AP/2

DoD

FLIGHT INFORMATION PUBLICATION

AREA PLANNING

EUROPE-AFRICA-MIDDLE EAST

11 MAY 2006

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Consult NOTAMS for latest information.

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SPECIAL NOTICE

6 JULY 2006

AERONAUTICAL INFORMATION TRANSITION

Effective October 1, 2006, NGA will move DAFIF™ and FLIP information to the NGA NIPRNET/Extranet. To access the NGA NIPRNET/Extranet, you will need a PKI certificate and additional access privileges granted by NGA. Register for access by going to https://www.extranet.nga.mil. You will be required to login using an existing valid Common Access Card (CAC) and pin. Fill out and submit the request form. You will be notified by email when you have been granted access.

8 JUNE 2006

SUNSET NOTICE: AREA ARRIVAL CHARTS DEPICTING TERRAIN DATA (AACDTD)

NGA and the FLIP Service representatives have identified there is no longer a requirement to produce all of the current Area Arrival Charts Depicting Terrain Data (AACDTD). NGA will sunset 35 of the 38 currently produced Area Arrival Charts Depicting Terrain Data (AACDTD) with the production of the 28 September 2006 effective date. The Alaska AACDTD charts (Adak, Anchorage, and Fairbanks) will continue in production, all other AACDTD's will expire at the end of the respective AIRAC cycle from the 28 September 2006 effective date. Any questions or concerns with this initiative should be forwarded to the respective Service representative as identified in General Planning, Chapter 10.

The following Area Arrival Charts Depicting Terrain Data (AACDTD) are scheduled for sunset:

Europe/North Africa/Middle East: Athinai, Aviano, Bardufoss, Frankfurt, Incirlik, Madrid, Napoli, Pisa, Preswick, and Ramstein.

Pacific/Australasia/Antarctica: Atsugi, Daegu, Fukuoka, Gimhae, Gwangju, Iwakuna, Kunsan, Osan, Pochang, and Yecheon.

Caribbean/South America: LaPaz, Lima, Rio, and Santiago.

United States: Albuquerque, Colorado Springs, Denver, Las Vegas, Los Angeles, Palmdale, Salt Lake City, San Diego, San Francisco, and Seattle.

Africa: Johannesburg.

11 MAY 2006

DISCONTINUE PRINTING OF THE US PREFERRED ROUTES

With Army, Air Force and Navy approval, NGA will stop printing the US Preferred Routes in the Area Planning Book / 1 effective 28 September 2006.
The information will be available at FAA website: http//www.fly.faa.gov/Products/Coded_Departure_Routes/NFDC_Preferred_Routes_Database/nfdc_preferred_routes_database.html.
DAFIF will continue to carry the Preferred Routes.

INTRODUCTION

GENERAL - AP/2 contains aeronautical data for Europe-Africa-Middle East and supplements the data in General Planning (GP), and select data in the Enroute Supplements and Flight Information Handbook. Refer to Chapter 3 of GP for a complete description of the FLIP Planning document. Textual entries shall have a Source Reference entry following the paragraph or paragraphs to which they apply.

REVISION CYCLE - AP/2 is revised every 24 weeks. The schedule including cutoff and effective dates is listed in GP Chapter 10, paragraph 11-6b.

INTERNET - DAFIF, E-CHUM, Enroute Supplements and Planning Documents available at http://164.214.2.62/products/digitalaero/index.html

NGA CUSTOMER HELP DESK - For questions concerning this or other NGA Products or Services, please, phone 1-800-455-0899, (314) 260-5032 or DSN 490-5032.

AMENDMENTS - AP/2 is amended by two (2) scheduled Planning Change Notices (PCNs)published 8 and 16 weeks after the effective date of AP/2. Since these PCNs are non-cumulative they must be retained until the new issue of the basic product is received.

NEW OR MODIFIED DATA - A vertical line appearing in the margin identifies data added or modified since publication of the last book.

REVISIONS AND QUALITY REPORTS -

1. Modifications to FLIP fall into three general categories.

   a. REVISIONS - Adding, rearranging contents or format, or deleting major blocks or types of information. Examples are:

      (1) Adding new weather service information to Section C of the Flight Information Handbook.

      (2) Rearranging the Remarks Section of an airport Enroute Supplement entry.

      (3) Deleting obsolete NAVAID information from Enroute Charts.

   b. CHANGES - Maintaining the currency of existing information in response to operational changes. Examples are:

      (1) Changing airport operating hours in the airport Enroute Supplement entry.

      (2) Adding a newly authorized radio frequency to an Instrument Approach Procedure.

   c. CORRECTIONS - Correcting improperly published information. Examples are:

      (1) Correcting an improperly published course on an Enroute Chart.

      (2) Correcting erroneous information concerning Flight Plans in General Planning.

2. The three types of modifications to FLIP are processed differently by each military service. It is important to adhere to the instructions below to ensure a submitted modification is promptly received, evaluated, approved, and implemented.

   a. USAF, ANG, AFRC

   (1) Except for requirement requests to publish changes to Terminal Instrument Procedures [paragraph (2) below] and changes to Military Airspace [paragraph (3) below], all requests for new products, publication of new types of FLIP data, revisions/changes/ corrections and inquiries concerning current FLIP will be in accordance with AFI 11-201 and submitted to AFFSA/XOIA. AFFSA/XOIA is the USAF point of contact responsible for FLIP validation/production/maintenance and will coordinate with NGA, FAA National Flight Data Center (NFDC) and National Aeronautical Charting Office (NACO) on any and all USAF FLIP issues related to requested changes/ maintenance/production. Additionally, AFFSA/XOIA will also process all requests for non-DoD FLIP products in accordance with the NGA Catalog. AFFSA/XOIA is the USAF FLIP Coordinating Committee member responsible for coordinating requirement issues with NGA, Army, and Navy.
   The AFFSA/XOIA address is:

   AFFSA/XOIA
   1535 Command Dr., Suite D-309
   Andrews AFB, MD 20762-7002
   CONUS - PACIFIC, CARIBBEAN and SOUTH AMERICA C240-857-6721 or DSN 857-6721
   OCONUS – EUROPE/ASIA and AFRICA C240-857-6713 or DSN 857-6713
   FAX: C240-857-7996 or DSN 857-7996

MSG: AFFSA ANDREWS AFB, MD//XOIA
E-MAIL: affsa.xoia@andrews.af.mil

NOTE: Canary yellow self-addressed AFFSA comment cards (AF Form 3546) are available at Base Operations/squadrons and AF Form 3546A (electronic) at http://www.e-publishing.af.mil for changes/comments to FLIP products or instrument flying related subjects.

(a) Originators, office of primary responsibility requester (OPRR), will prepare submissions in the appropriate format and perform primary responsibility for maintenance (OPRM) when required.

(b) Originators will ensure submissions are clear, concise, and intelligible to aircrew and flight mission planners.

(c) Originators will identify an expiration date, not to exceed 3 years. Entries not validated/updated within the time frame as stated will be subject to removal.

NOTE: Office of Primary Responsibility (OPRR) is the military department or organization that either establishes or validates the requirement for the entry, and the Office of Primary Responsibility for Maintenance (OPRM) is the organization or document responsible for the currency of the entry.

(Examples):
(SPECS/MIL RAC 7-5) - The OPRR is the NGA product specifications that mandates the need for an entry. The OPRM is the host nation Military AIP document used by NGA to maintain the entry.

(AFFSA/AFFSA XOIA FIL 03-147) - The OPRR is the US Air Force Flight Standards Agency. The OPRM is the AFFSA Instrument Standards/ Aeronautical Information Branch. The Flight Information List (FIL) 03-147 identifies calendar year 03. 147 identifies the FIL number.

(2) TERMINAL INSTRUMENT PROCEDURES - All procedural changes, including deletions to USAF procedures in FLIP terminal products and requests for publication of new or deletion of existing non-DoD instrument procedures, will be processed through the appropriate major command TERPS office in accordance with AFMAN 11-230. Procedural changes include changes to fix, radial, bearing, course, track, altitude, minima, obstacles, slaved variation, procedure identification, and operational notes. Non-procedural changes (Special Use Airspace, airport diagram/Airport Sketch, miscellaneous notes, communication frequencies, etc.) will be submitted to AFFSA/XOIA.

(3) MILITARY AIRSPACE - All military airspace (Special Use Airspace, Military Operations Area, Air Refueling Tracks/Anchors, IFR Low Level Routes, VFR Low Level Routes and Slow Speed Routes) changes/additions/deletions will be processed in accordance with AFI 13-201. All submissions for United States (FAA Controlled Airspace) and Canada must additionally be processed in accordance with FAA Handbook 7610.4 and routed through the USAF Representative (AFREP) at the applicable FAA region. Military airspace changes outside the United States and Canada that have been coordinated/ published in host country Aeronautical Information Publications (AIPs) require no USAF input, NGA St. Louis publishes these changes when received from the host country. All other airspace changes (i.e., Air Refueling Tracks/Anchors, Training Routes and Military Operations Areas) in foreign areas will be submitted to AFFSA/XOIA.

(4) USAFE ONLY: Submissions for the AP2 and AP4, new entries, changes, or deletions will be IAW AFI 11-201, USAFE SUP 1 as described below.

(a) Originators will coordinate submissions with the appropriate NAF-designated wing standardization-evaluation (DOV) office prior to forwarding to AFFSA/XOIA.

(b) An info copy of all submissions will be sent to the Aeronautical Information Liaison Officer (AILO) at: mailto:usafe.ailo@ramstein.af.mil. Submissions will identify an expiration date, not to exceed 1 year and include stan/eval office coordination on submission packages. Entries not validated/updated within the time frame as stated will be subject to removal.

NOTE: For data West of 88° , E, OPR is ENAME Theater; for data East of 88° E, OPR is PAA Theater.

b. USN, USMC

(1) Military airspace (SUA, AR, IR, VR and SR): All changes for the US (FAA controlled airspace) will be submitted to the Navy Representative at the applicable FAA Region as described in OPNAVINST 3770.2.

(2) Terminal instrument procedures: Changes to a USN or USMC Instrument Approach Procedure or Standard Instrument Departure are processed in accordance with NAVAIR 00-80T-114, NATOPS AIR TRAFFIC CONTROL FACILITIES MANUAL.

(3) Revisions and changes to all other FLIP data will be submitted to:

Department of the Navy
Head, Naval Flight Information Group
Building 176, Suite 301
1339 Patterson Avenue, SE
Washington Navy Yard, DC 20374-5088
DSN: 288-3473/0974 C202-433-3473/0974

FAX: DSN 288-3458 C202-433-3458
E-MAIL: navfltinfogrp@hq.navy.mil

(4) FLIP corrections will be submitted in accordance with NAVAIR 00-80T-114, NATOPS AIR TRAFFIC CONTROL FACILITIES MANUAL.

c. USA, NG, or ARMY RESERVE

(1) Changes, corrections, and revisions to FLIP for Europe, Africa, and the Middle East will be submitted to:
Commander US Army Aeronautical Services
Detachment Europe, Unit 29243
APO AE 09102
TEL: Heidelberg Civ country code +49 (0)6221-17-8079/6426
FAX: DSN 373-8957 or Civ country code +49 (0)6221-17-8957
E-MAIL: usaasde@hq.hqusareur.army.mil
MSG: CDR USAASDE HEIDELBERG GE//ATAS-AD//
CIVILIAN ADDRESS:Commander USAASD-E
Heidelberg Flughafen, Bldg 218, 69124
Heidelberg GE

(2) Self-addressed official comment cards are available in Army Airport Operations for changes, corrections, or revisions.

d. USCG

Send all changes, corrections, and revisions to:
Commandant (G-OAV)
USCG
2100 Second St. SW Washington, DC 20593-0001
C202-267-0952
MSG COMDT COGARD WASHINGTON DC//GOAV//

e. Remaining DOD or non-DOD organizations

Revisions, changes and corrections will be submitted to:
NGA STL/TNXA/L-27
3838 Vogel Road
Arnold, MO 63010-6238
C314-263-4646 or DSN 693-4646
FAX: C314-263-4247 or DSN 693-4247
MSG: NGA ST LOUIS MO//TNXA//

ARRANGEMENT OF DATA

NOTE: Theater, ICAO Region, and National listings will include eleven entries if information is available and/or is required, i.e.,

(1) Regional/National Procedures
(2) Visual Flight Rules
(3) Instrument Flight Rules
(4) Operational Air Traffic (Europe and Africa only)
(5) Flight Planning
(6) Flight Hazards
(7) Enroute
(8) Terminal
(9) Aerial Refueling
(10) Bird Hazard Data
(11) Additional Information

1. Chapter 1 - Theater information applicable to the entire Europe-Africa-Middle East Theater is published in Chapter 1. Information for each ICAO Region in the theater and national data is published in the subsequent chapters.

2. Chapter 2 - ICAO Regional Data - This data is presented in four regional sections:
Section A. Africa/Indian Ocean
Section B. European
Section C. Middle East/Asia
Section D. North Atlantic

Each section contains supplementary data applicable to the specific ICAO Region.

3. Chapter 3 - National Procedures and requirements sorted alphabetically. The National Procedures entry will explain the area of coverage and include a list of FIRs/UIRs within a country. If FIR/UIR entries cover more than one country, a note will be provided to see

the applicable country(s) for additional information. Entries may be published to accommodate procedures and notices determined to be of interest to DoD aircrews.

a. The following is an example of the Table of Contents for each National listing. The index includes the eleven entries and a listing of those subject areas that could be expected to be located under the respective entry.

NOTE: The listed entries should not be construed as being all-inclusive. Also, this is a representation of the type of information that can be expected beneath an entry. Entries will only be depicted if information is available and/or required.

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE
DIMENSIONAL UNITS
AIRSPACE STRUCTURE
ALTIMETER SETTING PROCEDURES
VERTICAL SEPARATION
POSITION REPORTING
SECONDARY SURVEILLANCE RADAR
MINIMUM NAVIGATION & COMMUNICATIONS EQUIPMENT
INTERCEPT PROCEDURES
RIGHT OF WAY
AIR TRAFFIC AT A CONTROLLED AERODROME
AIRSPACE WITH DESIGNATION "HX"

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS
DAY VFR FLIGHTS
NIGHT VFR FLIGHTS
VFR FLIGHTS ABOVE CLOUD LAYERS
MAXIMUM AIRSPEEDS
MINIMUM HEIGHTS FOR VFR OPERATIONS
CHANGE OF FLIGHT RULES FROM VFR TO IFR

INSTRUMENT FLIGHT RULES

FM IMMUNITY
MINIMUM SAFE HEIGHTS
ALTIMETER SETTING AND CRUISING LEVELS ON IFR FLIGHTS
CHANGE OF IFR TO VFR
IFR OPERATIONS IN CLASS F
FORMATION FLIGHTS
TRANSMISSION OF EXPECTED APPROACH TIMES
RVSM RULES
RNP REQUIREMENTS
ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC

OPERATIONAL AIR TRAFFIC (Europe and Africa ONLY)

GENERAL/COUNTRY
FILING FLIGHT PLANS
CLEARANCE INFORMATION
IFR/VFR
LOW LEVEL

FLIGHT PLANNING

GENERAL AIR TRAFFIC
AIR DEFENSE FLIGHTS
FILING FLIGHT PLANS. (DAY/NIGHT)
CLEARANCE INFORMATION
SUPERSONIC FLIGHTS
LOW LEVEL FLYING
SUPPLEMENTARY AIRPORT INFORMATION
LANDING FEES

FLIGHT HAZARDS

ASCENTS OF CAPTIVE BALLOONS AND FREE FLYING SONDES
ELECTRONIC WARFARE RANGE INFORMATION
HIGH INTENSITY RADIO TRANSMITTER AREAS
HIGH MIDAIR COLLISION POTENTIAL AREA
OVER FLIGHT OF NUCLEAR REACTORS AND HIGH RISK INDUSTRIAL PLANTS

ENROUTE

FLIGHTS IN BORDER AREAS
AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION
TACAN ROUTES

TERMINAL

NOISE ABATEMENT PROCEDURES
TERMINAL AREA PROCEDURES

AERIAL REFUELING

AERIAL REFUELING TRACKS/ANCHOR AREAS

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS

ADDITIONAL INFORMATION

RADAR ASSISTED FLIGHT INFORMATION SERVICES
NATIONAL HOLIDAYS

b. The word "Standard" will be shown under the eleven entries when the rules applicable within that area are the same as the worldwide ICAO Rules and Procedures published in Chapters 5 and 6 of General Planning, and (for Position Reporting) the Flight Information Handbook. If the rules or procedures are not standard, the differences are explained.

c. ICAO Rules and Procedures are modified to some degree within each Region. These differences are explained in the eleven entries for each Region. The phrase "Same as Regional Procedures" will be shown under FIR/UIR or National procedure entries when in agreement with the regional procedures.

d. ICAO CODES - ICAO, FAA or Host Country identifications are included adjacent to each airport name, i.e., Ramstein AB, GM (ETAR).

4. Daylight Saving Time - A ++ symbol following Z time effective or operating hours indicates that during periods of daylight saving time, hours will be one hour earlier than shown. Consult the applicable Enroute Supplement for areas and dates daylight saving time is observed.

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Chapter 1

THEATER SUPPLEMENTARY PROCEDURES

GENERAL THEATER PROCEDURES/NOTICES

NATIONAL PROCEDURES

DIMENSIONAL UNITS - Refer to appropriate FIR/UIR or National Supplementary Procedures.

ALTIMETER SETTING PROCEDURES -Refer to appropriate Regional, FIR/UIR or National Supplementary Procedures.

VERTICAL SEPARATION - Refer to appropriate FIR/UIR or National Supplementary Procedures.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Refer to appropriate Regional, FIR/UIR or National Supplementary Procedures.

INSTRUMENT FLIGHT RULES

Refer to appropriate Regional, FIR/UIR or National Supplementary Procedures.

RVSM RULES -

NOTE: REDUCED VERTICAL SEPARATION MINIMA (RVSM) - For requirements for RVSM in the European and North Africa Theaters see Chapter 2 Section B; European Region. For individual country exceptions see country listings for that region.

(AFFSA/XOIA USAF FIL 01-62)

FLIGHT PLANNING

FLIGHT PLANNING AND AIR TRAFFIC FLOW MANAGEMENT PROCEDURES

1. For Preferred IFR Routes, aircrews should check the Central Flow Management Unit, EUROCONTROL, Route Availability Documents (RAD) website at http://www.cfmu.eurocontrol.int/rad/.

(FCC/TNXA)

2. Aircrews or dispatchers should check for Route and Area Restrictions by checking the RAD (Route Availability Document) published by EUROCONTROL and available via the Army Flight Operations Detachment (AFOD) public domain web site at http://AFOD.HQUSAREUR.ARMY.MIL OR DIRECTLY THROUGH eurocontrol at http://www.ead.eurocontrol.int (Public User tab)

NOTE: This site requires registration and password.

(USAASDE/TFMWG-E/USA 06-0134)

3. US Army ONLY - Flight Plan Filing - All flight plans filed with a DD Form 1801 or ICAO equivalent flight plan, with the exception of those aircraft on a daily Air Tasking Order (ATO), will be addressed to the Army Flight Operations Detachment (AFOD). At other than USA airfields, inclusion of the re-addressee indicator AD ETEEYWYX on the third line of the addressee portion of the flight plan is required to ensure that the information will be transmitted to the AFOD. Aviators are further required to ensure that a departure and arrival message is sent to the AFOD for each leg of the flight. The following remark will be placed in ITEM 18 of the DD form 1801: RMK/REQ DEP and/or ARR to ETEEYWYX. For additional exceptions to flight planning procedures, check the AP/2, FLIGHT PLANNING entry for each REGION and COUNTRY in which flight operations will be conducted.

(USAASD-E/03-0018)

4. EUROPEAN ORGANIZATION FOR THE SAFETY OF AIR NAVIGATION (EUROCONTROL)

(USAFE AMOCC/XOF/IFPU USERS MANUAL)

a. EUROCONTROL is the European air traffic management agency responsible for approving flight plans, and for controlling the flow of traffic throughout European airspace. EUROCONTROL is organized into two divisions, the Integrated Initial Flight Plan Processing System (IFPS), and the Central Flow Management Unit (CFMU).

b. IFPS receives, processes, and distributes IFR/GAT flight plan data within the area covered by the participating States, known as the IFPS Zone (IFPZ). Find a current list of participating states within the IFPS Users Manual at http://www.cfmu.eurocontrol.int/userdocs/index.html.

NOTE: A new FPL must be submitted each time an aircraft departs the IFPS Zone and re-enters. The CFMU system can not accept a departures/delayed re-entry from IFPS airspace and a return. i.e. A tactical mission departing Ramstein AB would file ETAR to ZZZZ. Upon completion of mission in tactical airspace a new FPL must be submitted from ZZZZ to ETAR.

c. CFMU manages airspace capacity through a system of regulated departure times (slot times). Each state provides their airspace structure to CFMU and delegates responsibility for regulating the delivery of aircraft into each participating states' airspace, called Air Traffic Flow Management (ATFM) within the IFPS Zone.

d. Detailed procedures or information pertaining to either the IFPS or the CFMU not found in the following paragraphs can be found on the EUROCONTROL web site (http://www.eurocontrol.int).

e. In the context of this document, Aircraft Operator (AO) is either the pilot in command or a FAR Part 121 type dispatch operation when applicable.

NOTE: Information contained in the following paragraphs is taken from EUROCONTROL manuals and is only part of what is provided by EUROCONTROL in the three primary EUROCONTROL documents, (1) General and CFMU Systems, (2) IFPS Users' Manual, and (3) ATFM Users' Manual. Pilots should review each of these three documents, which are posted on the EUROCONTROL

web site, http://www.cfmu.eurocontrol.int/userdocs/index.html for additional information and greater detail.

5. FLIGHT PLANNING

a. Electronic Flight Plan filing

(1) USAFE AMOCC reviews European flight plans submitted through the web-based Integrated Management Tool (IMT) at https://ptc.scott.af.mil/ or https://dispatch.scott.af.mil/ (IMT Web).

(2) Access is restricted to *.mil domains and assigned user accounts.

(3) User guides are incorporated into the software and found on the AMOCC site.

(4) IMT Web contains form validation to assist the pilot in complying with ENAME planning requirements.

b. DD Form 1801, Item 10: EQUIPMENT

(1) In addition to the required entries found in General Planning, enter "R" in item 10 of the flight plan (e.g. SR/C) for RNP5 RNAV compliant equipment, otherwise list all COM/NAV equipment except the designators "S" or "R" in item 10 of the flight plan. (e.g. AOLUV/C), and in item 18, add STS/NONRNAV. (ICAO Doc 7030/4 EUR RAC 17/2/98).

(2) Enter "Y" in item 10 of the flight plan for 8.33 kHz compliance, otherwise enter "STS/EXM833" (if operating in 8.33 airspace) in item 18.

c. DD Form 1801, Item 13: TIME.

(1) Enter the Estimated Off Block Time (EOBT). The EOBT is the desired takeoff time minus the aerodrome Standard Taxi Time (STT), explained below. (IFPS Users Manual).

(2) Standard Taxi Time (STT): CFMU uses STT for computing Calculated Takeoff Times (CTOT, or slot time). Take the desired takeoff time and subtract the value of STT to computed the EOBT. Use a default value of 10 minutes if the STT for the airport of departure is unknown. STT calculations are integrated into the IMT Web.

EBCV	5	ETAR	5	LIPA	5
EDDF	15	HECA	15	LIRN	10
EDDS	11	LEMO	5	LITP	5
EGWU	5	LERT	5	LPLA	5
EGUN	10	LETO	5	LQSA	5
EGUL	10	LGSA	15	LQTZ	5
EHAM	15	LGTS	5	LTAC	7
ETAD	5	LICZ	5	LTAG	5

d. DD Form 1801, Item 15: ROUTE.

(1) Operational Air Traffic (OAT)/General Air Traffic (GAT). OAT indicates any portion of the route of a flight operating under military air traffic services and GAT indicates operation under civil air traffic services. OAT service is generally provided on routes where TACAN provides course guidance. France treats military flights on published TACAN routes as military GAT, except when the flight is operated according to OAT procedures listed under France in Chapter 3 of this document. Insert the indicators "/OAT " and "/GAT " or " OAT " and " GAT " after the published "civil" point to switch between OAT and GAT. When entering the North Atlantic Tracks via UK use the proper OAT/GAT reversion points listed in Chapter 3 of this document under United Kingdom. (IFPS Users Manual).

(2) Standard Instrument Departure (SID) / Standard Arrival Route (STAR) Enter SID/STAR information only when required by the specific state. (e.g., GERMANY) (IFPS Users Manual)

(3) The last point of the SID should be the first point on the route. (IFPS Users Manual)

(4) The last point on the route should be the first point of the STAR. (IFPS Users Manual)

(5) http://www.cfmu.eurocontrol.int/userdocs/ provides access to Route Availability Document (RAD), open conditional routes via the CRAM, and a flight plan validator (IFPUV) to check the flight plan prior to filing. IMT Web links directly to the IFPUV.

(6) STAY INDICATOR: Effective April 04, a flight plan may indicate an en route delay in item 15 and 18 with the "STAY" indicator. Format is "STAYn/hhmm" where "n" represents the sequence number of the delays, starting with "1", "hh" represents the number of hours and "mm" represents the number of minutes of the delay. The route of flight must remain within the IFPZ, listed in section 12 of IFPS Users Manual.

e. DD Form 1801, Field 18: OTHER INFORMATION

(1) The IFPS processes "recognized" or valid indicators found in FIELD18. An unrecognized indicator may cause an error or may be ignored. (IFPS Users Manual)

(2) Estimated Elapsed Time (EET) Indicator (EET/). FIR boundary estimates for IFR/GAT flight plans are not required inside the IFPZ unless mandated by an individual country AIP. (IFPS Users Manual)

(3) Include EET for any portion of the flight outside the IFPZ.

(4) Enter OPR/DOD in item 18 if U.S. Military operating in the European region.

(5) Status Indicator (STS/). Indicates "special handling". Enter each STS/ individually and always prior to the RMK/ field to insure IFPS "sees" the status. Contact the USAFE AMOCC/XOF DSN 314-480-4147, comm. into Germany: +49-6371-47-3733, in Germany: 06371-47-3733, for questions concerning STS indicators use. STS/ATFMEXEMPTAPPROVED. STS/ATFMEXEMPTAPPROVED exempts subject flight from EUROCONTROL departure regulation (slot time). Mission intent determines qualification for exemption rather than DV status. Examples of exempted flights are acts of war, Phoenix Banner/Silver support, US State Department-directed missions, special/tactical operations, time-critical courier materials,reconnaissance, and surveillance. Use this status for all air refueling missions, other than positioning or depositioning leg segments, for both tanker and receiver. Some examples not qualifying are routine flights to conferences, sites surveys, meetings, channels, embassy resupply, training, and troop visits.

NOTE: Under no circumstance is a US Military pilot to request permission from any state on the use of this exemption. Call USAFE AMOCC or the respective service command and control if encountering difficulties.

(USAFE AMOCC/CC)

STS/EMER. Emergency flight. ATFM Exemption is automatic.
STS/SAR. Search and Rescue. ATFM Exemption is automatic.
STS/HEAD. "Head of State", e.g., US President. ATFM Exemption is automatic.
STS/HOSP. Hospital flight cleared through TPMRC. If a delay would jeopardize the success of the mission, enter STS/ATFMEXEMPTAPPROVED in addition to STS/HOSP.
STS/HUM. Humanitarian mission. If a delay would jeopardize the success of the mission, enter STS/ATFMEXEMPTAPPROVED in addition to STS/HUM.
STS/PROTECTED. Used to limit dissemination of flight plan information to a "need to know" level.
STS/STATE. Use for mission specific authorization involving state interests other than "Head of State". If a delay would be unacceptable and could jeopardize the success of the mission, enter STS/ATFMEXEMPTAPPROVED in addition to STS/STATE.
STS/EXM833. Military aircraft non-compliant with 8.33 kHz capable radios.
STS/NONRVSM (if operating in RVSM airspace). Military aircraft non-compliant with EUR RVSM airspace.
STS/NONRNAV. Military aircraft non-compliant with RNP5 RNAV.
USAFE AMOCC monitors use of STS indicators, will investigate suspected misuse and report it to the respective command and controlagency.

(6) Runway Visual Range (RVR) Indicator (RVR/). Use "RVR/" to indicate the minimum RVR requirement for landing in meters, e.g., "RVR/730". Enter routinely from 01 October to 30 April. Maximum value is 999. (IFPS Users Manual)

(7) Date of Flight (DOF/). Always include DOF using the format "DOF/yymmdd" up to 144 hours (6 days) in advance of EOBT. (IFPS Users Manual)

(8) Remarks (RMK/). Place as the final item in item 18. Enter "PASS DEP ARR TO ETARYXYX EHXXUSAF" for all USAF movements departing from, arriving to, or operating within the EUCOM & CENTCOM AORs.

(USAFE AMOCC/XOF)

(9) Acceptance of Duplicate FPLs. IFPS will not accept multiple/overlapping flight plans. Cancel any flight plans that will not be used. Filing a flight plan over an existing flight plan will not replace the existing flight plan but will instead result in a REJ of the new flight plan. (IFPS Users Manual)

(10) Checking by the IFPS. IFPS processes and validates the flight plan. Pilots should test the proposed FPL against the IFPUV Flight Plan validation program prior to filing. Routes specifically designated "Military" routes in the RAD will return an error but can still be filed successfully. (IFPS Users Manual)

(11) Distribution of Messages by the IFPS. The IFPS distributes all IFR/GAT flight plan and associated messages to the appropriate addressees within the IFPZ, and to all "extra addresses", regardless of their location, which are provided by the message originator using the Re-addressing Function. Flight plans and associated messages, which are part IFR or GAT, will be addressed automatically by IFPS only to those ATS Units concerned with the IFR or GAT portion of the route. The message originator is always responsible for ensuring the addressing of all appropriate messages to those addressees concerned with VFR or OAT route portions. (IFPS Users Manual)

(12) Copy of 1801. When filing flight plans at a location inside the IFPZ for continuing movements outside the IFPZ, the AO should be prepared to present non-participating nations with a copy of the desired flight plan(s) upon arrival. Address ETARYXYX on all flight plans filed in EUCOM & CENTCOM AORs except when using the IMT Web.

(USAFE AMOCC/XOF)

(13) Flight plan filing time. File flight plan so as to receive an ACK confirmation message more than three hours prior to desired EOBT. Flight plans received within three hours are considered late and are more likely to be subject to unfavorable slot times.

(14) Flight Plan Acknowledgement Message (ACK). Indicates a successfully filed flight plan. Pilots shall obtain the ACK message to verify the acknowledged route of flight against the filed route and the diplomatic clearance route. EUROCONTROL may on occasion modify a routing to conform to the RAD, but, at the same time, those EUROCONROL-modified routes may not always conform to diplomatic clearance requirements. Obtain copies of the EUROCONTROL ACK message from base operations or the IMT Web.

(15) Flight Plan Reject Message (REJ). Indicates a failed filing attempt. In this case, no flight plan exists in the EUROCONTROL system (except when the REJ is for a duplicate received from another originator, whereby that flight plan is preventing a new filing).

6. CENTRAL FLOW MANAGEMENT UNIT (CFMU) and AIR TRAFFIC FLOW MANAGEMENT (ATFM)

The objective of the CFMU is to match IFR/GAT user demand with airspace capacity. CFMU continuously calculates flight plan data to optimize airspace utility, avoid ATC overload, and minimize delays for AOs. EUROCONTROL manages air traffic flow with the use of Calculated Take-off Times (CTOT), otherwise known as slot times, in order to regulate the time a movement enters a constrained area. The CTOT (slot time) is a valid ATC clearance. CTOTs affect an average of 15% of all flights, with an average delay of 15 minutes, and compliance is mandatory.

Avoid Ghost and Duplicate Flight Plans. Ghost flight plans are flight plans filed but never used or cancelled. File only one flight plan per leg. Cancel ATC flight plans as soon as the flight is cancelled. Additionally, cancel an existing flight plan that has been "ACK'd" before filing a replacement flight plan for the same flight. Ghost or multiple flight plans present ATC with imperfect information, impair the efficiency of the CFMU, result in issuance of unnecessary slots, cause additional delays to regulated flights, and lead to under utilization of ATC capacity. (ATFM Users Manual)

Calculated Take-Off Time (CTOT). A EUROCONTROL regulated departure CTOT (slot time) is a time during which the aircraft must takeoff. A departure window of 5-minutes prior to 10-minutes after the CTOT is available for the tower controller to plan the departure sequence. The pilot shall plan the off-block to meet the CTOT. EUROCONTROL imposes CTOTs via SAMs sent either to the Flight Plan Originator address or to an address (SITA or AFTN) specified in advance by the AO to the CFMU. The AO is responsible for arranging to ensure receipt of any CTOT issued by the CFMU. (ATFM Users Manual) This information is accessible via the IMT Web and the CFMU Internet Application.

a. Departure Procedures

(1) Pilot Responsibilities. A CTOT (slot time) is an ATC clearance and the pilot is responsible for complying. Pilots are to plan the departure of a flight so the aircraft is ready for start up in sufficient time to comply with a CTOT, taking into account standard taxiing time and any congestion known to them on the airfield. (ATFM Users Manual)

(2) ATC Responsibility. ATC is responsible for slot monitoring at departure aerodromes. This may include denying start up clearance to flights outside their slot window until coordination with the FMP/CFMU has been effected and a revised CTOT issued. ATC is also required to provide all possible assistance to pilots to meet a CTOT or to coordinate a revised CTOT. (ATFM Users Manual)

(3) Revisions to CTOT. Requests for revisions to CTOTs should be coordinated between the AO (pilot) and the CFMU using the ATFM message exchange procedures as outlined below. However, in the case of last minute revisions to CTOTs and slot extensions, when the pilot is in direct communication with ATC, coordination by ATC with the FMP/CFMU may be more easily or efficiently coordinated. (ATFM Users Manual)

7. USERS PROCEDURES FOR FPL REVISIONS AND ATFM MESSAGE EXCHANGE

a. The CFMU, the pilot or an ATC unit on behalf of the pilot may initiate revisions to or cancellations of the last issued CTOTs. All revisions or cancellations are to be made using the ATFM message exchange procedures described below. In all cases, it is in the best interest of pilot to initiate prompt revisions/cancellations thus permitting the system to maximize use of available capacity and minimize delay. (ATFM Users Manual)

b. Diversion. If a flight diverts back to its original ADEP for technical or other reasons, file a new flight plan using a different ARCID e.g. RCH123 becomes RCH123A. If this cannot be done, i.e., for Diplomatic Clearances, then cancel the original flight plan and re-file. (ATFM Users Manual)

c. Modification of Flight Plan. Any flight plans modified by DLA or CHG may result in a new CTOT. (ATFM Users Manual)

d. ATFM Messages Initiated by the CFMU

(1) Slot Allocation Message (SAM). ATC clearance assigning a CTOT to the flight issued up to 2 hours prior to filed EOBT. Compliance is mandatory.

(2) Slot Improvement Proposal Message (SIP). An CTOT improvement offer valid for 15 minutes from transmission time. This is sent to the departure aerodrome AIS and to USAFE AMOCC. Pilot response is to accept with a SPA or decline with a SRJ, listed below.

(USAFE AMOCC/XOF)

(3) Slot Requirement Cancellation Message (SLC). Cancels the slot time and the requirement for one. The flight may still receive a SAM if a new restriction is imposed. (ATFM Users Manual)

(4) Slot Revision Message (SRM). A SRM is an update to original or subsequent slot times. (ATFM Users Manual)

(5) Flight Suspension Message (FLS). The flight does not comply with certain restrictions and is suspended by CFMU. This may be for fog, no movement message received by 30 minutes past expected departure time, or from an SMM. The flight has no active flight plan until a new EOBT is declared via DLA, CHG, or the RVR and EOBT are declared via FCM. This can occur regardless of whether the flight has a slot time.

(6) De-suspension message (DES). The flight is no longer suspended and is free to depart.

e. ATFM Messages Initiated by AOs/ATS.

(1) In situations described below, the pilot should request base operations, tower, MOCC, AFOD, or other applicable agency to transmit the appropriate message to either the IFPS or the CFMU. All of these messages are available through the IMT Web.

(2) Delay Message (DLA). Use DLA message to move the EOBT to a later time. Do not file for an EOBT earlier than the originally filed EOBT. To establish an earlier EOBT, cancel existing flight plan and re-file for the earlier time. Do not use the DLA for delays caused by the CTOT. (ATFM Users Manual) Use the DLA for any expected delay of more than 15 minutes when not subjected to a slot time or when unable to meet slot time. Failure to follow this procedure may result in FLS. Reactivate the flight with DLA, CHG, or cancel flight with CNL. (ICAO Doc. 4444)

(3) Flight Confirmation Message (FCM). Use to reactivate a suspended flight. If the flight was suspended for RVR, enter the RVR value. If the value is not the minimum required the flight will remain suspended until either the plan is cancelled or when weather conditions improve sufficiently to allow arrival.

(4) Slot Missed Message (SMM). Send an SMM before the CTOT when unable to meet the CTOT and a new EOBT is NOT known. (ATFM Users Manual)

(5) Slot Improvement Proposal Acceptance Message (SPA). Accept a SIP within 15 minutes of transmission if able to meet the new slot time. (ATFM Users Manual)

(6) Slot Improvement Proposal Rejection Message (SRJ). Decline a SIP within 15 minutes of transmission if unable to meet the new slot time. (ATFM Users Manual)

(7) Ready to Depart (REA). Coordinate with tower if able to depart immediately, up to thirty minutes prior to the filed EOBT. Any new slot time will be no earlier than present time plus the aerodrome standard taxi time and can be before the filed EOBT. (ATFM Users Manual)

(8) Request for Direct Improvement (RFI). Effective April 2002, all flights are automatically placed in this status. A flight with a CTOT receives automatic improvements up to approximately 15 minutes prior to filed EOBT. Within 15 minutes of the CTOT (slot time), the CTOT will no longer receive improved times.

(9) Slot Improvement Proposal (SIP) Wanted Message (SWM). Indicates the pilot wants to be asked prior to changing the CTOT via SIP and only applies to the leg for which it was sent.

f. Exceptional Condition and Low Visibility Operations (Flight Suspension)

(1) Implementation of Low Visibility Operations. ATFM low visibility procedures are applicable where low visibility conditions will affect ATC capacity at or around aerodromes. The CFMU may:

(a) Trigger the suspension of the flights, which are to land at the aerodrome and restrict the landing traffic to those able to land according to a specified RVR. Flights are suspended until the RVR indicated requirement is met. Flights remain suspended if no valid RVR is given in the subsequent FCM.

(b) Issue revised slots at short notice.

(c) The CFMU will send an ANM message describing

the situation, in particular the time period and the minimum RVR required. The RVR may be provided via the FPL (FIELD18 e.g. RVR/200; or via an FCM message if the FPL has already been filed. This message may be sent as soon as the AO is aware that there is a risk of low visibility at an aerodrome.

1 The RVR status of the flight inside the CFMU systems determines the messages issued by the CFMU. If the RVR minima of a flight is known and satisfies the minimum required then no message is issued or a SAM/SRM due to a reduction of the landing rate.

2 If the RVR minima of a flight is known and is not sufficient, an FLS is issued which may contain a NEWEOBT or an RVR depending on the situation.

3 If the RVR minima of a flight is not known, the flight is suspended and an FLS is issued indicating the minimum RVR. A RESPBY time is also in the message enabling the AO to keep its present CTOT if the FCM with sufficient RVR is received by the CFMU in due time. The FLS is sent when the exceptional conditions are implemented or at SIT1. Once this occurs, an AO must send a Flight Confirmation Message (FCM) if the flight is able to land within the specified RVR minima. The FCM indicates the RVR capability of the flight.

4 If the RVR minima of the flight is sufficient, CFMU will issue a SAM if the flight is subject to regulations or a DES if the flight is not subject to regulations to the AO. The DES may indicate a NEWEOBT if the EOBT indicated in the FCM is not realistic (e.g. in the past).

5 If the RVR minima of the flight is not sufficient, an FLS or a SAM will be sent. The SAM may indicate a CTOT enabling the flight to land after the end of the fog situation. The management of the situation for the flight will be maximized where the RVR information is provided to the CFMU at the earliest possible time.

6 If the situation deteriorates, flights having RVR minima which still comply receive no message. Flights for which the RVR minima do not meet the new minima becomes insufficient and receives an FLS with the new RVR. If the RVR minima for the flight is not known, the concerned flight(s) receive an FLS with the new RVR minima required.

7 If the situation improves, flights already not suspended or having received a SAM receive no message. Flights whose minima meet that published by the CEU may receive a SAM or a DES or if still being regulated, a SIP or SRM or SLC as appropriate.

a Flights whose minima do not meet that published by the CEU receive an FLS with the new RVR.

b Flights with unknown minima receive an FLS with the new RVR.

(d) When the Exceptional Conditions are canceled, all flights having confirmed their RVR will receive a SAM/DES. All unconfirmed flights will receive an FLS stating RVR 998. These flights still wishing to depart shall send an FCM with a NEWEOBT and RVR 998. Flights that do not send an FCM will remain suspended and be considered as not flying. However, a cancellation of the FPL is requiredin order to avoid capacity under-utilization.

g. Aerodrome Closure

(1) Short Period Closure. When an aerodrome is to be closed for a short period (less than 3h00), a SAM or an SRM will be issued to indicate the Slot according to the reopening of the aerodrome. An ANM Flash is issued to report on the situation and to update it. SRM or SIP may be issued according to the situation. FPL must be canceled if the flight is not taking place.

(2) Longer Closure (Flight Suspension). If the closure is likely to be longer, the CFMU will issue an ANM Flash message and all flights affected will receive an FLS. AO are requested to send an FCM with a new EOBT to confirm the flight and the new departure time. A SAM or a DES is issued 2h00 before the new EOBT.

(3) Flights which are diverted to another aerodrome shall cancel their flight plans and refile new ones to ensure accurate data to ATC and to avoid underusing the capacity.

h. Closure of Airspace

(1) The same procedure applies as for the closure of an aerodrome. Proposals for rerouting may be issued by the CFMU.

i. Summary of Flight Planning and Air Traffic Flow Management Messages.

Symbol	Purpose	Pilot or AO actions	Base Ops or Tower actions. Tower actions are labeled below.
FPL	Flight plan airspace reservation request from pilot or AO.	File to receive ACK three hours prior to EOBT	Review & transmit FPL to EBBDZMFP LFPYZMFP (AFTN) or BRUEPYX PAREP7X (SITA) & appropriate AD/OAT/VFR addressees.
ACK	Successful message processing acknowledgment from IFPS.	Compare ACK to actually filed flight plan.	Base ops provide a copy to pilot upon request.
REJ	Unsuccessful message processing response from IFPS.	Modify rejected flight plan to comply.	Provide a copy to pilot upon request.
CHG	FPL change request for a later than filed EOBT and fields other than ARCID, ADEP, ADES,EOBD request from pilot or AO.	Modify fields as necessary and transmit anytime, but three hours prior to EOBT is desired.	Prepare modification and transmit to EBBDZMFP LFPYZMFP or BRUEP7X PAREP7X and appropriate OAT/VFR AFTN addressees.

Symbol	Purpose	Pilot or AO actions	Base Ops or Tower actions. Tower actions are labeled below.
DLA	EOBT modification request to alter time from pilot or AO.	When not regulated by slot time, transmit DLA whenever expected delay exceeds 30 minutes. When regulated, transmit SRR first followed by the exact SRR EOBT value as the DLA value.	Transmit to EBBDZMFP LFPYZMFP or BRUEP7X PAREP7X and appropriate OAT/VFR AFTN addressees.
CNL	Flight plan airspace reservation request cancellation message from pilot or AO.	Remove flight plan from system to prevent the unused but anticipated flight from blocking airspace that could be used by other aircraft.	Transmit to EBBDZMFP LFPYZMFP or BRUEP7X PAREP7X and OAT/VFR addressees as appropriate.
FLS	CFMU suspends the flight until pilot or AO responds with either a situationally compatible RVR value, or SRR.	Determine the cause for suspension and respond.Flight cannot proceed beforehand.	Contacts C2 or aircraft with status. Base ops or tower.
REA	Coordinated ready message request by pilot and tower for up to a 30-minute earlier than filed EOBT and automatic slot improvement when available.	Pilot must be at the controls and completed checklist items to allow for immediate acceptance of a new slot time if available.	Tower transmits intentions to EBBDZMTA (AFTN) or BRUEA7X(SITA) no earlier than thirty (30) minutes prior to filed EOBT.
SWM	Pilot or AO request to CFMU to stop RFI process and revert to offering a SIP when available.	Consider situation when under RFI. If pilot desires more control over revision process, transmit SWM.	Transmit intentions to EBBDZMTA (AFTN) or BRUEA7X (SITA).
RFI	Request for automatic slot time improvements by pilot or AO when available.	Determine if situation allows for automatic reduction of slot delay. USAF movements must request RFI status. For non-USAF movements or USAF movements having sent an SWM, transmit RFI at any time.	Transmit intentions to EBBDZMTA (AFTN) or BRUEA7X (SITA).
SAM	CFMU issues the initial slot time to AO and departure aerodrome.	Pilot plans to takeoff at assigned slot time.	Tower relays as ATC clearance. Base operations can relay to pilot.
SRM	CFMU allocates a new slot time to AO and departure aerodrome.	Pilot plans to takeoff at revised slot time.	Tower relays as ATC clearance. Base operations can relay to pilot.
SIP	Slot time improvements from CFMU requiring pilot or AO response.	Determine if capable of meeting new slot time.	Contact C2 agency or aircraft to relay request at the beginning of the 15-minute respond by time.
SPA	Pilot or AO accepts SIP.	Accept the new slot time if able to comply.	Transmit reply using ADEXP format to EBBDZMTA (AFTN) or BRUEA7X (SITA)
SRJ	Pilot or AO rejects SIP.	Reject the new slot time if unable to comply.	Transmit reply using ADEXP format to EBBDZMTA (AFTN) or BRUEA7X (SITA)
SRR	Pilot or AO request to CFMU to adjust the present EOBT to a later value.	Determine inability to depart within the slot window prior to slot time passage. When applicable, after sending an SMM, use SRR to restore the flight into the system.	Transmit SRR intentions to EBBDZMTA (AFTN) or BRUEA7X (SITA). Transmit DLA intention after sending the SRR using the same EOBT value to EBBDZMFP LFPYZMFP.
SMM	Pilot or AO returns slot time to CFMU before its passage.	Determine inability to depart within the slot window prior to slot time passage. Return airspace reservation prior to slot time passage when new EOBT is uncertain. This returns the airspace allocation for use by another flight. Transmit an SRR after determining a new EOBT or CNL if the flight is discontinued.	Transmit intentions to EBBDZMTA (AFTN) or BRUEA7X (SITA).

Symbol	Purpose	Pilot or AO actions	Base Ops or Tower actions. Tower actions are labeled below.
TIS	Aerodrome specific value used to determine the period of time ATC requires a flight to be inserted into the takeoff sequence if an earlier CTOT is issued.	None. Use to anticipate the time when an earlier slot improvement will no longer occur without the use of REA procedures. Default is 10 minutes.	The CTOT will not change again after entering the buffer of TIS plus the aerodrome standard taxi time values. Prevents rushing a flight into the departure sequence.
TRS	Aerodrome specific value used to determine the period of time ATC requires to remove a flight from the departure sequence if a later CTOT is issued.	None. Use to anticipate when the slot time will be frozen. Default value is 5 minutes.	The CTOT will not change again after entering the buffer of TRS plus the aerodrome standard taxi values. Prevents short notice removal of a flight established in the departure sequence.

Figure 1 Summary of Flight Planning and Air Traffic Flow Management Messages (USAFE AMOCC/XOF)

Additional information. Download from https://amocc.ramstein.af.mil/offices/xof/ "Password Required" the current IFPS and ATFM Users Manuals. For questions, email to initiation.cell@ramstein.af.mil. For all USAF customers, call DSN 314-480-4147 or +49-6371-47-4147 for assistance before calling EUROCONTROL

(USAFE/APF)

8. RNAV PLANNING AND OPERATING PROCEDURES (AFFSA/AFFSA)

a. PLANNING

(1) Before planning any RNAV flight or operation, pilots-in-command must ensure that:

(a) the aircraft is equipped with serviceable RNAV equipment which has been approved by the State of Registry or the State of the Operator for the appropriate level of RNAV operations; GPS RNAV also requires approval of those states through which the aircraft transient;

(b) they have a thorough understanding of the equipment and its limitations and a current knowledge of how to operate the equipment in order to achieve the optimum level of navigation accuracy;

(c) when using RNAV equipment which depends on ground aids for navigation data input, there are sufficient serviceable aids available to provide continuous determination of the aircraft's position for the planned operation;

(d) whenever possible, cross-checking procedures are employed at the flight planning stage to reduce the required in-flight workload and ensure the safe operation of RNAV flights, for example -

1 by taking account of the designated operational coverage of VOR/DME or TACAN facilities to ensure best use of available aids;

2 by plotting check fixes on each leg which show DME distances, VOR bearings or TACAN bearings with DME distances on the enroute chart;

3 by highlighting track/distance information between waypoints;

4 by careful cross-checking of the flight plan details of waypoints against source material;

5 by checking that, for equipment utilizing a data base, the material is current for the date/time of the planned flight; and

6 by taking into account, especially for operations in the lower airspace, the effect of terrain on ground aid coverage.

b. SPECIAL PROCEDURES REQUIRED FOR RANDOM RNAV ROUTES. The introduction of areas within which the use of random RNAV routes is permitted will place additional responsibilities on the pilot-in-command. Particular attention must be paid for any restriction on the random RNAV area during the specified time of operation, including details of published ATS routes, both RNAV and conventional, along which the user may enter and leave the specified random RNAV area.

(1) PREFLIGHT

(a) the random RNAV area must be available for use at the planned time and altitude;

(b) it is the operator's responsibility, making full allowance for the navigational accuracy of the RNAV equipment required for the flight, to ensure that the flight is planned and operated clear of airspace reservations and within the boundaries specified by the country concerned;

(c) flight through random RNAV areas should commence and terminate at specified significant waypoints; the intended routes should indicate clearly the points at which the aircraft intends to leave and rejoin the published ATS route segments. These points, as well as other significant points enroute within random RNAV areas, and other reporting points required by the countries concerned, defined in geographical coordinates or name-code as appropriate, should be indicated in the flight plan;

(d) routes within random RNAV areas could be covered by a repetitive flight plan;

(e) random RNAV route clearances may be altered or canceled or withheld at times when ATC system capacity is unable to cope with the traffic demand.

(2) IN FLIGHT

(a) specific procedures for RNAV position reporting will be prescribed by the countries;

(b) the responsibility for accurate navigation within

the random RNAV area rests with the pilot-in-command. No relianace should be placed upon ATC for the routine navigation of the aircraft; and

(c) random RNAV operations may place even greater emphasis upon the need for strict adherence to in- flight procedures to avoid tracking errors and reduce the need for ATC intervention.

c. OCEANIC PLOTTING CHART PROCEDURES -

(1) Aircrew will perform gross navigation error check of position prior to coast out using ground based navaids, and verify altimetry for entry into RVSM airspace. TACAN updates, if required, shall be accomplished. After loading ATRCC-CLEARED ROUTE, use of master document and OCEANIC PLOTTING CHART (or equivalent) will be used to plot all ARTCC-CLEARED OCEANIC ROUTE CROSSINGS.

As a minimum:

(a) Perform gross nav check prior to entry and after exit from OTS track (or random track).

(b) Plot ARTCC-CLEARED OCEANIC ROUTE and draw route from entry point to exit point.

(c) Ten minutes after each waypoint, plot present position (position hold feature).

(d) Annontate time, track heading, latitude/longitude and source (INERTIAL, GPS, FME).

(e) Compare plot, track heading, time to route drawn on OPC.

(f) Verify position and next waypoint with the master document and FMC/FMS.

(AFFSA/AFFSA XOIA FIL 06-014)

d. PROCEDURES IN EVENT OF EQUIPMENT FAILURE/OPERATING DIFFICULTIES

(1) BY THE PILOT-IN-COMMAND. The demands which RNAV operations place upon navigational accuracy require that ATC be advised should the pilot-in-command have reason to doubt the aircraft's ability to meet the level of accuracy required by the particular RNAV route. Should the pilot-in-command be uncertain of aircraft position or suspect an equipment malfunction or failure, ATC should be informed immediately so they can offer assistance and take necessary action.

(2) BY ATC. If it is necessary for ATC to intervene, to prevent an aircraft from straying from its cleared route, sufficient assistance should be provided to enable the aircraft to regain the route center line and/or proceed to the next waypoint. The details of such interventions should be recorded to collect data and allow evaluation of over-all RNAV system efficiency. This should highlight any shortcomings in the procedures, navigation equipment, or aircraft installations and enable remedial action to be taken.

9. When communications facilities US Army Only do not exist at the intended destination, the flight plan must indicate the name of the communications facility to be used for closing of the flight plan.

(USAASD-E/USA 02-0035)

10. HAZARDOUS MATERIALS - The policies and procedures as set forth in AFJI 11-204, AR 95-27, OPNAVINST 3710.31C must be complied with for all aircraft carrying hazardous materials. Prior permission required can be obtained thru Aerodrome OPS. Phone numbers are located in the FLIP Enroute Supplement, Aerodrome Remarks Section.

(FCC/AFFSA)

11. NOTAM coverage within the Africa-Indian Ocean (AFI) and Middle East/Asia (MID/ASIA) Region may be limited. If enroute Area Control Center (ACC/FIR), intended destination or alternate does not have the NOTAM coverage symbol (diamond) in the Enroute Supplement, contact the nearest civil Air Traffic Control (ATC) Agency or the United States Defense Attache Office (USDAO) for NOTAM information.

(AFFSA/AFFSA)

12. DOD Agencies planning to request and NOTAM airspace that could conflict with the ALFA, BRAVO or DELTA air refueling corridor in the Roma or Brindisi FIRs, or the CHARLIE or ECHO refueling corridor in the Athinai FIR must first coordinate 16AF/DO approval by message or FAX at least 14 work days before the effective date of the NOTAM. Message address: HQ 16AF Aviano AB IT/DO/. Phone: DSN 632-8441, C39-434-66-8441. FAX extension: 8078.

(AFFSA/USAF FIL 71-94)

13. Mediterranean Transit Routing. - Sixteenth Air Force, in coordination with ODC Madrid and the USAFE ATCLOs in Spain and France, coordinated the below Mediterranean transit routing to standardize DoD Med passage and reduce impact to the GAT airway system. Those segments of the routes in Spanish and French FIRs/UIRs are entirely within international airspace. They support DoD missions desiring air traffic services and may be flown GAT from start to finish. OAT is an option when transiting the Spanish FIRs/UIRs. 16 AF/DO recommends that DoD aircrews desiring air traffic service:

a. While transiting international airspace over the Mediterranean Sea between the Lisboa FIR/FIR and the air-to- air refueling corridors in the Roma FIR/UIR, do so using one of the profiles listed below.

b. Fly OAT under Spanish military control in the Madrid and Barcelona FIRs/UIRs.

(1) PROFILE 1-98 (Bi-directional, for transoceanic flights between the Atlantic and the Italian AAR corridors): ORTOP (N36°03'W007°23'), 15VJF (N35°54' W006°00'), PIMOS1 (N36°00' W005°00'), GONZA (N36°12' W002°53'), GOLFO (N36°22' W002°03'), N37°19' E000°25', N38°10' E002°30', N39°27' E004°22', SOTAX (N39°35' E004°40'), ETOIL (N39°44' E007°10'), ALGHERO (N40°38' E008°17'), RAMEN (N39°44' E009°00'), CARBONARA (N39°07' E009°30'), BULAR (N38°19' E010°48'), BRAVO CORRIDOR.

(2) PROFILE 1A-98: (Same as PROFILE 1 except for alternate routing option through Marseille FIR/UIR, between Barcelona and Roma FIRs/UIRs as follows): MORSS (N39°57' E004°40'), ALDHERO (N40°38' E008°17').

(3) PROFILE 2-98: (Uni-directional from east to west from Italian AAR corridors to the Atlantic): ALPHA AAR corridor (N38°52' E009°00'), TABOT (N39°09' E008°00'), ETOIL (N39°44' E007°10'), SOTAX (N39°35' E004°40'), N39°27' E004°22', N38°10' E002°30', N37°19' E000°25', GOLFO (N36°22' W002°03'), GONZA (N36°12' W002°53'), PIMOS1 (N36°00' W005°00'), 15VJF (N35°54' W006°00'), ORTOP (N36°03' W007°23').

c. For OAT flight through Spanish airspace:

(1) OAT Control Frequencies:

(a) BARCELONA: 263.500, 137.125

(b) SEVILLA: 299.900, 137.400

(2) OAT Flight Plans:

(a) Addressees: Flight plans for OAT flight in Spanish airspace must also contain the following additional ICAO AFTN addresses: LECSYXYX and LECBYXYX.

(b) Type of Flight: In addition to the I (IFR) and M (military) used in Section 8 of the flight plan, add a remark in Section 18 that indicates "IX-OAT in Spanish airspace" (NOTE: Spain uses an "X" rather than "M" to indicate a military flight).

(c) Flight Planning Computer Dialog: For computer compatibility, in Section 15 of the flight plan, indicate OAT will commence after the initial point of entry into Spanish airspace by prefixing "OAT" with a space as shown in the example below: (Example: ORTOP /OAT or SOTAX /OAT)

(AFFSA/AFFSA)

14. Western Atlantic Route System (WATRS) - ICAO has implemented RVSM operations in the New York Oceanic FIR. The following procedures have been implemented for aircraft utilizing this airspace.

a. The Western Atlantic Route System (WATRS) refers to that area of New York FIR W of MNPS Airspace (60°W). The WATRS area is defined by the following coordinates:

Beginning at N38°30′ W60°00′ to N38°30′ W69°15′ to N38°20′ W69°57′ to N37°31′ W71°41′ to N37°13′ W72°40′ to N35°05′ W72°40′ to N34°54′ W72°57′ to N34°29′ W73°34′ to N34°33′ W73°41′ to N34°19′ W74°02′ to N34°14′ W73°57′ to N32°12′ W76°49′ to N32°20′ W77°00′ to N28°08′ W77°00′ to N27°50' W76°32′ to N27°50′ W74°50′ to N25°00′ W73°21′ to N25°00′05″ W69°13′06″ to N25°00′ W69°07′ to N23°30′ W68°40′ to N23°30′ W60°00′ to beginning.

b. Operation along A632 between SLATN and AKERS to MNPSA and operations along A632 and tracks W.

(1) MNPS certification is not required for aircraft operating on A632 and tracks W of A632 that will enter MNPSA between N39°00′ and N38°30′.

c. Routings over ZIBUT and CHAMP intersections.

(1) The increase in radar coverage in the vicinity of ZIBUT and CHAMP intersections now allows for a more efficient use of the airspace, therefore, effective November 1, 2001, all airspace users transitioning NEW YORK CENTER West Atlantic Route System (WATRS) via ZIBUT, enroute to NEW YORK CENTER North Atlantic MNPS/RVSM Airspace, are encouraged to flight plan as follows:

(a) ZIBUT DCT LARGE (N39°17′06.917″ W69°18′04.482″) DCT SLATIN/JOBOC/DOVEY

(b) Users opting to flight plan via:

1 ZIBUT DCT CREEQ DCT AKERS; or

2 ZIBUT DCT DANER DCT GABES; or

3 ZIBUT DCT any combination of latitude/longitude shall expect no higher than FL 270 and may be rerouted to accommodate WATRS non-radar traffic.

d. Routings near SLATN and FLANN intersections.

(1) The increase in radar coverage in the vicinity of SLATN and FLANN intersections now allows for a more efficient use of the airspace, therefore:

(a) Effective November 1, 2001, all airspace users that operate via LINND DCT FLANN DCT N36° W60° shall now flight plan via LINND DCT ADYNA DCT N36° W60° and reverse.

(b) All airspace users that operate via ACK A632 BDA may now flight plan via ACK A632 LACKS DCT ADYNA DCT TARGA DCT BDA and reverse. (ADYNA: N38°45′00″ W68°08′00″).

e. Routings on A554, A300, A523, and G432

(1) Effective November 1, 2001, all airspace users entering NEW YORK CENTER West Atlantic Route System (WATRS) southbound on ATS routes A554, A300, A523 and G432 shall flight plan and file the following routes:

ATS ROUTE	NEW ROUTING
For A554	LINND-BETNY-KUPEC-A554
For A300	LINND-DIDLE-WAYDE-A300
For A523	LINND-KWINN-GABES-A523
For G432	LINND-RETTA-TARGAR-G432

SIGNIFICANT POINT	COORDINATES
BETNY	N37°41′59.175″ W71°33′01.299″
DIDLE	N37°58.0′ W71°10.0′
KWINN	N38°08.0′ W70°42.0′
RETTA	N38°19.0′ W70°21.0′

NOTE 1: Users of B24 (either direction) are NOT affected.

NOTE 2: Northbound A300, A523, A554, G432 are NOT affected.

f. In-flight Procedures within WATRS RVSM Airspace

(1) Before entering RVSM Airspace, the pilot should review the status of required equipment. (See Appendix 4 of FAA Interim Guidance 91-RVSM for pilot RVSM procedures). The following equipment should be operating normally:

(a) Two primary altimetry systems.

(b) One automatic altitude-keeping device.

(c) One altitude-alerting device.

(2) The pilot must notify ATC whenever the aircraft:

(a) Is no longer RVSM compliant due to equipment failure.

(b) Experiences loss of redundancy of altimetry systems.

(c) Encounters turbulence that affects the capability to maintain flight level. (See Appendix 5 of FAA Interim Guidance 91-RVSM for pilot and controller actions in such contingencies.)

(3) During cleared transition between levels, the aircraft should not overshoot or undershoot the assigned flight level by more than 150′ (45 meters).

(4) PILOT LEVEL CALL. Except in a radar environment, pilots shall report reaching any altitude assigned within RVSM Airspace.

g. Special Procedures for In-Flight Contingencies

(1) The following general procedures apply to both subsonic and supersonic aircraft and are intended as guidance only. Although all possible contingencies cannot be covered, they provide for cases of inability to maintain assigned level due to:

(a) Weather.

(b) Aircraft performance.

(c) Pressurization failure.

(d) Problems associated with high-level supersonic flight.

(2) The procedures are applicable primarily when rapid descent and/or turn-back, or diversion to an alternate airport is required. The pilot's judgment shall determine the sequence of actions to be taken, taking into account specific circumstances.

(3) If an aircraft is unable to continue flight in accordance with its air traffic control clearance, a revised clearance shall, whenever possible, be obtained prior to initiating any action, using a distress or urgency signal as appropriate.

(4) If prior clearance cannot be obtained, an ATC clearance shall be obtained at the earliest possible time and, until a revised clearance is received, the pilot shall:

(a) If possible, deviate away from an organized track or route system.

(b) Establish communications with and alert nearby aircraft by broadcasting, at suitable intervals: flight identification, flight level, aircraft position, (including the ATS route designator or the track code) and intentions on the frequency in use, as well as on frequency 121.5 MHz (or, as a back-up, the VHF inter-pilot air-to-air frequency 123.45).

(c) Watch for conflicting traffic both visually and by reference to ACAS (if equipped).

(d) Turn on all aircraft exterior lights (commensurate with appropriate operating limitations).

h. In-flight Contingency Procedures for Subsonic Aircraft Requiring Rapid Descent, Turn-back, or Diversion.

(1) Initial action - If unable to comply with the provisions of sub-paragraph (5) (c) above to obtain a revised ATC clearance, the aircraft should leave its assigned route or track by turning 90° right or left whenever this is possible. The direction of the turn should be determined by the position of the aircraft relative to any organized route or track system (for example, whether the aircraft is outside, at the edge of, or within the system). Other factors to consider are terrain clearance and the levels allocated to adjacent routes or tracks.

(2) Subsequent action:

(a) AIRCRAFT ABLE TO MAINTAIN LEVEL-An aircraft able to maintain its assigned level should acquire and maintain in either direction a track laterally separated by 30 NM from its assigned route or track and once established on the offset track, climb or descend 500' (150 meters).

(b) AIRCRAFT UNABLE TO MAINTAIN LEVEL-An aircraft NOT able to maintain its assigned level should, whenever possible, minimize its rate of descent while turning to acquire and maintain in either direction a track laterally separated by 30 NM from its assigned route or track. For subsequent level flight, a level should be selected which differs by 500' (150 meters) from those normally used.

(c) DIVERSION ACROSS THE FLOW OF ADJACENT TRAFFIC. Before commencing a diversion across the flow of adjacent traffic, the aircraft should, while maintaining the 30 NM offset, expedite climb above or descent below levels where the majority of aircraft operate (e.g., to a level above FL 410 or below FL 290) and then maintain a level which differs by 500' (150 meters) from those normally used. However, if the pilot is unable or unwilling to carry out a major climb or descent, the aircraft should be flown at a level 500' above or below levels normally used until a new ATC clearance is obtained.

(d) ETOPS AIRCRAFT. If these contingency procedures are employed by a twin engine aircraft as a result of an engine shutdown or a failure of an ETOPS critical system, the pilot should advise ATC as soon as practicable of the situation, reminding ATC ofthe type of aircraft involved and requesting expeditious handling.

i. Weather Deviation Procedures

(1) The following procedures are intended to provide guidance for deviations around thunderstorms. All possible circumstances cannot be covered. The pilot's judgement shall ultimately determine the sequence of actions taken and ATC shall render all possible assistance.

(2) If the aircraft is required to deviate from track to avoid weather and prior clearance cannot be obtained, an air traffic control clearance shall be obtained at the earliest possible time. In the meantime, the aircraft shall follow the procedures detailed in subparagraph (7) (f), below.

(3) The pilot shall advise ATC when weather deviation is no longer required, or when a weather deviation has been completed and the aircraft has returned to the centerline of its cleared route.

(4) Obtaining priority from ATC when weather deviation is required.

(a) When the pilot initiates communications with ATC, rapid response may be obtained by stating "WEATHER DEVIATION REQUIRED" to indicate that priority is desired on the frequency and for ATC response.

(b) The pilot still retains the option of initiating the communications using the urgency call "PAN PAN PAN" to alert all listening parties to a special handling condition which will receive ATC priority for issuance of a clearance or assistance.

(5) Actions to be taken when controller-pilot communications are established.

(a) The pilot notifies ATC and requests clearance to deviate from track, advising, when possible, the extent of the deviation expected.

(b) ATC takes one of the following actions:

1 If there is no conflicting traffic in the horizontal dimension, ATC will issue clearance to deviate from track.

2 If there is conflicting traffic in the horizontal dimension, ATC separates aircraft by establishing vertical separation.

3 If there is conflicting traffic in the horizontal dimension and ATC is unable to establish vertical separation, ATC shall:

a Advise the pilot unable to issue clearance for requested deviation.

b Advise pilot of essential traffic.

c Request pilot's intentions.

d **PHRASEOLOGY** - "Unable (requested deviation), traffic is (call sign, position, altitude, direction), advise intentions."

(c) The pilot will take the following actions:

1 Advise ATC of intentions; and

2 Comply with air traffic control clearance issued; or

3 Execute the procedures detailed in sub-paragraph (7) (f) below. (ATC will issue essential traffic information to all affected aircraft.)

4 If necessary, establish voice communications with ATC to expedite dialogue on the situation.

(6) Actions to be taken if a revised air traffic control clearance cannot be obtained.

(a) The pilot shall take the actions listed below under the provision that the pilot may deviate from rules of the air, when it is absolutely necessary in the interests of safety to do so.

(b) If a revised Air Traffic Control clearance cannot be obtained and deviation from track is required to avoid weather, the pilot should take the following actions:

1 If possible, deviate away from an organized track or route system.

2 Establish communication with and alert nearby aircraft by broadcasting, at suitable intervals: flight identification, flight level, aircraft position (including the ATS route designator or the track code) and intentions (including the magnitude of the deviation expected) on the frequency in use, as well as on frequency 121.5 MHz (or, as a back-up, the VHF inter-pilot air-to-air frequency 123.45).

3 Watch for conflicting traffic both visually and by reference to ACAS (if equipped).

4 Turn on all aircraft exterior lights (commensurate with appropriate operating limitations).

5 For deviations of less than 10 NM, aircraft should remain at the level assigned by ATC.

6 For deviations of greater than 10 NM, when the aircraft is approximately 10 NM from track, initiate a level change based on the following criteria:

Route center line track	Deviations > 10 NM	Level change
EAST (000°-179° magnetic)	LEFT RIGHT	DESCEND 300' CLIMB 300'
WEST (180°-359° magnetic)	LEFT RIGHT	CLIMB 300' DESCEND 300'

NOTE: Sub-paragraphs b and c above call for the pilot to: broadcast aircraft position and pilot's intentions, identify conflicting traffic and communicate air-to-air with near-by aircraft. If the pilot determines that there is another aircraft at or near the same flight level with which his aircraft might conflict, then the pilot is expected to adjust the path of the aircraft, as necessary, to avoid conflict.

7 If contact was not established prior to deviating, continue to attempt to contact ATC to obtain a clearance. If contact was established, continue to keep ATC advised of intentions and obtain essential traffic information.

8 When returning to track, be at its assigned flight level, when the aircraft is within approximately 10 NM of centerline.

j. Application of Strategic Lateral Offsets in WATRS Airspace

(1) The strategic lateral offset procedure provides for the application of lateral offsets within the following guidelines:

(a) Strategic lateral offsets including those executed to avoid wake turbulence are to be made to the right of a route or track;

(b) An aircraft may fly one of three positions in relation to a route or track: centerline, 1nm or 2nm right; and,

(c) Offsets are not to exceed 2nm right of centerline.

(2) The intent of this procedure is to reduce risk (increase the safety margin) by distributing aircraft laterally and equally across the three available positions. In this connection, pilots must take account of the following:

(a) Aircraft without automatic offset programming capability must fly the centerline;

(b) Aircraft capable of being programmed with automatic offsets may fly the centerline or offset 1 NM or 2 NM right of centerline to obtain lateral spacing from nearby aircraft;

(c) Pilots should use whatever means are available (e.g. TCAS, communications, visual acquisition, GPWS) to determine the best flight path to fly;

(d) Any aircraft overtaking another aircraft is to offset within the confines of this procedure, if capable, so as to create the least amount of wake turbulence for the aircraft being overtaken;

(e) For wake turbulence purposes, pilots are also to fly one of the three positions at j(1)(b), above and never offset to the left of centerline nor offset more than 2 NM right of centerline;

NOTE: It is recognised that the pilot will use his/her judgement to determine the action most appropriate to any given situation and has the final authority and responsibility for the safe operation of the aeroplane. The use of air-to-air channel, 123.45, may be used to coordinate the best wake turbulence offset option.

(f) Pilots may apply an offset outbound at the oceanic entry point but must return to centerline at the oceanic exit point;

(g) Aircraft transiting radar-controlled airspace e.g. Bermuda, are to remain on their established offset positions;

(h) There is no ATC clearance required for this procedure and it is not necessary that ATC be advised; and,

(i) Position reports are to be based on the current ATC clearance and not the exact co-ordinates of the offset position. An example of a report when passing 50N 020W while being offset from track is "Shanwick, Austrian 73, position 54N 020W, 1222 estimate . . . etc".

(AFFSA/AFFSA/XAX FIL 06-145)

k. Height Deviation Reporting.

(1) Any deviation which is 300' or more from the assigned level in RVSM or RVSM Transition Airspace, whether intentional or not, should be reported to the NAT CMA.

(2) Reporting these events to the NAT CMA is accomplished using the form contained as attachment 2 to Version 9 of the NAT MNPS Operations Manual, which is available from ftp://www.nuntius.co.uk/nat/MNPSA9/MNPS_ED9.ZIP. It may be filed at the completion of flight or it may be filed by the controlling ATC facility, as appropriate. The forms should be sent to:

North Atlantic Central Monitoring Agency
National Air Traffic Services Limited
T8G7, One Kemble Street
London WC2B 4AP
United Kingdom
Fax +44 207 832 55 62

Federal Aviation Administration
William J. Hughes Technical Center
NAS and International Airspace
Analysis Branch ACT-520
Atlantic City, NJ 08405
Fax: +01 609 485 5117

l. Flight Planning Requirements

(1) The letter "W" shall be inserted in Item 10 (Equipment) of the ICAO standard flight plan to indicate that the aircraft is RVSM approved aircraft.

m. Procedures for Operation of Non-RVSM Compliant Aircraft in RVSM Airspace.

(1) RVSM approved aircraft will be given priority for level allocation over non-RVSM approved aircraft.

(2) The vertical separation minimum between non-RVSM aircraft operating in the RVSM stratum and all other aircraft is 2,000'.

(3) CONTINUOUS CLIMB/DESCENT OF NON-COMPLIANT AIRCRAFT THROUGH RVSM AIRSPACE. Non-RVSM compliant aircraft may be cleared to climb to and operate above FL 410 or descend to and operate below FL 290 provided that they:

(a) Do not climb or descend at less than the normal rate for the aircraft.

(b) Do not level off at an intermediate level while passing through the RVSM stratum.

(4) SPECIAL COORDINATION PROCEDURES FOR CRUISE OPERATION OF NON-RVSM COMPLIANT STATE AIRCRAFT IN RVSM AIRSPACE.

(a) ATC Notification of non-RVSM compliant State aircraft (those aircraft used in military, custom, and police services shall be deemed state aircraft) is accomplished through filing of an ICAO flight plan. In Field 18 of the ICAO Flight Plan, include "STS/APVD NONRVSM."

(b) If approval status of non-RVSM state aircraft is challenged by New York Oceanic, pilots of military aircraft should state that they are operating a state aircraft in accordance with the procedures set out in the WATRS RVSM NOTAM. Problems with accommodation within WATRS RVSM Airspace should be reported to AFFSA/XOP, DSN 857-2223.

(c) Approval of all other (non-state) aircraft will be in accordance with the WATRS RVSM NOTAM (www.faa.gov/NTAP)

NOTE 1: New York Oceanic will coordinate non-RVSM status with any affected adjacent FIR or facility.

NOTE 2: Approval means able to operate in the RVSM stratum. Aircraft operating levels will be subject to Air Traffic Control.

n. Procedures for suspension of RVSM - Air Traffic Service providers will consider suspending RVSM procedures within affected areas within the New York FIR and adjacent transition areas when there are pilot reports of greater than moderate turbulence. Within areas where RVSM procedures are suspended, the vertical separation minimum between all aircraft will be 2,000'.

o. "When Able Higher" (WAH) Reports

(1) To ensure maximum use of available altitudes, aircraft entering RVSM and/or MNPS airspace in the New York FIR should be prepared to advise ATC of the time or position the aircraft can accept the next higher altitude. WAH reports are also used to plan the altitude for aircraft as they transition from RVSM to CVSM altitudes. Therefore it is important that the altitude capability of the aircraft is known by controllers. If the aircraft is capable of a higher altitude that, for whatever reason, is not preferred by the pilot, give the altitude in the WAH report and advise that you prefer not to be assigned that altitude.

(2) The procedures will differ for Eastbound and Westbound aircraft since many of the Eastbound aircraft will enter New York MNPS/RVSM Airspace from ATC sectors that have direct controller-pilot communications. ATC acknowledgment of a WAH report is NOT a clearance to change altitude.

(a) Eastbound aircraft entering RVSM or MNPS Airspace in the New York FIR-Pilots may be requested by ATC to provide an estimate for when the flight can accept the next higher altitude(s). If requested, pilots should provide this information as soon as possible.

(b) Westbound aircraft entering RVSM or MNPS Airspace in the New York FIR-Pilots should include in the initial position report the time or location that the next higher altitude can be accepted.

EXAMPLE - "Global Air 543, 40 north 40 west at 1010, flight level 350, estimating 40 north 50 west at 1110, 40 north 60 west. Next able flight level 360 at 1035."

NOTE: Pilots may include more than one altitude if that information is available.

EXAMPLE - (after stating initial report) "Able flight level 360 at 1035, able flight level 370 at 1145, able flight level 390 at 1300."

p. Mandatory Pilot Reports

(1) In addition to reading back altitude assignments, pilots shall report reaching any altitude assigned within RVSM airspace. This serves as a double check between pilots and controllers and reduces the possibility of operational errors. This requirement for altitude readback and reports of reaching assigned altitudes applies to both RVSM and CVSM altitudes (i.e., FL 330, 340, 350, 360, and 370).

EXAMPLE - (initial altitude readback): "Global Air 543 climbing to flight level 360." (upon reaching assigned altitude): "Global Air 543 level at flight level 360."

15. ICAO has implemented RVSM operations in the EUR/SAM corridor effective 24 January 02. The following procedures have been implemented for aircraft utilizing this airspace.

a. The EUR/SAM corridor is the airspace over the South Atlantic (SAT) area which lies within Flight Information Regions of Canarias, Dakar Oceanic, Atlantico and Sal Oceanic. RVSM shall be applicable in that volume of airspace between FL 310 and FL 410 in the following airspace:

(1) From N25°00′ W15°30′ to N19°00′ W19°00′ to N17°20′ W20°00′ to N15°00′ W20°00′ to N12°58′ W21°22′ to S08°30.6′ W34°21′ to S08°08.2′ W34°55.6 (Recife VOR) then follow the N continental limits of Brazil until the point S01°20.7′ W43°07.5′ then to N07°40' W35°00′ to N13°30′ W37°30′ to N17°00′ W37°30′ to N24°00′ W25°00′ to N30°00′ W25°00′ to N30°00′ W20°00′ to N25°00′ W20°00′ to N25°00′ W15°30′.

(2) This includes ATS Routes UN741, UN866, UN873, B/UB623 and UN857.

b. Non-RVSM Aircraft

(1) Operators of non-RVSM approved state aircraft with a requested flight level of FL 290 or above shall insert STS/NON RVSM in Item 18 of the ICAO flight plan form.

(2) Operators of formation flights of state aircraft shall not insert the letter W in Item 10 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned. Operators of formation flights of state aircraft intending to operate with the EUR/SAM Corridor RVSM Airspace as General Air Traffic (GAT) shall include STS/Non-RVSM in Item 18 of the ICAO flight plan form.

(3) Operators of Non-RVSM approved state aircraft intending to operate within the EUR/SAM Corridor RVSM Airspace shall include the following in Item 15 of the ICAO flight plan form:

(a) The entry point at the lateral limits of the EUR/SAM Corridor RVSM Airspace and the requested flight level for that portion of the route commencing immediately after the RVSM entry point; and

(b) The exit point at the lateral limits of the EUR/SAM Corridor RVSM Airspace and the requested flight level for that portion of the route commencing immediately after the RVSM exit point.

c. Crossing Traffic - For the purpose of this application, crossing traffic is defined as all that traffic entering or leaving the EUR/SAM RVSM Airspace along its E or W boundaries (i.e. at any point other than its N (Canarias) or S (Brazil transition area) boundaries). Crossing traffic can flight plan to enter and leave the RVSM Airspace at any point along its boundaries, indicating in the flight plan the coordinates and estimated time of the entering and exit points into the RVSM Airspace and of the crossing of each of the fixed ATS routes. Crossing traffic should flight plan to operate through the EUR/SAM RVSM Airspace at conventional flight levels, i.e., E to W FL 310, 350, 390 and W to E FL 290, 330, 370.

(1) Traffic crossing the EUR/SAM corridor should flight plan to enter and exit the EUR/SAM corridor RVSM Airspace at the following published points: EGIMI, DIKEB, MILOK, ORARO, BODAK, NOISE and DIGOR. The time estimates over each point must be inserted in Item 18 of flight plan.

(2) Antigua and Ascension Island Route users must comply with these requirements until such time as the Antigua and Ascension Island Route is officially designated an international airway and receives official recognition.

EGIMI - N06°00.00′ W36°20.00′ - Entry/Exit
DIKEB - N04°29.99′ W34°09.45′ - UN741
MILOK - N03°25.83′ W32°37.10′ - UN866
ORARO - N02°14.83′ W30°55.37′ - UN873
BODAK - N01°35.92′ W29°59.78′ - B/UB623
NOISE - N01°23.67′ W29°42.55′ - UN857
DIGOR - N00°40.00′ W28°40.00′ - Entry/Exit

(3) All crossing traffic intending to operate through the RVSM Airspace must obtain an ATC clearance. This should be requested sufficiently in advance to preclude operational difficulties from the ACC responsible for the first RVSM Airspace to be entered, or in case of communications difficulties, from any of the ACC concerned with the EUR/SAM RVSM Airspace or still from any other adjacent ACC.

(AFFSA/AFFSA FIL 02-13)

SPECIAL PROCEDURES FOR IN-FLIGHT CONTINGENCIES IN OCEANIC AREAS AND REMOTE AREAS -

1. If an aircraft is unable to continue the flight in accordance with its ATC clearance, and/or an aircraft is unable to maintain the navigation performance accuracy specified for the airspace, a revised clearance shall be obtained, whenever possible, prior to initiating any action.

2. The radiotelephony distress signal (MAYDAY) or urgency signal (PAN PAN) preferably spoken three times shall be used as appropriate. Subsequent ATC action with respect to that aircraft shall be based on the intentions of the pilot and the overall air traffic situation.

3. If prior clearance cannot be obtained, an ATC clearance shall be obtained at the earliest possible time and, until a revised clearance is received, the pilot shall:

a. Leave the assigned route or track by initially turning 90 degrees to the right or to the left. When possible, the direction of the turn should be determined by the position of the aircraft relative to any organized route or track system. Other factors which may affect the direction of turn are:

(1) The direction to an alternate airport, terrain clearance;

(2) Any lateral offset being flown, and the flight levels allocated on adjacent route or tracks.

FAA NOTE: A turn of less than or greater to 90 degrees may be required depending on the type of contingency and whether the pilot intends to continue in the same direction or reverse course.

b. Following the turn, the pilot should:

(1) If unable to maintain the assigned flight level, initially minimize the rate of descent to the extent that is operationally feasible;

(2) Take account of other aircraft being laterally offset from its track;

(3) Acquire and maintain in either direction a track laterally separated by 28km (15NM) from the assigned route; and

(4) Once established on the offset track, climb or descend to select a flight level which differs from those normally used by 150m (500 ft.);

c. Establish communications with and alert nearby aircraft by broadcasting, at suitable intervals; aircraft identification, flight level, position (including ATS route designator or the track code, as appropriate) and intentions on the frequency in use and on 121.5 MHz (or, as back-up, on the inter-pilot air-to-air frequency 123.45MHz);

d. Maintain a watch for conflicting traffic both visually and by reference to ACAS (TCAS)(if equipped);

e. Turn off all aircraft exterior lights (commensurate with appropriate operating limitations);

f. Keep the SSR transponder on at all times; and

g. Take action as necessary to ensure the safety of the aircraft.

4. When leaving the assigned track to acquire and maintain the track laterally separated by 28 km (15 NM), the flight crew, should, where practicable, avoid overshooting the track to be acquired, particularly in airspace where a 55.5 km (30 NM) lateral separation minimum is applied.

EXTENDED RANGE OPERATIONS BY AIRCRAFT WITH TWO-TURBINE POWER-UNITS (ETOPS)

1. If the contingency procedures are employed by a twin-engine aircraft as a result of an engine shutdown of failure of an ETOPS critical system, the pilot should advise ATC as soon as practicable of the situation, reminding ATC of the type of aircraft involved, and request expeditious handling.

(AFFSA/ICAO DOC 4444 Sec. 15.2)

CLEARANCE INFORMATION -

1. PROCEDURES FOR ALTITUDE RESERVATIONS - Flights of two or more aircraft transiting European airspace may be required to be on an altitude reservation.

a. General

(1) Altitude reservation requests for flights originating or operating within the European Command area of responsibility shall be IAW FAA Order 7610.4 and 7110.65, USAFE Instruction 13-202, and procedures outlined below. In those areas where host nation ATC authorities have consummated an agreement with the USAF, deviation from the above prescribed directives is authorized.

(2) The European Central Altitude Reservation Facility (EUCARF), located at Ramstein AB, GM, is designated the single manager for coordinating ALTRV requests of the DOD IAW the references outlined above. EUCARF is operational from 0600-2000Z++ Mon thru Fri, it is closed weekends and US holidays. Between 2000-0600Z++ weekdays and on weekends and holidays EUCARF is closed, an answering machine is available to provide alternate contact instructions. For time sensitive matters, contact the EUCARF duty NCO via the USAFE Air Operations Squadron Watch Element, Ramstein AB, DSN 480-8200.

(3) Direct filing of ALTRV approval requests (APREQs) with EUCARF may be accomplished via e-mail to eucarf@ramstein.af.mil, via military message to EUCARF RAMSTEIN AB GE, via ICAO Aeronautical Fixed Telecommunications Network (AFTN) to EDDFYXYR, or via fax to DSN 480-9855. EUCARF may be contacted via telephone, DSN 480-7346/7839. EUCARF is a coordinating agency only, without jurisdiction over the airspace concerned.

b. For further information see USAFE Instruction 13- 202.

(EUCARF/MSG 11-17-99)

FLIGHT HAZARDS

1. TRAILING WIRE ANTENNA OPERATIONS - Operation consists of aircraft flying a specified track with a wire antenna (of various lengths) and drogue trailing behind and below the aircraft. All operations are conducted on IFR flight plans and announced by NOTAM.

2. PARACHUTE JUMPING AREAS - Extreme caution must be used when aircraft fly thru or participate in parachute jumping activities (Drop Zone.) The parachute jumping areas listed in FLIP, are only "considered as a navigational warning". The burden of flight safety is placed on the user of the area rather than other aircraft operating in the area.

3. WARNING TO ACFT IN THE MEDITERRANEAN AND MIDDLE EAST AREAS - Every precautionary measure will be taken by DOD aircrews flying in the Mediterranean and Middle East areas to insure strict adherence to FCG criteria and overflight clearance authorization specifications. Dates, times, routes, and compulsory check points specified in overflight clearance authorization must be adhered to exactly. Base Operations clearance personnel will check every aspect of the flight plan and clearance authorization to insure that flight plans are in accordance with overflight authorizations, national boundary route/flight restrictions and the FCG. Base OPS officers will impress upon all aircrews flying within the Mediterranean and Middle East areas that unless every precaution is taken to insure compliance with dates, times, routes and compulsory check points while flying in the country's designated corridor, airways and ADR's interception by fighter aircraft will undoubtedly occur and an international incident may result.

NOTE: Due to controlling agencies and limited airspace, aircraft are advised to use extreme caution when transiting between TOSKA CRP (N34°57.9' E30°00.0') and TOMBI CRP (N36°02.5' E30°49.5')

4. Caution must be exercised at all times when using LF/MF navigational aids in the European/Mediterranean Region. Extreme frequency congestion exists, coupled with minimum frequency protection. At night, an increased radiation phenomena is experienced which increases the reception range

of all LF/MF aids; however, this causes a further deterioration of frequency protection. Exercise extreme caution in the identification and use of radio beacons and radio range stations within Europe, particularly adjacent to ADIZ. It is possible to get positive station identification and have the ADF needles point to an entirely different station due to similar frequencies and greater output of the adjacent station. All radio beacons listed in DOD FLIP Europe North Africa and Middle East Enroute Supplement may be unreliable beyond 25 NM. Aircrews experiencing suspected intentional interference of radio navigational aids report IAW appropriate service directives. Use extreme caution at all time.

(USAFE DO/AFFSA)

ADDITIONAL INFORMATION

1. NEAR COLLISION REPORT

a. When flight safety is jeopardized by another close flying aircraft, the incident will be reported as a NEAR COLLISION OPERATIONAL HAZARD. When a near collision incident occurs, the aircraft commander will report the following by radio to the nearest ATC Agency: "THIS IS A NEAR COLLISION REPORT", the particulars of the incident, complete position report and advise ATC that "Acomplete report will be filed upon landing at destination". If a tactical call sign is being used, do not identify the unit the pilot is assigned to in the airborne radio transmission. Phone and electrical message associating a single aircraft tactical call sign with the base of assignment are permitted.

(1) USAF Aircrews will follow guidelines from NATO STANAG 3750, Reporting and Investigation of Air Traffic - Incidents, but will file an AF Form 651, Hazardous Air Traffic Report form vice the NATO AIRPROX.

(AFFSA/USAF FIL 61/00)

b. When the aircraft lands at destination, the pilot will forward the following information, in the order listed below, to the nearest Flying Safety Office and/or AFOD, as appropriate. If the incident occurred within the USCINCMEAFSA area of responsibility refer to the classified supplement USAF FCG for additional instructions or US Air, Army and Naval Attaches if FCG is not available. Aircraft call sign, type and position in formation if appropriate: Identification of other aircraft involved; heading, altitude, flight maneuver, flight conditions, time and place of near collision; proximity to other aircraft and evasive action taken by either aircraft; ATC/ACW Agency working with at the time of occurrence.

c. If the near collision involves a civilian aircraft, in addition to the above, USAF pilots will make an OPREP-3 Beeline report to the USAFE Command Post.

d. USN pilots who can not obtain Operational Hazard Report forms will follow the reporting instructions in para b. above.

NOTE: Close proximities occurring during ordered interceptions will not be considered as near collisions unless unauthorized or dangerous tactics are used by the interceptor.

(USAFE-DO/AFFSA)

2. US ARMY FLIGHT OPERATIONS DETACHMENT (AFOD)

a. Provides US Army flight service support in the USAREUR area of responsibility. The AFOD, 24 hour, 365 days a year, provides:

(1) Coordination center for Army air traffic with USAFE, NATO military, and civil aeronautical authorities of European nations.

(2) Receives, reviews for accuracy, and disseminates US Army flight plans to appropriate agencies.

(3) ICAO preferred instrument flight routing.

(4) Procedural tracking of aircraft progress and initiate SAR for overdue aircraft.

(5) Coordinates USAREUR airspace usage requirements. Requests for airspace coordination require a minimum handling of not less than ten working days.

(6) Coordination of aeromedical evacuations.

(7) Assistance to US Army aviators and flight planning requirements.

(8) Investigates alleged flight violations and near miss reports.

(9) Operates Army's central notice to airmen (NOTAM) facility in Europe. Most international NOTAM's from outside Germany available within two hours.

b. TO CONTACT AFOD

(1) All sections of AFOD may be reached by direct dial DSN 373-6201, CIV 06221-17-6201 (if calling from outside Germany, the country code is 049 and then 6221) or E-MAIL: fltops.@hq.hqusareur.army.mil. US Army aviators reporting an aircraft mishap or torelay arrival/departure data in remote areas may call collect (state to operator "Army aviator calling collect to relay aircraft movement information").

(2) If airborne, have ATC/service transmit ATC message to AFOD using the address "ETEEYWYX".

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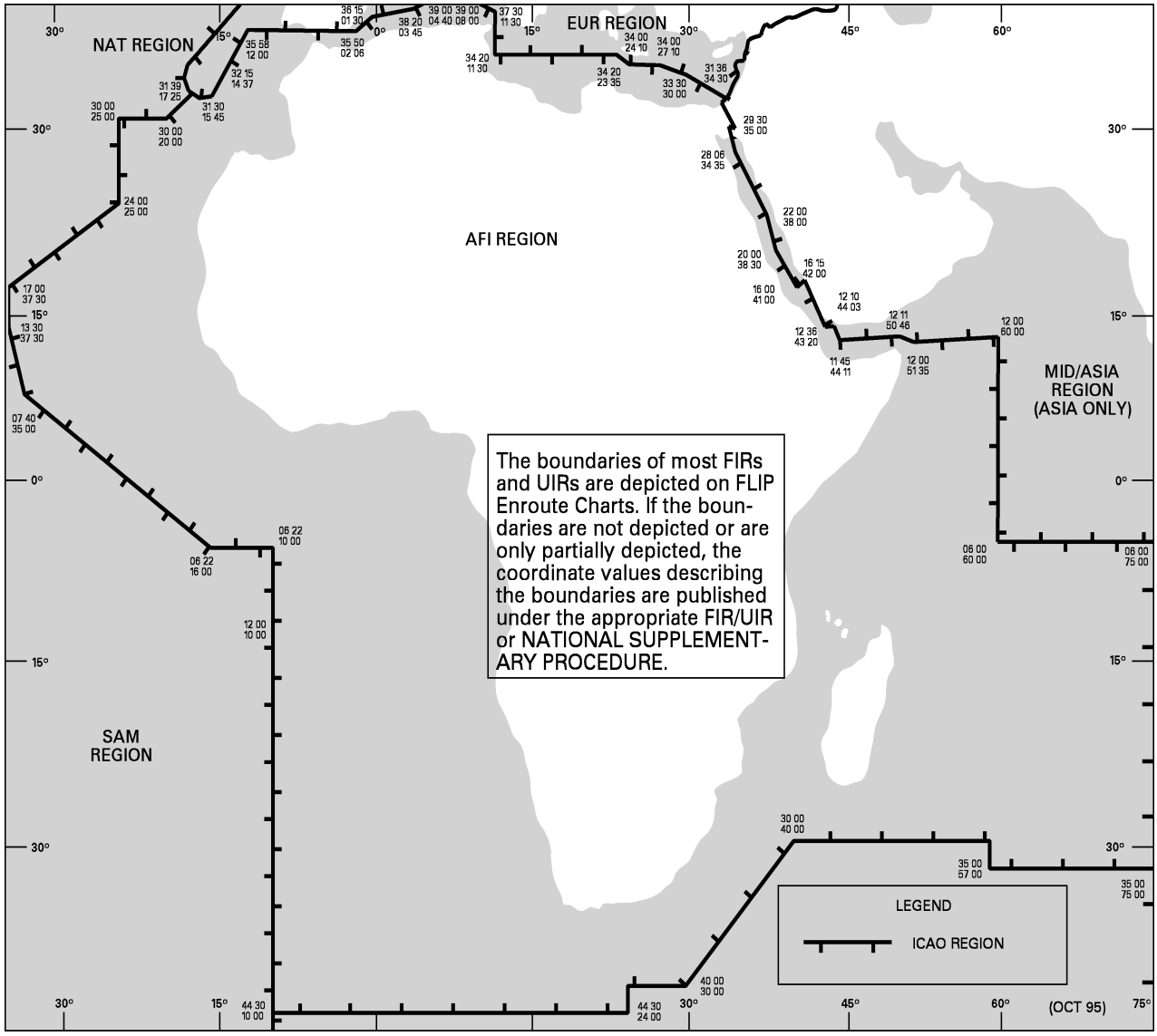
Chapter 2

ICAO REGIONAL DATA

SECTION A. AFRICA/INDIAN OCEAN REGION



SECTION A. AFRICA/INDIAN OCEAN (AFI) REGION

AFRICA/INDIAN OCEAN SUPPLEMENTARY PROCEDURES

NATIONAL PROCEDURES

DIMENSIONAL UNITS - Refer to appropriate FIR/UIR or National Supplementary Procedures.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Refer to individual FIR/UIR or National Supplementary Procedures.

POSITION REPORTING - Standard except:

1. Whenever possible flights should be authorized to fly direct between any two intermediate or terminal points of the ATS route network. In this case, flight progress reports should be made in relation to the significant points defining the basic route. (7030 AFI/RAC 2.1.1)

2. All aircraft on VFR flights, and aircraft on IFR flights outside controlled airspace, shall maintain a watch on a radio station furnishing communications for the unit providing flight

information service in the FIR and file with that station information as to their position unless otherwise authorized by the state overflown.

(7030 AFI/RAC 3.1.1)

3. Position reports additional to those required by the general position reporting procedures shall be made when entering or leaving controlled or advisory airspace.

(7030 AFI/RAC 3.2.1)

4. The last position report before passing from one FIR to an adjacent one shall also be made to the ATS unit serving the airspace about to be entered.

(7030 AFI/RAC 3.3.1)

VISUAL FLIGHT RULES

Standard except, VFR flights to be operated with a control zone established at an airport serving international flights and in specified portions of the associated TCA used by international IFR flights in association with approach, holding, departure and noise abatement procedure shall have two-way radio communications, obtain clearance from the appropriate ATC unit and report positions as required.

(7030/4 AFI-RAC 1.1.1)

INSTRUMENT FLIGHT RULES

Standard except:

1. Flights shall be conducted IAW Instrument Flight Rules, even when not operating in IMC when not operating in IMC when operated above FL 150.

(7030 AFI/RAC 1.2.1)

2. All IFR flights shall comply with the procedures for air traffic advisory service when operated in advisory airspace.

(7030 AFI/RAC 1.4.1)

3. All changes of flight level required by transition from the system of designated cruising levels along controlled routes to the semicircular system, or vice versa, shall be made at points within controlled airspace. Border points or other points where transfer of communications or responsibility would be adversely affected should be avoided.

(7030 AFI/RAC 1.3)

RVSM RULES -

NOTE: REDUCED VERTICAL SEPARATION MINIMA (RVSM) - For requirements for RVSM in Northern Africa see Chapter 2 Section B; European Region. For individual country exceptions see country listings.

(AFFSA/OL-D USAF FIL 01-62)

FLIGHT PLANNING

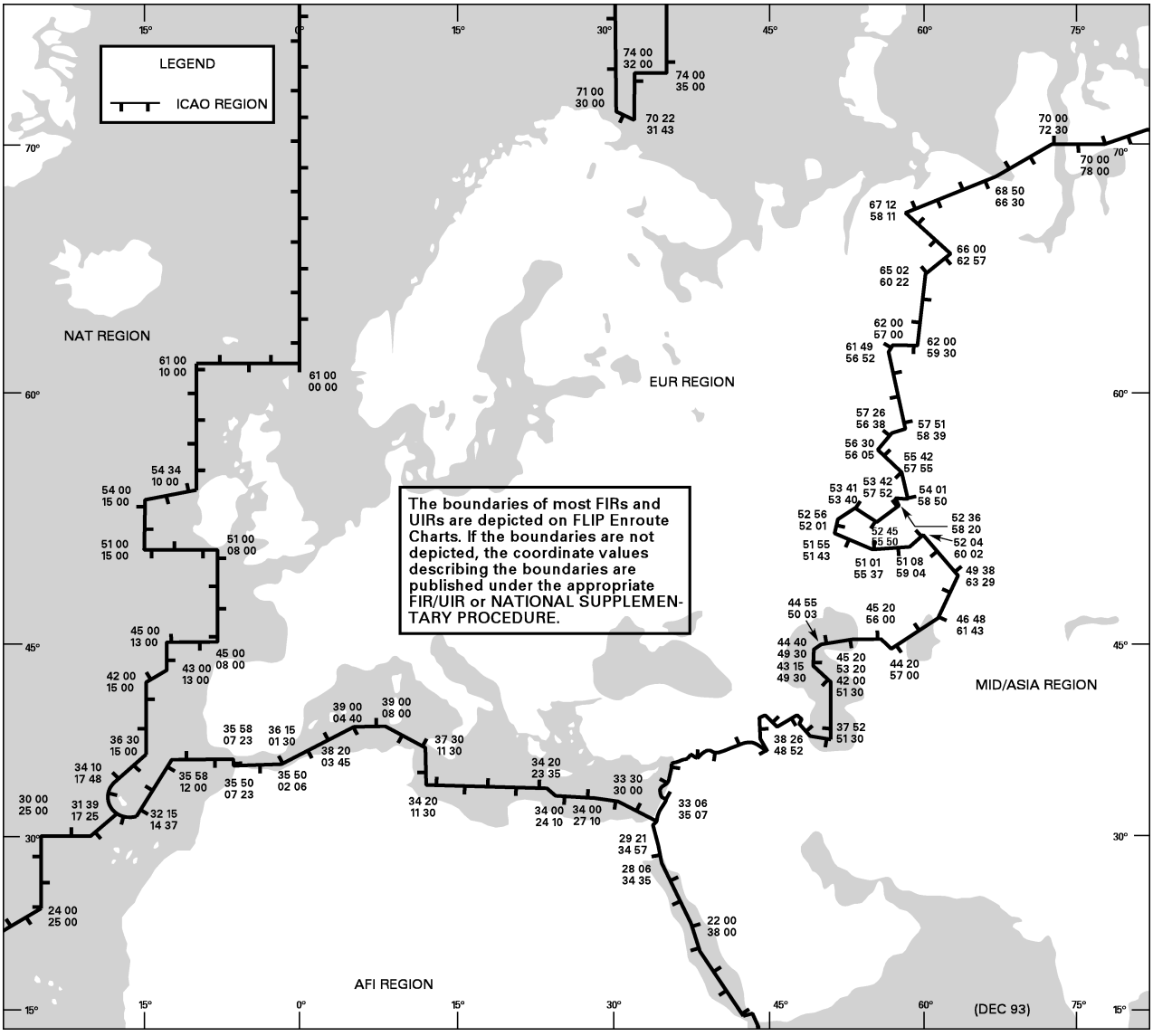
FOR EUROPEAN AIR TRAFFIC FLOW MANAGEMENT, INTEGRATED INITIAL FLIGHT PLAN PROCESSING SYSTEM, AND FLEXIBLE USE OF AIRSPACE IN ECAC AREAS, SEE CHAPTER 1, FLIGHT PLANNING.

4. In the Antananarivo, Brazzaville, Dakar, Dakar Oceanic, Ndjamena, and Niamey FIR/UIRs entering "S" in block 10 - Equipment of the ICAO flight plan, IFR or VFR, indicates having VHF, ADF, VOR, ILS and voice radio equipment capable of maintaining the required A/G communications with the FIC.

(ASECNA AIP 0 RAC 1-1.09)

5. When transiting the Africa-Indian Ocean, see IATA Inflight Broadcast Procedure (IFBP) Africa Region, found in the FIH.

SECTION B. EUROPEAN REGION



SECTION B. EUROPEAN (EUR) REGION

EUROPEAN REGIONAL SUPPLEMENTARY PROCEDURES

NATIONAL PROCEDURES

DIMENSIONAL UNITS - Refer to appropriate FIR/UIR or National Supplementary Procedures.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Refer to appropriate FIR/UIR or National Supplementary Procedures.

POSITION REPORTING - Standard except:

1. Position reports should contain only the aircraft identification, position, time, and flight level unless otherwise specified.

(SPEC/ICAO DOC 7030-4 EUR-RAC 3.3.1.1-2)

2. In defined portions of the airspace, designated by the appropriate ATS authority, where, through SSR, individual identity and verified Mode C information are permanently available in the form of labels associated with the radar position of the aircraft concerned and reliable air-ground communication coverage and direct pilot to controller communications exist, the initial call after changing a radio frequency may contain only the aircraft identification and level and subsequently any position report may contain only aircraft identification, position and time.

(SPEC/ICAO DOC 7030-4 EUR-RAC 3.2.1)

3. METEOROLOGICAL REPORTS - Aircraft outside the Alger, Cairo, Casablanca, Tripoli and Tunis FIR shall be exempt from making, recording and reporting any routine observations except

when flying on portions of routes traversing the Mediterranean Sea.

(SPEC/ICAO DOC 7030-4 EUR-MET 1.1)

VISUAL FLIGHT RULES

Standard, except as stated under Instrument Flight Rules below.

INSTRUMENT FLIGHT RULES

Standard except:

1. Flights within Amman, Beirut, Cairo, Damascus, Nicosia and Tel Aviv FIR shall be conducted in accordance with Instrument FlightRules, even when not operating in instrument meteorological conditions, above FL 150.

(SPEC/ICAO DOC 7030-4 EUR-RAC 1.1.1)

2. IFR flights operating within the Amman, Beirut, Cairo, Damascus and Tel Aviv FIR shall comply with procedures for air traffic advisory service when operating in advisory airspace.

(SPEC/ICAO DOC 7030-4 EUR-RAC 1.2.1)

3. RNAV - In the EUR Region, two levels of navigational accuracy have been established.

a. European Region "Basic RNAV" equipment has a track-keeping performance of plus or minus 9.3 km (5 NM) for 95% of the flight.

b. European Region "Precision RNAV" has a track- keeping performance of plus or minus .93km (.5 NM).

NOTE: "T" indicates true heading for RNAV routes.

(SPEC/ICAO DOC 7754 1-3.3)

RVSM RULES - REDUCED VERTICAL SEPARATION MINIMA (RVSM) - For individual country exceptions see country listings.

1. GENERAL. The following requirements apply within European RVSM airspace:

a. Flights shall be conducted in accordance with instrument flight rules (IFR) when operated within or above the EUR RVSM airspace.

b. Except for operations within the EUR RVSM transition airspace, and within airspace designated for the purpose of transitioning non-RVSM approved aircraft operating to and from the North Atlantic Region, only RVSM approved aircraft and non-RVSM approved State aircraft shall be issued an ATC clearance into the EUR RVSM airspace.

c. ATC clearance into the EUR RVSM airspace shall not be issued to formation flights of civil aircraft.

d. Operators shall ensure that any change to the RVSM approval status of a flight resulting from a change of aircraft or flight crew is addressed to the EUROCONTROL CFMU IFPS in the form of a modification (CHG) or a Cancellation (CNL) message, as appropriate.

e. All operators filing repetitive flight plans (RPL) shall include in Item Q of the repetitive flight plan all equipment and capability information in conformity with Item 10 of the ICAO flight plan form.

NOTE: It is essential that repetitive flight plan (RPL) files, New Lists (NLST) and Revised Lists (RLST) are coordinated in time to allow processing by the EUROCONTROL CFMU IFPS and all ATS units within EUR RVSM airspace located outside the CFMU IFPS Zone.

f. Operators shall ensure that flight plans for aircraft intending to operate within EUR RVSM airspace from FIR/UIR located outside the CFMU IFPS Zone are also addressed to all appropriate ATS units concerned with the provision of air traffic services to that aircraft. The flight plans for these aircraft shall be completed in accordance with the flight planning requirements for EUR RVSM, as described in this Aeronautical Information Circular. Operators shall also ensure that any change to the RVSM approval status of a flight due to a change of aircraft or flight crew is addressed to all appropriate ATS units located outside the CFMU IFPS Zone, in the form of a modification (CHG) or a Cancellation (CNL) message, as applicable.

NOTE 1: In order to ensure operational consistency between the flight plan data distributed within the IFPS Zone and flight plan data distributed outside, it is strongly recommended to use the IFPS Re-addressing Function. Details on the IFPS Re-addressing Function can be found in the IFPS Users Manual that is available on the CFMU website (www.cfmu.eurocontrol.int).

NOTE 2: The EUR RVSM airspace is not co-incident with the CFMU IFPS Zone. Full IFPS checking and flight plan distribution will therefore not be applied within the Flight Information Regions/Upper Flight Information Regions of those States located outside the CFMU IFPS Zone. However, RVSM entry/exit conditions and EUR RVSM airspace penetration will be checked for the entire EUR RVSM airspace.

2. Flight Planning Requirements for RVSM Approved State Aircraft. Effective 24 January 2002, the following flight planning requirements will apply to operators of RVSM approved State aircraft intending to conduct flights within the European RVSM airspace:

a. In addition to military operations, operators of customs or police aircraft shall insert the letter M in Item 8 of the ICAO flight plan form.

b. Operators of RVSM approved State aircraft shall indicate the approval status by inserting the letter W in Item 10 of the ICAO flight plan form regardless of the requested flight level, except that operators of formation flights of State aircraft shall not insert the letter W in Item 10 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned.

c. Operators of formation flights of State aircraft intending to operate within the EUR RVSM airspace as General Air Traffic (GAT) shall include STS/NONRVSM in Item 18 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned.

d. Operators of RVSM approved State aircraft intending to operate within the EUR RVSM airspace shall include entry/exit points of RVSM airspace in block 15 of the ICAO flight plan form:

RVSM Approved State Aircraft	Flight Planning Requirements for European RVSM
In addition to military operations, operators of customs or police aircraft.	Insert the letter **M** in **Item 8** of the ICAO flight plan form.
Operators of RVSM approved State aircraft (except for formation flights of State aircraft.)	Insert the letter **W** in **Item 10** of the ICAO flight plan form, regardless of the requested flight level.
Operators of formation flights of State aircraft.	Do **not** insert the letter **W** in **Item 10** of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned.
Operators of formation flights of State aircraft intending to operate within the EUR RVSM airspace as General Air Traffic (GAT).	Insert **STS/NONRVSM** in **Item 18** of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned.
Operators of RVSM approved State aircraft intending to operate within the EUR RVSM airspace.	Insert the following in Item 15 of the ICAO flight plan form: - The entry/exit point at the lateral limits of RVSM airspace.

3. Flight Planning Requirements for Non-RVSM Approved State Aircraft. Effective 24 January 2002, the following flight planning requirements will apply to operators of non-RVSM approved State aircraft intending to conduct flights within the European RVSM airspace:

a. In addition to military operations, operators of customs or police aircraft shall insert the letter M in Item 8 of the ICAO flight plan form.

NOTE: Operators of non-RVSM approved State aircraft shall not insert the letter W in Item 10 of the ICAO flight plan form.

b. Operators of non-RVSM approved State aircraft with a requested flight level of FL 290 or above shall insert STS/NONRVSM in Item 18 of the ICAO flight plan form.

c. Operators of formation flights of State aircraft shall not insert the letter W in Item 10 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned. Operators of formation flights of State aircraft intending to operate within the EUR RVSM airspace as General Air Traffic (GAT) shall include STS/NONRVSM in Item 18 of the ICAO flight plan form.

d. Operators of non-RVSM approved State aircraft intending to operate within the EUR RVSM airspace shall include the following in Item 15 of the ICAO flight plan form:

(1) The entry point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM entry point; and

(2) the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM exit point. The following table illustrates the flight planning requirements for non-RVSM approved State aircraft:

Non-RVSM Approved State Aircraft	Flight Planning Requirements for European RVSM
In addition to military operations, operators of customs or police aircraft.	Insert the letter **M** in **Item 8** of the ICAO flight plan form.
NOTE: Operators of non-RVSM approved State aircraft shall **not** insert the letter W in Item 10 of the ICAO flight plan form.	
Operators of non-RVSM approved State aircraft with a requested flight level of FL 290 or above.	Insert **STS/NONRVSM** in **Item 18** of the ICAO flight plan form.
Operators of formation flights of State aircraft.	Do **not** insert the letter **W** in **Item 10** of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned.
Operators of formation flights of State aircraft intending to operate within the EUR RVSM airspace as General Air Traffic (GAT).	Insert **STS/NONRVSM** in **Item 18** of the ICAO flight plan form.
Operators of non-RVSM approved State aircraft intending to operate within the EUR RVSM airspace.	Insert the following in **Item 15** of the ICAO flight plan form: - the **entry point at the lateral limits** of the EUR RVSM airspace and the **requested flight level** for that portion of the route commencing immediately after the RVSM entry point; and - the **exit point at the lateral limits** of the EUR RVSM airspace and the **requested flight level** for that portion of the route commencing immediately after the RVSM exit point.

4. Definitions and Descriptions.

a. European (EUR) RVSM airspace: RVSM shall be applicable in that volume of airspace between flight levels 290 and 410 inclusive in the following Flight Information Regions (FIR)/Upper Flight Information Regions (UIR):

b. Amsterdam, Ankara, Athinai, Barcelona, Beograd, Berlin, Bodo, Bratislava, Bremen, Brest, Brindisi, Bruxelles, Bucuresti, Budapest, Düsseldorf, France, Frankfurt, Hannover, Istanbul, Kaliningrad, Kishinau, Kobenhavn, Lisboa, Ljubljana, London, Madrid, Malmo, Malta, Milano, Minsk*, Munchen, Nicosia, Oslo, Praha, Rhein, Riga, Roma, Rovaniemi, Sarajevo, Scottish, Shannon, Skopje, Sofia, Stavanger, Stockholm, Sundsvall, Switzerland, Tallinn, Tampere, Tirana, Trondheim, Varna, Vilnius, Warszawa, Wien, Zagreb.
* Minsk is expected to implement RVSM on 24 January 2002, subject to approval by ICAO.

c. RVSM shall also be applicable in either all, or part of, that volume of airspace between flight levels 290 and 410 inclusive in the following Flight Information Regions/Upper Flight Information Regions: Canaries (ICAO AFI Region), Casablanca, Lvov, Odesa, Simferopol, Tunis.

d. EUR RVSM transition airspace: Transition tasks associated with the application of a 300 m (1000 ft) vertical separation minimum within the European RVSM airspace shall be carried out in all, or parts of, the following Flight Information Regions/Upper Flight Information Regions: Ankara, Athinai, Barcelona, Bodo, Canaries (ICAO AFI Region), Casablanca, France, Kishinau, Lvov, Madrid, Malta, Minsk, Nicosia, Odesa, Riga, Rovaniemi, Simferopol, Tallinn, Tampere, Tunis.

e. EUR/North Atlantic (NAT) Interface: In addition to the European RVSM transition airspace, the State authorities responsible for the following Flight Information Regions may establish designated airspace within their Flight Information Regions for the purpose of transitioning non-RVSM approved aircraft operating to/from the North Atlantic Region: Bodo (Domestic), Brest, Lisboa, London, Madrid, Scottish, Shannon, Stavanger, Trondheim.

f. RVSM Entry Point: The first reporting point over which an aircraft passes or is expected to pass immediately before, upon, or immediately after initial entry into EUR RVSM airspace, normally the first reference point for applying a 300 m (1000 ft) vertical separation minimum between RVSM approved aircraft.

g. RVSM Exit Point: The last reporting point over which an aircraft passes or is expected to pass immediately before, upon, or immediately after leaving EUR RVSM airspace, normally the last reference point for applying a 300 m (1000 ft) vertical separation minimum between RVSM approved aircraft.

5. States participating in the European RVSM Program

(AFFSA/XOIA FIL 01-62)

Albania	Germany	Portugal
Austria	Greece	Romania
Belarus*	Hungary	Serbia and Montenegro
Belgium	Ireland	Slovak Republic
Bosnia and Herzegovina	Italy	Slovenia
Bulgaria	Latvia	Spain
Croatia	Lithuania	Sweden
Cyprus	Luxembourg	Switzerland
Czech Republic	Malta	Tunisia
Denmark	Moldova	Turkey
Estonia	Monaco	Ukraine
Finland	Morocco	United Kingdom
The Former Yugoslav Republic of Macedonia	The Netherlands	
France	Norway	
	Poland	

* Belarus is not participating in the European RVSM Program but is expected to implement RVSM on 24 January 2002, subject to approval by ICAO.

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC. -

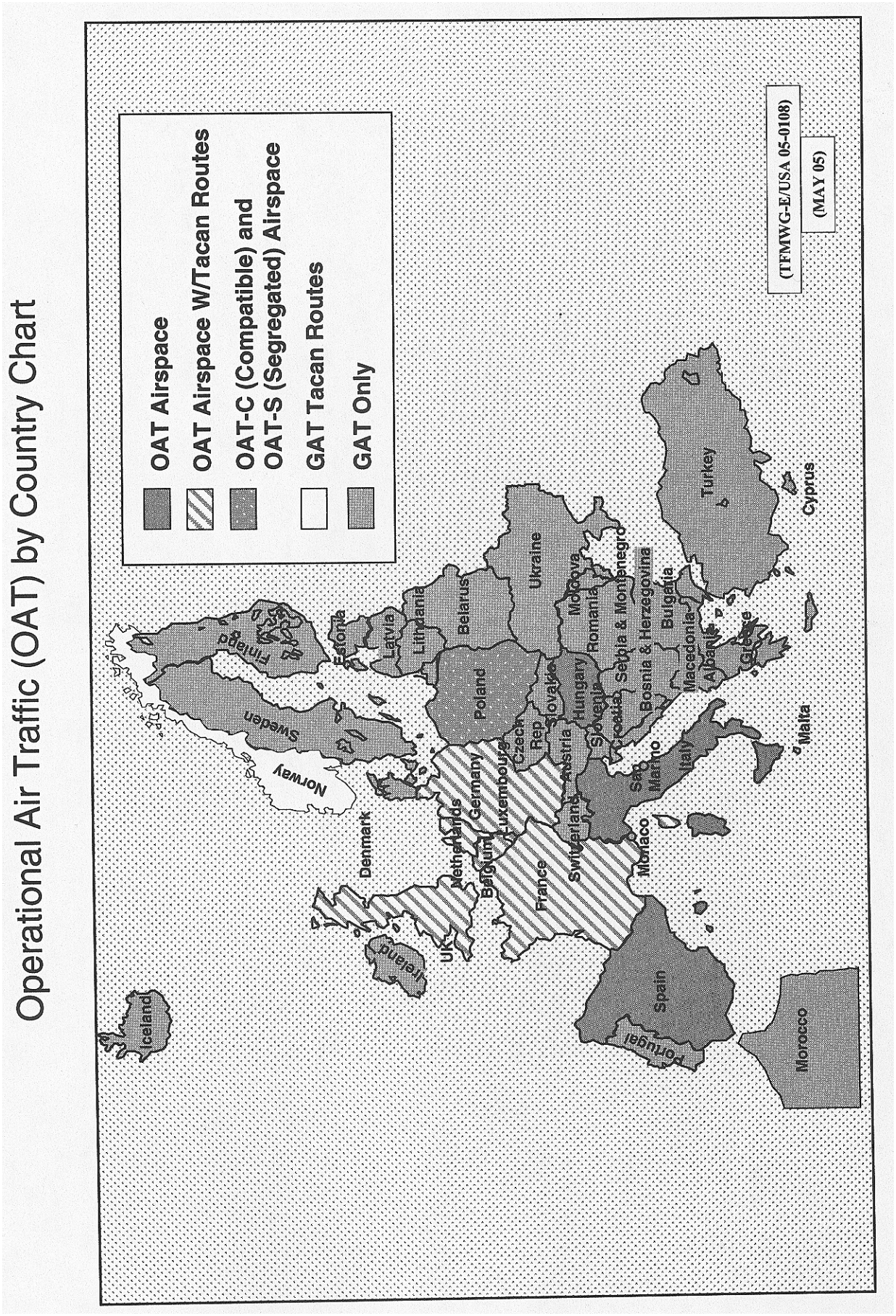
1. For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - See country listings for any requirements or restrictions that may apply when E-TCAS equipped aircraft fly within an individual country's airspace.

(USAFE-DOV/USAF FIL 01-62)

2. Aircrews see Flight Information Handbook, Section B for Mode 4, Register of National Clearances and Operational Restructions on the use of IFF Mark XII.

(TFMWGE/USA 05-0273)

OPERATIONAL AIR TRAFFIC



FLIGHT PLANNING

1. FOR EUROPEAN AIR TRAFFIC FLOW MANAGEMENT, INTEGRATED INITIAL FLIGHT PLAN PROCESSING SYSTEM, AND FLEXIBLE USE OF AIRSPACE IN ECAC AREAS, SEE CHAPTER 1, FLIGHT PLANNING.

2. For USA only: Estimated Elapsed Time indicator (EET/). FIR boundary estimates for IFR/GAT flight plans are not required inside the IFPZ unless stated by individual country.

3. On 1 Jan 2001, IAW ICAO guidance and host nation air laws, VOR/ILS receiver specifications change to guard against FM broadcast interference. Guidance for carriage of this equipment and any exceptions for military (state) aircraft will be promulgated by individual country. Aircrews should review NOTAMs and individual state entries in the AP/2 for specific rules and regulations regarding FM immunity equipment requirements. Aircrews should check through service channels to ensure equipment is compliant.

(TFMWGE/USA 02-0054)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. These routes are variously referred to as Seasonal, Weekend, Peak Period, Temporary, or Summer routes, and are in effect only during specific hours, days or seasons. They are not depicted on FLIP enroute charts because of their transitory nature and chart congestion.

(SPEC/GM CIV AIC 25-95)

2. CONDITIONAL (CDRs) ROUTES

a. "Conditional Routes" (CDR) are part of the Flexible Use of Airspace (FUA) Concept. CDR complement the permanent ATS network and are published on FLIP enroute charts. The purpose of CDR is to allow flights to be planned on and to use ATS routes, or portions thereof, that are not always available. CDR are established through potential areas of temporary segregation identified under the generic term "Temporary Segregated Areas" (TSA). The conditions for the use of CDR will be published, daily in national "Airspace Use Plans" (AUP) and the internationally distributed "Conditional Route Availability Message": (CRAM) by EUROCONTROL - CFMU at http:/cram.ecacnav.com/

(FCC/TNXA)

b. CDR are divided into three different categories according to their foreseen availability, their flight planning potential and the anticipated level of activity of the associated TSA. A CDR can be established in one or more of the following categories:

(1) Category One (CDR1)

(a) Permanently plannable.

(b) Available for most of the time.

(c) Flights will be planned in the same way as planned for permanent ATS routes.

(d) Any re-routing around associated TSA will be made on ATC instructions only.

(e) For the calculation of fuel consumption, alternate routes are published.

(2) Category Two (CDR2)

(a) CDR are part of pre-defined routing scenarios which respond to specific capacity imbalances.

(b) Flights will be planned only in accordance with conditions published, daily, in the CRAM.

(c) Possible re-routing on ATC instructions only.

(3) Category Three (CDR3)

(a) Not plannable.

Usable on ATC instruction as short notice only.

AERIAL REFUELING

AERIAL REFUELING TRACKS/ANCHOR AREAS
ICELAND
Keflavik
LEGEND
Refueling Track
ARIP, ARCP/Anchor
Track Areas
ARA 1
ARA 2
ARA 3
ARA 4
ARA 5
ARA 6
ARA 7
ARA 8
ARA 9
ARA 10
ARA 11
ARA 12
ARA 13
ARA 14
FLAMBORO
EAST-WEST
HANNA
NORTHSEA
CAROL
DANDI
GINI
KIM
MAGGIE
POLLY
ROSY
SAXON
VIRGIN
UTE
ANGIE
GRETCHEN
ALPHA
BRAVO
DELTA
ILL
LPD 47
AREA CRETE
AREA KARPATHOS
Oslo
Stockholm
Copenhagen
Glasgow
London
Paris
Berlin
Kiev
Warsaw
Frankfurt
Munich
Budapest
Rome
Madrid
Lisboa
Algiers
Tunis
Athens
Casablanca
(JAN 04)

BIRD HAZARD DATA

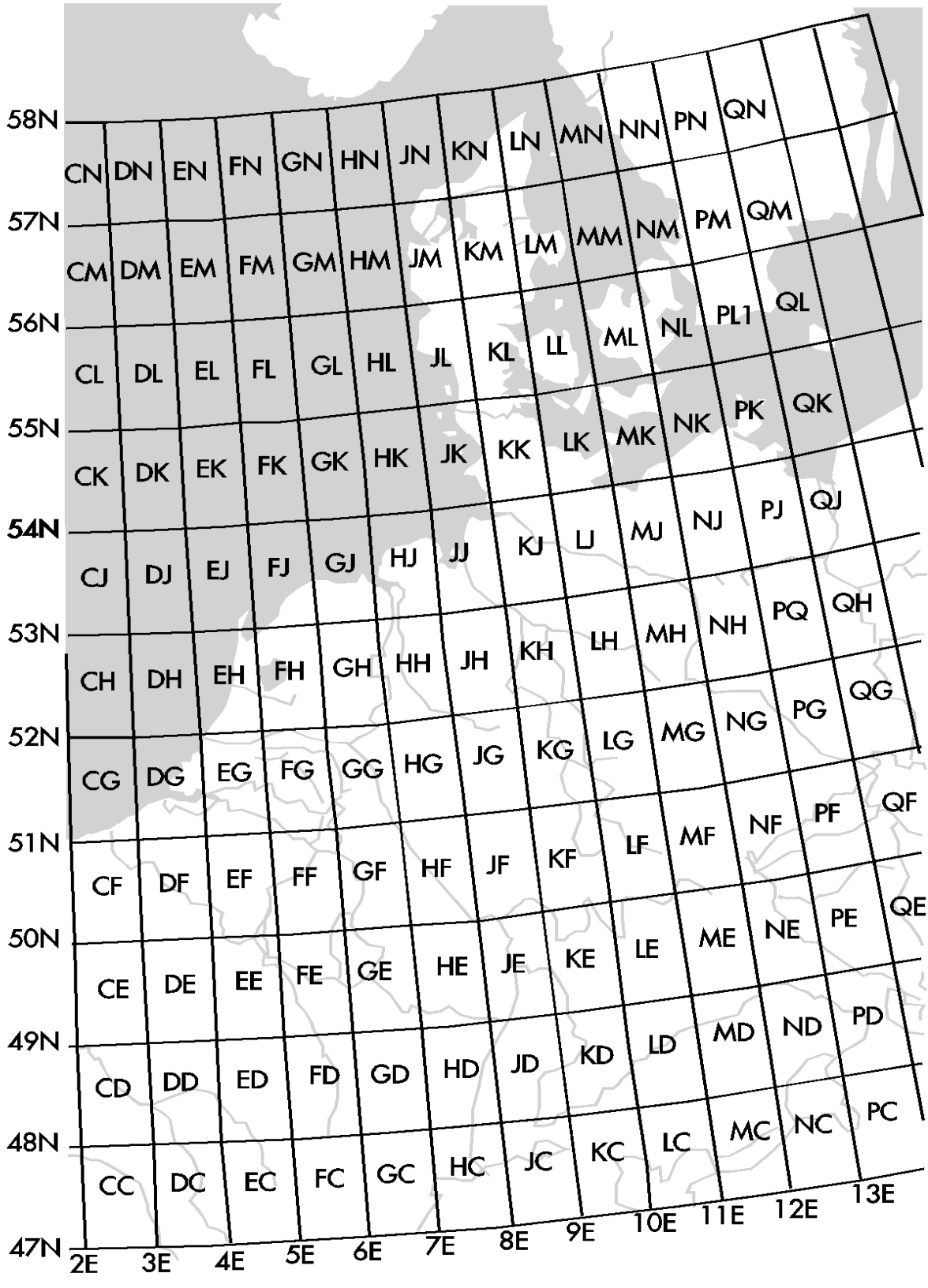
1. BIRD CONCENTRATION AREAS/ROUTES EUROPE

a. GENERAL - Large scale movements of migrating birds occur during various months in the European-Mediterranean and UK areas. There are also large concentrations of nesting, breeding, and wintering birds, often numbering in the millions, that may create a hazard to flight. The number & types of birds, areas of concentration, and height of flight vary from month to month and country to country; the associated charts are generalized depictions of areas of bird concentrations and migrating routes and should be used in conjunction with the specific details by each countries bird hazard data.

b. BIRDTAMS - An elaborate bird monitoring system has been developed and is being used by Belgium, Denmark, France, Germany, and The Netherlands to generate Birdstrike risk intensity levels. The birdstrike risk intensity levels range from 0 (nil birdstrike risk) to 8 (extremely great birdstrike risk). Only levels 5 to 8 are reported. Aircrews flying over Central Europe, to include Belgium, Denmark, France, Germany, and The Netherlands should consult the DoD NOTAM web site @ www.notams.jcs.mil during flight planning. BIRDTAMS 0 to 2 correspond to Bird Watch Condition LOW, 3 to 5 MODERATE, and 6 to 8 SEVERE. An example map depicting BIRDTAM coverage is shown on page 2-11.

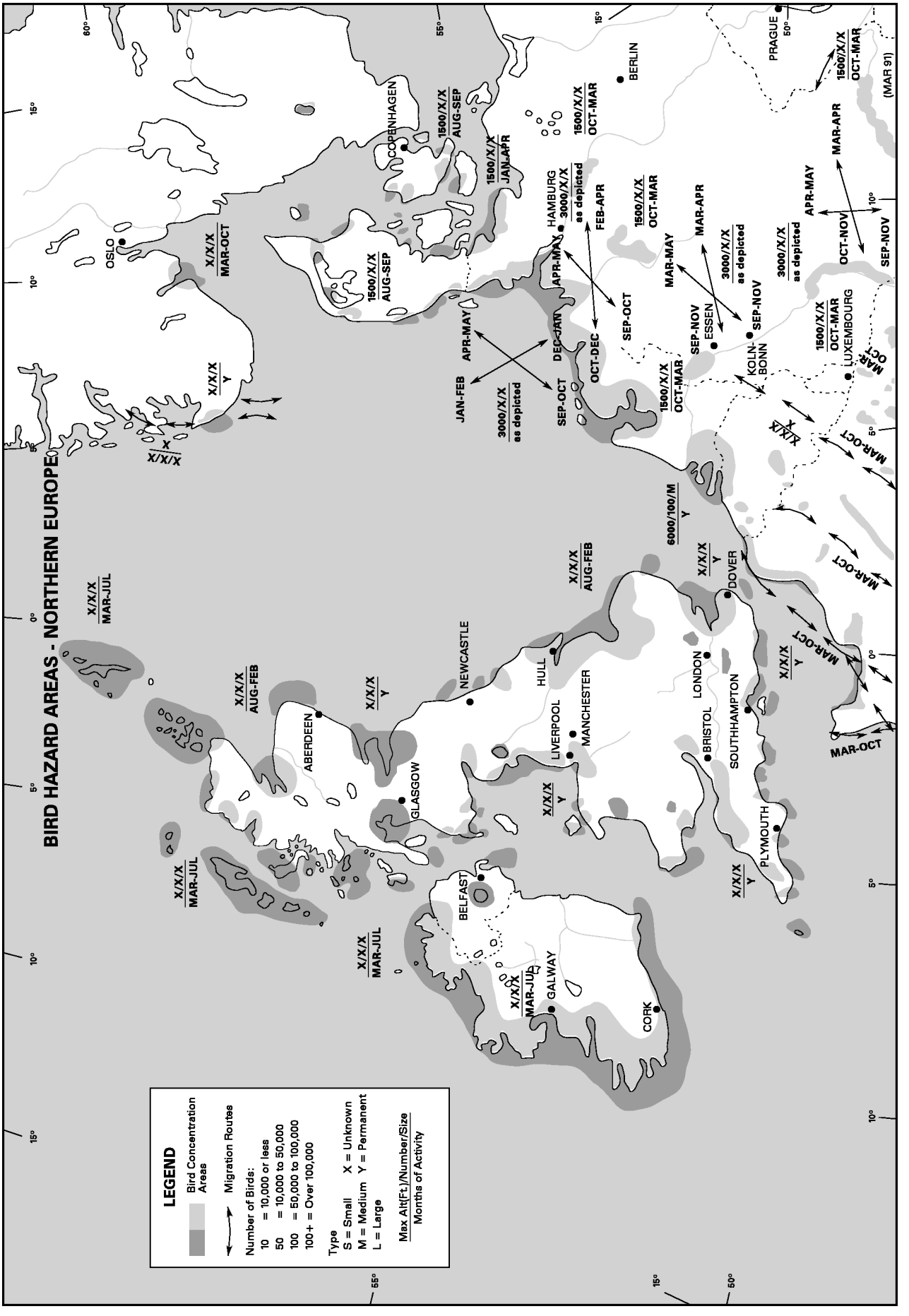
(AFFSA/XOIA FIL 80-03)

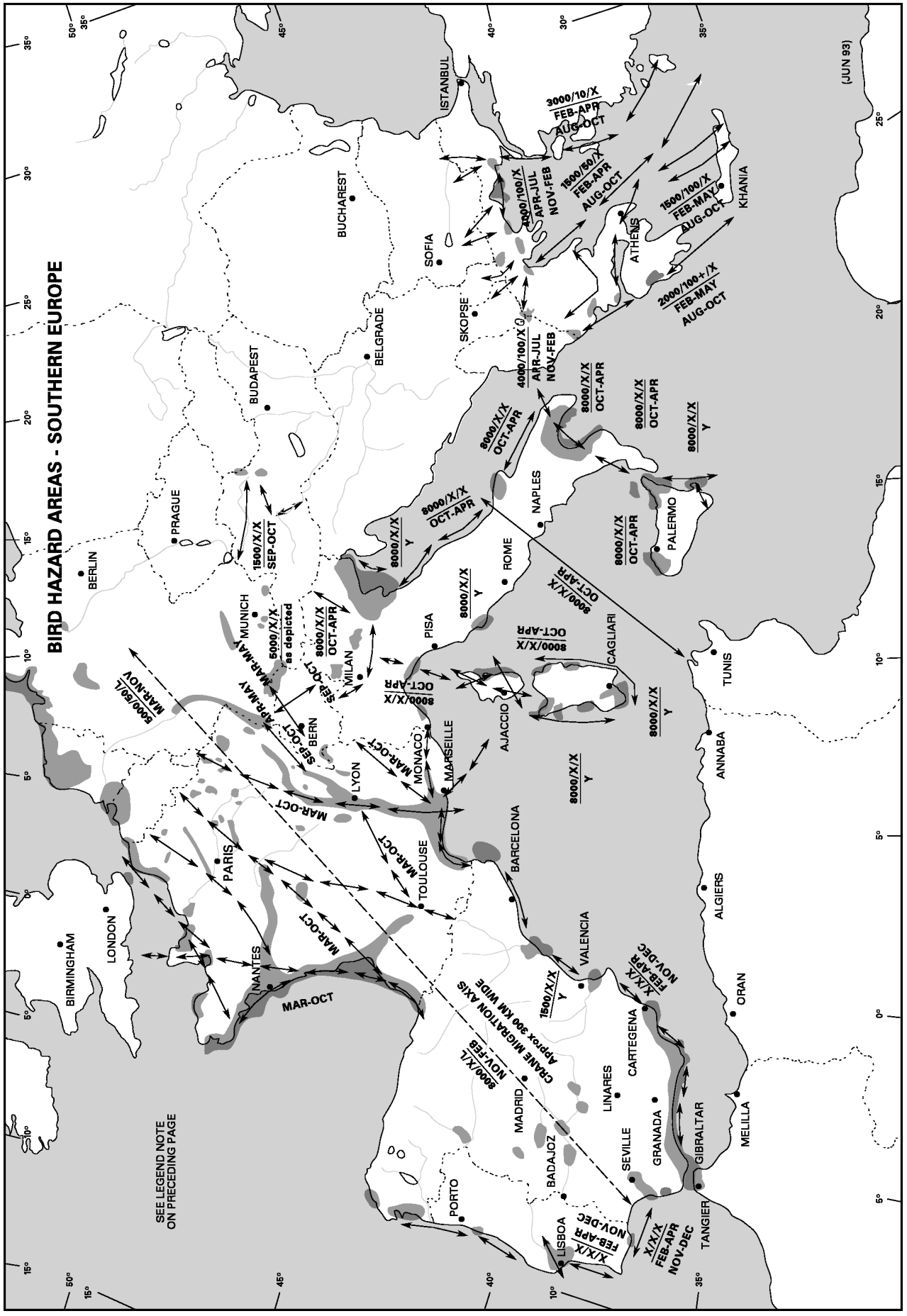
BIRDTAM GRID



BWCC/5=Moderate 6,7,8=Severe
GMGO only reports bird intensity of 5 or greater.

(NOV 00)


BIRD HAZARD AREAS - NORTHERN EUROPE
LEGEND
Bird Concentration Areas
Migration Routes
Number of Birds:
10 = 10,000 or less
50 = 10,000 to 50,000
100 = 50,000 to 100,000
100+ = Over 100,000
Type
S = Small X = Unknown
M = Medium Y = Permanent
L = Large
Max Alt(Ft.)/Number/Size
Months of Activity
OSLO
COPENHAGEN
BERLIN
PRAGUE
HAMBURG
ESSEN
KOLN-BONN
LUXEMBOURG
DOVER
NEWCASTLE
HULL
LIVERPOOL
MANCHESTER
LONDON
BRISTOL
SOUTHHAMPTON
PLYMOUTH
ABERDEEN
GLASGOW
BELFAST
GALWAY
CORK
X/X/X MAR-OCT
1500/X/X AUG-SEP
1500/X/X JAN-APR
1500/X/X OCT-MAR
3000/X/X as depicted
FEB-APR
APR-MAY
SEP-OCT
OCT-DEC
DEC-JAN
JAN-FEB
MAR-APR
SEP-NOV
OCT-NOV
MAR-MAY
APR-MAY
6000/100/M Y
X/X/X MAR-JUL
X/X/X AUG-FEB
X/X/X Y
(MAR 91)


BIRD HAZARD AREAS - SOUTHERN EUROPE
SEE LEGEND NOTE ON PRECEDING PAGE
3000/10/X FEB-APR AUG-OCT
4000/100/X APR-JUL NOV-FEB
1500/50/X FEB-APR AUG-OCT
1500/100/X FEB-MAY AUG-OCT
2000/100+/X FEB-MAY AUG-OCT
8000/X/X OCT-APR
8000/X/X Y
1500/X/X SEP-OCT
5000/X/X as depicted
6000/50/L MAR-NOV
MAR-MAY
APR-MAY
SEP-OCT
MAR-OCT
1500/X/X Y
X/X/X FEB-APR NOV-DEC
8000/X/L NOV-FEB
CRANE MIGRATION AXIS Approx 300 KM WIDE
ISTANBUL
BUCHAREST
SOFIA
ATHENS
KHANIA
SKOPSE
BELGRADE
BUDAPEST
PRAGUE
BERLIN
MUNICH
MILAN
PISA
ROME
NAPLES
PALERMO
CAGLIARI
TUNIS
BERN
LYON
MONACO
MARSEILLE
AJACCIO
ANNABA
PARIS
TOULOUSE
BARCELONA
ALGIERS
LONDON
BIRMINGHAM
NANTES
VALENCIA
ORAN
CARTEGENA
MADRID
LINARES
MELILLA
SEVILLE
GRANADA
GIBRALTAR
BADAJOZ
PORTO
LISBOA
TANGIER
(JUN 93)

ADDITIONAL INFORMATION

PROCEDURES FOR AIRCRAFT FLYING IN THE ADRIATIC SEA - United States military forces are operating in the Adriatic Sea. In view of the present state of increasing tensions in the Adriatic Sea, the timely and accurate identification of aircraft in this area is essential to preclude the inadvertent use of military force against civil aircraft. The U.S. forces are prepared to exercise such self-defense measures as may be necessary to ensure their safety in the event they are approached by unidentified aircraft (fixed wing or rotary wing) or aircraft whose intentions are unclear. To better enable U.S. military forces to identify aircraft, all aircraft flying within or entering the airspace over the Adriatic Sea north of forty (40) degrees North latitude should maintain a continuous listening watch on one or both international emergency frequencies (VHF 121.5 KHz and UHF 243.0 MHz). Aircraft equipped with a civil weather-avoidance radar and/or an operational civil type radar transponder should operate both continuously when transiting these areas. Unident aircraft and those whose intentions are unclear to US military forces will be contact using the English language on VHF 121.5 and UHF 243.0 and request to identify themselves and to state their intentions. Such contacts may originate from military surface or airborne units. US radio communications will use standard phraseology and will specify the aircraft's flight information, as available, to include; heading, flight level or altitude, SSR/IFF squawk, geographical coordinates, and ground speed. Aircraft receiving advisory calls should acknowledge receipt and understanding of the warnings on the frequency received, and provide the information requested. In the event the aircraft in question remains unidentified and/or is deemed to pose a threat to U.S. military forces, an emergency situation exists. The pilot must be prepared to exercise his emergency authority to deviate from ATC clearance, comply with recommended heading and/or altitude change provided by U.S. military forces, and notify the appropriate ATC facility of the deviation and the need for an amended clearance. Flight crews are further advised that failure to respond to radio transmissions or respond to or comply with advice given may place the aircraft at risk. Aircraft transiting the areas mentioned above may minimize the exposure to the advisory procedure by maintaining an altitude above FL 250; avoiding offairway routing; executing all climbs and descents within national airspace; and by avoiding abrupt and unusual change of heading and/or altitude which may be construed as inconsistent with normal civil aircraft flight pattern. Illumination of a U.S. military unit with a weaponstype fire control radar will be viewed with suspicion and could result in an immediate military defensive action. This information is being provided solely to preclude the potential for any misinterpretation or misunderstanding which could result in an unfortunate accident; it does not affect the freedom of navigation of any individual or state.

(AFFSA/XOIA FIL 96-99)

(USAFE/CL II NOTAM A-14-92)

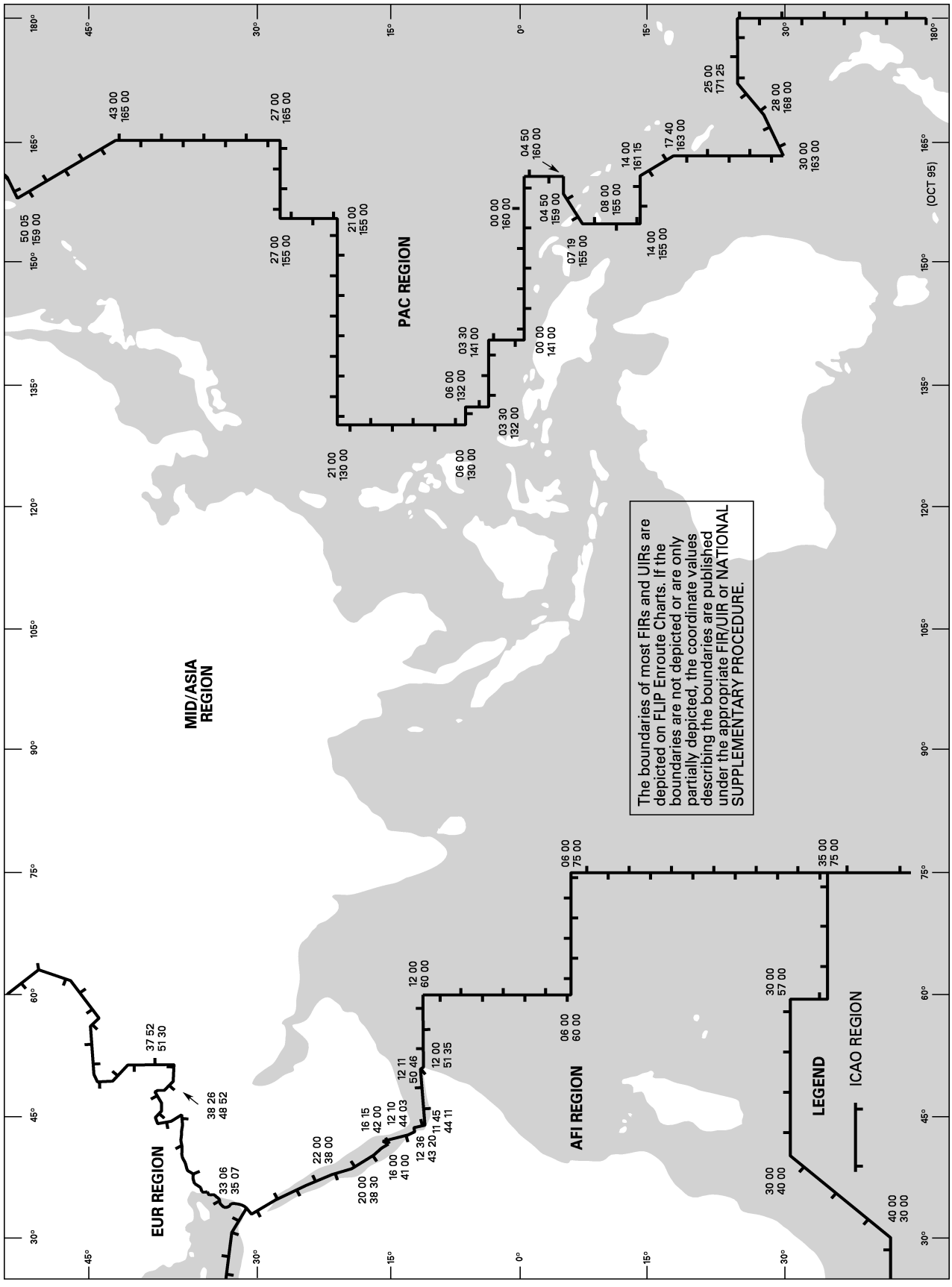
TELEPHONE CONTACTS

NOTE: DOD Users - to reserve Air refueling corridors in Italy and Greece, contact the European Central Altitude Reservation Facility (EUCARF) via: E-mail: eucarf@ramstein.af.mil, Military message: EUCARF RAMSTEIN AB GE, ICAO Aeronautical Fixed Telecommunications Network (AFTN): EDDFYXYR, DSN: 480-7346/7839 Fax: 9855 Commercial: (49) 6371-47-7346/7839 Fax: 9855.

NOTE: For information concerning Altitudes Reservations, contact: EUCARF.

NOTE: In areas designated as permanently available for Air-to-Air Refueling (AARA), the amount of warning concerning refueling operations can be so minimal as to preclude notification by normal methods. However, the units listed under ATC control column will be able to advise pilots on activity status in appropriate (AARAs). Where Air-to-Air Refueling Areas conflict with Airways, Advisory Routes or Upper Air Routes, civil/military coordination procedures are applied to minimize disruption to the plan flight profiles or the aircraft concerned.

SECTION C. MIDDLE EAST/ASIA (MID/ASIA) REGION



SECTION C: MIDDLE EAST/ASIA (MID/ASIA) REGION

NOTE: FIR/UIR and country listings herein are limited to the area of coverage of the associated FLIP Enroute Chart Series (ENAME). For other FIRs, UIRs and Countries of this Region refer to AP/3, Chapter 3.

MIDDLE EAST/ASIA REGIONAL SUPPLEMENTARY PROCEDURES

NATIONAL PROCEDURES

DIMENSIONAL UNITS - Refer to appropriate FIR/UIR or National Supplementary Procedures.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Refer to appropriate FIR/UIR or National Supplementary Procedures.

POSITION REPORTING - Standard except:

1. The last position report before passing from one FIR to an adjacent one shall also be made to the air traffic services unit serving the airspace about to be entered.

(ICAO DOC 7030 MID/ASIA RAC 3.3.1)

2. All aircraft on VFR flights, and those on IFR flights outside controlled airspace, shall maintain a watch on a radio station furnishing communications for the unit providing flight information service in the FIR and file with that station information as to their position unless otherwise authorized by the state overflown.

(ICAO DOC 7030 MID/ASIA RAC 3.1.1)

3. All flights except those conducted wholly in the vicinity of an airport when exempted by the appropriate air traffic control unit shall report during the period twenty to forty minutes following the time of last contact, whatever the purpose of such contact, merely to indicate that the flight is progressing according to plan. The above report will consist of aircraft identification and the words "Operations normal".

(ICAO DOC 7030 MID/ASIA RAC 12.2.1;4444-VI PANS-RAC 2)

VISUAL FLIGHT RULES

Standard except:

(ICAO DOC 7030 MID/ASIA RAC 1.1.1)

1. VFR flights to be operated within a control zone established at an airport serving international flights and in at least those portions of the associated terminal control area used by international IFR flights in association with approach, holding, departure and noise abatement procedures shall have two-way radio communications, obtain permission from the appropriate air traffic control unit and report position as required.

INSTRUMENT FLIGHT RULES

Standard except:

1. Flights shall be conducted in accordance with the instrument flight rules, even when not operating in IMC when operated more than 100 NM seaward from the shoreline within controlled air space or above FL 150.

(ICAO DOC 7030 MID/ASIA RAC 1.2.1)

2. All IFR flights shall comply with procedures for air traffic advisory service when operating in advisory airspace.

(ICAO DOC 7030 MID/ASIA RAC 1.3.1)

FLIGHT PLANNING

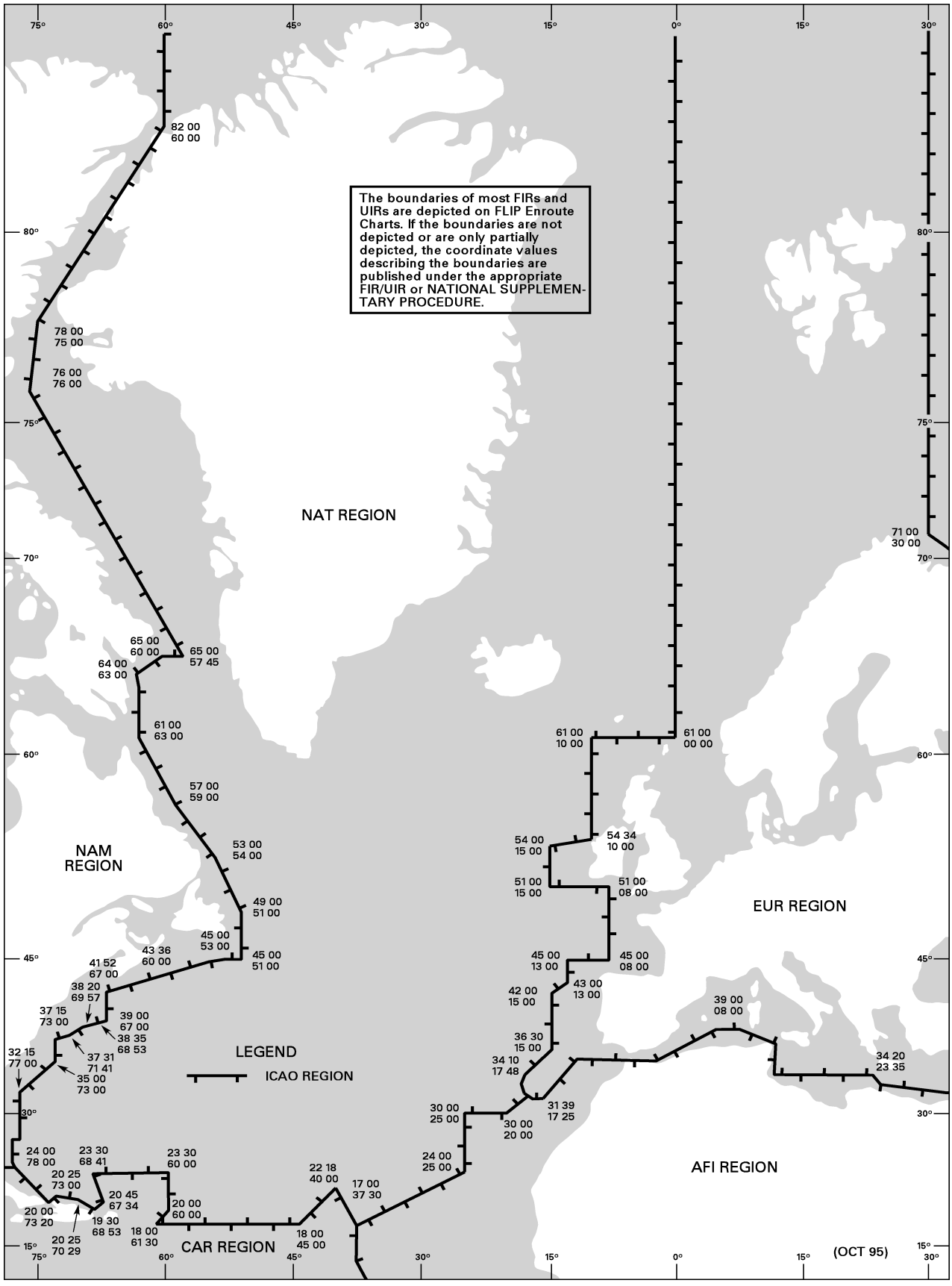
The following information supplied by Saudi Arabian Presidency of Civil Aviation. However, flight crews may expect much heavy air traffic in entire Mideast area during Haj (Holy Pilgrimage to Mecca) season. Saudi Arabia advises aircrews may expect extremely heavy traffic in vicinity of Jeddah airport between 0300-0600 and 1800-2100 UTC from approximately mid-May thru mid-Aug annually. Aircrews are requested to plan flight outside this time frame if at all possible. Enroute, landing and departure delays may be expected at any time during Haj season.

(SPEC/SA AIC 01-92)

CLEARANCE INFORMATION - If an aircraft on a long over water flight has inadvertently deviated from the route specified in its ATC clearance, it shall immediately take action to regain such route within 200 NM from the position at which the deviation was observed.

(ICAO DOC 7030 MID/ASIA RAC 5.1.1)

SECTION D. NORTH ATLANTIC REGION



SECTION D. NORTH ATLANTIC (NAT) REGION

NORTH ATLANTIC SUPPLEMENTARY PROCEDURES

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - Includes NEW YORK OCEANIC FIR.

1. Information for these procedures was drawn from.

a. Royal Air Force Flight Information Publication, Section 4, Air Traffic Control National Procedures.

b. Canadian DND Flight Information Publication - GPH 204 - Flight Planning and Procedures Canada and North Atlantic.

c. Aeronautical Information Publication Iceland (Handbook Flugmanna).

d. North Atlantic MNPS Airspace Operations Manual - 9th Edition, Civil Aviation Authority, London (http://www.nat-pco.org/mnpsa.htm).

e. ICAO DOC 7030.

f. FAA International Flight Information Manual (http://www.faa.gov/ats/aat/IFIM/index.htm)

2. As a result of passenger demand, time zone differences and airport noise restrictions, much of the North Atlantic (NAT) air traffic contributes to two major alternating flows: a westbound flow departing Europe in the morning, and an eastbound flow departing North America in the evening. The effect of these flows is to concentrate most of the traffic unidirectionally, with peak westbound traffic occurring between 1130 UTC and 1800 UTC and peak eastbound traffic occurring between 0100 UTC and 0800 UTC, both at W30°.

3. Due to the constraints of large horizontal separation criteria and a limited economical height band (FL 310-390), the airspace is congested at peak hours. In order to provide the best service to the bulk of the traffic, a system of organized tracks is constructed to accommodate as many flights as possible within the major flows on or close to their minimum time tracks and profiles. Due to the energetic nature of the NAT weather patterns, including the presence of jet streams, eastbound and westbound minimum time tracks are seldom identical. The creation of a different organized track system is therefore necessary for each of the major flows. Separate Organized Track Structures (OTS) are published each day for eastbound and westbound flows.

(NAT/NAT MNPS OPS MANUAL)

4. APPLICATION OF MINIMUM NAVIGATION PERFORMANCE SPECIFICATIONS (MNPS) WITHIN THE NAT REGION.

(HQ USAF/XOOTF)
(SPEC/IC AIP RAC 1-1-2, 1-1-3, 1-1-4)
(FAA INTL FLT INFO MANUAL VOL 39)

a. The concept of Minimum Navigation Performance Specifications (MNPS) has been adopted on a world-wide basis by the International Civil Aviation Organization (ICAO). MNPS has the objective of ensuring safe separation of aircraft and of enabling operators to derive maximum economic benefit from the improvement in accuracy of navigation equipment which has been demonstrated in recent years.

b. A condition implicit of MNPS is that all operators must maintain the specified operating standards and be aware of the inherent obligations of the MNPS requirements.An implicit condition of MNPS is that all operators must maintain the specified operating standards and be aware of the inherent obligations of the requirement.

c. The MNPS concept will be implemented on a regional basis. Certain areas of the North Atlantic (NAT) region have introduced the MNPS concept. These areas are known as NAT MNPS airspace and include the following defined airspace boundaries:

(FAA/FAA INTL FLT MANUAL)

(1) Between FL 285 and FL 420.

(2) Between latitudes N27° and the North Pole.

(3) In the East - the Eastern boundaries of the controlled areas (CTA) of Santa Maria Oceanic, Shanwick Oceanic, and Reykjavik.

(4) In the West - the Western boundaries of the CTA of Reykjavik, Gander Oceanic, and New York Oceanic excluding the area west of longitude W60° and south of N38°30'.

NOTE: Military aircraft operating on approved ALTRV are exempt from meeting MNPS criteria (including RVSM requirements). If not operating on an ALTRV, see paragraph h. below for information regarding special arrangements for aircraft unable to comply with MNPS.

d. Aircraft used to conduct flights within the volume of airspace specified shall have navigation performance capability such that:

(FAA/FAA INTL FLT MANUAL)

(1) The standard deviation of lateral track errors shall be less than 6.3 NM (11.7 km).

NOTE: As a considerable simplification, the above can be interpreted as a need for aircraft to stay within 12.6 NM (23.4 km) of track for about 95 percent of the time.

(2) The proportion of the total flight time spent by aircraft 30 NM (55.6 km) or more off the cleared track shall be less than 5.3x104 (i.e., less than 1 hour in about 2000 flight hours).

(3) The proportion of the total flight time spent by aircraft between 50 and 70 NM (92.6 and 129.6 km) off the cleared track shall be less than 13x105 (i.e., less than 1 hour in about 8000 flight hours).

e. Longitudinal Navigation

(NAT/NAT MNPS OPS MANUAL)

(1) Longitudinal separations between subsequent aircraft following the same track (in-trail) and between aircraft on intersecting tracks in the NAT MNPS Airspace are assessed in terms of differences in ATA/ETA at common waypoints. The longitudinal separation minima currently used in the NAT MNPS Airspace are thus expressed in clock minutes. The maintenance of in-trail separations is aided by the application of the Mach

Number Technique. However, aircraft clock errors resulting in waypoint ATA report errors can lead to an erosion of actual longitudinal separations between aircraft. It is thus vitally important that the time-keeping device intended to be used to indicate waypoint passing times is accurate, and is synchronized to an acceptable UTC time signal before commencing flight in MNPS Airspace. In many modern aircraft, the Master Clock can only be reset while the aircraft is on the ground. Thus the pre-flight procedures for any NAT MNPS operation must include a UTC time check and resynchronization of the aircraft Master Clock.

f. Lateral Navigation - There are two navigational requirements for aircraft planning to operate in MNPS Airspace. One refers to the navigation performance that should be achieved, in terms of accuracy. The second refers to the need to carry standby equipment with comparable performance characteristics (*ICAO Annex 6, Parts I and II, Chapter 7* refer). Thus in order to justify consideration for State approval of unrestricted operation in the MNPS Airspace, an aircraft must be equipped with the following:

(NAT/NAT MNPS OPS MANUAL)

(1) Two fully serviceable Long Range Navigation Systems (LRNS). A LRNS may be one of the following:

(a) One Inertial Navigation System (INS);

(b) One Global Navigation Satellite System (GNSS); or

(c) One navigation system using the inputs from one or more Inertial Reference System (IRS) or any other sensor system complying with the MNPS requirement.

NOTE 1: Only two GNSS currently exist: the Global Positioning System (GPS) and the Global Orbiting Navigation Satellite System (GLONASS)

NOTE 2: A GPS installation must be approved as follows: If the two required LRNS are both GPS, they must be approved in accordance with FAA Notice 8110.60 or equivalent JAA or national documentation and their operation approved in accordance with FAA HBAT 95-09 or equivalent national or JAA documentation. If GPS serves as only one of the two required LRNS, then it must be approved in accordance with FAA TSO-C129 as Class A1, A2, B1, B2, C1 or C2, or with equivalent national or JAA documentation.

NOTE 3: Equivalent approval material for GLONASS is under development and must be available prior to approval of any GLONASS equipped aircraft for MNPS operations.

(2) Each LRNS must be capable of providing to the flight crew a continuous indication of the aircraft position relative to desired track.

(3) It is highly desirable that the navigation system employed for the provision of steering guidance is capable of being coupled to the autopilot.

g. Prior to entering MNPS airspace, the aircraft's navigation systems must be operational to the extent that they will permit compliance with MNPS. Should partial equipment failure occur prior to entering MNPS airspace, pilots may consider requesting clearance to proceed on one of the following special routes if sufficient navigation capability remains:

(FAA/FAA INTL FLT INFO MANUAL)

(1) From Stornoway N60° W10°-N61° W12°34'-ALDAN - (KAPPA) Keflavik (HF required on this route).

(2) From Benbecula N61° W10°-ALDAN- Keflavik (VHF coverage exists, and subject to prior coordination with Scottish Airways and Shanwick, this route can be used by non HF equipped aircraft).

(3) From Machrihanish/Glasgow/Shannon/ Belfast N57° W10°-N60° W15°-N61° W16°30'-BREKI - Keflavik (HF is required on this route).

(4) Keflavik-GIMLI-Kulusuk-Sondre Stromfjord-Frobay (HF is required on this route).

(5) Keflavik-EMBLA-N63° W30°-N61° W40°W-Prins Christian Sund.

(6) Prins Christian Sund-N59° W50°-PRAWN-NAIN.

(7) Prins Christian Sund-N59° W50°-PORGY-Hopedale.

(8) Prins Christian Sund-N58° W50°-LOACH-Goose VOR.

(9) From Cork, LOACH - Goose VOR and Lands End-Gapli (HF is required on this route).

(10) Funcha/Porto Santo - Santa Maria/Ponta Delgada/Lajes.

(11) Lisboa/Porto/Faro - Ponta Delgada/Santa Maria/Lajes.

(12) Between Greenland and Canada (HF is required over the Greenland icecap below FL 195).: - Sondre Stromfjord NDB N67° W60°, Cape Hooper NDB. - Kook Islands NDB, N66° W60°, Cape Dyer NDB. - Kook Islands NDB, N66° W60°, N64° W63°, Frobay VOR.

(13) Between Iceland and Greenland: Reykjanesskoli NDB, N69°30' W22°40', Constable Pynt NDB.

NOTE: Operations on the above routes in MNPS airspace are subject to the following conditions:

(a) A revised flight plan is filed with ATC.

(b) An appropriate ATC clearance is obtained. A revised oceanic clearance will be issued only after coordination between all Oceanic Area Control Centers concerned.

(c) Sufficient navigation capability remains to meet the MNPS (i.e., redundancy may be lacking).

(d) The aircraft concerned may have to accept a lower than optimum flight level during peak traffic hours if the organized track structure extends to the northern part of the NAT.

h. Special arrangements for aircraft unable to comply with MNPS are as follows:

(FAA INTL FLT INFO MANUAL/NAT MNPS OPS MANUAL)

(1) Routes for Aircraft with Short-Range Navigation Equipment Only. Aircraft that are equipped only with short-range navigation equipment (VOR, DME, ADF) may operate through MNPS Airspace, along routes G3 or G11 (as published in DoD and Canadian FLIP). It is the responsibility of pilots with limited certification to reject clearances that would otherwise divert them from officially permitted routes.

(2) Routes for aircraft with a single Long Range Navigation System. Aircraft operating along the routes listed in

paragraph g. in MNPS airspace which are equipped with normal airway navigation equipment (VOR/DME, ADF) and at least one fully operational set of the following long-range navigation equipment:

(a) Doppler with computer

(b) INS

(c) GPS

(d) Loran C are considered capable of meeting MNPS while operating along these routes. The above listed long range navigation equipment need not be permanent aircraft equipment.

(3) Routes in Portuguese Territory. Aircraft that are equipped with normal airway navigation equipment (VOR/DME, ADF) and at least one fully operational set of the following long-range navigation equipment:

(a) Doppler with Computer

(b) INS

(c) GPS are considered capable of meeting MNPS while operating along the following routes:

1 Funchal/Porto Santo-Santo Maria/Ponta Delgada.

2 Lisboa/Porto/Faro-Ponta Delgada/Santa Maria/Lajes.

(4) Aircraft may be cleared to join the outer track of the track system at points other than the normal entry points if the required minimum separation will exist between aircraft operating along that track.

(5) Aircraft flying along the outer track of the organized track system may be cleared to leave the system.

(6) Aircraft changing tracks within the organized track system or which are crossing the organized track system shall be cleared to do so only if they are provided with minimum longitudinal, lateral or vertical separation with respect to other aircraft.

(7) Aircraft changing track within the organized track system may be cleared to change levels on the same track.

i. An inherent feature of the MNPS concept is the requirement to routinely monitor the navigation accuracy of aircraft operating within MNPS airspace. The monitoring function is to be performed by Oceanic Control Centers bordering MNPS airspace using radars that cover its eastern and western boundary. Navigation errors which exceed 24 NM from track center line will normally be reported to the pilot and require subsequent follow-up action. (Such report involving US military aircraft will be submitted to the appropriate military headquarters for investigation and reply). If there is a serious increase in the number of large errors, it may become necessary to increase separation standards until remedial action has been taken. Alternatively, if rapid corrective action cannot be achieved, it may be necessary for the State of Registry or the State of the Operator to temporarily exclude offending types of aircraft or operators from MNPS airspace.

j. Aircraft not equipped for operation in MNPS airspace may be cleared to climb or descend through MNPS airspace provided that:

(1) the climb is completed within the useable SSR coverage or within reception range of KEF VORTAC and ING, AKI VOR/DMEs in Iceland, or THT VORTAC and SF, HB, KU NDBs in Greenland, or MY, AB, NL NDBs in Faroe Islands, and

(2) the aircraft is able to maintain direct controller- pilot communication on VHF, and

(3) MNPS aircraft operating in that part of the MNPS airspace effected by such climb or descent are not penalized by the application of this procedure.

k. Reduced Vertical Separation Minimum (RVSM) in MNPS Airspace.

(1) In addition to meeting MNPS requirements, RVSM operations require specific approval and equipment. All operators must maintain the specified operating standards and be aware of the inherent obligations of this requirement. NAT MNPS airspace now has a ceiling of FL 420 and a floor of FL 285. As of October 1998, 1000 ft (300 m) vertical separation is applied between aircraft operating between FL 310 and FL 390 (inclusive). The final phase of RVSM implementation in NAT MNPS airspace begins 24 January 2002, FL 290 - 410 (inclusive). Non-equipped aircraft will have to operate above the block, FL 430 or higher, or below the block, FL 280 or lower. Nonequipped aircraft may be allowed climbs and descents through the RVSM block, traffic permitting (See paragraph 4.k.(10).

(2) RVSM EQUIPMENT REQUIREMENTS. Listed in FLIP GP.

(3) FLIGHT PLANNING. During flight planning, the crew should pay particular attention to conditions which may affect operation in RVSM airspace. These include, but may not be limited to:

(a) Verifying the aircraft is approved for RVSM operations.

(b) Annotating the flight plan to be filed with the Air Traffic Service Provider to show that the aircraft is approved for RVSM operations, or accounting for any aircraft operating restrictions related to RVSM airworthiness approval. (In North Atlantic oceanic airspace, block 10 (Equipment) of the ICAO flight plan should be annotated with the letter "W" to show RVSM approval).

(c) Reported and forecast weather conditions on the route of flight.

(d) Minimum equipment requirements pertaining to height-keeping systems.

(4) PREFLIGHT PROCEDURES. Listed in FLIP GP.

(5) "WHEN ABLE HIGHER" (WAH) Reports
(NAT MNPS OPS Manual, 9th Edition, Chapter 7)

(a) A WAH Report must be provided by all flights entering the MNPS Airspace portion of the New York OCA and entering the Santa Maria OCA. Provision of WAH Reports on entering other NAT OCA is optional or they may be requested by any OAC.

(b) When required or when otherwise provided, upon entering an oceanic FIR, pilots should include in the initial

position report the time or location that the flight will be able to accept the next higher altitude. The report may include more than one altitude if that information is available.

(6) BASIC CONCEPT FOR CONTINGENCIES

(a) The in-flight contingency procedures for the NAT, published in Doc 7030, were revised to provide for RVSM implementation in NAT MNPS airspace.

(b) The basic concepts for contingencies are:

1 Guidance for contingency procedures should not be interpreted in any way which prejudices the final authority and responsibility of the pilot in command for the safe operation of the aircraft.

2 If the pilot is unsure of the vertical or lateral position of the aircraft or the aircraft deviates from its assigned altitude or track for cause without prior ATC clearance, then the pilot must take action to mitigate the potential for collision with aircraft on adjacent routes or flight levels. In this situation, the pilot should alert adjacent aircraft by making maximum use of aircraft lighting and broadcasting position, flight level, and intentions on 121.5 MHz.

3 Unless the nature of the contingency dictates otherwise, the pilot should advise ATC as soon as possible of a contingency situation and if possible, request an ATC clearance before deviating from the assigned route or flight level.

4 If a revised ATC clearance cannot be obtained in a timely manner and action is required to avoid potential conflict with other aircraft, then the aircraft should be flown at an altitude and/or on a track where other aircraft are least likely to be encountered:

a The pilot may offset half the lateral distance between routes or tracks.

b The pilot may offset half the vertical distance between altitudes normally flown.

c The pilot may also consider descending below FL 285 or climbing above FL 410. (Flight above FL 410 or below FL 285 may limit exposure to conflict with other aircraft).

5 When executing a contingency maneuver the pilot should:

a Watch for conflicting traffic both visually and by reference to TCAS/ACAS, if equipped.

b Continue to alert other aircraft broadcasting on 121.5 MHz and using aircraft lights.

c Continue to fly offset tracks or altitudes until an ATC clearance is obtained.

d Obtain an ATC clearance as soon as possible.

(7) CONTINGENCY SCENARIOS

(a) In addition to emergency conditions that require immediate descent, such as loss of thrust or pressurization, ATC should be made aware of the less explicit conditions that may make it impossible for an aircraft to maintain its CFL appropriate to RVSM.

(b) The following material is provided with the purpose of giving the pilot guidance on actions to take under certain conditions of equipment failure and encounters with turbulence. It also describes the expected ATC controller actions in these situations. It is recognized that the pilot and controller will use judgment to determine the action most appropriate to any given situation. For example, with certain equipment failures, the safest course of action may be for the aircraft to maintain the assigned FL and route while the pilot and controller take precautionary action to protect separation. For extreme cases of equipment failure, however, the guidance recognizes that the safest course of action may be for the aircraft to depart from the cleared FL or route by obtaining a revised ATC clearance or if unable to obtain prior ATC clearance, executing the established Doc 7030 contingency maneuvers for the area of operation.

Scenario 1: There is a failure or loss of accuracy of one primary altimetry system (e.g., greater than 200 foot difference between primary altimeters).

The Pilot should
Cross check standby altimeter, confirm the accuracy of a primary altimeter system and notify ATC of the loss of redundancy. If unable to confirm primary altimeter system accuracy, follow pilot actions listed in the preceding scenario.

Scenario 2: All automatic altitude control systems fail (e.g., Automatic Altitude Hold).

The Pilot shall	**ATC can be expected to**
Initially	
Maintain CFL	
Evaluate the aircraft's capability to maintain altitude through manual control.	
Subsequently	
Watch for conflicting traffic both visually and by reference to TCAS, if equipped.	
If considered necessary, alert nearby aircraft by 1) making maximum use of exterior lights; 2) broadcasting position, FL, and intentions on 121.5 MHz (as a back-up, the VHF inter-pilot air-to-air frequency may be used.)	
Notify ATC of the failure and intended course of action. Possible courses of action include:	
1) maintaining the CFL and route, provided that the aircraft can maintain level.	1) If the pilot intends to continue in RVSM airspace, assess traffic situation to determine if the aircraft can be accommodated through the provision of lateral, longitudinal, or conventional vertical separation, and if so, apply the appropriate minimum.

The Pilot shall	ATC can be expected to
2) requesting ATC clearance to climb above or descend below RVSM airspace if the aircraft cannot maintain CFL and ATC cannot establish lateral, longitudinal or conventional vertical separation.	2) If the pilot requests clearance to exit RVSM airspace, accommodate expeditiously, if possible.
3) executing the Doc 7030 contingency maneuver to offset from the assigned track and FL, if ATC clearance cannot be obtained and the aircraft cannot maintain CFL.	3) If adequate separation cannot be established and it is not possible to comply with the pilot's request for clearance to exit RVSM airspace, advise the pilot of essential traffic information, notify other aircraft in the vicinity and continue to monitor the situation.
	4) Notify adjoining ATC facilities/sectors of the situation.

Scenario 3: Loss of redundancy in primary altimetry systems.

The Pilot shall	ATC can be expected to
If the remaining altimetry system is functioning normally, couple that system to the automatic altitude control system, notify ATC of the loss of redundancy and maintain vigilance of altitude keeping.	Acknowledge the situation and continue to monitor progress.

Scenario 4: All primary altimetry systems are considered unreliable or fail.

The Pilot shall	ATC can be expected to
Maintain CFL by reference to the standby altimeter (if the aircraft is so equipped).	
Alert nearby aircraft by 1) making maximum use of exterior lights; 2) broadcasting position, FL, and intentions on 121.5 MHz (as a back-up, the VHF inter-pilot air-to-air frequency may be used).	
Consider declaring an emergency. Notify ATC of the failure and intended course of action. Possible courses of action include:	Obtain pilot's intentions, and pass essential traffic information.
1) maintaining CFL and route provided that ATC can provide lateral, longitudinal or conventional vertical separation.	1) If the pilot intends to continue in RVSM airspace, assess traffic situation to determine if the aircraft can be accommodated through the provision of lateral, longitudinal, or conventional vertical separation, and if so, apply the appropriate minimum.
2) requesting ATC clearance to climb above or descend below RVSM airspace if ATC cannot establish adequate separation from other aircraft.	2) If the pilot requests clearance to exit RVSM airspace, accommodate expeditiously, if possible.
3) executing the Doc 7030 contingency maneuver to offset from the assigned track and FL, if ATC clearance cannot be obtained.	3) If adequate separation cannot be established and it is not possible to comply with the pilot's request for clearance to exit RVSM airspace, advise the pilot of essential traffic information, notify other aircraft in the vicinity and continue to monitor the situation.
	4) Notify adjoining ATC facilities/sectors of the situation.

Scenario 5: The primary altimeters diverge by more than 200 ft (60m).

The Pilot should:
Attempt to determine the defective system through established trouble-shooting procedures and/or comparing the primary altimeter displace to the standby altimeter (as corrected by the correction cards, if required).
If the defective system can be determined, couple the functioning altimeter system to the altitude keeping device.
If the defective system cannot be determined, follow the guidance in Scenario 3 for failure or unreliable altimeter indications of all primary altimeters.

Scenario 6: Turbulence (greater than moderate) which the pilot believes will impact the aircraft's capability to maintain flight level.

The Pilot shall	ATC can be expected to
Watch for conflicting traffic both visually and by reference to TCAS, if equipped.	
If considered necessary, alert nearby aircraft by: 1) making maximum use of exterior lights; 2) broadcasting position, FL, and intentions on 121.5 MHz (as a back-up, the VHF inter-pilot air-to-air frequency may be used).	
Notify ATC of intended course of action as soon as possible. Possible courses of action include:	
1) maintaining CFL and route provided ATC can provide lateral, longitudinal or conventional vertical separation.	1) Assess traffic situation to determine if the aircraft can be accommodated through the provision of lateral, longitudinal, or conventional vertical separation, and if so, apply the appropriate minimum.
2) requesting flight level change, if necessary.	2) If unable to provide adequate separation, advise the pilot of essential traffic information and request pilot's intentions.
3) executing the Doc 7030 contingency maneuver to offset from the assigned track and FL, if ATC clearance cannot be obtained and the aircraft cannot maintain CFL.	3) Notify other aircraft in the vicinity and monitor the situation.
	4) Notify adjoining ATC facilities/ sectors of the situation.

(AFFSA/FIL 04-588)

Route Centerline Track	Deviations > 19 km (10 NM)	Level Change
EAST (000-179 magnetic)	LEFT RIGHT	DESCEND 300 ft (91 m) CLIMB 300 ft (91 m)
WEST (180-359 magnetic)	LEFT RIGHT	CLIMB 300 ft (91 m) DESCENT 300 ft (91 m)

(8) WAKE TURBULENCE PROCEDURES. These procedures provide for the contingency use of a 2 NM lateral offset to avoid exposure to wake turbulence. The procedures have been published in State NOTAMS and AIP and are planned for publication in Regional Supplementary Procedures.

(9) WEATHER DEVIATION PROCEDURES FOR OCEANIC-CONTROLLED AIRSPACE. The following procedures from Doc 7030/4 - NAT, Part 1, are intended to provide guidance for deviations around thunderstorms. All possible circumstances cannot be covered. The pilot's judgement shall ultimately determine the sequence of actions taken. If an aircraft is required to deviate from track to avoid weather and prior clearance cannot be obtained, an ATC clearance shall be obtained at the earliest possible time. Until an ATC clearance is received, the aircraft shall follow the procedures detailed in paragraph (9)(d).

(a) Obtaining priority from ATC when weather deviation is required: When the pilot initiates communications with ATC, rapid response may be obtained by stating "WEATHER DEVIATION REQUIRED" to indicate priority is desired on the frequency and for ATC response. The pilot still retains the option of initiating the communications using the urgency call "PAN PAN" (preferably spoken three times) to alert all listening parties to a special handling condition which will receive ATC priority for issuance of a clearance or assistance.

(b) Actions to be taken when controller-pilot communications are established: The pilot notifies ATC and requests clearance to deviate from track, advising, when possible, the extent of the deviation expected. ATC takes one of the following actions:

1 If there is not conflicting traffic in the horizontal plane, ATC will issue clearance to deviate from track; or

2 If there is conflicting traffic in the horizontal plane, ATC separates traffic by establishing appropriate separation; or

3 If there is conflicting traffic in the horizontal plane and ATC is unable to establish appropriate separation, ATC shall: Advise the pilot unable to issue clearance for requested deviation, advise the pilot of conflicting traffic and request the pilot's intentions.

(c) The pilot shall take the following actions: Advise ATC of intentions and comply with the ATC clearance issued, or execute the procedures detailed in paragraph (9)(d) below. If necessary, establish voice communications with ATC to expedite dialogue on the situation.

(d) Actions to be taken if a revised air traffic clearance cannot be obtained: This section applies to situations where a pilot has the need to exercise the authority of pilot-in-command. If a revised ATC clearance cannot be obtained and deviation from track is required to avoid weather, the pilot shall take the following actions:

1 If possible, deviate away from an organized track or route system;

2 Establish communications with an alert nearby aircraft broadcasting, at suitable intervals: Flight identification, flight level, aircraft position (including the ATS route designator or the track code) and intentions on the frequency in use, and on frequency 121.5 MHz (or backup on VHF inter-pilot air-to-air frequency 123.45 MHz);

3 Watch for conflicting traffic both visually and by reference to ACAS (if equipped);

4 Turn all exterior lights (commensurate with appropriate limitations);

5 For deviations of less than 19 km (10 NM), the aircraft should remain at the level assigned by ATC;

6 For deviations of greater than 19 km (10 NM), when the aircraft is approximately 19 km (10 NM) from track, initiate a level change based on the following criteria:

Route Centerline Track	Deviations > 19 km (10 NM)	Level Change
EAST (000-179 magnetic)	LEFT RIGHT	DESCEND 300 ft (91 m) CLIMB 300 ft (91 m)
WEST (180-359 magnetic)	LEFT RIGHT	CLIMB 300 ft (91 m) DESCENT 300 ft (91 m)

7 When returning to track, be at its assigned level, when the aircraft is within approximately 19 km (10 NM) of centerline; and 8 If contact was not established prior to deviating, continue to attempt contact with ATC to obtain a clearance. If contact was established, continue to keep ATC advised of intentions and obtain essential traffic information.

(10) APPLICATION OF STRATEGIC LATERAL OFFSETS IN NORTH ATLANTIC REGION AIRSPACE.

(a) The strategic lateral offset procedure provides for the application of lateral offsets within the following guidelines:

1 Strategic lateral offsets including those executed to avoid wake turbulence are to be made to the **right** of a route or track;

2 An aircraft may fly one of three positions in relation to a route or track,: centerline, 1nm or 2nm **right**; and,

3 Offsets are not to exceed 2nm **right** of centerline.

(b) The intent of this procedure is to reduce risk (increase the safety margin) by distributing aircraft laterally and equally across the three available positions. In this connection, pilots must take account of the following:

1 Aircraft without automatic offset programming capability **must** fly the centerline;

2 Aircraft capable of being programmed with automatic offsets may fly the centerline or offset 1 NM one or 2 NM right of centerline to obtain lateral spacing from nearby aircraft;

3 Pilots should use whatever means are available (e.g. TCAS, communications, visual acquisition, GPWS) to determine the best flight path to fly;

4 Any aircraft overtaking another aircraft is to offset within the confines of this procedure, if capable, so as to create the least amount of wake turbulence for the aircraft being overtaken;

5 For wake turbulence purposes, pilots are also to fly one of the three positions at (10)(a) 2, above and never offset to the left of centerline nor offset more than 2 NM right of centerline;

NOTE: It is recognised that the pilot will use his/her judgement to determine the action most appropriate to any given situation and has the final authority and responsibility for the safe operation of the aeroplane. The use of air-to-air channel, 123.45, may be used to coordinate the best wake turbulence offset option.

6 Pilots may apply an offset outbound at the oceanic entry point but must return to centerline at the oceanic exit point;

7 Aircraft transiting radar-controlled airspace e.g. Bermuda, are to remain on their established offset positions;

8 There is no ATC clearance required for this procedure and it is not necessary that ATC be advised; and,

9 Position reports are to be based on the current ATC clearance and not the exact co-ordinates of the offset position. An example of a report when passing 54N 020W while being offset from track is "Shanwick, Austrian 73, position 54N 020W, 1222, estimate . . . etc".

(AFFSA/AFFSA/XAX FIL 04-194)

(11) Special Arrangements for Non-RVSM Approved Aircraft. Climb/Descend Through RVSM Levels. MNPS approved aircraft not approved for RVSM operation will be permitted, subject to traffic, to climb/descend through RVSM levels in order to attain cruising levels above or below RVSM airspace. Flights should climb/descend continuously through the RVSM levels without stopping at any intermediate level and should "Report leaving" current level and "Report reaching" cleared level.

(NAT/MNPSA OPS Manual, 9th Edition, Chapter 1)
(AFFSA-XOP, FAA 91-RVSM, NAT MNPSA OPS Manual, ICAO Doc 7030/USAF FIL 01-71)

(12) WATRS RVSM

(a) Operational procedures for RVSM within the WATRS.

1 TRANSITION BETWEEN FLIGHT LEVELS. During cleared transition between levels, the aircraft should not overshoot or undershoot the assigned FL by more than 150 ft (45 m).

2 PILOT LEVEL CALL. Except in a radar environment, pilots shall report reaching any altitude assigned within RVSM airspace.

3 DIVERSION ACROSS THE FLOW OF ADJACENT TRAFFIC. Before commencing a diversion across the flow of adjacent traffic, the aircraft should, while maintaining the 30 NM offset, expedite climb above or descent below levels where the majority of aircraft operate (e.g., to a level above FL 410 or below FL 290) and then maintain a level which differs by 500 ft (150 m) from those normally used. However, if the pilot is unable or unwilling to carry out a major climb or descent, the aircraft should be flown at a level 500 ft above or below levels normally used until a new ATC clearance is obtained.

(b) Procedures for Operation of Non-RVSM Compliant Aircraft in RVSM airspace.

1 FLIGHT PRIORITY. It should be noted that RVSM approved aircraft will be given priority for level allocation over non- RVSM approved aircraft.

2 VERTICAL SEPARATION APPLIED. The vertical separation minimum between non-RVSM aircraft operating in the RVSM stratum and all other aircraft is 2000 ft.

3 CONTINUOUS CLIMB/DESCENT OF NON-COMPLIANT AIRCRAFT THROUGH RVSM AIRSPACE. Non-RVSM compliant aircraft may be cleared to climb to and operate above FL 410 or descend to and operate below FL 290 provided that they:

a do not climb or descend at less than the normal rate for the aircraft; and

b do not level off at an intermediate level while passing through the RVSM stratum.

4 SPECIAL COORDINATION PROCEDURES FOR CRUISE OPERATION OF NON-RVSM COMPLIANT AIRCRAFT IN RVSM AIRSPACE.

a Non-RVSM compliant aircraft may not flight plan between FL 310 and FL 390 inclusive within RVSM airspace. After special coordination as detailed in 4 c, the following non-RVSM aircraft may flight plan at RVSM flight levels in the RVSM stratum:

(1) Is being initially delivered to the State of Registry or Operator; or

(2) was formally RVSM approved but has experienced an equipment failure and is being flown to a maintenance facility for repair in order to meet RVSM requirements and/or obtain approval; or

(3) is transporting a spare engine mounted under the wing; or

(4) is being utilized for mercy or humanitarian purposes.

b ATC Notification of non-RVSM compliant State aircraft (those aircraft used in military, custom and police services shall be deemed state aircraft) is accomplished through filing of an ICAO flight plan. In Field 18 of the ICAO Flight Plan, include "STS/APVD NONRVSM".

NOTE: New York Oceanic will coordinate non-RVSM status with any affected adjacent FIR or facility.

c Aircraft operators requesting approval as detailed in 4 a shall:

(1) If departing from, or transiting through the New York portion of WATRS, and initial entry into an RVSM exclusive environment is the New York FIR, obtain approval from New York Center normally not more than 24 hours and not less than 4 hours prior to intended departure time.

(2) Include "STS/APVD NONRVSM" in Field 18 of the ICAO Flight Plan.

(3) After departure, the pilot shall notify the ATC facility (on VHF) adjacent to the New York boundary that approval has been obtained from New York Center.

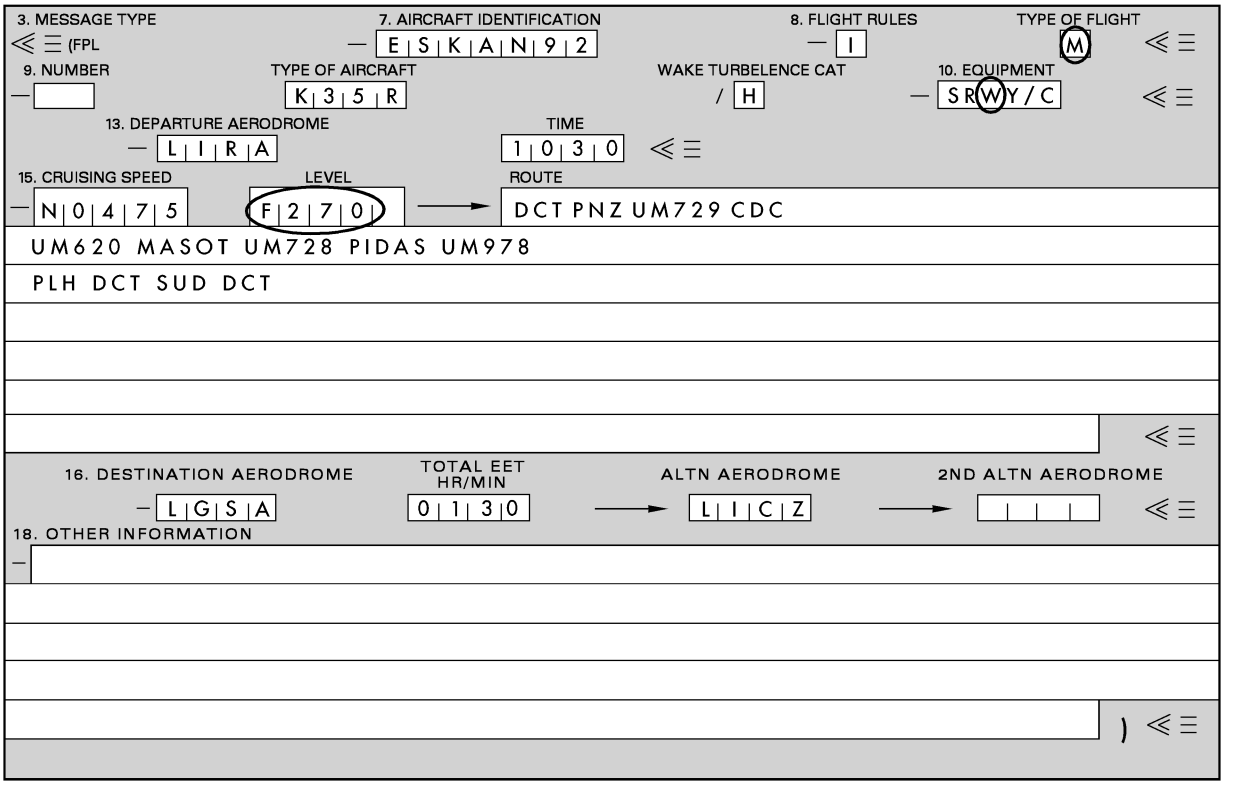
NOTE: APPROVAL MEANS ABLE TO OPERATE IN THE RVSM STRATUM. AIRCRAFT OPERATING LEVELS WILL BE SUBJECT TO AIR TRAFFIC CONTROL.

d Contact details for approval request are as follows: New York Center - Telephone: (631) 468-1495 or (631) 468-5959

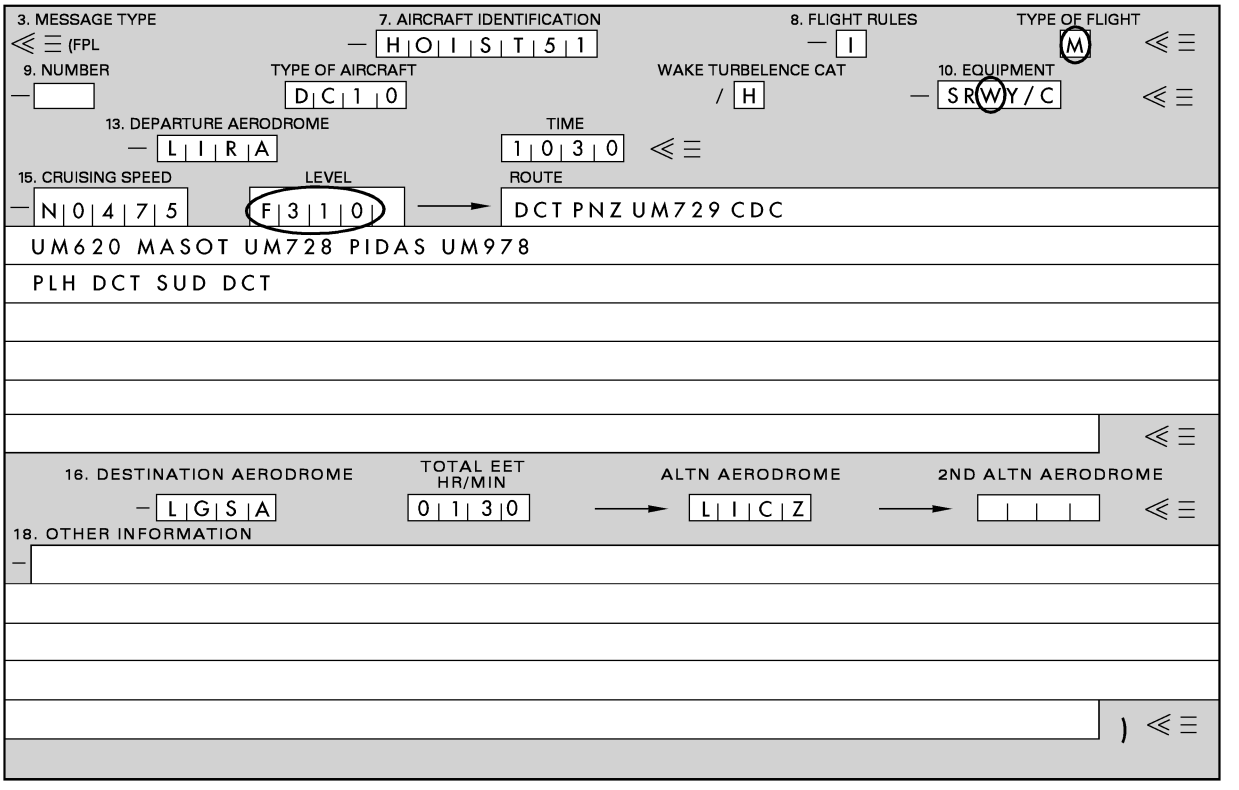
NOTE: This approval process is intended exclusively for the purposes indicated above and not as a means to circumvent the normal RVSM approval process.

(13) Procedures for Suspension of RVSM. Air Traffic Service providers will consider suspending RVSM procedures within affected areas within the New York FIR and adjacent transition areas when there are pilot reports of greater than moderate turbulence. Within areas where RVSM procedures are suspended, the vertical separation minimum between all aircraft will be 2000 ft.

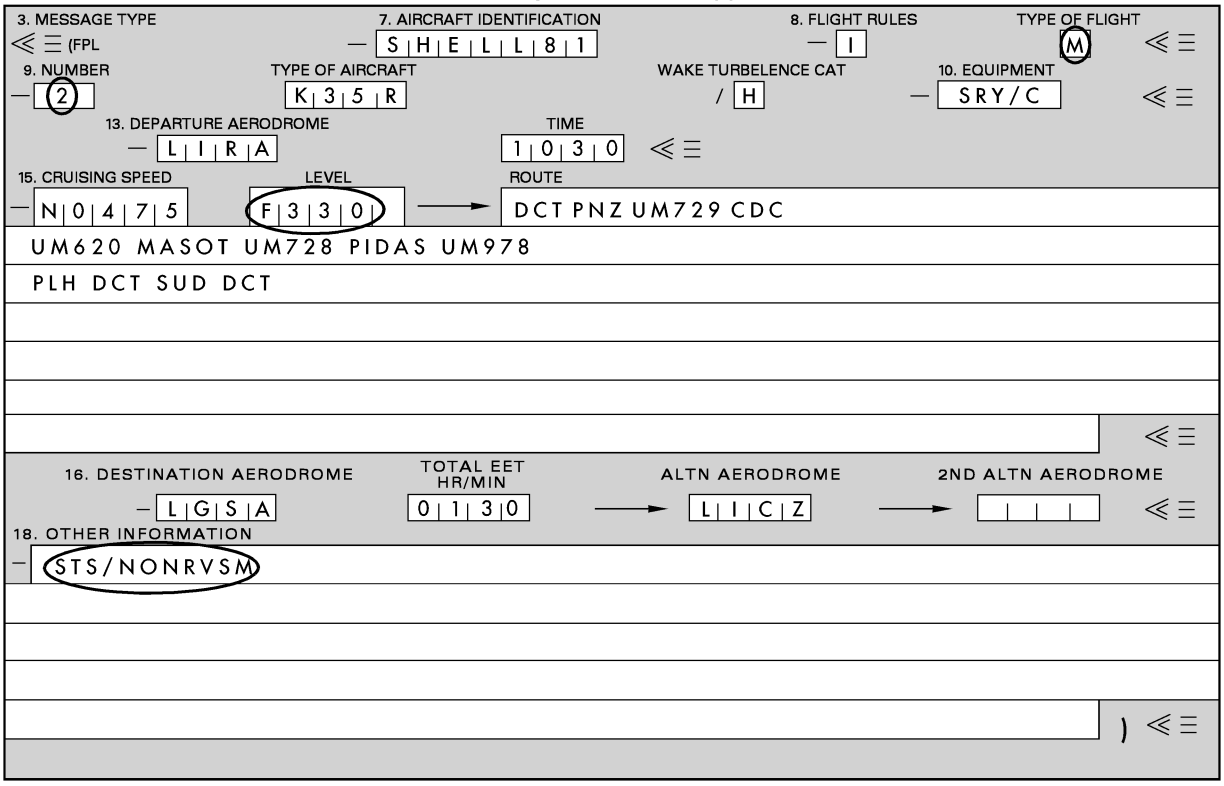
ICAO FPL - RVSM Approved State Aircraft
RFL Below FL 290



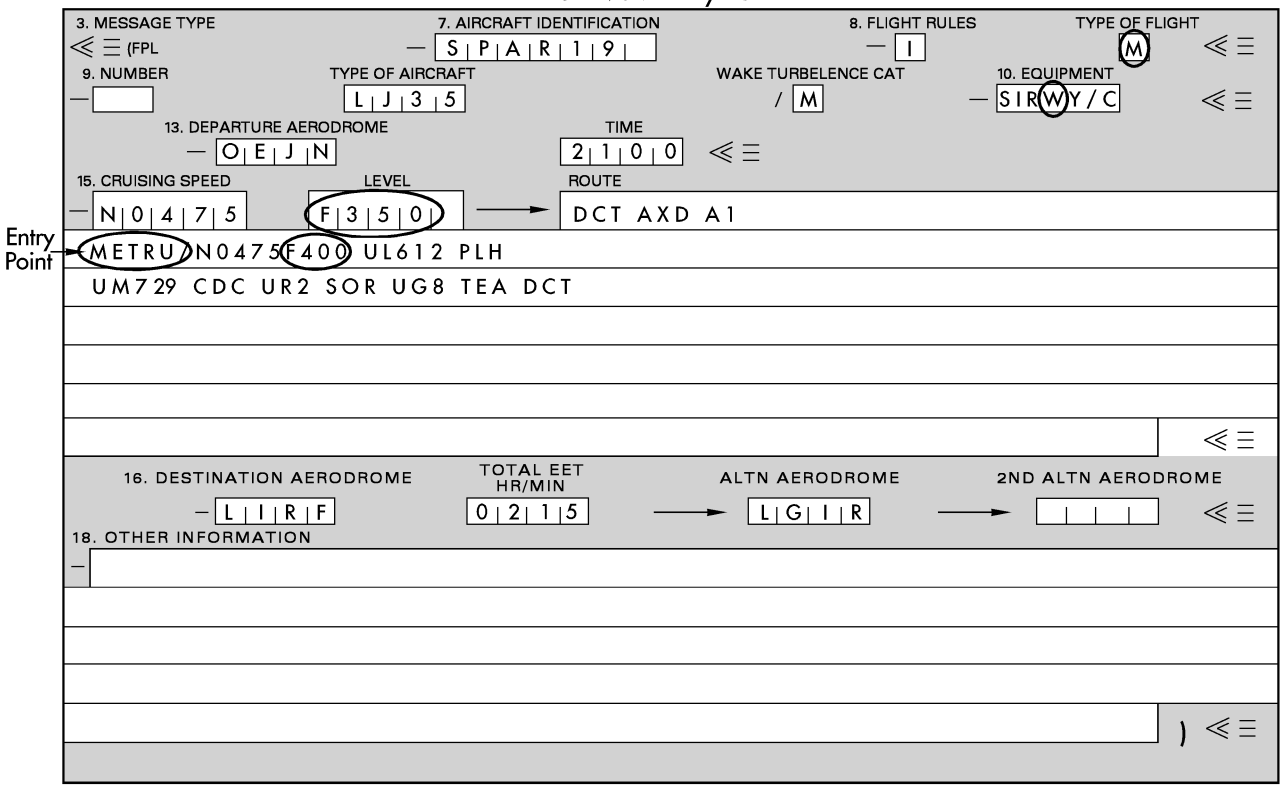
ICAO FPL - RVSM Approved State Aircraft
RFL Above FL 290



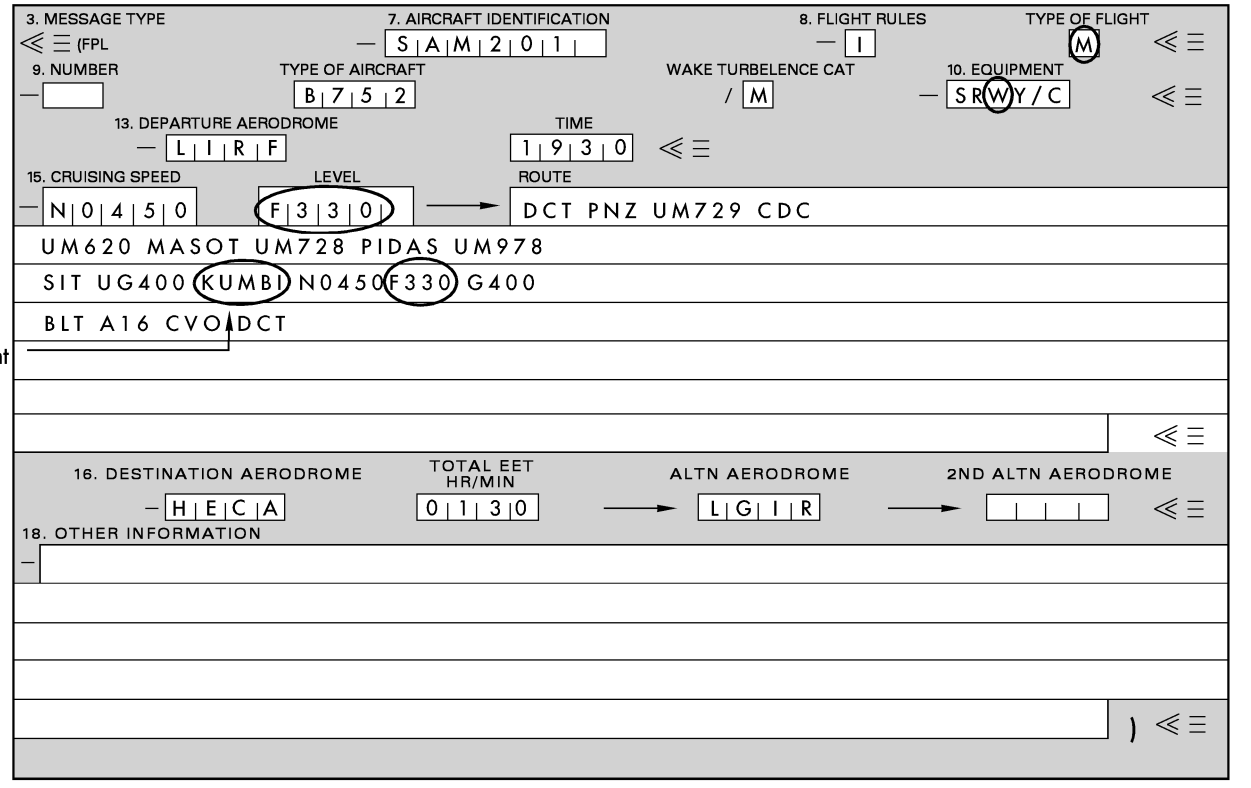
ICAO FPL - RVSM Approved State Aircraft
Formation Flight of 2 RVSM approved aircraft



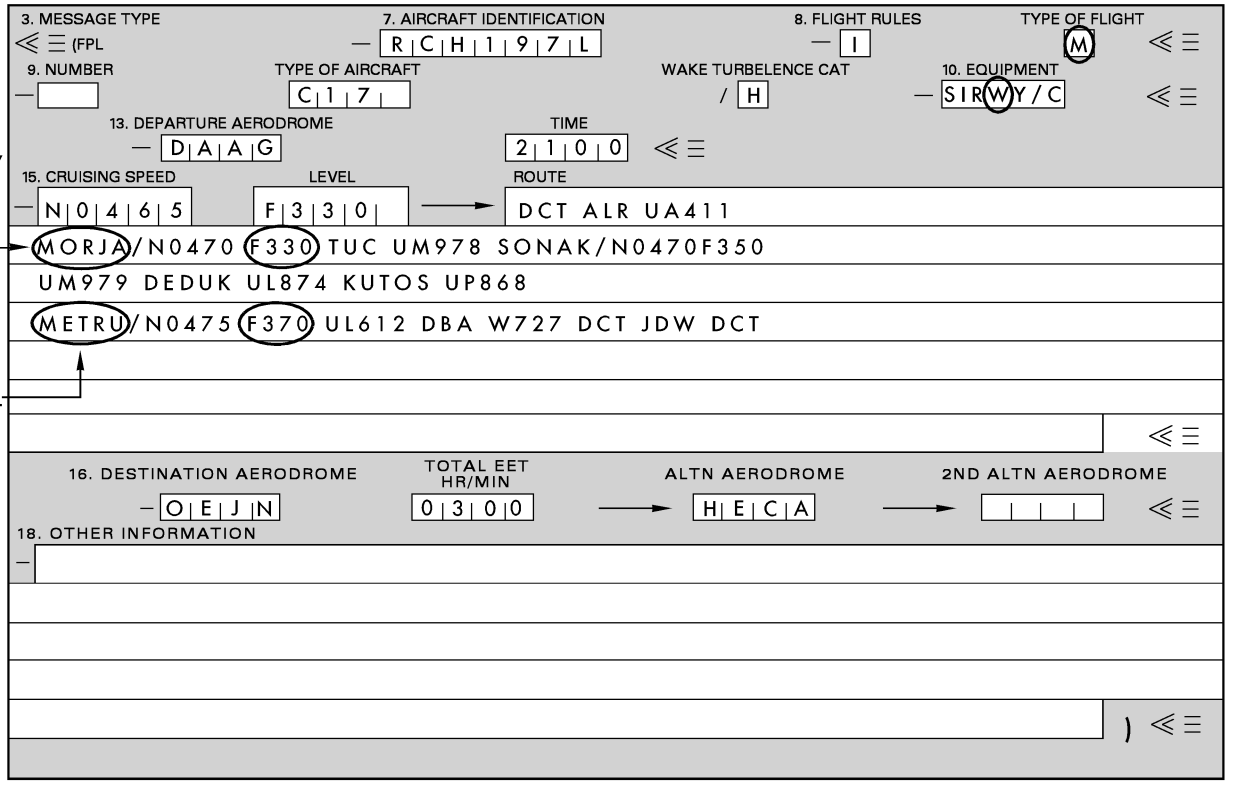
ICAO FPL - RVSM Approved State Aircraft
RFL at RVSM Entry Point



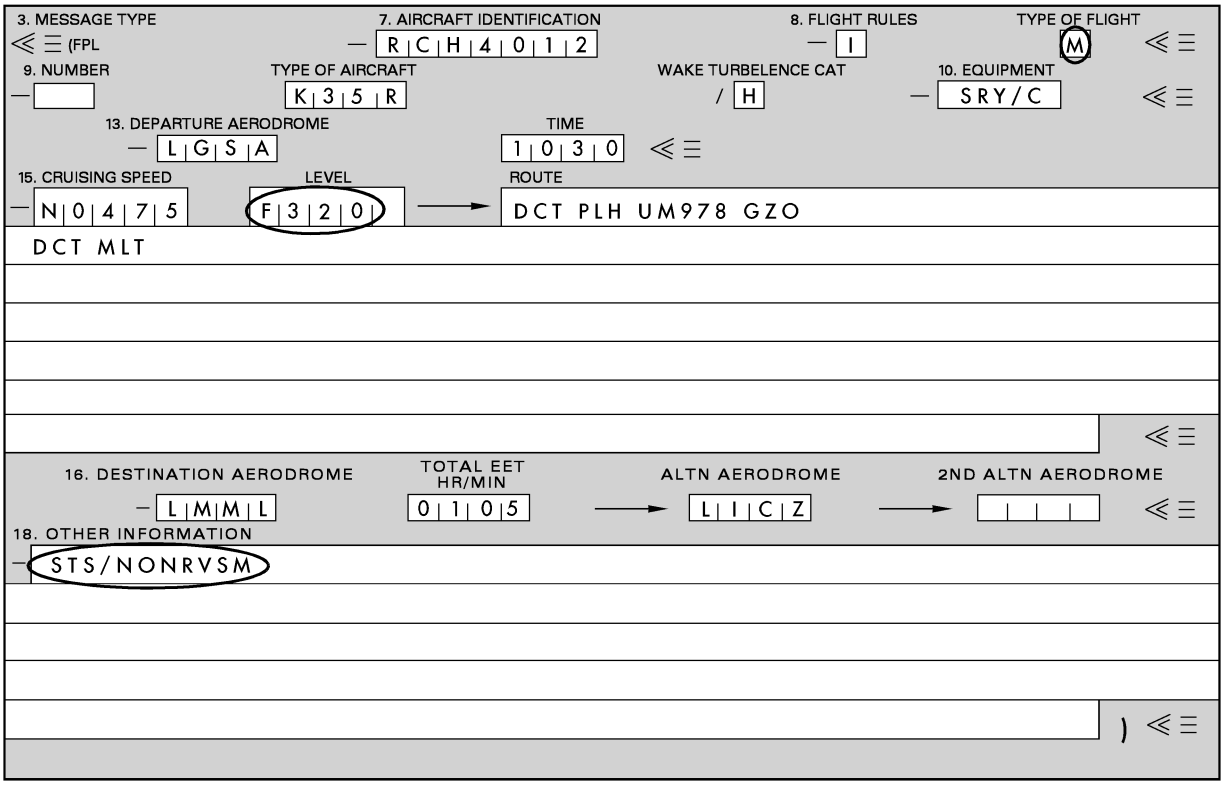
ICAO FPL - RVSM Approved State Aircraft
In-Out with same RFL



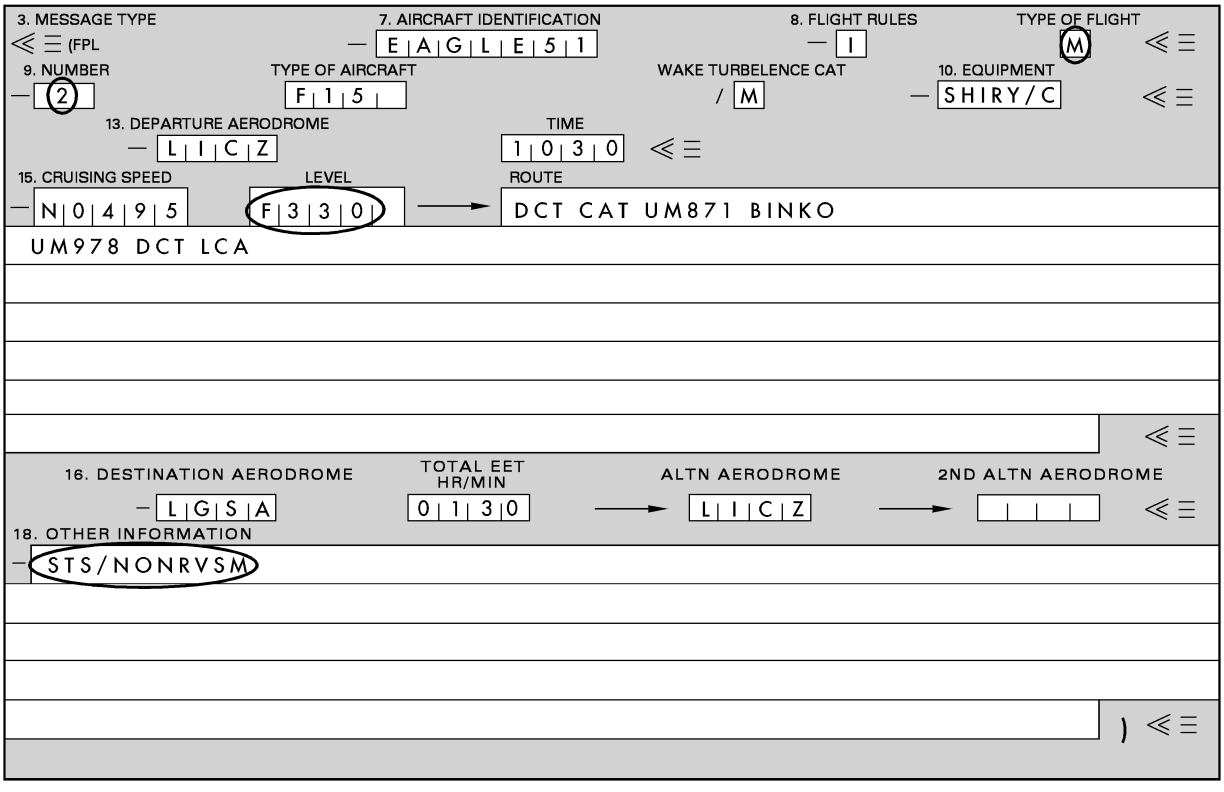
ICAO FPL - RVSM Approved State Aircraft
Out-In-Out



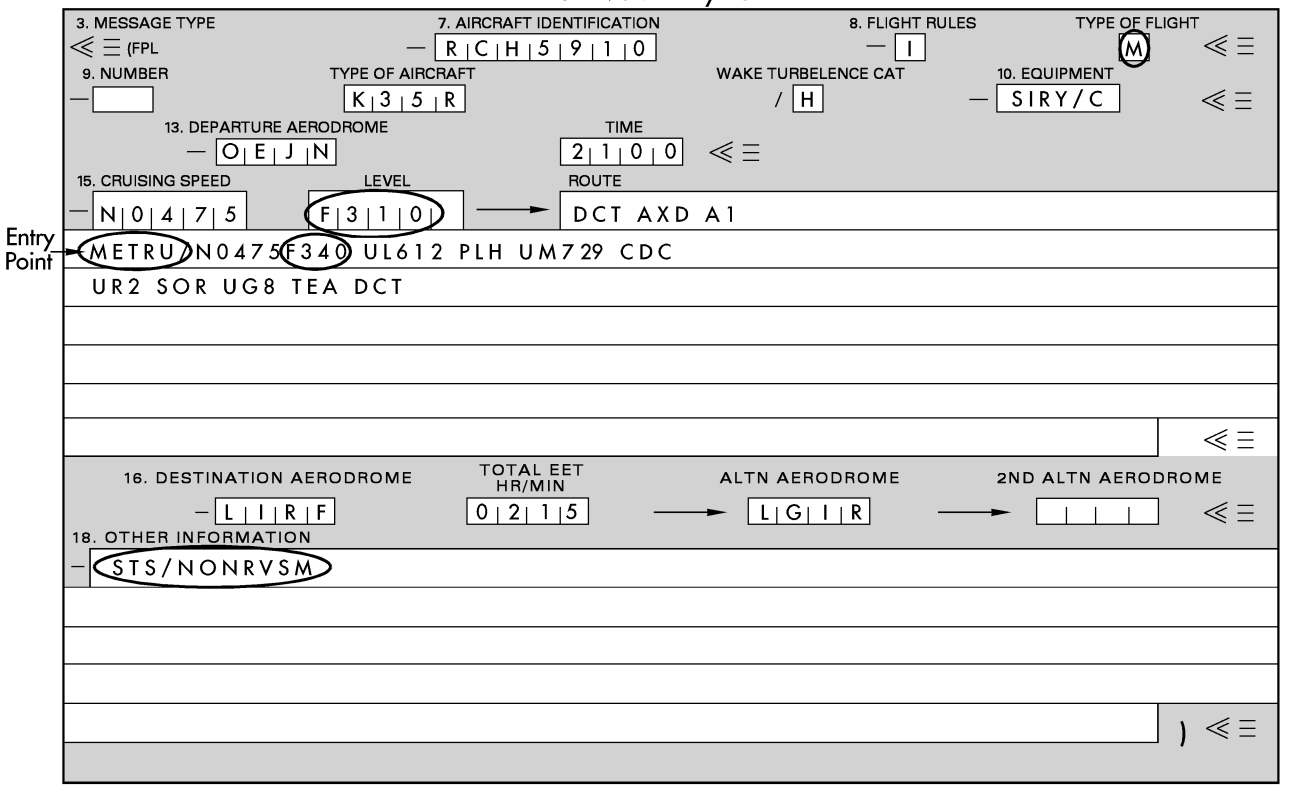
ICAO FPL - Non-RVSM Approved State Aircraft
RFL 290+



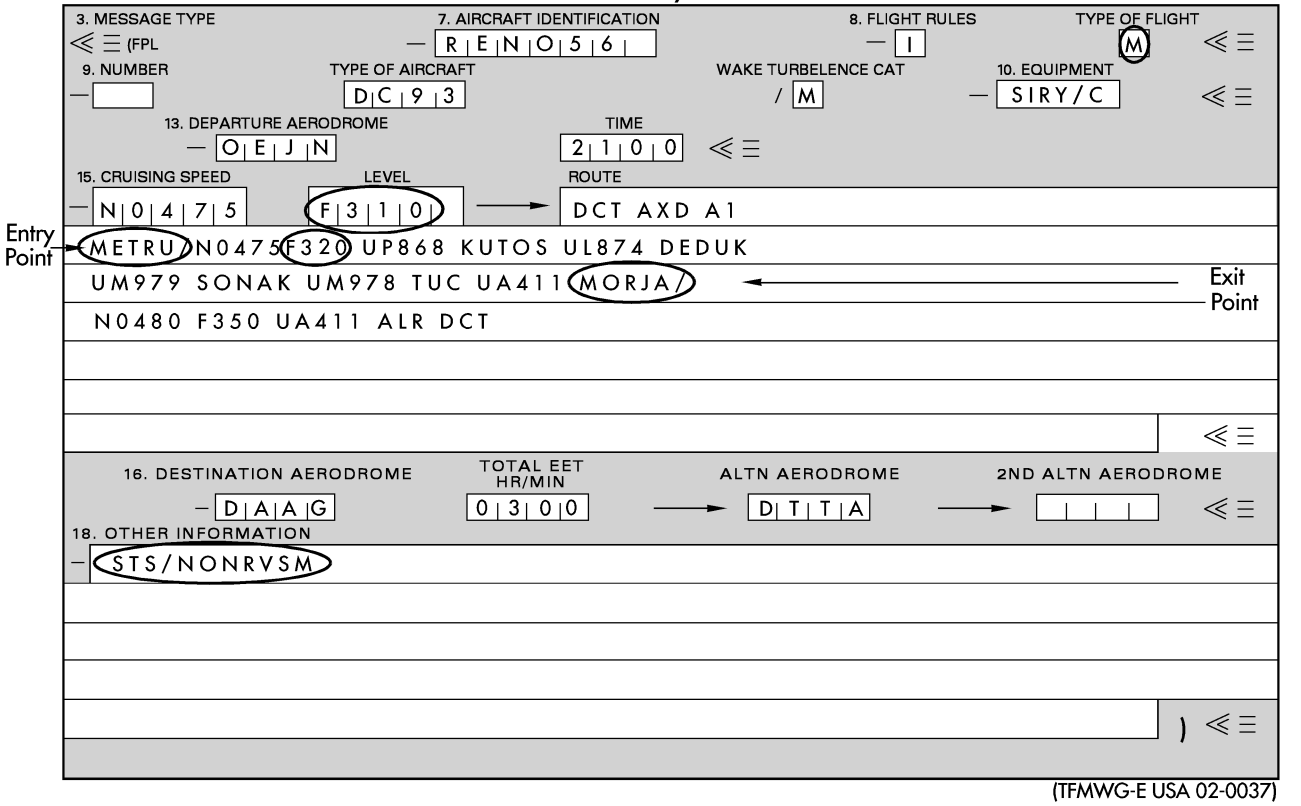
ICAO FPL - Non-RVSM Approved State Aircraft
Formation Flight



ICAO FPL - Non-RVSM Approved State Aircraft
RFL at RVSM Entry Point



ICAO FPL - Non-RVSM Approved State Aircraft
RFL at RVSM Entry/Exit Point



(TFMWG-E USA 02-0037)

RVSM PHRASEOLOGY

(*Indicates a pilot transmission)

Meaning	Phraseology
For a controller to ascertain the RVSM approval status of an aircraft.	(callsign) **CONFIRM RVSM APPROVED**
For a pilot to report non-RVSM approval status: i. on the initial call on any frequency within the EUR RVSM Airspace (controllers shall provide a read-back with this same phrase); and ii. in all requests for flight level changes pertaining to flight levels within the EUR RVSM Airspace and iii. in all read-backs to flight level clearances pertaining to flight level within the EUR RVSM Airspace. Additionally, except for State aircraft, pilots shall include this RTF phrase to read-back flight level clearances involving the vertical transit through FL 290 or FL 410. (See examples below)	**NEGATIVE RVSM***
For a pilot to report RVSM approval status.	**AFFIRM RVSM***
For a pilot of a non-RVSM approved State aircraft to report non-RVSM approval status, in response to the RTF phrase (callsign) CONFIRM RVSM APPROVED.	**NEGATIVE RVSM STATE AIRCRAFT***
Denial of ATC clearance into the EUR RVSM Airspace.	(callsign) **UNABLE CLEARANCE INTO RVSM AIRSPACE MAINTAIN (**or **DESCEND TO,** or **CLIMB TO) FLIGHT LEVEL** (number)
For a pilot to report when severe turbulence affects the aircraft's capability to maintain the height-keeping requirements for RVSM.	**UNABLE RVSM DUE TURBULENCE***
For a pilot to report that the aircraft's equipment has degraded below the MASPS required for flight within the EUR RVSM Airspace. (The phrase is to be used to convey both the initial indication of the non-MASPS compliance, and henceforth, on initial contact on all frequencies within the lateral limits of the EUR RVSM Airspace until such time as the problem ceases to exist, or the aircraft has exited EUR RVSM Airspace)	**UNABLE RVSM DUE EQUIPMENT***
For a pilot to report the ability to resume operations within the EUR RVSM airspace after an equipment or weather-related contingency.	**READY TO RESUME RVSM***
For a controller to confirm that an aircraft has regained its RVSM approval status, or to confirm that the pilot is ready to resume RVSM operations.	**REPORT ABLE TO RESUME RVSM**

Example 1: A Non-RVSM approved State aircraft operating as GAT, maintaining FL 260, subsequently requests a climb to FL 320.

Pilot RTF:	(call sign) **REQUEST FL 320, NEGATIVE RVSM**
Controller RTF:	(call sign) **CLIMB TO FL 320**
Pilot RTF:	(call sign) **CLIMB TO FL 320, NEGATIVE RVSM**

Example 2: A non-RVSM approved State aircraft operating as GAT, maintaining FL 260, subsequently requests a climb to FL 320.

Pilot RTF:	(call sign) **REQUEST FL 430, NEGATIVE RVSM**
Controller RTF:	(call sign) **CLIMB TO FL 430**
Pilot RTF:	(call sign) **CLIMB TO FL 430, NEGATIVE RVSM**

Example 3: A non-RVSM approved State aircraft operating as GAT, maintaining FL 360, subsequently requests a climb to FL 380.

Pilot RTF:	(call sign) **REQUEST FL 380, NEGATIVE RVSM**
Controller RTF:	(call sign) **CLIMB TO FL 380**
Pilot RTF:	(call sign) **CLIMB TO FL 380, NEGATIVE RVSM**

Example 4: A non-RVSM approved civil aircraft maintaining FL 280 subsequently requests a climb to FL 320.

Pilot RTF:	(call sign) **REQUEST FL 320, NEGATIVE RVSM**
Controller RTF:	(call sign) **UNABLE CLEARANCE INTO RVSM AIRSPACE, MAINTAIN FL 280**

Co-ordination between ATS Units

Meaning	Phraseology
To verbally supplement an automated estimate or message exchange that does not automatically transfer Item 18 flight plan information.	**NEGATIVE RVSM** or **NEGATIVE RVSM STATE AIRCRAFT** (as applicable)
To verbally supplement estimate messages of non-RVSM approved aircraft.	**NEGATIVE RVSM** or **NEGATIVE RVSM STATE AIRCRAFT** (as applicable)
To communicate the cause of a contingency relating to an aircraft that is unable to conduct RVSM operations due to severe turbulence or other severe weather-related phenomenon [or equipment failure, as applicable].	**UNABLE RVSM DUE TURBULENCE** (or **EQUIPMENT**, as applicable)

NOTE: For more information see website: http://www.ecacnav.com/rvsm/atm_procedures.htm#Controller_Pilot_Phraseologies

(TFMWG-E/USA 02-0038)

5. EXPLANATION OF ROUTE SYSTEM - The route system which aircraft are expected to use for flight operations across the NAT Region consists of the Organized Tracks, the North American Routes and the UK Domestic Routes. General rules and concepts concerning the Organized Track System are described below.

(SPEC/NGA)

a. ORGANIZED TRACK SYSTEM (OTS)

(FAA/FAA INTL FLT INFO MANUAL)

(1) Within the upper North Atlantic (NAT) Region is the OTS. The OTS consists of a system of transoceanic tracks or routes which link the North American and European Continents, the core of which is the Minimum Time track (MTT). The MTT is computed on a daily basis by applying meteorological data to a select great circle route. OTS tracks parallel the MTT to both the north and south and are normally separated from one another by at least 60 NM. A daily description of tracks that make up the OTS is transmitted to users and operators of the system over the ICAO Aeronautical Fixed Telecommunication Network (AFTN).

(2) To permit the optimum use of the airspace, the Area Control Center serving Gander, New York, Santa Maria and Shanwick OCA may, subject to coordination with each other and, when appropriate, with Reykjavik Area Control Center, establish an organized track system. The following procedures shall then be applied:

(ICAO DOC 7030 NAT/RAC 9.1)

(a) Operators conducting flight operations at or above FL 280 within Gander, New York, Shanwick and Santa Maria (N of N30°) OCA shall provide information to the Area Control Center concerned regarding the track likely to be requested during peak traffic periods. Such information shall be provided as far in advance of the anticipated peak periods as practicable.

(b) Based on the above information an organized track system may be established. The location of the organized track will depend on traffic demand and other relevant factors. The related track messages will be disseminated to operators by Shanwick Oceanic Area Control Center for the predominant westbound traffic flow and by Gander Oceanic Area Control Center for the predominant eastbound traffic flow. These messages shall be disseminated at least three hours in advance of each anticipated peak traffic period. Any subsequent change to the track system shall be notified to the operators as soon as possible.

(c) When composite separation is used in the organized track system, the following provisions apply:

NOTE: Composite separation, when applied between aircraft operating at or above FL 290, consists of a combination of at least 60 NM lateral and 1000' vertical separation.

(ICAO DOC 7030 NAT/RAC 7.4.1)

b. MILITARY COLOR CODED (NAT) ROUTES

(1) The following routes are designated primarily for tactical fighter deployments and have been coordinated to facilitate the activation of short-notice altitude reservations.

(AFFSA/AFFSA)

(a) Blue

Sept-lies TACAN	UZV	N50°13' W66°16'
Goose TACAN	UYR	N53°19' W60°25'
SCROD		N57°37' W55°52'
Fifty West		N55°00' W50°00'
Forty West		N50°00' W40°00'
Thirty West		N55°00' W30°00'
Twenty West		N56°00' W20°00'
Ten West		N56°00' W10°00'
Macrihanish VOR	MAC	N55°26' W05°39'

(b) Red

Yarmouth VOR/DME	YQI	N43°50' W66°05'
Halifax VOR/DME	YHZ	N44°55' W63°24'
Sydney VORTAC	YQY	N46°09' W60°03'
Torbay VOR/DME	YYT	N47°29' W52°51'
Fifty West		N49°00' W50°00'
Forty West		N50°00' W40°00'
Thirty West		N50°00' W30°00'
Twenty West		N50°00' W20°00'
Fifteen West		N50°00' W15°00'
Ten West		N50°00' W10°00'
Land's End VOR/DME	LND	N50°08' W05°38'

(c) Brown

Boston VORTAC	BOS	N42°21' W70°59'
HERIN		N42°00' W67°47' LFV 106/100
EnCan		N41°52' W67°00'
Sixty West		N43°00' W60°00'
Fifty West		N43°00' W50°00'
Forty West		N43°00' W40°00'
Thirty West		N43°00' W30°00'
Twenty West		N43°00' W20°00'
Thirteen West		N43°00' W13°00'
Santiago VOR/DME	STG	N42°56' W08°26'

(d) Yellow

Boston VORTAC	BOS	N42°21' W70°59'
HERIN		N42°00' W67°47' LFV 106/100
EnCan		N41°52' W67°00'
Sixty West		N43°00' W60°00'
Fifty West		N43°00' W50°00'
Forty West		N43°00' W40°00'
Thirty five West		N41°05' W35°00'
MIKE		N39°36' W31°38'
Flores NDB	FLO	N39°27' W31°10'
Graciosa NDB	GC	N39°06' W28°02'
Lajes TACAN LAJ		N38°43' W27°07'
CHARLIE		N38°22' W24°42'
Twenty West		N38°00' W20°00'
Ten West		N36°00' W10°00'
ORTOP		N36°02' W07°23'

(e) Gold Hi North (Eastbound)

DOTTY	N50°38' W55°35 YAY 182/49
Fifty West	N52°00' W50°00'
Forty West	N54°00' W40°00'
Thirty West	N55°00' W30°00'
Twenty West	N56°00' W20°00'
Ten west	N56°00' W10°00'

(f) Gold Hi South (Westbound)

Ten West	N56°00' W10°00'
Twenty West	N55°00' W20°00'
Thirty West	N54°00' W30°00'
Forty West	N53°00' W40°00'

Fifty West		N51°00′ W50°00′
Springdale NDB	2B	N49°29′ W56°11′

(2) The following routes developed primarily for AMC aircraft are established to facilitate the activation of short-notice altitude reservations for military aircraft.

(a) Black Two East

Eric NDB	UAC	N51°53′ W65°43′
VOKAR		N53°30′ W62°34′
LOACH		N55°31′ W57°01′
Fifty West		N56°00′ W50°00′
Forty West		N58°00′ W40°00′
Thirty West		N60°00′ W30°00′
Twenty West		N60°00′ W20°00′
Ten West		N60°00′ W10°00′
QN9		N58°18′ W05°10′ ARIP LUK 335/138
LUK335/035		N56°52′ W03°26′ ARCP
Leuchars TACAN	LUK	N56°22′ W02°52′
QM8		N54°07′ W00°06′ AREX LUK 151/166
Coltishall TACAN	CSL	N52°45′ E01°21′

Alternate options are:

1 Black South Two East

Eric NDB	UAC	N51°53′ W65°43′
VOKAR		N53°30′ W62°34′
LOACH		N55°31′ W57°01′
Forty West		N58°00′ W40°00′
Thirty West		N59°00′ W30°00′
Twenty West		N59°00′ W20°00′
Ten West		N59°00′ W10°00′
QN9		N58°18′ W05°10′ ARIP LUK 335/138
LUK 335/035		N56°52′ W03°26′ ARCP
Leuchars TACAN	LUK	N56°22′ W02°52′
QM8		N54°07′ W00°06′ AREX LUK 151/166
Coltishall TACAN	CSL	N52°45′ E01°21′

2 Black North Two East

Eric NDB	UAC	N51°53′ W65°43′
VOKAR		N53°30′ W62°34′
LOACH		N55°31′ W57°01′
Fifty West		N58°00′ W50°00′
Forty West		N61°00′ W40°00′
Thirty West		N61°00′ W30°00′
Twenty West		N61°00′ W20°00′
Ten West		N61°00′ W10°00′
QN9		N58°18′ W05°10′ ARIP LUK 335/138
LUK 335/035		N56°52′ W03°26′ ARCP
Leuchars TACAN	LUK	N56°52′ W02°52′
QM8		N54°07′ W00°06′ AREX LUX 151/166
Coltishall TACAN	CSL	N52°45′ E01°21′

CR Plan: Black Two East/West Pri 289.1, Sec 299.6, Beacon 1-2-1, A/A 29/92Y

(b) Orange One/Two East

Nantucket VORTAC	ACK	N41°17′ W70°02′
VITOL		N41°47′ W67°00′
CUDAS		N42°37′ W64°14′ ARIP ONE
Sixty two West		N43°10′ W62°00′ ARCP ONE
GRUPI		N43°52′ W58°50′
DOPHN		N44°33′ W55°29′
RAFIN		N44°53′ W51°48′ AREX ONE
Forty West		N44°00′ W40°00′
Thirty West		N44°00′ W30°00′
Twenty West		N44°00′ W20°00′
Fifteen West		N45°00′ W15°00′ARIP TWO
Thirteen West		N45°20′ W13°00′ ARCP TWO
SIVIR		N46°00′ W08°45′
RIVAK		N46°00′ W08°00′
MORGO		N45°51′ W03°18′
Cognac TACAN	CGC	N45°40′ W00°18′

CR Plan: Orange One East/West: Pri 258.0, Sec 399.8, Beacon 1-1-1, A/A 29/92Y
Orange Two East/West: Pri 299.5, Sec 298.9, Beacon 1-2-2, A/A 29/92Y

(c) Purple One/Two/Three East

SLATN		N39°07′ W67°00′
---		N39°14′ W64°20′ ARIP ONE
---		N39°48′ W62°14′ ARCP ONE
Sixty West		N40°21′ W60°00′
---		N40°56′ W57°00′ AREX ONE
Fifty West		N42°00′ W50°00′
Forty West		N42°00′ W40°00′
Thirty West		N42°00′ W30°00′
---		N40°48′ W23°00′ ARIP TWO
---		N40°25′ W21°35′ ARCP TWO
Twenty West		N40°00′ W20°00′
GUNTI		N39°00′ W15°00′
SONAP		N36°30′ W10°00′ (AFFSA/XOIA FIL 01-84)
ORTOP		N36°02′ W07°23′
Six West		N35°57′ W06°00′
Five West		N36°00′ W05°00′
Three West		N36°20′ W03°00′
---		N36°36′ W01°13′
---		N36°30′ W01°57′ ARIP THREE
---		N37°21′ E00°25′ ARCP THREE
---		N38°32′ E03°13′
---		N39°03′ E04°30′AREX THREE
MORSS		N39°57′ E04°40′

CR Plan: Purple One East/West Pri 258.0, Sec 399.8, Beacon 1-1-1, A/A 29/92Y
Purple Two East/West Pri 299.5, Sec 298.9, Beacon 1-2-2, A/A 29/92Y
Purple Three East West Pri 299.5, Sec 298.9, Beacon 1-2-2, A/A 29/92Y

(d) Black Two West

Coltishall TACAN	CSL	N52°45′ E01°21′ ARIP
QM8		N54°07′ W00°06′ ARCP LUK 151/166
Leuchars TACAN	LUK	N56°22′ W02°52′ AREX
LUK 335/035		N56°52′ W03°26′
QN9		N58°18′ W05°10′ LUK 335/138
Ten West		N60°00′ W10°00′
Twenty West		N60°00′ W20°00′
Thirty West		N60°00′ W30°00′
Forty West		N58°00′ W40°00′
Fifty West		N56°00′ W50°00′
LOACH		N55°31′ W57°01′
VOKAR		N53°30′ W62°34′
Eric NDB	UAC	N51°53′ W65°43′

Alternate Options are:

1 Black South Two West

Coltishall TACAN	CSL	N52°45′ E01°21′ ARIP
QM8		N54°07′ W00°06′ ARCP LUK 1/166
Leuchars TACAN	LUK	N56°22′ W02°52′ AREX
LUK 335/035		N56°52′ W03°26′
QN9		N58°18′ W05°10′ LUK 335/138
Ten West		N59°00′ W10°00′
Twenty West		N59°00′ W20°00′
Thirty West		N59°00′ W30°00′
Forty West		N58°00′ W40°00′
LOACH		N55°31′ W57°01′
VOKAR		N53°30′ W62°34′
Eric NDB	UAC	N51°53′ W65°43′

2 Black North Two West

Coltishall TACAN	CSL	N52°45′ E01°21′ ARIP
QM8		N54°07′ W00°06′ ARCP LUK N151/166
Leuchars TACAN	LUK	N56°22′ W02°52′ AREX
LUK 335/035		N56°52′ W03°26′
QN9		N58°18′ W05°10′ LUK 335/138
Ten West		N61°00′ W10°00′
Twenty West		N61°00′ W20°00′
Thirty West		N61°00′ W30°00′
Forty West		N61°00′ W40°00′
Fifty West		N58°00′ W50°00′
LOACH		N55°31′ W57°01′
VOKAR		N53°30′ W62°34′
Eric NDB	UAC	N51°53′ W65°43′

(e) Orange One/Two West

Cognac TACAN	CGC	N45°40′ W00°18′
MORGO		N45°51′ W03°18′
RIVAK		N46°00′ W08°00′
SIVIR		N46°00′ W08°45′
Thirteen West		N45°20′ W13°00′
Fifteen West		N45°00′ W15°00′ AREX TWO
Twenty West		N44°00′ W20°00′
Thirty West		N44°00′ W30°00′
Forty West		N44°00′ W40°00′
RAFIN		N44°53′ W51°48′ ARIP ONE
DOPHN		N44°33′ W55°29′ ARCP ONE
GRUPI		N43°52′ W58°50′
Sixty two West		N43°10′ W62°00′
CUDAS		N42°37′ W64°14′ AREX ONE
VITOL		N41°40′ W67°00′
Nantucket VORTAC	ACK	N41°17′ W70°02′

(f) Purple One/Two/Three West

MORSS	N39°57′ E04°40′
---	N38°32′ E03°13′
---	N36°30′ W01°57′
Three West	N36°20′ W03°00′
Five West	N36°00′ W05°00′
Six West	N35°57′ W06°00′
ORTOP	N36°02′ W07°23′
---	N37°00′ W10°00′ ARIP TWO
---	N37°33′ W11°32′ ARCP TWO
Twenty West	N40°00′ W20°00′
---	N40°48′ W23°00′ AREX TWO
Thirty West	N42°00′ W30°00′
Forty West	N42°00′ W40°00′
Fifty West	N42°00′ W50°00′
__	N40°47′ W57°48′ ARIP ONE
---	N40°21′ W60°00′ ARCP ONE
---	N39°14′ W64°20′ AREX ONE
SLATN	N39°07′ W67°00′

c. NORTH AMERICAN ROUTE SYSTEM - Route descriptions and operating procedures are published in the Canada Flight Supplement.

6. THE ORGANIZED TRACK SYSTEM (OTS), The Organized Track System (OTS) is constructed by the appropriate Oceanic Area Control Center (OAC), the night-time OTS by Gander OAC and the day-time by Shanwick (OAC) (Prestwick), each in coordination with New York, Reykjavik and Santa Maria OACs. The agreed organized track system is then promulgated as the NAT Track Message via the AFTN to all interested addresses. A typical time of publication of the day-time OTS is 0100Z and the night-time OTS 1300Z.

7. THE NAT TRACK MESSAGE. The NAT Track Message give full details of the coordinates of the organized tracks as well as the flight levels that are expected to be in use on each track. In most cases there are also details of domestic entry and exit routing associated with the individual tracks and the portion of airspace within which the Datum Line Technique is applicable. In the day-time system the track most northerly at its point of origin is designated Track "A" (Alpha) and the next most northerly Track "B" (Bravo) etc. In the night-time system the most southerly track at its point of origin is designated Track "Z" (Zulu) and the next most southerly Track "Y" (Yankee) etc. The hours of validity of the two organized Track System (OTS) are normally:

NOTE: Day-time OTS 1130Z-1900Z at W30°

Night-time OTS 0100Z-0800Z at W30°

Changes to these times can be negotiated between Gander and Shanwick OACs, however, in all cases the hours of validity are specified in the NAT Track Message for each system.

a. Correct interpretation of the track message by aircrews is essential to both economy of operation and minimizing the possibility of misunderstanding leading to the use of incorrect track coordinates. Oceanic airspace outside the published OTS is available, subject to separation criteria and NOTAM restrictions, for use by random operations. It is usually possible for ATC to clear aircraft to join or leave an outer track of the OTS without difficulty. If an operator wishes to file partly or wholly outside the OTS, knowledge of separation criteria, the forecast upper wind situation and correct interpretation of the NAT Track Message will assist in judging the feasibility of the planned route. When anticipated volume of traffic does not warrant publication of all available flight levels on a particular track, ATC will publish on it those levels required to meet traffic demand. The fact that a specific flight level is not published for a particular track does not necessarily mean that it cannot be made available if requested.

b. On many occasions tracks on two successive systems may appear to have the same coordinates, but special care should be taken to ensure that this is really the case for the whole track and also to check to what extent the associated landfall/termination points and domestic routing are also identical.

c. In order to ensure a smooth transition from night to day track system and vice-versa a period of several hours is placed between the termination of one system and the commencement of the next.

(1) Eastbound traffic crossing W30° between 0930Z and 1029Z in MNPS airspace should file random flight plans at

Eastbound FLs (290, 330, 370). Where the flight will conflict with the date-time (westbound) OTS the route should follow the day-time structure from W30°. However, such traffic may plan to join the outer track of the day-time structure at any point.

(2) Westbound traffic crossing W30° between 2300Z and 2359Z in MNPS airspace should file random flight plans at the westbound FLs (280, 310, 350, 390). Where the flight will conflict with the night-time (eastbound) OTS the route should follow the night-time structure from W30°. However, such traffic may plan to join the outer track of the night-time structure at any point.

(3) Eastbound traffic crossing W30° at 1030Z or later and Westbound traffic crossing W30° at 0001Z or later should plan to avoid the Organized Track System and Datum Line level.

EXAMPLE OF WESTBOUND NAT TRACK MESSAGE

NAT TRACKS FL 310/370 INCLUSIVE APRIL 25/1130Z TO APRIL 25/1900Z

a 57/10 58/20 59/30 58/40 56/50 SCROD YYR
WEST LVLS 310 330 350 370
EAST LVLS NIL
EUR RTS WEST 2
EUR RTS EAST NIL
NAR NA222 NA230

b 56/10 57/20 58/30 57/40 55/50 OYSTER KLAMM
WEST LVLS 310 330 350 370
EAST LVLS NIL
EUR RTS WEST 2
EUR RTS EAST NIL
NAR NA202 NA204

c 55/10 56/20 57/30 56/40 54/50 CARPE REDBY
WEST LVLS 310 330 350 370
EAST LVLS NIL
EUR RTS WEST 2
EUR RTS EAST NIL
NAR NA180 NA182

d 54/15 55/20 56/30 55/40 53/50 YAY
WEST LVLS 310 330 350 370
EAST LVLS NIL
EUR RTS WEST 2 VIA ACKIL
EUR RTS NIL
NAR NA160 NA166

e 53/15 54/20 55/30 54/40 52/50 DOTTY
WEST LVLS 310 330 350 370
EAST LVLS NIL
EUR RTS WEST 2 VIA SNN
EUR RTS EAST NIL
NAR NA152 NA154

NOTE: DATUM TRACK ALPHA 2-R99 IN EFFECT FOR EUR/CAR TRAFFIC.

EXAMPLE OF EASTBOUND NAT TRACK MESSAGE

NAT TRACKS FL 330/390 INCLUSIVE APRIL 25/0100Z TO APRIL 25/0800Z

v YSG 51/50 52/40 53/30 53/20 54/15 ACKIL
WEST LVLS NIL
EAST LVLS 330 350 370 390
EUR RTS WEST NIL
EUR RTS EAST NIL
NAR NA141 NA149

w YQX 50/50 51/40 52/30 53/20 53/15 SNN
WEST LVLS NIL
EAST LVLS 330 350 370 390
EUR RTS WEST NIL
EUR RTS EAST NIL
NAR NA125 NA127 NA131

x VYSTA 49/50 50/40 51/30 52/20 52/15 CRK
WEST LVLS NIL
EAST LVLS 330 350 370 390
EUR RTS WEST NIL
EUR RTS EAST NIL
NAR NA105 NA107 NA111

y YYT 48/50 49/40 50/30 51/20 51/15 TIVLI
WEST LVLS NIL
EAST LVLS 330 350 370 390
EUR RTS WEST NIL
EUR RTS EAST NIL
NAR NA83 NA89 NA93

z COLOR 47/50 48/40 49/30 50/20 50/08 LND
WEST LVLS NIL
EAST LVLS 330 350 370 390
EUR RTS WEST NIL
EUR RTS EAST NIL
NAR NA41 NA51 NA53

NOTE: DATUM LINE TRACK VICTOR 2. R99 IN EFFECT FOR CAR/EUR TRAFFIC.

8. THE DATUM LINE TECHNIQUE. Datum Line Technique is a method used in the NAT Region to assist, at the flight planning stage, by delineating in advance a block of airspace in which flight level(s) not appropriate to the direction of the flight can be used. This is done to accommodate a peak flow of aircraft operating on random routes. Within the confines of the Gander and Shanwick OCAs the Datum Line, as specified in the appropriate NAT Track Message, defines the southern limit of airspace within which the following procedures apply.

a. During day-time OTS, FL 330 is released for random routing of westbound aircraft on and north of the published Datum Line.

b. During night-time OTS, FL 350 is released for random routing of eastbound aircraft on and north of published Datum Line.

9. BASIC RNAV - Basic RNAV (BRNAV) is defined as RNAV with an accuracy that meets RNP-5 for operations under IFR in that European airspace designated for BRNAV/RNP-5 operations. BRNAV equipage mandatory as of April 23, 1998.

a. Receiver Autonomous Integrity Monitoring (RAIM) is a technique whereby a GPS receiver/processor determines the integrity of the GPS navigation signals using only GPS signals or GPS signals augmented with altitude. This determination is achieved by a consistency check among redundant pseudo- range measurements. At least one satellite in addition to those required for navigation must be in view for the receiver to perform the RAIM function (i.e. five satellites).

b. Required Navigation Performance is a statement of the navigation performance necessary for operation within a defined airspace.

(Adapted from ICAO - IS&RP Annex 6)

c. Required Navigation Performance Type (RNP Type). RNP accuracy standards require an aircraft to be within a specific number of nautical miles (NM) of its cleared position for 95% of the duration of the flight. RNP airspace is categorized in terms of the accuracy requirement (e.g., RNP-4 means the aircraft must be within 4 NM).

(Adapted from ICAO IS&RP Annex 6)

d. Eligibility of Aircraft Navigation for BRNAV/RNP-5 Operations in European Airspace.

(1) Aircraft Equipage. An aircraft is eligible for BRNAV/RNP-5 approval, when equipped with one or more approved RNAV systems. In the event of RNAV system failure, the aircraft will revert to navigation using ICAO Standard Navigation Aids (VOR, DME, and NDB).

(a) The following system functions are required for BRNAV/RNP-5 operations:

1 Continuous display of aircraft position relative to track displayed to the pilot flying on a navigation system situated in his primary field of view.

2 Display of distance and bearing to the active (To) waypoint.

3 Display of ground speed or time to the active (To) waypoint.

4 Storage of waypoints: minimum of 4.

5 Appropriate failure indication of the RNAV system, including the sensors.

(b) Conditions or limitations specific to the RNAV system, should be highlighted. For example, some RNAV systems must be updated after a specified number of hours of use in order to continue to provide the required navigation accuracy.

(2) Limitations on the Use of Navigation Systems. The following navigation systems require limitations on their use for BRNAV/RNP-5 operations.

(a) Inertial Navigation Systems (INS).

1 Those INS systems which do not use automatic radio updating of aircraft position may be used for a maximum of two hours from the time the system is placed in the navigation mode (NAV SELECT).

2 Those aircraft INS systems that DO NOT use automatic radio updating of aircraft position must use an accepted flight crew procedure to accomplish position updates.

NOTE: Certain INSs perform automatic updates after the aircrew makes a manual selection of navigation aids. Such systems are not limited to the two hour time limit provided the operator has established update procedures for the aircrew to follow.

NOTE: European joint regulations stipulate that manual insertion of coordinates for updates to onboard navigation systems is not an acceptable procedure under European BRNAV operations.

(b) Loran C. Use of Loran C is an acceptable means of complying with BRNAV only in those areas of European airspace and on routes with acceptable Loran C coverage. Loran users are responsible for determining if operational use of the Loran system is limited to a specified Loran C Operational Area (LOA).

(c) GPS systems are acceptable for BRNAV/RNP-5 operations if they include integrity monitoring. Integrity should be provided by RAIM or an equivalent means within a multi-sensor navigation system.

1 VOR, DME or ADF capability must be installed and operative consistent with the applicable operating rules and intended route-of-flight to ensure availability of a suitable alternative means of navigation in the event of failure.

e. Operational Criteria for GPS-based Operations.

(1) General Criteria. Flight crews should be familiar with use of the GPS for normal and non-normal operating procedures.

(2) Normal Procedures. The procedures for the use of GPS stand-alone equipment-as the navigational means for BRNAV compliance, on BRNAV/RNP-5 routes should include the following:

(a) Crews must check NOTAMs for GPS satellite status and RAIM availability. During pre-flight planning, if 24 satellites (23 if baro aiding is incorporated into the GPS unit) are projected to be operational for the flight, then the aircraft can depart without further action. If, however, 23 or fewer satellites (22 if baro aiding incorporated) are projected to be operational, then the availability of GPS integrity (RAIM) should be confirmed for the intended flight (route and time). Obtain RAIM availability from either a prediction program that is provided in the GPS unit installed in the aircraft or a prediction program run outside the aircraft. For aircraft using GPS as the primary BRNAV means of compliance, in the event of a predicted continuous loss of RAIM of more than 5 minutes for any part of the intended flight the flight should be delayed, rerouted, or canceled.

(b) When a navigation data base is installed, the data base validity (current AIRAC cycle) will be checked before the flight.

(c) Tune alternate navigation equipment suitable for the route of flight (e.g., VOR, DME, and ADF) to allow immediate crosschecking or reversion in the event of loss of GPS navigation capability.

(3) Non-Normal Procedures in the Event of Loss GPS RAIM Capability. Flight crew will be familiar with the operating procedures and actions required in the event that the GPS equipment indicates a loss of RAIM, or the integrity alarm limit is exceeded (erroneous position). Operating procedures should include the following:

(a) In the event of loss of RAIM while enroute, the GPS equipment may continue to be used for navigation, however, flight crews will cross-check the aircraft position with VOR, DME, TACAN, Loran or NDB information, to confirm acceptable navigation performance. If navigation performance is in doubt the flight crew should revert to an alternative means of navigation.

(b) In the event that the alarm limit has been exceeded, the flight crew should revert to an alternative means of navigation.

f. Pilot Knowledge. Pilots should be knowledgeable in the following areas:

(1) RNP definition as it relates to BRNAV requirements in European airspace.

(2) Airspace where RNP-5 is required.

(3) Changes to charting and documents to reflect RNP-5.

(4) Navigation equipment required for flight in designated BRNAV airspace and any limitations associated with the RNAV equipment.

(5) Flight planning requirements.

(6) Contingency Procedures (e.g., for equipment failure).

(7) Enroute and other procedures applicable to RNAV.

g. Contingency Procedures.

(1) Expected Flight crew Actions. Pilots should notify ATC of conditions (e.g., equipment failures and weather conditions) affecting the ability of the aircraft to maintain position within the designated BRNAV airspace. In this case, flight crews should state their intentions, coordinate a plan of action, and obtain a revised ATC clearance. The flight crew should follow established contingency procedures and notify ATC prior to deviating from the BRNAV airspace. When deviation is required prior to ATC notification, flight crews will notify ATC as soon as possible after taking action.

h. Flight Plans. U.S. aircraft filing flight plans into European BRNAV designated airspace expected to comply with the European BRNAV airspace requirements. Operators will indicate approval for BRNAV/RNP-5 operations by annotating block 10 (Equipment) of the ICAO flight plan with the letter "R". If there are any other flight plan annotations required by individual States, operators should make appropriate annotations.

i. GPS Integrity Monitoring Predictive RAIM Program. Where a prediction program is used as a means of GPS compliance for BRNAV:

(1) The crew should use the program during flight planning to predict availability of the integrity monitoring (RAIM) function of the GPS equipment.

(2) The program should have the capability to manually designate (deselect) GPS satellites, which have been notified to be outof- service for the intended flight (i.e., NOTAMs).

(3) The crew should check RAIM availability for the intended route and declared alternates for the time and duration of the intended flight.

DIMENSIONAL UNITS - Standard except for mandatory application of IFR as indicated under IFR below.

NEW YORK OCEANIC FIR - ICAO Table.

ALTIMETER SETTING PROCEDURES - Standard, except: NEW YORK OCEANIC FIR - All altitude and flight levels: 29.92 HG.

(SPEC/UNITED STATES RAC 2.1.4)

VERTICAL SEPARATION -

1. Phased implementation of Reduced Vertical Separation Minimum (RVSM) began on 27 March 1997, in NAT MNPS airspace. RVSM will reduce vertical separations from 2000 to 1000 feet between suitably equipped aircraft. Paragraph 4.j. under the GENERAL sectionof this chapter contains further details on RVSM.

2. Refer to appropriate FIR/UIR or National Supplementary Procedures.

(AFFSA/AFFSA)

NEW YORK OCEANIC FIR - Semicircular.

POSITION REPORTING - Standard except:

1. Unless otherwise required by ATS, position reports for flights on routes not defined by designated reporting points shall be made at the significant point listed in the flight plan.

(ICAO DOC 7030 NAT/RAC 4.1.1)

NEW YORK OCEANIC FIR - Standard.

2. POSITION

(ICAO DOC 7030 NAT/RAC 4.2)

a. Position shall, for flights outside the ATS route network, be expressed in terms of latitude and longitude. For flights whose tracks are predominantly east or west, latitude shall be expressed in degrees and minutes, longitude in degrees only. For flights whose track are predominantly north or south, latitude, shall be expressed in degrees only, longitude in degrees and minutes.

b. "Next position" shall normally be expressed as the significant point at which the aircraft is next required to report its position.

3. If the estimated time for the "next position" is found to be in error by 3 minutes or more, a revised estimate shall be transmitted to the ATS unit concerned as soon as possible.

(ICAO DOC 7030 NAT/RAC 4.2.2)

4. LEVEL - Aircraft cleared for cruise climb shall report their level to the nearest 100', e.g. 554.

(ICAO DOC 7030 NAT/RAC 4.2.3)

5. TIME - All times shall be expressed in four digits, giving both the hour and minutes, when making position report.

(ICAO DOC 7030 NAT/RAC 4.2.1)

6. Position reports made by aircraft operating within an ocean control area at a distance of 60 NM or less from the common boundary with an adjacent ocean control area, includes aircraft operating on track thru successive points on such boundary, shall also be made to the area control center serving the adjacent control area.

(ICAO DOC 7030 NAT/RAC 4.3.1)

7. UNITED STATES MILITARY PROCEDURES - While in the Shanwick Control Area, US military aircraft will pass command and control and all other operational communications to the Croughton Global Command and Control Station. ATC communications and associated air reports will be passed to ICAO aeronautical station. The Flight Information Handbook contains a current listing of ICAO HF aeronautical station and selected VHF long range stations.

(USAFE XO/AFFSA)

8. ALERTING AND SEARCH AND RESCUE - All flights operated more than 100 NM from the shoreline shall report during the period twenty to forty minutes following the time of last contact, whatever the purpose of such contact, merely to indicate that the flight is progressing according to plan. The above report will consist of aircraft identification and the words "Operations normal".

(ICAO DOC 7030 MID/ASIA RAC 12.2.1; ICAO DOC 4444, IV PANS RAC 2)

9. From among the aircraft intending to operate on the organized tracks, oceanic control centers shall designate those which shall be required to report routine meteorological observation at each prescribed report point. This designation shall be made by the oceanic control centers delivering the oceanic clearance, using the phrase "SEND MET REPORTS".

(ICAO DOC 7030 NAT/RAC 4.4.1)

10. NAT ATS MEASAGE FORMAT - The following is submitted in an effort to standardize ATS message formats for air-ground communications in the NAT Region.

(FAA/FAA INTL NOTAMS)

a. General - All NAT air-ground messages are categorized under one of the following headings (excluding emergency messages):

(1) Position Report

(2) Request Clearance

(3) Revised Estimate

(4) Miscellaneous Messages - In order to enable ground station to process messages in the shortest possible time, pilots should observe the following rules:

(a) Use the correct type of message applicable to the data transmitted;

(b) State the message type on the contact call to the ground station or at the start of message;

(c) Adhere strictly to the sequence of information for the type of message;

(d) All times in each of the messages should be expresed in hours and minutes.

b. Description of ATS Message Type - Aircraft should transmit air-ground messages using standard RTF phraseology in accordance with the following:

(1) Position - Content and data sequence to be used for routine position report.

(a) "Position"

(b) Flight identification

(c) Present position

(d) Time over present position (hour and minutes)

(e) Present flight level

(f) Next position on assigned route

(g) Estimated time for next position (hours and minutes)

(h) Next subsequent position

(i) Any further information; e.g., MET data or Company Message

EXAMPLE: "POSITION, AIR FORCE 12, N56° W010° 1235, FL 330, ESTIMATING N56° W020° 1310, NEXT N56° W030°"

c. REQUEST CLEARANCE - To be used in conjunction with a routine position report, to request a change of MACH number, flight level, or route and to request westbound oceanic clearance prior to entering Reykjavik, Santa Maria or Shanwick CTAs.

(1) CONTENT AND DATA SEQUENCE

(a) "REQUEST CLEARANCE"

(b) Flight identification

(c) Present or last reported position

(d) Time over present or last reported position (hours and minutes)

(e) Present flight level

(f) Next position or assigned route or oceanic entry point

(g) Estimate for next position or oceanic entry point

(h) Next subsequent position

(i) Request Mach number, flight level or route

(j) Further information or clarifying remarks

EXAMPLE: "REQUEST CLEARANCE, AIR FORCE 12, N56° W020° 1245, FLIGHT LEVEL 330, ESTIMATING N56° W030° 1320, NEXT N56° W040°, REQUESTING FLIGHT LEVEL 350"

d. To be used to request a change in Mach number, flight level or route when a position report message is not appropriate.

(1) CONTENT AND DATA SEQUENCE

(a) "REQUEST CLEARANCE"

(b) Flight indentification

(c) Request Mach number, flight level or route

(d) Further information or clarifying remarks

EXAMPLE: "REQUEST CLEARANCE, AIR FORCE 11, REQUESTING FLIGHT LEVEL 370"

(2) REVISED ESTIMATE - Content and data sequence to be used to update estimate for next position

(a) "REVISED ESTIMATE"

(b) Flight identification

(c) Next position on route

(d) Revised estimate for next position (hours and minutes)

(e) Further information

EXAMPLE: "REVISED ESTIMATE, AIR FORCE 11, N57° W40° 0325"

(3) MISCELLANEOUS - To be used to pass information or make a request in plain language that does not conform with the content of other message formats. No message designator is required as this will be inserted by the ground station. Content and data sequence:

(a) Flight identification

(b) General information or request in plain language and format free.

INSTRUMENT FLIGHT RULES

Standard except that flights shall be conducted in accordance with Instrument Flight Rules, even when not operated in instrument meteorological conditions when operated at or above FL 60 or 2000' above ground, whichever is higher, within the FIR of New York Oceanic, Gander Oceanic, Shanwick Oceanic, Santa Maria Oceanic, Sondrestrom and Reykjavik, and when more than 100 NM seaward from the shoreline within the Bodo Oceanic FIR.

(ICAO DOC 7030 NAT/RAC 1.1.1)

FLIGHT PLANNING

CLEARANCES -

1. Pilots should request oceanic clearances from the ATC unit responsible for the first oceanic area within which they wish to operate as early as possible. Such clearances, although in most cases obtained some time before reaching the oceanic boundary/entry point, are applicable only from that boundary/entry point.

a. Methods for obtaining oceanic clearances include

(1) Use of VHF clearance delivery frequencies when in coverage.

(2) Use of HF to the OCA through the appropriate aeronautical station. (If possible, at least 30 minutes before boundary/entry point).

(3) Use of the USAF Global High Frequency (HF) System (listed in the FIH).

(4) Request through domestic or other ATC agencies.

NOTE: At some airports situated close to oceanic boundaries, the oceanic clearance can be obtained before departure (e.g. Prestwick, Shannon, Gander, Goose Bay).

2. SHANWICK OCEANIC ACC

NOTE: Specific clearance information for Europe Westbound traffic is also found in the Europe, North Africa and Middle East (ENAME) Supplement.

a. Westbound aircraft operating within the United Kingdom FIR/UIR should request Oceanic clearance from "SHANWICK OCEANIC" on VHF. Turbojet aircraft should request clearance when E of W002°. Aircraft other than Turbojet should request clearance at least 30 minutes before the ETA for the OCA entry point.

(1) CLEARANCE DELIVERY 123.95/135.525 (for aircraft registered W of W30°).

(2) CLEARANCE DELIVERY 127.65/135.525 (for aircraft registered E of W30°).

b. Departures from Aldergrove, Glasgow/Edinburgh should request an Oceanic Clearance from ATC at least 30 minutes before departure. Departures from Prestwick should contact Shanwick Oceanic on VHF to obtain clearance at least 30 minutes before departure.

c. Aircraft unable to contact "SHANWICK OCEANIC" on VHF should request the ATC authority for the airspace in which they are operating to relay their request for oceanic clearance to SHANWICK. Aircraft in communication with SHANWICK for Oceanic clearance on VHF should also maintain communications with the ATC authority for the airspace in which they are operating.

d. Aircraft entering SHANWICK directly from the MADRID FIR/UIR should request Oceanic clearance as in paragraph c. above at least 30 minutes before ETA for the OCA entry point or N45°.

e. Requests for clearance should include

(1) Call Sign.

(2) OCA entry point and ETA.

(3) Requested Flight Level and Mach Number.

(4) Any change to flight plan affecting OCA.

NOTE: On an Organized Track System, EAGLE ISLAND is considered to be an oceanic entry point.

(a) For Westbound flights intending to operate in the Reykjavik, Santa Maria and Shanwick OCAs, after obtaining and reading back the clearance, the pilot should monitor the forward estimate for the oceanic entry and if this changes should pass a revised estimate to ATC. As planned longitudinal spacing by these OCAs is based solely on boundary estimates, failure to adhere to this ETA amendment procedure may result in a re-clearance to a less economical track/flight level for the complete crossing.

(b) If the oceanic clearance which the pilot is given differs from the route originally requested, it then becomes his responsibility to obtain the necessary domestic route clearance in order to ensure that he is in compliance with his oceanic clearance when he enters oceanic airspace.

3. CONTENTS OF CLEARANCES

a. An abbreviated clearance is only issued by air traffic services when clearing an aircraft to fly along the whole length of an organized track or along a Polar track within the Reykjavik OCA. In all other circumstances full details of the cleared track are specified in the clearance message. When an abbreviated clearance is issued it includes:

(1) Cleared track specified by track and code letter or Polar track and number.

(2) Cleared flight level.

(3) Cleared Mach number.

(4) If the aircraft is designated to report Met Information enroute, the phrase "SENT MET REPORTS."

b. Pilots should note that a flight level request on a filed plan does not constitute authority to change flight level enroute without specific clearance, even though the ATC clearance originally issued may specify "Cleared as Filed" or "Cleared via flight-planned route." These terms refer to the routing requested, and not to altitude requests in the flight plan.

c. Oceanic Clearances issued to flights in the above category are strategic clearances intended to provide a safe separation for each flight from oceanic entry to track termination. Should a pilot receive a clearance on a track other than originally flight planned, special caution should be exercised to ensure the coordinates of the assigned track and the associated landfall and domestic routing are fully understood and correctly inserted into the automatic navigation system with appropriate cross checks. In all cases where an enroute revised clearance is requested by the pilot, he should ensure that the revised ATC clearance includes new routing from the exit from the oceanic airspace to the first landfall or coastal fix. If at any time the pilot is in doubt about his clearance or revised clearance, he should check the details with the ATC facility relaying the clearance/revised clearance to him.

ADDITIONAL INFORMATION

NOTE: For Special Procedures for In-Flight Contingencies in North Atlantic and Oceanic Areas, refer to Chapter 1, THEATER SUPPLEMENTARY PROCEDURES, FLIGHT PLANNING, SPECIAL PROCEDURES FOR IN-FLIGHT CONTINGENCIES IN OCEANIC AREAS AND REMOTE AREAS.

NOTE: Information in this section applies to both RVSM equipped/approved aircraft and non-RVSM equipped aircraft operating in NAT MNPS airspace.

1. BASIC CONCEPTS FOR CONTINGENCIES
(ICAO DOC 7030 NAT/FAA 91-RVSM Interim Guidance)

a. The basic concepts for contingencies are

(1) Pilot-in-Command Responsibility. Guidance for contingency procedures should not be interpreted in any way which prejudices the final authority and responsibility of the pilot-in-command for the safe operation of the aircraft.

(2) If the pilot is unsure of the vertical or lateral position of the aircraft or the aircraft deviates from its assigned altitude or track for cause without prior ATC clearance, then the pilot must take action to mitigate the potential for collision with aircraft on adjacent routes or flight levels.

NOTE: In this situation, the pilot should alert adjacent aircraft by making maximum use of aircraft lighting and broadcasting position, flight level, and intentions on 121.5 Mhz (or 123.45 as a back-up).

(3) Unless the nature of the contingency dictates otherwise, the pilot should advise ATC as soon as possible of a contingency situation and, if possible, request an ATC clearance before deviating from the assigned route or flight level.

(4) If a revised ATC clearance cannot be obtained in a timely manner and action is required to avoid potential conflict with other aircraft, then the aircraft should be flown at an altitude and/or on a track where other aircraft are least likely to be encountered.

NOTE: This can be accomplished by offsetting from routes or altitudes normally flown in the airspace. Paragraph 2, below, contains special procedures for in-flight contingencies and recommendations on the order preference for the following pilot actions:

(a) The pilot may offset half the lateral distance between routes or tracks.

(b) The pilot may offset half the vertical distance between altitudes normally flown.

(c) The pilot may also consider descending below FL 285 or climbing above FL 410. (The vast majority of North Atlantic traffic has been found to operate between FL 290 and 410. Flight above FL 410 or below FL 285 limits exposure to conflict with other aircraft).

(5) When executing a contingency maneuver, the pilot should:

(a) Watch for conflicting traffic.

(b) Continue to alert other aircraft using 121.5 Mhz (or 123.45 as a back-up) and aircraft lights.

(c) Continue to fly offset tracks or altitudes until an ATC clearance is obtained.

(d) Obtain an ATC clearance as soon as possible.

2. SPECIAL PROCEDURES FOR IN-FLIGHT CONTINGENCIES
(ICAO DOC 7030 NAT/FAA 91-RVSM Interim Guidance)

a. INTRODUCTION - The following procedures are intended for guidance only. Although all possible contingencies cannot be covered, they provide for the more frequent cases of:

(1) Inability to maintain assigned level due to weather, aircraft performance, pressurization failure and problems associated with high level supersonic flight.

(2) Loss of, or significant reduction in, the navigation capability when operating in parts of the airspace where high accuracy of navigation is a prerequisite to the safe conduct of flight operations.

(3) Enroute diversion across the prevailing NAT traffic flow.

NOTE: With regard to (1) and (3) above, the procedures are applicable primarily when rapid descent and/or turn-back or diversion is required. The pilot's judgment shall determine the sequence of actions taken, and air traffic control shall render all possible assistance having regard to the specific circumstances.

b. GENERAL PROCEDURES - Applicable to both subsonic and supersonic aircraft.

(1) If an aircraft is unable to continue flight in accordance with its ATC clearance, a revised clearance shall, whenever possible, be obtained prior to initiating any action. This shall also apply to aircraft which are unable to maintain an accuracy of navigation on which the safety of separation minima applied by ATC between it and adjacent aircraft depends. This shall be accomplished using the radiotelephony distress or urgency signal as appropriate. Subsequent ATC action with respect to that aircraft shall be based on the intentions of the pilot and the overall air traffic situation.

(2) If prior clearance cannot be obtained, an ATC clearance shall be obtained at the earliest possible time and, in the meantime, the pilot shall:

(a) Broadcast position (including the ATS route designator or the track code, as appropriate) and intentions on frequency 121.5 Mhz at suitable intervals until an ATC clearance is received.

(b) Make maximum use of aircraft lights to make the aircraft visible.

(c) Maintain a watch for conflicting traffic.

(d) Initiate such action as necessary to ensure safety of the aircraft.

c. SPECIAL CONTINGENCY PROCEDURES FOR SUBSONIC AIRCRAFT

(1) Initial Action - If unable to comply with the preceding general procedures to obtain prior ATC clearance, the aircraft should leave its assigned route or track by turning 90 degrees to the right or left whenever this is possible. The direction of the turn should, where possible, be determined by the position of the aircraft relative to any organized route or track system (e.g., whether the aircraft is outside, at the edge of, or within the system). Other factors which may affect the direction of the turn are the direction of an alternate airport, terrain clearance and the levels allocated to adjacent routes or tracks.

(2) Subsequent Action

(a) An aircraft able to maintain its assigned flight level should:

1 Turn to acquire and maintain in either direction a track laterally separated by 30 NM from its assigned route or track.

2 If above FL 410, climb or descend 1000 feet (300 meters).

3 If below FL 410, climb or descend 500 feet (150 meters).

4 If at FL 410, climb 1000 feet (300 meters) or descend 500 feet (150 meters).

(b) An aircraft, not able to maintain its assigned flight level, should:

1 Initially minimize its descent rate to the extent that it is operationally feasible.

2 Turn while descending to acquire and maintain in either direction a track laterally separated by 30 NM from its assigned route or track.

3 For the subsequent level flight, a level should be selected which differs from those normally used by 1000 feet (300 meters) if above FL 410 or by 500 feet (150 meters) if below FL 410.

(3) Enroute Diversion Across the Prevailing NAT Air Traffic Flow

(a) This guidance applies to aircraft operating within the OTS or on random routes that are proximate to the OTS, and can climb or descend to an altitude above or below those where the majority of NAT aircraft operate. Paragraph 2.c.(3)(d) below contains guidance for other situations where diversion across adjacent tracks or routes is necessary.

(b) The basic concept of this guidance is that, when operationally feasible, before diverting across tracks or routes with heavy traffic, the aircraft should offset from the assigned track or route by 30 NM and expedite a descent to an altitude below or a climb to an altitude above those where the vast majority of NAT aircraft operate before proceeding toward the alternate airport. Flight below FL 285 or aove FL 410 should meet this objective.

(c) In the event of a contingency which necessitates an enroute diversion to an alternate airport, across the direction of the prevailing NAT traffic flow, and prior ATC clearance cannot be obtained:

1 An aircraft able to maintain its assigned flight level should:

a Turn toward the alternate airport to acquire a track which is separated laterally by 30 NM from the assigned route or track.

b If above FL 410, climb or descend 1000 feet (300 meters)

c If below FL 410, climb or descend 500 feet (150 meters).

d If at FL 410, climb 1000 feet (300 meters) or descend 500 feet (150 meters).

e Fly the offset track while expediting its descent to an altitude below FL 285 or a climb to an altitude above FL 410.

f When below FL 285 or above FL 410, proceed towards the alternate airport while maintaining a level which differsfrom those normally used by 500 feet (150 meters) if below FL 410 or 1000 feet (300 meters) if above FL 410.

g If unable or unwilling to make a major climb or descent, fly an altitude offset for the diversion until obtaining an ATC clearance. See paragraph 2.c.(3)(d) below.

2 An aircraft not able to maintain its assigned flight level should:

a Initially minimize its descent rate to the extent it is operationally feasible.

b Start its descent while turning to acquire a track separated laterally by 30 NM from its assigned route or track.

c Unless the nature of the contingency dictates otherwise, maintain the offset track while expediting its descent to an altitude below FL 285.

d Unless the nature of the contingency dictates otherwise, when below FL 285, it should proceed towards the alternate airport.

e Continue descent to a level which can be maintained and which differs from those normally used by 500 feet (150 meters) if below FL 410.

3 If these contingency procedures are

employed by a twin-engined aircraft as a result of a shutdown of a power unit or a primary airplane system failure, the pilot should so advise ATC as soon as practicable, reminding ATC of the type of aircraft involved and requesting expeditious handling.

(d) Aircraft which are required to divert across the prevailing NAT air traffic flow and are:

1 Unable or unwilling to descend to an altitude below those where the majority of NAT aircraft operate due to operational constraints; or

2 Unsure of their proximity to other routes or tracks; or

3 Assigned to a route which crosses the OTS at a significant angle; should execute the appropriate actions as follows:

a An aircraft which is able to maintain its assigned flight level should:

(1) If above FL 410, climb or descend 1000 feet (300 meters);

(2) If below FL 410, climb or descend 500 feet (150 meters);

(3) If at FL 410, climb 1000 feet (300 meters) or descend 500 feet (150 meters) while turning to proceed toward the alternate airport.

b An aircraft which is unable to maintain its assigned flight level should:

(1) Expedite a descent to an altitude below those where the majority of NAT aircraft operate while turning toward the alternate airport.

(2) Diligently follow the guidance in paragraph 2.(b)(2) above in regard to radio calls, aircraft lights and watching for conflicting traffic.

3. GUIDANCE FOR EQUIPMENT FAILURES OR ENCOUNTERS WITH TURBULENCE AFTER ENTRY INTO NAT MNPS AIRSPACE - In addition to emergency conditions that require immediate descent, such as loss of thrust or pressurization, ATC should be made aware of the less explicit conditions that may make it impossible for an aircraft to maintain its CFL appropriate to RVSM. Controllers should react to such conditions but these actions cannot be specified, as they will be dynamically affected by the real-time situation.

(AFFSA/FAA 91-RVSM)

a. Objective of the Guidance Material - The following material is provided with the purpose of giving the pilot guidance on actions to take under certain conditions of equipment failure and encounters with turbulence. It also describes the expected ATC controller actions in these situations. It is recognized that the pilot and controller will use judgment to determine the action most appropriate to any given situation. The guidance material recognizes that for certain equipment failures, the safest course of action may be for the aircraft to continue in MNPS airspace while the pilot and controller take precautionary action to protect separation. For extreme cases of equipment failure, however, the guidance recognizes that the safest course of action may be for the aircraft to leave MNPS airspace by obtaining a revised ATC clearance or if unable to obtain prior ATC clearance, executing the established contingency maneuver to leave the assigned route or track.

b. Contingency Scenario: The pilot is unsure of the vertical position of the aircraft due to loss or degradation of all primary altimetry systems or is unsure of the capability to maintain CFL due to turbulence or loss of all automatic altitude control systems.

(1) Pilot Actions. The pilot should maintain CFL while evaluating the situation and:

(a) Watch for conflicting traffic;

(b) If considered necessary, alert nearby aircraft by:

1 Making maximum use of exterior lights;

2 Broadcast position, flight level, and immediate intentions on 121.5 Mhz (or 123.45 as a back-up);

(c) Notify ATC of the situation and the intended course of action. Possible courses of action include:

1 Continuing in MNPS airspace provided that the aircraft can maintain CFL.

2 Requesting ATC clearance to climb above or descend below RVSM airspace if the aircraft cannot maintain CFL and ATC cannot establish adequate separation from other aircraft.

3 Executing the appropriate contingency maneuver, described in paragraph 2. of this section, to leave the assigned track if prior ATC clearance cannot be obtained and the aircraft cannot maintain CFL.

(2) Expected ATC Actions. The following information is provided for information purposes. ATC can be expected to:

(a) Obtain the pilot's intentions.

(b) If the pilot intends to continue in MNPS airspace, consider establishing increased vertical, longitudinal, or lateral seperation.

(c) Pass traffic information.

(d) If the pilot requests clearance to exit MNPS airspace, accommodate expeditiously, if possible.

(e) If adequate separation cannot be established and it is not possible to comply with the pilot's request for clearance to exit MNPS airspace, ATC can be expected to notify other aircraft in the vicinity and continue to monitor the situation.

(f) Advise adjoining ATC facilities/sectors of the situation.

c. Contingency Scenario: Failure or loss of accuracy of one primary altimetry system (e.g., 200 feet or more difference between primary altimeters).

(1) Pilot Action: Cross check standby altimeter, confirm the accuracy of a primary altimeter system and notify ATC of the loss of redundancy. If unable to confirm primary altimeter system accuracy, follow pilot actions listed in the preceding scenario.

4. COMMON PROCEDURES FOR RADIO COMMUNICATIONS FAILURE OF OCEANIC AIRCRAFT OPERATING IN THE NAT REGION.

a. The following procedures are intended to provide general guidance for NAT aircraft experiencing a communications failure.These procedures are intended to complement and not

supersede state procedures/regulations. It is not possible to provide guidance for all situations associated with a communications failure.

b. GENERAL

(1) If so equipped, the pilot of an aircraft experiencing a two-way radio communications failure shall operate the secondary radar transponder on identify (Mode A) Code 7600 and Mode C.

(2) The pilot shall also attempt to contact any ATC facility or another aircraft and inform them of the difficulty and request they relay information to the ATC facility with whom communications are intended. The preferred frequency for relaying position reports via other aircraft is 123.45 MHZ. 121.5 MHZ may also be used, but care must be taken to avoid hindering other emergency aircraft.

(AFFSA/AFFSA)

c. COMMUNICATIONS FAILURE PRIOR TO ENTERING NAT OCEANIC AIRSPACE

(1) If operating with a received and acknowledged oceanic clearance, the pilot shall enter oceanic airspace at the cleared oceanic entry point, level and speed and proceed in accordance with the received and acknowledged oceanic clearance. Any level or speed change required to comply with the oceanic clearance shall be completed within the vicinity of the oceanic entry point.

(2) If operating without a received and acknowledged oceanic clearance, the pilot shall enter oceanic airspace at the first oceanic entry point, level and speed as contained in the filed flight plan, and proceed via the filed flight plan route to landfall. That first oceanic level and speed shall be maintained to landfall.

d. COMMUNICATIONS FAILURE PRIOR TO EXITING NAT OCEANIC AIRSPACE

(1) CLEARED ON FLIGHT PLAN ROUTE. The pilot shall proceed in accordance with the last received and acknowledged oceanic clearance to the last specified oceanic route point, normally landfall, then continue on the flight plan route. Maintain the last assigned oceanic level and speed to landfall. After passing the last specified oceanic route point, conform with the relevant state procedures/regulations.

(2) CLEARED ON OTHER THAN FLIGHT PLAN ROUTE. The pilot shall proceed in accordance with the last received and acknowledged oceanic clearance to the last specified oceanic route point, normally landfall. After passing this point, rejoin the filed flight plan route by proceeding directly to the next significant point ahead of the track of the aircraft as contained in the filed flight plan. Where possible, use published ATS route structures, then continue on the flight plan route. Maintain the last assigned oceanic level and speed to the last specified oceanic route point. After passing this point, conform with the relevant state procedures/regulations.

(SPEC/ENR1-1-3-2 UK Civil AIP)

(3) In the event of failure of HF communications every effort should be made by the pilot to relay position reports through other aircraft. 123.45 MHz, may be used to relay position reports. If necessary initial contact for such relays can be established on 121.5 MHz - although great care must be exercised should this be necessary, as the frequency 121.5 MHz is monitored by all aircraft operating in the NAT Region in case it is being used by aircraft experiencing emergencies. Therefore in order to minimize unnecessary use of 121.5 MHz, it is recommended that aircraft additionally monitor 123.45 MHz when flying through NAT airspace.

(SPEC/ENR1-1-3-2 UK Civil AIP)

TRANSPONDER OPERATION- NEW YORK OCEANIC FIR

a. The pilot of an aircraft equipped with a coded radar beacon transponder, experiencing a loss of two-way radio capability should:

(1) Adjust transponder to reply on Mode A/3, Code 7600.

b. The pilot should understand that he may not be in an area of radar coverage.

(AFFSA/AFFSA)

5. MISCELLANEOUS PROCEDURES

a. STEP - CLIMB PROCEDURES - Although the main flow of traffic operates on "strategic" clearances there is scope for enroute tactical revised clearances which afford the possibility of step-climbs. Controllers are aware of the need for fuel conservation and will accommodate requests for step- climbs wherever possible. Pilots should remember to maintain their last assigned Mach number during step-climbs in oceanic airspace. If due to aircraft performance this is not feasible, ATC should be notified at the time of request.

b. MACH NUMBER CHANGES - The initial oceanic clearance will specify a Mach Number which the pilots must adhere to. However, as the weight of the aircraft reduces, it may be more fuel efficient to adjust the Mach Number. ATC approval of requests for change in cruise Mach Number will be given if traffic conditions permit.

c. PENETRATION OF MNPS AIRSPACE BY AIRCRAFT INTENDING TO OPERATE ABOVE - Aircraft not approved for operation in MNPS airspace may be cleared by the responsible ATC unit to climb or descend through MNPS airspace provided:

(1) The climb or descent can be completed within the useable coverage of selected VOR/DME's and/or within radar coverage of the ATC facility issuing such a clearance and the aircraft is able to maintain direct pilot-controller communications on VHF.

(2) MNPS aircraft operation in that part of MNPS airspace affected by such climbs or descents are not penalized.

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Chapter 3

NATIONAL SUPPLEMENTARY PROCEDURES

ALBANIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes TIRANA FIR/UIR.

DIMENSIONAL UNITS - Non-SI alternative unit table. Altimeter settings in hectopascals.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard.

INSTRUMENT FLIGHT RULES

FM IMMUNITY - Effective 1 January 2001, ICAO Annex 10 FM immunity requirements are implemented.
(TFMWG-E/USAASD-E 01-0151)

RVSM RULES - The airspace within the Tirana FIR between FL 290 and FL 410 inclusive is EUR RVSM airspace.
(SPEC/AIC D1-04)

FLIGHT PLANNING

GENERAL AIR TRAFFIC - Flight plan must be submitted to ATC at least 2 hours prior to planned departure.

SUPPLEMENTARY AIRPORT INFORMATION - TIRANA/RINAS (LATI) -

1. Crew and passenger passports will be collected and retained until departure.

2. Photography STRICTLY PROHIBITED.
(SPEC/AIC D1-96)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

UL607- Levels available are FL 330 and FL 410. UR45 - Southbound traffic permitted at FL 330 and FL 410 only. Northbound traffic permitted on FL 310, 350, 390 only.

ALGERIA

NATIONAL PROCEDURES

Standard.

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes ALGERIA and international waters.

DIMENSIONAL UNITS - ICAO Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - ALGERIA has implemented the ICAO Annex 11 airspace classification with the following exception:

1. Class B. C, and E not yet implemented.
(SPEC/CL II NOTAM 2021-93)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

ALGERIA HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
*Aid El Fitr	8 Mar
Women's Day	
*Aid El Adha	1 May
Workers' Day	
*Hegira Day	19 Jun
National Birthday	
Independence Day	5 Jul
*Birth of the Prophet	1 Nov
Start of the Revolution	

*NOTE: These holidays are based on the lunar month and cannot be stated in advance as unique dates from year to year.
(SPEC/GEN 2-1-2)

ANGOLA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - Angola services and constitutes the major part of LUANDA FIR/UIR.

DIMENSIONAL UNITS - ICAO Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard except report before passing from one FIR to another FIR is to be made to the FIR to be entered.

(RAC 1-3/4)

VISUAL FLIGHT RULES

Same as Regional Procedures.

INSTRUMENT FLIGHT RULES

Same as Regional Procedures.

FLIGHT PLANNING

GENERAL AIR TRAFFIC -

1. All aircraft authorized to overfly Angola territory must report to Luanda ACC/FIC on appropriate HF frequency at least 10 minutes prior to ETA and include flight level for entering the Luanda FIR boundary. Non-compliance with this procedure may hinder continuation of flight through Angola airspace.

(SPEC/CL II NOTAM A013-79)

2. ATS Routes R987 and UR987 between VNA and VCA are available for domestic flights only. International flights will use R526 and UR526.

(SPEC/CL II NOTAM A004-88)

AUSTRIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes WIEN FIR.

DIMENSIONAL UNITS - Blue Table, altimeter setting given in hectopascals.

(SPEC/GEN 2.1-1)

AIRSPACE STRUCTURE -

1. Austria has implemented the ICAO Annex 11 airspace classification with the following exceptions:

   a. Class A and B are not implemented.

   b. Class C, D and E are controlled airspace.

   c. Class F is uncontrolled airspace at Voslau, Wiener Neustadt East and Wels.

   d. Class G airspace is all airspace not covered by Class C, D, E and F when active. (i.e. all airspace below TCA and CTA).

(SPEC/ENR 1.4-1)

2. The Wien FIR consists of:

   a. Controlled airspace (airspace Classes C, D, E).

   (1) Control Zone (CTLZ) - Extend from the ground into the TCA or CTA situated above. Upper limits in feet AMSL and lateral limits are indicated in the AIP and depicted on the ICAO chart.

   (2) Terminal Control Area (TCA) - Extend from 1000' GND up to FL 245. Within TCA there are SRA, e.g. SRA I, II, III, IV of the Wien TCA.

   (3) Control Area (CTA) - Extend from certain levels AMSL or GND up to FL 245.

   (4) Therefore, even outside of CTLZ and TCA, you can be within controlled airspace namely within CTA.

   b. Uncontrolled airspace (airspace Class F and G).

   c. Military airspace (airspace Class D or G).

(SPEC/ENR 1-4.1)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. Aircraft Radio telephony is necessary:

   a. Within airspace Class C or D;

   b. For Night VFR (NVFR) flights.

   c. Exceptions based on local procedures are possible.

   d. In case of approach and departure at airports with INFO, establishing of radio contact is not obligatory, but for safety reasons, it is highly recommended.

2. Transponder - Standard except:

   a. VFR-code 7000 and Mode C;

   b. For maintenance purposes code 7777.

(SPEC/ENR 1.6.1)

3. If standard VFR minima are not available in airspace Classes C, D and E, SVFR is possible, however, only;

   a. Within a control zone.

b. During the hours of daylight;

c. Flight visibility at least 1.5 KM.

4. SVFR clearances for takeoff and landing will only be granted, if:

a. Ground visibility at least 1.5 KM;

b. Ceiling above 660' (200 M).

5. At Innsbruck, Klagenfurt and Salzburg:

a. SVFR clearance if visibility (flight visibility and ground visibility) below 3 KM only if max. 120 KT IAS.

b. SVFR flights with helicopters are also permitted if the flight visibility is less than 1.5 KM, provided this aircraft is operated at a speed which enables the pilot to recognize other aircraft or obstructions early enough to avoid conflict.

(SPEC/ENR 1.2.2)

NIGHT VFR FLIGHTS - Standard except night VFR flights are only permitted as controlled flights.

(SPEC/ENR 1.2-1)

MINIMUM HEIGHTS FOR VFR OPERATIONS -

Minimum Altitudes are standard, except over congested areas of certain cities the following minimum altitudes shall be maintained:

Graz	3000' AGL
Innsbruck	2000' AGL
Klagenfurt	3000' AGL
Linz	3000' AGL
Salzburg	3000' AGL
Wien	3300' AGL

(SPEC/ENR 1.1-3)

INSTRUMENT FLIGHT RULES

Standard except IFR flight permitted as controlled flights only and within controlled airspace. In particular cases IFR flight may be authorized outside controlled airspace if necessary for flight safety.

(SPEC/ENR 1.3-1)

FM IMMUNITY - New requirements are established regarding immunity from interference of FM broadcasts against VHF communications and VHF navigational equipment. Effective 1 Jan 98, Austria has implemented ICAO Annex 10 Volume 1 requirements for VHF communications and VHF navigational radios (including ILS frequencies) to have radio modifications which make the aircraft equipment immune from FM broadcast interference. Equipment installed before Jan 98 can still be used with caution and should be modified/changed as soon as possible. If interference is detected, restrictions in the use of the affected facility will be implemented. Exception to the use of non-FM immune equipment: Wein-Schwechat (Vienna) Rwy 16 requires FM immune equipment.

(TFMWGE/NOTAM A0751-97)

ENGINE START FOR IFR DEPARTURES -

1. To avoid delays with running engines pilots will request permission from ATC for engine start. Engine start request will be initiated after all departure preparations are completed, doors closed, etc.

2. When push back is required engines will normally be started during, or after, push back. If engine start is intended before push, inform ATC.

(SPEC/ENR 1-5-3)

RVSM RULES - With the exception of state aircraft, only RVSM approved aircraft shall be permitted to operate within the RVSM airspace of the WIEN FIR. RVSM approved aircraft are those aircraft for which the operator has obtained an RVSM approval, either from the state in which the operator is based, or from the state in which the aircraft is registered. RVSM airspace is between FL 290-FL 410 inclusive.

(SPEC/GEN 1.5-2-A)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. Standard, additionally:

a. FLIGHT PLAN ADDRESSEES,

(1) For IFR flights within Austria: EBBDZMFP LFPYZMMFP.

b. For VFR Flights within Austria: LOVVZQZX.

(1) To the tower for destinations; LOWW, LOWI, LOWG, LOWS, LOWL.

(2) Flights to destination airports with following location indicators, LOWWZTZX, LOWGZTZX, LOWIZTZX, LOWKZTZX, LOWLZTZX, and LOWSZTZX.

c. IFR Approaches with VFR-part using VOR/DME Approach LOXN to Wr. Neustadtoost (LOAN) to LOWWZTZX and LOXNZTZX.

d. International flights with destination Voslau - Loav - shall additionally be addressed to: LOAVYDYX.

e. VFR flights that require a clearance by Tulln TWR/RADAR are to be addressed additionally to: LOXTZTZX.

(SPEC/ENR 1-11-1)

FLIGHT HAZARDS

HIGH MIDAIR COLLISION POTENTIAL AREA -

Within some agricultural districts of the eastern part of Austria and especially during the period between May and October, in thunderstorms or weather conditions in which the information of thunderstorms is likely, anti-hail rockets might be fired up to 7000'MSL constituting a hazard to air navigation. Details are promulgated every year by NOTAM.

(SPEC/ENR 5.3-3)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. For latest changes to Route Availability Document (RAD), See www.cfmu.eurocontrol.be

a. LOW/HIGH ALTITUDES - Listed by alphanumeric designation.

LNZ; Not available for traffic Via PABSA-RENKA/LAMSI except Via GRZ or departing LOWG.

L/UL74 - LIZUM - VIW; Not available for traffic except destination LOVV FIR and LJMB. Not available for traffic destination LOWK/WK, LIPQ above FL 335.

L/UL156 - SNU - DIVAL; Not available for traffic departing LOWW or Via L/UL605 STEIN or Via Y/UY54 SASAL.

L/UL172 - OBEDI - VIW; Not available for traffic except destination LOVV FIR, LDZO FIR, LJLA FIR, LIMM FIR or departing LOWI, EDDM.

L173 - SBG - MAH; Not available for traffic except destination EDDS/SB/TY, ETAR/OR, EDMM FIR, except EDDM, and with Status Humanitarian (STS/HUM).

L/UL173 - SBG - KFT; Not available for traffic except departing LOWS, EDME or Unable at or above 15,000 due performance or Z-FPLs departing EDMM FIR. PEREX - SBG; Not available for traffic Destination EDDM. This traffic shall file via RASTA-PEREX-AWY QII2.

L/UL174 - LUGIN - LNZ; Not available for traffic except departing LOWW or destination LOLW/WL. VELOM - LNZ; Not available for traffic above FL 125, except destination LOLW/WL.

L/UL603 - UNKEN - OBEDI; Not available for traffic destination LOWK/WK above FL 335.

L/UL604 - LNZ - LIMRA; Not available for traffic destinations LOWW and LZIB. LIMRA - GRZ; Not available for traffic except departing LOVV FIR or EDDN or destinations LOVV FIR, LJLA FIR, LDZO FIR. MILGO - LNZ; Not available for traffic destinations EDMM FIR, EDDS, LOWS above FL 120. BAGSI - LNZ; Not available for traffic departing LOWW.

L/UL605 -ESEGA - GAMLI; Not available for traffic destinations LOWW, LZIB, LHBP or Via FRE. 3-10 AUSTRIA

L/UL607 - LIZUM - VENOG; Not available for traffic Via P/UP994.

L/UL608; ERKIR - KOGOL; Not available for traffic Via M/UM726 - MAH. VIW - DOL; Not available for traffic departing EDDM.

UL608 - ERKIR - LIRSU; Not available for traffic destinations EHBK, EBLG, ELLX, LFJL/SF or destination EDFF FIR.

L/UL610 - FRE - GONBA; Not available for traffic destinations EDD/DN/FM, ETAR/ID/OR/OU. This traffic shall file AWY T161. ABETI - SNU; Not available for traffic destination LOWW or Via M/UM174. SNU - TAGAS; Not available for traffic Via AWY L/UL856 except departing LOWW, LZIB, LHBP or destinations EDDN/DF/FE, ETID/OU. TAGAS - MOTIX; Not available for traffic departing LOWW or destination EDDF/DN/FE, ETID/OU. FRE - PABSA; Not available for traffic Via AWY L/UL604 LALIN except departing LOWW and LZIB.

L/UL725 - GAMLI; Not available for traffic departing LOWL with destination LOWW.

UL850 - BEGLA - GISPO; Not available for traffic Via L/UL856 TAGAS. ADLET - LALIN; Not available for traffic destination EDDF/DN/FE/ETAR/ID/OR/OU.

UL851 - SITNI - LNZ; Not available for traffic departing LOWW or Via UL604 PABSA.

L/UL856 - GISPO - TAGAS; Not available for traffic Via DENUX-M/UM725-STO. SITNI - BAGSI; Not available for traffic Via LNZ/LIMRA. MUREG - GRZ; Not available for traffic except departing LDZA.

M/UM19 - MUREG - GRZ; Not available for traffic except departing LDZA.

M/UM138 - SNU - PUBEG; Not available for traffic departing LOWW Between 0600-2000Z++.

M141 - STO - LNZ; Not available for traffic except below FL 125.

M/UM141; SBG - LNZ Not available for traffic except below FL125 and destination LOLW/WL - LNZ - STO; Not available for traffic except departing LOLW/WL or below FL 125. WGM - TOVKA; Not available for traffic destination LZIB.

M/UM178 - VIW - ISTRI; Not available for traffic except destinations LDZO FIR, LJLA FIR. ISTRI - VIW; Not available for traffic departing LDZO FIR, LJLA FIR.

M/UM725 - LANUX - STO; Not available for traffic destination LOWI, EDDM, EDM*, LDZA, LJLJ/MB/ above FL 335 and destination LOWG/WK/WL/WS above FL 305.

M726 - NORIN - ERNAS; Not available for traffic destinations except EDDM/MO. This traffic shall file above FL 195 via BZO-T101 or below FL 195 via BZO-M726-INN-J25-NORTO-T101.

M/UM749 - AKIMA - FRE; Not available for traffic destination LOWW, LZIB, LKTB above FL 335 and destination LOWL. STO - GESGI; Not available for traffic except destination LZIB.

M/UM985 - MALUG - ELKAT; Not available for traffic Via AWY L/UL603 PINKA - DIVAL; Not available for traffic Via SNU-ABLOM.

P/UP/870 - SUNIS - RASTA; Not available for traffic except destinations LOVVFIR, EDMM FIR, EDDS.

P/UP978 - MALUG - VIW; Not available for traffic destination LOWK above FL 310 or destination LOWG above FL 330. SNU - GRZ; Not available for traffic departing LOWW. KFT - VIW; Not available for traffic except departing LOVV FIR, LHCC FIR, LJLA FIR, LDZA or destination LOVV FIR.

P/UP994 ARTUS - DETSA Not available for traffic except departing EDDM or Via L/UL607-ARNOS.

P/UP995 - LOMRO - ARNOS; Not available for traffic Via VIW Q100. RASTA - ARNOS; Only available for traffic departing LOWS.

Q100 - RASTA - ARNOS; Not available for traffic except departing LOWS.

Q101 - GASNA - LIMRA; Not available for traffic except departing LOWI or destinations LOLW/WL.

Q105 - FRE - VENEN; Not available for traffic except destination LOWW, LZIB.

Q108 - NUBRA - PUBEG; Not available for traffic except destination LZIB.

Q110 - SNU - KUNET; Not available for traffic except destination LZIB.

T/UT43 - MIKOV - STO; Not available for traffic destinations LOWI, EDDM, EDMx, LDZa, LJLJ/MB above FL 345, or with destinations LOWG/WK/WL/WS above FL 305.

T700 - SBG - EGG; Not available for traffic except destination EDME below FL 125. EGG - SBG; Not available for traffic except destination LOWS or Unable via L603 due to performance reasons or departing EDME or Z flights departing EDMM FIR.

Y/UY571 - SNU - SASAL; Not available for traffic except departing LKAA FIR, LOWW.

Y704 - TURBU - ROTIN; Not available for traffic except departing LOWI.

Z/UZ37 - RUDEX - GIMBO; Not available for traffic destination LOWW. This traffic shall file via Z/UZ205.

Z/UZ205 - BUDEX - VENEN; Not available for traffic except destination LOWW.

Z/UZ209 - VEBEG - INN; Not available for traffic except Type Military.

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
AUSTRIA							
Z33	Linz VOR/DME	020	Adlet NCRP (N48°34′ E14°18′)	22	FL 60	FL 245 4500′ MSL	ODD EVEN
	CONTROL: WIEN ACC REMARKS: 1300Z++ Fri to 0800Z++ Mon.						

RNAV TRUNK ROUTES - Lowest useable flight level: FL 250.

(SPEC/RAC 3-3-1-A)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for Charts.

AUSTRIA - The information shown represents a composite of the migration routes and concentration areas for the entire year. See chart legend for specific information.

Preservation areas have been established at Hohe Tauren National Park and Kalkhochalpen Preservation Area. Area bounded, roughly on the south by N46°55′, on the north by N47°35′, on the west by E12°05′ and on the east by E13°15′.

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

AUSTRIAN HOLIDAYS

NAME	DATE
New Year's Day	01 Jan 06
Epiphany Day	06 Jan 06
Easter Monday	17 Apr 06
Labor Day	01 May 06
Ascension Day	25 May 06
Whit Monday	05 Jun 06
Corpus Christi Day	15 Jun 06
Assumption Day	15 Aug 06
National Holiday	26 Oct 06
All Saints Day	01 Nov 06
Feast of the Immaculate Conception	08 Dec 06
Christmas Day	25 Dec 06
Boxing Day	26 Dec 06

(AIC A4-05)

BAHRAIN

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the BAHRAIN FIR, QATAR and a portion of SAUDI ARABIA.

DIMENSIONAL UNITS - Blue Table except for altimeter settings in hectopascals.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard except:

(SPEC/AIP ENR 1.7-1)

1. The transition altitude is fixed at 13,000 MSL for the entire Bahrain FIR.

2. The transition level is fixed at FL 150 for the entire Bahrain FIR.

(SPEC/AIP ENR 1.7-1)

VERTICAL SEPARATION - Semicircular.

(SPEC/ENR 1.7-2)

POSITION REPORTING - Standard except:

AIREPS required at Bahrain (RATUN CRP or PIMAL CRP). Reports also requested at AMOLI CRP, BALUS CRP, BOPAN CRP and ITIXI CRP.

(SPEC/GEN 3.5-3)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. Bahrain has implemented the ICAO Annex 11 airspace classifications, with the following exceptions:

a. Class D, E, and F not yet implemented.

(SPEC/ENR 1.4-2 thru 1.4-5)

INSTRUMENT FLIGHT RULES

1. Bahrain has implemented the ICAO Annex 11 airspace classifications, with the following exceptions:

a. Class D, E, and F not yet implemented.

(SPEC/AIP ENR 1.4-2 thru 1.4-5)

2. RNP 5 Routes

(AIC 003/01)

a. Bahrain will implement Area Navigation (RNAV) RNP 5 within designated airspace on area basis, as follows:

(1) Area east of Bahrain Lower/Upper Limits - 10,500 feet/Unlimited.

(2) Designated Routes north and west of Bahrain - Lower/Upper Limits - FL 285/Unlimited.

b. Only RNAV equipped aircraft having a navigation accuracy meeting RNP 5 may plan for operations under IFR within designated RNP 5 airspace, unless otherwise indicated. RNAV equipped aircraft that will operate within Bahrain RNP 5 airspace are required to be certified for RNP 5 operations.

c. Non-RNAV equipped aircraft and RNAV equipped aircraft that are not certified for RNP 5 operations may operate within Bahrain RNP 5 airspace, provided they operate only on published ATS routes that are defined by VOR/DME navigation (non-RNAV routes).

RVSM RULES - Flight between FL 290 to FL 410 is for the exclusive use of RVSM approved aircraft. Non-RVSM certified aircraft shall flight plan accordingly.

(SPEC/ENR 1.10-7)

ENROUTE

AIRWAYS/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. AIRWAYS/ROUTES

A791 - Mandatory routing for all Eastbound departures from OBBI and OBBS overflying UAE FIR or landing Northern UAE aiports.

B415 - All Eastbound traffic departing Doha landing Southern UAE airports/OOMS or exiting Muscat FIR at MAROB, KIBIT, ALAMA, or BOTAN shall route via B415 BUNDU.

G783 - FL 300 and FL 330 available only.

L305 - RNAV equipped flights from OTBD landing Northern UAE airports shall plan L305, A791.

L556 - FL 330 not available.

M628 - FL 300 FL 330 not available.

N315 - FL 300 not available.

N324 - FOR Salalah, Oman (OOSA) traffic only. FL 270 and FL 280 available only.

N569 - FL 330 not available.

R219 - Mandatory routing for all Eastbound departures from OEDF/OEDR overflying UAE FIR or landing Northern UAE airports.

R659 - FL 300 and FL 330 available only. RNAV route PURDA to MARMI not available, activated by NOTAM.

V997 - Airway available between: Sat-Wed 1900-0300Z. Thu 1900Z to Sat 0300Z inclusive.

(SPEC/ENR 3.1-1 thru 3.3-4)

TERMINAL

NOISE ABATEMENT PROCEDURES -

1. Bahrain Intl

2. Arriving/departing flights will not operate within the 80 arc between the Bahrain VOR 180 and 260 radials unless:

a. Operationally essential and approved by ATC.

b. Can remain clear of land either visually or by radar vectoring.

(SPEC/AD2-7)

TERMINAL AREA PROCEDURES -

1. TRAFFIC PATTERNS

Bahrain Intl

a. Runway 12 left hand.

b. Runway 30 right hand.

(SPEC/AD2-7)

ADDITIONAL INFORMATION

SSR TRANSPONDER REQUIREMENTS

1. Mode A/C required at or above FL 150.

2. Mode A/C required in Doha Control Zone and Bahrain/Dammam Control Areas.

JEDDAH FIR 4-5

3. Photographing military bases from the air or on the ground is totally prohibited.

(SPEC/AD 1.1-4)

BELGIUM

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes BRUSSELS FIR/UIR and LUXEMBOURG.

DIMENSIONAL UNITS - Blue Table except:

1. Civil:

a. Altimeter setting - Hectopascals.

(SPEC/GEN 2.1)

ALTIMETER SETTING PROCEDURES - Standard.

(SPEC/ENR 1.7-1)

VERTICAL SEPARATION - Semicircular.

(SPEC/ENR 1.7-2)

POSITION REPORTING - Standard.

(SPEC/ENR 1.3-1)

VISUAL FLIGHT RULES

Standard except:

1. VFR FLIGHT LIMITATIONS:

a. Test and training flights under GAT status within CIV controlled airspace of the Brussels FIR/UIR may only be performed after prior permission (PPR) has been obtained from the appropriate ATS authorities, provided air traffic conditions permit.

b. Except for LDG and TKOF, the MNM level within the Belgian airspace for GAT operating between 2200 and 0459 should be as far as possible at or above FL 50.

(1) En-route GAT VFR flights above FL 195 will not be permitted.

(2) GAT VFR flights above FL 195 and up to and including FL 285, will only be authorized in: Airspace reservation [Temporary Segregated Airspace (TSA) or its equivalent] or in accordance with specific arrangements agreed by the appropriate ATS authority. Requests to operate GAT VFR FLTs above FL 195 within TSA or restriction shall be obtained from the Director General of the Belgian CAA at least five working days in advance of the activation.

(3) GAT VFR flights above FL 285, within RVSM airspace, must be contained within airspace reservation (TSA or its equivalent). Requests to operate GAT VFR FLTs above FL 195 within TSA or restriction shall be obtained from the Director General of the Belgian CAA at least five working days in advance of the activation.

(SPEC/ENR 1.2-3)

2. MILITARY UNCONTROLLED VFR FLIGHTS - Are authorized below 4500′ MSL clear of controlled airspace. The following one-way corridors are provided. Not applicable for helicopters below 500′ AGL. Civil aircraft are not covered by this rule.

a. Between Brasschaat (EBBT) CZ and Deurne (EBAW) CZ: Eastbound at 1000′ MSL.

b. Between Deurne (EBAW) CZ and Brussels National (EBBR) CZ: Westbound at 1000′ MSL.

c. Between Brussels National (EBBR) CZ and Chievres AB (EBCV) CZ: Eastbound.

d. Between Beauvechain (EBBE) CZ and Brussels South (EBCI) CZ: Eastbound.

e. Between Chievres AB (EBCV) CZ and the French border: Westbound.

f. Between Brussels South (EBCI) CZ and Florennes (EBFS) CZ: Westbound.

g. Between Leige (EBLG) CZ and the Dutch border: Southeastbound.

h. Between Leige (EBLG) CZ and EBD37: Northeastbound at 1000′ MSL, southwestbound at 1500′ MSL. If cloud bases are below 1500′ MSL, stay southeast of Leige.

i. Between Brussels South (EBCI) CZ and Chievres (EBCV) AB CZ: Northeastbound at 1500′ MSL.

NOTE: Pilots are warned that these regulations are only applicable to military aircraft. Consequently, collision hazards still exist with the civilian aircraft in the above mentioned corridors.

(SPEC/MIL RAC 1.4.2h)

INSTRUMENT FLIGHT RULES

Standard except as noted under VFR above.

1. FM Immunity - Effective 1 JAN 2001, Non-FM immune state aircraft can continue enroute operations in a civil aviation environment provided that they are suitably equipped and certified to meet the requirements for RNP-5 in enroute operations. With regards to TCA operations, state aircraft not equipped with SARPS compliant VOR/ILS receivers shall request prior permission to operate in civil TCA. Those aircraft may expect an approval provided that the respective Air Traffic Control unit has the possibility to assist in the approach without using VOR/ILS (Use of ASR) or is able to offer instrument approach procedures based on NDB only.

(TFMG-E/AIC 14/30 11-00)

NOTE: Prior permission required through Brussels (EBBU) ACC using AFTN address EBBUZRZX.

2. FM Immunity - Effective 1 Jan 2001, Luxembourg (ELLX) can accept on prior permission request (sent to Luxembourg (ELLX) Airport Administration) overfly of Luxembourg (ELLX) airspace and operations at Luxembourg airport.

NOTE: Prior permission required through Brussels ACC using AFTN address EBBUZRZX.

3. For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS will operate in the standard TCAS II mode and will not use the enhanced mode when flying in Belgian airspace.

(USAFE-DOV/USAF FIL 01-62)

OPERATIONAL AIR TRAFFIC

GENERAL/COUNTRY -

GENERAL AND OPERATIONAL AIR TRAFFIC - Military flights may be conducted as general or operational air traffic in all Belgian airspace, depending on requirements of the mission. All OAT flights have to establish radio contact with the appropriate Air Force traffic Control Center, call sign BELGA RADAR before penetrating the Belgian airspace.

(SPEC/MIL AIP RAC 1.3.21)

FILING FLIGHT PLANS -

1. At least 60 minutes prior to ETD for: flights to foreign FIR/UIR including transit flights; flights within civilian controlled airspace; all flights departing from foreign FIR/UIR to the Brussels FIR/UIR; OAT flights within controlled airspace; GAT night flights above 4500' MSL. GAT flights conducted entirely or partially within the UTA (always IFR-EUROCONTROL jurisdiction).

2. At least 30 minutes prior to ETD for: flights above the North Sea more than 30 NM from the Belgian (EB) coast; IFR flights within uncontrolled airspace; and OAT flights outside controlled airspace.

3. ADDRESSING OF FLIGHT PLAN MESSAGES:

NOTES:

a. To be added for GAT or MIXED OAT/GAT flights.

b. For OAT: when TG1 is flown between BFS and NTM.

REMARKS:

a. OAT is only possible during ATCC SEMMERZAKE operating hours.

(SPEC/MIL RAC 1.3.1a)

FLIGHT PLANNING

1. A flight plan shall be submitted prior to operating:

a. any FLT or portion thereof to be provided with ATC service,

b. any FLT above FL 660,

c. any FLT across international borders, except CIV VFR FLTs conducted between EDKA (Germany) on the one hand and EBLG and EBSP on the other.

d. Any VFR FLT at night.

2. For FLTs into areas subject to ATFM measures, flight plans shall be filed at least 3 HR prior to the EOBT, unless a repetitive flight plan exists. Any delay to the EOBT of more than 15 MIN shall be notified by a delay message (DLA). A flight plan shall only be considered as accepted after an ACK message has been received from the IFPS at the responsible ARO. Flight plans not accepted by the IFPS will be returned to the ARO submitting them. The Aircraft Operator should ensure that the ACK message has been received by the responsible ARO or eventually provide additional data to the ARO in order to have his flight plan accepted by the IFPS.

1. FLIGHTS DEPARTING BRUSSELS FIR

IFR FLTs remaining inside IFPS-zone	IFR FLTs leaving IFPS-zone and/or mixed flight rules	VFR FLTs
EBBDZMFP + LFPYZMFP	EBBDZMFP + LFPYZMFP or EBRZPZX (1) ELLXZPZX (2)	EBBRZPZX (1) ELLXZPZX (2) EBMIZGZF (3)
(1) For FLTs departing any Belgian AD (2) For FLTs departing any AD in the Grand Duchy of Luxembourg. (3) For any VFR LFT at night.		

2. FLIGHTS ENTERING AND/OR LANDING IN BRUSSELS FIR

IFR overflights and arrivals	VFR overflights	VFR arrivals
EBBDZMFP + LFPYZMFP	EBBUZFZX ----ZTZX (1) (2) EBMIZGZF (7)	----ZTZX (3) (4) EBBRZPZX (5) ELLXZPZX (6) EBMIZGZF (7)
(1) Address to be used for FLTs through Brussels, Charieroi, Oostende and Luxembourg TMA. (2) FLTs through Liege TMA shall be addressed to EBLGZGZA and EBLGZGZT. (3) For landing at EBLG use addresses EBLGZGZA and EBLGZGZT. (4) For landing at EBKT add EBSZZRZX. (5) For landing at any Belgian AD not connected to AFTN. (6) For landing at any AD in the Grand Duchy of Luxembourg not connected to AFTN. (7) For any VFR FLT at night.		

3. NIGHT FLIGHTS - Flight plans for OAT night flights will be submitted to EBMIZGZF (MDC ZAVENTEM) before 1200Z++ of the same day if conducted at or below 4500' MSL.

(SPEC/MIL RAC 1.3.2)

4. LUXEMBOURG (ELLX) CLASS D AIRSPACE - Prior to entering Luxembourg (ELLX) Class D Airspace, contact LUXEMBOURG GCA on 118.9.

(AFFSA/USAF FIL NR 02)

5. FLOW CONTROL. See Chapter 2, EUROPEAN REGION, FLIGHT PLANNING, EUROPEAN AIR TRAFFIC FLOW MANAGEMENT.

(SPEC/MIL RAC 1.3k)

6. FLIGHT PLAN ADDRESSEES

a. UIR

(1) Brussels (EBUR)

(a) GAT

1 EBURZQZX

2 EDDYZQZX

(b) OAT

1 EBURZQZX

2 EBSZZRZF

3 EBMIZGZF

4 EDDYYUYX

b. FIR

(1) Brussels (EBBU)

(a) GAT

1 EBBUZQZX

2 EBMIZGZF

(b) OAT

1 EBBUZQZX

2 EBSZZRZF

3 EBMIZGZF

c. VFR

(1) GAT

(a) EBBUZFZX

(b) EBMIZGZF

(2) OAT

(a) EBBUZFZX

(b) EBSZZRZF

(c) EBMIZGZF

d. Flow Control - EBBUZDZX

e. Above FL 195

(1) EDDYZDZX

(2) EBURZDZX

f. Destination/Subsequent legs

(1) Civil

(a) . . . . ZPZX

(b) . . . . ZTZX

(2) Military - . . . . ZGZX

(3) No AFTN - EBBRZPZX

(USAFE-DO/AFFSA)

FLIGHT HAZARDS

TARGET TOWING AREAS - Exercise will be flown along designated routes, VMC only, under radar control. Areas involved are TRA01 (FL 100 to FL 300), and TRA02/TRA03 (FL 100 to FL 250).

(SPEC/MIL RAC 1.3.16 and 5.24)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. SUPERSONIC FLIGHTS - The following rules apply to aircraft operating at supersonic speed, within Brussels UIR.

a. Flight authorized Mon-Fri between 0700-1100Z++ and 1200-1700Z++. Other times, approval by Belgium Air Staff VS3/CTL is required. Supersonic flights are prohibited below FL 360 and must be performed under radar control. SSR is compulsory.

b. Prior to any descent, speed will be reduced to 0.98 MACH, except that supersonic descent may be maintained until reaching FL 500.

c. Advise ATC when starting, ending or accidentally entering supersonic flight.

d. Supersonic flights are prohibited at all altitudes in the following areas:
BRUSSELS: 8 NM radius circle centered on N50°50'42"E04°21'47"
ANTWERPEN (EBAW): 6 NM radius circle centered on N51°12'30" E04°25'00"
GENT (EBLG): 6 NM radius circle centered on N51°02'45"E03°44'00"
LIEGE: 10 NM radius circle centered on N50°38'00" E05°35'30"

The area delimited by two circle of 6 NM radius centered on: MONS: N50°27' E03°57' CHARLEROI (EBCI): N50°25' E04°27' and joined by tangents.

Supersonic flights are prohibited in those parts of the Amsterdam FIR delegated to Belgian ATC:
MAASTRICHT: Area South of a line from N51°15'21" E05°33'24" to N51°14'46" E06°04'08" then along the German, Dutch, and Belgian border.
ZUID ZEELAND: Area formed by lines connecting N51°30'00"E02°00'00" to N51°42'20"E02°10'15" to N51°16'15" E04°06'30" along the Dutch - Belgian FIR boundary.

(SPEC/MIL RAC 1.3.11)

2. BELGIAN UPPER AIRSPACE INFORMATION

a. GENERAL AND OPERATIONAL AIR TRAFFIC - Military flights may be conducted as general or operational air traffic in all Belgian airspace, depending on requirements of the mission. All OAT flights have to establish radio contact with the appropriate Air Force traffic Control Center, call sign BELGA RADAR before penetrating the Belgian airspace.

(SPEC/MIL AIP RAC 1.3.25)

3. LARGE CITIES OVERFLIGHT.

a. It is prohibited for military aircraft to fly over Brussels (EBMI) city below FL 200 except for landing and takeoff at Brussels National or by special permission from the Chief of Operations, Belgian Air Staff.

b. It is recommended that jet aircraft avoid flying over other large cities below FL 200.

(SPEC/MIL RAC 1.3.24)

4. TERMINAL CONTROL AREAS

a. BRUSSELS (EBBR) - Arrivals for airports within the TCA may expect vectors after crossing 30 DME from BUB VOR-DME.

(1) SPEED LIMIT POINT (SLP) - Pilots should comply with speed limits within +/- 10 kt and the noise abatement procedures in paragraph 9.a. BRUSSELS NATIONAL (EBBR) AIRPORT. If no speed limit is imposed by ATC, the ATIS will state: "No ATC restriction on speed".

(a) SLP 1: ARVOH for traffic from PARIS FIR.

(b) SLP 2: TULNI for traffic from PARIS FIR.

(c) SLP 3: 25 NM AFI for traffic from KOK.

(d) SLP 4: WOOD for traffic from AMSTERDAM FIR.

(e) SLP 5: BEKEM for traffic from AMSTERDAM FIR.

(f) SLP 6: 16 NM FLO for traffic from BATTY.

(g) SLP 7: 16 NM FLO for traffic from LNO.

(2) HOLDING PATTERNS - Protected up to and including 14,000'.

(a) Category A/B aircraft - at or below 170 kt

(b) Category C/D aircraft - at or below 230 kt

(3) APPROACHES AT BRUSSELS NATIONAL - Aircraft unable to comply will not be accepted between 0700-0900Z++, 1200-1300Z++.

(a) Initial approach segment - 220 Kt.

(b) Non-precision intermediate and final approach segment - 160 Kt.

(c) Precision intermediate approach segment to the outer marker - 160 Kt.

(SPEC/AD 2-EBBR 19)

b. BRUSSELS SOUTH (EBCI) - Unless otherwise instructed by ATC, climb to 3000'on runway heading prior to turning on course.

(SPEC/AD 2-EBCI 11)

c. LUXEMBOURG (ELLX)

(1) HOLDING PATTERNS - Speed limit at or below 220 kt.

(SPEC/RAC 4-20-1)

5. AIRWAYS/ROUTES

a. LOW AND HIGH ALTITUDE AIRWAYS

(1) Minumum level to overfly; EHAM TCA is FL 100. EHAA FIR is FL 150 for pressurised aircraft. EBBR TCA is FL 90.

(2) FL 250 is not available for traffic overflying either the Brussels UIR or the Amsterdam FIR.

(3) Not above FL 240 to PARIS TCA from EHAM TCA, EHEH, EDDK, EDDF, EDDL. Not above FL 330 London TCA to/from EDDF, EDDK, EDDL, ELLX.

b. LOW ALTITUDE AIRWAYS -listed by alphanumeric designation.

A5 - ADUTO-HELEN not available for traffic destination EHAM.

A24 - GILOM-NIK08 not available for traffic destination EHAM.

B29 - SASKI-SORAT not available for traffic destination EBBR TCA.

G1 - ARKY-KONAN Forward: Unless otherwise instructed by Brussels ACC, EB traffic to EBAW or along Awy B29

shall proceed DCT-FM KOK to NIK. Backward: FL 100 max except for traffic detsination EBFN, EGMH, EMGD, EGTO. Overflying Brussels TCA is normally not allowed below FL 90. Lower limit FL 55 between 40 DME NIK and LNO. Between FL 65 and FL 105: CDR1-H24. Temporarilily closed on ACC instructions due to military requirements. Alternate route: LNO-INGUL-NTM.

G110 - FERDI-DENUT compulsory for traffic EHAM.

G120 - BUB-HELEN compulsory for traffic EHAM.

J115 - LIMGO-TALUD Lowest useable flight level may be raised, depending on activation of EBD41.

J904 - MAS12-CIV only available for traffic departing EDLN.

J906 - NOR40-HORTA only available for traffic departing EDDK.

J910 - DIK-MMD17 Lowest useable flight level may be raised, depending on activation of EBD41.

L745 - COA1-COA only available and compulsory for traffic departing EBBR TCA, EBOS via RAVLO, MIMVA or GODOS.

R7 - LNO-LOPIK and LOPIK-LNO not available for traffic departing/arriving EBLG.

R15 - PODAT-LNO not available for traffic above FL 95 destination EBAW, EBBR/EBMB, EBCI AND EBCV except departing EDDK, EDKB.

W70 - VABIK-KOK compulsory for traffic destination EBAW, EBBR, EBCI, EBCV, EBMB and all destnations in the Netherlands except EHBK.

c. LOW ALTITUDE RNAV AIRWAYS

L607 - ARCKY-GELPA not available for traffic destination EDDF, EDFE, ETOU, ETID and ETAR.

T172 - CIV-MEDIL only available for traffic departing Brussels FIRwith requested FL above FL 195.

T181 - ARCKY-DITEL only available for traffic destination EDDF, EDFE, ETOU, ETID and ETAR.

T853 - ARCKY-IBESA not available for traffic destination Dusseldorf FIR.

T855 - AGENI-BATTY only for traffic destination EBAW, EBBR/EBMB, EBCI, EBCV, EBLG, ELLX or the PARIS TCA.

T857 - SPI-KOGES only for traffic destination Dusseldorf FIR (except EDLN).

Y181 - MAKIK-GOPAS only for departures EDDF, EDFE, ETOU, ETID, EDFH and ETAR.

Y183 - LNO-PINUS only available for EDDL and EDLN departures.

Z717 - GOBNO-MAS only for traffic departing EDLN.

Z905 - KOGES-KENUM not available for traffic destination EDLL FIR.

d. HIGH ALTITUDE AIRWAYS

UA24 - NIK08-DIK Forward only available above FL 265. Backward not available for flight planning at FL 260 and not available for traffic destination EHAM.

UG110 - FERDI-DENUT compulsory for traffic destination EHAM.

UG120 - BUB-HELEN compulsory for traffic destination EHAM.

UJ906 - NOR40-HORTA only for traffic departing EDDK.

UT853 - ARCKY-NOR only available for traffic destination EDLL FIR.

UW64 - DIK-BATTY only availabale for traffic destination EBBR/EBMB.

UW70 - VABIK-KOK compulsory for traffic destination EBAW, EBBR, EBCI, EBCV, EBMB and all destinations in the Netherlands (except EHBK).

e. HIGH ALTITUDE RNAV AIRWAYS

UL607 - KONAN-MATUG FL 250 not available. EB traffic destination EBAW shall proceed direct from KOK to NIK, unless otherwise instructed by ATC. After SPI not available for traffic destination EDDF, EDFE, ETOU, ETID and ETAR.

UL608 - COA-SOGRI FL260 not available for planning purposes.

UM617 - SOGRI-CIV above FL 245 only available for flights departing Dusseldorf FIR. Below FL 245 only available for traffic departing Dusseldorf FIR and for traffic destination Paris TCA. SISGA not available for flight planning ABV FL 245. CIV-RAVMA only available for traffic departing LFQQ TCA.

UN858 - BETEX-VALEK above FL 245 not available for traffic destination EDFF, EDFE, ETOU, ETID, EDFZ and ETAR.

UN872 - WOODY-MEDIL above FL 245 only even flight levels.

UN873 - ADUTO-HELEN not available for traffic destination EHAM. HELEN-ADUTO above FL 245 only odd flight levels.

UQ50 - SPI-GELPA not available for traffic destination EDDF, ETID, ETOU, ETAR and EDFE.

UT27 - RITAX-ROUSY for traffic departing Brussels TCA, EBCI, EDDL, EDLV, EDDK and EHEH.

UT180 - SPI-DITEL only available for traffic destination EDDF, ETID, ETOU, ETAR, EDFE and EDFZ.

UT853 - ARCKY-NOR only available for traffic destination EDLL FIR.

UT856 - DIK-ADUSU only for traffic destination EDDF, EDFE, ETOU, ETID, EDFZ and EDDL except EDDK, EDKB, EDLN, EDGS, ETNG.

UT857- SPI-KOGES only for traffic destination Dusseldorf FIR except EDLN.

UT880 - LENDO-BATTY only available for traffic destination Brussels TCA, EBCI, EHEH, EHWO, EHGR, EHVK.

UY181 - MAKIK-DEMUL only for departures from EDDF, EDFE, ETOU, ETID, EDFH, ETAR.

UY283 - LNO-PINUS only available for departures EDDL and EDLN.

UY863 - SOPOK-ETENO only for departures from Brussels TCA, EBCI and EHEH.

UZ319 - DENOX-DELOM only available for traffic destination PARIS TCA.

UZ717 - GOBNO-MAS only available for traffic destination Paris TCA (LFOB, LFPB, LFPC, LFPG, LFPM, LFPN, LFPO, LFPT and LFPY) or for flights departing EDDL.

UZ907 - KOGES-ARCKY not available for traffic destination Dusseldorf FIR.

UZ993 - LNO-IDOSA compulsory for traffic departing EHEH, EDDL, EDLV and EDDK above FL 245. Not available for traffic departing EBBR TCA. Not available for traffic originating from Brussels TCA and EBCI.

(SPEC/ENR 3.1-1 thru 3.4-30)

6. PLACE NAMES

a. BRUSSELS NATIONAL (EBBR) AIRPORT

(1) NOISE ABATEMENT - Hours between 2200-0500Z++. Conditions are as follows: ILS available, runway clear and dry, crosswind including gusts are less than 15 kt, tailwind including gusts are less than 5 kt, visibility greater than 6200'and ceiling greater than 500'AGL, no adverse weather that would effect the approach. Except for helicopters, the minimum altitude for arr or departing is FL 50.

(a) ARRIVALS

1 From the West via KOK VORTAC or from the South via CMB or CIV VORTAC, expect no descent below FL 70 until crossing the BUB VOR-DME R-360.

2 Intercept glide path at or above 3000'not less than 11 NM from the threshold for all ILS approaches.

3 When simultaneous approaches are in progress, intercept the Runway 25R glide path at or above 3000'or the Runway 25L glide path at or above 4000'.

4 Surveillance approaches - do not descend below 2000' prior to 6 NM from touchdown.

5 Visual approach - do not descend below 1800'prior to intercept the PAPI.

6 Use minimum flap setting for conditions available.

7 Reverse thrust or prop other than idle shall not be used.

(b) DEPARTURES - Applicable for all runways and SIDS, net climb gradient not less than 4% until passing 3200'SIDs constitute noise abatement procedures. Only engine run-ups made prior to departure will be allowed at night.

1 Turbo-jet

a Takeoff to 1700'- takeoff power/flap and climb at V2+10 to 20 kt or as limited by angle of attack.

b At 1700'- Reduce thrust to not less than climb thrust.

c From 1700'to 3200'- Climb at V2+10 to 20 kt.

d At 3200'- Accelerate to enroute climb speed, retract flaps.

2 Prop

a From takeoff to 1200'- Maximum climb gradient and not less than VSE or best rate of climb speed.

b At 1200'- Reduce to maximum normally operating power if it complies with the noise certification requrements or maximum climb power.

c From 1200'to 3200'- climb at maximum gradient with reduced power, maintain constant speed.

d Above 3200'- Accelerate to enroute climb speed.

3 Special noise abatement route to HUL VOR-DME-CIV VORTAC or Nebul CRP.

(c) ENGINE TEST RUNS

1 Allowed between 0500 and 2200Z++.

2 On holding bay P7 or

3 Taxiways F3 and Y.

4 Authorized by the Airport Inspection Department, telephone: 753-69-00, 02, or 03.

(SPEC/AD2 EBBR 11 thru 12.1)

b. CHIEVRES AB. (EBCV)

(1) Bird Aircraft Strike Hazard (BASH) - Numerous birds on and in vicinity of airfield throughout the year due to constant farming activity within 30 meters of the runway. Expect increased activity and at dawn/dusk +/- 1 hr. Lapwings, pigeons, rooks, gulls, and starlings accounts for over 80% of birdstrikes. In order to minimize the risk of bird strikes, request all air traffic transitioning Chievres AB adhere to the following:

(a) Contact Chievres (EBCV) PTD to obtain Bird Watch Condition (BWC) status while enroute and before decent into Chievres AB (EBCV).

(b) BWC codes are as follows:

1 LOW - Normal bird activity on and above the airfield with a low probability of hazard.

2 MODERATE - Increased bird population in locations which represent an increased potential for strike. This condition requires increased vigilance by all agencies and supervisors and caution by aircrews. Flights will be delayed until successful dispersal of birds.

3 SEVERE - High bird population on or immediately above the active runway or other specific location that represents a high potential for strike. Supervisors and aircrews must thoroughly evaluate mission needs before conducting

operations in areas under condition SEVERE. Flying operations will be suspended until airfield management personnel disperses birds and downgrades the BWC.

(USAFE/FIL 77-00)

7. LOW LEVEL FLIGHTS

a. General:

(1) Definition

(a) Low flying by day: any mission executed during operations involving Belgian aircraft and flown below 1000 ft AGL.

NOTE: Although flights between 1000 ft AGL and 4500 ft AMSL are not considered as low flying, the rules laid down in Para b. also apply.

(b) Low flying by day below 1000 ft AGL is prohibited for foreign aircraft unless a special authorization of the Belgian Airstaff has been granted.

(c) Low flying by night: any mission flown below 4500 ft AMSL.

(d) All low level Night flights in the BRUSSELS FIR need prior coordination by MDC(EBMIZGZF).

(e) For low level flights in Belgium:

1 Pilots of military jet aircraft shall use the latest edition of the Low Flying Chart, 2nd series (LFC) 1/500,000. Sheets 1, 2, 4 and 5 cover Belgium.

2 Pilots of other than jet aircraft, i.e. helicopters, can use the Belgian produced LOW AIR Chart 1/250,000 or the Transit Flying Chart (Low Level) 2nd series (TFC(L). Sheets NM 31-2, and NM 32-4 NM 31-3, NM 31-4, NM 31-5, NM 31-6, NM 31-9, and NM 31-12 cover the area of Belgium.

b. Noise abatement procedures:

(1) Speed

Aircraft are not to be flown at speeds exceeding 450 Kt except between IP and target where they may be flown at speeds up to 540 Kt for maximum 5 minutes.

(2) Operating hours

Day operations below 1000 ft AGL are only authorized:

- 0730 - 1600Z++ Mon-Fri.

- Sat, Sun and national hol: When authorized by BE AIRSTAFF.

NOTE: See Para 4.c. 2.3 hereafter for flights in HTAA and LFAA.

(3) Flights over familiar terrain

(a) Low flying over familiar terrain has little training value and with the aim of reducing noise disturbance, pilots of jet aircraft will not fly lower than 1000 ft AGL within 15 NM radius of their own base or along familiar routes (e.g. to and from weapon ranges). Flying at a lower height is only permitted for flying operations involving Belgian aircraft and TLP operations and to meet specific training, flight safety or weather avoidance requirements.

(b) Use of standard routes

Aircrew are to avoid the use of standard routes and have to diversify their everyday training routes away from well used choke points, except when such routes are required by training establishments.

(c) Repetitive overflights

Aircrew are not to make repetitive overflights of targets, IP's, etc . . . unless it is essential to the training aim of the sortie. But under no circumstances should these areas be overflown more than twice.

(d) Use of afterburner

The use of afterburner is prohibited below 4500 ft AGL except for take-off, climb out and in case of emergency.

(4) Low flying by day -

(a) The minimum safety heights are laid down in RAC 1.3.20 Para 1.3.23 of this AIP.

(b) A one way flow for VFR traffic is established as described in Para 6 hereafter.

(c) Low Flying Area Ardennes (LFAA) - Helicopter Training Area Ardennes (HTAA)

1 Generalities

a The Ardennes are divided into 7 different subzones of which the lower part from ground to 250 ft AGL (incl) is accessible to rotary wing aircraft and the upper part from 250 ft AGL (excl) to 500 ft AGL (incl) is accessible for fixed wing aircraft. Together the 7 lower zones constitute the HELICOPTER TRAINING AREA ARDENNES (HTAA), the 7 upper zones constitute the LOW FLYING AREA ARDENNES (LFAA). To ease reservation, four subareas are defined:

HTAA - LFAA WEST: subzones 1 + 4 + 6
HTAA - LFAA EAST: subzones 2 + 3 + 5 + 7
HTAA - LFAA NORTH: subzones 1 + 2 + 3
HTAA - LFAA SOUTH: subzones 4 + 5 + 6 + 7

b Any derogation from the rules mentioned below is subject to prior approval of BE AIRSTAFF (VS3).

(5) Low Flying Area Ardennes (LFAA) –

(a) Only accessible for operations involving BAF aircraft.

(b) Availability

The LFAA is open from 0730-1100Z++, 1230-1600Z++ Mon-Fri. The LFAA is closed:
- from 01 Jun til Sep 15
- between 1100Z-1230Z++
- on Sat, Sun and national hol when visibility is less than 2.5 km. The LFAA becomes subsequently available for Lt. Avn aircraft.

During high intensity use of one or more subzones of the HTAA, the equivalent zone(s) of the LFAA will be closed by decision of the BE AIRSTAFF (VS3).

(6) Maximum allowed occupation of the LFAA -

(a) Complete LFAA: 4 formations of 4 aircraft or 3 C-130 aircraft.

(b) Only 3 or 4 subzones or 1 subarea available: 2 formations of 4 aircraft or 2 C-130 aircraft.

(7) The prescriptions laid down in RAC 1.4.1b are in force when overflying the following towns and areas -

(a) Below 2000 ft AGL - 1 NM radius around

ARLON	N49°41'00" E00°54'90"
BARVAUX/ DURBUY	N50°21'00" E05°28'45"
BASTOGNE	N50°00'00" E05°43'00"
BEAURAING	N50°06'30" E04°58'00"
BERTRIX	N49°51'15" E05°15'15"
BOUILLON	N49°48'00" E05°04'00"
CINEY	N50°18'00" E05°06'00"
FLORENVILLE	N49°42'00" E05°18'00"
HABAY LA NEUVE	N49°44'00" E05°3900"
HAN-SUR-LESSE	N50°07'00" E05°12'00"
HOUFFALIZE	N50°08'00" E05°47'25"
LA ROCHE	N50°11'00" E05°35'00"
MALMEDY	N50°25'30" E06°02'00"
MARCHE-EN-FAMENNE	N50°13'30" E05°21'00"
NEUFCHATEAU	N49°51'00" E05°26'00"
ROCHEFORT	N50°09'30" E05°13'20"
SAINT-VITH	N50°17'00" E06°07'00"
STAVELOT	N50°23'30" E05°56'00"
VIELSALM	N50°17'30" E05°55'00"

(b) Below 2000 ft AGL - 2 NM radius

DINANT	N50°14'45" E04°54'50"
SAINT-HUBERT	N50°01'40" E05°22'30"

(c) Below 2500 ft AMSL and 0.5 km radius around

DINANTHUMAIN (EB-R04)	N50°13'00" E05°15'00"

(d) Below 5000 ft AGL and 1.5 km radius around

LESSIVE (EB-R05)	N50°07'52" E05°08'52"
REDU (EB-R06)	N50°00'07" E05°08'45"

(e) TRA 12 BERTRIX when active (see RAC 5.25)

1 Speeds in excess of 450 Kt and up to 540 Kt, from IP to target is only allowed to a maximum of 25 NM.

Furthermore, immediately after the run-in aircraft must climb up to an altitude above the LFA until the speed is reduced to the normally prescribed maximum of 450 Kt.

In any case it is forbidden to simulate attacks on, even temporary, populated locations.

It is forbidden to simulate attacks on rotary wing aircraft operating in the HTA.

(8) Helicopter Training Area Ardennes (HTAA) -

(a) Only accessible for operations involving BAR helicopters.

(b) Availability

1 The HTAA is open from 0700Z- 2300Z++ Mon-Fri.

2 The HTAA is permanently active during the opening hours.

3 The HTAA is closed on Sat, Sun and national hol.

(c) Maximum allowed occupation of the HTAA

1 Complete HTAA: 08 helicopters operating together as one talking unit.

2 When using 3 or 4 subzones or 1 subarea: 4 helicopters working individually (4 talking units).

(9) Coordination procedures -

(a) ATCC SEMMERZAKE will assume coordination of the traffic within the LFAA and HTAA provided the reservation procedures and flight planning are compliant with the rules laid down in the HQ COM(BE) TAF OI C/10.

1 When departing from and/or recovering towards an airbase, ATCC SEMMERZAKE will be informed by the TWR about take-off and landing of all flights operating in the HTAA or LFAA.

2 When operating from a (temporary) field helistrip, ATCC SEMMERZAKE will be informed by Telephone or FAX about the take-off of the first and the last flight of the day operating in the HTAA. When Telephone and fax are unavailable, the pilot-in-command of the first and the last helicopter will obtain sufficient altitude to established two-way radio contact with BELGA INFORMATION on freq 129.325 and announce their flight.

3 When penetrating the LFAA/HTAA, the pilot-in-command will state "TRANSMITTING IN THE BLIND" on freq 250.250 or 129.325, followed by his call-sign and assigned time slot.

4 BELGA INFORMATION will broadcast the actual occupation of both LFAA and HTAA.

5 When leaving the LFAA/HTAA, the pilot-in-command will state "TRANSMITTING IN THE BLIND" on freq 250.250 or 129.325, followed by his call-sign and state "LEAVING THE LFAA/HTAA".

(10) Low Flying by Night –

(a) Important notice: For all low level night flights in the BRUSSELS FIR, prior coordination by MDC is necessary.

Therefore a FPL should be submitted to MDC (EBMIZGZF) the day of the flight before 1100Z++.

(11) Jet aircraft -

(a) Night flying below 4500 ft AMSL by jet aircraft is subject to prior approval of BAF STAFF.

(b) Basically, it consists of an integrated system of low flying routes calling "BENE ROUTES", which have been agreed by the RNAF, RAFG, GAF and BAF.

(c) Night flying within the integrated system, as well outside this system, needs prior coordination by MDC (EBMIZGZF).

(d) Regulations applicable to the integrated system are laid down in particular documents in possession of the participating Air Forces.

1 NOTE: Only that part of the BENE routes within the BRUSSELS FIR are published in the MIL AIP BELGIUM.

2 All BENE routes, except BENE THREE and SIX, may be flown during day at VFR altitude and clear of all restricted and controlled airspaces.

3 No training night flight will be allowed between Jul 01 and Aug 31. Nevertheless, the 15 W Tpt Ae is authorized to carry out night flights in and providing to use civilian Belgian airfields as diversion.

4 No night flight is authorized between 2300-0500Z++.

(12) VFR Navigation Routes -

(a) These VFR low flying routes are intended for night flight navigation for helicopters based at EBBT and EBLG. Night flying along these routes needs prior coordination by MDC (EBMIZGZF) based on the introduction of a FPL in due time (see RAC 1.3.1).

(b) No night flight is authorized 2300-0500Z++.

(c) US Army helicopter en-route SHAPE - R02 – EBBR have to be coordinated with MDC section Coordination 15 minutes before take-off, C02/752.4477 or Fax 02/752.4201.

(USAASD-E/USA 02-0060)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			BELGIUM				
B29	Gamlo NCRP (N51°33′ E02°19′)	097 277	Saski CRP (N51°33′ E02°19′)	7		FL 195 FL 55	ODD EVEN
	Saski CRP	113 293	Costa DVOR/DME (N52°21′ E03°21′)	34			
	Costa DVOR/DME	112 292	Helen CRP (N51°14′ E03°52′)	20			
	Helen CRP		Nicky DVOR/DME (51°10′ E04°11′)	13			
	Nicky DVOR/DME	088 268	Sondi CRP (N51°11′ E04°50′)	25		FL 195 4500	
	Sondi CRP		Kleine-Brogel NDB (N51°13′ E05°33′)	27			
	Kleine-Brogel NDB	089 269	Sorat NCRP (N51°13′ E05°36′)	1		FL 175 FL 75	
	Sorat NCRP		Romin CRP (N51°13′ E05°57′)	14			
	CONTROL: Brussels ACC REMARKS: CDR1 1700Z++ Fri-0600Z++ Mon; 2300-0600Z++ Mon-Thu. CDR2 See Daily CRAM Tempo closed on ACC. instructions due to MIL requirements. Cruising levels below FL 90 are normally not available for traffic overflying Brussels TCA. Not available for traffic with destination of Brussels TCA.						
J524	Gilom NCRP (N50°45′ E04°46′)	137	Remba NCRP (N50°40′ E04°55′)	8		FL 195 4500	ODD
	Remba NCRP		Ritax NCRP (N50°05′ E05°48′)	49			
	Ritax NCRP		Demul NCRP (N49°58′ E05°59′)	10			
	Demul NCRP		Diekirch DVOR/DME (N49°52′ E06°08′)	8			
	CONTROL: Brussels ACC REMARKS: CDR1 1700Z++ Fri-0600Z++ Mon; 2300-0600Z++ Mon-Thu. CDR2 See Daily CRAM. Tempo closed on ACC instructions due to MIL requirements.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
L610	Nicky DVOR/DME (N51°09′ E04°11′)	283	Denut NCRP (N51°14′ E03°39′)	20		FL 195 FL 105	EVEN
	Denut NCRP		Lumen NCRP (N51°16′ E03°24′)	10			
	Lumen NCRP		Bulam NCRP (N51°21′ E02°45′)	25			
	Bulam NCRP		Dibli NCRP (N51°25′ E02°16′)	19			
	Dibli NCRP		Rapix NCRP (N51°27′ E02°00′)	10			
	Rapix NCRP		Lambourne DVOR/DME (N51°39′ E00°09′)	70			
	CONTROL: Brussels ACC REMARKS: CDR1 H24. Tempo closed on ACC instruction due to MIL requirements.						
M150	Diekirch DVOR/DME (N49°52′ E06°08′)	119	Pites NCRP (N49°44′ E06°31′)	17		FL 195	ODD
	CONTROL: Brussels ACC above FL 135; Luxembourg APP below FL 135. REMARKS: CDR1 1100Z++ Fri-0700Z++ Mon; 2300-0600Z++ Mon-Thu. Tempo closed on ACC instructions due to MIL requirements. Not available for departures ELLX.						
Z311	Bekem CRP (N51°26′ E04°35′)	044	Nicky DVOR/DME (N51°10′ E04°11′)	22		FL 195 FL 95	ODD
	CONTROL: Brussels ACC REMARKS: CDR1 1700Z++ Fri-0600Z++ Mon; 2300-0600Z++ Mon-Thu. Tempo closed on ACC instructions due to MIL requirements. Exclusive for traffic with destination Brussela TCA, except EBAW.						
UG110	Denut NCRP (N51°14′ E03°39′)	183	Ferdi NCRP (N50°55′ E03°38′)	19		FL 660 FL 195	EVEN
	CONTROL: Brussels ACC below FL245; Maastricht UAC above FL 245. REMARKS: CDR1 H24. Tempo closed on UAC/ACC instructions due to MIL requirements.						
UJ158	Ageni NCRP (N50°45′ E06°02′)	232	Olno DVOR/DME (N50°35′ E05°43′)	16		FL 660 FL 245	EVEN
	CONTROL: Brussels ACC below FL 245; Maastricht UAC above FL 245. REMARKS: CDR1 Weekend, Fri 1700Z++-Mon 0600Z++; Nights 2300-0600Z++ Mon-Thu. CDR2 See Daily CRAM. Tempo closed on UAC/ACC instructions due to MIL requirements.						
UL608	Costa DVOR/DME	302	Denut NCRP (N51°14′ E03°39′)	13		FL 660 FL 195	EVEN
	Denut NCRP		Brussels DVOR/DME (N50°54′ E04°32′)	39			
	CONTROL: Brussels ACC below FL 245, Maastricht UAC above FL 245. REMARKS: CDR1 H24. Tempo closed on UAC/ACC instructions due to MIL requirements. Not available for traffic destination Brussels TCA, EBCI, EHEH, EBLG, EHBK, EHWO, EHGR and EHVK.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL610	Nicky DVOR/DME (N51°09′ E04°11′)	283	Denut NCRP (N51°14′ E03°39′)	20		FL 660 FL 195	EVEN
	Denut NCRP		Lumen NCRP (N51°16′ E03°24′)	10			
	Lumen NCRP		Bulam NCRP (N51°21′ E02°45′)	25			
	Bulam NCRP		Dibli NCRP (N51°25′ E02°16′)	19			
	Dibli NCRP		Rapix NCRP (N51°27′ E02°00′)	10			
	Rapix NCRP		Lambourne DVOR/DME (N51°39′ E00°09′)	70			
	CONTROL: Brussels ACC REMARKS: CDR1 H24. Tempo closed on UAC/ACC instruction due to MIL requirements. Not available for traffic destination Brussels TCA, EBCI, EHEH, EHWO, EHGR, EHVK, EBLG, and EHBK.						
UM150	Kosky VORTAC (N51°06′ E02°39′)	119	Diekirch DVOR/DME (N49°52′ E06°08′)	152.4		FL 660 FL 195	ODD
	Diekirch DVOR/DME		Pites NCRP (N49°44′ E06°31′)	17.1			
	CONTROL: Brussels ACC below FL 245, Maastricht UAC above FL 245. REMARKS: CDR1 KOK-DIK Every weekend 1700Z++ Fri-0600Z++ Mon; 2300-0600Z++ Mon-Thu. DIK-KRH Every weekend 1700Z++ Fri-0700Z++ Mon; 2300-0600Z++ Mon-Thu. Tempo closed on UAC/ACC instructions due to MIL requirements. CDR2 KOK-DIK Every week 0600-2300Z++ Mon-Thu; Fri 0600-1700Z++. DIK-PITES Every week 0700-2300Z++ Mon; 0600-2300Z++ Tue-Thu; 0600-1700Z++ Fri (except bank holidays). Transition to UZ111 not possible.						
UM170	Podat NCRP (N50°46′ E06°08′)	069 249	Dinki CRP (N50°32′ E05°54′)	9		FL 660 FL 195	EVEN ODD
	Dinky CRP		Olno DVOR/DME (N50°35′ E05°43′)	8			
	Olno DVOR/DME	019 199	Dinan NCRP (N49°50′ E05°20′)	48			
	Dinan NCRP		Kudin NCRP (N49°42′ E05°16′)	9			
	CONTROL: Brussels ACC below FL 245, Maastricht UAC above FL 245. REMARKS: CDR1 1700Z++ Fri-0600Z++ Mon; 2300-0600Z++ Mon-Thu. CDR2 See Daily CRAM. Tempo closed on UAC/ACC instructions due to MIL requirements. Not available for traffic destination EBLG and EHBK. Not available for traffic departing Brussels TCA.						
UM624	Diekirch DVOR/DME	002	Rousey NCRP (N49°29′ E06°07′)	23		FL 660 FL 195	EVEN
	CONTROL: Brussels ACC below FL 245, Maastricht UAC above FL 245. REMARKS: CDR1 1600Z++ Fri-0800Z++ Mon; 2200-0700Z++ Mon-Thu.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN852	Lutom NCRP (N51°16′ E05°25′)	166 346	Brogy CRP (N51°11′ E05°27′)	5		FL 660 FL 195	ODD EVEN
	Brogy CRP		Terla NCRP (N50°41′ E05°40′)	31			
	Terla NCRP		Olno DVOR/DME (N50°35′ E05°43′)	6			
	Olno DVOR/DME	161 341	Pelix NCRP (N50°30′ E05°46′)	6			
	Pelix NCRP		Larep NCRP (N50°27′ E05°48′)	3			
	Larep NCRP		Geslo NCRP (N50°05′ E06°01′)	23			
	Geslo NCRP		Gopab NCRP (N49°58′ E06°04′)	7			
	Gopab NCRP		Diekirch DVOR/DME (N49°52′ E06°08′)	7			
	Diekirch DVOR/DME	157 337	Limgo NCRP (N49°38′ E06°17′)	15			
	Limgo NCRP		DIK21 NCRP (N49°31′ E06°22′)	7			
	CONTROL: Maastricht UAC above FL 245, Brussels ACC below FL 245. REMARKS: Not available for traffic destination EBLG. Between Terla NCRP and Sutal NCRP UN852 not available for traffic departing EDDL, EDLV and EDDK requesting a FL above FL 245. CDR1 Weekend, Fri 1700Z++-Mon 0600Z++; Nights 2300-0600Z++ Mon-Thu. CDR2 See Daily CRAM.						
UW70	Vabik NCRP (N51°15′ E02°00′)	095	Madux NCRP (N51°14′ E02°24′)	15		FL 245 FL 195	ODD
	Madux NCRP	132	Kosky VORTAC	12			
	CONTROL: Brussels ACC REMARKS: CDR1 H24. Tempo closed on UAC/ACC instructions due to MIL requirements. Compulsory for traffic destination EBAW, EBBR, EBCI, EBCV, EBMB and all destinations in the Netherlands.(except EHBK)						
UY131	Nicky DVOR/DME (N51°10′ E04°11′)	184	Bartu NCRP (N51°00′ E04°10′)	10		FL 660 FL 195	ODD
	Bartu NCRP		Lervo NCRP (N50°50′ E04°10′)	10			
	Lervo NCRP		Nilem NCRP (N50°18′ E04°07′)	32			
	CONTROL: Maastricht UAC above FL 245, Brussels ACC below FL 245. REMARKS: CDR1 Weekend, Fri 1700Z++-Mon 0600Z++; Nights 2300-0600Z++ Mon-Thu. CDR2 See Daily CRAM.						
UY157	DIK07 NCRP (N49°59′ E06°10′)	256	Dinan NCRP (N49°50′ E05°20′)	8		FL 660 FL 245	ODD
	Dinan NCRP	255	Remgo NCRP (N49°47′ E05°01′)	13			
	CONTROL: Maastricht UAC above FL 245, Brussels ACC below FL 245. REMARKS: For jet aircraft destination LFPG. CDR1 Weekend, Fri 1700Z++-Mon 0600Z++; Nights 2300-0600Z++ Mon-Thu. CDR2 See Daily CRAM.						
UZ29	Evosa NCRP (N51°11′ E05°50′)	271	Nicky DVOR/DME (N51°10′ E04°11′)	60		FL 660 FL 275	EVEN
	CONTROL: Maastricht UAC REMARKS: CDR1 H24. Tempo closed on UAC instructions due to MIL requirements. Only available for departures from EDDF.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ111	Limgo NCRP (N49°38′ E06°17′)	060	Pites NCRP (N49°44′ E06°31′)	11		FL 660 FL 245	ODD
	CONTROL: Maastricht UAC REMARKS: CDR1 Every weekend 1700Z++ Fri-0700Z++ Mon; 2300-0600Z++ Mon-Thu. Tempo closed on UAC instructions due to MIL requirements. CDR2 Every week 0700-2300Z++ Mon; 0600-2300Z++ Tue-Thu; 0600-1700Z++ Fri (except bank holidays). Not available for traffic destination EDFF. Transition to UM150 not possible.						
UZ210	Pelix NCRP (N50°30′ E05°46′)	126	SPI29 NCRP (N50°16′ E06°16′)	24.1		FL 660 FL 245	ODD
	CONTROL: Maastricht UAC REMARKS: CDR1 Every weekend 1700Z++ Fri-0700Z++ Mon; 2300-0600Z++ Mon-Thu. Tempo closed on UAC instructions due to MIL requirements. CDR2 Every week 0700-2300Z++ Mon; 0600-2300Z++ Tue-Thu; 0600-1700Z++ Fri (except bank holidays). Only avbl for TFC DEP EHAM FIR except EHEH, EHBK, EHBD, EHRD, EHVK and EHGR.						
UZ703	Babix NCRP (N51°25′ E04°54′) Lervo NCRP	040 039	Lervo NCRP (N50°50′ E04°10′) Chievres TACAN (N50°34′ E03°50′)	45 20		FL 660 FL 245	ODD
	CONTROL: Maastricht UAC REMARKS: CDR1 Weekend, Fri 1700Z++-Mon 0600Z++; Nights 2300-0600Z++ Mon-Thu. CDR2 See Daily CRAM.						
UZ706	Arden NCRP (N49°52′ E04°51′)	232	Lendo NCRP (N50°37′ E06°17′)	71		FL 660 FL 195	EVEN
	CONTROL: Maastricht UAC above FL 245, Brussels ACC below FL 245. REMARKS: CDR1 Weekend, Fri 1700Z++-Mon 0600Z++; Nights 2300-0600Z++ Mon-Thu. CDR2 See Daily CRAM.						
UZ707	Ulpen NCRP (N50°45′ E05°56′) Onlo DVOR/DME	040 051	Onlo DVOR/DME (N50°35′ E05°43′) Famen NCRP (N49°58′ E04°34′)	13 57		FL 660 FL 245	ODD
	CONTROL: Maastricht UAC above FL 245, Brussels ACC below FL 245. REMARKS: CDR1 Weekend, Fri 1700Z++-Mon 0600Z++; Nights 2300-0600Z++ Mon-Thu. CDR2 See Daily CRAM. Tempo closed on UAC/ACC instructions due to MIL requirements.						
UZ709	Rupin Bartu NCRP	208	Bartu NCRP (N51°00′ E04°10′) Chievres VORTAC	31 29		FL 660 FL 195	ODD
	CONTROL: Maastricht UAC REMARKS: CDR1 Every weekend 1700Z++ Fri-0600Z++ Mon; 2300-0600Z++ Mon-Thu. Tempo closed on UAC instructions due to MIL requirements. CDR2 Every week 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri (except bank holidays).						

AERIAL REFUELING

AERIAL REFUELING TRACKS/ANCHOR AREAS - See Chapter 2, Section B, AERIAL REFUELING TRACKS/ANCHOR AREAS for Chart.

TELEPHONE CONTACTS

THE APPROPRIATE OFFICES SHOULD BE CONTACTED BY USAF MILITARY USERS TO RESERVE AIR REFUELING TRACKS OR ANCHOR AREAS IN THE FOLLOWING COUNTRIES:

BELGIUM: Belga Radar - Commercial: (32) 9-389-2555.

NOTE: DOD Users - to reserve Air refueling corridors in Italy and Greece, contact the European Central Altitude Reservation Facility (EUCARF) via: E-mail: eucarf@ramstein.af.mil, Military message: EUCARF RAMSTEIN AB GE, ICAO Aeronautical Fixed Telecommunications Network (AFTN): EDDFYXYR, DSN: 480-7346/7839 Fax: 9855 Commercial: (49) 6371-47-7346/7839 Fax: 9855.

NOTE: For information concerning Altitudes Reservations, contact: EUCARF.

NOTE: In areas designated as permanently available for Air-to-Air Refueling (AARA), the amount of warning concerning refueling operations can be so minimal as to preclude notification by normal methods. However, the units listed under ATC control column will be able to advise pilots on activity status in appropriate (AARAs). Where Air-to-Air Refueling Areas conflict with Airways, Advisory Routes or Upper Air Routes, civil/military coordination procedures are applied to minimize disruption to the plan flight profiles or the aircraft concerned.

(AFFSA/XOIA FIL 96-99)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for Charts.

BELGIUM - The information shown represents a composite of the migration routes and concentration areas for the entire year. Low level flight over colonies of Black-headed Gull (April-June) involve a very high risk and low level flight over the coast always involve a high risk. Day flights during September and October, and also night flights during July, August and September involve a higher risk than usual. 80% of night migration occurs below 4500' AGL and the most between 300' and 1800'. 80% of day migration occurs below 3000' AGL and the most between the ground and 1500'. Bird migration intensity during April-May and August-October is lowest between 0100 and 0500 and between 1200 and 1500.

ADDITIONAL INFORMATION

MINIMUM SAFETY HEIGHTS - Except for takeoff and landing, or in areas specially reserved for activities involving low flying and SAR operations, aircraft shall conform to the following rules:

a. Over congested areas, towns, industrial sites, nuclear power station, natural gas terminals and gatherings of people in the open, an aircraft must maintain sufficient altitude to permit, in case of engine failure, an emergency landing without endangering persons or property on the surface. This altitude shall not be less than 2000'above the highest obstacle within a radius of 600m (2000') of the aircraft in VMC or 8 km (5 NM) in IMC.

b. Over a strip of 5 NM either side of the Belgian (EB) coast, maintain an altitude of at least 10,000'MSL, except for flight to and from Great Britain for which the Military Detachment for Coordination (MDC) may allow a lower altitude, providing a flight plan has been filed.

(SPEC/MIL RAC 1.3.20)

c. Areas not specified above:

(1) VFR flights.

(a) 1000' (150' for helicopters) above the highest obstacle within a radius of 600m (2000') of the aircraft except within TRA 13, 14, and 15.

(SPEC/MIL RAC 1.3.21)

1 Within TRA 13 and 14, 250'AGL, except between 1 Jun and 15 Sep when TRA 13 and 14 are closed, and except when TRA 14 is closed to fixed wing traffic due to the activation of TRA 15.

(SPEC/MIL RAC 1.4.1, 1a.)

2 Within TRA 15, helicopter low flying training mission conducted from the surface to 300'AGL.

(b) VFR night flight by helicopters, 500'above the highest obstacle within 5 km (2.7 NM) of the helicopter.

(SPEC/MIL RAC 1.3.21)

(2) IFR Flights.

(a) 1000' above the highest obstacle with 8 km (4.32 NM) of the estimated position of the aircraft.

(SPEC/ENR 1.3-1)

NATIONAL HOLIDAYS -

BELGIUM (EB) HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
May Day	1 May
King's Birthday	6 Jun (Belgium Military)
National Commemoration Day	21 Jul
Assumption Day	15 Aug
All Saints Day	1 Nov
All Souls	2 Nov (Belgium Military)
Armistice Day	11 Nov
Dynasty Day	15 Nov (Belgium Military)
Christmas Day	25 Dec
Boxing Day	26 Dec (Belgium only)

If the holiday falls on Sat or Sun, the holiday is transferred to another day, by NOTAM.

Additional holidays recognized on different yearly dates:

NAME	PARTICIPATING
Good Friday	SHAPE only
Easter	Belgium and SHAPE
Easter Monday	Belgium and SHAPE
Ascension Day	Belgium and SHAPE
Whit Sunday	Belgium only
Whit Monday	Belgium and SHAPE

In addition to the Belgian holidays, all Belgian military aerodromes will be closed on:

Tuesday	6 Jun
Monday	14 Aug
Thursday	2 Nov
Wednesday	15 Nov
Tuesday	26 Dec
Wednesday	27 Dec
Thursday	28 Dec
Friday	29 Dec

(SPEC/MIL GEN 2.1)

BENIN

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes ACCRA FIR and NIAMEY FIR.

DIMENSIONAL UNITS -

1. Accra FIR - Blue Table, except altimeter in hectopascals.
(SPEC/BENIN GEN 2-1-1)

2. Niamey FIR - ICAO table except:

a. Vertical speed in feet per minute.

b. Altimeter setting in hectopascals.
(SPEC/ASECNA GEN 2.1-01)

AIRSPACE STRUCTURE -

1. NIAMEY FIR/UIR has implemented icao annex 11 airspace classifications with the following exceptions:

a. Classes B and E not yet implemented.

b. No avoidance advisories available in Class C and D airspace.

c. 250 KIAS airspeed limit below FL 100 not used.

d. Two way radio required in Classes F and G airspace.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING -

1. Position reports shall be transmitted to ACCRA Air Traffic Control Center by all flights operating within ACCRA FIR. When flying off airways or advisory routes, position reports are required one half-hour after take-off and thereafter.

2. Standard in Niamey FIR.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. Accara FIR - Standard, except flight over populated area is prohibited below 1500 feet. Except for the purpose of navigation or in emergency, no object shall be dropped or sprayed from an aircraft in flight.

2. Niamey FIR - VFR flight is authorized with the following exceptions:

a. Flight plan required.

b. VFR not authorized at night outside airport traffic area.

c. Except for takeoff and landing, aircraft will fly at an altitude of at least 50 meters (170') AGL or above, and at least 150 meters (500') from any person or manmade obstruction.

d. Minimum flight visibility required.

(1) Class F and G airspace below FL 30 or 1000' AGL, whichever is higher, 1500m (1 mile) visibility. Helicopters may operate with 800m (½ mile) flight visibility.

(2) Class A through G above FL30 or 1000', 8 km (5 miles) flight visibility required.

MAXIMUM AIRSPEEDS - In Niamey FIR, 250 kias limit below FL 100 not used.

MINIMUM HEIGHTS FOR VFR OPERATIONS - In Niamey FIR, aircraft will fly at a height of at least 450 meters above the highest obstruction within an 8 NM radius of their estimated position.

INSTRUMENT FLIGHT RULES

Same as Regional Procedures.

ALTIMETER SETTING PROCEDURES - Standard.

RVSM RULES - The airspace within Niamey FIR/UIR between FL 290 and FL 410 inclusive, is RVSM airspace.
(SPEC/ASECNA AIP ENR 2-1-11)

FLIGHT PLANNING

Flight plans shall be submitted for all flights to be operated within the ACCRA FIR. Updated flight plans shall be deemed cancelled 2 hours after Estimated Time of Departure and a new flight plan will therefore have to be submitted.
(SPEC/BENIN GEN 1.7-1)

BERMUDA

NATIONAL PROCEDURES

DIMENSIONAL UNITS - Non-SI Alternative Table except: Distances (short), Runway length, and Runway Visual Range in feet. Visibility in statute miles and fractions. Weight in pounds. Altimeter Setting in inches of Mercury. Temperature in degrees Fahrenheit. Time may be given in localtime.
(SPEC/GEN 2.1.1)

ALTIMETER SETTING PROCEDURES - Standard except use altimeter setting QNE 29.92 in or 1013.2 mb when transiting the Bermuda TMA, at 18,000 ft MSL or above.
(SPEC/ENR 1.7)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - The Bermuda TCA, is described as that airspace from 700 ft MSL to FL 500 within 50 NM then from 4000' AMSL up to and including FL 500 within a 180 NM radius of Bermuda VOR-DME, excluding the airspace within charted warning areas when such areas are temporary activated by NOTAM.
(SPEC/ENR 2.1)

VISUAL FLIGHT RULES

Same as Regional Procedures.

INSTRUMENT FLIGHT RULES

All flights at or above FL 180 within NY Oceanic CTA/FIR shall be in accordance with Instrument Flight Rules (IFR). Consequently, all civil aircraft operating into and out of Bermuda must do so in accordance with IFR.

(SPEC/ENR 1.1)

FLIGHT PLANNING

Positive control procedures in eff within Bermuda TCA. All flights are to be conducted in accordance with instrument flight rules. Upon, entering the Bermuda TCA, all aircraft set transponder on Mode 3A Code 2100.

(SPEC/ENR1.6.2)

BISSAU

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the DAKAR FIR.

DIMENSIONAL UNITS - ICAO table.

ALTIMETER SETTING PROCEDURES - Standard.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - DAKAR FIR/UIR has implemented the icao annex 11 airspace classification with the following exceptions:

1. Class B, E airpaces not yet implemented.

(SPEC/ASECNA AIP 0 RAC 1-1-05)

INSTRUMENT FLIGHT RULES

RVSM RULES - In Dakar FIR, the airspace between FL 290 and FL410 inclusive, is RVSM airspace.

(SPEC/ASECNA AIP 0 ENR 2-1-10)

TERMINAL

TERMINAL AREA PROCEDURES - Military exercises will take place inside the Bissau TMA each Tuesday and Thursday from 0700-1300z. Aircraft must contact Bissau Approach on 123.9 MHz for coordination ten (10) minutes before entering the TMA, verify flight level.

(SPEC/CL II NOTAM B3023-90)

BOSNIA AND HERZEGOVINA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes SARAJEVO FIR/UIR.

DIMENSIONAL UNITS - Blue Table. Altimeter settings in hectopascals.

ALTIMETER SETTING PROCEDURES - Standard. A common transition altitude of 9500′ MSL has been established for all instrument airports.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard.

INSTRUMENT FLIGHT RULES

FM IMMUNITY - Starting at 01.01.01. due to reduced restrictions VHF broadcasting stations could have significant implications for VHF NAV AID in acft, especially for VOR and ILS receivers, used during APP and landing. For safety reasons acft VOR and ILS receivers are required to become immunity protect against potential interference FM VHF FM broadcast transmissions. Acft with NAV equipment not meeting ICAO FM immunity may continue operations in Bosnia-Herzegovina if equipped with other NAV equipment meeting RNP-5 standards without use of VOR.

(TFMWG-E/NOTAM D001/01 FIR LQSB)

RVSM RULES - The airspace within the FIR Sarajevo between FL 290 and FL 410 inclusive is EUR RVSM airspace.

FLIGHT PLANNING

GENERAL AIR TRAFFIC - Eurocontrol's Integrated Initial Flight Processing System (IFPS) is in operational service in Bosnia and Herzegovina. Therefore, with effect from 23 December 2004, Aircraft Operators may submit flight plans directly to IFPS for all IFR/GAT flights, or portions thereof, departing from within FIR Sarajevo. Flight plans for flights departing outside the FIR Sarajevo and operating into or overflying the FIR Sarajevo shall be submitted in accordance with the procedures published by the State within which the aerodrome of departure is located.

(SPEC/AIC A01-04)

NOTAMS - ALL civilian and foreign aircrews: to receive NOTAM and ADVISORIES for Tuzla/LQTZ, go to the DOD DINS web site or call DSN 314-762-8005. Commercial from Europe: 00 387 758 14294 or from U.S.: 011 387 758 14294. For both numbers ask for ext 762-8005/8122.

SUPPLEMENTARY AIRPORT INFORMATION -

Sarajevo (LQSA)

1. Information for potential users of Sarajevo airport.

a. The following information, taken from the Memorandum of Understanding (MOU) between the SFOR and the Bosnia-Herzegovina Ministry of Foreign Trade and International Communication is provided for potential users of Sarajevo airport. This information must be understood by any individual or company prior to being allowed use of the airport.

b. Portions of Sarajevo airport and the airspace of Bosnia-Herzegovina are under the military control of SFOR. Military activities of SFOR have priority. If deemed necessary by SFOR, any flight authorization, takeoff or landing can becancelled or modified.

c. SFOR authority on the airport rests with the Commander, French DETAIR.

2. All services at Sarajevo airport provided by SFOR are provided at the request of, and on behalf of the Bosnia-Herzegovina CAA. SFOR will not be liable for acts committed in the performance of official duties.

a. Request for flight into Sarajevo airport must be submitted to SFOR for approval through the Bosnia- Herzegovina CAA not later than 72 hours prior to desired flight activity.

b. IFR arrival, approaches and departures are procedural only. No radar vectoring will be provided for any reason.

c. Aircraft parking is limited to one hour. Parking location will be as assigned by French DETAIR movement control personnel.

d. Any aircraft unable to move under its own power may be moved by whatever means determined necessary by the French DETAIR Commander.

3. Civil traffic is limited to passenger service only. Civil cargo flights are prohibited. It is forbidden to bring in any military equipment.

a. The aircraft parking ramp is under exclusive control of SFOR.

b. Aircrews must remain in close vicinity of their aircraft.

c. Passengers will be escorted to/from the aircraft.

d. After above information is understood, please FAX signed statement and release of liability and filled flight request form. Failure to adhere to these procedures/restrictions will result in loss of airport and/or Bosnia-Herzegovina airspace privileges. A complete copy of the (MOU), or any additional information should be requested from the Civil Aviation Authority (CAA) of Bosnia-Herzegovina. Telephone +387 71 461 199, FAX +387 71 653 431.

(AFFSA/AFFSA LTR)

Tuzla (LQTZ)

(AFFSA/USAF FIL 00-88)

1. Tuzla airport and airspace are under the control of military SFOR. Military activities of SFOR have priority. If deemed necessary by SFOR, any flight authorization, takeoff, or landing can be cancelled or modified. PPR for fixed and rotor wing aircraft is obtained through the Tuzla airfield management section, DSN 314-762-8005/2118, Europe C00387-35-814-294 then ask for 762-8005/2118 from CONUS C011-387-35-814-294 then ask for 762-8005/2118. Limited fuel services available. No fleet servicing available. DE-icing available. Aircrews must be certified on the latest version of the SPINS before arriving in the BALKANS. For the latest SPINS reference the COMBINED AIR OPERATIONS CENTER 5 (CAOC5) web-site: www.caoc5.nato.int.

(401ST EABG-AFM/USAF FIL 01-61)

2. 2. All inbound DV/VIP traffic contact KingfishV Tango (1142.525/261.125) 30 minutes prior to arrival.

3. Expect Runway 09 for arrival and Runway 27 for departures. Aircraft for military terminal normally exit the runway at Twy Charlie and enter the runway for departure at Twy Delta. Wide body aircraft are limited to the runway and Twy Echo. 180° backtaxi turns on rwy normally restricted to C160 or smaller acft. When mission requires, larger aircraft MUST accomplish widest possible rolling turn-around to prevent asphalt damage. Large aircraft requiring more than 149' should complete their 180 abeam Twy Alpha or Echo. Twy Foxtrot is closed to fixed wing traffic between Twy Alpha and the clamshell structure located just west of Twy Charlie. Tuzla International traffic utilizes the runway and Twy Alpha only. Helicopter operations prohibited in sod (grass) area south of Twy Foxtrot between Twy Charlie and the Control Tower.

4. Aircraft must file a stopover flight plan. Limited flight planning facilities available. If there is a problem with an outbound flight plan, contact the Airfield Manager, thru ATC, for assistance.

5. CAUTION: Taxiway dimensions:

a. Twy Alpha is 142' wide with a 71' throat.

b. Twy Bravo is 35' wide and restricted to rotor wing OPS only.

c. Twy Charlie is 75' wide.

d. Twy Delta is 75' wide.

e. Twy Echo is 272' wide with additional 40' non weight bearing shoulders on both sides. While the throat measures 72' at its narrowest point, when measured perpendicular to the taxi on/off line, aircraft have 78' of useable weight bearing pavement.

f. Twy Foxtrot is 73' wide from Charlie to Echo taxiway and parallels the runway.

6. CAUTION - BIRD STRIKE HAZARD Currently, No migratory or seasonal habitat information is available. Raptors frequently seen soaring within the terminal area. Flocks of large crows have been seen flying over town located east end of airfield. Pyrotechnics are utilized on the airfield, except rapidly changing bird watch conditions during dispersal's. Report all wildlife activities to the control tower. Contact control tower for current bird watch conditions.

7. Base Operations does not have facilities available to store classified. All classified material must be stored at 401st EABG Command Post.

8. Fire department is based on (NFPA) CAT 7 Airfield. Limited medical capabilities exist for acft emergency. Recommend diverting in-flight emergencies and medivac's to alternate locations.

(AFFSA FIL 06-203)

9. The addressing process for all Aeronautical Fixed Service (AFS) msgs LQTZ is processed through Air Reporting Office (ARO) Tuzla International Airport (TIA) and civil ATS collocated at Tuzla AB. ARO Opr 0600-1800Z++. Ctc info Europe C00387-35-745-530, CONUS C011-387-35-745-530, fax 352, AFS: LQTZZPZX/LQTZZTZX, E-mail: ATS_TUZLA@FEDCAD.GOV.BA.

(AFFSA FIL 05-483)

FLIGHT HAZARDS

ASCENTS OF CAPTIVE BALLOONS AND FREE FLYING SONDES - Ascent of free balloons will take place at position N44°28′ E18°44′. Balloons are red, white or black in color, length: 2 meters, weight: 100 g. The rate of ascent is from 300 to 420 meters/minute. Duration is approximately 80 minutes from surface to FL 500 daily 1000- 2200Z++.

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION - Upper ATS Routes UBI, UB4, UB5 and UG23 are available for civil aviation operations from FL 330 to FL 450 inclusive, within the Upper Airspace of Bosnia and Herzegovina. Other ATS Routes within the Upper Airspace of Bosnia and Herzegovina are not available.

a. Exchange of flight data, transfer of communication and control between Beograd ACC and Zagreb ACC shall refer to the following transfer points:

(1) BOSNA (N44°22′ E017°46′) for aircraft flying along UB1;

(2) N44°07′ E017°40′ for aircraft flying along UB4;

(3) DER (N44°59′ E017°58′) for aircraft flying along UB5;

(4) VRANA (N43°45′ E017°33′) for aircraft flying along UG23;

b. Aircraft intending to operate along these routes in the Upper Airspace of Bosnia and Herzegovina are required to comply with the following:

(1) All aircraft shall be equipped with at least one Mode A and Mode C SSR transponder which is functioning properly prior to entering the Upper Airspace of Bosnia and Herzegovina;

(2) All aircraft shall be equipped with Basic Area Navigation (BRNAV) equipment meeting RNP 5 accuracy which is functioning properly prior to entering the Upper Airspace of Bosnia and Herzegovina; and

(3) All aircraft are required to have obtained an ATC clearance from Beograd ACC or Zagreb ACC prior to entering the Upper Airspace of Bosnia and Herzegovina.

c. The Upper Airspace of Bosnia and Herzegovina along these ATS Routes is notified as Classification A.
FOR MILITARY OR CIVIL OPERATIONS IN THE BALKAN JOINT OPERATIONS AREA, FIRST REVIEW REGULATORY GUIDANCE "REGULATIONS FOR A/C OPERATING AS GENERAL AIR TRAFFIC (GAT) IN THE BALKAN JOINT OPERATING AREA (JOA)" AT THE COMBINED AIR OPERATIONS CENTER 5 (CAOC5) website: www.caoc5.nato.int
IF THE WEBSITE IS UNAVAILABLE, CONTACT THE CAOC5 AIRLIFT LIAISON ELEMENT AT: COMM VOICE: 00 39 0532 828 505 FAX: 00 39 0532 828 516
E-mail: Airliftplans@caoc.5.nato.int.
THE AIRLIFT LIAISON ELEMENT IS LOCATED AT POGGIO RENATICO ITALY. MILITARY OPERATIONS SHOULD REFER TO THE CLASSIFIED SPINS.

(AFFSA/USAF FIL 03/01)

BOTSWANA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - BOTSWANA services and constitutes the major part of the GABORONE FIR.

DIMENSIONAL UNITS - Units ICAO Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular except: All flights from Johannesburg/Pretoria area to Victoria Falls (FVFA) via Gaborone FIR at Eastbound flight level, request Westbound flight level at FTV VOR-DME/FT NDB. From Victoria Falls to Johannesburg/Pretoria at Westbound flight level, request Eastbound flight level at FTV VOR-DME/FT NDB.

(SPEC/ENR 1-7.3)

POSITION REPORTING - Standard.

AIR TRAFFIC AT A CONTROLLED AERODROME -

1. Flights over Gaborone city below 2000 feet AGL prohibited.

2. GABORONE TCA: Aircraft from the southeast sector (Johannesburg) with destination Sir Seretse Khama International (FBSK) - Because of the establishment of a permanent restricted area all joining traffic from the southeast sector should enter the Gaborone Control Area on VOR R-160 or greater and establish on final Runway 08 over GBV VOR. Departing traffic Runway 26 maintain runway heading till passing GBV VOR before turning left.

3. Sir Seretse Khama International (FBSK). Aircraft will not fly below FL 90 within a 30 NM radius of GBV VOR/DME from 2000 to 0400Z.

(SPEC/AIP AD-2-9)

VISUAL FLIGHT RULES

Botswana has implemented the ICAO Annex 11 airspace classifications.

(SPEC/ENR 1-2)

INSTRUMENT FLIGHT RULES

Botswana has implemented the ICAO Annex 11 airspace classifications.

(SPEC/ENR 1-3)

BRAZZAVILLE

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the LIBREVILLE SUB-FIR, CONGO, EQUATORIAL GUINEA, GABON, SAO TOME and

BRAZZAVILLE FIR/UIR PRINCIPE ISLAND, and part of CAMEROON, CENTRAL AFRICAN REPUBLIC and CHAD.

DIMENSIONAL UNITS - ICAO Table except:

1. Vertical speed in feet per minute.

2. Altimeter setting is hectopascals.

(SPEC/GEN 2.1-01)

ALTIMETER SETTING PROCEDURES - Standard.

(SPEC/ASENCA ENR 1.7-01)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Same as Regional Procedures except:

1. The BRAZZAVILLE FIR/UIR has implemented the ICAO Annex 11 airspace classifications except:

a. Classes B and E not implemented.

b. No avoidance advisories available in Classes C and D airspace.

c. 250 KIAS limit below FL 100 not used.

d. Two way radio required in Classes F and G airspace.

2. Flights will be at a minimum height of 50 meters above the surface and at a distance of at least 150 meters from a person or man-made obstruction.

(SPEC/ASECNA ENR 1.4-01)

INSTRUMENT FLIGHT RULES

1. Same as Regional Procedures except:

a. The BRAZZAVILLE FIR/UIR has implemented the ICAO Annex 11 airspace classifications except:

(1) Classes B and E not implemented.

(2) Aircraft will fly at a height of at least 450 meters above the highest obstruction within an 8 NM radius of their estimated position.

(3) 250 KIAS limit below FL 100 not used.

(SPEC/ASECNA ENR 1.4-01)

TERMINAL

TERMINAL AREA PROCEDURES -

1. CONGO - POOL TCA

a. Minimum level for entry FL 50. Minimum level for maneuvering except for approach, landing and missed approach maneuvers, is not authorized below FL 50.

b. AIRCRAFT FROM THE NORTH SECTOR (BRAZZAVILLE) WITH DESTINATION KINSHASA - Unless otherwise instructed, mandatory itinerary will be from VOR ""BZ" to NDB "OK" minimum altitude FL 100. Aircraft will be cleared to contact Kinshasa APP CON before arriving over VOR "BZ". Definite transfer will be made over VOR "BZ" after aircraft has received instructions to proceed from Kinshasa NDB "OK".

c. AIRCRAFT FROM SOUTH SECTOR (KINSHASA) WITH DESTINATION BRAZZAVILLE - Unless otherwise instructed, route will be VOR KSA to VOR BZ. Minimum altitude FL 90. Aircraft will be cleared to contact Brazzaville ACC before arriving over VOR "KSA". Definite transfer will be made over VOR "KSA" after aircraft has received instructions to proceed from Brazzaville VOR "BZ".

(SPEC/ASCENA ENR 2.1-05)

BULGARIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes SOFIA FIR and Varna FIR.

(SPEC/GEN 3-3-1)

DIMENSIONAL UNITS - Primary SI Unit.

(SPEC/GEN 2-1)

ALTIMETER SETTING PROCEDURES - Standard. The term "transition altitude" is used to mean absolute transition height.

(SPEC/AREA 1-1-19)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard and as noted.
Bulgaria has implemented the ICAO Annex II airspace classifications.

1. Minimal conditions for VFR flights -

TERRAIN	KIAS	CEILING (feet)	VISIBILITY (NM)	VERTICAL CLOUD CLEARANCE (feet)
a. In take-off and landing areas:				
	162 and below	492	1.6	164
Plain	163 to 297	984	2.7	328
Hilly	297 and below	1312	2.7	328
Mountain	above 297	984	2.7	328
b. Down range and off airway:				
	162 and below	492	1.6	164
Plain	163 to 297	984	2.7	328
Hilly	297 and below	1312	2.7	328

TERRAIN	KIAS	CEILING (feet)	VISIBILITY (NM)	VERTICAL CLOUD CLEARANCE (feet)
Mountain To Height 6562'	297 and below	1312	2.7	328
above	297 and below	2297	5.4	328

(SPEC/AREA 1-1-4)

2. The ATC units in Sofia and Varna FIR's shall not handle aircraft without transponder equipment.

NIGHT VFR FLIGHTS - All night flights are IFR.
(SPEC/AREA 1-1-5)

INSTRUMENT FLIGHT RULES

Standard except as noted. Bulgaria has implemented the ICAO Annex II airspace classifications.

1. Foreign civil and military aircraft can operate along the domestic air routes only if a special permission of the Defense Minister is granted.
(SPEC/GEN 3-3-1)

2. Supersonic aircraft have priority to other aircraft at all stages of flight.
(SPEC/GEN 3-3-3)

FM IMMUNITY - State acft capable of meeting the required navigational performance of 5 NM (RNP-5) with NAV systems other than VOR can perform en-route flights. - ILS and VOR approaches as well as SID and STAR referenced by a VOR can be performed at pilots responsibility. All information available on FM interference will be given to pilots.
(TFMWG-E/NOTAM A0074-01)
(TFMWG-E/USA 02-0039)

NOTE: NOTE for US aircrews: EUCOM clarification of NOTAM A0074/01 - Terminal area operations requiring the use of ILS/VOR are not permitted without FM immune equipment.
(TFMWG-E/02-0086)

RVSM RULES - The airspace within Sofia FIR and Varna FIR between FL 290 and FL 410 inclusive, as described in the Table of cruising levels given in section ENR 1.7, is RVSM airspace. Within RVSM airspace, the vertical separation minimum shall be:

1. 300m (1000 feet) between RVSM approved aircraft.

2. 600m (2000 feet) between:

-non RVSM approved State aircraft and any other aircraft;
-formation flights of State aircraft and any other aircraft; and
-an aircraft experiencing a communication failure in flight and any other aircraft.
(SPEC/ENR 1.8-1)

FLIGHT PLANNING

GENERAL AIR TRAFFIC -

1. International flight is performed only within the established international airways and the airports assigned to handle international flight. Violators will be intercepted and force to return to an airway or to land.
(SPEC/GEN 3.3.3)

2. In case of simultaneous approach of different types of aircraft, the heavier has a priority. Landing priority is granted to aircraft:
(SPEC/ENR 1.1-6)

a. Approaching for emergency landing.

b. With a limited fuel endurance.

c. Performing urgent medical flights.

d. Performing special government flights.

e. Performing a group flight.

f. Performing a scheduled flight.

3. Eurocontrol's Integrated Initial Flight Processing System (IFPS) and Centralized Air Traffic Flow Management is in operational service in Bulgaria.

ENROUTE

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			BULGARIA				
B7	BLO CRP (N42°40′ E023°48′)	324	Ogata CRP (N43°12′ E023°19′)	39	FL 085	FL 245 FL 085	EVEN
	Ogata CRP	352	Erdon NCRP (N43°26′ E023°17′)	14	FL 095	FL 245 FL 095	EVEN
	Erdon NCRP	352	Lomos CRP (N43°50′ E023°15′)	23	FL 095	FL 245 FL 095	EVEN
	NOTE: CDR 1 2300Z++ til 0400Z++ week nights, weekend fm Fri 1400Z++ til Mon 0600Z++. CDR 2 See daily cram.						
B27	GOL NCRP (N43°05′ E024°14′)	083 263	Delin CRP (N43°07′ E025°09′)	41	FL 075	FL 245 FL 075	EVEN
	Delin CRP	083 263	GRN NCRP (N43°09′ E025°42′)	24	FL 065	FL 245 FL 065	EVEN
	GRN NCRP	083 263	Amtov CRP (N43°10′ E026°09′)	21	FL 065	FL 245 FL 065	EVEN
	Amtov CRP	083 263	Alivi CRP (N43°11′ E026°38′)	20	FL 045	FL 245 FL 045	EVEN
	NOTE: CDR 1 2300Z++ til 0400Z++ week nights, weekend fm Fri 1400z++ til Mon 0600z++. CDR 2 See daily cram.						
G38	GOL NCRP (N43°05′ E024°13′)	034 214	Somov CRP (N43°42′ E024°51′)	45	FL 095	FL 245 FL 095	ODD EVEN
	NOTE: CDR 1 2300Z++ til 0400Z++ week nights, weekend fm FRI 1400Z++ til MON 0600Z++. CDR 2 see daily cram.						
W21	Inbol CRP (N43°28′ E023°48′)	176	Rovam CRP (N43°08′ E023°48′)	19	FL 095	FL 245 FL 095	ODD
	NOTE: CDR 1 2300Z++ til 0400Z++ week nights, weekend fm Fri 1400Z++ til Mon 0600Z++. CDR 2 See daily cram.						
W27	SOF CRP (N42°41′ E023°23′)	352	Todro CRP (N42°51′ E023°21′)	13	FL 085	FL 245 FL 085	EVEN
	Todro CRP	352	Ogota CRP (N43°12′ E023°19′)	18	FL 085	FL 245 FL 085	EVEN
	NOTE: CDR 1 2300Z++ til 0400Z++ week nights, weekend fm Fri 1400Z++ til Mon 0600Z++. CDR 2 See daily cram.						
Z103	Vaden CRP (N42°04′ E27°13′)	302	Ostov CRP (N43°47′ E23°48′)	183	FL 180	UNLTD FL 165	EVEN
	NOTE: CDR1 - Every night 2300-0400Z++ and every weekend 1400Z++ Fri-0600Z++ Mon. CDR2						
Z117	Varna DVOR/DME	316	Arges CRP (N44°05′ E26°50′)	67	FL 60	FL 245 FL 45	EVEN
	NOTE: CDR1 - Every night 2300-0400Z++ and every weekend 1400Z++ Fri-0600Z++ Mon. CDR2						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Z118	WRN CRP (N43°13′ E027°49′)	233	ENONI CRP (N43°26′ E028°15′)	23	FL 060	FL 245 FL 045	ODD
	Enoni CRP	233	DINRO CRP (N43°42′E028°48′)	29	FL 060	FL 245 FL 045	ODD
	NOTE: CDR 1 2300Z++ til 0400Z++ week nights, weekend fm Fri 1400Z++ til Mon 0600Z++. CDR 2 See daily cram.						
UL852	Udros CRP (N42°44′ E30°36′)	287	Balik CRP (N43°41′ E27°18′)	155	FL 260	UNLTD FL 245	EVEN
	Balik CRP	287	Koman CRP (N43°59′ E26°13′)	51			
	REMARKS: CDR1						
UL863	Okana CRP (N42°50′ E22°29′)	96.5	Keral NCRP (N42°04′ E23°01)	52		FL 660 FL 245	EVEN
	Keral NCRP (N42°04′ E23°01′)	82.5	Evivi CRP (N41°24′ E023°27′)	44			
	NOTE: CDR1 - Every night 2300-0400Z++ and every weekend fm Fri 1400Z++ til Mon 0600Z++. CDR2 See daily cram.						
UM19	Etida CRP (N43°52′ E22°25′)	89.2	ADORU CRP (N41°52′ E26°34′)	394		FL 660 FL 245	ODD
	NOTE: CDR1 - Every night 2300-0400Z++ and every weekend fm Fri 1400Z++ til Mon 0600Z++. CDR2 See daily cram.						
UN131	Nisva CRP (N42°58′ E22°47′)	6.9	Usala NCRP (N42°12 E23°35′)	57		FL 660 FL 245	ODD
	Usala NCRP (N42°12′ E23°35′)	53.5	Rodop CRP (N41°35′ E24°11′)	46			
	NOTE: CDR1 - Every night 2300-0400Z++ and every weekend fm Fri 1400Z++ til Mon 0600Z++. CDR2 See daily cram.						
UN739	Larat NCRP (N42°30′ E023°42′)	287	Plovdiv VOR/DME	52		FL 660 FL 245	
	Plovdiv VOR/DME	287	Adoru CRP	77			ODD
	NOTE: 2300-0400Z++, wkend Fri 1400-Mon 0600Z++. CDR2						
UZ103	Vaden CRP (N42°04′ E27°13′)	301	Ostov CRP (N43°47′ E23°48′)	183	FL 260	UNLTD FL 245	EVEN
	REMARKS: CDR1 - Every night 2300-0400Z++ and every weekend 1400Z++ Fri-0600Z++ Mon. CDR2						
UZ118	Dinro CRP (N43°42′ E28°48′)	95.6	Wrn CRP (N43°13′ E27°49′)	51		FL 660 FL 245	ODD
	NOTE: CDR1 - Every night 2300-0400Z++ and every weekend fm Fri 1400Z++ til Mon 0600Z++. CDR2 See daily cram.						

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

BULGARIAN HOLIDAYS for 2005

NAME	DATE
New Year's Day	1 Jan
Liberation's Day	3 Mar
International Labor Day	1 May
Day of Bulgarian Army	6 May
Day of Bulgarian Culture	24 May

NAME	DATE
Union Day	6 Sep
Independence Day	22 Sep
Christmas Eve	24 Dec
Christmas Day	25, 26 Dec

Easter is a moving Holiday.

(SPEC/AIC 03)

BURKINA FASO

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the DAKAR FIR and NIAMEY FIR. For DAKAR FIR, see Bissau. For NIAMEY FIR, see Benin.

BURUNDI

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - The following rules and procedures apply to the territorial limits of the Republic of Burundi (Bujumbura SUB-FIR) from ground to FL 245. Bujumbura Tower has total responsibility for flight information service. Refer to Dar Es Salaam FIR entry.

DIMENSIONAL UNITS - Blue Table, except altimeter settings inhectopascals.

(SPEC/AIP GEN 1-8)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

1. The Republic of Burundi has implemented the ICAO Annex 11 airspace classifications with the following exceptions:

a. A VFR flight should not be undertaken or continued if visibility conditions and distance from clouds is less than the values indicated below:

(1) In controlled airspace and outside of this space, more than 300m from the surface; Visibility: 5km. Distance from clouds: 600m horizontally, 150m vertically.

(2) Outside of controlled airspace, at least 200m from the surface; flight visibility 1.5km. Distance from clouds: clear of clouds.

(SPEC/RAC 1-1-95)

INSTRUMENT FLIGHT RULES

The Republic of Burundi has implemented the ICAO Annex 11 airspace classification.

(SPEC/RAC 1-1, 3-1)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

BURUNDI HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
National Unity Day	5 Feb
Labor Day	1 May
Independence Day	1 Jul
Commemoration of the Assassination of National Heros	15 Oct
All Saint's Day	1 Nov
Christmas	25 Dec

(SPEC/GEN 1-9)

CAMEROON

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the BRAZAVILLE FIR and the D'NJAMENA FIR.

DIMENSIONAL UNITS - ICAO Table except:

1. Vertical speed in feet per minute.

2. Altimeter setting is in hectopascals.

(SPEC/GEN 2.1-01)
(SPEC/ASCENA GEN 2.1-01)

ALTIMETER SETTING PROCEDURES - Standard.
(SPEC/ASENCA ENR 1.7-01)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Same as Regional Procedures except:

AIRSPACE EXCEPTIONS

1. The BRAZZAVILLE FIR/UIR and N'DJAMENA FIR/UIR have implemented the ICAO Annex 11 airspace classifications except:

a. Classes B and E not implemented.

b. No avoidance advisories available in Classes C and D airspace.

c. 250 KIAS limit below FL 100 not used.

d. Two way radio required in Classes F and G airspace.

2. Flights will be at a minimum height of 50 meters above the surface and at a distance of at least 150 meters from a person or man-made obstruction.

(SPEC/ASECNA ENR 1.4-01)

3. In D'NJAMENA FIR, VFR flight is authorized with the following exceptions

a. Flight Plan acquired.

b. VFR not authorized at night outside Airport Traffic Area.

c. Except for takeoff and landing, aircraft will fly at an altitude of at least 50 meters (170') AGL or above any natural obstruction and at least 150 meters (500') from any permanent manmade obstruction.

d. Minimum Flight visibility acquired.

(1) Class F and G airspace below FL 30 or 1000' AGL, whichever is higher, 1500m (1 mile). Helicopters may operate with 800m (½ mile) flight visibility.

(2) Class A and C plus F and G above FL 30 or 1000' AGL, 8km (5 miles) flight visibility acquired.

(SPEC/ASECNA AIP 0 RAC 1-1-04)

MINIMUM HEIGHTS FOR VFR OPERATIONS - In N'DJAMENA FIR, flights will be at a minimum height of 50 meters above the surface and at a distance of at least 150 meters from a person or man-made obstruction.

(SPEC/ASECNA AIP 0 RAC 1-1-04)

INSTRUMENT FLIGHT RULES

ALTIMETER SETTING PROCEDURES - Standard.

(SPEC/ASENCA ENR 1.7-01)

RVSM RULES - In N'DJAMENA FIR, the airspace between FL 290 and FL 410 inclusive, is RVSM airspace.

(SPEC/ASECNA AIP 0 ENR 2-1-11)

CANADA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - Includes GANDER OCEANIC FIR. The boundary of the Gander OCA is common to that of the FIR except the Control Area also includes that airspace within the Sondrestrom FIR south of N63°30' above FL 195.

(DASH PARA 4.8.1)

DIMENSIONAL UNITS - Blue Table except relatively short distance - feet, visibility - statue miles, runway visual range-feet, altimeter setting - inches of mercury, and weight - lb.

(SPEC/CANADA GEN 2-12)

ALTIMETER SETTING PROCEDURES - Same as Regional Procedures.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Same as Regional Procedures except:

(SPEC/GPH 204, CHAP 5)

1. Unless otherwise requested by ATC, flights shall make position reports to Gander (Primary) or Iqaluit (Secondary) on the appropriate air/ground frequency as follows:

a. Predominantly north/south flights shall report at each significant point listed in the flight plan.

b. Westbound flights shall report at W30°00', W40°00', W50°00' and, if crossed north of N53°00', the Domestic/Oceanic boundary.

c. Eastbound flights shall report at W50°00', W40°00', W30°00' and, if crossed north of N53°00', the Domestic/Oceanic boundary.

2. All flights operating in that portion of the Gander OCA over Southern Greenland and the adjoining waters at FL 200 and above should report primarily to Gander, or alternatively to Iqaluit, on international air/ground frequencies.

3. In addition to maintaining a listening watch on the appropriate enroute frequency, flights are to establish VHF/UHF communications with Gander, Moncton, Iqaluit or Goose, whichever is appropriate, as soon as possible, and maintain a listening watch in accordance with the following:

NOTE: For the below listed stations, frequencies are specified only in those cases where sectors, not defined in the Canada and North Atlantic IFR Supplement, are involved or when primary frequencies are specified from among multiple frequencies listed in the supplement.

a. Within 200 NM of Gander, at or above FL 270, Schefferville and Iqaluit at or above FL 290, and Goose at or above FL 240.

(1) Gander - Call Gander Center - 133.9, 294.5.

(2) Schefferville - Call Moncton Center - 128.7, 381.4.

(3) Iqaluit - Call Iqaluit Radio - 122.2, 126.7 or Iqaluit International Radio - 126.9.

(4) Goose - Call Moncton Center. On or north of a line joining Loach CRP/Goose/Lake Eon - 132.4, south of the line - 133.1.

b. Within 150 NM of Gander, below FL 270, Schefferville and Iqaluit below FL 290, and Goose below FL 240.

(1) Gander - Call Gander Center - 119.7, 342.9.

(2) Schefferville - Call Moncton Center - 132.9.

(3) Iqaluit - Call Iqaluit Radio - 122.2, 126.7 or Iqaluit International Radio - 126.9.

(4) Goose - Call Moncton Center - 120.4, 294.5. If within the Goose TCA (87 NM) between 1130 - 0300Z (DT 1030 - 0200Z), call Goose Arrival - 119.5 or 267.1. OT call Moncton Center.

c. Westbound flights at any level within 150 NM of Sydney, excluding flights established on designated airway, call Moncton Center- 132.75, 266.3 or 118.6.

d. Eastbound flights which traverse the Gander Domestic FIR in the high level structure between 2300-0800 UTC are (in addition to monitoring the appropriate control sector frequency) required to establish contact with "Gander Clearance Delivery" when within 200 NM of Gander in accordance with the following unless otherwise directed.

(1) For coast out point VYSTA and north 134.6 or 247.0.

(2) For coast out points St. John's and south 134.7 or 235.0.

e. To facilitate the use of step-climb, the pilot shall, on first radio contact with the relevant area control center at each oceanic control centers boundary, indicate at the end of his position report the highest level he is prepared to accept, and the position or time at which such higher flight level would be acceptable.

Example: PA101, N61° W30° 0346 FL 330. Est 50N 40W 0521. Next N45° W50°. Will accept FL 350 at W40°.

VISUAL FLIGHT RULES

Same as Regional Procedures.

INSTRUMENT FLIGHT RULES

Same as Regional Procedures.

FLIGHT PLANNING

(GPH 204, CHAP 5)

1. All aircraft flying in a generally eastbound or westbound direction must flight plan so that specified 10° of longitude (W60°00', W50°00', W40°00', W30°00'), as applicable, are crossed at whole degrees of latitude. Generally northbound or southbound aircraft must flight plan so that specified parallel of latitude spaced at intervals of 5° (N65°00', N60°00', N55°00', etc) are crossed at whole degrees of longitude.

2. Pilots of potential non-stop westbound flights may flight plan to any suitable aeronautical radio facility or designated intersection east of W70°, and in addition, specify route and altitude to any of the approved regular or alternate airport designated as international for use as the flight plan alternate. Prior to reaching the flight plan fix or clearance limit, the pilot, after assessing the onward flight conditions, will normally file to the airport of ultimate destination and will request an ATC clearance accordingly. However, should it be determined that flight to the airport of destination is undesirable, the pilot will file to a regular or alternate airport and request an appropriate ATC clearance. If for any reason an onward ATC clearance from the flight plan fix is not obtained by the time the fix is reached, the pilot must proceed toward the alternate in the manner specified in the flight plan or amendments thereto.

3. MILITARY CLIMB CORRIDOR - The corridor is a great circle track running along the 62nd parallel lying between the W044° and the W050° meridians, extending vertically from FL 195 up to and includes FL 450, and is restricted to flights operated by the Royal Danish Air Force. Aircrews plan flight thru the corridor airspace may contact Gander OAC for the current status of the corridor. Requests for the use of the Military Climb Corridor must be submitted to the Danish CAA.
TELEX: 27096 (CAA/DK)
AFTN: EKCAYAYX, ATTN ATS DIVISION
PHONE: 45 1 44 48 48 EXT 477
TELEFAX: 45 1 44 03 03 --

(AFFSA/AFFSA)

4. NAT operators will provide Canadian Area Control Center with all flight plans for eastbound NAT flights which will traverse their airspace. These flight plans will include the estimate for each CTA boundary and a coast-out fix estimate in item 18.

5. NAT operators will, where possible, file eastbound NAT flight plan at least 4 hours prior to ETA from coast-out fix.

6. Nat operators are to provide 2nd and 3rd route options at the end of the "RMK" portion of the ICAO flight plan. With respect to eastbound NAT flights planned to operate on the NAT system, operators who do not have the capability to provide this information in item 1A should provide it via separate AFTN message to Gander Area Control Center (CYQXZQZX).

CLEARANCE INFORMATION -

1. OCEANIC CLEARANCE DELIVERY PROCEDURES.

a. In order to reduce the radio workload associated with the readback of eastbound oceanic clearance via established North Atlantic (NAT) track, and differentiate between the previous and current day's published track message, including amendments, Gander ACC will employ the following procedures:

(1) Each eastbound track message will be identified by a 3 digit track identification number in the Remarks section of the message.

(2) Any subsequent track change will include a new remarks line amending the previous track message identification number.

(3) Amendments will be identified by adding an alpha character to the track message identification number for each revision.

b. Gander Clearance Delivery will issue an oceanic clearance via published track using only the track letter without the current NAT track identification number.

c. Pilots in possession of a valid copy of the NAT track message are instructed to include the NAT track message identification number in their clearance readback.

(1) If the track message identification number is included in the read back, do not read back the track coordinates.

(2) Any doubt as to the track message identification or NAT track coordinates by either the pilot or ATC will require a detailed readback of track coordinates.

d. Aircraft equipped with Air Ground Communications System (AGCS) datalink capability shall use the following procedures:

(1) Aircraft authorized to acknowledge oceanic clearance via datalink are not affected.

(2) Aircraft not approved or capable of acknowledging oceanic clearance via datalink are required to read back only the track letter.

(CA NOTAM 0494/93)

e. Gander ACC frequencies 134.9 and 135.05 will be utilized from 2330 to 0530 for clearance delivery. Changes to these frequencies will be made by NOTAM, NAT Track Message, or voice broadcast.

f. All eastbound NAT aircraft entering the Gander Domestic FIR and crossing the CZQX/CZQM CTA boundary between YNA and HEMMI are required to obtain an oceanic clearance when within 200 NM of the published clearance delivery frequency location.

(1) Frequency 134.9 is located at Allens Island (N46°50′ W55°47′).

(2) Frequency 135.05 is located at Stephenville (N48°35′ W58°40′).

g. Eastbound aircraft crossing Gander's Western CTA boundary on or north of a line JIGGS direct Gander utilize 135.05 as the primary clearance delivery frequency. Eastbound aircraft south of this line use 134.9.

h. Pilots shall maintain a continuous listening watch on the controlling frequency while obtaining the oceanic clearance.

i. Data lilnk equipped aircraft are not exempt from these procedures. All oceanic clearance, during the times specified, must be verified with Gander Clearance Delivery. However, those aircraft having authorization to do so may verify only the message sequence number.

j. After receipt of oceanic clearance and upon initial contact with Gander Area Control Center on the assigned control frequency, pilots shall confirm receipt of oceanic clearance from Gander Clearance Delivery.

k. Due to expected frequency loading on both clearance delivery and control frequencies, pilots are requested to refrain from unnecessary lengthy debate with respect to oceanic clearance and procedures. Comments and/or complaints should be processed after flight through company operations.

(CA NOTAM 0087/93)

CANARY ISLANDS

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - Includes CANARIAS FIR/UIR and part of WESTERN SAHARA.

DIMENSIONAL UNITS - ICAO Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Same as Regional Procedures.

VISUAL FLIGHT RULES

Same as Regional Procedures.

INSTRUMENT FLIGHT RULES

CANARIAS FIR/UIR: Pilots should use the strategic lateral offset procedure as standard operating practice in the course of normal operations to mitigate collision risk and wake turbulence. Strategic lateral offsets shall be applied only by aircraft with automatic offset tracking capability. There are three positions that an aircraft may fly: centerline, 1 NM right, and 2 NM right. Offsets are not to exceed 2 NM right of centerline. There is no ATC clearance required for this procedure and it is not necessary that ATC be advised.

(SPEC/A1447/05)

CAPE VERDE

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the SAL OCEANIC FIR/UIR.

DIMENSIONAL UNITS - Blue table, except altimeter setting in hectopascal.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

(SPEC/SUP S01-02)

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - The Republic of Cape Verde has implemented the ICAO Annex 11 airspace classifications with the following exceptions;

1. Classes B, D, E and F not yet implemented.

(CL I NOTAM 28/91)

INSTRUMENT FLIGHT RULES

RVSM RULES - For the RVSM requirements within the SAL OCEANIC FIR/UIR see AP/1 Chapter 1, EUR/SAM RVSM Corridor.

(SPEC/SUP S01-02)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

CAPE VERDE HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
National Heores Day	20 Jan
Good Friday	Friday before Easter
Labor Day	1 May
Independence Day	5 Jul
Saint's Day	15 Aug
All Saint's Day	1 Nov

NAME	DATE
Christmas	25 Dec

(SPEC/GEN 2.1-2)

CENTRAL AFRICAN REPUBLIC

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes the BRAZAVILLE FIR and the N'DJAMENA FIR. See Cameroon.

CHAD

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes the BRAZAVILLE FIR and the N'DJAMENA FIR. See Cameroon.

COMORO ISLANDS

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes the ANTANANARIVO FIR. See Madagascar.

CONGO

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes the BRAZAVILLE FIR. See Cameroon.

TERMINAL

TERMINAL PROCEDURES -

1. CONGO - POOL TCA

a. Minimum level for entry FL 50. Minimum level for maneuvering except for approach, landing and missed approach maneuvers, is not authorized below FL 50.

b. AIRCRAFT FROM THE NORTH SECTOR (BRAZZAVILLE) WITH DESTINATION KINSHASA - Unless otherwise instructed, mandatory itinerary will be from VOR ""BZ" to NDB "OK" minimum altitude FL 100. Aircraft will be cleared to contact Kinshasa APP CON before arriving over VOR "BZ". Definite transfer will be made over VOR "BZ" after aircraft has received instructions to proceed from Kinshasa NDB "OK".

c. AIRCRAFT FROM SOUTH SECTOR (KINSHASA) WITH DESTINATION BRAZZAVILLE - Unless otherwise instructed, route will be VOR KSA to VOR BZ. Minimum altitude FL 90. Aircraft will be cleared to contact Brazzaville ACC before arriving over VOR "KSA". Definite transfer will be made over VOR "KSA" after aircraft has received instructions to proceed from Brazzaville VOR "BZ".

(SPEC/ASCENA ENR 2.1-05)

CROATIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes ZAGREBFIR/UIR.

DIMENSIONAL UNITS - Blue Table. Altimeter settings in hectopascals.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard.

INSTRUMENT FLIGHT RULES

FM IMMUNITY - As of 1 Jan 2001, US national aircraft that are not equipped with protected receivers will not be allowed to fly in those areas of the Republic of Croatia where FM emission from radio stations may interfere with the radio navigational devices of aircraft except as follows:

1. ENROUTE - US national aircraft whose navigational equipment conforms to RNP5 can fly without using VOR subject to permission by the Croatian Air Navigation Control Company. US national aircraft equipped with VORTAC and TACAN systems cannot, repeat, cannot be granted navigation use since the Republic of Croatia does not have such means of navigation.

NOTE: Permission from the Croatian Air Navigation Control Company will be obtained using DoD FCG, Croatia, Section 1. Aircraft Clearance Requirements procedures. SFOR mission aircraft are required to use this same guidance.

2. TERMINAL - The use of ILS/VOR procedures without FM immunity is not authorized.

(TFMWG-E/USA 02-0040)

RVSM RULES - The airspace within the FIR ZAGREB between FL 290 and FL 410 inclusive is EUR RVSM airspace.

(SPEC/ENR 1.8-1)

FLIGHT PLANNING

GENERAL AIR TRAFFIC - Application for flight permission to foreign government aircraft overflying or landing within Croatian territory shall be submitted 48 hours in advance to: Ministry of Foreign Affairs Department for Consular Affairs The Republic of Croatia Trg Nikole Subica Zrinjskog 7-810000 Zagreb Telephone: (+385 1) 4569980 Telefax: (+385 1) 4569983 Operational: 0800 - 1530Z++ (Working days only)

(SPEC/AIC A20-96)

1. A flight plan shall be submitted in accordance with ICAO Annex 2, 3.3.1, prior to operating:

a. Any IFR flight.

b. Any VFR flight in airspace class C and D, except flights within controlled zone during daylight.

c. Flights within restricted areas.

d. Flights across the state and/or FIR boundary.

2. Flight plan can be filed either as:

a. Individual flight plan (also as collective flight plan for consecutive flights and also for formation flight);

b. Repetitive flight plan (for IFR flights operated regularly on the same day(s) of consecutive weeks and on at least ten occasions or every day over a period of at least ten consecutive days). In order to process flight plan messages correctly, each flight plan should be sent as a single AFTN message.

3. Time of Submission: Except for repetitive flight plans, a flight plan shall be submitted at least 60 minutes prior to estimated off-block time (EOBT), taking into account requirements of ATS units in the airspace along the route to be flown for timely information. Flight plans for flights into areas subject to Air Traffic Flow Management (ATFM) shall be submitted at least 3 hours before EOBT. A flight plan can be filed more than 24 hours but not more than 144 hours (6 days) in advance of EOBT.

4. Place of Submission: Aircraft operators may file their IFR or IFR/VFR (mixed) flight plans and associated messages directly with IFPS using their own AFTN or SITA access point. If those means are not available, flight plan and associated messages may be submitted at the Air Traffic Services Reporting Office (ARO) at the departure aerodrome. Direct filers take the full responsibility for compliance with all relevant IFPS procedures including complete addressing of their messages. In the case of absence of ARO at the departure aerodrome or in case the ARO is not in operation, a flight plan shall be submitted by telephone or via Telefax to the nearest ARO. ARO service at airports is provided by the local briefing unit or by the local TWR or AFIS.

5. Flight plan may be filed during flight if required by certain circumstances, except for continuing flights after intermediate landing and for flights into foreign countries. The flight plan shall be submitted to the nearest ATS unit in operation or to the ACC.

6. VFR flight plan for alerting service only: An alerting service is, in principle, provided to flights for which a flight plan has been submitted.

7. Contents and form of a flight plan: ICAO flight plan forms are available at ARO and airport offices at uncontrolled aerodromes. The instructions for completing those forms shall be followed. Flight plan item 15 - route shall not contain direct indicator - DCT for the segment of route crossing the FIR border. Insertion of SID and STAR established in FIR Zagreb is compulsory in the route field of the FPL. Flight plans concerning IFR flights need not include FIR boundary estimates.

(SPEC/ENR 1.10-1)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

CROATIA HOLIDAYS

NAME	DATE
New Year	1 Jan
Twelfth-Day	5 Jan
Easter Monday	28 Mar
Labor Day	1 May
Croatian Statehood Day	30 May
Anti-Fascist Struggle Day	22 Jun
National Thanksgiving Day	5 Aug
Assumption	15 Aug
Remembrance	1 Nov
Christmas	25, 26 Dec

(SPEC/GEN 2.1-3)

CYPRUS

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes NICOSIA FIR-UIR.

DIMENSIONAL UNITS - Blue Table except use altimeter setting in hectopascals.

(SPEC/GEN 2.1-1)

VERTICAL SEPARATION - Semicircular.

(SPEC/ENR 1.7-3)

POSITION REPORTING - Standard.

(SPEC/ENR 1.3-3)

VISUAL FLIGHT RULES

AIRSPACE EXCEPION -

1. The REPUBLIC OF CYPRUS has implemented the ICAO Annex 11 airspace classification with the following exception;

a. Classes D, E and F not yet implemented.

(SPEC/ENR 1.4-1)

INSTRUMENT FLIGHT RULES

FM IMMUNITY -

1. From 1 Jan 2001 onwards: Aircraft operating in the Nicosia FIR (LCCC) under IFR rules shall be equipped with ILS and VOR receiving systems meeting Annex 10 immunity criteria except for the following:

a. VFR - Aircraft operating under VFR rules shall not be obliged to carry such systems.

b. ENROUTE - State aircraft not complying with ICAO SARPS may continue flight operations within Nicosia FIR (LCCC)

with the provision that they are equipped with suitable other RNAV receivers meeting RNP-5 for Enroute part of the IFR flight without the use of VOR.

c. TERMINAL - With respect to TCA operations, all international airports are NDB capable. NDB or visual approach recommended. Effective application of the generic method cannot be guaranteed.

(TFMWG-E/AIC A5-01)

ALTIMETER SETTING PROCEDURES - Standard.

(SPEC/ENR 1-7-1)

RVSM RULES - Standard except:

1. For the support of Reduced Vertical Separation Minima program(RSVM) and due to the lack of direct communications between Nicosia ACC and Ankara ACC all aircraft:

2. Proceeding from Nicosia FIR to Ankara FIR shall establish contact with Ankara ACC the latest by NIKAS or BALMA for point VESAR and by MAROS or 10 minutes flying time in advance for point TOMBI.

3. Proceeding from Ankara FIR to Nicosia FIR shall establish contact with Nicosia ACC the latest by point MUT for points VESAR and AYT for point TOMBI.

4. Failure of any aircraft to establish contact with the accepting unit will result in the aircraft being treated as a radio failure and thus causing unnecessary complications in the application of RSVM.

(SPEC/NOTAM A0531/04)

FLIGHT PLANNING

GENERAL AIR TRAFFIC -

1. The entire airspace over the territory of Cyprus including its territorial water is prohibited. Over flying aircraft are restricted within the established airways and, as instructed by Air Traffic Control, within the Control Zones.

(SPEC/ENR 5-1.1)

2. All aircraft entering Nicosia FIR from Ankara FIR (LTAA) shall establish contact with Nicosia ACC (LCCC) at least ten (10) minutes prior to crossing the FIR boundary.

(SPEC/NOTAM A0087/01)

3. Required ATS/MET reporting (AIREP) points:
Lakto (N32°38′ E32°05′E)
Rasda (N33°06′ E30°57′E).

(SPEC/GEN 3.5-3)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

CYPRUS HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
Epiphany Day	6 Jan
Green Monday	7 weeks before Easter
Greek Independence Day	25 Mar
National Day	1 Apr
Good Friday	Fri before Easter
Easter Monday	Mon after Easter
Labor Day	1 May
Whit Monday	7 weeks after Easter
Assumption - Religious Holiday	15 Aug
Independence Day	1 Oct
Greek National Day	28 Oct
Christmas Eve	24 Dec
Christmas Day	25 Dec
Boxing Day	26 Dec

(SPEC/GEN 2.1-3)

CZECH REPUBLIC

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

This entry includes PRAHA Flight Information Region which corresponds to the country boundary of the Czech Republic. The PRAHA Flight Information Region is controlled by the Praha ACC.

(SPEC/ENR 2.1-1)

DIMENSIONAL UNITS - Primary SI Units except:

MEASUREMENT OF	UNITS
1. Distances used in navigation, position reporting, etc.	Nautical miles or Kilometers
2. Altitudes, elevations and height	Feet or meters; always given in feet in relation to the aircraft in flight
3. Horizontal speed including wind speed	Kilometers per hour or knots
4. Vertical Speed	Feet per minute/Meters per second
5. Visibility including runway visual range	Feet, Kilometers or meters
6. Height of cloud base	Feet

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard.

The Czech Republic has implemented ICAO Annexes 2 and 11 airspace classification.

(SPEC/ENR 1.1-1)

AIRSPACE EXCEPTIONS - A Visual Flight Rule Identification Zone 2.7 NM horizontally and below FL 95 (G and E Airspace) exists within the perimeter of the entire border of Czech Republic. Flight inside the zone requires prior permission which must be obtained by telephone from the appropriate local ATC unit. If contacting a local military ATC unit, the service of a Czech translator will be required.(SPEC/ENR 1.2-4)

INSTRUMENT FLIGHT RULES

Standard except as noted.

FM IMMUNITY - The operations of State aircraft from 1 Jan 2001 with regards to FM Immunity requirements are:

1. Enroute Operations - State aircraft may continue to operate in Praha FIR provided they are equipped with suitable RNAV equipment meeting RNP5 standards without the use of VOR.

2. TMA Operations - As of this date of publication, in Praha FIR, no interference problems have been detected and no areas have been identified within the services volumes of ILS and VOR equipment, where interference to less immune aircraft receivers was above the present ICAO limits.

(SPEC/GEN 1.5-1)

3. For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS will operate in the standard TCAS II mode and will not use the enhanced mode when flying in Czech airspace.

(HQ USAFE-DOV/USAF FIL 01-62)

RVSM RULES - As specified in the ICAO EUR Supplementary Procedures.

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC - For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS will operate in the standard TCAS II mode and will not use the enhanced mode when flying in Czech airspace.

(HQ USAFE-DOV/USAF FIL 01-62)

ENROUTE

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			CZECH REPUBLIC				
L984	Bodal NCRP (N49°28′ E15°47′)	058 238	Novum NCRP (N49°34′ E16°04′E)	13	3800	FL 245 3800	ODD EVEN
	Novum NCRP	058 238	Trebova NDB	27	3800	FL 245 3800	ODD EVEN
	Trebova NDB	078 259	Opavo NCRP (N49°54′ E17°47′E)	43	4300	FL 245 4300	ODD EVEN
	Opavo NCRP	079 259	Sopav NCRP (N49°56′ E18°03′)	11	4300	FL 245 4300	ODD EVEN
	Sopav NCRP	086 266	Padka NCRP (N49°56′ E18°17′)	9	2800	FL 245 2800	ODD EVEN
	REMARKS: CDR1. Temporary closed on ATC instructions. Alternate routes M748, W32, T43						
M725	HDO VOR/DME	158 338	Komur NCRP (N50°34′ E14°35′)	23	5000	FL 245 FL 95	ODD EVEN
	Komur NCRP		Lumes NCRP (N50°23′ E14°41′)	11	3900		
	Lumes NCRP		VLM VOR/DME	44	3900		
	REMARKS: CDR1						
M992	Gubko (N50°09′ E17°35′)	267	Anako (N50°09′ E17°06)	19		FL 245 FL 205	EVEN
	REMARKS: CDR1 Route via SOPAV.						
T42	Trebova NDB	128 308	Holesov NDB	44	4000	FL 245 4000	ODD EVEN
	REMARKS: CDR1. Alternate Route on ATC instructions.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
T46	Vlasim VOR/DME	143	Astut CRP (N48°46′ E16°03′)	68	4400	FL 245 4400	ODD
	REMARKS: CDR1. Alternate Route on ATC instructions.						
T48	Domal NCRP (N49°07′ E13°14′)	045	Libsi NCRP (N49°48′ E14°21′)	60	5400	FL 245 5400	ODD
	REMARKS: CDR3.						
T204	Rodux NCRP (N50°56′ E14°37′)	354	Lumes (N50°23′ E14°41′)	33	5000	FL 245 FL 95	EVEN
	REMARKS: CDR1						
Y444	HDO VOR/DME	317	Lembi NCRP (N50°33′ E14°53′)	30	5000	FL 245 FL 95	EVEN
	Lembi NCRP		Bulek NCRP (N50°25′ E15°04′)	11	3600		
	REMARKS: CDR1						
Z33	Adlet CRP (N48°34′ E14°18′)	019 199	VOZ VOR/DME	62	5600	FL 245 FL 130	ODD EVEN
	REMARKS: CDR1 Weekend between 1300Z++ Fri-0800Z++ Mon. Alternate Routes L156, M725 prior request ATC may clear lower to FL 70.						
Z37	Vemut (N49°47′ E12°27′)	121	Vadov (N49°07′ E13°58′)	71		FL 245 FL 95	ODD
	Vadov	125	Budex (N48°56′ E14°20′)	18			
	Budex	125	Gimbo (N48°43′ E14°46′)	22			
	REMARKS: CDR1. Alternate route on ATC instructions.						
UT42	Lales (N48°51′ E17°42′)	313	Dobil (N50°02′ E15°56′)	99		FL 660 FL 245	EVEN
	REMARKS: CDR1. Alternate route via UL602 and UP41.						
UP27	HLV NDB	275	Bodal (N49°28′ E15°47′)	69		FL 285 FL 245	EVEN
	REMARKS: CDR1 Route via UT47, UL726.						
UT48	Domal NCRP (N49°07′ E13°14′)	045	Libsi NCRP (N49°48′ E14°21′)	60	FL 245	FL 660 FL 245	ODD
	REMARKS: CDR3.						
UT993	Anako (N50°09′ E17°06′)	267	Dopov (N50°04′ E13°07′)	154		FL 660 FL 245	EVEN
	REMARKS: CDR3.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL

(SPEC/ENR 3.2-1 thru 3.2-75)

BIRD HAZARD

CZECH REPUBLIC: Migrating and local bird flockspresent some hazard year around to low flying aircraft. Bird activity that may result in increased hazards at airports is reported by NOTAM. The following airports have bird hazards of the type and intensity indicated:

(SPEC/AD2)

AIRPORT	SPRING	FALL	BIRDS
Turany (LKTB)	Feb-May	Aug-Nov	Rook, Gull, Lapwing, Birds of prey, Geese, Pigeon, Starling and Stork
Mosnov (LKMT)	Mar-May	Aug-Oct	Rook, Gull, Lapwing, Starling, Skylark, Pigeon, Swallow
Ruzyne (LKPR)	Feb-May	Aug-Nov	Pigeon, Gull, Rook, Kestrel, Lapwing
Vodochody (LKVO)	Feb-May	Aug-Nov	Types not listed

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

CZECH REPUBLIC HOLIDAYS

(SPEC/GEN 2.1-3)

NAME	DATE
New Year's Day	1 January
Easter Monday	Monday after Easter Sunday
Labour Day	1 May
Bank Holiday	8 May
Bank Holiday	5 July
Bank Holiday	6 July
Bank Holiday	28 September
Bank Holiday	28 October
Bank Holiday	17 November
Christmas Eve	24 December
Christmas Day	25 December
Boxing Day	26 December

DEMOCRATIC REPUBLIC OF THE CONGO

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

Democratic Republic of the Congo services and constitutes the major portion of the KINSHASA FIR/UIR. A minor part of southwestern Democratic Republic of the Congo below FL 245 lies within and is serviced by Luanda ACC/FIC.

(SPEC/RAC 3-1-2)

DIMENSIONAL UNITS - ICAO table except:

1. Horizontal speed including wind speed in kilometers per hour.

2. Winds aloft in degrees magnetic.

(SPEC/GEN 1-14)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard except: KINSHASA FIR/UIR is an IATA in-flight broadcast area. In addition to normal ATS reporting procedures, refer to the Africa regional procedures in the Flight Information Handbook.

VISUAL FLIGHT RULES

Same as Regional Procedures except: Flight plan required.

(SPEC/RAC RAC 1-1)

INSTRUMENT FLIGHT RULES

Same as Regional Procedures.

FLIGHT PLANNING

1. A valid flight plan must be on file with KINSHASA ACC or LUBUMBASHI ACC at least 30 minutes prior to entering the FIR.

(SPEC/AIP RAC 1-2)

2. All aircraft must follow the exact heading, flight level, and airspeed assigned by ACC except as needed for flight safety or in an emergency.

(SPEC/SUP 3022-99)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. The lower limit for ATS routes UG655, UA607, and UA618 are set at FL 310.

2. Aircraft operating on ATS routes UA618 and UB12 shall maintain:

   a. In a South-North direction: from FL 310, even flight levels.

   b. In a North-South direction: from FL 330, odd flight levels.

(SPEC/SUP 3007-00)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

DEMOCRATIC REPUBLIC OF THE CONGO HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
Day of the Martyrs of Independence	4 Jan
Labor Day	1 May
Zaire Day	24 Jun
Independence Day	30 Jun
Parents' Day	1 Aug
President's Birthday	14 Oct
Day of the 3 Z's	27 Oct
Armed Forces Day	17 Nov
Anniversary of the New Regime	24 Nov
Christmas	25 Dec

(SPEC/GEN 1-16)

DENMARK

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes COPENHAGEN FIR. Also includes BORNHOLM ISLAND and RONNE TCA.

DIMENSIONAL UNITS - Blue Table except civil use altimeter setting in hectopascals, and military use feet for relatively short distances, altimeter setting in hectopascals or inches of mercury, and weight is in pounds.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard except:

1. The lowest QNH shall be used for flight at or below 3000' MSL within that part of the Copenhagen FIR west of E08°00' and that part of the Danish continental region situated within the Scottish FIR.

(SPEC/MIL ENR 1.7.1)

2. QNH values are given in hectopascal rounded down to the nearest whole hectopascal.

(SPEC/NIL ENR 1.7.2)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard except:

1. DENMARK has implemented the ICAO Annex 11 airspace classifications with the exception, Class F and G: At or below 3000' MSL or 1000' above terrain, whichever is higher, aircraft may operate in flight visibility not less than 1.6 NM, clear of clouds and in sight of the surface, if the speed is 140 KIAS or less.

a. Aircraft established in the airport traffic pattern may operate with a flight visibility of not less than 0.8 NM, clear of cloud and in sight of the airport.

b. Helicopters may operate in flight visibility of not less than 0.4 NM, if maneuvered at a speed that will give adequate opportunity to observe other traffic or any obstacle in time to avoid collision.

(SPEC/GEN 1.7-2)

2. Enroute VFR flights shall not be flown above FL 195 in Class C airspace.

(SPEC/ENR 1.2-1)

INSTRUMENT FLIGHT RULES

Standard except as noted.

FM IMMUNITY - The Civil Aviation Administration Denmark, in coordination with the Danish Telecom Agency, allow non-FM immune US state aircraft, and those civilian aircraft contracted to operate for the US, to operate under instrument flight rules (IFR) in the airspace of Copenhagen FIR, Denmark; and Sondrestrom FIR, Greenland until 31 DEC 2006 on the following conditions:

(USAASD-E/USA 06-0004))

1. Enroute:

a. Aircraft are capable of meeting RNP/5 NM without the use of VOR.

b. Aircraft with only one RNP/5 compliant nav-system shall be equipped with TACAN.

c. Relevant equipment shall be identified to the crew as "non-FM immune".

d. Only use of the TACAN part of VORTAC is allowed.

(TFMWG-E/USA 02-0041)

2. Terminal Area Operations: State aircraft equipped with non-FM interference immune VOR/ILS equipment shall restrict their operations in Ronne TCA and TCAS within Copenhagen FIR to VMC, or to aerodromes with approved and published procedures for NDB, PAR, Aerodrome Surveillance Radar/ASR or TACAN approach.

(TFMWG-E/USA 03-0007)

RVSM RULES - Standard.

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC -

1. For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS version 6.04 may use their E-TCAS in the enhanced mode when flying in Danish airspace until 30 September 2004, or until permission to use ACAS II (Ver 7.0) is withdrawn.

a. Tanker aircraft operating E-TCAS versions 6.04 in the enhanced mode while flying in Danish airspace will follow these restrictions:

(1) No more than two tanker aircraft will operate E-TCAS when flying in formation below 18,000 feet.

(2) No more than three tanker aircraft will operate E-TCAS when flying in formation above 18,000 feet.

b. Other aircraft or formations will not operate E-TCAS in the enhanced mode while flying within 10 NM of another E-TCAS formation at any altitude.

(HQ USAFE-DOV/USAF FIL 01-62)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. Foreign Air Stations planning to overfly Denmark on navigational flights later that 1500Z are to send their flight plans early enough to be received at Copenhagen ACC (EKDKZQZM for IFR flights/EKDKZFZM for VFR flights) before 1300Z. (Night VFR flights with foreign military aircraft are not allowed over Danish territory). For flights on Sat, Sun, and Danish public holidays, flight plans shall be sent early enough to be received by Copenhagen ACC before 1300Z the previous working day.

(SPEC/MIL ENR 1.1-1)

SUPERSONIC FLIGHT - Supersonic flight with foreign military aircraft will not be allowed over Danish territory except when participating in NATO exercises in which case specific regulations will be stipulated for each individual exercise or when foreign military aircraft under operational control of Commander Tactical Air Command Denmark operates from a Danish air station where national regulations apply.

(SPEC/MIL ENR 1.1-1)

FLIGHT HAZARDS

OVER FLIGHT OF NUCLEAR REACTORS AND HIGH RISK INDUSTRIAL PLANTS - COLD

FLARING - Air traffic is advised to pass installations from which "Cold Flaring" is taking place at a lateral distance of 3 NM or more, at an altitude of 3000 Ft MSL or above. Actual information about "Cold Flaring" may be obtained from THYRA AFIS on frequency 123.45. Operating hours are as follows:
Winter Daily: 0500-2100Z Sat-Sun: 0500-0900Z and 1400-2100Z
Summer Daily: 0400-2000Z Sat-Sun: 0400-0800Z and 1300-2000Z

(SPEC/MIL ENR 5.3-1)

GLIDING AND PARACHUTING - Military/civil gliding and military parachuting may be conducted anywhere.

(SPEC/MIL ENR 5.5-1 and 5.5-2)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. LOW ALTITUDE AIRWAYS - Listed by alphanumeric designation.

L621 - Aalborg VORTAC-Kulud: Not available for destination within Copenhagen Area. Traffic to destination within Copenhagen area shall flightplan via UT54/T54. Kulud-Norti: Not available for traffic departing Copenhagen Area. Traffic departing EKCH shall flightplan via SID Sorga or Mirgo. Traffic departing other aerodromes within Copenhagen Area shall flightplan via Ratbi. L983 - Vesta VOR/DME - Codan VOR/DME: RNAV operations only.

M602 - Not available for traffic to EKCH. Traffic to EKCH shall file via T299.

M725 - Not available for traffic to EKCH. Traffic to EKCH shall file via T299.

M726 - Only for traffic to EKCH.

M852 - Traffic destination Goteborg TCA or overflying Goteborg TCA below FL 245 shall flightplan via Alsie-P615-Radis-N873-Backa. Alsie-Vadin: RNAV operations only.

N872 - Dobel - Alsie VOR: Not available for traffic departing from aerodromes within Copenhagen Area.

N873 - Vesta VOR/DME - Lobbi: RNAV operations only.

P601 - RNAV operations only.

P602 - RNAV operations only.

P615 - Artor - Aalborg: Aircraft departing ENGM are to flight plan via T551.

Q280 - Only for traffic to/from EDBH, ETNL and ETNU.

T51 - RNAV operations only.

T53 - Only for destinations within Copenhagen Area.

T54 - Tespi - Trano VOR/DME: Only for destinations within Copenhagen Area.

T55 - Tespi - Trano VOR/DME: Only for destinations within Copenhagen Area.

T56 - Vesta VOR/DME - Abino: Not available for destinations within the Copenhagen Area. Abino - Trano VOR/DME: Only for destinations within Copenhagen Area.

T57 - Only for destination EKCH.

T58 - Only for departures within Copenhagen Area except EKCH.

T59 - Ketal-Korsa VOR/DME: Only for traffic with destinations within Copenhagen Area except EKCH.

T299 - Only for traffic to EKCH.

T510 - Odin VOR/DME - Korsa VOR/DME - Alma VOR: Available for single engine aircraft at 4000 MSL only. Orsun - Alma VOR: File direct.

Z32 - Eastbound traffic: Only for destinations in Denmark, ESMT and ESTA. ALTN for traffic beyond Tobmi: Alsie-P615-Radis-N873-Backa.

2. HIGH ALTITUDE AIRWAYS - Listed by alphanumeric designation.

UL621 - Aalborg VORTAC-Kulud: Not available for destination within Copenhagen Area. Traffic to destination within Copenhagen area shall flightplan via UT54/T54. Kulud-Norti: Not available for traffic departing Copenhagen Area. Traffic departing EKCH shall flightplan via SID Sorga or Mirgo. Traffic departing other aerodromes within Copenhagen Area shall flightplan via Ratbi.

UM602 - Not available for traffic to EKCH. Traffic to EKCH shall file via UT299/T299.

UM725 - Not available for traffic to EKCH. Traffic to EKCH shall file via UT299/T299.

UM726 - Only for traffic to EKCH.

UM852 - Traffic with destination EDDH shall cross Alsie VOR FL 240 or below. Traffic destination Goteborg TCA flightplan via Alsie VOR-UP615-Radis-UN873-Baca.

UN607 - Traffic with destination Goteborg TCA shall cross Makur FL 240 or below.

UN850 - Traffic with destination EDDH shall cross Bagos FL 240 or below.

UN872 - Dobel - Alsie VOR: Not available for traffic departing from aerodromes within Copenhagen Area: EKAL, EKCH, EKGH, EKHK, EKRK, EKRS, EKVL.

UN873 - Traffic with destination within Goteborg TCA shall cross Lobbi FL 240 or below.

UP615 - Traffic with destination EDDH shall cross Alsie VOR FL 240 or below. ARTOR - AAL: Aircraft departing ENGM are to flight plan via UT551.

UP729 - Only for destinations in Denmark, ESMT, and ESTA or proceeding Talsa - UP730 - Codan VOR/DME.

UT53 - Only for destinations within Copenhagen Area.

UT54 - Tespi - Trano VOR/DME: Only for destinations within Copenhagen Area.

UT55 - Tespi - Trano VOR/DME: Only for destinations within Copenhagen Area.

UT56 - Vesta VOR/DME - Abino: Not available for destinations within the Copenhagen Area. Abino - Trano VOR/DME: Only for destinations within Copenhagen Area.

UT57 - Only for destination EKCH.

UT59 - Ketal - Korsa VOR/DME: Only for traffic within Copenhagen Area except EKCH.

UT299 - Only for traffic to EKCH.

UT503 - Traffic with destination EDDH shall cross Gimru FL 240 or below.

UZ700 - Not for destinations within Copenhagen Area. Traffic shall flightplan via Talsa - UP729/P729 or UP605/P605 - Gedser VOR - UT57/T57.

UZ702 - Only for destinations in Denmark, Halmstad/Sweden (ESMT) and Angelholm/Sweden (ESTA) or proceeding Talsa-UP730-CDA.

UZ709 - Not available for traffic originating from EKBI, EKEB, and EKVJ.

(SPEC/ENR 3)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			DENMARK				
L975	Golum NCRP (N55°27′ E05°17′)	084T 266T	VES VOR/DME	103		FL 245 FL 195	ODD EVEN
	CONTROL: Copenhagen Control NOTE: CDR1 - H24 ALTN ROUTE: VES-N581-Amram-N866-Golum						
	ODN VOR/DME	094T 275T	ODN25 NCRP (N55°33′ E11°24′)	25		FL 245 3500	ODD EVEN
	ODN25 NCRP		Kokak NCRP (N55°29′ E12°43′)	45		FL 245 FL 95	
	Kokak NCRP		Nislo NCRP (N55°29′ E12°53′)	6			
	CONTROL: Copenhagen Control NOTE: CDR3 - ODN-Nislo below FL 195						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
M611	Odaru NCRP (N55°06′ E12°46′)	247T 067T	Codan VOR/DME	14		FL 245 3500	EVEN ODD
	CONTROL: Copenhagen Control. NOTE: CDR1. ALTN ROUTE: Kolja-M864-ROE-L983-CDA.						
M726	Nikda NCRP (N54°37′ E12°17′) Monak NCRP	003T 034T	Monak NCRP (N54°57′ E12°19′) CDA VOR/DME	20.3 4		FL 245 3500	EVEN
	CONTROL: Copenhagen Control NOTE: CDR1- H24						
N850	Remko NCRP (N55°59′ E12°47′) Golmi NCRP (MIC63) NCRP	216T 211T 211T	Golmi NCRP (N55°47′ E12°31′) (MIC63) NCRP (N55°12′ E11°55′) Marip NCRP (N54°43′ E11°25′)	16 40 44		FL 195 FL 95 FL 195 3500	ODD
	CONTROL: Copenhagen Control NOTE: CDR3 - Remko-Marip below FL 195 ALTN ROUTE: Rasmu-Misma-Z32-Kelom-T51-Kopex-T504-Marip or Rasmu-Misma-Z32-ALS-P615-LBE or Rasmu-Misma-Z32-ALS-M852-HAM						
N851	Gedser VOR (GES41) NCRP Lebda NCRP Mosin NCRP	028T 028T 028T 028T 208T	(GES41) NCRP (N55°13′ E12°29′) Lebda NCRP (N55°22′ E12°38′) Mosin NCRP (N55°33′ E12°48′) Gorax NCRP (N55°48′ E13°02′)	41 10 12 17		FL 125 3500 FL 125 FL 95 	ODD ODD EVEN
	CONTROL: Copenhagen Control NOTE: CDR3 - GES-Gorax below FL 125 ALTN ROUTE: GES-P605-ALM-M736-Nexil						
N872	Sveda VOR/DME Kopim NCRP Lasgi NCRP Narol NCRP	230T 230T 230T 230T	Kopim NCRP (N56°08′ E12°30′) Lasgi NCRP (N56°07′ E12°27′) Narol NCRP (N56°00′ E12°14′) Dobel NCRP (N55°36′ E11°23′)	3 2 10 37		FL 195 FL 95	EVEN
	CONTROL: Copenhagen Control NOTE: CDR3 - SVD-Dobel below FL 195 ALTN ROUTE: Misma-Z32-ALS						
P615	Aalborg VORTAC	004T 184T	Artor NCRP (N58°20′ E10°09′)	74		FL 245 3500	ODD EVEN
	CONTROL: Copenhagen CON NOTE: CDR1 - Aalborg - Artor ALTN ROUTE: Aalborg - M725 - Lavko direct Torp						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
P992	Attus NCRP (N54°54′ E08°47′)	339T 158T	Vesta VOR/DME	45		FL 245 3500	ODD EVEN
	CONTROL: Copenhagen CON NOTE: CDR1 - 1100Z++ Fri-0700Z++ Mon; and between 2300Z++ Mon-0600Z++ Fri, daily 2300Z++-0600Z++. CDR2 ALTN ROUTE: Elbe-P615-Alsie direct Vesta.						
P999	Amrak NCRP (N54°49′ E09°45′)	060T 240T	Alsie VOR	10		FL 245 3500	ODD EVEN
	CONTROL: Copenhagen CON NOTE: CDR1 - FL 80-FL 100 and FL 210-FL 240 H24. FL 110-FL 200 1100Z++ Fri-07 00Z++ Mon; and between 2300Z++ Mon-0600Z++ Fri, daily 2300Z++-0600Z++. CDR2 - FL 110-FL 200 outside said hours.						
T50	Skrydstrup VOR/DME	172T 352T	Lunud NCRP (N54°48′ E09°19′)	26		FL 245 3500	ODD EVEN
	CONTROL: Copenhagen CON NOTE: CDR1 - FL 80-FL 240. 1100Z++ Fri-0700Z++ Mon; and between 2300Z++ Mon-0600Z++ Fri, daily 2300Z++-0600Z++. CDR2 - At other times. ALTN ROUTE: SKR-ALS-P615-LBE.						
T505	Mirgo NCRP (N56°02′ E12°00′) Tiska NCRP	337T 288T	Tiska NCRP (N56°09′ E11°55′) Miksi NCRP (N56°12′ E11°35′)	7 12		FL 245 3500	EVEN
	CONTROL: Copenhagen CON NOTE: CDR1 - Mirgo-Miksi ALTN ROUTE: Sorga-T501-Miksi						
T506	Mirgo NCRP (N56°02′ E12°00′) Tiska NCRP	337T 337T	Tiska NCRP (N56°09′ E11°55′) Norti NCRP (N56°31′ E11°38′)	7 25		FL 245 3500	EVEN
	CONTROL: Copenhagen Control NOTE: CDR1 - Mirgo-Norti ALTN ROUTE: Sorga-T501-Aalborg						
T551	Binro NCRP (N58°10′ E09°47′)	174T	Aalborg VORTAC	64		FL 245 3500	EVEN(S) (S)
	CONTROL: Copenhagen CON NOTE: CDR1. ALTN ROUTE: Skien - P602 - Lavko - M725 - Aalborg						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Z32	Rokam NCRP (N55°19′ E12°11′)	229.9T	Tobmi NCRP (N56°16′ E12°04′)	5.3		FL 245 3500	EVEN
	Tobmi NCRP	229.9T 048.8T	Kelom NCRP (N55°50′ E11°10′)	39.3			EVEN ODD
	Kelom NCRP	229.9T 048.8T	ODN VOR/DME	23.1			
	ODN VOR/DME	209.4T 028.8T	ALS VOR	46.4			
	CONTROL: COPENHAGEN CONTROL NOTE: CDR1 - Rokam-ODN all levels. ALTN ROUTE: Rokam-TNO-ALS, or for traffic via Kelom-T51: Rokam-TNO-Kopex.						
UL975	VES VOR/DME	266T 084T	Golum NCRP (N55°27′ E05°17′)	103		FL 460 FL 245	EVEN ODD
	CONTROL: Copenhagen Control NOTE: CDR1 - H24 ALTN ROUTE: VES-UN581-Amram-UN866-Golum						
	Lesra NCRP (N55°23′E05°00′)	248T 068T	Input NCRP (N55°18′ E04°39′)	13		FL 460 FL 245	EVEN ODD
	Input NCRP	248T	Ropal NCRP (N55°08′ E03°57′)	26		FL 660 FL 245	EVEN
	CONTROL: Copenhagen Control NOTE: CDR1 - 1800-0700Z++. CDR3 -Outside said hours.						
UM83	Petil NCRP (N55°56′ E05°00′)	286T 105T	Rekna NCRP (N56°10′ E03°30′)	52		FL 660 FL 245	ODD EVEN
	CONTROL: Copenhagen Control NOTE: CDR1						
UM611	Odaru NCRP (N55°06′ E12°46′)	247T 067T	Codan VOR/DME	14		FL 460 FL 245	EVEN ODD
	CONTROL: Copenhagen Control. NOTE: CDR1 - Kolja-CDA ALTN ROUTE: Kolja-UM864-ROE-UL983-CDA.						
UM726	Nikda NCRP (N54°37′ E12°17′)	003T	Monak NCRP (N54°57′ E12°19′)	20.3		FL 460 FL 245	EVEN
	Monak NCRP	034T	CDA VOR/DME	4			
	CONTROL: Copenhagen Control NOTE: CDR1- H24						
UN581	Elsan NCRP (N56°42′E03°44′)	103T 284T	Vaxit NCRP (N56°32′ E05°00′)	43		FL 660 FL 245	ODD EVEN
	CONTROL: Copenhagen Control NOTE: CDR1 - H24						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UP615	Aalborg VORTAC	004T 184T	Artor NCRP (N58°20′ E10°09′)	74		FL 460 FL 245	ODD EVEN
	CONTROL: Copenhagen Control NOTE: CDR1. ALTN ROUTE: AAL-UM725-Lavko-TOR.						
UT505	Mirgo NCRP (N56°02′ E12°00′) Tiska NCRP	337T 288T	Tiska NCRP (N56°09′ E11°55′) Miksi NCRP (N56°12′ E11°35′)	7 12		FL 460 FL 245	EVEN
	CONTROL: Copenhagen CON NOTE: CDR1 - Mirgo-Miksi ALTN ROUTE: Sorga-UT501-Miksi						
UT506	Mirgo NCRP (N56°02′ E12°00′) Tiska NCRP	337T	Tiska NCRP (N56°09′ E11°55′) Norti NCRP (N56°31′ E11°38′)	7 25		FL 460 FL 245	EVEN
	CONTROL: Copenhagen CON NOTE: CDR1 - Mirgo-Norti NOTE: Sorga-UT501-Aalborg						
UT551	Binro NCRP (N58°10′ E09°47′)	174	Aalborg VORTAC	64		FL 460 FL 245	EVEN
	CONTROL: Copenhagen CON NOTE: CDR1 - Binro-Aalborg ALTN ROUTE: Skien - UP602 - Lavko - UM725 - Aalborg						
UZ700	Giter NCRP (N54°39′ E11°00′)	065T	Codan VOR/DME	52		FL 460 FL 245	ODD
	CONTROL: Copenhagen Con NOTE: CDR1 - 1900Z++ Fri to 0700Z++ Sat and 1300Z++ Sat to 0700Z++ Mon. CDR2 - FL 310-FL 450 (FL 250-FL 290 not available). ALTN ROUTE: UP729 - Talsa - UP730 - Codan						
UZ701	Codan VOR/DME (N55°00′ E12°23′)	244T	Gobot NCRP (N54°37′ E11°05′)	50		FL 460 FL 245	EVEN
	CONTROL: Copenhagen CON NOTE: CDR 1 -1900Z++ Fri to 0700Z++ Sat and 1300Z++ Sat to 0700Z++ Mon daily. CDR 2 -FL 300-FL 450 (FL 250-FL 290 not available). ALTN ROUTE: CDA-UM611-ALS-UN872						
UZ702	Medel NCRP (N54°50′ E09°14′)	043T	Talsa NCRP (N55°06′ E09°41′)	23		FL 460 FL 245	ODD
	CONTROL: Copenhagen CON NOTE: CDR1 - 1100Z++ Fri to 0700Z++ Mon. 2300Z++ Mon to 0600Z++ Fri. 2300Z++ to 0600Z++ daily. CDR2 - FL 310-FL 450 (FL 250-FL 290 not available). ALTN ROUTE: UN873 - Juist-UP729-Talsa						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ703	Alsie VOR	223T	Kesur NCRP (N54°50′ E09°53′)	5		FL 460 FL 245	EVEN
	CONTROL: Copenhagen CON. NOTE: CDR1 - 1100Z++ Fri-0700Z++ Mon, 2300Z++ Mon-0600Z++ Fri, 2300Z++-0600Z+ + daily. CDR2 - FL 300-FL 450 (FL 250-FL 290 not available). ALTN ROUTE: UN873						
UZ704	Amanda NCRP (N55°00′ E06°21′)	021T	Kopin NCRP (N57°15′ E07°59′)	146		FL 460 FL 245	ODD
	CONTROL: Copenhagen CON NOTE: CDR1 - 1100Z++ Fri-0600Z++ Mon, 2300Z++ Mon-0600Z++ Fri, 2300-0600Z++ daily. CDR2 ALTN ROUTE: UN873 - VES - UP601 - TOR						
UZ705	Kopin NCRP (N57°15′ E07°59′)	203T	Amada NCRP (N55°00′ E06°21′)	146		FL 460 FL 245	EVEN
	CONTROL: Copenhagen CON NOTE: CDR1 - 1100Z++ Fri-0600Z++ Mon, 2300Z++ Mon-0600Z++ Fri, 2300-0600Z++ daily. CDR2 ALTN ROUTE: SKI - UP602 - UN873 - Juist - UA7 - EEL - UN872 - PAM						
UZ706	Kokor NCRP (N54°28′ E11°41′)	042T	Gedser VOR	13		FL 460 FL 245	EVEN
	CONTROL: Copenhagen CON NOTE: CDR1 - H24						
UZ708	Kugal NCRP (N55°00′ E07°37′)	032T	Vesta VOR/DME	43		FL 460 FL 245	ODD
	CONTROL: Copenhagen CON NOTE: CDR1 - 1100Z++ Fri to 0700Z++ Mon. 2300Z++ Mon to 0600Z++ Fri. 2300Z++ to 0600Z++ daily. CDR2 - FL 310-FL 450 (FL 250-FL 290 not available). ALTN ROUTE: Helen-UN873 - VES						
UZ709	Vesta VOR/DME	210T	Lanul NCRP (N55°00′ E07°42′)	42		FL 460 FL 245	EVEN
	CONTROL: Copenhagen CON NOTE: CDR1 - 1100Z++ Fri-0700Z++ Mon, between 2300Z++ Mon-0600Z++ Fri, 2300Z+ +-0600Z++ daily. CDR2 - FL 300-FL 450 (FL 250-FL 290 not available). ALTN ROUTE: VES - UN873 - Juist - UA7 - EEL - UR1 - UB31						
UZ710	Vesta VOR/DME	173T 353T	Lutir NCRP (N55°04′ E08°25′)	33		FL 460 FL 245	ODD EVEN
	CONTROL: Copenhagen CON. NOTE: CDR1 - 1100Z++ Fri-0700Z++ Mon, between 2300Z++ Mon-0600Z++ Fri, 2300Z ++-0600Z++ daily. CDR2 - FL 300-FL 450 (FL 250-FL 290 not available). ALTN ROUTE: VES-UP992-LBE-UA9-WRB						

TERMINAL

NOISE ABATEMENT PROCEDURES -

COPENHAGEN NOISE ABATEMENT - On approach to Kastrup (EKCH), jet aircraft may not overfly greater Copenhagen lower than 2500′ and propeller aircraft lower than 1500′ until final approach.

(SPEC/AD2-EKCH-13)

AERIAL REFUELING

AERIAL REFUELING TRACKS/ANCHOR AREAS - See Chapter 2, Section B, AERIAL REFUELING TRACKS/ANCHOR AREAS for Chart.

AREA	ARIP	ARCP/ ANCHOR	AR FREQ	AR BLOCK	AR ALT	ATC CONTROL
DENMARK						
HANNA (Track)	SKR TACAN	SKR 299/54		FL 240/260		COPENHAGEN CONTROL 362.75

NAVIGATION CHECK POINTS: DHE 002/75 (N55°26′ E07°59′), DHE 002/155 (N56°46′ E08°04′).
SPECIAL INSTRUCTIONS: Track is on 002° radial, 75-155 NM, left hand turns; remain west of Airway UN873. Tanker must remain within Copenhagen FIR.

(DA MILAIP ENR 1)

TELEPHONE CONTACTS

THE APPROPRIATE OFFICES SHOULD BE CONTACTED BY USAF MILITARY USERS TO RESERVE AIR REFUELING TRACKS OR ANCHOR AREAS IN THE FOLLOWING COUNTRIES:

DENMARK: Copenhagen Military ATC - Commercial (45) 3251-6611 (request extn. 8255 or Watch Supervisor).

NOTE: DOD Users - to reserve Air refueling corridors in Italy and Greece, contact the European Central Altitude Reservation Facility (EUCARF) via: E-mail: eucarf@ramstein.af.mil, Military message: EUCARF RAMSTEIN AB GE, ICAO Aeronautical Fixed Telecommunications Network (AFTN): EDDFYXYR, DSN: 480-7346/7839 Fax: 9855 Commercial: (49) 6371-47-7346/7839 Fax: 9855.

NOTE: For information concerning Altitudes Reservations, contact: EUCARF.

NOTE: In areas designated as permanently available for Air-to-Air Refueling (AARA), the amount of warning concerning refueling operations can be so minimal as to preclude notification by normal methods. However, the units listed under ATC control column will be able to advise pilots on activity status in appropriate (AARAs). Where Air-to-Air Refueling Areas conflict with Airways, Advisory Routes or Upper Air Routes, civil/military coordination procedures are applied to minimize disruption to the plan flight profiles or the aircraft concerned.

(AFFSA/XOIA FIL 96-99)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for Charts.

DENMARK - The information shown represents a composite of concentration over Denmark and surrounding waters for the entire year. Migrations occur the entire year and culminate in periods from the end of March to Mid-May and September to Mid-November; at least a million birds passing during autumn. Species most hazardous to aircraft are starlings, thrushes, and finches; also crow, ducks, gulls, waders, pigeons, and birds of prey. Migration altitudes are 3000′-5000′ by night, 1000′-3000′ by day.

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

DENMARK HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
Maundy Thursday	Thu before Easter
Good Friday	Fri before Easter
Easter Monday	Mon after Easter Sun
Prayer Day	Fourth Fri after Easter Sun
Ascension Day	Sixth Thu after Easter
Whit Monday	Mon after Whit Sun
Constitution Day	5 Jun
Fri after Ascension Day	Sixth Fri after Easter
Christmas and New Year	23 thru 31 Dec

(SPEC/GEN 2.1-2 and MIL GEN 2.2-2)

OTHER -

1. FORMATION FLIGHTS - Aircraft will not be flown in formations of more than eight aircraft.

(SPEC/GEN 1.2-1).

2. USE OF AFTERBURNER - Afterburner use is prohibited except:

a. Emergencies.

b. During take-off, touch-and-go, and go-around.

c. During climb after take-off, touch-and-go or go around.

d. When climbing to altitude below 5000', the afterburner has to be cut at 350 KT or when reaching altitude.

(SPEC/MIL ENR 1.1-1)

DJIBOUTI

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes DJIBOUTI, SEE ETHIOPIA FOR ADDIS ABABA FIR information.

DIMENSIONAL UNITS - ICAO Table except altimeter settings in hectopascals.

(SPEC/DJ AIP GEN 1-06)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard, except Djibouti - All aircraft at any altitude must contact Djibouti APP on 121.1 or 122.10 MHz at least 10 minutes prior to estimated time of entry of Djibouti airspace. They must also at 80 NM of DTI VOR, set squawk A2000 for overflight or A4300 for landing at Djibouti airport. Due to the prevailing situation in the sub-region, all operators are reminded for their safety to fully and strictly comply with the above instructions.

(SPEC/NOTAM A0030/05)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. Djibouti has implemented ICAO Annex 11 airspace classification with the following exceptions:

(SPEC/DJ RAC 1-03)

a. Flight Plan required for all VFR flight outside the Djibouti/Ambouli Control Zone.

b. Night flight permitted with regard to airport, route weather, crew certification, and flight plan.

c. Except for takeoff and landing, maintain an altitude of at least 500' above the highest obstacle that may be encountered. Overfights of Djibouti City below 3300' MSL is prohibited. Overfights of towns or other gathering of people at less than 1000' AGL is prohibited.

d. Special VFR within the Djibouti/Ambouli Control Zone approved on a not to interfere basis.

INSTRUMENT FLIGHT RULES

Djibouti has implemented ICAO Annex 11 airspace classification.

(SPEC/DJ RAC 1-03)

ENROUTE

1. The following ATS routes are closed within the Djibouti airspace UR993/R993 between DTI VOR/RAGAS and UR775/R775 between DTI VOR/MANDA.

2. Northern Traffic in and out of Djibouti airport must use PARIM or TORBA waypoints.

3. Overflying traffic must use the alternate route PARIM abeam DTI direct HARGEISA and vice versa.

(SPEC/NOTAM A0071/05)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

DJIBOUTI HOLIDAYS

NAME	DATE
New Year	1 January
Id Al Adaha (3 days)	10, 11, 12 January
New Year Musluman	20 January
Birth Day of the Prophet Mohammed	10 April
International Labor Day	1 May
Independence (2 days)	27, 28 June
Al Isra (Al Miraj)	22 August
Id Al Fater (2 days)	23, 24 October

NOTE: Dates may vary according to the lunar calendar.

(SPEC/DJ AIC 001/A/2006)

EGYPT

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes EGYPT, CAIRO FIR, and adjacent international waters.

DIMENSIONAL UNITS - Non-SI alternative except short distances in meters, altimeter setting in hectopascals, and weight in metric tons or kilograms.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

(SPEC/ENR 1.8-1)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Standard except VFR flight shall not be operated above FL 150.

(SPEC/ENR 1.2-1)

INSTRUMENT FLIGHT RULES

1. EGYPT has implemented the ICAO Annex 11 airspace classification with the following exception:

a. Class C, E, F and G not yet implemented.

(SPEC/ENR 1.4-1)

RNAV PROCEDURES -

1. All of Cairo FIR above FL 195 is designated as RNP5 airspace with the following exception of: that airspace south of N28°00′ and west of E29°00′. Aircraft operating within Cairo RNP5 airspace are required to be certified for RNP operations. Non-RNAV equipped aircraft and RNAV equipped aircraft not certified for RNP5 operations may operate within Cairo RNP5 airspace provided they are only operated on published ATS routes that are defined by VOR/DME navigation (non-RNAV routes).

(SPEC/ENR 2.2-1)

RVSM RULES -

1. The airspace in the Cairo Fir between FL 290 and FL 410 inclusive within the whole Cairo FIR, except the route R2 portion between ATMUL (Cairo/Khartoum boundary) to DITAR (Cairo/Tripoli boundary). NON-RVSM compliant aircraft that intended to operate within this RVSM airspace will not be permitted.

2. Transition areas and procedures for transition from non-RVSM to RVSM airspace, within the Cairo FIR are as follows:

a. Cairo FIR RVSM Transition Area adjacent to the Khartoum FIR non-RVSM airspace: is that airspace between FL 290 and FL 410 inclusive, contained within the confines of the following airways:

B12: Between NUBAR and El-Kharga and

A451: Between ALEBA and 10 minutes before LXR

b. Cairo FIR RVSM Transition Area adjacent to the Tripoli FIR non-RVSM airspace: is that airspace between FL 290 and FL 410 inclusive, contained within the confines of the following airways:

UM999: Between DITAR and NAKDO

W615 - Between BOMOR and NAKDO

A411 - Between LOSUL and SIDI BARRANI

(SPEC/ENR 1.15-1)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. Flight plans shall be submitted at least 60 minutes prior to estimated off-block time except for those flights destined to or overflying areas of daily restrictions imposed by CFMU in the European Region. These flight plans shall be submitted at least 3 hours prior to estimated off-block time.

2. IFR flight plans along ATS routes need not include FIR boundary estimates.

3. Flight plans deviating from the published ATS route structure are not permitted without prior permission from Cairo ATC.

(SPEC/ENR 1.10-1)

SUPPLEMENTARY AIRPORT INFORMATION -

Cairo Intl (HECA)

1. NOISE ABATEMENT (FAN JET AIRCRAFT):

a. Low drag, low power approach:
IFR flight should be conducted in clean configuration as long as possible unless otherwise instructed. Aircraft should maintain 250 KIAS below FL 100. Speed should be reduced continuously so as to reach 170 KIAS shortly prior to 5 NM from any runway threshold. These speed restrictions should be maintained within a tolerance of 261 10 kt and are compulsory, except when ceiling is below 500′ and/or ground visibility is less than 2 km. Pilots unable to comply should advise ATC.

b. Landing - Idle reverse thrust is recommended during landing.

c. Departures:

(1) Takeoff to 1800′ MSL: Takeoff power, takeoff flaps, climb at V2 + 10 to 20 kt (or as limited by body angle).

(2) At 1800′ MSL: Reduce thrust to not less than climb power.

(3) 1800′ to 3300′ MSL: Climb at V2 + 10 to 20 kt (or as limited by body angle).

(4) At 3300′ MSL: Accelerate with flap retraction on schedule to enroute climb 250 kt below FL 100.

(SPEC/AD2-HECA-6 and 7)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

A1 - Bi-directional available from AXD to CVO below FL 255.

A145

a. Only Southeast bound, BRN-KHG above FL 255.

b. Kunak intersecting A145 at or above FL 195.

c. Westbound available for traffic departing Jeddah FIR and for traffic overflying LUXOR-BOMAR-DITAR.

d. Northwest bound btn KGH-BRN only for traffic to Tripoli FIR via LOSUL.

A411

a. Only Eastbound from FYM-CVO, above FL 255.

b. Only Westbound from SHM-MENLI, above FL 255.

c. Bi-directional available only between CAIRO-MENLI above FL 255.

d. Available for traffic departing SHARM EL SHEIKH to WEJ maximum FL 150.

e. CVO-FYM operational Sat, Mon, Wed 1600-0600 summer, 1700-0700 winter. Other days H24.

A451 - Only Eastbound, from BRN-KATAB above FL 255.

A727

a. Northwest bound, CAIRO-GESAD, above FL 255.

b. Southeast bound, CAIRO-LXR, only above FL 255.

c. LXR-SML southbound only except traffic landing at Luxor.

B12 - Upper limit for portion KATAB to SML is unlimited within non radar environment.

B418 - SEMRU-HGD southeast bound only above FL 255. Only for traffic from SILKA landing at Hurghada.

G183 - Available for traffic to/from Gaza Intl.

G400 - Available for traffic landing at Cairo or Sharm El Shiekh.

R2 - Traffic inbound from Libya maintain FL 270, FL 330, or FL 370. Traffic outbound to Libya maintain FL 310 or FL 350.

R775

a. Westbound only for traffic landing LUXOR.

b. Southeast bound only LXR-DEDLI above FL 255.

UL550 - Traffic from Jeddah FIR shall not use KITOT as an entry point, when landing at the following airfields: Asyut Intl, Aswan Intl, Luxor Intl, Marsa Alam Intl, Abu Simbel.

V603 - Only Eastbound, SISIK to CAT, above FL 255.

V608 - OWEINAT to DAKHLA not RNP.

V738 - Only Westbound, BOVAR-AST, above FL 255.

W8 - KHG-CVO northeast bound only above FL 255.

W613 - Only Eastbound, KATAB-FYM-ALPID,above FL 255.

W727 - Eastbound only DBA-FYM and SEMRU-SHM above FL 255.

W976 - Westbound only TBA-SISIK above FL 255.

(SPEC/ENR 3.1-1 to 3.1-20)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

EGYPT HOLIDAYS

NAME	DATE
Christmas Day	7 Jan
Eid Al Adha (Greater Bairam)	9-13 Jan
Hejira New Year	31 Jan
Prophet Mohammed's Birthday	10 Apr
Sham El Nessim	24 Apr
Liberation of Sinai Day	25 Apr
Labour Day	1 May
23 July Revolution Day	23 Jul
The Armed Forces' Day	6 Oct
Eid Al Fitr (Lesser Bairam)	23-26 Oct

NAME	DATE
Eid Al Adha (Greater Bairam)	30 Dec-03 Jan 07

(SPEC/GEN 2.1-2)

EQUATORIAL GUINEA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes the BRAZAVILLE FIR. See Cameroon.

ERITREA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes the ASMARA FIR and a small part of SUDAN.

DIMENSIONAL UNITS - Blue Table, except altimeter settings in hectopascals.

(SPEC/AIP GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

(SPEC/AIP ENR 1.8-1)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Eritrea has implemented the ICAO Annex 11 airspace classifications, except D and F not yet implemented.

(AIP ENR 1.4-1)

NIGHT VFR FLIGHTS - Night VFR flight may be authorized by ATC with prior coordination.

(AIP ENR 1.4-1)

MINIMUM HEIGHTS FOR VFR

OPERATIONS - Unless authorized by ATS, VFR flights shall not be conducted above FL 150.

(AIP ENR 1.4-1)

INSTRUMENT FLIGHT RULES

RVSM RULES - Eritrea proposes to implement RVSM airspace in the Asmara FIR effective 28 September 2006 in accordance with the following: The airspace within Asmara FIR between FL 410/290 inclusive, is RVSM airspace. Only RVSM compliant aircraft will be cleared to operate in the Asmara FIR between FL 410/290 inclusive. Aircraft that are not RVSM compliant will only be cleared to operate in the Asmara FIR between FL 410/290 inclusive after prior coordination with the adjacent FIRs. 2000 ft vertical separation will be applied to such aircraft.

(SPEC/AIC 03/05)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) - Flight plans shall be submitted for all flights, IFR or VFR, at least one hour prior to departure to the Asmara International NOTAM Office and the Air Traffic Services Reporting Office. In the absence of such office, flight plans shall be submitted by telephone or other means of communication.

(SPEC/AIP ENR 1.10-1)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION - Flights outside of ATS routes are not permitted in Eritrean airspace.

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

ERITREA HOLIDAYS

Name of Holiday	Date
New Year	1 January
Christmas (Geez)	7 January
Epiphany (Timket)	19 January
Id-Al Adha	31 January*
International Woman's Day	8 March
Mowlid Al Nebiy	10 April
Good Friday	21 April
Easter	23 April
International Worker's Day	1 May
Independence Day	24 May
Martyr's Day	20 June
Beginning of the Armed Struggle	1 September
New Year (Geez)	11 September
Meskel (Holy Cross)	27 September
Id Al Fater	3 November*
Christmas	25 December

NOTE: *Dates may vary according to the lunar calender.

(SPEC/ER GEN 2.1-2)

ESTONIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes TALLINN FIR/UIR.

(SPEC/GEN 1-2)

DIMENSIONAL UNITS - Blue table, altimeter setting given in hectopascals.

(SPEC/GEN 2.1-1)

ALTIMETER HEADING PROCEDURES -

Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard.

INSTRUMENT FLIGHT RULES

Standard except; FM Immunity - The Estonia Civil Aviation Administration allows national aircraft of the United States of America to operate with onboard radio equipment which does not conform to FM Immunity requirements established by ICAO. The exception will be valid until ascertainment of the first disturbance or until 31 DEC 2013. This exception is based on the prescribed analyses concerning the influence of terrestrial broadcasting transmitters have been carried out on radio navigation equipment on board aircraft and the analyses did not ascertain any possible decrease of air safety levels.

(TFMWG-E/USA 04-0132)

FLIGHT PLANNING

SUPERSONIC FLIGHTS - Flights at transonic and supersonic speed over Estonian territory only by special permission of ATS authority.

(SPEC/GEN 1.2-3, 4)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

ESTONIA HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
Independence Day	24 Feb
Good Friday	Friday before Easter
Pentecost	7 weeks after Easter
Public Holiday	1 May
Victory Day	23 Jun
St. John's Day	24 Jun
Re-Independence Day	20 Aug
Christmas Eve	24 Dec
Christmas Day	25 Dec
Boxing Day	26 Dec

(SPEC/GEN 2.1-2)

ETHIOPIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes ETHIOPIA and ADDIS ABABA FIR.

DIMENSIONAL UNITS - Blue Table.

(SPEC/ET GEN 1-5)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. Ethiopia has implemented the ICAO Annex 11 airspace classifications, except Class B and F not yet implemented.
(SPEC/ET AIP ENR 1-4)

a. VFR flights shall comply with ATC instruction when:

(1) Operating in Classes C and D airspace.

(2) In aerodrome traffic area at controlled aerodrome.

(3) Operating as special VFR flight.

2. Except for takeoff and landing, VFR flights shall not be flown over congested areas of cities, towns, or settlements or over an assembly of persons at a height of less than 1000 feet above the highest obstacle within 2000 feet of the aircraft. Elsewhere, VFR flight shall not be flown at a height of less than 500 feet AGL.
(SPEC/ET AIP ENR 1-2)

INSTRUMENT FLIGHT RULES

Ethiopia has implemented the ICAO Annex 11 airspace classifications, except Class B and F not yet implemented.
(SPEC/ET AIRAC A005-93)

RVSM RULES - The airspace within ADDIS ABABA FIR between FL 410/290 inclusive, is RVSM airspace. Only RVSM compliant aircraft will be cleared to operate in the ADDIS ABABA FIR between FL 410/290 inclusive. Aircraft that are not RVSM compliant will only be cleared to operate in the ADDIS ABABA FIR between FL 410/290 inclusive after prior coordination with the appropriate center. 2000 ft vertical separation will be applied to such aircraft.
(SPEC/AIC 006/04)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. The following ATS routes are temporarily closed within Ethiopian airspace. UA408 between GWZ DVOR/DME and TATGU. G650/UG650 between GWZ DVOR/DME and KONET. UR780 between DWA VOR/DME and SETIT. R993/UR993 between RAGAS and DILKA. UB525 between GWZ DVOR/DME and ITGEV. UR995 between GWZ DVOR/DME and ERBUK. A/UA451 route width within Ethiopian airspace is closed. Pilots are strongly advised to avoid these ATS routes in the interest of safety.
(SPEC/NOTAM A0020/05 and A0028/05)

2. W180 is unknown to ADDIS ACC. ADDIS ACC will not accept any flights operating on W180 in the interest of safety.
(SPEC/ET NOTAM A0028/05)

3. UN303 Eastbound traffic restricted to FL 330 only. Westbound traffic restricted to FL 310 only.
(SPEC/AIP SUP A 02/05)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

From 01 January 2006 to 31 December 2006 the following dates will be considered as public holidays in Ethiopia.

ETHIOPIAN HOLIDAYS

NAME	DATE
Ethiopian Christmas	7 January
Id Al Adaha (Arafa)	10 January
Ethiopian Ephiphany	19 January
Victory of Adwa	2 March
Birthday of the Prophet	10 April
Ethiopan Good Friday	21 April
Ethiopian Easter	23 April
International Labor day	1 May
Ethiopian Patriots Victory Day	5 May
Down fall of the Dergue	28 May
Ethiopian New Year	11 September
The finding of the true cross (Meskel)	27 September
Id Al Fater (Ramadan)	3 November

(SPEC/ET AIC 05/05 15 DEC 2005)

FINLAND

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

This entry includes FINLAND FIR/UIR.

DIMENSIONAL UNITS - Blue table, altimeter setting given in hectopascals, significant vertical distances are given in meters (M) and feet (ft).
(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard except:

1. Altimeter setting values are given in hectopascals rounded off downward to the nearest whole hectopascal. On request the values will, however, be provided in tenths for landing.

2. The transition altitude for all instrument aerodromes is 1500m/5000 ft.
(SPEC/ENR 1.7-1)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

The air traffic rules and procedures to air traffic in Finland conform, in general, with the Standards and Recommended Practices (SARP) of ICAO Annexes 2 and 11 and the following:

(SPEC/ENR 1.1-1)

1. A flight plan shall be submitted prior to operating any IFR flight outside controlled airspace, any VFR en-route flight by night or any flight operated within a fight information zone surrounding an Aerodrome Flight Information Service (AFIS).

(SPEC/GEN 1.7-1)

2. Helicopters may operate in less than 1500M/1 SM flight visibility by day and not less than 3000M/2 SM by night, if maneuvered at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

3. VFR flights by day are not permitted within control zones or aerodrome traffic zones:

a. When the ceiling is less than 450M/1500 ft or

b. When the ground visibility is less than 5 km/3 SM,

Unless an air traffic control clearance (special VFR clearance) has been obtained from the appropriate ATC unit.

(SPEC/ENR 1.2-1)

4. VFR flights shall not be conducted by night:

a. Outside a control zone in any airspace class unless the flight visibility is, except as specified in paragraph c below, not less than 8 km/5 SM;

b. With the exception of cases given in paragraph 2 above and paragraph c below, without specific authorization from the Civil Aviation Administration unless the cloud base for the route to be flown or in the respective area is not less than 600M/2000 ft;

c. In a traffic pattern of an uncontrolled aerodrome unless the visibility is not less than 3 km/2 SM and the cloud conditions such that the flight can be conducted clear of clouds at given minimum heights.

(SPEC/ENR 1.2-2)

5. Except when necessary for take-off or landing, or except by permission from the appropriate authority, a VFR flight shall not be flown:

a. Over the congested areas of cities, towns or settlements or over an open-air assembly of persons at a height less than 300M/1000 ft above the highest obstacle within a radius of 600M/2000 ft from the aircraft;

b. Elsewhere the minimum height is 150M/500 ft by day and 300M/1000ft by night above ground or water.

6. VFR flights operated within airspace classes B or C shall be conducted at a flight level appropriate to the track as specified for IFR cruising levels.

(SPEC/GEN 1.7-3)

7. An aircraft shall not exceed the speed 250 Kt IAS below flight level 3050M/FL 100 when:

a. Conducting a IFR flight in airspace classes D, E, F, G+ or G;

b. Conducting a VFR flight in airspace classes C, D, E, F, G+ or G.

An aircraft conducted as VFR flights shall not exceed the speed 140 Kt IAS in airspace classes F, G+ or G below 900M/3000 ft AMSL or 300M/1000 ft above terrain, whichever is higher, when flight visibility is less than 5 km/3 SM.

(SPEC/GEN 1.7-9)

INSTRUMENT FLIGHT RULES

1. FMI waiver applications will be processed along with diplomatic clearance requirements as published in the Foreign Clearance Guide.

(TFMWG-E/USA 03-0319)

2. Finland has implemented the ICAO Annex 11 airspace classifications except as stated under VISUAL FLIGHT RULES above.

(SPEC/ENR 1.4-1)

FLIGHT PLANNING

1. FIR BOUNDARY ESTIMATES - Estimated time at FIR boundary are not required in Item 18 of the flight plan.

(SPEC/ENR 1.10-4)

2. MANDATORY CARRIAGE OF SSR TRANSPONDER

a. Aircraft shall be equipped with a serviceable transponder when operating within the Finnish flight information regions at or above FL 95, within Helsinki (EFHK) TCA and within Helsinki (EFHK) CTLZ.

b. The transponder shall be capable of replying to Mode 3/A, 4096 Codes, and Mode C.

c. Exemptions from the requirements above can be granted by the Civil Aviation Administration or the appropriate ATS unit.

(SPEC/ENR 1.6-4)

3. MANDATORY CARRIAGE OF DME

a. IFR aircraft departing from or landing at Helsinki-Vantaa (EFHK) or Helsinki-Malmi Airport (EFHF) shall carry a serviceable DME.

b. ATC may grant an exception for single flights, traffic conditions permitting.

(SPEC/AD 2.2-6)

4. FLIGHT PLAN ADDRESSEES

a. Helsinki FIR/UIR

(1) IFR/EFESZQZX

(2) VFR/EFESZFZX

b. Rovaniemi FIR/UIR

(1) IFR/EFPSZQZX

(2) VFR/EFPSZFZX

c. Flow control

(1) EFESZDZX

(2) EFPSZDZX

d. Destination/Subsequent Legs

(1) Civil

(a) . . . . ZPZX

(b) . . . . ZTZX

(2) Military: . . . . ZPZX

e. All military aircraft

(1) EFJYYWYX

(2) EFHKYAYX

(USAFE-DO/AFFSA)

5. LOW ALTITUDE ATS ROUTES - The lowest useable Flight Level shall not be below 5000' except within the portion of the Finland FIR west of longitude 22 East within the responsibility area of Rovaniemi ACC where the lowest useable Flight Level shall not be below 6000'.

(SPEC/ENR 1.7-2)

SUPPLEMENTARY AIRPORT INFORMATION -

Helsinki - Vantaa (EFHK)

1. Unless otherwise instructed, arriving aircraft shall use the parallel taxiway to the link taxiway closest to the assigned aircraft stand, short cuts through the apron are not permitted.

2. TAXIING ON THE APRON

a. Taxiing on the apron is always subject to instructions given by the appropriate ATC unit.

b. When taxiing on the apron the aircraft shall follow the yellow taxiing guide lines. No deviations or short cuts are permitted except under the guidance of a follow-me car or after special instructions given by the appropriate ATC unit.

(SPEC/AD 2.2-2)

3. DEPARTING AIRCRAFT

a. Route clearance shall be requested from the appropriate ATC unit but not earlier than 10 minutes before the estimated start-up.

b. The type aircraft, the designator of the last received ATIS broadcast and, when appropriate, the request to use other runway than the runway in use for departure in the initial contact with the ATC unit.

c. When taxiing the aircraft shall follow the instructions given by the appropriate ATC unit.

d. Unless otherwise instructed the aircraft shall use the shortest possible way to the taxiway parallel to the runway.

(SPEC/AD 2.2-3)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. NON-CONTINUOUS MILITARY CONTROL AREAS

AREA	Operating hours
Halli (EFHA), North and South	0600-1400Z++ Mon-Thu, 0600-1200Z++ Fri.
Jyvaskyla (EFJY)	0600-1400Z++ Mon-Thu, 0600-1200Z++ Fri.
Kauhava (EFKA)	0600-1400Z++ Mon-Thu, 0600-1200Z++ Fri.
Kuopio (EFKU)	0600-1400Z++ Mon-Thu, 0600-1200Z++ Fri.
Pirkkala (EFTP)	0600-1400Z++ Mon-Thu, 0600-1200Z++ Fri.
Rovaniemi (EFRO)	0600-1400Z++ Mon-Thu, 0600-1200Z++ Fri.

(SPEC/ENR 2.1-5 thru 2.1-14)

2. PROHIBITED AREAS

a. Flights within prohibited areas are not permitted in order to guarantee the safety of construction and establishments located within these areas.

b. However, for special reasons permission can be granted by Tampere ACC. Application in writing shall reach Tampere ACC unit at least 7 days prior to the intended flight. Permission will be granted for each individual flight separately.

c. Application forms are available from Civil Aviation Administration and ATS units.

3. RESTRICTED AREAS

a. Prior permission for all flights entering the restricted areas shall be obtained from the Civil Aviation Administration, unless otherwise stated in international agreements binding on Finland. Such permission will be granted by Tampere or Rovaniemi ACC depending on the area of responsibility within which the area concerned is located.

b. Application in writing shall reach Tampere or Rovaniemi ACC at least 3 days prior to the intended flight. Application forms are available from Civil Aviation Administration and ATS units. Permission can be granted for individual flight or, under special circumstances, for a set time, not exceeding two months.

c. In addition, a Flight Plan for of each flight shall be submitted at least two hours before departure either to Tampere or Rovaniemi ACC depending on the area of responsibility within which the flight will be conducted.

d. The postal address of Tampere ACC is:

Area Control Centre, South Finland
PO Box 714
FIN-33101 Tampere, FI

e. The postal address of Rovaniemi ACC is:

Area Control Centre, North Finland
PO Box 8182
FIN-96101 Rovaniemi, FI

4. DANGER AREAS

a. Activities dangerous to aircraft in flight take place within danger areas. Tampere or Rovaniemi ACC, depending on the area of responsibility within which the area concerned is located, or the Civil Aviation Administration, notifies the activation of a danger area by NOTAM or means of other AIS publication.

b. The pilot in command shall, before entering the area concerned, consult the appropriate ATS unit to ensure whether the danger area has been notified to be active.

c. Flying below the upper limit of a danger area, which has been notified to be active, is prohibited. However, on occasional periods when no dangerous activity is in progress, despite the notified activation, the appropriate ATC unit may provide a clearance for a controlled flight in controlled airspace to cross the danger area concerned.

(SPEC/ENR 5.1-1,2)

5. AIRWAYS/ROUTES

a. LOW ALTITUDE AIRWAYS - Listed by alphanumeric designation.

P854 - Not available for traffic landing EFHK and EFHF.

Q1 - Traffic departing EFHK and EFHF, maximum cruising level FL 80.

T80 - Gupsa-VTI not available for arrivals to EFHK and EFHF.

T82 - Not available for departures from EFHK and EFHF.

T86 - Not available for westbound departures or arrivals from EFHK and EFHF Rusko - Marie westbound only for traffic landing EFMA.

Y73 - Not available for departures from EFHK and EFHF.

Y77 - Not available for departures from EFHK and EFHF.

Y78 - HEL - VEH not available for departures from EFHK and EFHF.

Y79 - PVO - Umoti not available for traffic arriving EFHK and EFHF.

Y86 - PIR - Gupsa for departures from EFTP only.

b. HIGH ALTITUDE AIRWAYS - Listed by alphanumeric designation.

UM857 - OUK - ROI not available for arrivals to EFRO.

UP854 - Not available for traffic landing EFHK and EFHF.

UT80 - Gupsa - VTI not available for arrivals to EFHK and EFHF.

UT82 - Not available for departures from EFHK and EFHF.

UT86 - Not available for westbound departures or arrivals from EFHK and EFHF. Rusko - Marie westbound only for traffic landing EFMA.

UY73 - Not available for departures from EFHK and EFHF.

UY75 - OUK - ROI arrivals EFRO only.

UY77 - Not available for departures from EFHK and EFHF.

UY78 - HEL - VEH not available for departures from EFHK and EFHF.

UY79 - PVO - UMOTI not available for traffic arriving EFHK and EFHF.

(SPEC/ENR 3.3-6 thru 3.3-44)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			FINLAND				
P609	Bakla CRP (N61°22′ E19°25′)	032T	Etani NCRP (N62°45′ E21°21′)	100		FL 285 FL 100	ODD (NE)
	Etani NCRP	032T 025T	Vaasa VOR/DME	21			
	Vaasa VOR/DME	025T	Tiltu NCRP (N63°21′ E22°05′)	21			
	Tiltu NCRP	025T	Inkat NCRP (N63°56′ E22°41′)	39			
	Inkat NCRP	025T	Vasal CRP (N64°32′ E23°20′)	40			
	Vasul CRP		Babux NCRP (N66°03′ E25°10′)	102			
	Babux NCRP		Rovani VOR/DME	35			

REMARKS: CDR1 - Times other than CDR2.
CDR2

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
T70	Oulu VOR/DME	356T	Epesa NCRP	30		FL 285	ODD
		176T	(N65°25′ E25°17′)			FL 100	(N)
	Epesa NCRP		Obiro NCRP	107			
			(N67°12′ E24°59′)				
	Obiro NCRP		Kittila NDB	26			
	REMARKS: CDR1 - Times other than CDR2.						
	CDR2						
T79	Seinajoki NDB	154T	Talug NCRP	8		FL 285	ODD
		334T	(N62°31′ E23°04′)			FL 100	(SE)
	Talug NCRP	168T	Larpu NCRP	10			
		348T	(N62°22′ E23°08′)				
	Larpu NCRP		Ibari NCRP	24			
			(N61°59′ E23°19′)				
	Ibari NCRP		Usepu NCRP	16			
			(N61°44′ E23°26′)				
	Usepu NCRP		Pirkka VOR/DME	20			
	REMARKS: CDR1 - Times other than CDR2.						
	CDR2						
T89	Vaasa VOR/DME	040T	Omelu NCRP	20		FL 285	ODD
		220T	(N63°18′ E22°14′)			FL 70	(NE)
	Omelu NCRP		Vexat NCRP	15			
			(N63°29′ E22°35′)				
	Vexat NCRP		Kruunu NDB	24			
	Kruunu NDB		Okamo NCRP	17			
			(N64°01′ E23°34′)				
	Okamo NCRP		Noslo CRP	21			
			(N64°16′ E24°04′)				
	Noslo CRP		Akovu NCRP	30			
			(N64°39′ E24°48′)				
	Akovu NCRP		Oulu VOR/DME	22			
	Oulu VOR/DME	055T	Sispo NCRP	22		FL 285	ODD
		235T	(N65°09′ E26°05′)			FL 100	(NE)
	Sispo NCRP	058T	Tokla NCRP	80			
		238T	(N65°52′ E28°45′)				
	Tokla NCRP		Kantola VOR/DME	14			
	REMARKS: CDR1 - H24.						
T91	Previk VOR/DME	015T	Peril NCRP	17		FL 285	ODD
		195T	(N61°44′ E21°57′)			FL 100	(NE)
	Peril NCRP		Rolos NCRP	48			
			(N62°30′ E22°23′)				
	Rolos NCRP		Elmux NCRP	24			
			(N62°53′ E22°37′)				
	Elmux NCRP		Pobus NCRP	33			
			(N63°25′ E22°56′)				
	Pobus NCRP		Kruunu NDB	23			
	REMARKS: CDR1 - Between Previk VOR/DME and Rolos NCRP (N62°30′ E22°23′), H-24.						
	Between Rolos NCRP and Kruunu NDB, times other than CDR2.						
	CDR2 - Between Rolos NCRP and Kruunu NDB.						
T93	Rolos NCRP	062T	Pirux NCRP	5		FL 285	EVEN
	(N62°30′ E22°23′)	242T	(N62°30′ E22°23′)			FL 100	(NE)
	Pirux NCRP		Seinajoki NDB	12			
	REMARKS: CDR1 - H24.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
T94	Kruunu NDB	175T 355T	Takot NCRP (N63°25′ E23°15′)	23		FL 285 FL 100	EVEN (S)
	Takot NCRP		Litsu NCRP (N62°48′ E23°21′)	37			
	Litsu NCRP		Uraka NCRP (N62°22′ E23°25′)	26			
	Uraka NCRP		Tupsu NCRP (N62°00′ E23°29′)	23			
	Tupsu NCRP		Lersa NCRP (N61°44′ E23°32′)	16			
	Lersa NCRP		Pirkka VOR/DME	19			
	REMARKS: CDR1 - Times other than CDR2. CDR2						
T95	Pirkka VOR/DME	012T 192T	Ubelo NCRP (N61°43′ E23°43′)	19		FL 285 FL 100	ODD (NE)
	Ubelo NCRP		Gesmi NCRP (N61°59′ E23°50′)	16			
	Gesmi NCRP		Rivox NCRP (N62°23′ E24°02′)	25			
	Rivox NCRP		Vanit NCRP (N63°44′ E24°42′)	83			
	Vanit NCRP	013T 193T	Xokno NCRP (N63°59′ E24°50′)	16			
	Xokno NCRP		Upmot NCRP (N64°26′ E25°05′)	27			
	Upmot NCRP	014T 194T	Oulu VOR/DME	31			
	REMARKS: CDR1 - Times other than CDR2. CDR2						
T97	Kaunis VOR/DME	186T	Tisru NCRP (N67°05′ E27°04′)	83		FL 285 FL 100	EVEN (S)
	Tisru NCRP		Uruvi NCRP (N65°58′ E26°47′)	68			
	Uruvi NCRP		Geksi NCRP (N63°45′ E26°18′)	134			
	Geksi NCRP		Etabi NCRP (N62°55′ E26°08′)	50			
	Etabi NCRP		Ganki NCRP (N62°42′ E26°06′)	13			
	Ganki NCRP		Bampo NCRP (N61°58′ E25°58′)	44			
	Bampo NCRP		Verex NCRP (N61°20′ E25°51′)	39			
	Verex NCRP		Orimaa VOR/DME	30			
	REMARKS: CDR1 - Times other than CDR2. CDR2						
T99	Epesi NCRP (N62°42′ E25°13′)	146T	Lounet VOR/DME	20		FL 285 FL 100	EVEN (SE)
	REMARKS: CDR1 - H24.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Y71	Luonet VOR/DME	025T 205T	Mismu NCRP (N62°44′ E25°56′)	20		FL 285 FL 100	ODD (NE)
	Mismu NCRP		Etabi NCRP (N62°55′ E26°08′)	13			
	Etabi NCRP		Upuli CRP (N63°45′ E27°03′)	56			
	Upuli CRP		Pokex NCRP (N63°59′ E27°19′)	16			
	Pokex NCRP		Kainuu VOR/DME	20			
	Kainuu VOR/DME		Nuksa NCRP (N64°32′ E27°53′)	17			
	Nuksa NCRP		Pisin NCRP (N65°46′ E29°01′)	79			
	Pisin NCRP		Kantola VOR/DME	15			
	REMARKS: CDR1 - Between Kainuu VOR/DME and KaNTOLA VOR/DME), H-24. CDR2 -Between Luonet VOR/DME and Kainuu VOR/DME. CDR1 - times other than CDR2.						
Y72	Pirkka VOR/DME	179T	Valox NCRP (N61°25′ E23°35′)	18		FL 285 FL 70	ODD (S)
	Valox NCRP		Enoki NCRP (N60°50′ E23°36′)	17			
	Enoki NCRP		Gupsa NCRP (N60°38′ E23°36′)	12			
	Gupsa NCRP		Amedu NCRP (N60°28′ E23°37′)	9			
	REMARKS: CDR1 - Times other than CDR2. CDR2						
Y74	Marie VOR/DME	053T	Ebuna NCRP (N60°20′ E20°27′)	20		FL 285 FL 100	ODD (NE)
	Ebuna NCRP		Raman NCRP (N61°05′ E22°35′)	77			
	Raman NCRP	055T	Nikru NCRP (N61°13′ E22°59′)	15			
	Nikru NCRP		Pikka VOR/DME	20			
	REMARKS: CDR1 - Times other than CDR2. CDR2						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Y75	Balti CRP (N59°54′ E25°15′)	023T	Porvoo VOR/DME	26		FL 285 FL 100	ODD (NE)
	Porvoo VOR/DME	337T	Rovil NCRP (N60°49′ E25°08′)	35			ODD (N)
	Rovil NCRP	001T	Anton VOR/DME	3			
	Anton VOR/DME		Tildo NCRP (N61°21′ E25°08′)	29			
	Tildo NCRP		Emlis NCRP (N61°39′ E25°08′)	19			
	Emlis NCRP		Lukat NCRP (N61°57′ E25°07′)	18			
	Lukat NCRP		Dipar NCRP (N62°05′ E25°07′)	8			
	Dipar NCRP	004T	Epesi NCRP (N62°42′ E25°13′)	37			
	Epesi NCRP	001T 181T	Vavix NCRP (N62°58′ E25°14′)	16			
	Vavix NCRP		Mimla CRP (N63°50′ E25°16′)	52			
	Mimla CRP		Ostos NCRP (N64°26′ E25°19′)	37			
	Ostos NCRP	002T 182T	Oulu VOR/DME	30			
	Oulu VOR/DME	002T	Irkin NCRP (N65°24′ E25°24′)	29			
	Irkin NCRP		Bilsa NCRP (N65°52′ E25°27′)	28			
	Bilsa NCRP		Kekox NCRP (N66°03′ E25°28′)	11			
	Kekox NCRP		Rovani VOR/DME	32			ODD (NE)
	REMARKS: CDR1 - H24.						
Y76	Kekox NCRP (N66°03′ E25°28′)	010T	Vemux NCRP (N66°59′ E25°53′)	58		FL 285 FL 100	ODD (NE)
	Vemux NCRP		Xamil NCRP (N67°16′ E26°01′)	17			
	Xamil NCRP		Supox NCRP (N68°18′ E26°32′)	63			
	REMARKS: CDR1 - H24.						
Y78	Oulu VOR/DME	123T 303T	Sopri NCRP (N64°40′ E26°19′)	29		FL 285 FL 100	ODD (SE)
	Sopri NCRP		Tiglu NCRP (N64°28′ E27°00′)	22			
	Tiglu NCRP		Kainuu VOR/DME	20			
	Kainuu VOR/DME	177T 357T	Toslo NCRP (N64°01′ E27°41′)	16			ODD (S)
	Toslo NCRP		Maxan NCRP (N63°45′ E27°43′)	16			
	Maxan NCRP		Aprov NCRP (N63°23′ E27°46′)	23			
	Aprov NCRP		Vehkaa VOR/DME	24			
	REMARKS: CDR1 - H24.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Y81	Sunas NCRP (N60°06′ E22°32′) Armit NCRP	273T	Armit NCRP (N60°06′ E22°32′) Marie VOR/DME	60 19		FL 285 FL 100	EVEN (W)
	REMARKS: CDR1 - H24.						
Y85	Oulu VOR/DME	262T 042T	Bignu NCRP (N64°53′ E24°31′)	22		FL 285 FL 100	EVEN (W)
	Bignu NCRP	226T 046T	Deles CRP (N64°28′ E23°31′)	36			EVEN (SW)
	Deles CRP	225T 045T	Ebeli NCRP (N64°04′ E22°34′)	35			
	Ebeli NCRP	214T 034T	Ibena NCRP (N63°54′ E22°19′)	12			
	Ibena NCRP		Gamsi NCRP (N63°48′ E22°09′)	8			
	Gamsi NCRP	213T 033T	Ipsas NCRP (N63°26′ E21°37′)	26			
	Ipsas NCRP	207T 027T	Ralox NCRP (N63°16′ E21°26′)	11			
	Ralox NCRP	208T 028T	Nalix NCRP (N62°58′ E21°04′)	21			
	Nalix NCRP	205T 025T	Bakla CRP (N61°22′ E19°25′)	107			
	REMARKS: CDR1 - H24.						
Y440	Pirkka VOR/DME	248T	Apris NCRP (N61°17′ E22°58′)	19		FL 285 FL 100	EVEN (SW)
	Apris NCRP		Ardil NCRP (N61°11′ E22°27′)	16			
	Ardil NCRP		Kelas CRP (N60°28′ E19°11′)	106			
	REMARKS: CDR1 - H24.						
Y880	Previk VOR/DME	279T	Togmi CRP (N61°46′ E19°32′)	67		FL 285 FL 100	EVEN (W)
	REMARKS: CDR1 - Times other than CDR2. CDR2						
UP609	Bakla CRP (N61°22′ E19°25′)	032T 212T	Etani NCRP (N62°45′ E21°21′)	100		FL 660 FL 285	ODD (NE)
	Etani NCRP	034T 214T	Vaasa VOR/DME	21			
	Vaasa VOR/DME	025T 205T	Tiltu NCRP (N63°21′ E22°05′)	21			
	Tiltu NCRP		Inkat NCRP (N63°56′ E22°41′)	39			
	Inkat NCRP		Vasal CRP (N64°32′ E23°20′)	40			
	Vasul CRP	026T 206T	Babux NCRP (N66°03′ E25°10′)	102			
	Babux NCRP	028T 208T	Rovani VOR/DME	35			
	REMARKS: CDR1 - Times other than CDR2. CDR2						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UP855	Vihti VOR/DME	297T 117T	Atriv NCRP (N60°57′ E22°20′)	64		FL 460 FL 285	EVEN (W)
	Atriv NCRP	298T 118T	Togmi CRP (N61°46′ E19°32′)	94			
	REMARKS: CDR1 - H24.						
UT70	Oulu VOR/DME	356T 176T	Epesa NCRP (N65°25′ E25°17′)	30		FL 660 FL 285	ODD (N)
	Epesa NCRP		Obiro NCRP (N67°12′ E24°59′)	107			
	Obiro NCRP		Kittila NDB	26			
	REMARKS: CDR1 - Times other than CDR2. CDR2						
UT79	Seinajoki NDB	154T 334T	Talug NCRP (N62°31′ E23°04′)	8		FL 660 FL 285	ODD (SE)
	Talug NCRP	168T 348T	Larpu NCRP (N62°22′ E23°08′)	10			
	Larpu NCRP		Ibari NCRP (N61°59′ E23°19′)	24			
	Ibari NCRP		Usepu NCRP (N61°44′ E23°26′)	16			
	Usepu NCRP		Pirkka VOR/DME	20			
	REMARKS: CDR1 - Times other than CDR2. CDR2						
UT89	Vaasa VOR/DME	040T 220T	Omelu NCRP (N63°18′ E22°14′)	20		FL 660 FL 285	ODD (NE)
	Omelu NCRP		Vexat NCRP (N63°29′ E22°35′)	15			
	Vexat NCRP		Kruunu NDB	24			
	Kruunu NDB		Okamo NCRP (N64°01′ E23°34′)	17			
	Okamo NCRP		Noslo CRP (N64°16′ E24°04′)	21			
	Noslo CRP		Akovu NCRP (N64°39′ E24°48′)	30			
	Akovu NCRP		Oulu VOR/DME	22			
	Oulu VOR/DME	055T 235T	Sispo NCRP (N65°09′ E26°05′)	22			
	Sispo NCRP	058T 238T	Tokla NCRP (N65°52′ E28°45′)	80			
	Tokla NCRP		Kantola VOR/DME	14			
	REMARKS: CDR1 - H24.						
UT91	Previk VOR/DME	015T 195T	Peril NCRP (N61°44′ E21°57′)	17		FL 660 FL 285	ODD (NE)
	Peril NCRP		Rolos NCRP (N62°30′ E22°23′)	48			
	Rolos NCRP		Elmux NCRP (N62°53′ E22°37′)	24			
	Elmux NCRP		Pobus NCRP (N63°25′ E22°56′)	33			
	Pobus NCRP		Kruunu NDB	23			
	REMARKS: CDR1 - Between Previk VOR/DME and Rolos NCRP (N62°30′ E22°23′), H-24. Between Rolos NCRP and Kruunu NDB, times other than CDR2. CDR2 - Between Rolos NCRP and Kruunu NDB.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UT93	Rolos NCRP (N62°30′ E22°23′) Pirux NCRP	062T 242T	Pirux NCRP (N62°33′ E22°33′) Seinajoki NDB	5 12		FL 660 FL 285	EVEN (NE)
	REMARKS: CDR1 - H24.						
UT94	Kruunu NDB	175T 355T	Takot NCRP (N63°25′ E23°15′)	23		FL 660 FL 285	EVEN (S)
	Takot NCRP		Litsu NCRP (N62°48′ E23°21′)	37			
	Litsu NCRP		Uraka NCRP (N62°22′ E23°25′)	26			
	Uraka NCRP		Tupsu NCRP (N62°00′ E23°29′)	23			
	Tupsu NCRP		Lersa NCRP (N61°44′ E23°32′)	16			
	Lersa NCRP		Pirkka VOR/DME	19			
	REMARKS: CDR1 - Times other than CDR2. CDR2						
UT95	Pirkka VOR/DME	012T 192T	Ubelo NCRP (N61°43′ E23°43′)	19		FL 660 FL 285	ODD (NE)
	Ubelo NCRP		Gesmi NCRP (N61°59′ E23°50′)	16			
	Gesmi NCRP		Rivox NCRP (N62°23′ E24°02′)	25			
	Rivox NCRP		Vanit NCRP (N63°44′ E24°42′)	83			
	Vanit NCRP	013T 193T	Xokno NCRP (N63°59′ E24°50′)	16			
	Xokno NCRP		Upmot NCRP (N64°26′ E25°05′)	27			
	Upmot NCRP	014T 194T	Oulu VOR/DME	31			
	REMARKS: CDR1 - Times other than CDR2. CDR2						
UT97	Kaunis VOR/DME	186T	Tisru NCRP (N67°05′ E27°04′)	83		FL 660 FL 285	EVEN (S)
	Tisru NCRP		Uruvi NCRP (N65°58′ E26°47′)	68			
	Uruvi NCRP		Geksi NCRP (N63°45′ E26°18′)	134			
	Geksi NCRP		Etabi NCRP (N62°55′ E26°08′)	50			
	Etabi NCRP		Ganki NCRP (N62°42′ E26°06′)	13			
	Ganki NCRP		Bampo NCRP (N61°58′ E25°58′)	44			
	Bampo NCRP		Verex NCRP (N61°20′ E25°51′)	39			
	Verex NCRP		Orimaa VOR/DME	30			
	REMARKS: CDR1 - Times other than CDR2. CDR2						
UT99	Epesi NCRP (N62°42′ E25°13′)	146T	Lounet VOR/DME	20		FL 460 FL 285	EVEN
	REMARKS: CDR1 - H24.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UY71	Luonet VOR/DME	025T	Mismu NCRP	20		FL 660	ODD
		205T	(N62°44′ E25°56′)			FL 285	(NE)
	Mismu NCRP		Etabi NCRP	13			
			(N62°55′ E26°08′)				
	Etabi NCRP		Upuli CRP	56			
			(N63°45′ E27°03′)				
	Upuli CRP		Pokex NCRP	16			
			(N63°59′ E27°19′)				
	Pokex NCRP		Kainuu VOR/DME	20			
	Kainuu VOR/DME		Nuksa NCRP	17			
			(N64°32′ E27°53′)				
	Nuksa NCRP		Pisin NCRP	79			
			(N65°46′ E29°01′)				
	Pisin NCRP		Kantola VOR/DME	15			
	REMARKS: CDR1 - Between Kainuu VOR/DME and Kantola VOR/DME), H-24. CDR2 - Between Luonet VOR/DME and Kainuu VOR/DME. CDR1 - times other than CDR2.						
UY72	Pirkka VOR/DME	179T	Valox NCRP	18		FL 660	ODD
			(N61°25′ E23°35′)			FL 285	(S)
	Valox NCRP		Enoki NCRP	17			
			(N60°50′ E23°36′)				
	Enoki NCRP		Gupsa NCRP	12			
			(N60°38′ E23°36′)				
	Gupsa NCRP		Amedu NCRP	9			
			(N60°28′ E23°37′)				
	REMARKS: CDR1 - Times other than CDR2. CDR2						
UY74	Marie VOR/DME	053T	Ebuna NCRP	20		FL 660	ODD
			(N60°20′ E20°27′)			FL 285	(NE)
	Ebuna NCRP		Raman NCRP	77			
			(N61°05′ E22°35′)				
	Raman NCRP	055T	Nikru NCRP	15			
			(N61°13′ E22°59′)				
	Nikru NCRP		Pirkka VOR/DME	20			
	REMARKS: CDR1 - Times other than CDR2. CDR2						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UY75	Balti CRP (N59°54′ E25°15′)	023T	Porvoo VOR/DME	26		FL 660 FL 285	ODD (NE)
	Porvoo VOR/DME	337T	Rovil NCRP (N60°49′ E25°08′)	35			ODD (N)
	Rovil NCRP	001T	Anton VOR/DME	3			
	Anton VOR/DME		Tildo NCRP (N61°21′ E25°08′)	29			
	Tildo NCRP		Emlis NCRP (N61°39′ E25°08′)	19			
	Emlis NCRP		Lukat NCRP (N61°57′ E25°07′)	18			
	Lukat NCRP		Dipar NCRP (N62°05′ E25°07′	8			
	Dipar NCRP	004T	Epesi NCRP (N62°42′ E25°13′)	37			
	Epesi NCRP	001T 181T	Vavix NCRP (N62°58′ E25°14′)	16			
	Vavix NCRP		Mimla CRP (N63°50′ E25°16′)	52			
	Mimla CRP		Ostos NCRP (N64°26′ E25°19′)	37			
	Ostos NCRP	002T 182T	Oulu VOR/DME	30			
	Oulu VOR/DME	002T	Irkin NCRP (N65°24′ E25°24′)	29			
	Irkin NCRP		Bilsa NCRP (N65°52′ E25°27′)	28			
	Bilsa NCRP		Kekox NCRP (N66°03′ E25°28′)	11			
	Kekox NCRP	016T	Rovani VOR/DME	32			
	REMARKS: CDR1 - H24.						
UY76	Kekox NCRP (N66°03′ E25°28′)	010T	Vemux NCRP (N66°59′ E25°53′)	58		FL 660 FL 285	ODD (NE)
	Vemux NCRP		Xamil NCRP (N67°16′ E26°01′)	17			
	Xamil NCRP		Supox NCRP (N68°18′ E26°32′)	63			
	REMARKS: CDR1 - H24.						
UY78	Oulu VOR/DME	123T 303T	Sopri NCRP (N64°40′ E26°19′)	29		FL 660 FL 285	ODD (SE)
	Sopri NCRP		Tiglu NCRP (N64°28′ E27°00′)	22			
	Tiglu NCRP		Kainuu VOR/DME	20			
	Kainuu VOR/DME	177T 357T	Toslo NCRP (N64°01′ E27°41′)	16			ODD (S)
	Toslo NCRP		Maxan NCRP (N63°45′ E27°43′)	16			
	Maxan NCRP		Aprov NCRP (N63°23′ E27°46′)	23			
	Aprov NCRP		Vehkaa VOR/DME	24			
	REMARKS: CDR1 - H24.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UY85	Oulu VOR/DME	262T 042T	Bignu NCRP (N64°53′ E24°31′)	22		FL 660 FL 285	EVEN (W)
	Bignu NCRP	262T 046T	Deles CRP (N64°28′ E23°31′)	36			EVEN (SW)
	Deles CRP	225T 045T	Ebeli NCRP (N64°04′ E22°34′)	35			
	Ebeli NCRP	214T 034T	Ibena NCRP (N63°54′ E22°19′)	12			
	Ibena NCRP		Gamsi NCRP (N63°48′ E22°09′)	8			
	Gamsi NCRP	213T 033T	Ipsas NCRP (N63°26′ E21°37′)	26			
	Ipsas NCRP	207T 027T	Ralox NCRP (N63°16′ E21°26′)	11			
	Ralox NCRP	208T 028T	Nalix NCRP (N62°58′ E21°04′)	21			
	Nalix NCRP	205T 025T	Bakla CRP (N61°22′ E19°25′)	107			
	REMARKS: CDR1 - H24.						
UY440	Pirkka VOR/DME	248T	Apris NCRP (N61°17′ E22°58′)	19		FL 660 FL 285	EVEN (SW)
	Apris NCRP		Ardil NCRP (N61°11′ E22°27′)	16			
	Ardil NCRP		Kelas CRP (N60°28′ E19°11′)	106			
	REMARKS: CDR1 - H24.						
UY880	Previk VOR/DME	279T	Togmi CRP (N61°46′ E19°32′)	67		FL 660 FL 285	EVEN (W)
	REMARKS: CDR1 - Times other than CDR2. CDR2						

TERMINAL

NOISE ABATEMENT PROCEDURES -

1. Departure: After takeoff aircraft shall climb as rapidly as practicable to at least 2000′ AGL, unless otherwise instructed.

2. Arrival: The final stage of an instrument or visual approach shall not be performed below the glide path of ILS or PAPI. When ILS glide path or PAPI is not available, the approach should be carried out maintaining at least 3° glide path.

(SPEC/ENR 1.5-1)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

FINLAND HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
Twelfth-Day	6 Jan
Good Friday	14 Apr
Easter Sunday	16 Apr
Easter Monday	17 Apr
The First of May	1 May
Ascension Day	25 May
Whit Sunday	4 Jun
Midsummer Eve	23 Jun
Midsummer Day	24 Jun
All Saint's Day	4 Nov
Independency Day	6 Dec
Christmas Eve	24 Dec
Christmas Day	25 Dec
Boxing Day	26 Dec

(SPEC/GEN 2.1-4)

FRANCE

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes BORDEAUX FIR, BREST FIR, FRANCE UIR, MARSEILLE FIR, PARIS FIR AND REIMS FIR. The

following rules and procedures also apply to CORSICA and MONACO.

DIMENSIONAL UNITS - ICAO Table except altimeter setting given in hectopascals.

(SPEC/GEN 2.1-1)

AIRSPACE STRUCTURE -

1. Standard except:

a. FRENCH SPECIAL CONTROLLED AIRSPACE. Special Control Areas (S/CTA) and Special Control Zones (S/CTR) are control areas and control zones in which air traffic services are provided simultaneously to general and military air traffic by a military air traffic control unit. In these airspaces, additional measures and spacing minimums can be put into effect to assure compatibility between civil and military air traffic.

(SPEC/MIL ENR 2.1-1)

ALTIMETER SETTING PROCEDURES -

1. Standard except:

a. During IFR approaches QFE will be referenced to the runway threshold in the following cases:

(1) All precision approaches.

(2) All non-precision approaches when the threshold is more than 5m (16 ft) below the airport elevation.

(SPEC/ENR 1.7-2)

b. Altimeter settings for military operational traffic are:

(1) QFE: Used during landing and take-off maneuvers.

(2) QNH: Used for all flights performed at low altitude below the transition altitude or below the highest of 3000 ft (900m) AMSL or 1000 ft (300m) AGL if no transition altitude is defined. The QNH is determined for each traffic coordination & control center (ACC) to be the lowest QNH established by weather stations for the ACC area. It is communicated by the ACC, local airport control unit or the Mil control center.

(3) Standard altimeter: Used in all other cases.

(SPEC/MIL ENR 1.7-1)

VERTICAL SEPARATION - Semicircular. France has implemented the European Reduced Vertical Separation Minimum (RVSM) For military flights see the paragraph on OAT Flight Levels.

(SPEC/MIL ENR 1.7-2)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. France has implemented the ICAO Annex 11 airspace classification with the following differences.

a. In France, some low traffic control zones are Class E airspace. Only control zones for airports with heavy traffic are classified at least Class D.

(SPEC/GEN 1.7-54)

MINIMUM HEIGHTS FOR VFR OPERATIONS -

1. Minimum Overflight Heights. Unless otherwise stated, minimum overflight heights are listed below.

a. Overflying of certain installations or sites.

INSTALLATIONS AND SITES	MINIMUM HEIGHT (AGL)
Isolated Factories.	Single-engine piston aircraft and helicopters: 1000 ft (300m) All other aircraft: 3300 ft (1000m)
Industial Installations.	
Hospitals, Rest Homes, Retirement Centers.	
Any site or installation having a distinctive mark (White crown on a red square background).	
Flight following a direction parallel to a motorway and close to it.	

b. Overflying of towns. Towns are depicted by symbols showing their average width on the ICAO 1:500,000 aeronautical chart published by the National Geographical Institute (IGN) of France.

AIRCRAFT TYPE	MINIMUM HEIGHT (AGL)	AVERAGE TOWN WIDTH
Single-engine aircraft and helicopters	1650 ft (500m)	Width less than 1200m
Multi-engine aircraft	3300 ft (1000m)	Width less than 1200m
Any aircraft	3300 ft (1000m)	Width 1200m to 3600m
Any aircraft	5000 ft (1500m)	Width greater than 3600m (Overflying of Paris is forbidden except under special exemption)

c. Overflying groups of people or animals: (beaches, arenas, cycling races, public meetings, racetracks, stockyards, etc.)

AIRCRAFT TYPE	MINIMUM HEIGHT (AGL)
Single-engine aircraft and helicopters	1650 ft (500m)
Multi-engine aircraft	3300 ft (1000m)

(SPEC/ENR 1.2-4, 1.2-5)

2. MINK FARMS - Overflight prohibited below 3300' for multi-engine and jet aircraft and 1000' for single-engine aircraft and

helicopters within a 2 NM radius of each mink farm from 15 Apr to 15 Jul each year.

(SPEC/MIL ENR 5.1-6)

NORTH REGION

CHAMPROND EN GATINE/L'ETANG-CARREAU	N48°24'30" E01°02'00"
GUMBRECHTSHOFFEN	N48°54'10" E07°37'35"
LA CHAPELLE D'ANDAINE	N48°33'40" W00°27'40"
LANDERONDE/LES BOIS	N46°39'50" W01°33'24"
LES HERBIERS/LA PREE DE VIE	N46°52'20" W01°00'45"
MAURE DE BRETAGNE	N47°52'00" W02°00'00"
THIMORY	N47°55'00" E02°36'00"

SOUTH REGION

BARBASTE/LA CAZENEUVE	N44°11'04" E00°14'34"
CENAC and ST JULIEN/ PECH DE LAUZEL	N44°47'02" E01°10'00"
CERSAY/L'HUMEAU JOANNE	N47°03'25" W00°19'50"
GENOUILLAC/BEAUREGARD	N45°51'20" E00°34'10"
L'ABSIE/LE MARGA	N46°39'00" W00°32'20"
MAZAMET/PUECH MEGE	N43°27'40" E02°21'50"
MONTS SUR GUESNES/ST VINCENT	N46°55'23" E00°12'47"
MORLANNE/GAEC VISONS DES PYRENEES*	N43°30'10" W00°30'10"
RAMASSE/AUX VILLYS	N46°11'40" E03°30'15"
ST FELIX DE LUNEL/LES HERIMES HAUTES	N44°33'26" E02°31'46"
ST FELIX DE LUNEL/LES HERMIES HAUTES	N44°34'02" E02°40'59"

*Located within LFR594A

(SPEC/MIL AIP SUP 01-05)

3. MISCELLANEOUS SITES. Sites with distinctive marks prohibited for low altitude overflight. See VISUAL FLIGHT RULES for minimum overflight heights.

BORDEAUX FIR

FACILITY	LOCATION
BEDENAC PENITENTIARY	N45°10'07" W00°18'15"
CHATEAUROUX ST. MAUR FEDERAL PRISON	N46°47'45" E01°38'05"
GRADIGNAN FEDERAL PRISON	N44°46'56" W00°35'49"
LANNEMEZAN PENITENTIARY	N43°06'17" E00°22'38"
LEOGNAN CHATEAUNEUF CONVALESCENT HOME	N44°43'00" W00°35'37"
MAUZAC PENITENTIARY	N45°50'59" E00°47'27"
NEUVIC SUE L'ISLE PENITENTIARY	N45°04'42" E00°26'53"
PERIGUEUX PENITENTIARY	N45°11'21" E00°43'09"
PURPAN HOSPITAL OF TOULOUSE	N43°37'00" E01°24'00"
ROCHEFORT PENITENTIARY	N45°56'35" W00°55'34"
SAINT MARTIN DE RE PENITENTIARY	N46°12'08" W01°21'42"
SAINTES PENITENTIARY	N45°44'46" W00°37'32"
SAINT-JACQUES HOSPITAL AT AGEN	N44°13'00" E00°38'00"

MARSEILLE FIR

FACILITY	LOCATION
AITON PENITENTIARY	N45°33'55" E06°13'55"
ARLES PENITENTIARY	N43°42'23" E04°38'10"

MARSEILLE FIR

FACILITY	LOCATION
AVIGNON LE PONTET PENETENTIARY	N43°58'09" E04°51'48"
DRAGUIGNAN PENITENTIARY	N43°31'54" E06°27'05"
GRASSE FEDERAL PRISON	N43°40'30" E06°54'15"
LA FARLEDE PENITENTIARY	N43°09'34" E06°03'24"
MARIN LEON BERARD HELIO HOSPITAL OF HYERES	N43°05'15" E06°07'06"
MONTFAVET PSYCHOTHERAPY CENTER	N43°55'00" E04°53'00"
MOULINS YZEURE PENITENTIARY	N46°32'14" E03°21'17"
NIMES FEDERAL PRISON	N43°50'07" E04°23'49"
PERPIGNAN PENITENTIARY	N42°40'50" E02°52'19"
ROQUEFRAICHE SANITORIUM AT LAURIS	N43°46'00" E05°17'00"
SAINT LAMBERT SANITORIUM AT LIOUX	N43°59'00" E05°18'00"
SAINT QUENTIN FALLAVIER PENITENTIARY	N45°39'31" E05°07'31"
SALON PENITENTIARY	N43°37'59" E05°02'54"
TARASCON PENITENTIARY	N43°47'54" E04°39'22"
VILLENEUVE LES MAGUELONE FEDERAL PRISON	N43°32'52" E03°49'33"

PARIS FIR

FACILITY	LOCATION
CHARTRES MEDICAL CENTER	N48°25'19" E01°30'31"
CHATEAUDUN PENITENTIARY	N48°04'10" E01°21'39"
CLAIRVAUX PENITENTIARY	N48°09'00" E04°47'00"

REIMS FIR

FACILITY	LOCATION
HOERDT PSYCHIATRIC CENTER	N48°40'20" E07°46'40"
LA GRANGE-SUR-LE-MONT MEDICAL CENTER	N46°53'05" E05°54'45"
VARENNES LE GRAND PENITENTIARY	N46°41'55" E03°50'12"
VILLENAUXE LA GRANDE PENITENTIARY	N48°36'11" E03°34'36"

(SPEC/ENR 5.0-1, 2)

4. NATIONAL PARKS AND NATURE RESERVES PROHIBITED TO LOW ALTITUDE OVERFLIGHT

BORDEAUX FIR		MIN ALT
VALLE D'OSSAU	N43°03' W00°26'	1700'
BAIE DE L'AIGUILLON	N46°17' W01°24'	1000'
BANC D'ARGUIN	N43°35' W01°15'	1000'
CHAUDEFOUR	N45°32' E02°51'	1000'
CHERINE	N46°48' E01°09'	1000'
CONAT	N42°38' E02°20'	1000'
ETANG DE COUSSEAU	N45°02' W01°08'	1000'
JUJOLS	N42°35' E02°17'	1000'
L'ETANG DE LA MAZIERE	N44°23' E00°18'	1000'
LILLEAU DES NIGES	N46°14' W01°30'	1000'
MANTET	N42°25' E02°18'	1000'
MARAIS D'ORX	N43°35' W01°24'	1000'
MARAIS DE MOEZE	N45°53' W01°02'	1000'
MARAIS D'YVES	N46°01' W01°02'	1000'
NEOUVIELLE	N42°51' E00°09'	3300'

BORDEAUX FIR		MIN ALT
NOHEDS	N42°38′ E02°17′	1000′
PRATS DE MOLLO LA PRESTE	N42°26′ E02°23′	1000′
PY	N42°25′ E02°24′	1000′
PYRENEES OCCIDENTALES	N42°50′ W00°10′	3300′
SAINT DENIS DU PAYRE	N46°23′ W01°14′	700′

BREST FIR		MIN ALT
BAIE DE SAINT BRIEUC	N48°32′ W02°24′	1000′
DOMAINE DE BEAUGUILLOT	N49°24′ W01°10′	1000′
GRAND LIEU	N47°05′ W01°41′	1000′
IROISE	N48°25′ W04°58′	1000′
LA SANGSURIERE ET L'ADRIENNERIE	N49°21′ W01°32′	1000′
MARAIS DE SENE	N47°37′ W02°42′	1000′
MARAIS DU MULLEMBOURG	N47°00′ W02°13′	1000′

MARSEILLE FIR		MIN ALT
AIGUILLES ROUGES	N45°58′ E06°53′	3300′
BAGNAS	N43°18′ E03°32′	1000′
CAMARGUE	N43°30′ E04°30′	1500′
CARLAVEYRON	N45°55′ E06°43′	3300′
CEVENNES	N44°15′ E03°35′	3300′
CIRQUE DU GRAND LAC DES ESTARIS	N44°44′ E06°21′	3300′
CONTAMINES-MONTJOIE	N45°46′ E06°44′	1000′
ECRINS	N44°53′ E06°20′	3300′
ETAND DU GRAND-LEMPS	N45°25′ E05°25′	1000′
GRANDE SASSIERE	N45°29′ E07°00′	3300′
HAUTE VALLEE DU LA SEVERAISSE	N44°48′ E06°09′	3300′
HAUTE VALLEE DE SAINT PIERRE	N44°54′ E06°26′	3300′
HAUTE VALLEE DE DU BERANGER	N44°54′ E06°03′	3300′
HAUTE VALLEE DU VENEON	N44°57′ E06°10′	3300′
HAUTE PLATEAUX DU VERCORS	N44°50′ E05°30′	1000′
ILE DE LA PLATIERE	N45°21′ E04°46′	1000′
LES GEORGES DE L'ARDECHE	N44°20′ E04°30′	1000′
MARAIS DU BOUT DU LAC D'ANNECY	N45°48′ E06°15′	700′
MAS LARRIEU	N44°44′ E06°21′	1000′
MERCANTOUR	N44°09′ E07°00′	3300′
PASSY	N46°02′ E06°50′	1000′
PORT-CROS	N43°01′ E06°24′	3300′
RAMIERES DU VAL DE DROME	N44°45′ E04°56′	1000′
SCANDOLA	N42°22′ E08°35′	3300′
SIXT PASSY	N45°58′ E06°47′	1000′
VALLON DE BERARD	N46°00′ E06°53′	3300′
VANOISE	N45°20′ E06°55′	3300′

MARSEILLE FIR		MIN ALT
VERSANT NORD DES PICS DU CAMBEYNOT	N45°01′ E06°24′	3000′

PARIS FIR		MIN ALT
BAIE DE SOMME	N50°15′ E01°30′	800′
ESTUAIRE DE LA SEINE	N49°28′ E02°00′	1000′
MANNEVILLE	N49°20′ E00°31′	1000′
PLATIER D'OYE	N51°00′ E02°04′	1000′

REIMS FIR		MIN ALT
MASSIF DU VENTRO	N 47°57′ E06°58′	1000′
PETITE CAMARGUE ALSACIENNE	N47°39′ E07°33′	1000′
FORET D'OFFENDORF	N48°45′ E07°55′	1000′

(SPEC/ENR 5.6-1 thru 5.6.3)

OTHER -

1. VFR flights cruising above the higher of 900m (3000 ft) AMSL or 300m (1000 ft) AGL will be conducted at a Flight Level appropriate to the magnetic track.

(SPEC/ENR 1.2-5)

2. VFR flights without radio navigation and radio communication equipment are prohibited unless the aircraft remains in sight of land or water.

(SPEC/GEN 1.7-8)

3. VFR aircraft with a mode A/C transponder without an assigned transponder code shall display code 7000 and activate the altitude reporting function. VFR aircraft without Mode C shall not use the transponder unless a code is assigned by ATC.

(SPEC/ENR 1.6-1 and 1.6-2)

4. Outside of controlled airspace, VFR flight at and below 900m (3000 ft) MSL or 300m (1000 ft) AGL, whichever is higher, flight visibility must be at least 1500m (5000 ft), 800m (2700 ft) for helicopters, or the distance covered in 30 seconds of flight, whichever is higher.

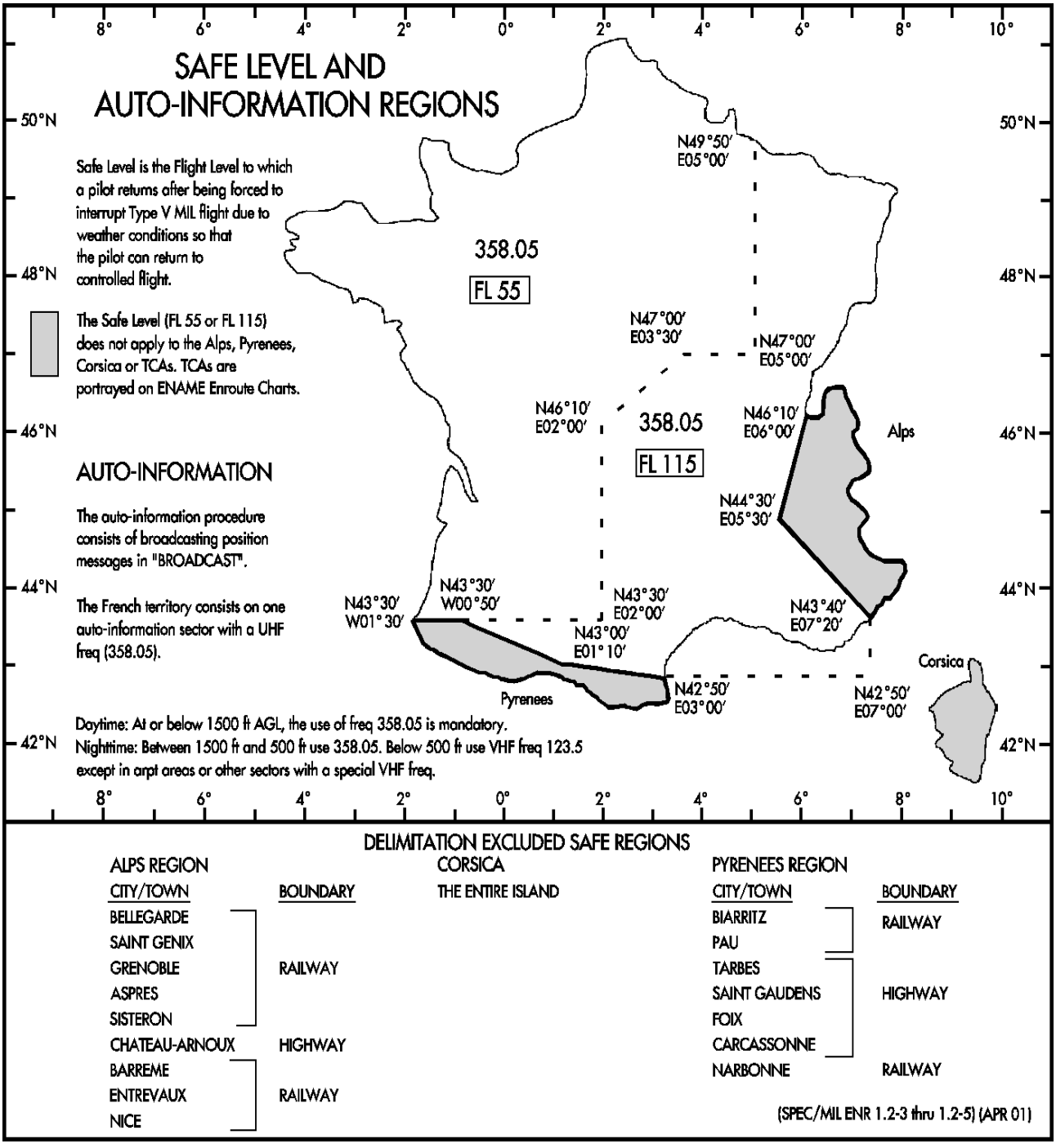
(SPEC/GEN 1.7-8)

INSTRUMENT FLIGHT RULES

FM IMMUNITY - In the airspace controlled by French authorities, the requirement for installing VHF radio navigation receivers (ILS and VOR) immunized according to the standards in ANNEX 10 of ICAO has been indefinitely delayed for aircraft operating IFR.

(TFMWG-E02/USA03-0323)

MINIMUM SAFE HEIGHTS - See SAFE LEVEL AND AUTO-INFORMATION REGIONS graphic.



DELIMITATION EXCLUDED SAFE REGIONS

ALPS REGION		CORSICA	PYRENEES REGION	
CITY/TOWN	BOUNDARY	THE ENTIRE ISLAND	CITY/TOWN	BOUNDARY
BELLEGARDE			BIARRITZ	RAILWAY
SAINT GENIX			PAU	
GRENOBLE	RAILWAY		TARBES	
ASPRES			SAINT GAUDENS	HIGHWAY
SISTERON			FOIX	
CHATEAU-ARNOUX	HIGHWAY		CARCASSONNE	
BARREME			NARBONNE	RAILWAY
ENTREVAUX	RAILWAY			
NICE				

(SPEC/MIL ENR 1.2-3 thru 1.2-5) (APR 01)

RVSM RULES -

1. RVSM Airspace:

a. The airspace within France UIR between FL 290-FL 410 inclusive is EUR RVSM airspace.

b. Airspace within the France UIR west of N49°26′ W05°05′ to N47°30′ W05°30′ to N44°50′49″ W07°02′21″, between FL 290-FL 410 inclusive, is EUR/NAT RVSM transition airspace.

c. Airspace within the France UIR south of N41°25′ E04°40′ to N41°59′30″ E06°11′ to N42°17′ E06°22′ to N41°50′15″ E08°04′12″ to N41°46′ E08°20′ to N41°20′ E08°20′, between FL 290-FL 410 inclusive, is EUR RVSM/ALGER UIR transition airspace.

(SPECS/ENR 1.8-1)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC. -

For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS version 7.0 may use their E -TCAS in the enhanced mode when flying in French airspace until 15 July 2008.

(HQ USAFE-DOV/USAF FIL 01-62)

OTHER -

1. IFR flights outside of controlled airspace.

a. Appropriate cruising levels shall be selected from the Table of Cruising Levels except when otherwise specified by the appropriate Air Traffic Service authority for flights that are operating at or below the higher of 900 meters (3000 ft) AMSL or 300 meters (1000 ft) AGL.

b. IFR aircraft in uncontrolled airspace must establish two-way communications and then maintain a listening watch.

(SPEC/GEN 1.7-8)

OPERATIONAL AIR TRAFFIC

1. Applies to flights which cannot comply with General Air Traffic (GAT) rules due to the nature of the mission.

2. TYPE B - Is a flight under control of surveillance radar in upper airspace (above FL 200) and except in lower airspace.

NOTE: Acceptance of Type B traffic cannot be assured when "Exercise Poker" is in effect.

a. TYPE V - Flights are not controlled and may take place by day or night under visual flying conditions. They are authorized anywhere provided the minima are maintained. (See instructions regarding OAT/V)

(USAFE ATCLO PARIS/AFFSA)

b. SPECIFIC INSTRUCTIONS CONCERNING OAT FLIGHTS

(1) OAT flight is performed entirely within France or is transferable to an adjacent country which is capable of interfacing with the French OAT system, such as the United Kingdom, Germany, and Spain. It is impossible for an aircraft on an OAT Flight plan overflying France to be transferred to or from the Italian ATC system. These flights must terminate their OAT phases and be transferred to GAT at designated transfer points on the OAT/B preferential routing chart. These flights, as well as those desiring GAT in the adjoining countries, must file a "Mixed GAT/OAT flight plan".

(2) All OAT flights above FL 55 or 1500' AGL, which ever is higher, must be controlled by Military Radar. For missions having a high-low profile, descent and climb must be performed under control of an approach control or an ARTCC. Below the lower boundary of control, the flight must be continued in Type V. (See High-Low-High Flight Procedures.) The minimum radar separation between aircraft enroute is 5 NM or 1000' below FL 290, 2000' above FL 290. The separation of all detected and known flights is the responsibility of the controlling radar agency. Avoidance instructions given by ATC are mandatory and must be carried out immediately. Navigation is the responsibility of the pilot who must ensure that the flight plan route is followed, unless otherwise instructed by ATC. The controller will issue instructions to return to the flight plan route as necessary.

(3) Prior to departure aircrews must receive an acceptance message (Abbreviated on the Aeronautical Fixed Telecommunications Network-AFTN-Message as ACP) from the first military radar station that will control the OAT flight. The acceptance message will be dispatched to the aircrews within 30 minutes prior to departure. Check with Base Operations via Pilot-To- Dispatch or tower to ensure compliance. DO NOT DEPART WITHOUT THIS ACP MESSAGE.

NOTE: Base Operations should notify the USAFE ATC Liaison in Paris whenever they have not received an acceptance message 30 minutes prior to estimated time of departure.

(4) OAT flights requiring special control measures (night flight, airspace reservations, etc.) must address an OAT advance notice message to CODA Taverny (LFPJZXVB) and LFFFYWYX (ATTN: American ATC Liaison) two working days in advance of their execution. The message will include:

(a) Number/type aircraft

(b) Departure airport

(c) Inclusive dates/times

(d) Flight level

(e) US code, and

(f) Brief description of services required.

(USAFE ATCLO PARIS/AFFSA)

(5) Units desiring French Military OAT Charts and Guides should contact the appropriate service representative and justify their requirements as outlined in the NGA Aeronautical Catalog Part 1, Volume 1, page 2-10 paragraph c.(2)

(TFMWG-E/NGA-OGIEG)

c. OAT FLIGHTS IN LOWER TRAFFIC AREA (LTA)

(1) Airspace Involved - The lower traffic area (LTA) is a Class D Airspace, except for the airspace located over the High Seas (12 NM out from the coasts) and mountainous areas which are in Class E. The LTA consists of FIR for Brest, Bordeaux, Marseille, Paris, and Reims above the highest of either FL 115 or 3000' AGL (900m) with the exception of the following:

(a) Airspace delegated to a foreign air traffic unit.

(b) Terminal Control Areas, Control Zones and Airways.

(c) Special Control Areas and Zones. Restricted, Danger and Prohibited Areas.

(2) Type V Military Air Traffic in Class D LTA.

(a) In general, Type V military air traffic flights require a clearance to enter the LTA. When they have received a clearance from the appropriate Region Control Center, these flights will receive service identical to that of VFR flight in the same airspace. To do this, Type V military air traffic must satisfy the same equipment conditions as VFR aircraft.

(b) Type V military air traffic flights that have not obtained a clearance may enter the LTA without a clearance in order to carry out a mission, but they should squawk transponder code A0400 while transiting the LTA. All traffic, no matter what type, should follow the rules of the air for collision avoidance.

(c) Type V military flights that, for techinical or operational reasons are not in a position to request a clearance, can enter the LTA notwithstanding the conditions set forth in previous paragraphs. Instead, they should apply the procedure designed for flights that have not obtained clearances found in the preceding paragraph.

(3) A or B Military Air Traffic

(a) Type A or B military air traffic is controlled in LTA by military control centers.

(b) Crossing airways is done without coordination under radar control.

(c) Entry into TCA is possible when conditions for use are established by protocols between the air traffic units involved. This provision does not interfere with aircraft under the control of ship-based units while they are operating in international airspace outside territorial waters.

(d) Airspace outside TCA and airways can be temporarily used in Class D airspace for special military activities. Conversely, clearances can be granted by the controlling authority, outside the TCA or airways (in order to return to airports, transition outside of air routes) Information on these practices will be shared among the ATS units.

(SPEC/MIL ENR 2.1-2)

d. OAT MINIMUM FLIGHT ALTITUDES

(1) Except for landing and takeoff maneuvers, flight minimums are 500 ft (150m) for jet aircraft, 330 ft (100m) for conventional aircraft, 170 ft (50m) for helicopters above the highest obstacle within a radius equal to the distance covered in ten seconds of flight. An exception can be made in mountainous regions for obstacles located abeam, when flight circumstances require it.

(2) For overflight of certain installations and built-up areas, these altitudes are increased. (See paragraphs on MINIMUM HEIGHTS FOR VFR OPERATIONS and FLIGHT HAZARDS.)

(SPEC/MIL ENR 1.1-1)

e. OAT FLIGHT LEVELS

(1) RVSM Areas. In order to provide separation for aircraft operating in IFR general air traffic, semi-circular flight levels are used for Military air traffic flights. Military air traffic flight levels are inserted between flight levels in IFR general air traffic. In lower airspace they are identical to VFR general air traffic flight levels.

	OAT FLIGHT LEVELS IN RVSM AREAS	
	Magnetic Route	
	000°-179°	180°-359°
	FL	FL
	etc.	etc.
	460	480
	420*	440
RVSM	385	405*
RVSM	345	365
RVSM	305	325
	275	285
	255	265
	235	245
	etc.	etc.
	35	45

NOTE: * Because separation between FL 405 and FL 420 is 1500 ft, these two FL will not be used simultaneously.

OAT FLIGHT LEVELS IN NON-RVSM AREAS	
Magnetic Route	
000°-179°	180°-359°
FL	FL
etc.	etc.
460	440
420	400
380	360
340	320
295	285
275	265
255	245
235	225
etc.	etc.
35	25

NOTE 1: In RVSM areas, separation between two controlled Military air traffic flights is 1000 ft below FL 285, 2000ft above FL 285. In non-RVSM areas, separation between two controlled Military air traffic flights is 1000 ft below FL 295, 2000ft above FL 295.

NOTE 2: FL 25 can be used when a transition altitude has not been established and when the QNH is greater than or equal to 1031.7 hectopascals.

(SPEC/MIL ENR 1.7-2)

f. OAT MILITARY RADAR SYSTEMS (ATCC)

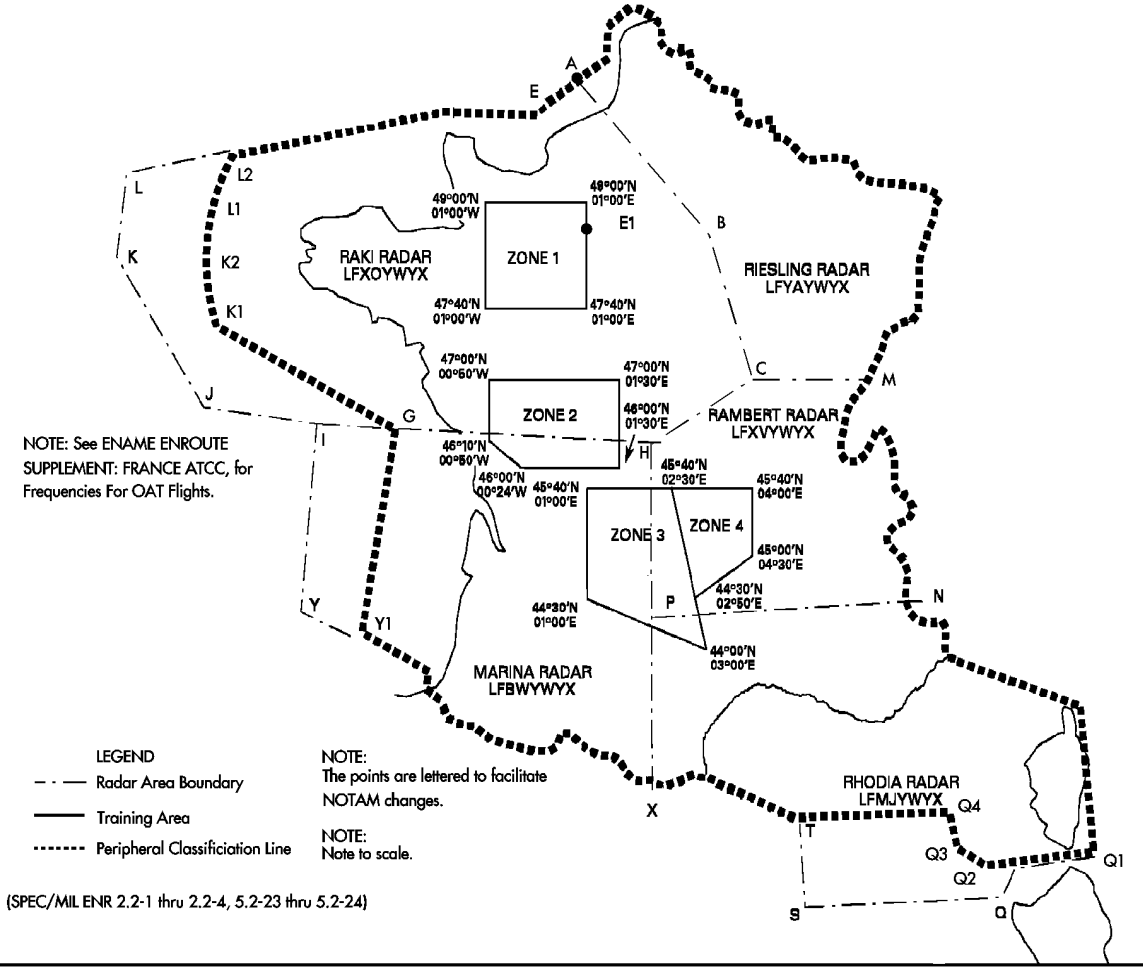
(1) The station of: DRACHENBRONN (call RIESLING), CINQ MARS LA PILE (call RAKI), LYON (call RAMBERT), MONT DE MARSAN (call MARINA) are open 24 hours.

(2) The NICE station (call RHODIA) is open 0800-1600Z++ Monday through Thursday and 0800-1500Z++ Friday. Outside these times, the control, information, alert and assistance to aircraft in flight services is provided by LYON (call RAMBERT).

(SPEC/MIL ENR 2.2-2)

OAT MILITARY RADAR SYSTEMS (ATCC's)

TRAINING AREAS FOR TACTICAL MISSIONS CONDUCTED BY ALLIED GOVERNMENT AIRCRAFT



NOTE: See ENAME ENROUTE SUPPLEMENT: FRANCE ATCC, for Frequencies For OAT Flights.

LEGEND
- Radar Area Boundary
- Training Area
- Peripheral Classificiation Line

NOTE: The points are lettered to facilitate NOTAM changes.

NOTE: Note to scale.

(SPEC/MIL ENR 2.2-1 thru 2.2-4, 5.2-23 thru 5.2-24)

(JUL 04)

A	N50°27′	E00°53′
B	N48°35′	E03°01′
C	N47°00′	E04°00′
E	N50°08′	E00°06′
E1	N48°42′	E01°00′
G	N46°20′	W02°30′
H	N46°20′	E02°15′
I	N46°20′	W04°00′
J	N46°20′	W06°00′
K	N48°00′	W08°00′
K1	N47°20′	W06°00′
K2	N48°00′	W06°15′
L	N48°50′	W08°00′
L1	N48°25′	W06°15′
L2	N49°15′	W06°00′
M	N47°00′	E06°35′
N	N44°15′	E07°00′
P	N44°15′	E02°15′
Q	N41°00′	E08°00′
Q1	N41°20′	E09°45′
Q2	N41°20′	E07°50′
Q3	N41°35′	E07°25′
Q4	N42°00′	E07°15′
S	N41°00′	E04°40′
T	N42°00′	E04°40′
X	N42°26′	E02°15′
Y	N44°20′	W04°00′
Y1	N43°57′	W02°49′

OAT V MINIMUM WEATHER CONDITIONS

			Below surface S and outside controlled airspace ③			Above surface S or in controlled airspace ① ③		
	aircraft type		flight visibility whichever is higher		cloud base	flight visibility whichever is higher		cloud
DAY	jet		2.7 NM (5 km)	or distance flown in 30 seconds	ceiling at or above 1,500'	4.3 NM (8 km) if at or above FL 100 / 2.7 NM (5 km) if below FL 100	or distance flown in 30 seconds	horizontal separation 5000' (1500m) or more vertical separation 1000' (300m) or more
	prop		.8 NM (1.5 km)		clear of cloud			
	helicopter	single	.5 NM (.8 km)					
		formation	.8 NM (1.5 km)					
NIGHT	fixed wing		-flight visibility: 4.3 NM (8 km) or more, or distance flown in 30 seconds, whichever is greater -cloud base at or above 2,500' (750m)					
	helicopter		-flight visibility: 2.2 NM (4km) or more -cloud base at or above 2,500' (750m) ②					

① In controlled airspace, these minima could be those of special VFR.
② In exceptional circumstances these values may be reduced to 1,500' e.g. humanitarian flight.
③ Surface S is the higher of 3000' (900m) MSL or 1000' (300m) AGL.

(SPEC/MIL ENR 1.2-1) (JUL 04)

OAT V FLIGHT LEVELS

	aircraft type	minimum altitude AGL ① ②	Cruising flight levels		maximum flight level
			altitude less than or equal to transition altitude or surface S ③	altitude more than transition altitude or surface S ③	
DAY	jet	500' (150m)	altitude using the QNH of the ATCC	altitude according to direction of flight OAT semicircular	FL 195
	prop	330' (100m)		N/A	1500' AGL (450m) ①
	helicopter	170' (50m)			
NIGHT	all	1000' (300m)			

① Above the highest obstacle within a radius equal to the distance flown in 10 seconds. Exceptions given to flights in mountainous regions when the obstacle is abeam, when the circumstances warrant.
② Training missions for foreign jets are prohibited from flying at less than 1000' (300m) without permission of the French Air Force General Staff.
③ Surface S is the higher of 3000' (900m) MSL or 1000' (300m) AGL.

(SPEC/MIL ENR 1.2-2) (APR 01)

g. HIGH - LOW - HIGH FLIGHT PROCEDURES - Flights with a mixed high - low - high profile are mission which cannot be executed entirely at low altitude for technical or operational reasons. They include phases of controlled and uncontrolled flight.

(1) Descent under CCT Control - Descent can only occur:

(a) Under the control of one CCT.

(b) Clear of heavy traffic areas and convergence points of airways.

(c) At a rate of 1000' per nautical mile if a risk of encountering IFR conditions exists.

(d) As low as the minimum control altitude, defined as the highest of the two following:

1 Minimum detection altitude plus 2000'.

2 Minimum safe altitude, defined as 3000' above the highest obstacle within a radius of 25 NM of the aircraft position.

NOTE: Flight below the minimum control altitude can only be conducted as OAT/V.

(2) Before descent:

(a) At least 3 minutes before the descent, the pilot states:

1 The point where the descent begins or the point of level off at low altitude;

2 The altitude where the descent begins.

(b) The controller:

1 Transmits to the pilot the local QNH, the minimum control altitude, and weather conditions at the nearest airfield;

2 Gives the descent clearance.

(3) During descent:

(a) The pilot reports regularly:

1 Passing each 5000' altitude.

2 His in-flight conditions.

(b) ATC shall:

1 Order the aircraft to level off if radar contact is lost, or if the minimum control altitude is reached while not in VMC conditions, in which case the aircraft will be instructed to climb or will be transferred to an approach control.

2 Authorize the pilot to change to OAT V if the pilot has visual contact with the ground prior to reaching the minimum control altitude.

(USAFE ATCLO PARIS/MIL ENR 1.3-4)

h. OAT/GAT FLIGHTS BETWEEN COUNTRIES

(1) OAT/GAT flights between Belgium and France.

(a) Transfer points:

	TRANSFER POINT	TYPE OF TRANSFER	ROUTE TAKEN AFTER TRANSFER
Inbound to Belgium	RSL 08	OAT/*	As directed by BELGA Radar
	RSL 09	OAT/*	
	RSL 10	OAT/*	
	RSL 01	OAT/OAT	RSL 01 to BFS above FL 150
Inbound to France	RSL 08	OAT/OAT*	As directed by RIESLING
	RSL 09	OAT/OAT*	
	RSL 10	OAT/OAT*	
	RSL 01	OAT/OAT	BFS to RSL 01 above FL 195

*OAT is preferred to GAT.

(b) OAT/GAT Flight plans with phases in Belgium must be sent to BELGA RADAR (EBSZZRZX) and Brussels Military (EBMIZGZF).

(SPEC/MIL ENR 1.5-2)

(2) GAT/OAT Flights between Italy and France.

(a) Transfer points:

	TRANSFER POINT	TYPE OF TRANSFER	ROUTE TAKEN
Inbound to Italy	GIRKU	OAT/GAT	VANAS - MEDAM - KODOK
	RBT 01	OAT/GAT	KINES-TOP
	ABRON	OAT/GAT	UM733, UM622
	AJO	OAT/GAT	UA9, UA2
Inbound to France	RBT 01	GAT/OAT	OAT Route 35
	SODRI	GAT/OAT	OAT Route 30
	AJO	GAT/OAT	OAT Route 10, 21, 30

NOTE: GIRKU useable only outside RVSM airspace for flights inbound to Italy.

(b) Rambert-Milan UIR auto-transfer. If communications are interrupted, use the following procedure:

1 Italy to France direction: Contact Rambert Radar, freq 317.5 or 143.55, Squawk 3/A 5077.

2 France to Italy direction: Contact Geneva Control: to FL 264 freq 266.55 or 125.55; FL 265 to FL 314 freq 298.25 or 126.05; FL 315 to FL 345 freq 358.8 or 124.03; FL 355 to FL 600 freq 358.8 or 128.15.

(c) Other transfer points: 1 Solenzara Control Center: RQ (N42°10' E09°45'), RR (N41°35' E09°45') 2 Rhodia, Rambert, or Marina Control Center: RO (N43°10' E09°45'), RP (N42°37' E09°45'), RR (N41°35' E09°45').

(SPEC/MIL ENR 1.5-3)

(3) OAT/GAT flights between France and UK.

(a) Transfer points:

	TRANSFER POINT	TYPE OF TRANSFER	ROUTE
Inbound to U.K.	RSL 08	OAT/*	As directed by London Military
	ING	OAT/*	
	SPT	OAT/*	
	LIZAD	OAT/*	
Inbound to France	RSL 08	OAT/OAT	OAT Route 30
	ING	GAT/OAT	OAT Route 30
	SPT	GAT/OAT	OAT Route 80
	LIZAD	GAT/OAT OAT/GAT	OAT Routes 10, 91

*OAT is preferred to GAT.

(b) Flight plan for OAT flights in France and GAT or OAT flights in the United Kingdom must be addressed to EGTTZQFP (London ATCC), EGWDYJYX (British Air Operations Command Center), EGWDZQZX (London Military ATCC) If the flight penetrates the Scottish FIR/UIR, add EGQQZQZX (Scottish Military ATCC).

(c) For mixed flight plans (OAT in France and GAT in United Kingdom) do not use the points RSL 08 and SPT in the GAT IFR portion of the flight plan as they are not recognized by the IFPS system. Instead use the geographic coordinates with the abbreviation DCT.

(SPEC/MIL ENR 1.5-1)

(4) OAT/GAT flights between France and Spain transfer points:

TRANSFER POINT	TYPE OF TRANSFER	ROUTE	REMARKS
AGN	GAT/OAT	OAT Route 74	Inbound to France
	OAT/GAT	UA34	Inbound to Spain
ENSAC	GAT/OAT	OAT Routes 10, 73	Inbound to France
	OAT/GAT	UR10 - UB19	Inbound to Spain
OBUTO	GAT/OAT	UN871	Inbound to France
TBO	OAT/GAT	UG52 - UN869	Inbound to Spain
LAPRO	OAT/GAT	UN855	Inbound to Spain
E1	OAT/OAT	OAT Route 40	NOTE 1
E2	OAT/OAT	OAT Route 20	NOTE 1
E3	OAT/OAT	OAT Route 25	NOTE 2
E4	OAT/OAT	OAT Routes 26, 36	NOTE 2
E5	OAT/OAT	OAT Route 26	NOTE 2, 3

NOTE 1: Send flight plan to LECMYXYX (Madrid Operational ATC Sq).

NOTE 2: Send flight plan to LECBYXYX (Barcelona Operational ATC Sq).

NOTE 3: Above FL 250. Cannot be used as a substitute on flight plan.

NOTE 4: All operational flight plans for flights inbound to Spain must be addressed to LESCYFPX.

(SPEC/MIL ENR 1.5-4)

(5) OAT/GAT Flights between France and Germany.

(a) Transfer points above FL 245:

	TRANSFER POINT	ROUTE	PREFERRED LEVELS
Inbound to Germany	RSL 02	RSL 02 - RMS	FL 250, 270, 290, 330, 370, 410, 450.
	RUSTI	RUSTI - TGO via HERBA	
Inbound to France	RSL 02	OAT Route 32	

(b) Transfer points between FL 200 and FL 245:

	TRANSFER POINT	ROUTE	PREFERRED LEVELS
Inbound to Germany	RSL 02	RSL 02 - SBN	Between FL 200 & FL 245
	RUSTI	RUSTI - LIPKA	
Inbound to France	RSL 02	OAT Route 32	
	RUSTI	OAT Route 40	

(SPEC/MIL ENR 1.5-5)

(6) OAT/GAT Flights between France and Switzerland transfer points:

	TRANSFER POINT	ROUTE	REMARK
Inbound to Switzerland	RSL 07	Les Eplatures (LSGC)/ Payerne (LSMP)	If above FL 195, transfer to Dubendorf.
Inbound to France	RSL 07	OAT Route 33	If below FL 195, transfer to Geneva ACC.

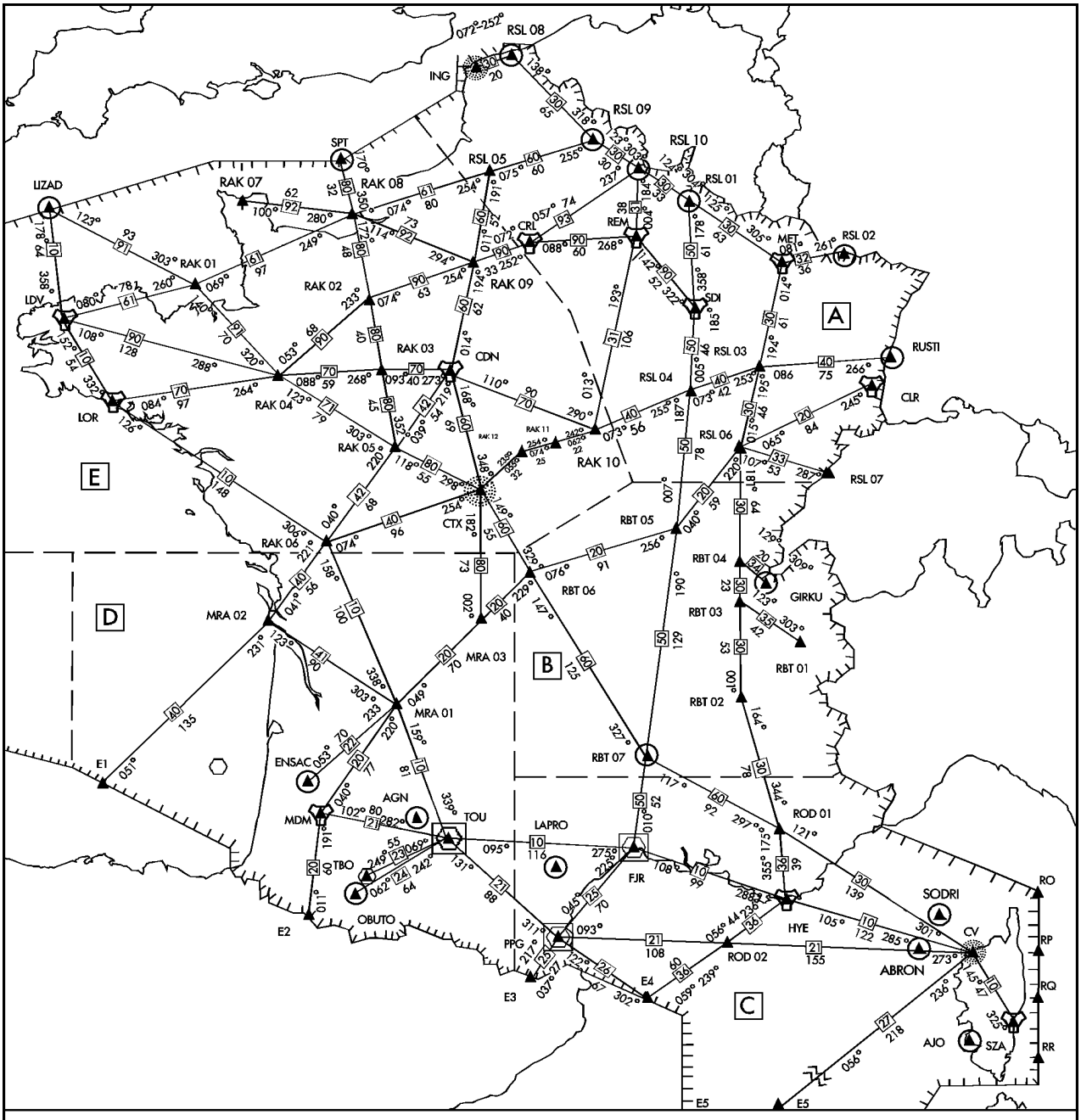
(SPEC/MIL ENR 1.5-6)

OAT REPORTING POINTS

REPORTING POINT	POSITION
ABRON (1)	N42°36′51″ E08°08′52″
AGN VOR-DME (1)	N43°53′17" E00°52′22"
AJO VOR-DME (1)	N41°46′14" E08°46′29"
CDN TACAN	N48°03′32" E01°23′13"
CLR TACAN	N47°55′46" E07°24′00"
CRL TACAN	N49°15′19" E02°30′53"
CTX NDB	N46°56′12" E01°48′04"
	(AVD TACAN 261°/35)
CV NDB	N42°34′37" E08°48′24"
	(SZA TACAN 325°/47)
E1	N44°12′00" W03°35′00"
E2	N42°55′00" W00°42′00"
E3	N42°23′00" E02°′30'00"
E4	N42°10′00" E04′10'00"
E5	N40°30′00" E04°50'00"
ENSAC (1)	N44°12′00" W00°41'25"
	(CAA TACAN 136°/28)
FJR VOR-DME	N43°34′42" E03°58'29"
GIRKU (1)	N46°03′05" E05°54'17"
HYE TACAN	N43°06′01" E06°08'51"
ING NDB	N50°52′59" E01°44'30"
LAPRO (1)	N43°25′00" E02°51'27"
LDV TACAN	N48°31′42" W04°09'23"
LIZAD (1)(2)	N49°35′25" W04°20'20"
LOR TACAN	N47°45′41" W03°26'28"
MDM TACAN	N43°54′36" W00°30'16"
MET TACAN	N49°04′01" E06°07'46"
MRA 01	N44°55′41" E00°35'21"
MRA 02	N45°41′48" W01°14'00"
	(CGC TACAN 274°/39)
MRA 03	N45°43′00" E01°48'04"
OBUTO (1)	N43°09′32" E00°01'13"
PPG VOR-DME	N42°45′01" E02°52'02"
RAK 01	N48°51′00" W02°16'00"
RAK 02	N48°43′34" E00°12'53"
RAK 03	N48°04′09" E00°23'24"
RAK 04	N48°00′00" W01°04'31"
RAK 05	N47°19′43" E00°35'52"
RAK 06	N46°26′01" W00°24'13"
	(CGC TACAN 345°/47)
RAK 07	N49°38′00" W01°35'00"
RAK 08	N49°31′00" W00°01'00"
	(EVX TACAN 301°/57)
RAK 09	N49°04′00" E01°43'00"
RAK 10	N47°34'24" E03°30'01"
RAK 11	N47°23'30" E03°01'18"
RAK 12	N47°15'44" E02°25'52"
RBT 01	N45°30′19" E06°22'37"
RBT 02	N45°00′00" E05°31'50"
RBT 03	N45°52′59" E05°31'50"
RBT 04	N46°15′38' E05°31'50"
RBT 05	N46°34′00" E04°37'26"
RBT 06	N46°10′00" E02°30'00"
RBT 07 (1)	N44°26′30" E04°10'00"
REM TACAN	N49°18′42" E04°02'43"
RO	N43°10′00" E09°45'00"
ROD 01	N43°45′00" E06°04'00"
	(HYE TACAN 355°/39)
ROD 02	N42°41′00" E05°19'00"
RP	N42°37′00" E09°45'00"
RQ	N42°10′00" E09°45'00"
RR	N41°35′00" E09°45'00"
RSL 01 (2)	N49°39'00" E04°48'00"
RSL 02 (2)	N49°10'30" E07°02'00"
	(MET TACAN 080°/36)
RSL 03	N48°05'00" E05°48'00"
RSL 04	N47°52'00" E04°49'00"
RSL 05	N49°55′00" E01°56'00"
RSL 06	N47°20'06" E05°31'50"
RSL 07	N47°05'00" E06°47'00"
RSL 08 (2)	N50°59′57' E02°14'20"
	(CMB TACAN 323°/58)
RSL 09 (2)	N50°13′00" E03°25'00"
	(CRL TACAN 031°/66)
RSL 10 (2)	N49°57′00" E04°05'00"
	(CMB TACAN 114°/40)
RUSTI (1)(2)	N48°10'36" E07°39'36"
	(CLR TACAN 035°/18)
SDI TACAN	N48°38'13" E04°53'21"
SPT (2)	N50°02'00" W00°12'06"
SODRI (1)	N43°00′47″ E08°22′19″
SZA TACAN	N41°56'15" E09°23'58"
TOU VOR-DME	N43°40'51" E01°18'35"
TBO VOR	N43°19'56" E00°08'45"

(1)Transfer Point OAT/GAT or GAT/OAT
(2)Transfer Point OAT/OAT

OAT/B PREFERENTIAL ROUTING CHART



LEGEND

270° 13 090° / 38 — Preferential routes and Identification

GAT/OAT transfer ctl pt

Flight Information Region

RADAR sector boundaries

AREA	CALL SIGN	ADDRESSEE
A	Riesling	LFYAYWYX
B	Rambert	LFXVYWYX
C	Rhodia	LFMJYWYX
D	Marina	LFBWYWYX
E	Raki	LFXOYWYX

(SPEC/MIL ENR 2.2-4, 3.5-2 thru 3.5-6) (JUN 05)

FLIGHT PLANNING

1. MILITARY AIR TRAFFIC.

a. France has designated four types of military air traffic.

(1) Type A: Controlled flight or part of controlled flight carried out under radar guidance. ATC agency is responsible for navigation and prevention of collisions between aircraft and obstructions. Flight can be conducted in IMC or VMC.

(2) Type B: Controlled flight of part of controlled flight under control of surveillance radar. ATC agency is aware of the position of the aircraft in order to provide separation and is responsible for prevention of collisions between known or detected aircraft and obstructions. The pilot is responsible for navigation. Flight can be conducted in IMC or VMC.

(3) Type C: Controlled flight or part of flight which takes place in specially allocated airspace or route, which allows protection for certain types of activity. Protection can take place in the form of a segregated area or airspace, flight level allocation or time slots. The pilot is responsible for navigation and for respecting the airspace boundaries or route. Flight can be conducted in IMC or VMC.

(4) Type V: Uncontrolled flights. Flights can only be conducted in VMC at an altitude greater than 1500'.

b. The same military flight can consist of successive phases of different types: A, B, C, or V. A military air traffic flight can also consist of flight phases in General Air Traffic which is called a Mixed Flight.

(SPEC/MIL GEN 3.3-1 thru 3.3-2, RCAM 1-45 thru 1-47)

FILING FLIGHT PLANS (DAY/NIGHT) -

1. PREPARATION OF OAT B/V FLIGHT PLANS.

a. FILING TIMES. For all OAT flight plans as tabulated below:

Flying period	Acceptance time limit
(Monday Thru Friday between 0800Z++ and 1600Z++	60 minutes before estimated departure time.
Monday Thru Friday between 1600Z++ and 0800Z++ the next day	before 1500Z++
Sat - Sun - Hol	before 1100Z++ on the last duty day before weekend or holiday

NOTE: Exceptionally urgent cases flight plans may be filed out of acceptance time limit. These flight plans must be authorized by the Air Operations Command Center (CCOA). State the nature of the urgency in block 18 of the flight plan under "RMK/URG".

b. VALIDITY: The flight plan remains valid for 60 minutes after estimated time of departure. After this period the flight plan is automatically cancelled unless a delay message (DLA) is sent.

(SPEC/MIL ENR 1.10-2)

c. ACCEPTANCE OR REFUSAL OF FLIGHT PLANS: After receipt and verification of the flight plan, the CCT serving the departure airfield transmits;

(1) An acceptance message (ACP) which constitutes the authorization to proceed with the flight.

or

(2) A refusal message (REFUS) which consists of a FPL refusal (the FPL is cancelled) and the reason for the refusal.

(SPEC/MIL ENR 1.10-12)

d. If for any reason an approved (accepted) OAT flight plan is not going to be used, a cancellation message (CNL MSG) must be sent to all French military units that were addressed on the original OAT request. The cancellation message is sent in the following format: CNL, CALL SIGN, DEPARTURE AIRPORT, DESTINATION AIRPORT, FLIGHT PLAN NO.

(SPEC/MIL ENR 1.10-13)

e. If any part of the OAT flight is performed as OAT Type V, pilots are required to file a CRV (post flight) message within one hour after landing.

(SPEC/MIL ENR 1.10-14)

2. ADDRESSEES The aircraft commander/pilot is responsible for insuring that the flight plan is completed in accordance with the instructions given. It is the Base Operations Dispatcher's responsibility to insure the proper addressing of a flight plan, however, it is highly recommended that pilots advise Base Operations of any mission that require GAT/OAT transfer in order to insure proper addressing of the flight plan as follows:

a. The Military Air Traffic Control and Coordination Center (TCC) serving the departure airfield.

b. All other Military TCC's along the route of flight;

c. Destination airport;

d. Departure airport if the flight plan is filed at a different airport;

e. Air Operations Command Center (CCOA) (LFPJYWZQ) in addition to the units affected by the flight and flights taking place on Sat, Sun, and holidays.

f. Flight plans affecting the MARINA area (LFBWYWYX) (Mont De Marsan TCC) must be transmitted to MARENGO (LFWBYWYX) (Bordeaux SCCOM) and to BURINFOVOL MERIGNAC (85930B).

(SPEC/MIL ENR 1.10-2 thru 1.10-3)

NOTE: Flight plans for flights within RHODIA or MARINA, which penetrate ISTRES area of responsibility must be addressed to ISTRES (LFMIZXVG) Flight plans for flights coming from or going to MERIGNAC (LFBD) airfield, must also be sent to MARENGO (LFWBYWYX) Flight plans for flights coming from or going to AIX (LFMA), HYERES (LFTH), ORANGE (LFMO) and SALON (LFMY) must also be sent to MARIUS (LFMMYWYX) Flights using the portion of ITI30 from Broyes Les Pesmes - RB01 must be addressed to GENEVA ACC (LSAGZRZX).

NOTE: When the total number of addresses on a flight plan exceeds six, each flight plan header must include CODA TAVERNY (LFPJZXVB) and the first Traffic Coordination Center of entry in French airspace, e.g., RAKI RADAR (LFXOYWYX) This procedure is to be followed for all subsequent service messages (DRP DLA ARR

CNL CHG) Failure to comply with this procedure will lead to a refusal (REFUS) message for the OAT phase of the flight.

NOTE: In no case should a civil addressee or civil ATCC identifier appear in a purely OAT flight plan. (See OAT/B preferential routing chart for Military ATCC area call signs and corresponding addressees) If transferring to GAT in the UK refer to instructions in OAT Restrictions.

(USAFE ATCLO PARIS/AFFSA)

3. PREPARATION OF THE MIXED GAT/OAT FLIGHT PLAN

a. Generality - A flight requiring alternating phases of OAT and GAT, as for flights from or to an overseas destination is called a MIXED FLIGHT. It demands:

(1) A mixed flight plan;

(2) GAT service message (DEP, DLA, ARR, CNL, CHG, RQS);

(3) An acceptance (ACP) or occasionally, a refusal (REFUS) message for the OAT phase established by the first CCT concerned, with remark "OAT OVER FRANCE". i.e.: (ACP - OAT OVER FRANCE - DCN5812 - NPLO3SG);

(4) If applicable a CRV (post flight) message for foreign pilots.

b. Special Notes - The mixed flight plan is composed of a GAT flight plan augmented by the following information:

Block 15:

ROUTE - Insert a chronological description of the OAT route.

- At change of type of traffic point (which must always be represented by GAT route reporting point) add:

- OAT for a change GAT - OAT i.e. AGN/OAT.

- IFR or VFR for a change OAT - GAT i.e. ENSAC/IFR.

Block 18:

After EET, list the change of type of traffic points and the Estimated Elapsed Time (EET) to reach these points. i.e. EET/EPL/0115 AGN/0155 (for inbound flights from foreign countries an OAT V or C phase of flight, detail the coordinates of the entry point and the EET to reach this point.

(AFFSA/XOIA GUIDE TO OAT B AND V)

All addresses in block 1 of the flight plan must also be indicated in block 18 in the remarks section. Use the following format (i.e. ZEN: LFPJZXVB, LFYAYWYX, etc. etc.) See sample OAT B/V and mixed GAT/OAT flight plan on following pages.

(USAFE ATCLO PARIS/AFFSA)

After RMK: In addition to standard entries add:

- MIXED GAT - OAT;

- for authorized flights from foreign countries indicate the diplomatic clearance code proceeded by DIC (i.e. DIC US 108);

- NOPDA for flights which should not be intercepted for training exercises;

- finally the flight plan number preceded by NPL.

c. Filing times-both GAT and OAT lead times are applicable to mixed flight plans.

d. Addresses-both IFPU addresses and all military air traffic control organizations concerned.

(AFFSA/XOIA GUIDE TO OAT B AND V)

SAMPLE OAT B/V FLIGHT PLAN

PRIORITY ≪ FF →

ADDRESSEE(S)
LFXVYWYX LFYAYWYX LFXOYWYX LFBWYWYX
LFMJYWYX LFMMYWYX LFBCZPZX
LFBMZPZX LFMIZPZX ≪

FILING TIME: 071200
ORIGINATOR: LFM0ZPZX
SPECIFIC IDENTIFICATION OF ADDRESSEE(S) AND/OR ORIGINATOR

3. MESSAGE TYPE ≪ (FPL
7. AIRCRAFT IDENTIFICATION: — M401222
8. FLIGHT RULES: — 0
TYPE OF FLIGHT: D ≪
9. NUMBER: — 02
TYPE OF AIRCRAFT: C—21
WAKE TURBELENCE CAT.: / M
10. EQUIPMENT: — S/C ≪
13. DEPARTURE AERODROME: — LFM0
TIME: 1300 ≪
15. CRUISING SPEED: — N0430
LEVEL: F225
ROUTE:
OAT RHODIA OB ITI50 RB 06 DCT AXE 03 OB
DCT CAA F285 APP LFBC OV H 0500 AP 3530 BQ 4218 QQ 1010 APP LFBM
OB F340 MR 02 DCT ORG
≪

16. DESTINATION AERODROME: LFM0
TOTAL EET HR/MIN: 0200
ALTN AERODROME: LFMI
2ND ALTN AERODROME: LFMY ≪
18. OTHER INFORMATION
— REG/CHARCOT A- FUGNI OPR/USAF EET/ LFBM 0135 RMK/ RVT AXE 03 NPL 08 MO
DIC US75 (OR APPROPRIATE CODE)
ZEN: (ADDITIONAL ADDRESSES NOT LISTED IN ADDRESS BLOCK ABOVE)
) ≪

NOT FOR TRANSMISSION

19. SUPPLEMENTARY INFORMATION
ENDURANCE — FUEL/ → POB/ → RDO/ 121.5 → 243 → 500 → 8364 ≪
TYPE OF EQUIPMENT | LIFE JACKETS | RADIO FREQUENCY
POLAR → DESERT → MARITIME → JUNGLE → GLOBAL → JACKETS → LIGHT → FLUORESCEIN → ≪
DINGHIES COLOR NUMBER TOTAL CAPACITY OTHER EQUIPMENT
DINGHIES → COVER → RMK/) ≪

REMARKS

AIRCRAFT SERIAL NUMBERS AND TYPE OF AIRCRAFT IN FLIGHT

CREW LIST ☐ ATTACHED ☐ LOCATED AT:
PASSENGER MANIFEST ☐ ATTACHED ☐ LOCATED AT:

NAME OF PILOT IN COMMAND | SIGNATURE OF APPROVING AUTHORITY | AIRCRAFT HOME STATION OR ORGANIZATION

DD Form 1801, MAY 87 *Previous edition is obsolete.* **DOD INTERNATIONAL FLIGHT PLAN**

Note: Completed forms can be computer generated, typed or handwritten.

(AFFSA/AFFSA OL-D) (JAN 02)

SAMPLE MIXED GAT/OAT FLIGHT PLAN

PRIORITY ≪ ☰ FF →

ADDRESSEE(S)

EDMMZQZX EDDUZQZX LFEEZQZX LFBBZQZX

LECMZQZX LPPCZQZX LFPJZXVB

LFYAYWYX LFXVYWYX LFBWYWYX LFBJZPZX ≪ ☰

FILING TIME: 1 9 0 8 3 5

ORIGINATOR: E D S F Z P Z X

SPECIFIC IDENTIFICATION OF ADDRESSEE(S) AND/OR ORIGINATOR

3. MESSAGE TYPE: ≪ ☰ (FPL

7. AIRCRAFT IDENTIFICATION: — M 4 0 1 2 2

8. FLIGHT RULES: — I

TYPE OF FLIGHT: M ≪ ☰

9. NUMBER: — 1

TYPE OF AIRCRAFT: C — 2 1

WAKE TURBELENCE CAT.: / M

10. EQUIPMENT: — S/C ≪ ☰

13. DEPARTURE AERODROME: — E D S F

TIME: 1 0 0 0 ≪ ☰

15. CRUISING SPEED: — N 0 4 5 0

LEVEL: F 4 3 0

ROUTE: DCT DKB UR11 STR/OAT RIESLING

OB ITI 20 MR02 TBO/IFR N0450 F470 LURAN UA23 ZMR UA23E BEJ

≪ ☰

16. DESTINATION AERODROME: L P B J

TOTAL EET HR/MIN: 0 2 4 5

ALTN AERODROME: L P M T

2ND ALTN AERODROME: ≪ ☰

18. OTHER INFORMATION

— OPR/USAF EET/STR/0020 TBO/0125 RMK/ MIXED GAT/OAT DIC US75 NPL 02 SF

ZEN: (Re-list all addresses in address block above)

) ≪ ☰

NOT FOR TRANSMISSION

19. SUPPLEMENTARY INFORMATION

ENDURANCE — FUEL/ → PERSONS ON BOARD — POB/ → RDO/ → EMERGENCY AND SURVIVAL EQUIPMENT — 121.5 → 243 → 500 → 8364 ≪ ☰

TYPE OF EQUIPMENT | LIFE JACKETS | RADIO FREQUENCY

POLAR → DESERT → MARITIME → JUNGLE → GLOBAL → JACKETS → LIGHT → FLUORESCEIN → ≪ ☰

DINGHIES | COLOR | NUMBER | TOTAL CAPACITY | OTHER EQUIPMENT

DINGHIES → COVER → RMK/) ≪ ☰

REMARKS

AIRCRAFT SERIAL NUMBERS AND TYPE OF AIRCRAFT IN FLIGHT

CREW LIST ☐ ATTACHED ☐ LOCATED AT:

PASSENGER MANIFEST ☐ ATTACHED ☐ LOCATED AT:

NAME OF PILOT IN COMMAND | SIGNATURE OF APPROVING AUTHORITY | AIRCRAFT HOME STATION OR ORGANIZATION

DD Form 1801, MAY 87 *Previous edition is obsolete.* **DOD INTERNATIONAL FLIGHT PLAN**

Note: Completed forms can be computer generated, typed or handwritten.

(AFFSA/AFFSA OL-D) (JUN 05)

FILING OF FLIGHT PLANS

Flight plans are filed using the ICAO formula.

The non-numbered blocks are reserved for ATC service and transmission.

All times must be filed in UTC.

BLOCK	GAT FLIGHT	MIXED FLIGHT	OAT FLIGHT
Addresses	Civil air traffic central organizations concerned. Destination airport	Both IFPU addresses and all military air traffic organizations concerned. Destination airport NOTE: When two or more transmissions are necessary, the French military addressees must be grouped in the same transmission. CODA (LFPJZXVB) for flights by allied aircraft.	Military air traffic control organizations concerned. Destination airport
7	Maximum of 7 characters; aircraft registration or operators ICAO indicator followed by the flight number. For formation flights use only the identification of the lead aircraft.		
8 Rules	Letter - I:IFR V:VFR Y: IFR then VFR Z: VFR then IFR	As for OAT	Two letters: O for OAT or E for CER A, B, C or V of (type of flight) and D in case of several types of flight.
Types	Letter - S: regular transport N: non-regular transport G: general aviation M: military X: other types	Letter M	
9 Number Type Turbulence	Indicate the number of aircraft, if more than one, and the type of aircraft using the ICAO code (DOC 8643) If more than one type of aircraft, insert ZZZZ and give number and type in block 18 DEP/. Letter H for weights equal to or greater than 136,000 kg, M for weights less than 136,000 kg and greater than 7000 Kg. L for weights less than or equal to 7000 Kg.		

BLOCK	GAT FLIGHT	MIXED FLIGHT	OAT FLIGHT
10 Equipment COM/NAV/AP P	S: a minimum of multifrequency VHF+ADF+VOR+ILS		S: a minimum of multifrequency UHF + TACAN or VOR-DME
	Otherwise describe equipment by: A = LORAN A, C = LORAN C, D = DME, E = DECCA, F = ADF, H = HF, I = Inertial nav, L = ILS, O = VOR, P = DOPPLER, R = RNAV, T = TACAN, U = UHF (1), V = VHF (1), Z = other equipment (describe in block 18 COM/. NAV/. APP/.).		
		(1) add Z if frequencies are limited and give full details in block 18 COM/.	(1) add Z if frequencies are limited and give full details in block 18 COM/.
SSR	Then, after a slash mark, one character: N - no IFF/SIF, O - any coding, 2 - 64 codes 3/A, 4 - 4096 codes but no mode C, C - 4096 codes + mode C.		
13 Departure	4 letter location indicator (ZZZZ) if no indicator)		
FIR	Estimate off-block time (EOBT), 4 numbers. If flight is not to take place the same day, give date (2 numbers) in block 18 RMK/. DEP/.		
15 Speed	5 characters: either N followed by 4 figures giving true speed in knots, or M followed by 3 figures giving speed in hundreds of MACH, or K followed by 4 figures giving speed in km/hr.		
Level	Either F for flight level followed by 3 figures or the altitude in hundreds of feet by A followed by 3 figures.		
	Either the altitude in tens of meters by M followed by 4 figures or the standard metric level in tens of meters by S followed by 4 figures.	As for GAT - as for OAT	The height in feet by H followed by 4 figures.
	For non-controlled flights at variable levels indicate: VFR	VFR, V	The letter V

BLOCK	GAT FLIGHT	MIXED FLIGHT	OAT FLIGHT
ROUTE	Write all FIR's and boundaries to be crossed outside the EUROCONTROL area in this block and give the estimated elapsed time for crossing the point in block 18 EET/.	Chronological description of ATS and OAT routes. At points of traffic type change (mandatory to be on GAT routes) after a slash mark, add: OAT for a change GAT - OAT followed by type of flight. IFR or VFR for a change OAT - GAT.	Write OAT followed by the radio call sign of the first CCT concerned by the flight. Write the initial type of flight (OA, OB, OC or OV) followed by chronological description of OAT route.
	On ATS route	On ATS/OAT routes	On OAT routes
	Route indicator, or if the airport is not on a route, DCT followed by the joining point on the first route: then the route indicator followed by each reporting point/position where changes are planned (route, level, speed ± 5 percent, flight rules (GAT), type of flight (OAT) followed by the new information. When speed or level changes, the two items are systematically repeated after a slash mark followed the point of change.		
	Off ATS route	Off OAT/ATS route	Off OAT route
	List the turning point, preceded by DCT, and the point where, as above, there will be change to the flight.		
		As for OAT	Identification of the training area, refueling axis, of the route number or specific itinerary.
16 Destination	4 letter location indicator (ZZZZ if no indicator, with name in block 1 8 DEST/.) followed, without spacing, by the estimated time of flight.		
Diversion	1 or 2 alternate airfield indicators (ZZZZ if no indicator, with name in block 18 ALTN/.).		

BLOCK	GAT FLIGHT	MIXED FLIGHT	OAT FLIGHT
18 REG	Write 0 if no information available or write all other information appropriately abbreviated and separated by slash marks.		
	Aircraft Call sign if not shown in block 7.		Otherwise, the operational Call sign or mission number used for radio communications.
OPR	Nationality using abbreviation: FAF, FNF, ALAT, USAF . . . or in clear.		
STS	Flight necessitating special treatment or particular surveillance: VIP, EVASAN, SAR, flight under a waiver, etc.		
TYP	Number and type of aircraft if ZZZZ in block 9.		
COM	Additional equipment if Z in block 10.	As for OAT	If Z after UHF or VHF in block 10, useable frequencies followed by the indicators of the CCT concerned.
NAV	In full all NAV equipment if Z in block 10		
DEP	Place of departure in full if ZZZZ in block 13		
EET	Coordinates and estimated elapsed time's for crossing point requested by ATS	As for GAT- As for OAT In addition: change of traffic points and estimated elapsed time's for these points separated by slash marks. (Ex: EST/EPL/1015-AGN/1055) Coordinates of entry points into France followed by estimated elapsed time of transition to OAT V or C for flight of foreign origin.	Transition point from non-controlled flight into controlled flight and estimated elapsed time.
ALTN	Diversion airport (or place) in full if ZZZZ in block 16		

BLOCK	GAT FLIGHT	MIXED FLIGHT	OAT FLIGHT
RMK	Any other information in clear.		In addition:
		As for OAT Besides remark mixed GAT/OAT.	For foreign aircraft, overflight auth number preceded by DIC. Flight not to be intercepted for training exer NOPDA. Air-to-air refueling: RVT followed by the area number. Finally, PLN departure number (4 characters: 2 numbers and 2 last letters of location indicator of airfield of dispatch preceded by NPL) (EX: RMK/NOPDA RVT AXE 03NPLO5BG).
	ZEN: List all appropriate addresses which are not indicated in the address block of the flight plan.		
19	Not transmitted with the flight plan. Endurance: endurance in hours (2 numbers) and minutes (2 numbers). Persons on board: after POB the total number of persons on board. Emergency and survival equipment: Cross out all those frequencies and Types of equipment not carried. Life saving jackets: cross out all those items not carried. Radio Frequency: write the transmission/reception frequencies of any portable transmitter. Dinghies: Color: write in full. Number: write the number of dinghies carried. Total capacity: write the total number of people who can be carried in the dinghies. Other equipment: write in full. (AFFSA/XOIA GUIDE TO OAT B AND V)		

SUPERSONIC FLIGHTS -

1. Execution.

a. Supersonic flight over French territory and within less than 37 km (20 NM) of the coast are forbidden under the following conditions:

(1) In a dive at any angle.

(2) In level flight or in a climb below 10,000m (FL 330).

(3) Within zones depicted on the OAT navigation chart and listed below (Urban zones, risk of landslide or avalanche).

(4) Between the hours of 1900-0700Z++.

b. Missions may be carried out over the ocean at all altitudes as long as the supersonic boom does not reach the shore.

c. Overflying beaches supersonically must be avoided between 15 Jun and 15 Sep.

2. Supersonic flight management.

a. Acceleration should be carried out in horizontal flight only.

b. Where the type of mission requires a waiver of these rules, the maneuvers should be carried out when possible over low density population areas or over the sea.

c. Under no circumstances may supersonic flight be carried out over large centers of population (100,000 plus).

NOTE: Exceptions to the above rules are authorized on the initiative of the Secretary of State for Armament and the Chief of Staff of the Air Force and Navy for experimental test flights and safety missions. Contravention of these rules will be sanctioned in the same manner as for any other rule of the air.

(SPEC/MIL ENR 1.1-5)

3. Supersonic flights are prohibited at all altitudes in areas covered by NOTAMs and in the following zones.

a. Zone 1 - (Paris) Circle radius 45 NM center on N48°51’15" E02°21’00".

b. Zone 3 - (Swiss border) Between N47°55’ E07°35’ along French/Swiss border to N45°35’ E07°00’ to N45°47’ E05°28’ to N46°30’ E05°28’ to N47°49’ E06°42’ to point of beginning.

c. Zone 4 - (Moustier) Circle radius 20 NM centered on N43°50’30" E06°13’30".

d. Zone 5 - (Oloron) Between N43°04’ W01°28’ along the French/Spanish border to N42°42’ E00°00’ to N43°32’ W00°17’ to N43°34’ W01°07’ to point of beginning.

e. Zone 6 - (La Roche Sur Le Buis) Circle radius 5 NM centered on N44°16’30" E05°19’20".

4. Supersonic flights are prohibited at all altitudes in the following zones between 1 Nov and 1 Apr.

a. Zone 10 - (Alps) Between N45°35’ E07°00’ to N45°47’ E05°28’ to N43°50’ E05°25’ to N43°45’ E07°30’ along the French/Italian border to the point of beginning.

b. Zone 11 - (Pyrenees) Between N42°30′ E03°10′ to N43°10′ E02°35′ to N43°30′ W01°00′ to N43°00′ W01°00′ along the French/Spanish border to the point of beginning.

(SPEC/MIL ENR 5.1-7)

LOW LEVEL FLYING -

1. Low level is a special form of Type V. These flights may be performed between 500 and 1500′ AGL during daylight hours only. The maximum speed is limited to 450 kt. (See instructions regarding OAT/V)

NOTE: LOW LEVEL OAT/V WILL NOT BE PERFORMED IN PROHIBITED AREAS, RESTRICTED AREAS, BUILT UP AREAS OR AREAS WHERE PEOPLE ARE ASSEMBLED, NOR WILL IT BE CONDUCTED ON SATURDAYS SUNDAYS OR FRENCH HOLIDAYS.

(USAFE ATCLO PARIS/AFFSA)

2. LOW LEVEL FLYING - Mission planners should adhere to low level VFR routes described in the Foreign Clearance Guide (FCG) (See "France" section, USA 101, 102, and 204) Aircrews may contact USAFE ATCLO Paris for assistance with flight planning and coordination.

(USAFE ATCLO PARIS/AFFSA)

SUPPLEMENTARY AIRPORT INFORMATION -

Blagnac (LFBO)

1. NOISE ABATEMENT:

a. All aircraft:

(1) Over-flight of Purpan Hospital is prohibited. (Approximately 1NM prior to Rwy 33R and slightly right of centerline.)

(2) Low circling approaches are prohibited.

(3) Perform approaches with an angle equal to or greater than the angle of the ILS glide slope (Rwy 14R, 32L, 32R, 14L) or PAPI (Rwy 32R).

(4) On landing, thrust reversal is prohibited and propeller reverse pitch may be set to a position exceeding the reverse idle power only for operational purposes.

(5) Visual approaches are prohibited except:

(a) When required for flight safety.

(b) When proposed by air traffic control in order to optimize air traffic. In this case, avoid overflying the city of Toulouse and intercept the rwy centerline at a minimum of 3000 feet QNH.

b. Flight Restrictions:

(1) Turbojet aircraft which do not comply with ICAO Annex 16 noise requirements are not authorized to land or takeoff between 2200L-0600L except under extraordinary circumstances. Times are in-block or off-block times.

(2) Training flights consisting of repetitve instrument approach procedures or traffic pattern circuits are prohibited without permission from Director of South Civil Aviation (DAC SUD).

c. Engine Tests:

(1) Must be performed on parking area "Bikini" (West side of Rwy 14R/32L alongside Taxiway 46A).

(2) Are prohibited between 2200L-0600L.

(3) Engine tests are defined as any operation carried out on stationary aircraft with its engines running either for more than 5 minutes or at a power more than that used for starting and taxiing.

(SPEC/ARR-DEP AD2 LFPO ENV 1 and 2)

Cote D'Azur (LFMN)

1. NOISE ABATEMENT:

a. General:

(1) Deviations to noise abatement procedures are permitted when required for flight safety, authorized by airport authority or as directed by ATC.

(2) Over-flying the coastline:

(a) IFR: Do not over-fly the coastline below 5000ft AMSL except when making a straight-in approach to Rwy 04L/04R or an approach to Rwy 22L/22R.

(b) VFR: Except for landings and take-offs or as directed by ATC, over-fly the coastline as high as possible.

(SPEC/ARR-DEP AD2 LFMN INI 1 and 3)

(3) Speed Restriction: Unless otherwise stated, speed is restricted to a maximum 250KIAS below FL 100.

(SPEC/ARR-DEP AD2 LFMN TEXT 1)

(4) VFR flights at NICE are prohibited every day between 0900-1200Z (SUM) or between 1000-1300Z (WIN) except for home based aircraft or helicopters.

b. Arrivals

(1) Visual Approaches to Rwy 04/22 must be made over the sea below 5000 ft AMSL. Do not over-fly Antibes, Juan les Pins or Cap d'Antibes.

(2) Instrument approaches to Rwy 04L/04R:

(a) To avoid over-flying Antibes-Juan les Pins, expect circle-to-land procedures unless weather conditions, technical conditions, or ATC requires instrument straight-in approaches.

(b) Straight-in approaches:

1 Maximum 200KIAS before reaching 10NM from runway in use.

2 Landing gear extension recommended after NC LCTR (221°/4.9 NM from threshold Rwy 04L, freq 338 MHz).

3 Whenever possible, avoid increases in power and thrust when on final approach.

(3) Approaches to Rwy 22L/22R:

(a) Straight-in approach prohibited. Fly base leg so that final is short, avoid over-flying NICE, maintain a minimum 3° descent path.

(SPEC/ARR-DEP AD2 LFMN INI 1 thru 3)

(b) Noise abatement procedures may be initiated by ATC when weather conditions allow. Over-fly NC LCTR at or above 2500 feet, fly downwind over the sea.

(SPEC/ARR-DEP AD2 LFMN INI 1, IAC AD2 LFMN IAC 06 and 08)

c. Departures:

(1) Take-off Runway 04L/04R: Rwy hdg to 400 ft AAL before turning. Runway 22L/22R: Rwy hdg to 500 ft AAL before turning.

(2) Between 2100-0630Z++ all takeoffs will be made from Runway 04R/22L unless otherwise instructed.

d. GPU/APU Restrictions: Ground power unit (GPU) or electrical converter must be used during stopovers. However, the use of onboard APU is permitted for a maximum of 30 minutes after the arrival of aircraft at the ramp; 30 minutes before departure of aircraft from the ramp; and for the total length of the stopover if less than 60 minutes.

e. Aircraft Restrictions: The following aircraft which do not comply with ICAO Annex 16 noise requirements are not allowed to land between 2330-0615L or take-off between 2315-0600L. The aircraft are propeller aircraft with a maximum certified take-off weight more than 9000 kg (19,840 pounds) and turbojet aircraft. The times are apron arrival/departure times.

f. Thrust Reversers: When landing, operate thrust reversers and propeller pitch reversers at idle power except for operational or safety purposes.

g. Engine testing:

(1) Engine tests include any operation carried out on a stationary aircraft with engines running for more than five minutes or with an engine power higher than that used for starting or taxing.

(2) Engine tests are not allowed between 2100- 0600L but with prior request to Prefect of the Alpes-Maritimes, special dispensation may be approved between 2100-2300L and between 0500-0600L.

h. Training Flights: Prohibited for aircraft whose max take-off weight is more than 5.7 Metric Tons (12,565 pounds).

(SPEC/ARR-DEP AD2 LFMN INI 1 thru 3)

Le Bourget (LFPB)

1. SIMULTANEOUS OPERATIONS WITH PARIS CHARLES DE GAULLE (LFPG) - Triple parallel simultaneous approaches and departures take place in all weather conditions for Paris Le Bourget (LFPB) runways and Paris Charles De Gaulle (LFPG) runways.

(SPEC/IAC AD2 LFPB ADC 04)

2. TAXIWAY RESTRICTIONS

a. Aircraft with wingspan greater than 53M (173 ft 10 in) must report the information on initial contact with Le Bourget and then to Le Bourget Ground and state type of aircraft.

b. The following twy are unuseable for aircraft whose wingspan is greater than the stated values.

(1) 28M (91 ft 10 in): Twy W5, Access to parking areas Kilo & Mike.

(2) 53M (173 ft 10 in): Twy V1.

(3) 63M (206 ft 8 in): Twy W1, U1, U2.

(4) 71M (232 ft 11 in): Twy V2.

(5) 74M (242 ft 9 in): Twy W2.

(6) 76M (249 ft 4 in): Twy V3.

(SPEC/AD2 LFPB4)

3. ARRIVAL PROCEDURES

a. SPEED AND LEVEL LIMITS: Speed and Level limitations are imposed on certain segments of the procedures for air traffic reasons. Unless otherwise instructed, pilots being vectored are to comply with these restrictions. If unable, they must notify ATC.

b. HEADING OVERSHOOT PREVENTION WHEN RADIO CONTACT IS MOMENTARILY LOST - After the pilot has been given a radar vector to intercept the assigned runway centerline at an angle less than 70°, pilots will take the initiative to intercept the ILS localizer or other replacement approach aid unless they have previously been instructed to cross the rwy centerline by ATC.

c. RWY 07 - Due to the fact that approaches to Le Bourget (LFPB) Rwy 07 and to Charles De Gaulle (LFPG) Rwy 08R/08L are handled independently, pilots must strictly adhere to missed approach instructions to avoid drifting into Charles De Gaulle (LFPG) Rwy 08R/L approach path and must report any equipment malfunctions to Charles De Gaulle Approach and/or Le Bourget Twr.

d. RWY 25 - Only multi-engine jets, such as A300, DC8, MD11 & B747, will be vectored to Rwy 25. If for safety reasons, an aircraft wishes to use Rwy 25, the aircraft should advise Charles De Gaulle Approach on first contact Flow control measures (holding) may be used to assure compatibility with Paris Charles De Gaulle (LFPG) traffic.

e. RWY 27:

(1) On intercepting the LLZ Rwy 27, unless otherwise cleared by Charles De Gaulle radar, airspeed should not exceed 220 KIAS so as to not interfere with the Rwy 26R/L approach path to Paris Charles De Gaulle (LFPG).

(2) Pilots must strictly follow the Rwy 27 approach centerline so as not to enter the non transgression zone (NTZ) located between the approach path of Rwy 27 Paris Le Bourget (LFPB) and that of Rwy 26R/L to Paris Charles De Gaulle (LFPG).

(3) Any excessive deviation from the localizer centerline, malfunction of the localizer, or decision to initiate a missed approach must be relayed immediately to approach control.

(4) Depending on the Charles De Gaulle (LFPG) Rwy 26R/L traffic, ATC may issue nonstandard missed approach instructions. Clearances can be issued to turn at or above 600' QNH and climb to 1500' QNH minimum. From 600' and above, radar vectors will be given.

f. Training Flights - Approaches for CAT 2 and CAT 3 training are prohibited.

(SPEC/IAC AD2 LFPB ADC 03 and 05)

4. DEPARTURE PROCEDURES

a. Airspeed - Airspeed for conventional SIDs shall not exceed 220 KIAS. Airspeed for other SIDs shall not exceed 250 KIAS below FL 100. From FL 100 and above, airspeed shall not exceed 280 KIAS for the following SIDs: AGOPA, ERIXU, LATRA, OKASI, PILUL. Airspeed may be increased without ATC clearance on other SIDs above FL 100.

b. ATC Climb Gradient - Aircraft must adhere to the climb gradient specified on the SID. If no gradient is specified, use 5.5% minimum to FL 150. If this is not possible, advise control on preflight frequency on first contact. During climb, if it is impossible to maintain the assigned gradient, pilots must advise the air traffic control unit on departure frequency.

c. High Performance Routes - Aircraft capable of maintaining a climb gradient of 10% to FL 150 may take shortened routes. Radar vectoring will automatically be provided by De Gaulle departure.

d. Departure Clearance - The initial call should be carried out 10 minutes before the anticipated start-up time. The following information should by given: call sign, destination, parking position and "ready to start engines in 10 minutes".

e. Flight crews are reminded of the risk of confusing Rwy 07 and Rwy 09. Flight crews are asked to verify their magnetic headings after alignment and before takeoff:

(1) Rwy 07 - magnetic heading 070°.

(2) Rwy 09 - magnetic heading 087°.

f. RWY 07: If for operational reasons an aircraft wants to use Rwy 07 for take-off, advise Le Bourget Preflight 30 minutes before ETD. Flow control measures (GND holding) may be used to assure compatibility with Paris Charles De Gaulle (LFPG) traffic.

(SPEC/ARR-DEP AD2 LFPB TEXT 1)

5. NOISE ABATEMENT:

a. Quiet Hours

(1) Propeller aircraft may not take-off from 2315-0600L or land from 2330-0615L when their certified take-off weight is greater than 19,842 pounds (9 Metric tons) and they do not comply with ICAO Annex 16, Chapter 3 noise requirements. Times are departure and arrival times at parking areas.

(2) Jet aircraft may not take off from 2215-0600L. Time is of departure time from parking area.

(3) Jet aircraft not in compliance with ICAO Annex 16, Chapter 3 noise requirements may not land from 2330-0615L. Time is arrival time on the parking area.

(4) Quiet hours do not restrict arrivals and departures under unusual circumstances or when approved by Director General Aviation.

(SPEC/ARR-DEP AD2 LFPB ENV1)

b. Take-off procedures:

(1) All aircraft will climb to 3000' AGL as soon as possible.

(2) Jet aircraft will maintain V2+10 Kt or minimum climb speed with takeoff flap setting to 3000'.

(3) Turbofan aircraft will maintain takeoff speed up to 1500', then reduce to climb power to 3000'.

(4) Single jet aircraft will maintain takeoff power for 70 seconds or up to 700'. At 70 seconds or 700', reduce to noise abatement power to 3000'. This procedure is to create as little noise as possible over built-up areas located 4 km and more from threshold (2.1 NM).

(5) All aircraft at 3000', retract flaps and resume normal climb power.

(SPEC/ARR-DEP AD2 LFPB ENV2)

c. Landing Procedures:

(1) Pilots are to perform their approach so as to maintain the last altitude assigned by ATC up to the interception of the ILS glide path. After interception, the final approach must be performed without flying below this glide path.

(2) Reverse thrust is prohibited from 2115-0500Z++ except when needed for safe operation of the aircraft.

(SPEC/ARR-DEP AD2 LFPB ENV2)

d. Runway Utilization:

(1) Rwy 03:

(a) Authorized only for aircraft weighing 5.7 metric tons (12,566 lb) or less from 2115-0500Z++.

(b) VFR traffic: If aircraft turn left after take-off, they must do so either at the end of the rwy or between Gonesse and Goussainville so as to avoid overflight of these built-up areas.

(2) Rwy 07: If jet aircraft are authorized to take-off from 2115-0500Z++, they will use Rwy 07 whenever possible.

(3) Rwy 21 may only be used for departures under exceptional circumstances. If used for departure, after takeoff turn as soon as possible, and not later than 1.5 NM from the airport, to miss the city of Paris.

e. Engine Testing: Testing engines at hold points requires prior permission from the airport ATS office.

(SPEC/ARR-DEP AD2 LFPB ENV1)

Mediterranee (LFMT)

1. Noise Abatement:

a. Arrival Procedures:

(1) The preferred landing runway is Rwy 31R unless the tail wind is 8 Kt or greater.

(2) Approaches to Rwy 13L are to be carried out at an angle equal to or greater than the PAPI angle of 6.4% (3.7°).

(3) Do not over-fly the town of "La Grande Motte" below 2000 ft. (Approximately FJR R-107/5 DME.) otherwise instructed by ATC.

b. Departure Procedures:

(1) Rwy 13L is the preferred departure runway at night.

(2) Rwy 13L Departures: Maintain runway heading until FG NDB (1.7 NM) before proceeding on course.

(3) Rwy 31R Departures:

(a) Fly runway heading until 400 feet AAL before

proceeding on course.

(SPEC/ARR-DEP AD2 LFMT INI 1 and 2)

(b) Departures towards MEN VOR/DME should intercept and proceed on FJR R-332 by FJR 4 DME.

(c) Jet aircraft departing from Rwy 31R are to maintain take-off power setting until 1500 feet and then a climbing power speed of V2+10 until 4000 feet.

(SPEC/ARR-DEP AD2 LFMT INI 1)

c. Training Flights:

(1) Permitted year-round for piston aircraft from 0600-2100Z++.

(2) Permitted for turbojets and turboprops in acoustical Groups 4 and 5 from 0600-2100Z++ Mon-Sat (except holidays) from 1 Oct-15 Jun.

(3) Prohibited year-round to aircraft in acoustical Groups 1, 2, 3.

(4) Training flights to Rwy 13L must maintain a minimum altitude of 1000 feet on downwind leg.

(5) Traffic pattern training flights taking off from Rwy 31R must perform their initial turn at FJR 1.4 DME to join right hand downwind leg.

(SPEC/ARR-DEP AD2 LFMT INI 1)

Merignac (LFBD)

1. NOISE ABATEMENT:

a. All aircraft:

(1) Avoid overflying the Bordeaux built-up area.

(SPEC/ARR-DEP AD2 LFBD TEXT 2)

(2) When departing, climb to 3000' AAL as soon as possible.

(SPEC/ARR-DEP AD2 LFBD INI 1a and 2a)

b. Jet Aircraft:

(1) On departure, use flaps in takeoff configuration and maintain V2 + 10Kt or a speed that allows the correct attitude up to 3000' AAL. Above 3000' AAL, adopt a normal climb speed and retract the flaps.

(2) When landing at night (2100-0500Z++), avoid using thrust reversers when braking and runway conditions permit.

c. Runway Use:

(1) Preferred runway: Runway 23 is the preferred rwy up to a tail wind of 8Kt. At night (2100-0500Z++), the use of Rwy 23 is compulsory unless the condition of the runway renders its use impossible. Runway 11/29 is used when the cross wind on Runway 05/23 exceeds 15Kt or Rwy 05/23 is unavailable.

(2) Runway 05: The use of the Rwy 05 threshold turnaround area in order to achieve the TODA of 10,170' is restricted to widebody aircraft. Other aircraft should expect an intersection departure (approximately TODA of 8850') unless they have prior permission from ATC.

d. Training Flights: Repetitive instrument approach procedures or successive traffic pattern circuits are prohibited except with special authorization from the airport manager and 48 hours prior notice.

e. Engine tests:

(1) Engine tests and run-ups are prohibited 2200-0600L except with authorization from airport manager.

(2) Engine tests must be run in idle power on the aircraft stands or in high power in areas assigned by the control tower.

(SPEC/ARR-DEP AD2 LFBD TEXT 2)

Orly (LFPO)

1. GROUND MOVEMENT

a. Anti-collision lights must be on before engine startup and must stay on whenever engines are running on the apron.

b. Wing Span Restrictions.

(1) Aircraft with wing spans greater than 60 meters (196 ft 10 in) must report the information on initial contact with Orly and then to Orly GND and state type of aircraft.

(2) The following twys are unuseable for aircraft whose wingspan is greater 60m (196 ft 10 in): Twy WA, WB, WG and access to KILO 0 area.

(SPEC/AD2 LFPO 5)

c. Push Back Vehicles - The push-back of certain aircraft at Paris Orly can be performed by using a remote controlled vehicle (Power Push Unit: PPU) fitted with rotary beacon lights. The PPU vehicles are engaged at the rear of the main gear in order to move the aircraft to the taxiway centerline, then are disengaged and moved back a few meters behind the tail of the aircraft. Once the aircraft has self departed, the PPU vehicle is moved away from the taxiway. The attention of the flight crew is drawn to the possible presence for a short time, of a PPU vehicle leaving the taxiway between their aircraft and the one ahead.

2. ARRIVAL PROCEDURES

a. SPEED AND FLIGHT LEVEL LIMITS: Speed limits of 250 Kt and 220 Kt and flight level limitations are imposed on certain segments of the procedures for air traffic reasons. Unless otherwise instructed, pilots must comply with these restrictions. If unable, they must notify ATC as soon as possible.

b. "Landing After" Procedure - During landings on Rwy 06/24 or Rwy 26, a landing clearance called "land after" may be given to pilots.

c. Radar Separation on Final Approach - Radar separation on final approach may be reduced to 2.5 NM.

d. Reduced Runway Spacing - Reduced runway spacing may be used on Rwy 06 and 26. Minimum distance that has to be cleared by the preceding aircraft is 2500m (8202 ft).

e. Training Flights - Approaches for CAT 2 and CAT 3 training are prohibited 0700-1000L and 1800-2130L Mon-Fri; 1800-2130L Sun.

(SPEC/IAC LFPO ADC 02 and 03)

3. NOISE ABATEMENT PROCEDURES

a. Airport Restrictions

(1) Runway Use:

(a) Preferred Runway for Take-Off: Rwy 08, 24.

(b) Preferred Runway for Landing: Rwy 06, 26.

(c) Runway 02/20 can be used if main runway is unavailable or there are strong winds from the north or south.

(2) Night Restrictions

(a) The quiet hour period for the airport is 2330-0615L time of arrival on apron and 2315-0600L time of departure from apron. Aircraft may not arrive or take-off during the quiet hour period without authorization from Director Civil Aviation (DGAC). These restrictions do not apply to government flights, weather diverted flights, ambulance or humanitarian transport missions, or emergency situations.

(b) Between 2330-0600L, as long as the tail wind component does not exceed 8 Kt, all aircraft will take-off to the West and land to the East.

(3) Engine Testing:

(a) Engine testing may only be carried out in designated locations.

(b) Except as approved by the Director of Civil Aviation (DGAC), engine testing in the North industrial area is prohibited between 2315-0615L.

(c) Engine testing restrictions do not apply to short engine adjustments lasting less than 5 minutes and which are carried out at idle power, and the power does not exceed that used for engine starting and taxiing.

(4) Non-Low Noise Aircraft: Aircraft which do not meet ICAO Annex 16, Chapter 3 noise requirements may be prohibited from landing and taking off at Orly (LFPO).

b. Take-off Restrictions

(1) All aircraft must climb to 3000 ft AAL as soon as possible.

(2) Jet aircraft - Maintain a take-off speed of V2+10 Kt (or the speed required to maintain aircraft attitude) up to a height of 3000 ft with flaps set for take-off. Maintain power take-off setting up to a height of 1500 ft then full power up to 3000 ft. At 3000 ft reduce power to normal climb and flap settings.

(3) Unless for safety reasons, aircraft are required to follow the initial climb procedures for noise abatement.

(a) For 6.5 NM from OL VOR/DME: Takeoff Rwy 02, 06, 08.

(b) For 7 NM from OL VOR/DME: Takeoff Rwy 24, 26.

(c) Do not initiate turns before the distances stated above.

(4) Initial takeoff procedures do not apply to propeller aircraft weighing less than 5.7 metric tons (12,566 pounds) or propeller aircraft weighing more than that after reaching 2500 ft.

(5) Air Traffic Control will attempt to avoid requiring northward turns less than 9 NM from OL VOR/DME below FL 60 for jet aircraft or an altitude of 2500 ft for propeller aircraft on Runways 02, 06 and 08.

c. Arrival Procedures

(1) Maintain last assigned altitude until ILS glideslope interception.

(2) Do not fly below the glide path on final.

(3) Reverse thrust or pitch reversing may only be used from 2200-0615L for safety reasons.

(4) Air Traffic Control will attempt to avoid turning an aircraft onto base leg at less than 9 NM from OL VOR/DME for inbound flights from Toussus VOR (TSU) to Runway 24 and 26 following the northern downwind leg.

(SPEC/ARR-DEP AD2 LFPO ENV 1 thru 3)

Paris Charles De Gaulle (LFPG)

1. SIMULTANEOUS OPERATIONS WITH PARIS LE BOURGET (LFPB) Triple parallel simultaneous approaches and departures take place in all weather conditions for PARIS LE BOURGET (LFPB) Runways and PARIS CHARLES DE GAULLE (LFPG) Runways.

2. PREFERRED RUNWAY USE

a. Rwy 09L/27R: Arrivals.

b. Rwy 09R/27L: Departures.

c. Rwy 08R/26L: Arrivals.

d. Rwy 08L/26R: Departures.

(SPEC/IAC LFPG ADC 05-06)

3. GROUND MOVEMENT

a. Aircraft vacating Rwy 08R/26L or 09L/27R after landing must NEVER cross Rwy 08L/26R or 09R/27L without first receiving specific ATC clearance which will be issued after landing.

(SPEC/IAC LFPG ADC 05)

b. Taxiway Restrictions

(1) Twy FN2 prohibited to aircraft bigger than 80 metric tons (176,368 lbs) Twys E North, E South, and HPE are limited to aircraft with wingspan less than or equal to 27m (88 ft-7 in).

(2) Use caution on Twy S3 and S4. They have a slope of 3% between Rwy 08L/26R and Twy T.

(SPEC/AD2 LFPG 4)

c. Anti-collision lights must be on before engine startup and must stay on whenever engines are running on the apron.

(SPEC/AD2 LFPG 12)

4. ARRIVAL PROCEDURES

a. Heading Overshoot Prevention When Radio Contact Is Momentarily Lost - After the pilot has been given a radar vector to intercept the assigned runway centerline at an angle less than 70°, pilots will take the initiative to intercept the ILS localizer or other replacement approach aid unless they have previously been instructed to cross the rwy centerline by ATC.

b. Radar Separation on Final Approach - Radar separation on final approach may be reduced to 2.5 NM.

c. Depending on the Paris Charles De Gaulle (LFPG) and Paris Le Bourget (LFPB) traffic, ATC may issue nonstandard missed approach instructions. Clearances can be issued to turn at or above 800' QNH and climb to 1500' QNH minimum. From 800' and above, radar vectors will be given.

d. Any excessive deviation from the localizer centerline, malfunction of the localizer, or decision to initiate a missed approach must be relayed immediately to approach control.

e. Training Flights - Approaches for CAT 3 training are permitted by prior request from 1300-1700L and 2100-0700L when visibility is at least 5000m and ceiling is at or above 600 ft.

(SPEC/IAC LFPG ADC 06 thru 08)

5. PRE-DEPARTURE PROCEDURES

a. All aircraft must contact "Charles De Gaulle Preflight" 10 min prior to estimated start-up and give the following data: call-sign, destination, stand number, and "Ready to start in 10 min".

b. On pilot's request, early startup clearance may be approved and ATC delay absorbed with engines running at designated remote holding pads near the runways.

c. Push Backs:

(1) Push back clearance is valid for one minute.

(2) On aprons B,D,F (terminal 2), aircraft whose wingspans do not exceed 34.5m (113 ft) may be pushed back simultaneously on blue and orange guidelines.

d. Holding Points: Holding points for ILS Cat 1 are located at 90m (295 ft) from the runways and are usable when low visibility procedures (LVP) are not in force. When LVP conditions are transmitted on ATIS, wait at the Cat 3 holding points located 150m (492 ft) from the runways.

e. Line-Up and Take-Off Clearances:

(1) Unless otherwise instructed, pilots are encouraged to take advantage of intersection departures.

(2) On De Gaulle Ground, when instructed to change frequency, pilots may be asked to monitor the TWR frequency to guard against excessive frequency overloading.

(3) On receipt of line-up or take-off clearance, pilots should proceed expeditiously.

f. Ground Service For Terminal 2 Apron.

(1) A ground service has been set up for Terminal 2 Apron within an area involving Aprons B, C and D, and part of Aprons A, E, and F to the STOP Sign. The service is available everyday from 0630-2300L, frequency 118.1, 119.55, and 121.925 MHz, call-sign "Traffic". The service will give pushback approval, instructions about centerlines and routes to be followed, and position of other aircraft or vehicles taxiing in vicinity.

6. DEPARTURE PROCEDURES

a. Departures require a minimum 5.5% climb gradient. If the 5.5% minimum climb gradient or the one required by a specific SID cannot be complied with, notify "De Gaulle Preflight".

b. Multidirectional Departures. Propeller aircraft may obtain multidirectional departure clearances as follows:

(1) Rwy 08L/26R and Rwy 08R/26L - Northbound: Turn at 900 ft; Southbound: Turn at 800 ft.

(2) Rwy 09L/27R and Rwy 09R/27L - Northbound: Turn at 800 ft; Southbound: Turn at 900 ft.

c. High Performance Departures: Aircraft capable of maintaining a climb gradient of 10% until FL 150 may be able to have shorter departure routes. "De Gaulle Departure" will automatically give radar vectors.

d. Airspeed - Airspeed for conventional SIDs shall not exceed 220 KIAS. Airspeed for other SIDs shall not exceed 250 KIAS below FL 100. From FL 100 and above, airspeed shall not exceed 280 KIAS for the following SIDs: AGOPA, ERIXU, LATRA, OKASI, PILUL. Airspeed may be increased without ATC clearance on other SIDs above FL 100.

e. Simultaneous Departures: Simultaneous parallel departures are conducted from Rwy 27R/L and 26R/26L or Rwy 09R/L and 08R/08L. Pilots must adhere strictly to published initial climb segments.

(SPEC/ARR-DEP AD2 LFPG TEXT 5 and 7)

7. NOISE ABATEMENT

a. Engine Testing - Engines may be tested at predetermined points on the airport and is not permitted from 2200-0600L. With prior authorization, testing may be approved from 2200-2300L and from 0500-0600L.

b. Quiet Hours Night Restrictions.

(1) Jet aircraft not in compliance with ICAO Annex 16 Chapter 3 noise requirements may not takeoff between 2315-0600L time of departure from apron or land between 2330-0615L time of arrival at apron.

(2) Exceptions to quiet hours can be approved by Director of Civil Aviation (DGAC), air traffic control or by aircraft captain when necessary for safety.

c. Landing Procedures - Maintain last assigned altitude until intercepting glideslope. Do not fly below glideslope while on final.

d. Takeoff Procedures

(1) Except for complete or partial closure of Rwy 27L, Rwy 26R may only be used for takeoff by aircraft meeting ICAO Annex 16 Chapter 3 noise requirements, and which proceed outbound westward or turn left after initial climb.

(2) From 2315-0600L time of departure from parking, aircraft which are not certified in a noise level group, or those aircraft which have been re-certified as meeting ICAO Annex 16 chapter 3 requirements and whose jet engines have a bypass ratio less than 3, must advise ATC on initial contact.

(3) All aircraft must climb to 3000' AAL as soon as possible.

(4) Turboengine aircraft must maintain V2+10 Kt (or the climb speed required to maintain proper attitude) to 3000' as soon as possible with flap setting for takeoff; maintain takeoff power to 1500' then maximum climb power to 3000'. At 3000' resume normal climb and retract flaps.

(5) Straight ahead westbound departures can only be made by aircraft meeting ICAO Annex 16 Chapter 3 noise requirements, and must maintain a minimum climb gradient of

6.5%. Advise De Gaulle preflight if unable to maintain the climb gradient.

(6) Turbojet aircraft must follow initial SID tracks until:

(a) Rwy 09R/L: Until overflying RSY Lctr with no turns before RSY.

(b) Rwy 08L/08R: Until overflying CGZ Lctr with no turns before CGZ.

(c) Rwy 26L/26R: Until PGS VOR/DME 11 DME up to FL 60.

(d) Rwy 27R/L: Until CGN VOR/DME 6.1 DME up to FL 60.

(SPEC/ARR-DEP AD2 LFPG ENV 1 thru 6)

Provence (LFML)

1. AIRPORT GROUND MOVEMENTS

a. Aircrews should use caution when operating near the parking stands just in front of the TWR (10A, 10B, 10C) due to lack of visibility by Marseille GND. GND also has poor visibility of the aprons near the water and cannot monitor activity around the aprons.

b. Aircrews should be alert to the possible presence of remote controlled push-back vehicles on taxiways serving the main terminal apron (Twy A3, A4, A5, A6).

c. Taxiway Visibility Restrictions Due To Non-Standard Lighting.

(1) Twy B3 (near general aviation apron) is useable only when the visibility is at least 400m.

(2) Twy F3 and F4 (west of Rwy 14R/32L) are useable only during the day when visibility is at least 800m.

(SPEC/AD2 LFML 9)

Saint Exupery (LFLL)

1. NOISE ABATEMENT:

a. All aircraft:

(1) Visual approaches are prohibited except for safety or health emergency. Side-stepping from one runway to the parallel runway may be approved if the aircraft is lined up on final and the request is less than 10 NM from the runway threshold.

(2) On departure, all aircraft must climb to 3000 ft AAL as soon as possible.

(3) Takeoff on Runway 18 will be done at taxiway 3A (2900m 9514 ft) except by special request.

b. Turbojet aircraft:

(1) Under normal circumstances, turbojet aircraft which do not comply with ICAO Annex 16 noise requirements, may not land 2330-0615L or take-off 2315-0600L without special permission from Director Civil Aviation-East.

(2) On departure, turbojet aircraft should maintain take-off power to 1500 ft AAL and then set thrust to V2+10 up to 3000 ft AAL.

c. Training and check flights: With 48 hours prior notice, may be authorized by Director Civil Aviation-East, Saint Exupery Airport from 1000-1200L and 1400-1700L Mon-Fri. They are prohibited on Sat, Sun and Hol.

d. Engine testing:

(1) Turbojet aircraft which do not comply with ICAO Annex 16 requirements are not allowed to conduct engine testing or runups lasting more than 5 minutes between 2200-0600L without authorization from Director Civil Aviation-East, Saint Exupery (LFLL) Airport.

(SPEC/ARR-DEP AD2 LFLL TEXT 3 and 4)

FLIGHT HAZARDS

ASCENTS OF CAPTIVE BALLOONS AND FREE FLYING SONDES -

1. RADIO EQUIPPED WEATHER BALLOON LAUNCHING

a. Meterological authorities will proceed to launch weather balloons on a daily basis over French territory which presently reach altitude of 85,302′ (26000m) and have a climbing speed of between 984′ and 1312′ (300 and 400m) a minute.

b. Launch station named below will effect daily launches at these specified hours (except when other events prevent):

Campo Del'Oro (LFKJ)	0530Z	1115Z	1730Z	2315Z
Nimes Courbessac (LFME)	0530Z	1115Z	1730Z	2315Z
Essey (LFRB)		1115Z		2315Z
Guipavas (LFRB)	0530Z	1115Z	1730Z	2315Z
Merignac (LFBD)	0530Z	1115Z	1730Z	2315Z
St. Exupery (LFLL)	0530Z	1115Z	1730Z	2315Z
Trappes	0530Z	1115Z	1730Z	2315Z

c. Unscheduled Launches: Unscheduled launches are usually of limited duration and known in advance. They are effected on well defined sites. In these cases the directors of the regional meterological offices will inform regional civil aviation authorities well within time limits and submit a proposition for a NOTAM which these authorities will evaluate as to the necessity of the action.

(SPEC/ENR 5.3-1)

2. CAPTIVE BALLOONS

LOCATION	HEIGHT
N49°56′57″ E02°10′10″	1000′ AGL
N48°52′09″ E02°47′12″	500′ AGL
N47°00′40″ E04°50′45″	800′ AGL
N46°42′16″ E01°15′15″	10,554′ AGL
N43°07′37″ E00°22′01″	3300′ AGL
N46°20′00″ E06°22′43″	500′ AGL

(SPEC/ENR 5.5-33)

OVER FLIGHT OF NUCLEAR REACTORS AND HIGH RISK INDUSTRIAL PLANTS -

1. Sites prohibited for low altitude overflight. See VISUAL FLIGHT RULES for minimum overflight heights.

BORDEAUX FIR

FACILITY	LOCATION
ATOFINA FACTORY AT LANNEMEZAN	N43°05'26" E00°22'20"
BARP INDUSTRIAL SITE	N44°38'40" W00°47'00"
BLAYAIS, BRAUD AND SAINT LOUIS INDUSTRIAL SITE	N45°15'15" W00°41'20"
CECA FACTORY AT PIERREFITE-NESTALAS	N42°57'53" W00°04'02"
CIVAUX INDUSTRIAL SITE	N46°27'23" E00°39'02"
GOLFECH INDUSTRIAL SITE	N44°06'20" E00°51'00"
TARBES ARSENAL PYROTECHNIC FACILITIES	N43°15'00" E00°04'45"

BREST FIR

FACILITY	LOCATION
FLAMANVILLE INDUSTRIAL SITE	N49°32'20" W01°53'00"
LA HAGUE INDUSTRIAL SITE	N49°41'00" W01°53'00"

MARSEILLE FIR

FACILITY	LOCATION
ATOCHEM FACTORY AT ST AUBAN SUR DURANCE	N44°03'52" E06°00'07" to N44°04'08" E06°00'15"
BOLLENE CATALYTIC FACTORY	N44°18'40" E04°44'00"
BUGEY 1 INDUSTRIAL SITE AT SAINT VULBAS	N45°47'44" E05°16'12"
CREYS MALVILLE INDUSTRIAL SITE	N45°45'30" E05°28'30"
CRUAS INDUSTRIAL SITE	N44°37'53" E04°45'20"
GRENOBLE INDUSTRIAL SITE	N45°12'11" E05°41'48"
MIRAMAS INDUSTRIAL SITE	N43°35'00" E05°00'00"
MONTPERTUIS-PALAZOL PYROTECHNICAL SITE	N46°08'50" E03°23'10"
RENARDIERE TEST CENTER	N43°04'18" E05°55'38"
SAINT ALBAN INDUSTRIAL SITE	N45°24'18" E04°45'20"
SAINT VICTOR INDUSTRIAL SITE	N46°23′22″ E02°34′44″
SAPCHIM FACTORY AT SISTERON	N44°12'30" E05°56'00"
SORGUES GUN POWDER FACTORY	N43°59'00" E04°52'00"
TRISCASTIN INDUSTRIAL SITE	N44°19'47" E04°43'56"

PARIS FIR

FACILITY	LOCATION
BELLEVILLE SUR LOIRE INDUSTRIAL SITE	N47°30'00" E02°52'00"
BRUYERES LE CHATEL INDUSTRIAL SITE	N48°36'00" E02°12'00"
CHINON-AVOINE INDUSTRIAL SITE	N47°14'00" E00°10'00
CHOOZ INDUSTRIAL SITE	N50°05'00" E04°47'00"
DAMPIERRE EN BURLY INDUSTRIAL SITE	N47°44'02" E02°30'58"
DAVEY BICKFORD FACTORY	N47°55'00" E03°38'15"
DIAMOND SHAMROCK FACTORY IN COURTENAY	N48°02'32" E03°04'25"
GRANDPUITS FACTORY	N48°36'00" E02°57'20"
GRAVELINES INDUSTRIAL SITE	N51°00'10" E02°07'50"

PARIS FIR

FACILITY	LOCATION
HOESCHT FACTORY AT CUISELAMOTTE	N49°24'30" E02°59'30"
LAON COUVRON MILTARY INSTALLATION	N49°38'30" E03°33'40"
MATRA CENTRE FACTORY AT SELLE SAINT-DENIS	N47°21'00" E01°56'00"
MORONVILLIERS INDUSTRIAL SITE	N49°14'00" E04°19'00"
NOGENT SUR SEINE INDUSTRIAL SITE	N48°31'00" E03°31'00"
PALUEL INDUSTRIAL SITE	N49°51'33" E00°38'13"
PENLY INDUSTRIAL SITE	N49°58'20" E01°12'50"
RIPAULT INDUSTRIAL SITE	N47°17'00" E00°40'00"
SACLAY INDUSTRIAL SITE	N48°43'00" E02°09'00"
SAINT LAURENT DES EAUX INDUSTRIAL SITE	N47°43'13" E01°34'45"
SUBDRAY AEROSPACE FACTORY	N47°02'11" E02°18'58"
VAUJOURS INDUSTRIAL SITE	N48°56'00" E02°36'00"
VWR INTERNATIONAL FACTORY AT BRIARE	N47°38'17" E02°45'30"

REIMS FIR

FACILITY	LOCATION
CATTENOM INDUSTRIAL SITE	N49°25'00" E06°13'00"
FESSENHEIM INDUSTRIAL SITE	N47°54'15" E07°33'48"
NOBEL EXPLOSIVES FACTORY	N47°17'30" E05°23'00"
RHOVYL COMPANY OF TRONVILLE EN BARROIS	N48°43'00" E05°17'00"
TITANITE FACTORY	N47°18'38" E05°23'18"
VALDUC INDUSTRIAL SITE	N47°35'00" E04°53'00"

(SPEC/ENR 5.0-1,2)

2. ELF AQUITAINE Hydrocarbon Sites: Avoid low altitude overflight of the following hydrocarbon extraction and processing sites due to sudden unplanned gas emissions. The maximum altitude of the flammable gas flares cannot be predicted.

FACILITY	LOCATION
CARRESSE	N43°29' W01°00'
IZAUTE	N43°49' W00°07'
LACQ	N43°25' W00°37'
LUSSAGNET	N43°47' W00°15'
MAZERES	N43°17' W00°21'
PECORADE	N43°39' W00°23'
PONT D'AS	N43°20' W00°35'
SAINT FAUST	N43°16' W00°27'
VIC BILH	N43°34' W00°17'

(SPEC/MIL AIC 08-05)

3. GAZ De France Installations. Overflight of these sites should be avoided. If overflight cannot be avoided, remain at least 3300 ft (1000m) AGL.

a. GAZ De France stations

FACILITY	LOCATION
PALLEAU	N46°58'47" E05°02'05"
VINDECY	N46°20'45" E04°01'17"

(SPEC/ENR 5.0-1,2)

b. GAZ De France Underground Storage sites

FACILITY	LOCATION
BEYNES	N48°50'36" E01°52'34"
CERE LA RONDE	N47°16'06" E01°13'08"
CERVILLE	N48°41'55" E06°17'52"
CHEMERY	N47°23'26" E01°29'05"
ETREZ	N46°20'30" E05°12'30"
GERMINY SOUS COULOMBS	N49°03'22" E03°10'24"
GOURNAY SUR ARONDE	N49°31'46" E02°42'02"
MANOSQUE	N43°51'51" E05°47'07"
SOINGS	N47°14'17" E01°30'01"
ST CLAIR SUR EPTE	N49°12'16" E01°42'21"
ST ILLIERS	N48°59'07" E01°33'02"
TERSANNE	N45°12'40" E04°59'05"

c. GAZ De France Methane Terminals

FACILITY	LOCATION
FOS SUR MER	N43°27'15" E04°51'10"
MONTOIR DE BRETAGNE	N43°18'20" W02°08'30"

d. GAZ De France Compression Stations: Located within a 2200 ft radius of the listed coordinates:

FACILITY	LOCATION
BREHEVILLE	N49°22'59" E05°21'11"
DIERREY SAINT JULIEN	N48°18'29" E03°48'02"
MORELMAISON	N48°19'30" E05°56'08"
OBERGAILBACH	N49°06'07" E07°13'18"
OLTINGUE	N47°29'25" E07°24'34"
TROIS FONTAINES	N48°41'59" E04°58'24"
VOISINES	N47°52'39" E05°10'26"

(SPEC/MIL AIC 15-05)

SKI LIFT CABLES -

1. Lateral limits are N44°06'00" E07°23'40", N44°04'20" E07°25'30", and N44°04'00" E07°23'50".

2. Height 700' AGL.

(SPEC/MIL ENR 5.1-11)

ENROUTE

FLIGHTS IN BORDER AREAS -

1. PENETRATING THE PERIPHERAL LINE OF CLASSIFICATION (LCP) - Each pilot entering French airspace must establish radio contact with the CCT concerned when penetrating the LCP. Penetrating the LCP below 1500' AGL is prohibited. Aircraft from Corsica who never cross the LCP must contact Rhodia CCT as soon as possible.

NOTE: Before crossing the LCP, OAT/V flights shall squawk Mode 3/A code 0300.

(SPEC/MIL ENR 1.1-10)

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. LOW ALTITUDE

A2 - ABB to DEVAL above FL 115 on ACC instructions.

A3 - DOMOD to MOTAL RNAV segment.

A6 - CTL TO BAXIR is useable only on ACC instruction. LYON to ROMAM segments useable below FL 95 on ACC instruction when area LFD534 is inactive. MTL to CM to MTG segments useable below FL 75 on ACC instruction.

A25 - Channel Islands Control Zone is Class A when Jersey APP is open.

A27 - BRUSC to MEN is unusable when area LFD579 is active.

A30 - Above FL 115 on ACC instruction.

A34 - SITET to DVL segment, FL 105, to FL 195 only in north-south direction, odd or even levels on ACC instruction FL 55 to FL 105 in both directions. Transit LFR10 guaranteed per special ACC instruction. KOVAK to AMB segment below FL 125 only on ACC instructions.

A41 - Useable only on ACC instruction.

A53 - BOBRI to ANG is useable above FL 105 only on ACC instruction when LFR7A is active, traffic will be rerouted via AWY R66.

A242 - GTQ to ARPUS segment in south-north direction useable on ACC instruction.

A361 - LGL to SAMPO is useable above FL 115 only to ACC instruction when LFR7B is active.

A475 - Useable only on ACC instructions.

B3 - When LFR6B - (FL 145/FL 095), LFR6C (FL 195/FL095) or LFR15B (FL 195/FL 085), traffic taking the RLP-VATRI segment at the levels indicated will be rerouted on RLP-SOMDA-ARSIL-VATRI. Lower boundary between DIKOL and BILGO is FL135 on ACC instruction when LFR26 1A is active. Lower boundary between REM to BILGO is FL 105, on ACC instruction when LFR26 A4 is active. Below FL 135 cannot be used when LFR114 A2 is active, lower boundary of segment REM to BILGO is FL 135. When TCA 13-1 and/or TCA 13-2 PARIS is active, REM to BILGO segment does not exist in the corresponding airspace layers. Above FL 115 on ACC instruction between CMB and FIR boundary.

B13 - CTL to BAXIR is useable on ACC instruction only.

B16 - Below FL 75 useable only on clearance from MARSEILLE ACC.

B24 - BNE to (ING01) segment above FL 115 only on ACC instructions.

B31 - When LFR102 B1 is active, transit provided per ACC instructions, IDOKO to ELVES segment does not exist. Lower boundary of ELVES to GITAN segment is FL 105 on ACC instruction when LFR26 A4 is active. When LFR114 A2 is active, below FL 135 is unusable, lower boundary of ELVES to GITAN segment is FL 135. When LFR26 A1 is active, lower boundary of ELVES to REM segment is FL 135, per ACC instruction. If TCA 13-1 and/or TCA 13-2 PARIS are active, ELVES to GITAN segment does not exist in the corresponding airspace layers. One way south for acft using UN857.

B37 - CTL to TRO useable only on ACC instruction.

G6 - Above FL 130, restrictions may be imposed due to military air traffic. MEN to FJR is useable in opposite direction on ATC authorization. When LFR108A is active, traffic will be rerouted via FJR-Salin-MTG or via FJR-VARES-MARRI-SALIN-MTG.

G27 - Aircraft must maintain precise navigation due to area LFP81.

G28 - Between CTX and GUSON, FL 120 to FL 190 useable only on BORDEAUX ACC instruction.

G39 - FJR to AFRIC on ACC instruction inside area LFR108 E2.

G40 - ATN to TRO, FL 120 to FL 190 on instruction from PARIS ACC. VATRI to CTL is useable on ACC instruction.

G54 - Between POLLY and CTX, FL 140 to FL 190 are useable only on ACC instructions. Between VEROS and CTX FL 70 useable only on ACC instructions. Between CTX and POI, FL's 120 to FL 190 are useable only on ACC instruction. Between POI and ABSIE, FL's 140 to FL 190 are useable only on ACC instruction.

G393 - Airway useable on ACC instructions.

H-12 - REN to TABIL above FL 115 useable only on ACC clearance when LFR7B is active.

H20 - RNAV Awy on BILGO to PERON, radar guidance on request. DOMOD to PVT segment only on ACC instructions.

J115 - When LFR26 A2 is active, transit provided per ACC instructions, RENSA to SONUR segment does not exist. If TCA13-1 and/or TCA 13-2 PARIS are active, GIMER to SOLBA segment does not exist in the corresponding airspace layers.

J301 - OKRIX to MOLEK segment below FL 85 only on ACC instruction.

J302 - Below LF 85 only on ACC instruction.

M623 - RNAV AIRWAY. During Military operations in LFD54C, traffic will be rerouted on ATC instructions via A3/A2. When LFD54C is active, MARSEILLE ACC will only provide flight information and alerting services.

M731 - RNAV AIRWAY. During Military operations in LFD54A/B/C, traffic will be rerouted on ATC instructions on MTG to ALG segment via P856/G701/A3/A2. When LFD54A/B/C is active, MARSEILLE ACC will only provide flight information and alerting services.

N86 - LERMA to SOSUR segment, if there is Military traffic in LFD54A/B, traffic will be routed on ATC instruction via A3/G7 (LERMA to SOSUR direction) and via B16 - P856 or G701 (SOSUR to LERMA direction). If LFD54A/B is active, MARSEILLE ACC will only provide flight information and alerting services.

N163 - RNAV AIRWAY. If there is Military traffic in LFD54A, traffic will be routed on ATC instruction via A3/G7 (OMARD to MTG direction) and via P856, G701 or A3 (MTG to OMARD direction). If LFD54D is active, MARSEILLE ACC will only provide flight information and alerting services.

Q16 - MURRO to MEZIN RNAV segment.

Q20 - RNAV AIRWAY

R1 - Brest ACC provides control when the Jersey Zone is closed.

R7 - GTQ to LUPEN above FL 145 useable only on ACC instruction when LFR123 is inactive.

R9 - Above FL 115 useable only on ACC instructions when LFR7B is active. Between SUIPE and REM lower boundary is FL 135 when LFR26 A1 is active.

R10 - FL 60, 70 and occasionally FL 80 not useable between MMD and CTL on ACC instructions.

R11 - BOBSA to DOLDE segment above FL 115 useable only on ACC instruction when LFR7B is active. OSKIN to KUTAN from FL 100 to FL 190, bypass via LUREN on ACC instructions when LFR124 is active. POGOL to STR bypass via AWY V17 when LFR123 is active.

R28 - ODEBU to OKASI RNAV segment. OKEKO to OKEPI segment cannot be used when LFR20B1 is active.

R50 - Above FL 115 useable only on ACC clearance when LFR7B is active. Transit LFR10 provided per special ACC instruction.

R52 - SAMPO to GILRA above FL 115 useable only on ACC instruction when LFR7B is active.

R66 - KORER to ARE, lower boundary is FL 95 when Lorient TCA is active. RISUM to SINPO segment above FL 105 only on ATC instruction.

R106 - RNAV AIRWAY.

R492 - DIN-VIREX above FL 115 useable only on clearance from ACC when LFR7B is active.

T10 - SOBLI to ROBIR segment, follow ATC instructions during Military operations in CBA 25A.

T12 - MEDIM to PENDU segment, follow ATC instructions during Military operations CBA 25A.

T13 - RNAV AIRWAY to the United Kingdom.

T14 - PELOK to GILIR segment, follow ATC instructions during Military operations CBA 25A.

T16 - Above FL 115 useable on ACC instruction when LFR68E is inactive. RNAV AWY.

T19 - Useable on ACC instruction when LFR68 is inactive. RNAV airway.

T20 - RNAV AIRWAY to the United Kingdom.

T22 - RNAV AIRWAY to the United Kingdom.

T27 - RNAV AIRWAY to the United Kingdom.

T36 - RNAV AIRWAY

T41 - RNAV AIRWAY

T45 - RNAV AIRWAY

T47 - RNAV AIRWAY

T48 - LERGA to LATAM RNAV segment.

T51 - Reserved for departures from LSZH.

T112 - RNAV AIRWAY.

T172 - When LFR102 B1 is active, transit provided per ACC instructions, Awy does not exist in this area.

V12 - Useable on ACC instruction when LFR68 is inactive.

V13 - Useable on ACC instruction when LFR68 is inactive.

V15 - Useable on ACC instruction when LFR68 is inactive.

V31 - RNAV AIRWAY.

V36 - GIVOR NCRP mandatory overfly point.

W54 - During Military activity in LFD54A/C, traffic will be rerouted on ATC instruction via A3/A2. When LFD54A/C is active, MARSEILLE ACC will only provide flight information and alerting services.

Y14 - RNAV AIRWAY.

Y15 - RNAV AIRWAY.

Y131 - RNAV Awy only on ACC instruction. If LFR114 A2 is active, below FL 135 cannot be used. If TCA 13-1 and/or TCA13-2 PARIS are active, ELVES to SOLBA does not exist.

Y473 - Useable on ACC instruction.

Z40 - RNAV AIRWAY

Z46 - RNAV AIRWAY

Z48 - RNAV AIRWAY

Z154 - RNAV AIRWAY. During Military activity in LFD54A/B/C, traffic will be rerouted on ATC instructions via MTG to AJO via P856/G701/G7/A3/A2; and on AJO to MTG segment via A2/A3/G7. When LFD54C is active, MARSEILLE ACC will only provide flight information and alerting services.

Z157 - If TCA 13-1and/or TCA 13-2 Paris are active, XERAM to LORTA does not exist. If LFR114 A2 is active, below FL 135 cannot be used.

Z303 - Below FL 85 only on ACC instructions. IPLAN to ETNOS segment only on ACC instructions.

Z319 - XERAM to SOTUS segment will not exist within the corresponding airspace layers, if TCA 13-1 and/or TCA 13-2 PARIS is active. Follow ACC instructions.

(SPEC/ENR 3.1)

2. HIGH ALTITUDE - All airspace above FL 195 is classified "RNAV".

UA605 - Segment CIRTA - ETOIL is in RVSM transition area. Report at CIRTA and BARIL is mandatory.

UB734 - Segment DOLIS - BALEN is in RVSM transition area. Report at DOLIS and BALEN is mandatory.

UH37 - Awy useable on UAC instructions when LFTSA24A is active.

UH47 - Awy useable on UAC instructions when LFTSA24A is active.

UJ32 - Segment MABES - MOREG; flight levels greater than FL 195 on GENEVA ACC instruction.

UL48 - Awy useable on UAC instruction.

UL166 - Flight levels on UAC instructions.

UL851 - Segment LUVAL - EPL is Conditional Route from FL 215 to FL 285. Segment LASAT-BEGAR is Conditional Route below FL 285.

UM129 - Segment DJL - GUERE useable from FL 200 to FL 230 only. Segment DJL - MOU available from 2300-0900Z++ and 1500-2300Z++ Mon-Fri except holidays. From 0900-1500Z++ Mon-Fri, except holidays, bypass via G21 segments EPL - RLP - MOU.

UM154 - Segment SOSUR - OBLAD is bypass route associated with UM731 or useable on UAC instructions during military activity. Segment OBLAD - BALEN useable only on UAC instructions during military activity and is in RVSM transition area. Report at BALEN is mandatory.

UM164 - Segment LUVAL - EPL is Conditional Route from FL 215 to FL 285.

UM168 - Segment AKIKI - ORIST follow UAC instructions if LFR156A is active above FL 195.

UM622 - Segment AJO - DIVUL useable in North-South direction only on UAC instructions when LFD54C is active.

UM623 - Segment MEDAM - VANAS useable in South-North direction only on UAC instructions when LFD547 is active.

UM730 - Segment VANAS - MEDAM is useable in South-North direction only on UAC instructions when LFD547 is active. (See Switzerland).

UM733 - Segment AJO - DIVUL useable in North - South direction only on UAC instructions when LFD54C is active. Segment OKTET - GIPNO traffic will be rerouted on UAC instruction via OKTET - NEDRU - GIPNO during activity in LFD548.

UM739 - Segment TABOT - ETOIL permanent ATS route on Italian holidays and from 1201Z++ Sat to 2400Z++ Sun with min FL 230; and 0100Z++ to 1200Z++ Sat with min FL 260.

UM976 - Segment ETREK - ATN: Traffic with requested FL below FL 280 can be rerouted on UAC instructions via ETREKBULOL- UM733.

UM982 - Segment IPLAN - ETNOS on UAC instructions.

UM984 - Segment KOLON - GANGU will be rerouted on ATC instructions via KOLON-SOKDI-GANGU when there is military activity above FL 195 in LFR138. Segment PADKO - DIVKO even flight levels from DIVKO to PADKO can be used on ATC instruction during military activity.

UM986 - Segment REQIN - NEPTI is in RVSM transition area. Report at REQIN and NEPTI is mandatory.

UM989 - Segment BALEN - OTARO is in RVSM transition area. Report at BALEN and OTARO is mandatory.

UN461 - Segment KOLEK - RIVAK, preferred FL not established.

UN470 - Segment NOVAN - SEPAL, preferred FL not established.

UN471 - Segment COQUE - LAPEX, preferred FL not established.

UN851 - Segment TORTU - OMEDA: TORTU to OMEDA direction useable only on UAC instructions at odd flight levels when LFTSA44E is active, for flights planning to use UM858.

UN853 - Segment IRMAR - VANAS: If LFD547 is active, traffic will be rerouted on UAC instructions via IRMAR-MEDAM-VANAS.

UN854 - Segment SALMA - BALEN is in RVSM transition area. Report at SALMA and BALEN is mandatory. Segment DJL - TINIL useable on UAC instructions only.

UN871 - Segment OMASI - MOLUS: Flights inbound to ZURICH (LSAZ) and BALE MULHOUSE (LFSB) use Z67 on Geneva UAC instructions.

UN858 - Segment BOKNO-VAND. VANAD to BOKNO direction useable only on UAC instructions.

UN859 - Segment VANAD-BEBIX below FL 285 is CDR1.

UP860 - Segment TOP - BALSI useable in the BALSI to TOP direction only on UAC instructions when LFD547 and/or LFD548 are active.

UR34 - Segment ETOIL - MOUET is in RVSM transition area. Report at MOUET is mandatory. MOUET is RVSM entry/exit point.

UR978 - Segment BALEN - KAMER is in RVSM transition area. Report at BALEN and KAMER is mandatory. KAMER is RVSM entry/exit point.

UT24 - Segment GAI - FJR - PADKO permanent RNAV route crossing area LFR108H. Segment FJR - PADKO, during activity in LFR108A, traffic will be rerouted on ATC instructions via UY342.

UT45 - Segment RISOR - ASLEG on ATC instruction.

UT47 - Segment RISOR - GEMLA on ATC instruction.

UT158 - Segment TUDRA-CDN. Follow ATC instructions if LFTSA 10C1 and/or LFTSA 10C2 and/or LFTSA 10C3 are active.

UT161 - If LFR108A is active, traffic will be re-routed on UAC instructions via MTL-MTG-DIVKO.

UT251 - Awy useable only on UAC instructions. Flight plan via UN851 (LUNOR-NEGAT-OMEDA).

UT407 - MIRGU is mandatory overflight point.

UY11 - When LFD547 and/or LFD548 are active, traffic will be rerouted on UAC instructions via BALSI-KINES-MEDAM-TOP.

UY25 - FL 200 max at MEN if LFTSA42N is active. Conditional route above FL 205.

UY31 - Segment OKTET - GIPNO useable on ATC instructions when LFD548 active.

UY420 - Awy useable only on UAC instructions.

UY473 - Awy useable on UAC instructions.

UY612 - Awy useable only on UAC instuctions.

UZ12 - Segment BULOL - ATN usable only on UAC instructions when LFTSA24 is active.

UZ16 - Awy useable on UAC instructions when LFTSA42S is active. Segment AVN - MTL bypass route linked with CDR3 UT161 (LFTSA42S).

UZ153 - Awy useable on UAC instruction during military activity.

UZ161- Awy useable on ATC instruction during military activity in LFTSA 43.

UZ168 - Awy useable on UAC instruction during military activity.

UZ184 - Awy useable only on UAC instruction during military activity.

UZ185 - Segment LAGEN - BORDI useable only when CDR1, VOG - VAMTU is closed.(See Italy).

(SPEC/ENR 3.2)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
FRANCE							
CONDITIONAL ROUTES (CDRs) EFFECTIVE TIMES: Nights-2200Z++ Mon to 0700Z++ Fri. Weekends-1600Z++ Fri to 0800Z++ Mon.							
A2	ABB VOR/DME	007	BNE VOR	29		FL 195 FL 115	EVEN
	BNE VOR	312	Deval NCRP (N50°51′ E001°28′)	22			
	CONTROL: Paris ACC REMARKS: CDR3 H24. Used only on ACC instructions.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
A30	Traca CRP (N50°51′ E001°58′)	286	ING NDB	9		FL 195 FL 115	EVEN
	ING NDB	286	(ING02) NCRP (N50°55′ E001°28′)	11			
	CONTROL: Paris ACC REMARKS: CDR3 H24. Used only on ACC instructions.						
B3	CMB VORTAC	313 133	Traca CRP (N50°51′ E001°58′)	59		FL 195 FL 115	EVEN
	Traca CRP		Rinti NCRP (N51°01′ E001°36′)	17			
	CONTROL: Paris ACC REMARKS: CDR3 H24. Used only on ACC instructions.						
B24	BNE VOR	342	ING NDB	17		FL 195 FL 115	EVEN
	ING NDB	323	(ING01) (N51°01′ E001°33′)	11			
	CONTROL: Paris ACC REMARKS: CDR3 H24. Used only on ACC instructions.						
M731	Rekto CRP (N41°06′ E07°37′)	133 313	Arpag CRP (N40°50′ E07°59′)	23	FL 90	FL 195 FL 95	ODD EVEN
	Arpag CRP		Risga CRP (N40°49′ E08°00′)	2			
	CONTROL: Roma ACC REMARKS: CDR1						
M732	Labre CRP (N40°55′ E007°27′)	116 296	Loksi CRP (N40°43′ E008°00′)	28		FL 195 FL 85	EVEN
	CONTROL: Rome ACC REMARKS: CDR3 H24.						
UA605	Baril CRP (N40°52′ E07°11′)	003 183	Sovag NCRP (N41°09′ E07°12′)	17		FL 460 FL 195	EVEN (N)
	Sovag NCRP		Nemur NCRP (N41°22′ E07°13′)	14			
	Nemur NCRP		Garpu NCRP (N41°37′ E07°14′)	14			
	Garpu NCRP		Ebora NCRP (N43°20′ E07°22′)	103			
	Ebora NCRP	001 181	Pigos CRP (N43°37′ E07°22′)	18			
	CONTROL: Marseille UACC REMARKS: CDR1 H24. If LFD54A5/C5 is active, bypass on ATC instruction via, For South to North traffic BARIL to NEGAT to OMEDA to PIGOS or BARIL to NEGAT to AJO to PIGOS. - For North to South traffic KOLON to OMARD to VAREK to ERPIN to BARIL or KOLON to DIVUL to AJO to NEGAT to BARIL.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UH10	DJL VOR/DME	307	Oburo NCRP (N47°39′ E04°16′)	41		FL 460 FL 195	EVEN
	Oburo NCRP		Chaby NCRP (N47°48′ E03°57′)	15			
	Chaby NCRP		Okrix NCRP (N47°58′ E03°34′)	18			
	CONTROL: Paris UACC REMARKS: CDR1 H24. If military activity in LFTSA24A, bypass on UAC instructions via UH37-TUNOR-UH47.						
UL14	DIN VOR/DME	190	Eriga NCRP (N46°52′ W02°22′)	104		FL 460 FL 195	ODD
	Eriga NCRP		Popul CRP (N43°57′ W02°50′)	176			
	CONTROL: Brest UACC REMARKS: Weekend route. Not useable during military activity.						
	Popul CRP (N43°57′ W02°50′)	010	Lebri NCRP (N45°49′ W02°32′)	113		FL 460 FL 195	EVEN
	Lebri NCRP		Tepra NCRP (N46°30′ W02°25′)	41			
	CONTROL: Brest UACC REMARKS: Weekend route. CDR3 when weekend routes are closed.						
UL65	Ensac NCRP (N44°12′ W00°41′)	020	POI VOR	149		FL 460 FL 195	EVEN
	CONTROL: Bordeaux UACC REMARKS: CDR1 H24. During military activity, traffic will be rerouted on UAC instructions.						
UL152	Balan NCRP (N46°31′ E01°02′)	185	LMG VOR	42		FL 460 FL 195	ODD
	CONTROL: Bordeaux UACC REMARKS: CDR1 H24 for Flight Level below FL 285. When LFTSA 10B is active, bypass on ATC instructions via UL851 and UN857 or UN858.						
UL161	Lasiv CRP (N48°54′ E04°14′)	121	Lanvi CRP (N48°19′ E05°48′)	72		FL 460 FL 195	ODD
	CONTROL: Paris ACC below FL 265 Reims ACC above FL 265. REMARKS: CDR1 weekends and nights. CDR3 on weekdays, outside of scheduled times for CDR1. During military activities bypass via BUBLI-LUVAL-EPL.						
UL722	Annet CRP (N49°39′ W04°00′)	210 030	Korul CRP (N44°50′ W06°55′)	312		FL 460 FL 195	ODD (SW)
	CONTROL: BREST UACC REMARKS: CDR1 on weekends only. CDR3 on weekdays, outside scheduled times for weekend routes. (File flight plan via SALCO-UM30-QPR-UN866-KORUL. If EGD003 is active, traffic will be rerouted via SALCO-UM30-QPR-UN866-KORUL. Route cannot be used during military activity.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL851	Luval CRP (N48°18′ E05°19′) Lanvi CRP	089 269	Lanvi CRP (N48°19′ E05°48′) EPL VOR (N48°19′ E06°04′)	26 12		FL 460 FL 195	ODD (E)
	CONTROL: Reims UACC REMARKS: Conditional route FL 215 to FL 285. CDR2 on weekdays, See daily CRAM. (If LFTSA20B is active, file flight plan with requested flight level less than FL 215 or greater than FL 285); CDR1 nights and weekends (follow UAC instructions if LFTSA20B is active).						
	Lasat NCRP (N48°10′ E06°41′)	111	Begar CRP (N47°55′ E07°35′)	39		FL 460 FL 195	ODD
	CONTROL: Reims UACC REMARKS: CDR1 H24 below FL 285. If military activity in LFTSA22B, traffic will be rerouted on UAC instructions via UG42 LUL-HOC.						
UL866	AGN VOR/DME	242	Pipor CRP (N43°01′ W01°06′)	101		FL 460 FL 195	ODD
	CONTROL: Bordeaux UACC REMARKS: Weekend route. CDR3 weekdays when weekend routes are closed.						
UL873	AGN VOR/DME Poket NCRP	354 353	Poket NCRP (N45°06′ E00°37′) Fouco CRP (N45°45′ E00°29′)	74 39		FL 460 FL 195	EVEN
	CONTROL: Bordeaux UACC REMARKS: CDR1 H24. Not useable if activity in LFTSA32. Bypass via AGN-PERIG-FOUCO except flights inbound to Orly (LFPO) and related airfields bypass via AGN-PERIG-DIBAG.						
UM30	Erwan NCRP (N45°56′ W05°13′)	025 205	QPR VOR/DME	108		FL 460 FL 195	ODD (SW)
	CONTROL: Brest UACC REMARKS: CDR1 H24. During military activity, traffic will be rerouted on UAC instructions via ERWAN-KOLEK-QPR.						
UM128	STP VOR/DME Varek CRP	133 313	Varek CRP (N42°19′ E07°59′) AJO VOR/DME	82 48		FL 460 FL 195	ODD (SE)
	CONTROL: Marseille UACC REMARKS: CDR1 H24. If LFD54A/C is active, bypass on UAC instructions via UL127, then UM623 or UM622/UM733.						
UM131	Idori NCRP (N41°48′ E09°45′)	270	AJO VOR/DME	44		FL 460 FL 195	ODD
	CONTROL: Marseille UACC REMARKS: CDR1 H24. Unusable during military activity, traffic will be rerouted on UAC instructions via ALG.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM164	Luval NCRP (N48°18′ E05°19′) Lanvi CRP	089 269	Lanvi CRP (N48°19′ E05°48′) EPL VOR	26 12		FL 460 FL 195	ODD (E)
	CONTROL: Reims UACC REMARKS: Conditional route FL 215 to FL 285: CDR2 on weekdays (if LFTSA20B is active, file flight plan with requested flight level less than FL 215 or greater than FL 285); CDR1 nights and weekends (follow UAC instructions if LFTSA20B is active).						
	Pogol NCRP (N48°24′ E06°42′) Oborn CRP	081 261 092 272	Oborn CRP (N48°28′ E07°12′) Lupen CRP (N48°26′ E07°44′)	20 22		FL 460 FL 195	ODD (E)
	CONTROL: Reims UACC REMARKS: CDR3 weekdays (file via Awy R11 and V17 below FL 195). CDR1 nights and weekends. When military activity in LFTSA22A, traffic will be rerouted below FL195 via Awy R11 and V17.						
UM170	Kudin NCRP (N49°42′ E05°16′)	199	Rapor NCRP (N45°35′ E05°13′)	6		FL 460 FL 195	EVEN
	CONTROL: Traffic below FL 265 Paris UACC; above FL 265 Reims UACC. REMARKS: Weekend route. CDR2 or CDR3 on weekdays when weekend routes are closed. (See Belgium)						
UM616	ARE VOR	134 314	Korer NCRP (N47°41′ W02°30′)	59		FL 460 FL 195	ODD (SE)
	CONTROL: Brest UACC REMARKS: CDR1 H24. Reserved for arrivals/departures from IROISE TCA. Bypass via TERKU-DEGEX on UAC instructions.						
	Bebix NCRP (N45°57′ E01°24′) Adatu NCRP Maleb NCRP	113 293	Adatu NCRP (N45°32′ E02°50′) Maleb NCRP (N45°26′ E03°11′) Lerga CRP (N45°16′ E03°45′)	65 16 26		FL 460 FL 195	ODD (SE)
	CONTROL: Bordeaux UACC REMARKS: CDR1 H24. During military traffic in LFTSA43 traffic will be rerouted on UAC instructions via UZ161-ADEKA-UP860-BEBIX.						
UM623	Kolon CRP (N43°43′ E06°57′) Rokno NCRP Edora NCRP Omard NCRP Varek CRP	144 143 160 173	Rokno NCRP (N43°26′ E07°15′) Edora NCRP (N43°20′ E07°22′) Omard NCRP (N43°06′ E07°35′) Varek CRP (N42°19′ E07°59′) Oktav CRP (N41°17′ E08°09′)	21 8 17 51 62		FL 460 FL 195	ODD
	CONTROL: Marseille UACC REMARKS: CDR1 H24. If LFD54C5 is active, bypass on ATC instruction via KOLON-DIVUL-MERLU-OMEDA-AJO-CORSI.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM624	EPL VOR	004	Nancy NCRP (N48°49′ E06°05′)	30		FL 460 FL 195	EVEN
	Nancy NCRP		Jarny NCRP (N49°12′ E06°06′)	23			
	Jarny NCRP		Rousy NCRP (N49°29′ E06°07′)	17			
	CONTROL: Reims UACC REMARKS: CDR1 nights and weekends. CDR3 on weekdays and outside of times for CDR1. If LFTSA20A is active, bypass via GIVOR-UN853.						
UM731	Amlir NCRP (N44°27′ E03°10′)	147	FJR VOR/DME	63		FL 460 FL 195	ODD
	CONTROL: Bordeaux or Marseille UACC REMARKS: CDR3 weekdays. Flight plan via UZ131 if above FL 285; via UY27 and UZ131 if below FL 285. CDR1 nights and weekends.						
	Divko CRP (N43°03′ E04°47′)	133 313	Tinot NCRP (N42°42′ E05°19′)	32		FL 460 FL 195	ODD (SE)
	Tinot NCRP		Balok NCRP (N42°26′ E05°42′)	24			
	Balok NCRP	134 314	Larap NCRP (N42°00′ E06°20′)	38			
	Larap NCRP		Nemur NCRP (N41°22′ E07°13′)	55			
	Nemur NCRP		Rekto CRP (N41°06′ E07°37′)	25			
	CONTROL: Marseille UACC REMARKS: CDR1 H24. If LFD54A,B,C is active, bypass on UAC instructions via DIVKO-SOSUR-OBLAD-NERAN-VELON-LABRE-LOKSI.						
UM732	Obland CRP (N41°49′ E05°01′)	116 296	Neran CRP (N41°41′ E05°23′)	18		FL 460 FL 195	ODD (SE)
	Neran CRP		Velon NCRP (N41°15′ E06°35′)	60			
	Velon NCRP		Labre CRP (N40°56′ E07°28′)	44			
	Labre CRP		Loksi CRP (N40°43′ E08°00′)	28			
	CONTROL: Marseille UACC REMARKS: CDR3 H24. Useable only on UAC instructions. Route is a bypass route associated with UM731 when there is military activity in LFD54A5, B5, or C5.						
UM733	Bulol CRP (N46°03′ E05°06′)	338	Ardol NCRP (N46°45′ E04°38′)	46		FL 460 FL 195	EVEN
	Ardol NCRP		Bagbi NCRP (N46°49′ E04°36′)	4			
	Bagbi NCRP		Chaby CRP (N47°48′ E03°57′)	65			
	Chaby CRP		Lauly NCRP (N48°09′ E03°42′)	24			
	CONTROL: Paris UACC REMARKS: CDR1 H24. During military activity bypass on UAC instructions via UZ12-ATN-UM976.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM739	Tabot CRP (N39°09′ E08°00′)	313 133	Etoil CRP (N39°44′ E07°10′)	52	FL 280	FL 460 FL 195	EVEN (NW)
	CONTROL: Marseille UACC REMARKS: CDR3 H24 from 0001Z Mon to 2400Z Fri.						
UM858	Tortu CRP (N43°23′ E08°58′) Akuti NCRP Sudas NCRP	185 005	Akuti NCRP (N43°14′ E08°56′) Sudas NCRP (N42°56′ E08°54′) AJO VOR/DME	10 17 70		FL 460 FL 195	ODD (S)
	CONTROL: Marseille UACC REMARKS: Weekend route: CDR1 H24 when weekend routes are open. During military activity in LFTSA44E, traffic will be rerouted on UAC instructions via TORTU-OMEDA-AJO (UN851 and UM733).						
UM985	Lumas CRP (N41°44′ E04°40′) Oblad NCRP Raspa NCRP Balok NCRP	075 040	Oblad NCRP (N41°49′ E05°01′) Raspa NCRP (N42°09′ E05°24′) Balok NCRP (N42°26′ E05°42′) STP VOR/DME	16 27 21 62		FL 460 FL 195	EVEN
	CONTROL: Marseille UACC REMARKS: CDR1 H24. If LFD54A/B is active bypass on UAC instructions via LUMAS-TINOT-AGDOR-ADITA-TURIL-STP or LUMAS-SOSUR-SOFFY-ADITA-TURIL-STP.						
UM989	Sosur NCRP (N42°34′ E05°00′) Neran CRP	163 343 163	Neran CRP (N41°41′ E05°23′) Balen CRP (N40°57′ E05°41′)	55 47		FL 460 FL 195	ODD (SE)
	CONTROL: Marseille UACC REMARKS: CDR1 H24. Unusable during military activity in LFD54B. Bypass on UAC instructions via SOSUR-OBLAND-BALEN.						
UN26	Manig NCRP (N49°47′ W03°16′) Larim NCRP	169	Larim NCRP (N49°06′ W03°00′) Korer NCRP (N47°41′ W02°30′)	43 87		FL 460 FL 195	ODD
	CONTROL: BREST UACC REMARKS: CDR1 H24. During military activity in LF TSA6, traffic will be re-routed via SALCO-ARE-TERKU-DEGEX-KORER.						
UN90	Skeso NCRP (N49°49′ W03°02′) Larim NCRP	181 169	Larim NCRP (N49°06′ W03°00′) Korer NCRP (N47°41′ W02°30′)	44 87		FL 460 FL 195	ODD
	CONTROL: BREST UACC REMARKS: CDR1 H24. During military activity in LF TSA6, Brest UACC will re-route traffic.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN460	TIS VOR/DME	270	LMG VOR/DME	106		FL 460 FL 195	EVEN
	CONTROL: Bordeaux UACC REMARKS: CDR1 H24. If military activity in LFTSA43, UAC will reroute traffic via UP860 TIS-BEBIX, UM129 BEBIX-LMG.						
	CAN VOR/DME	279 099	Lebri NCRP (N45°49′ W02°32′)	94		FL 460 FL 195	EVEN (NW)
	Lebri NCRP		Desab NCRP (N45°50′ W02°58″)	18			
	Desab NCRP	278 098	Erwan NCRP (N45°56′ W05°13′)	95			Note
	Erwan NCRP	277 097	Rivak CRP (N46°00′ W08°00′)	116			
	Rivak CRP	275 095	Sivir CRP (RVSM) (N46°00′ W08°00′)	31			
	CONTROL: Brest UACC REMARKS: CDR1 H24. Bypass on ATC instructions during military activity. Note: Preferred flight levels not established for segments Desab NCRP - Sivir CRP.						
UN461	Terpo NCRP (N47°21′ W01°56′)	257	Akemo NCRP (N47°08′ W03°00′)	46		FL 460 FL 195	ODD
	Akemo NCRP	256	Kolek NCRP (N46°37′ W05°24′)	104			
	Kolek NCRP		Rivak CRP (N46°00′ W08°00′)	114			Note
	CONTROL: Brest UACC REMARKS: Note: No preferred flight levels for this segment. Segment Terpo-Kolek is CDR1 H24. During military activity bypass on UAC instructions via ERIGA-NOVAN. Segment Kolek-Rivak CDR1 nights and weekends. Cannot be used during military activity. Bypass on UAC instructions.						
UN470	CNA VOR/DME	290 110	Dilra NCRP (N45°51′ W01°14′)	40		FL 460 FL 195	ODD (W)
	Dilra NCRP		Godem NCRP (N46°03′ W02°15′)	45			
	CONTROL: Bordeaux UACC REMARKS: CDR1 H24. During military activity bypass on UAC instructions.						
UN471	Coque NCRP (N47°05′ W04°59′)	092 272	Akemo NCRP (N47°08′ W03°00′)	82		FL 460 FL 195	EVEN (E)
	Akemo NCRP	092	Oleba NCRP (N47°09′ W01°51′)	46			
	Oleba NCRP		NTS VOR/DME	10			
	CONTROL: Brest UACC REMARKS: CDR1 H24. During military activity bypass on UAC instructions via XIDAN-KOLEK-NOVAN-ERIGA-NTS.						
UN472	QPR VOR/DME	257 077	Lapex CRP (N47°00′ W08°00′)	165		FL 460 FL 195	
	CONTROL: Brest UACC REMARKS: CDR1. Cannot be used during military activity. Bypass on UAC instruction via COQUE-XIDAN. Preferred flight levels not established.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN482	Reghi CRP (N48°00′ W08°00′)	099 279	Pomta NCRP (N47°47′ W03°38′)	177		FL 460 FL 195	
	Pomta NCRP	101 281	Degex NCRP (N47°45′ W03°09′)	19			ODD (ESE)
	Degex NCRP		Korer NCRP (N47°41′ W02°30′)	27			
	Korer NCRP		Godan NCRP (N47°39′ W01°58′)	22			
	Godan NCRP		Kuris NCRP (N47°36′ W01°31′)	18			
	Kuris NCRP	101	ANG VOR	27			
	CONTROL: Brest UACC REMARKS: CDR1 H24. During military activity bypass via TURAN-XIDAN-COQUE-NTS-ANG for eastbound flights and via KURIS-TERPO-AKEMO-COQUE-XIDAN-TURAN for westbound flights. Segment REGHI-POMTA: Preferred flight levels not established.						
UN484	Rusib NCRP (N48°59′ W03°49′)	258 078	Reghi CRP (N48°00′ W08°00′)	177		FL 460 FL 195	ODD (SW)
	CONTROL: Brest UACC REMARKS: CDR1. Unusable during military activity. Bypass via NERLA-DEKOR on UAC instructions.						
UN490	Mosis CRP (N49°00′ W07°13′)	114 294	Berad NCRP (N48°18′ W04°04′)	132		FL 460 FL 195	ODD (ESE)
	CONTROL: Brest UACC REMARKS: CDR1 H24. During military activity bypass on UAC instructions via DEKOR-NERLA.						
UN512	Dekor NCRP (N49°00′ W05°56′)	125 305	Berad NCRP (N48°18′ W04°04′)	87		FL 460 FL 195	ODD (SE)
	CONTROL: Brest UACC REMARKS: CDR1 H24. During military activity bypass on UAC instructions via NERLA.						
UN736	Lunor CRP (N40°23′ E05°24′)	023 203	Balen NCRP (N40°57′ E05°41′)	36		FL 460 FL 195	ODD (SW)
	Balen NCRP	025 205	Larap CRP (N42°00′ E06°20′)	70			
	Larap CRP	026 206	Rubas NCRP (N42°23′ E06°34′)	25			
	Rubas NCRP		Lerma NCRP (N43°10′ E07°04′)	52			
	Lerma NCRP		Rokno NCRP (N43°26′ E07°15′)	18			
	Rokno NCRP		Pigos CRP (N43°37′ E07°22′)	12			
	CONTROL: Marseille UACC REMARKS: CDR1 H24. If LFD54A is active, bypass on UAC instructions via: For south/north traffic: LUNOR-NEGAT-OMEDA-PIGOS or LUNOR-AJO-PIGOS. For north/south traffic: ROKNO-OMARD-VAREK-ERPIN-BALEN or KOLON-DIVUL-AJO-LUNOR.						
UN850	Abron CRP (N42°37′ E08°09′)	230	Balen CRP (N40°57′ E05°41′)	149		FL 460 FL 285	ODD
	CONTROL: Marseille UACC REMARKS: CDR1 H24. If LFD54A is active, bypass on UAC instruction via ABRON-ERPIN-BALEN.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN853	Lumas CRP (N41°44′ E04°40′)	034	Mebel NCRP (N42°30′ E05°21′)	55		FL 460 FL 195	EVEN
	Mebel NCRP		Tuneg NCRP (N43°14′ E06°01′)	33			
	Tuneg NCRP		Turil NCRP (N43°24′ E06°02′)	20			
	Turil NCRP	005	Maxir CRP (N43°24′ E06°02′)	10			
	CONTROL: Marseille UACC REMARKS: CDR1 H24. If LFD54A5/B5 are active, bypass on ATC instruction via LUMAS-TINOT/SOSUR-ROTIS-ADITA-MAXIR or LUMAS-SOSUR-SOFFY-ADITA-MAXIR.						
UN854	Balen CRP (N40°57′ E05°41′)	351	Raspa NCRP (N42°09′ E05°24′)	74		FL 460 FL 195	EVEN
	Raspa NCRP	355	Mebel NCRP (N42°30′ E05°21′)	20			
	Mebel NCRP		Tinot CRP (N42°42′ E05°19′)	12			
	Tinot CRP	002	Padko NCRP (N43°14′ E05°20′)	32			
	Padko NCRP	359	MRM VOR/DME	9			
	CONTROL: Marseille UACC REMARKS: CDR1 H24. If LFD54B is active, bypass on UAC instruction via BALEN-OBLAD-SOSUR-SOFFY-MRM.						
UN855	Valku NCRP (N46°00′ E02°49′)	180	Adatu NCRP (N45°32′ E02°50′)	28		FL 460 FL 195	ODD
	Adatu		Olrak NCRP (N44°47′ E02°50′)	45			
	CONTROL: Brest UACC REMARKS: Below FL 285, CDR1 H24. During military activity in LFTSA43B, traffic will be rerouted on UAC instructions via UZ271 and UY27.						
UN857	SAU VOR	212	Beguy CRP (N43°04′ W00°09′)	112		FL 460 FL 195	ODD
	CONTROL: Bordeaux UACC REMARKS: Weekend Route. CDR3 weekdays when weekend routes are closed. Flight plan via BTZ.						
UN858	Abrix CRP (N43°39′ W01°58′)	033	Somos NCRP (N44°33′ W01°14′)	62		FL 460 FL 195	EVEN
	Somos NCRP		CNA VOR/DME	78			
	CONTROL: Bordeaux UACC REMARKS: Weekend Route. CDR3 weekdays when weekend routes are closed. Flight plan via BTZ.						
UN859	Vanad NCRP (N47°50′ E00°54′)	167	AMB VOR/DME	25		FL 460 FL 195	ODD
	AMB VOR/DME	183	Balan NCRP (N46°31′ E01°02′)	55			
	Balan NCRP	158	Bebix NCRP (N45°57′ E01°24′)	37			
	CONTROL: Bordeaux UACC REMARKS: CDR1 H24 for Flight Level below FL 285. When LFTSA 10C2,C3 is active, bypass via UL851 and UN857 or UN858.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN861	Fisto NCRP (N44°28′ E01°14′)	329	Poket NCRP (N45°07′ E00°37′)	47		FL 460 FL 195	EVEN
	Poket NCRP	328	Tupar NCRP (N46°26′ W00°40′)	95			
	Tupar NCRP	356	ANG VOR	67			
	ANG VOR	358	Dikro CRP (N49°35′ W01°07′)	123			
	Dikro CRP		Epati NCRP (N49°48′ W01°05′)	13			
	Epati NCRP		Kotem CRP (N50°00′ W01°03′)	12			
	CONTROL: FISTO NCRP-TUPAR NCRP: Bordeaux UACC. TUPAR NCRP-KOTEM CRP: Brest UACC. REMARKS: Segment FISTO - TUPAR CDR1 on weekends only. Segment TUPAR - DIKRO weekend route, CDR3 during the week when weekend routes are closed. Segment DIKRO - KOTEM CDR1 H24.						
UN862	Lagor CRP (N46°30′ W01°51′)	149	Dilra NCRP (N45°51′ W01°14′)	47		FL 460 FL 195	ODD
	Dilra NCRP		SAU VOR	96			
	SAU VOR	175	TBO VOR	82			
	TBO VOR	184	Perdu CRP (N42°44′ E00°09′)	36			
	CONTROL: Lagor CRP-SAU VOR: Brest UACC; SAU VOR-Perdu CRP: Bordeaux UACC. REMARKS: Weekend route. CDR3 on weekdays when weekend routes are closed.						
UN867	Akiki CRP (N49°35′ W01°25′)	006	Garmi CRP (N50°00′ W01°23′)	25		FL 460 FL 195	EVEN
	CONTROL: Brest UACC REMARKS: CDR1 H24.						
UN870	Sosur NCRP (N42°34′ E05°00′)	043	Rotis NCRP (N42°58′ E05°30′)	43		FL 460 FL 195	EVEN
	Rotis NCRP		Adita NCRP (N43°14′ E05°50′)	21			
	CONTROL: Marseille UACC REMARKS: CDR1 H24. If LFD-54B5 is active, bypass on ATC instruction via SOSUR-SOFFY-ADITA.						
UN872	LGL VOR	232	Rolen NCRP (N48°35′ E00°09′)	20		FL 460 FL 195	ODD
	Rolen NCRP		Pepon CRP (N48°21′ W00°15′)	21			
	Pepon CRP		Kuris NCRP (N47°36′ W01°31′)	68			
	CONTROL: Brest UACC REMARKS: CDR1 H24. If military activity in LFTSA8A, bypass on UAC instruction via UT190: LGL-GODIX-DIDAK-KURIS.						
UN995	AGN VOR/DME	227	TBO VOR	46		FL 460 FL 195	ODD
	CONTROL: Bordeaux UACC REMARKS: Weekend route. CDR3 on weekdays when weekend routes are closed.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UP620	Cambo NCRP (N49°17′ W05°52′) Dekor NCRP	195 015 195 015	Dekor NCRP (N49°00′ W05°56′) Korul CRP (N44°50′ W06°55′)	19 253		FL 460 FL 195	ODD (SW)
	CONTROL: Brest UACC REMARKS: Weekend route. CDR 3 on weekdays when weekend routes are closed (flight plan should be filed on weekdays via UT7). Awy unusable during military activity.						
UP84	PPG VOR/DME Moril NCRP Monix NCRP Lomra NCRP	311 131 	Moril NCRP (N43°04′ E02°21′) Monix NCRP (N43°20′ E01°54′) Lomra NCRP (N43°21′ E01°53′) TOU VOR/DME	30 26 1 32		FL 460 FL 195	EVEN (NW)
	CONTROL: Bordeaux UACC REMARKS: CDR1 H24. During military activity in LFTSA40, UAC will reroute traffic in low airspace.						
UP132	Lerma CRP (N43°10′ E07°04′) Epolo CRP Tuneg CRP Rotis CRP Soffy CRP	234 277 276 283 277	Epolo CRP (N42°53′ E06°32′) Tuneg CRP (N42°57′ E05°46′) Rotis CRP (N42°58′ E05°30′) Soffy CRP (N43°01′ E05°11′) Divko CRP (N43°03′ E04°47′)	29 34 12 14 18		FL 460 FL 195	EVEN
	CONTROL: Marseille UACC. REMARKS: CDR1 H24. If LFD-54A5/C5 are active, bypass on ATC instruction via UL127 and UT24/UM984.						
UP860	NTS VOR/DME Lemka CRP	122	Lemka CRP (N46°38′ W00°15′) Bebix NCRP (N45°57′ E01°24′)	64 80		FL 460 FL 195	ODD
	CONTROL: NTS-LEMKA: Brest UACC; LEMKA-BEBIX: Bordeaux UACC. REMARKS: CDR3. File flight plan via NTS-TUPAR-DIDRU- . . .)						
UT16	Lumas CRP (N41°44′ E04°40′) Tinot NCRP Rotis NCRP	028 044	Tinot NCRP (N42°42′ E05°19′) Rotis NCRP (N42°58′ E05°30′) Adita NCRP (N43°14′ E05°50′)	65 18 21		FL 460 FL 195	EVEN
	CONTROL: Marseille UACC REMARKS: CDR1 H24. If LFD54B5 is active, bypass on ATC instructions via LUMAS-SOSUR-ROTIS-ADITA(CDR1) or LUMAS-SOSUR-SOFFY-ADITA.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UT21	Toulouse VOR/DME	104 284	Lapro CRP (N43°25′ E02°51′)	69		FL 460 FL 195	ODD (SE)
	Lapro CRP	105 285	Bolsa NCRP (N43°20′ E03°19′)	21			
	Bolsa NCRP		Nivet NCRP (N43°12′ E04°03′)	33			
	Nivet NCRP		Divko CRP (N43°03′ E04°47′)	33			
	CONTROL: Bordeaux/Marseille UACC REMARKS: Weekend route. During military activity, traffic will be rerouted via GAI-DEGOL-NEKTA-FJR-DIVKO.						
UT24	Seche CRP (N44°26′ E00°31′)	119 299	Lacou NCRP (N44°18′ E00°54′)	19		FL 460 FL 195	ODD (SE)
	Lacou NCRP		GAI VOR	45			
	CONTROL: Bordeaux UACC REMARKS: CDR1 H24. During military activity in LFTSA32, UAC will reroute traffic.						
UT133	Danbo NCRP (N45°55′ E05°04′)	327	Busil NCRP (N46°18′ E04°43′)	26		FL 460 FL 195	EVEN
	Busil NCRP	330	Amoro NCRP (N46°30′ E04°32′)	15			
	Amoro NCRP	009	Momil NCRP (N46°33′ E04°33′)	3			
	Momil NCRP		Bagbi NCRP (N46°49′ E04°36′)	16			
	CONTROL: Danbo NCRP-Amoro NCRP: Marseille UACC; Amoro NCRP-Bagbi NCRP: Bordeaux UACC REMARKS: CDR1 H24. During military activity, bypass on UAC instruction via ATN.						
UT144	BTZ VOR/DME	103 283	Bidac NCRP (N43°25′ W01°08′)	17		FL 460 FL 195	EVEN (SE)
	Bidac NCRP		Ortez NCRP (N43°22′ W00°43′)	19			
	Ortez NCRP	095 275	TBO VOR	38			
	TBO VOR	076	Gonup CRP (N43°28′ E00°46′)	28			
	CONTROL: Bordeaux UACC. REMARKS: CDR1 H24. During military activity in LFTSA34, UAC will reroute traffic in low airspace.						
UT161	MTL VOR/DME	184 004	AVN VOR	34		FL 460 FL 195	ODD (S)
	AVN VOR	180	Divko NCRP (N43°03′ E04°47′)	56			
	CONTROL: Marseille UACC REMARKS: During activity in LFR108A, traffic will be rerouted on UAC instructions via MTL-MTG-DIVKO. Segment AVN-DIVKO is CDR1 H24. During military activity in LFTSA42S, traffic will be rerouted on UAC instructions via UZ16-MTG-UN852.						
UT180	Belen CRP (N43°55′ W02°44′)	013	Godem NCRP (N46°03′ W02°15′)	129		FL 460 FL 195	EVEN
	Godem NCRP	014	Mokor NCRP (N47°00′ W02°01′)	58			
	CONTROL: Brest UACC REMARKS: Weekend route. CDR3 rest of week when weekend routes are closed.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UT187	Lerga NCRP (N45°15′ E03°45′)	285 105	Fouco CRP (N45°45′ E00°29′)	141		FL 460 FL 195	ODD (SE)
	CONTROL: Bordeaux UACC REMARKS: CDR1 H24. During military activity, traffic will be rerouted on UAC instructions via UZ161-ADEKA-UP860-BEBIX.						
UT188	ANG VOR	056	CHW VOR/DME	93		FL 460 FL 285	EVEN
	CONTROL: Brest UACC REMARKS: CDR3. Useable only on UAC instructions.						
UT460	Novan NCRP (N46°19′ W03°42′)	265 085	Rivak CRP (N46°00′ W08°00′)	180		FL 460 FL 195	
	CONTROL: BREST UACC REMARKS: CDR1 H24. During military activity, bypass on UAC instructions. Preferred flight levels not established.						
UY25	MEN VOR/DME Ergul NCRP Esera NCRP	153	Ergul NCRP (N44°15′ E03°27′) Esera NCRP (N44°09′ E03°32′) FJR VOR/DME	25 7 39		FL 460 FL 195	ODD
	CONTROL: BORDEAUX UACC REMARKS: Conditional route above FL 205. CDR1 nights and weekends. CDR3 weekdays outside of published CDR1 times. FL 200 max at MEN if LFTSA42N is active.						
UY30	Lerga CRP (N45°15′ E03°45′)	135	MTL VOR/DME	61		FL 460 FL 195	ODD
	CONTROL: BORDEAUX UACC REMARKS: CDR1 H24. During military activity, traffic will be rerouted on UAC instructions via LERGA-LATAM-MTL.						
UY110	Girom CRP (N42°46′ E01°00′) Gonup CRP Manak CRP	349 337 358	Gonup CRP (N43°28′ E00°46′) Manak CRP (N46°13′ W00°57′) Akiki CRP (N49°35′ W01°25′)	43 180 204		FL 460 FL 195	EVEN
	CONTROL: Girom CRP-Manak CRP: Bordeaux UACC; Manak CRP-Akiki CRP: Brest UACC. REMARKS: CDR1 Weekend route. CDR3 during the week when weekend routes are closed.						
UY120	TOU VOR/DME	333	Tupar NCRP (N46°26′ W00°40′)	185		FL 460 FL 195	EVEN
	CONTROL: Bordeaux UACC. REMARKS: CDR1 Weekend route. CDR3 during the week when weekend routes are closed.						
UY131	Nilem NCRP (N50°18′ E04°07′)	185	Mopil NCRP (N50°09′ E04°06′)	9		FL 460 FL 195	ODD
	CONTROL: Paris UACC below FL 265. Reims UACC above FL 265. REMARKS: Weekend route. CDR2 or CDR3 on weekdays, when weekend routes are closed. (See Belgium)						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UY157	Remgo NCRP (N49°47′ E05°01′)	257	Xeram NCRP (N49°36′ E004°04′)	39		FL 265 FL 195	EVEN
	CONTROL: PARIS UACC below FL 265; REIMS UACC above FL 265. REMARKS: Weekend route. CDR2 or CDR3 on weekdays, when weekend routes are closed. (See Belgium)						
UY268	Divko CRP (N43°03′ E04°47′) Tinot CRP Rubas NCRP	133 313 110 290	Tinot CRP (N42°42′ E05°19′) Rubas NCRP (N42°23′ E06°34′) AJO VOR/DME	32 59 104		FL 460 FL 195	ODD (SE)
	CONTROL: Marseille UAC REMARKS: CDR1 H24. If LFD54A/B/C is active, bypass on UAC instructions via DIVKO-PADKO-ADITA-TURIL-STP-OMARD-VAREK-AJO or DIVKO-PADKO-ADITA-TURIL-STP-OMARD-MERLU-ABRON-OMEDA-AJO.						
UY342	FJR VOR/DME Salin CRP	118 298 097 277	Salin CRP (N43°17′ E04°44') Padko CRP (N43°14′ E05°20')	37 27		FL 460 FL 195	ODD (SE)
	CONTROL: Marseille UACC. REMARKS: CDR3 bypass of LFR108A on ATC instruction.						
UY373	Salin CRP (N43°17′ E04°44′)	069	Rovot NCRP (N43°20′ E04°56′)	9		FL 460 FL 195	EVEN
	CONTROL: Marseille UACC. REMARKS: CDR3 bypass of LFR108A on ATC instruction.						
UZ34	Gonup CRP (N43°28′ E00°46′) Ensac NCRP Somos CRP Desab NCRP	309 314 320 352	Ensac NCRP (N44°12′ W00°41′) Somos CRP (N44°33′ W01°14′) Desab NCRP (N45°50′ W02°58′) Terku Ncrp (N48°02′ W03°37′)	77 31 106 135		FL 460 FL 195	EVEN
	CONTROL: Bordeaux/Brest UACC REMARKS: Weekend route. CDR1, can only be planned on Saturdays, Sundays, and holidays from 0000-2359 local time. Cannot be used during military activity. Conditions for use are published each week by the CFMU, after coordination with units involved.						
UZ38	Montelimar VOR/DME Nakis CRP Bolsa CRP	246 212 211	Nakis CRP (N44°19′ E04°06′) Bolsa CRP (N44°20′ E03°19′) PPG VOR/DME	32 68 40		FL 460 FL 195	ODD
	CONTROL: Marseille/Bordeaux UACC REMARKS: Weekend route. Not useable during military activity.						
UZ39	Bolsa CRP (N43°20′ E03°19′)	246	Sijan CRP (N43°12′ E02°56′)	18		FL 460 FL 195	ODD
	CONTROL: Bordeaux UACC REMARKS: Weekend route. Not useable during military activity.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ124	Ibaba NCRP (N46°53′ E05°25′) Tutax NCRP	293 319	Tutax NCRP (N46°55′ E05°15′) Oburo NCRP (N47°39′ E04°16′)	8 59		FL 460 FL 195	EVEN
	CONTROL: Paris UACC. REMARKS: CDR1 H24. When LF TSA 24 is active, bypass on ATC instructions via IBABA-DJL-TUNOR.						
UZ150	Kokos NCRP (N48°54′ W01°41′)	358	Orist CRP (N50°00′ W01°51′)	66		FL 460 FL 195	EVEN
	CONTROL: Brest UACC REMARKS: CDR3 H24						
UZ209	Bokno NCRP (N47°03′ E00°41′)	158	Balan NCRP (N46°31′ E01°02′)	35		FL 285 FL 195	ODD
	CONTROL: Bordeaux UACC. REMARKS: CDR3.						
UZ365	Dirmo CRP (N47°05′ E02°12′) Guere CRP Belpa NCRP	186 188	Guere CRP (N46°11′ E02°05′) Belpa NCRP (N45°00′ E01°57′) GAI VOR	54 72 62		FL 460 FL 195	EVEN ODD
	CONTROL: Bordeaux UACC REMARKS: CDR 1 H24. During military activity in LF TSA 43A, traffic will be rerouted on UAC instructions via MAKOX-UL152-BRIVE. Segments GUERE to GAI will be rerouted via OBUBA-UN859-GAI.						
UZ706	CTL VOR/DME	052	Arden NCRP (N49°52′ E04°51′)	66		FL 460 FL 295	EVEN
	CONTROL: Reims UACC REMARKS: Weekend Route. Cannot be used during military activity. CDR2 on weekdays when weekend routes are closed.						
UZ707	Famen NCRP (N49°59′ E04°34′) BSN VOR/DME	234 225	BSN VOR/DME Resmi NCRP (N49°34′ E02°12′)	75 51		FL 460 FL 265	ODD
	CONTROL: Reims UACC REMARKS: Weekend Route. Cannot be used during military activity. CDR2 on weekdays when weekend routes are closed.						

(SPEC/ENR 3.2)

TACAN ROUTES -

1. The TACAN route network serves military aircraft operating in IFR in GAT. It fills a need for the following:

a. Allows military flights to circulate in GAT when technical and operational conditions are compatible with GAT.

b. Allows flights of military aircraft that are not using predetermined routes.

c. Links via a network of routes, some airports or regions in order to carry out military objectives.

2. Flights bound for FRANCE UTA must receive entry clearance for the UACC concerned, 5 minutes or less before boundary crossing, unless cleared by previous control unit.

3. These route are available between WINTER: 0000-0700Z and 1700-2400Z, SUMMER: 0000-0600Z and 1600- 2400Z Mon, Tue, Wed and Fri; WINTER: 0000-1100Z and 1700-2400Z, SUMMER: 0000-1000Z and 1600-2400Z Thu; Available 24 hours Sat, Sun and holidays.

4. The portion of TACAN Route A6 between DIJON and LYON can be used 24 hours a day to maintain military traffic flow coming from, or going to:

a. From ITALY, MALTA and the CENTRAL MEDITERRANEAN, on TACAN B25 (except FL 280 and FL 290).

b. From Spain, on TACAN Route G5.

5. Vertical limits are FL 195 - Unlimited, except TB3 which is FL 240 - Unlimited.

(SPEC/MIL ENR 3.5-10)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for Charts.

1. The information shown on the Bird Hazards Area graphic represents a composite of the migratory routes and concentration areas for the entire year. See chart legend for specific information.

2. Additionally there are significant bird hazards at the following locations:

a. Le Pal Amusement and Zoological Park at N46°30'06" E03°37'08".

(SPEC/MIL AIC 10-05)

b. Sainte Anne Chateau, Forez Free-Flying Raptor Center at N45°42'00" E04°01'37".

(SPEC/MIL AIC 07-05)

c. Millau-Florac region bounded approximately by the following coordinates: N44°23' E03°00' - N44°23' E03°17' - N44°13' E03°17' - N44°13' E02°56'.

(SPEC/MIL AIC 05-05)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

FRENCH HOLIDAYS

NAME	DATE
New Years Day	1 Jan
Easter Sunday	16 Mar 2006
Easter Monday	17 Apr 2006
Labor Day	1 May
Pentecost Sunday	4 May 2006
V Day 1945	8 May
Ascension Thursday	25 May 2006
Bastille Day	14 Jul
Assumption	15 Aug
All Saints Day	1 Nov
Armistice Day	11 Nov
Christmas	25 Dec

(SPEC/GEN 2.1-2)

GABON

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the BRAZAVILLE FIR. See Cameroon.

GAMBIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the DAKAR FIR. See Bissau.

GERMANY

NATIONAL PROCEURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes BERLIN FIR/UIR, BREMEN FIR, DUSSELDORF FIR, FRANKFURT FIR, HANNOVER UIR, MUNCHEN FIR, AND RHEIN UIR.

DIMENSIONAL UNITS - ICAO Blue Table except that the altimeter setting is in hectopascals (millibars) unless the pilot requests inches of mercury.

(SPEC/CIV GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard, additionally:

1. On VFR flights at and below an altitude of 5000' MSL or at and below a height of 2000' AGL whichever is higher, the altimeter shall be set to the QNH value of the airport with ATC unit located nearest to the route of flight. Above this height/altitude the altimeter shall be set to 29.92 in of mercury.

2. For IFR flights the altitude at and below which the pilot shall set the altimeter to the QNH value transmitted by the appropriate ATC unit and above which he shall use the standard altimeter setting, is established at 5000' MSL (Transition Altitude). For flight above the Transition Altitude, an altitude is established which, taking into account the valid QNH value corresponds to the flight level for IFR, at least 1000' above the Transition Altitude (Transition Level).

(SPEC/CIV ENR 1.7-1)

3. On IFR approaches the pilot using the standard altimeter setting shall set the altimeter to the QNH value transmitted by the competent ATC unit when passing the transition level.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING -

1. IFR FLIGHTS - Standard, additionally:

a. After changing frequency, the following data shall be transmitted:

(1) Call sign (and runway identification when parallel runways are in operation).

(2) Altitude and, if climbing or descending, cleared altitude. (Not required on change from approach control to tower).

2. VFR FLIGHTS - Standard.

(SPEC/CIV ENR 1.8-14)

AIRSPACE WITH DESIGNATION "HX" -

1. General

a. The classification of classes of airspace exists basically without restrictions as to time. However, in order to improve the possibilities for VFR flights to make use of the airspace more freely, parts of the airspace structure are becoming more flexible with regard to times.

b. Those classes of airspace are affected which are not continually active in their classification and which are marked by "HX" on the aeronautical charts - 1:500,000 German ICAO charts.

c. As long as the classes of airspace designated by HX are not active, uncontrolled airspace of class G applies in the areas up to the respective lower limits of Airspace E.

2. Control Zones, D (HX) - Control zones of most military airports, as well as some civil airports, are not constantly active. Thus, for example, other control zones at military airports are basically active only during the times published in the AIP. However, at the instigation of the local ATS unit of the airport, they can be deactivated not only during the basic times of activity (Mon-Fri), but also activated outside these times (Sat, Sun, Hol).

3. Airspace E (HX) With Lower Limit 1000 ft and/or 1700 ft GND - Airspace E in the vicinity of the above-mentioned control zones is also often designated by HX. The regulation for the times of activity applies analogously to the corresponding control zones.

4. Airspace F (HX) - This airspace in the vicinity of uncontrolled airports with IFR flight operations is only active if IFR approaches/departures take place.

5. Conducting VFR Flights

a. Pilots can gather information on the current status of these classes of airspace prior to entering this airspace by enquiring at the competent FIS units or at the ground stations of airports concerned.

b. Pilots who fail to enquire shall consider such airspace as constantly active and shall observe the regulations pertaining to it.

c. If regulations of the air, e.g. the observance of visual flight rules or the necessity of an air traffic control clearance in Airspace D, permit the use of a specific airspace in a deactivated condition only, pilots shall maintain constant listening watch during the flight within this airspace so that they can be informed about short term changes to the status.

(USAASD-E/AIC VFR 2/97)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Standard with the following exceptions:

1. Germany has implemented the ICAO Annex 11 airspace classification with the following exceptions:

(SPEC/CIV ENR 1.1-21)

a. Class A & B are not implemented.

(SPEC/CIV ENR 2.1-6)

b. Class C airspace has been implemented for all airspace at and above FL 100 with exceptions around the following international airports: Berlin (EDDI) (EDDT) (EDDB), Dusseldorf (EDDL), Koln/Bonn (EDDK), Frankfurt Main (EDDF), Hamburg (EDDH), Hannover (EDDV), Munchen (EDDM), Nurnberg (EDDN), Stuggart (EDDS).

(USAASD-E/CIV ENR 2.1-7-11)

(1) Flight within Class C area is allowed only for powered aircraft with VHF radio, VOR receiver, and transponder A/4096 with Mode C.

(USAASD-E/VFR GEN 1-20 and 21)

(2) If radio failure occurs prior to entering Class C area, pilot shall avoid the area even if he has received an entry clearance. If radio communication failure occurs within Class C airspace below FL 100, the pilot shall continue the flight in accordance with the ATC clearance received and acknowledge or, if this is not possible, shall leave the area via the shortest route. If communication failure occurs in Class C airspace above FL 100, the pilot shall leave the airspace via the shortest route.

(SPEC/CIV VFR ENR 1-8)

c. Class D airspace (Control Zones)

(1) In Class D airspace, VFR flight may only be conducted if the minimum meteorological conditions prevail. Following Class D airspaces are exceptions to Class D standard criteria:

(a) Cloud clearance requirement - Clear of Clouds within all Class D airspace.

(b) Ceiling - Ceiling 1000 feet within the following Class D airspace: Ansbach (ETEB), Coleman (ETOR), Friedrichshafen (EDNY), Giebelstadt (ETEU), Grafenwohr (ETIC), Hanau (ETID), Wiesbaden (ETOU).

(USAAAD-E/USA 04-0031)

(c) Ceiling, Flight and Ground Visibility - Ceiling 700 feet and flight/ground visibility 3km within the following Class D airspaces: Buckeburg (ETHB), Celle (ETHC), Diepholz (ETND), Fassberg (ETHS), Fritzlar (ETHF), Illesheim (ETIK), Laupheim (ETHL), Mendig (ETHM), Neiderstetten (ETHN), and Rhein-Bentlage (ETHE).

(d) Ceiling, Flight and Ground visibility - Ceiling 1000 feet and flight/ground visibility 3 km within the following Class D airspace: Frankfurt Main (EDDF), Oberphaffenhofen (EDMO).

(SPEC/CIV ENR 2.1-15 thru 23)

(2) Class D airspace (Non-Control Zone) Flight visibility 5km, Cloud clearance 1.5km horizontally, 1000 ft vertically.

(USAASD-E 02-0174/MIL ENR 1.2-1)

(3) Special VFR - An ATC clearance for a Special VFR Flight will be issued by ATC only if the following conditions exist or are met:

(a) At German airfields, pilots will only request a special VFR clearance if:

1 Ground visibility is 1500m (800m for rotorcraft).

2 The pilot can maintain separation.

3 If the ceiling is below 500', only if the pilot has been granted exceptional permissions to fly below the Minimum Safe Height. Minimum Safe Height is the height at which neither unnecessary noise disturbance nor unnecessary hazard to person or property can be expected in the event of an emergency landing; and other cities, densely populated areas, or assemblages of people a minimum of 1000 feet above the highest obstacle within 500 feet; elsewhere 500 feet above obstacles within 500 feet.

4 Ceiling is not less than 500 feet.

(SPEC/CIV VFR ENR 1-10)

a Ramstein AB (ETAR) and Spangdahlem AB (ETAD) may authorize special VFR flight within its Class D airspace. Rotorwing aircraft may be granted special VFR if they remain clear of clouds. Fixed wing special VFR is not authorized.

(USAFE/USAF FIL 27/94)

b USA - Special VFR flight shall be flown in accordance with minimums specified in AE95-1. The use of lower minima is not authorized; however, higher minima will be used when specific locations publish other special VFR minima in DoD FLIP.

d. Class E airspace will have a minimum flight visibility of 8 km.

(SPEC/CIV VFR ENR 1-1)

e. Class F airspace.

(1) Establishment of Class F airspace is in accordance with ICAO Standard, and permits IFR approach and departure at airports without airport control. Uncontrolled airspace will be established with higher minima for VFR flight in the vicinity of the airport concerned.

(SPEC/CIV VFR ENR 1-1)

(2) Class F airspace has been established at the following airports with a maximum radius of 12NM up to 2500 ft. AGL: Barth (EDBH), Bautzen (EDAB), Coburg (EDQC), Cottbus (EDCD), Donaueschingen (EDTD), Eggenfelden (EDME), Emden (EDWE), Magdeburg (EDBM), Schwabisch Hall (EDTY), Siegerland (EDGS), Straubing (EDMS); up to 1700 ft. AGL: Bremerhaven (EDWB); up to 1000 ft. AGL: Altenburg (EDAC), Bayreuth (EDQD), Lahr (EDTL), and Zweibrucken (EDRZ).

(3) In addition to the above airports, the North Sea Area Class F airspace is continuously in effect at or below 2500' AGL within the following coordinates: N55°00'00" E06°30'00" to N55°00'00" E07°43'20" to N53°30'00" E06°44'00" along the German-Netherlands border to N53°40'00" E06°30'00" to N55°00'00" E06°30'00".

(USASD-E/ENR 2.1-47 thru 50)

DAY VFR FLIGHTS - Day and Night VFR Flights In Class C To G.

1. VFR flights in the airspace classified C to G shall be conducted in such a way that pilots do not fly below the minimum values for flight visibility and distance from clouds. Flight visibility is the visibility forward from the cockpit of an aircraft in flight.

2. Uncontrolled VFR flights set IFF/SIF equipment (if installed) as follows: Mode 2: ON; Altitude coding (Mode C): ON; Mode 3: ON, squawk 0033.

(SPEC/MIL GEN 1.2-2)

3. Radio equipment required -

a. One VHF transmitter/receiver with frequency range from 117.975 to 137.000 MHz.

b. A transponder with Mode A (4096 codes) and Mode C with automatic altitude reporting capability for new aircraft from Jan 1, 2003 (all aircraft from Mar 31, 2009) will use Mode S in controlled airspace as perscribed by the Federal Office of Civil Aeronautics (LBA), is required -

(1) In Class C airspace.

(2) Above 5000' MSL or 3500' AGL, whichever is higher.

(3) At night in controlled airspace.

c. One VOR reciever is required -

(1) In Class C airspace.

(2) In controlled airspace.

(3) For flights beyond visual range of an airport approved for night operations.

(4) In uncontrolled airspace, a VOR or ADF reciever may be used.

(SPEC/CIV VFR GEN 1-19,20)

d. USA only, AH-64, UH-60, OH-58 may operate above 5000 feet MSL and at night within controlled airspace without Mode C capability subject to the following:

(1) Flights shall be kept to an absolute minimum.

(2) Pilots are required to establish RT communications with the appropriate FIS stating position and altitude.

e. USA OH-58D and AH64 model aircraft are exempt from VOR/ADF requirements (Day & Night) provided:

(USAASD-E/USA 02-0051)

(1) The aircraft must be equipped with an operational, aircraft integrated inertial reference system that must have an accuracy which is comparable with that obtained from VOR/ADF. This includes but is not limited to Doppler/AHARS/GPS.

(2) Available navigation equipment will be stated in the flight plan and during initial radio communications with ATS.

NIGHT VFR FLIGHTS - USA VFR night flight (see AE95-1 for additional criteria).

1. Within controlled airspace (except Class D).

a. For flights within controlled airspace (Class E Airspace) aircraft have to be equipped with at least one VOR receiver and one VHF radio.

b. For flights within Frankfurt Main (EDDF) and Ramstein (ETAR) controlled airspace, pilots of army aircraft may operate at night without a VOR provided they:

(1) Contact the controlling agency, on UHF, for permission to enter and to receive any pertinent instruction or information from the controller prior to entry.

(2) Avoid Night Low Level Routes.

(3) Remain clear of all control zones unless landing at an airport located within a control zone.

(4) Are aware of the Radar Bomb Scoring activity located southeast of Ramstein AB (ETAR) (3600') and the high density traffic which lies in a sector from 045° to 180° starting at 5 miles and extending to 40 miles from Ramstein AB (ETAR) at 4000' and above.

(5) Coordinate operations consisting of large number of aircraft and special mission two days in advance with the controlling agency concerned.

c. For flight within U.S. Army controlled airspace (Class E airspace): Contact the controlling agency for permission to enter.

(1) USA aircraft conducting practice instrument approaches (including GCA) during VFR night flight in non-US controlled airspace will be equipped with one VHF radio, one VOR and/or one ADF.

(2) USA aircraft utilizing VFR arrival/departure routes which enter non-US controlled airspace must have one VHF radio, one VOR and/or one ADF.

(3) VFR night flight conducted exclusively within uncontrolled airspace may be operated without any radio/navigation and/or radio equipment.

2. Within Class D airspace

a. Flight conducted within civil Class D airspace may be conducted without any radio navigation equipment. Radio communication on prescribed VHF frequency must be possible.

b. Flights conducted within military Class D airspace may be conducted without any radio navigation equipment. The frequency band for radio communication with military ATC units is up to military regulations.

3. ATC CLEARANCES - All flights intending to operate within controlled airspace require an ATC clearance prior to entering such airspace.

(USAASD-E/USA 02-0061)

VFR FLIGHTS ABOVE CLOUD LAYERS - Flight above cloud layers (pilot must adhere to flight plan and make VFR approach and landing).

MAXIMUM AIRSPEEDS - MAXIMUM SPEED BELOW FL 100

1. VFR flights below FL 100 may not exceed 250 KIAS in accordance with ICAO Standard.

2. The competent ATC unit may grant exceptions on individual cases with traffic permitting and if safety of air traffic is not impaired:

a. At night in Class E airspace.

b. For IFR flights in Class D airspace.

c. For VFR flights in Class C and D airspace.

(SPEC/CIV ENR 1.8-10)

MINIMUM HEIGHTS FOR VFR OPERATIONS -

1. The following minimum heights apply to VFR flights. Aircraft may fly below these heights only if required for takeoff and landing, and, in case of helicopters, hovering. Minimum heights:

a. For jet aircraft and prop aircraft principally 1000 ft, for helicopters principally 500 ft.

b. Over cities with a population of more than 100,000.

- 2000 ft for jet and prop aircraft.

- 1000 ft for helicopters within a radius of 2000 ft above the highest obstacle.

NOTE: Towns with a population of less than 100,000 and other densely populated areas should not be overflown below these heights, if possible.

2. To enhance flight safety, prop aircraft and helicopters operating during military low flying operating times shall:

a. by day fly at heights of 1000 ft AGL to 1500 AGL only if required by the flight order or the meteorological situation.

b. by night underfly or overfly night low-flying routes only at a vertical distance of not less than 500 ft. In case of VFR night flights with helicopters, the vertical distance may be reduced to 300 feet for underflying night low-flying routes which have been activated for terrain following flights.

3. Dropping or dumping of objects or substances from military aircraft is prohibited as a matter of principle. Exceptions are permissible

a. if a pertinent flight order has been given;

b. on the basis of defined procedures;

c. in especially designated areas;

d. in places where individuals and objects are not endangered;

e. in emergency situations where the aircraft and its crew and passengers are exposed to imminent hazards. Details shall be determined by the responsible major command/command/comparable authorities of the Federal Armed Forces. Spraying of substances from military aircraft is subject to authorization by FMOD - Air Staff III 4.

(SPEC/MIL ENR 1.1-9)

Bridges and similar structures as well as overhead power lines and antennas shall not be underflown by aircraft.

CHANGE OF FLIGHT RULES FROM VFR TO IFR -

1. Planned -

a. A VFR flight plan in controlled airspace directly preceeding an IFR flight will be conducted in such a way that:

(1) The pilot has a flight visibility of at least 1.5 km/.8 NM.

(2) The aircraft remains clear of clouds.

b. Maintain visual contact with the ground while in uncontrolled airspace.

c. The change of flight rules will be made in such a way that:

(1) The competent ATC unit has agreed to this procedure in advance.

(2) The change from VFR to IFR is made at the minimum altitude for IFR flights.

(3) The climb between the lower limit of controlled airspace and the minimum altitude for IFR flight is accomplished without delay.

(SPEC/CIV ENR 1.8-20)

2. Caused by deteriorating weather (inadvertent IMC) -

a. Basically, when changing from VFR to IFR flight, the flight will be continued in VMC until an ATC clearance has been received. If continuation of flight in VMC is not possible until receipt of an ATC clearance, the following procedures shall be applied:

(1) Squawk Mode 3/A Code 7700 and Mode C.

(2) If below the following altitude, a climb will be initiated:

(a) North of N52°00' to 3500'.

(b) Within the area of Harz (N51°55' E10°20' to N51°55' E10°50' to N51°40' E10°50' to N51°40' E10°20') climb to 5200'.

(c) South of N52°00' to 4500' except . . . a. South of N49°00' and West of E09°10' climb to FL 65. b. South of N48°00' and East of E09°10' climb to FL 85.

(d) Within the area of Erzgebirge (N50°22.00' E11°55.00' to N51°14.00' E14°00.00' to N51°14.00' E14°16.00' along the German-Czech border to N50°15.50' E12°06.00' to N50°17.80' E11°54.46' to N50°22.00' E11°55.00') climb to 5000'.

b. If the altitude/flight levels listed above have been already exceeded, maintain present altitude.

c. Contact ATC for IFR clearance.

(1) Initiate IFR lost communications procedures.

(2) Continue to destination airport at the altitude described for the areas listed above and conduct an instrument approach. If VMC is again encountered, continue the flight VFR and land VFR at destination.

(SPEC/MIL ENR 1.2-6)

3. These procedures apply to both day and night, and include formation flights. U.S. Army refer to AE95-1 for detailed inadvertent IMC procedures.

(USAASDE/USA 02-0059)

INSTRUMENT FLIGHT FULES

FM IMMUNITY - FM immunity - This exception is only valid for aircraft type B-52. Aircraft is exempt from requirement to carry at least one FM immune VOR receiver until 31 Dec 2007 provided:

1. ENROUTE -

a. The aircraft is certified for IFR-flight operations by the competent national (military) authority.

b. The aircraft is equipped with RNAV capability of RNP/5.

c. The aircraft is additionally equipped with a conventional navigation system with a similar accuracy (e.g. TACAN).

2. TERMINAL AREAS -

a. State aircraft not equipped with FM-immune system will restrict their operations in accordance with the published approach procedures (e.g. VMC, NDB/DME(GPS), GPS/DME overlay, SRE, TACAN or NDB approaches).

b. Germany will ensure for ILS/VOR approach procedures the "Generic Method" (means these airport's approaches are available for non-FMI equipment) for the following airports:

(1) Berlin-Tegel (EDDT)

(2) Frankfurt Main (EDDF)

(3) Koln/Bonn (EDDK)

(4) Munchen (EDDM)

(5) Stuttgart (EDDS)

(6) All military airfields

NOTE: Radar monitoring of approaches to civil airports is not possible in Germany.

(TFMWG-E/USA 05-0198)

CHANGE OF IFR TO VFR - (Y FLIGHT PLAN) - IFR IS NOT PERMITTED IN CLASS G AIRSPACE.

(SPEC/CIV ENR 1.1-45)

A VFR flight in controlled airspace immediately follows an IFR flight will be conducted so that:

1. The pilot has a flight visibility of at least 3 km/1.62 NM and visual contact with the ground.

2. The aircraft remains clear of clouds and departs controlled airspace immediately.

3. The change from IFR to VFR is made at the minimum altitude for IFR flight.

(SPEC/CIV ENR 1.8-19)

IFR OPERATIONS IN CLASS F - Instrument flight operations shall be possible at uncontrolled airports in Germany.

1. Air navigation services procedures for IFR flight.

a. Separation between IFR flight in Class F airspace is insured by having no more than one flight being conducted in this

airspace at the same time. IFR flights will not be separated from VFR flights.

b. Flight procedures for IFR flight in uncontrolled airspace will be established according to the same ICAO criteria (Document 8168) which also apply to procedures at the controlled airport.

c. The instrument chart will inform the pilot when the IFR approach leaves controlled airspace E or the IFR departure enters this airspace.

d. If an IFR flight within airspace F has to deviate from the IFR flight procedure published, it is not possible to give this flight navigational support. In such a case, the responsibility rests with the pilot.

e. The competent Air Navigation Service unit will issue IFR approach clearance and enroute clearance for IFR departure. Enroute clearance will be transmitted to the pilot by the Aviation Supervision Office or "Flugletung" at the airport. Takeoff may take place only after confirmation that enroute clearance has been received.

(SPEC/CIV ENR 1.8-21)

TRANSMISSION OF EXPECTED APPROACH TIMES -

1. If aircraft on IFR flights are expected to hold more than 20 minutes over the navigation aid serving as clearance limit, ATC will generally transmit the expected approach time to the pilot.

2. If the holding time is 20 minutes or less, the expected approach time will be transmitted only when considered necessary by ATC.

3. If ATC clearance for continuation of the flight beyond the navigational aid serving as clearance limit has not been issued, the pilot shall enter the holding pattern, maintain the level last assigned and confirmed, and await further air traffic clearance.

(SPEC/CIV ENR 1.8-11)

RVSM RULES - Standard in accordance with European RVSM Requirements.

(SPEC/AIC IFR 11, 4 Oct 2001)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC - (excepting day VFR flights not conducted beyond the local envronment) -

1. IFR FLIGHTS

a. Two VHF transmitters/receivers with frequency range from 117.975 to 137.000 MHz. Receivers must be suitable for operation within the 8.33 kHz channel spacing for flights in upper airspace above FL 245 (above FL 195 in 2006).

b. Two VOR receivers whereby one of these two receivers may be dispensed with RNAV equipment available and operating independently from the VOR receiver.

c. One Automatic Direction Finder (ADF) with frequency range from 200.0 kHz to 526.5 kHz with a direction indicator and audio monitoring capability, in so far as this is prescribed for the use of approach/departure procedures.

d. One Secondary Surveillance Radar Transponder capable of replying to Mode A interrogations on 4096 codes and to Mode C interrogations with automatic altitude reporting or utilizing Mode S. New airplanes from 1 Jan 2001 will utilize Mode S.

e. One DME interrogator.

f. RNAV equipment as described above.

g. An Airborne Collision Avoidance System II (ACAS II) for civil airplanes with more than 30 seats or with a MTOW of more than 33,000 lbs, and from 1 Jan 2005 for airplanes with MTOW over 12,500 lbs. With effect from 1 Jan 2005, military transport-type aircraft with a MTOW of over 33,000 lbs or more than 30 seats will be required to carry and operate ACAS II for flights in German airspace.

h. For approaches utilizing ILS:

(1) One receiver for ILS signals.

(2) One receiver for ILS glide path signals.

(3) One VHF receiver capable of indicating marker beacon signals.

(4) One device for joint indication of ILS localizer and glide path signals.

(SPEC/CIV GEN 1.5-1-2)

2. EXCEPTIONS

a. U.S. ARMY ONLY.

(1) UH/EH-60, CH-47, and UH-1 aircraft may operate IFR using only one (1) VOR navigation radio.

(2) UH/EH-60, CH-47, AH-64, and UH/EH-1 aircraft are authorized to fly IFR with one VHF radio provided they are also equipped with one UHF radio.

(3) UH/EH-1 aircraft may fly IFR without a marker beacon provided a marker beacon is not required for any phase of the mission.

(4) UH-1, CH-47 and UH-60 aircraft may fly IFR without a DME provided that upgrading to meet DME requirements shall be made as soon as possible.

NOTE: The use of certified GPS equipment with a DOD certified database is authorized to fix DME positions, but does not eliminate the requirement to equip with a DME receiver as soon as possible.

(5) Aircrews are authorized to fly IFR using an FAA Technical Service Order (TSO) 129 GPS (e.g. ANS-128D/Garmin GNS 430/UNS-1 or other certified DOD GPS) to fly to RNAV waypoints or operate along RNAV routes as long as the current database (DAFIF or other DOD approved database) is loaded into the navigational equipment.

NOTE: When planning routes, pilots should consider the ground based navaid range fan for emergencies if the loss of GPS signal should occur and navigation to a ground based navaid is required. If the GPS signal is lost while in flight, pilots are required to inform ATC to obtain radar vectors or obtain a clearance based on operational on-board navigation equipment.

(USAASD-E/USA 06-0131)

b. USAF Only

(1) KC-135, KC-10 and HC-130N/P (Tanker) aircraft equipped with E-TCAS version 7.0 may use their E-TCAS in the enhanced mode when flying in German airspace until 31 Mar 2011 when conducting refueling missions as a:

(a) Single tanker aircraft using E-TCAS to acquire, identify, and track the receiver aircraft during the rendezvous portion of the air refueling.

(b) Formation of tanker aircraft (maximum number of 3) using E-TCAS for station keeping enroute to, from, and during air refueling.

(c) Formation of tanker aircraft (maximum number of 3) using E-TCAS for station keeping while transiting German airspace.

(2) If paragraphs (a) through (c) above do not apply, then tanker aircraft equipped with E-TCAS will operate the E-TCAS in the standard TCAS II mode when flying in German airspace.

(3) When flying as a formation in German airspace, all tanker aircraft will operate (i.e. do not inhibit) the TCAS broadcast function by selecting "BRDCST ON".

(HQ USAFE-DOV/USAF FIL 01-62)

c. The following ACAS II exemption has been approved for military transport flights in Germany:

State Aircraft Operator	Manufacturer	Aircraft Type	Number of Aircraft	Final Exemption
USAF AFSOC	LOCKHEED	AC-130H	8	31 DEC 2016
USAF AFSOC	LOCKHEED	AC-130U	17	31 DEC 2007
USAF AFSOC	LOCKHEED	AC-130E	3	31 DEC 2013
USAF ACC	LOCKHEED	AC-130H	14	31 DEC 2013
USAF AFSOC	LOCKHEED	HC-130N/P	32	31 DEC 2005
USMC	LOCKHEED	KC-130F/R/T	72	31 DEC 2007
USAF AFSOC	LOCKHEED	MC-130E	14	31 DEC 2016
USAF AFSOC	LOCKHEED	MC-130P	27	31 DEC 2008
USAF AFSOC	LOCKHEED	MC-130H	34	31 DEC 2008
USAF AFSOC	LOCKHEED	C-130E	12	31 DEC 2016
USAF AMC	LOCKHEED	C-130E	158	31 DEC 2008
USMC	LOCKHEED	C-130T	20	31 DEC 2005
USAF ACC	BOEING	E-3	32	31 DEC 2010
USAF ACC	GRUMMAN	E-8	19	31 DEC 2006
USMC	GRUMMAN	C2A	35	31 DEC 2005
USA FIXED WING	BEECH	RC-12	33	31 DEC 2005
USA FIXED WING	GULFSTREAM	C-20	2	31 DEC 2006
USA FIXED WING	SHORT BROTHERS	C-23	16	31 DEC 2008
USA FIXED WING	FAIRCHILD	C-26D	11	31 DEC 2007
USN	FAIRCHILD	C-26D	4	31 DEC 2005
USA FIXED WING	CESSNA	UC-35	28	31 DEC 2007
USAF AMC	GULFSTREAM	C-37	9	31 DEC 2005
USN	BOEING	E-6B	16	31 DEC 2006
USAF AFMC	BOEING	C-135C	1	31 DEC 2005

(HQ USAFE/APF/USAF FIL 05-817)

OPERATIONAL AIR TRAFFIC

GENERAL/COUNTRY - In Germany, flights of military aircraft can be performed according to the provisions for operational air traffic (OAT) **or** general air traffic (GAT):

FILING FLIGHT PLANS -

1. Operational Air Traffic (OAT)refers to flight operations wholly or partially not performed in compliance with the rules for general aviation and for which rules and provisions are specified by the competent authorities. If required, these rules and provisions are coordinated at international level.

2. Operational air traffic may be performed according to visual or instrument flight rules.

3. Flights performed as operational air traffic are not subject to air traffic flow management measures.

4. Operational air traffic is usually performed outside air traffic service routes. These flights are controlled/monitored by the competent ATS units or units of the tactical air command and control service (TACCS). To simplify the planning and performance of OAT flights, TACAN routes may be used in upper airspace. Aircraft are on principle controlled/monitored in accordance with the pertinent military regulations/provisions. If, however, operational air traffic is performed on air traffic service routes, the provisions of air traffic service is governed by civil provisions.

5. UPPER INFORMATION REGION (HIGH ALTITUDE) TRAFFIC PROCEDURES:
TACAN routes

a. For the simplification of flight planning of OAT flights, TACAN routes have been established in the upper airspace of the Federal Republic of Germany. TACAN routes connect TACAN facilities used for the general navigation of OAT flights. They are connected to the TACAN route system of the Netherlands, Belgium and Denmark.

b. The TACAN routes are marked with color codes and figures, intermediate connections are marked with the letter "L" and a number.

c. Routes into and out of TACAN route system will be specified in the clearance.

6. Special Procedures - OAT Flights outside of TACAN Routes, in the Rhein UIR, above Munchen FIR:

a. OAT flights entering or leaving that part of Rhein UIR located above Munich FIR outside of TACAN routes shall be planned via one of the following entry/exit points. The respective entry/exit points shall be entered in Item 15 of the flight plan.

GRAFFE	N49°34.93' E012°10.57'
VALAR	N49°12.13' E010°44.12'
ULMEX	N48°49.45' E010°02.18'
MEXIT	N47°58.40' E009°33.22'

b. Entries via VALAR are only permitted for flights to the aerodromes Ingolstadt/Manching (ETSI), Neuburg (ETSN), and Erding (ETSE) and/or for flights intending to proceed in accordance with VFR after having passed reporting points.

c. Off route flights in direction to Lechfeld (ETSL) shall be planned only via the entry/exit point ULMEX or MEXIT.

d. For entries via ULMEX LCH, as the following reporting point, shall be inserted in item 15 of the flight plan.

e. Direct routing will be provided by the Air Traffic control in accordance with the traffic solution.

7. Entry and Exit Points - Rhein UIR to/from France:

a. OAT - Flights between France and the Rhein UIR which are conducted outside of TACAN routes shall be planned via one of the following entry/exit points. The respective entry/exit oints shall be entered in Item 15 of the flight plan.

RSL02 - R-081/36 DME MET N49°10.50'E007°02.00'
RUSTI - R-035/18 DME CLR N48°10.60'E007°39.60'

8. Entry and Exit Points Rhein UIR- Berlin FIR/UIR

a. As far as possible, military operational air traffic leaving the Rhein UIR and entering the Berlin FIR/UIR, or vice versa, shall be planned so as to use one of the following reporting points:

PLAUN - R-061/90 DME GBL N50°21.30'E012°00.45'
BUSCH - R-061/53 DME GED N50°50.60'E010°25.77'

9. Entry and Exit Points Hannover UIR - Berlin FIR/UIR

a. As far as possible, military operational air traffic leaving the Hannover UIR and entering the Berlin FIR/UIR, or vice versa, shall be planned so as to use one of the following reporting points:

WISMA	N53°49.53'E011°29.13'
LUWIL	N53°25.55'E011°27.56'
RISOK	N51°53.45'E011°11.35'

(SPEC/MIL ENR 3.2.1-2)

FLIGHT PLANNING

GENERAL AIR TRAFFIC (GAT) -

1. General Air Traffic refers to flight operations performed in compliance with the rules and regulations of the International Civil Aviation Organization (ICAO) and/or the national rules for civil aviation.

2. General air traffic is usually performed on ATS routes/upper ATS routes and is controlled by civil air traffic control units. The provision of air traffic control services is governed by the pertinent civil provisions.

AIR DEFENSE FLIGHTS -

1. Air defense flights are carried out to intercept/identify other aircraft. These flights are conducted in accordance with the regulations of the marjor command/command/comparable authority.

2. Air defense flights are security flights

a. for the immediate defense of the Federal Republic of Germany.

b. In order to guarantee the integrity of its airspace. They are handled with priority to all other air traffic with the exception of flights:

c. where an emergency situation is obvious and/or;

d. those affected or threatened by unlawful interference. Security flights are performed under instrument meteorological conditions (IMC) and visual meteorological conditions (VMC).

3. Air defense - practice security flights are security flights to obtain the efficiency of the air defense system. They are handled with the priority of government flights.

4. air defense - training flights.

(SPEC/MIL ENR 1.1-2)

a. Dry Air-To-Ground Attacks Performed by Jet Aircraft.

(1) General

Dry air-to-ground attacks are air-to-ground attack procedures without the release of ammunition.

These are permitted:

- on air-to-ground ranges

- in training areas

- in garrison training areas and other training areas

- in areas which have been published by NOTAM as training airspaces

- in areas where military exercises (e.g. movement exercises) take place

- in the low flying areas 250 ft (if activated)

- in the Low flying Area Federal Republic of Germany and over sea

- within controlled airspace of the classes C or D or within an activated restricted area

(2) Air-to-Ground Attack Exercises on Air-to- Ground Ranges/in Training Areas

(a) These attacks may be performed on air-to-ground ranges and in training areas only if Local Operating Procedures (LOP) have been prepared, approved and published for these areas. If air-to-ground gunnery and bombing ranges of the allied forces are used, the Local Operating Procedures are replaced by the Range Orders.

(b) The procedures and minimum flight alitutdes determined in the Local Operating Procedures as a consequence of local conditions are mandatory.

(c) Altimeters shall be set to the QNH value of the air-to-ground range/training area. If this value is not available, the QNH value of the nearest reporting station shall be used.

(3) Air-to-Ground Attacks outside Air-to- Ground Ranges.

(a) The requirements to be met by the responsible flight leaders/element leaders during dry attacks outside air-to-ground gunnery ranges shall be determined by the competent major commands/commands.

(b) No ammunition shall be carried on external pylons. Aircraft guns shall not be armed.

(c) In the selection of practice targets, special consideration is to be given to protection of the population against undue aircraft noise. Selection has to be limited to those targets which are tactically relevant. Any practice attacks on civil airfields, as well as facilities in the immediate vicinity of civil airfields (within the area of the published traffic patterns), within cities and towns, and on hospitals are prohibited. Practice attacks on military airfields are subject to approval by the responsible ATC/FIS unit if passing directly over the airfield at less the 2500 ft AGL is intended when performing the practice attack procedure. Densely populated areas have to be avoided during the practice attack procedure. The practice attack has to be aborted if, when performing the procedure:

- the safety and order of air traffic is endangered.

- crowds of people or traffic congestions are observed on the ground in the immediate vicinity of the practice target. This does not apply for military personal/material.

(SPEC/MIL ENR 1.15-9,10)

5. Terrain Following Flights.

a. Terrain following flights are flights conducted by aircraft using terrain following systems while maintaining a determined minimum height above ground level and obstacles.

b. Terrain following flights may be conducted on the route segments cleared for this purpose at a minimum height of 1000 ft AGL. On the excluded route segments, the determined enroute flight altitude shall be maintained. For details refer to the operations orders.

c. The regulation that cities with more than 100,000 inhabitants shall not be overflown by jet aircraft below 2000 ft and transport/liaison aircraft below 1000 ft above the highest obstacle within a radius of 600m remains unaffected with regard to any clearance for terrain following flights. Other towns/villages should not be overflown below these height limits, if possible. When complying with these regulation, the emergency enroute flight altitude shall not be exceeded under any circumstances.

(1) Emergency Enroute Flight Altitudes
If the pilot cannot maintain the enroute flight altitude for technical or other reasons, he shall assume the emergency enroute flight altitude and inform the responsible ATC unit/air defense radar unit immediately.

d. Deviations.

(1) For planned deviations from the corridors an appropriate advance request shall be made to the GAFO - MilFltOps in due time. Deviations are subject to approval by the responsible ATC unit/air defense radar unit.

(2) Upon instruction by the responsible ATC unit/air defense radar unit, the terrain following flight shall be aborted and the flight shall be continued at the enroute flight altitude, the emergency enroute flight altitude or the allocated flight altitude, depending on the instructions received.

e. Sequence of Flight Route Data.

- Way point, coordinates, segment to waypoint.

- Enroute flight altitude.

- Emergency enroute flight altitude.

- Route segment excluded from terrain following flight, restricted areas, remarks.

(SPEC/MIL ENR 3.1-1,2)

FILING FLIGHT PLANS (DAY/NIGHT) - Standard, additionally:

NOTE: USA only: For VFR night flight only within USA controlled airspace, or uncontrolled airspace, no VFR night (VN) flight plan has to be filed or addressed to AFOD. For flights intending to operate within other than USA controlled airspaces, a VN flight plan will be filed. AFOD will forward the flight plan to the appropriate civil ATS units. Exception: USA aircraft conducting night VFR operations in uncontrolled airspace may penetrate civil controlled airspace after receiving an ATC clearance for the purpose of conducting practice VFR instrument approaches or operations on VFR Arrival and Departure Routes to or from USA facilities without filing a VN flight plan.

(USAASD/USA 06-0078)

1. Flight plans may be transmitted to the IFPS up to 144 hr (6 days) before the estimated time of departure. In case of flight plans that are transmitted to the ZKSD-System by means of direct addressing or re-addressing (via IFPS), the existing regulations remains in force; these FPL must not be transmitted more than 22 hours before the estimated time of departure.

(AFFSA/DFS FAX 3-21-01)

a. A flight plan can be filed in flight if required by circumstances not known by the pilot before departure. Intermediate stops will not be filed in flight.

b. USA - AFOD will accept flight plans directly from pilots via E-mail or FAX with the following provisions:

(USAASD-E/USA 06-0078)

(1) An airfield base opns is either not in existence or otherwise not available to a pilot filing a flight plan.

(2) A pilot sending a flight plan via E-mail or FAX shall ensure that a call is made to the AFOD verifying receipt of the flight plan.

(3) DD Form 1801, block 18 under RMK, indicate location, POC, and phone number of where signed copy of flight plan will be left (e.g. 1-214th Opn, CW4 Johnson, 373-6201).

(4) Flight plans will be passed through the following E-mail: afodfdp@hq.hqusareur.army.mil or FAX DSN 373-6542, or FAX Commercial 0622117-6542. If sending FAX from outside of Germany, send to 0049-6221-17-6542.

(USAASD-E/USA 02-0020)

2. U.S. Army Only - Preferred Routing

a. In order to ensure IFR flight plans are entered into IFPS without being rejected, AFOD Flight Data Processing (FDP) section has preferred routes which are available to aircrews to aid in their flight planning process. Pilots desiring these preferred routes should contact the AFOD FDP section.

b. Aircrews may file other than preferred routing if mission constraints dictate. However, the IFPS computers may change IFR routes that are not filed IAW preferred routing. When filing for other than preferred routing, a "cleared as filed" clearance will not be accepted by the pilot in command. If "cleared as filed" is issued to a pilot who has filed other than preferred routing, the pilot will request "full route clearance".

3. US Army only - Filing times:

a. All flight plans filed other than preferred routing should be filed as early as possible to avoid delays in takeoff time.

b. Preferred Route information may be found on the AFOD Internet Web Site: http://afod.hqusareur.army.mil.

c. Flight plans (for VFR flight at night within other than USA controlled airspace) should be submitted at least one hour prior to proposed takeoff.

d. U.S. Army Only - USA aviators should, when practicable, submit IFR flight plans no earlier than 24 hours and no later than three hours before EOBT. Flight plans filed later than three hours before EOBT may experience delays in receiving IFR clearance from EUROCONTROL Brussels.

e. See AE95-1 for filing “Local Flight” plans. For changes in filing local flight plans, see AFOD website http://afod.hqusareur.army.mil, NEWS UPDATES.

(USAASD-E/USA 02-0020)

4. MULTIPLE FLIGHT PLANS

a. If additional flight plan proposals are filed at the same time for subsequent legs, an alphabetic suffix will be added to the aircraft identification for each flight plan. (Example: R16226A for the first flight plan, R16226B for the second proposed flight plan.) The suffix will become part of the spoken call sign for each leg as appropriate.

b. The following procedures are used by AFOD handling multiple flight plans: AFOD will ensure transmission of flight plans to all ATS agencies concerned in such a timely manner that IFR clearance will be available upon estimated time of departure on all legs of multiple flight plans.

(USAASD-E/USA 06-0079)

5. DD FORM 1801 - INTERNATIONAL FLIGHT PLAN

a. Item 10

(1) U.S. Army aircraft flying IFR or VFR will enter equipment requirements in Item 10 as follows:

(a) Aircraft flying IFR in Germany with all required equipment except a glide slope receiver may enter the letter "S". In addition, under item 18 add: RMK/ILS w/o glide slope receiver.

(b) Flying IFR, if an aircraft meets the RNP type prescribed for a route segment, routing, and/or an area, the letter "R" shall be inserted.

(c) Flying IFR, aircraft not equipped with RNAV shall not insert the designators "S" or "R" in Item 10. Item 18 shall contain "STS/NONRNAV."

1 Flying VFR, aircraft with all required equipment for the route of flight to be flown, the letter "S" may be entered.

2 Flying VFR and/or IFR, insert one of the following codes for SSR equipment: N-None or unserviceable; A-Transponder (4 digits) 4096 codes - Mode A; C-Transponder (4 digits) 4096 codes - Mode A and C.

(2) The radio equipment, radio navigation equipment for en-route and approach navigation as well as, separated by an oblique stroke. SSR transponder equipment of the aircraft and/or ADS equipment shall be indicated as follows:

One of the following letters according to the equipment available and serviceable:

"A" - ADF	"L" - ILS
"C" - LORAN C	"M" - Omega
"D" - DME	"O" - VOR
"E" - high end FMS	"R" - RNP
"F" - single FMS	"T" - VORTAC TACAN
"G" - GNSS	"U" - UHF
"H" - HF	"V" - VHF
"I" - INS	"W" - RVSM
"J" - Data Link	"Y" - 8.33 kHz
"K" - MLS	"Z" - other equipment

(3) In case of formation flight of state aircraft, the letter “W” must not be entered in item 10 of the FPL, irrespective of the actual equipment of the aircraft, however, “STS/NONRVSM” shall be entered in box 18 of the FPL.

(AFFSA/DSF FAX 3-21-01)

b. Item 15.

(1) For VFR flights not subject to civil air traffic control, the route of flight shall be indicated by:

(a) Latitude/Longitude.

(b) Identifications of radio navigation facilities;

(c) Airfield ICAO identifiers.

(2) For VFR flights at night, item 15 will indicate the VFR cruising altitude in accordance with the cruising chart (GP para 6-17) and the route by reference to IFR routing, NAVAIDS, airfield identifiers. These entries are required to cause the automatic data system to notify each ATC controller involved. When flying off-airways, pilots need not navigate directly to the NAVAID of the airport indicated. More detailed route information may be entered in item 18 for SAR purposes.

(3) For "Z" or "Y" flight plans, the intended change of flight rules shall be indicated by entering VFR or IFR as

appropriate after the navigational point, departure route at which the change takes place. e.g. NKR WUR W719 BAY WALDE VFR.

(4) For mixed OAT/GAT flights:

(a) The change-over from OAT/GAT or GAT to OAT shall always be entered in Item 15 as "change from/to OAT/GAT" and vice versa, and add: "RMK/OAT over Germany".

(b) Address flight plan to, ICAO identifier (ETCCWECF). This will allow German authorities (AFSBw) to receive flight plan.

(USAFE/USAF FIL 04-19)

(5) Flights between EDDT, EDDI, or EDDB, and Dusseldorf FIR/UIR shall file FL 330 or below.

(a) Item 16: For "Y" flight plans, if the changeover point is not an IAF, list in the ALT AERODROME block the closest IFR airfield to execute an approach in the event of lost communication and VMC is not encountered.

(b) Item 18:

1 FIR BOUNDARY ESTIMATES - Estimates are not required for crossing Germany's FIRs, with the exception that VFR flights entering Germany should enter the lat/long point for crossing the border and the time crossing as "EET/" (For example, EET/N48°26.1' E007°43.9'/0030).

2 See Army flight plan examples at http://afod.hqusareur.army.mil.

a For all flights (IFR/VFR) operating in accordance with exceptions enter the appropriate equipment exception in item 18, e.g. RMK/1 VOR, 1 VHF, NO DME, etc.

b Before the identification group "RMK/" (if entered), enter the identification group "MDCN/" and the current FRG/US military diplomatic clearance number from the Foreign Clearance Guide. Other miliitary diplomatic clearance numbers (if required, e.g. Deconfliction Line and border crossings, etc.) are entered following the identification group "RMK/".

c For flights entering the identification (IZ), make the following entries after "RMK/": "A/IZ FLT", "B/" coordinates of entry point, "C/" coordinates of exit point. Following "EET/", enter "B/" the estimated elapsed time to entry and "Cr, the estimated elapsed time to the exit point. e.g. RMK/A/IZ FLT B/4850N 1325E C/4935N 1218E EET/B/0050 C/0140 (BesAnMilFS 3-100 pg 3-27 para 3.2.5.9.4).

(USAASD-E/USA 02-0020)

(c) Provide any special information about the flight in the sequence that it happens. e.g. For "Z" flight plan, the estimate to changeover point and the agency from which you plan to receive IFR clearance must be indicated: EET/HDM 0015 REQ IFR CLNC THRU ETOR TWR.

(d) For flights to EBCV, EBBR and EBMB, enter after RMK/ "NT" for NATO or "SH" for SHAPE missions.

(e) Item 19: For IFR flights, enter with the pilot in commands name, a contact telephone number if the event of clearance/SLOT delays prior to takeoff. This request is from European Flow Control, Brussels.

(f) The entry "RMK/N VFR NIGHT" shall be made for all VFR flights that will be conducted wholly or partially by night in item 18.

(g) The letter (s) indication operational air traffic (OAT) or a VFR flight by night shall be entered directly after the identification group "RMK/". If serveral additional indications shall be indicated, the idenfication group "RMK/" is to be entered each time, e.g.; RMK/OAT RMK/N FUEL0400 POB5 etc.

(h) The additional indication "RMK/OAT, RMK/N" entered in item 18 of the FPL must not be changed by means of a change message (CHG).

(i) For non-RVSM aircraft "STS/NONRVSM" shall be entered irrespective of the planned level. It also applies to flights that will be conducted wholly or partially as OAT.

(AFFSA/DSF FAX 3-21-01)

6. RAMSTEIN AB (ETAR) FLIGHT PLAN FILING PROCEDURES

a. Ramstein AB (ETAR) is the test bed for the USAF Flight Dispatch and Centralized Flight Messaging System. All flight plans produced and filed at Ramstein AB (ETAR) shall be accomplished using the electronic filing medium. Download instructions at: http://amocc.ramstein.af.mil/xocf/. Aircrews can file a flight plan from most computers connected to the Ramstein LAN, including base operations and 723AMSS/AMCC.

(USAFE AMOCC-XOCF/AFFSA)

b. All flights operating to or from Ramstein AB (ETAR) shall include the following addressees in the flight plan message: EHXXUSAF. Failure to follow this procedure may result in significant arrival or departure delays. Address flight plans and related flight information concerning flight plans to AMOCC initiation cell AFTN: EHXXUSAF. Flight plan information is the responsibility of AMOCC initiation cell EHXXUSAF or DSN 480-4146/4147 C49-6371-47-4146/4147. Airfield management/Base Ops does not flight plan or flight follow aircraft. Aircraft on or supported by AMC for flight plan information/changes/slots contact AMC Command Post. AMC aircrews must adhere to the rstd in the AMC Summary of Afld Rstd.

(AFFSA/XOIA/FIL 48 6-00)

c. Aircrews can submit system feedback in the Aircrew Feedback section of the USAF Mission Initiation Form, or Flow.control@ramstein.af.mil.

(USAFE/USAF FIL 79-02)

CLEARANCE INFORMATION - Standard.

SUPERSONIC FLIGHTS - SUPERSONIC FLIGHTS OF MILITARY JET AIRCRAFT -

1. All supersonic flights by foreign military aircraft not permanently stationed in Germany are prohibited within German airspace.

2. Exceptions:

a. Air Policing Flights (A-Scramble) tasked by appropriate NATO-Agencies.

b. Aircraft on deployment to Germany requiring supersonic run after major technical repair work due to unscheduled malfunction.

3. As a matter of principle, flights during which sonic speed is reached or exceeded are permitted from Monday to Friday between 0700Z++ and 1900Z++ only. These flights are prohibited between 1130Z++ and 1300Z++, unless imperative for operational reasons. Paragraph 4. in AP2 entitled Flight Planning - Operating Hours shall be observed as well.

4. Supersonic flights shall be scheduled in the flight plan. Over the territory of the Federal Republic of Germany, they shall only be performed with radar monitoring and must be coordinated in advance with the radar-monitoring unit.

5. Supersonic flight over land below FL 360 are prohibited. They shall be performed between FL 360 and FL 500 as level flights or climbs only. The flight path shall be planned such that sonic booms will avoid densely populated areas whenever possible.

6. Supersonic flights over sea below FL 200 are permitted only if the distance from the coast is at least 10 NM and the heading is towards the sea or, in case of a heading parallel to the coastline or the offshore islands, a minimum distance of 35 NM is maintained.

NOTE: The restrictions mentioned above do not apply to air defense security flights.

(SPEC/MIL ENR 1.1-17)

LOW LEVEL FLYING -

1. Principles

a. General

(1) Low-level flights are flights with military aircraft below 2000 ft. AGL. Low-level flights of foreign military aircraft need the special authorization of FMOD-Air Staff III 4. Requests are to be sumbitted to GAFO MILFLTOPS. For the armed forces of the signatory states of the NATO Status-of-Forces Agreement, this special authorization for training flight operations is considered to be granted in conjunction with the issue of the annual diplomatic clearance.

NOTE: In German airspace, German Military Aeronautical Information Publications (AIP), German series Low Flying Chart (LFC) and Tactical Flying Chart (L) (TFCL) have to be used exclusively while conducting low level flying activity.

(2) Low-level flights with prop aircraft and jet transport/special aircraft below 1000 ft AGL are subject to special authorization by the responsible Staffs of the Services of the Federal Armed Forces or FMOD-Armaments Directorate, and coordination with GAFO MilFltOps. As far as required, weather minima and minimum heights are to be determined in this authorization.

(SPEC/MIL ENR 1.15-1)

b. Maximum Airspeeds

A planned speed of 420 kts over land / 450 kts over sea shall not be exceeded. The following exceptions are permitted:

(1) A maximun speed of 450 KIAS over land depending on imperative tactical needs.

(2) An attack speed (IP to target)

- for conventional weapon delivery practicing
  + over land 480 KIAS
  + over sea Mach 0.95

- for special weapon delivery practicing
  + over land 540 KIAS
  + over sea Mach 0.95

(3) A maximum speed for interceptors during simulated intercept missions - over land Mach 0.90, however, not exceeding 575 KIAS - over sea Mach 0.95.

(SPEC/MIL ENR 1.15-2,3)

c. Excluded Airspace

(1) As a matter of principle, control zones, restricted areas and danger areas are excluded from low level flying operations for the time of their activation. In this case, entry into these areas is subject to an appropriate clearance by the competent ATC unit/responsible control authority.

(2) Protection zones at aerodromes without control zone and the helicopter protection areas Buckeburg 1 and 2 shall not be penetrated by jet aircraft unless appropraite permission has been granted by the competen FIS/ATC unit. The upper limit for protection zones and protection areas is 1500 ft AGL, unless specified otherwise.

(3) Within a distance of 1.5 km from their discernible boundaries/circumferences, industrial facilities must, on principle, not be overflown below 2000 ft GND.

(4) Consult VISUAL FLIGHT RULES, paragraph 5 entitled Minimum Heights For VFR Flights for other altitude restrictions.

(SPEC/MIL ENR 5.2-2)

d. Special Restrictions

(1) Entering of protection zones and areas with jet aircraft is prohibited. Nuclear power plants (marked by a rhombic symbol and circle) shall not be overflown below 2000 ft AGL within a radius of 1.5 km around the reactor building.

(2) Bottlenecks shall be passed to the right of an imaginary centerline.

(3) Areas which have been activated by NOTAM for parachute descents shall be avoided.

(4) Refer to AP2 Visual Flight Rules, paragraph 5 entitled Minimum Heights for VFR Flight for other restrictions to low level flying.

(SPEC/MIL ENR 5.2-3)

e. Additional Regulations

(1) The anticollision light shall be turned on during all low-flying operations. If the anticollision light is turned off due to a special mission or if it is inoperative, the position lights shall be switched to BRIGHT in visibilities of less than 8 km.

(2) The altimeter setting for day and night low- flying operations with jet aircraft within and outside the Night Low-Flying System shall be in accordance with the minimum QNH values forecast for the main route to be flown.

(3) When performing missions and training flights, helicopters may underfly overhead cables and bridges, provided that the following conditions are met:

(a) Low level flights by day:

- Underflying must be authorized in the flight order.

- Visual meterological conditions must prevail.

- The objects to be underflown must be located outside towns and villages and must be known to the pilot.

- Surface traffic must not be endangered by underflying. Therefore, the distance maintained to roads, railway lines, and inland waterways must be sufficiently large to ensure the safety of surface traffic.

(b) Low level flights at night: A minimum visual range of 1.5 km must prevail when performing low level flights with vision aids. For the purposes of underflying, the competent major air command, air command or another comparable agency must define the minimum span of the objects to be underflown, the helicopter's minimum flight altitude above ground or water, the maximum speed admitted during the process of underflying as well as the manner in which an object must be explored by the pilot beforehand.

(SPEC/MIL ENR 1.15-3,4)

2. Day Low Flying Operations

a. Over the Territory of the Federal Republic of Germany, low level flights over land are permitted in specifically allocated Low Flying areas at the minimum heights detailed below. However, these flights are not permitted over town and built-up areas. Minimum Height Above Ground:

Type of Aircraft	Within Low-flying area Federal Republic of Germany	Within Low-flying areas 250 ft
Jet Aircraft	1000 ft AGL	1000 ft AGL (if activated, 250 ft AGL between initial point and target)
Prop Aircraft	1000 ft AGL	1000 ft AGL
Helicopters	depending on Mission requirements	depending on Mission requirements

b. Low-Level Flights Over Sea

(1) For low-level flights over the sea within the territorial waters of the Federal Republic of Germany, the following minimum heights apply:

Jet Aircraft	100 ft AGL in case of rough sea and visible horizon with operational radar/radio altimeter. 500 ft AGL in all other cases
Prop Aircraft	according to the requirements of the mission
Helicopters	according to the requirements of the mission

(2) Drilling, extraction and research platforms are to be avoided by a minimum distance of 3 km or overflown at not less than 2000 ft. AGL. Over inhabited islands, jet and prop aircraft have to maintain a minimum height of 1000 ft. AGL during the day low flying operating times, and of 1500 ft. AGL outside that operating time. For helicopters, a minimum height of 500 ft. AGL applies.

(3) As a matter of principle, surface vessels have to be avoided by a minimum distance of 1 NM horizontally or 1000 ft. (300m) vertically. If weapon delivery practicing requires lower minimum distances, these must be determined in advance by the responsible major command/command or the Federal Armed Forces. The have to be stated in the flight order.

c. Weather Conditions

(1) For day low-level flying, the following minimum values apply:

(SPEC/MIL ENR 1.15-4,5)

Aircraft Type	Flight visibility	Minimum distance from clouds
-controlled airspace class C and E		
jet aircraft	8 km	1.5 km horizontally
prop aircraft	8 km	300 m (1000 ft)
helicopters	8 km	vertically
-controlled airspace class C below FL 100 and -uncontrolled airspace class F below FL 100		
jet aircraft	5 km	1.5 km horizontally
prop aircraft	5 km	300 m (1000 ft)
helicopters	5 km	vertically
-uncontrolled airspace class G		
jet aircraft	5 km	150 m (500 ft)
prop aircraft	3 km	clear of clouds
helicopters	0.8 km	clear of clouds

(SPEC/MIL ENR 1.15-4, 5)

3. Night Low-Flying Operations

a. Low-Flying Routes/Low-Flying Areas/Minimum Heights.

(1) Over the territory of the Federal Republic of Germany the following low-level flights over land are permitted:

- In the Night Low Flying System for flights with jet aircraft as well as for transport and liaison flights in VMC/IMC at the specifically allocated heights.

- In specifically allocated Helicopter flight Coordination Areas (HFCA) and on specifically allocated low-flying routes for helicopter flights at minimum heights according to the mission requirements.

b. Weather Conditions

(1) Night low-level flights outside the Night Low-Flying System are permitted using the following deviations:

(a) Low-level prop aircraft flights over land:

- IAW the provisions determined by the authorizing agency, but at least in compliance with the values detailed in Weather Conditions table above.

(b) Low-level helicopter flights over land (without night vision aids)

- within uncontrolled airspace; flight visibility 3 km

(c) Low - Level Flights over sea:

- Prop aircraft: flight visibility 5 km.

- Helicopters: flight visibility 1.5 km.

(SPEC MIL/ENR 1.15-5,6)

4. Regulations

a. Day Low Level Flights

(1) Low Level Flights over Land

(a) Low level flights over land may be conducted within the

- Low Flying Area Federal Republic of Germany

- Low Flying Areas 250 ft

(b) The boundaries of the low flying areas are depicted in the following chart

- Mil AIP Germany, ENR 5.2

- Low Flying Chart, Second Series (LFC) 1:500,000

- Transit flying Chart (Low Level). Second Series 1:250,000

(c) The low flying areas 250 ft are cleared for operational procedures if the Federal Ministry of Defense, air Staff III 4, has granted the appropriate special permission for utilization of these areas.

(d) The total low level flying time below 1500 ft AGL with jet aircraft over land must not exceed 50 min per mission. For any included low level parts below 1000 ft AGL in the categories approved by the FMOD, a maximum duration of 20 min. within the above mensioned total period of 50 min must not be exceeded.

(SPEC/MIL ENR 1.15-7)

5. Special Regulations for Helicopters

a. Helicopter Flight Coordination Areas (HFCAs)

(1) The Helicopter Flight Coordination Areas have been established for the safe conduct of day low-level flights below 100 ft AGL and night low-level flights below 500 ft AGL, especially if equipped with night vision aids. Any flight at or below these heights has to be coordinated with the unit responsible for the respective HFCA and subject to approval by that unit. Exceptions are flights within the scope of search and rescue and of urgent emergency aid.

(2) Requests for modifications with regard to procedures, area changes, establishment and activation/ deactivation have to submitted through channels to GAFO MilFltOps.

(3) US Army aircrews see HQ USAREUR Helicopter Flight Coordination Area SOP for additional information.

(SPEC/MIL ENR 5.2-15)

b. Underflying of Overhead Power Lines and Bridges
Underflying of overhead power lines and bridges with helicopters during operational flights, tactical training and practice flights is permitted by way of exception if the following requirements are met:

(1) During authorized day low flying operation times.

(a) Permission must be given by stating relevant details in the flight order.

(b) Visual meteorological conditions must prevail.

(c) Objects to be underflown must be located outside towns and built-up areas and must have been reconnoitered on location before they are underflown.

(d) Other traffic participants must not be endangered during underflying. Consequently, a sufficient distance must be maintained from roads, railway lines and inland waterways to ensure that other traffic participants are not endangered.

(2) During authorized night low flying operating times.

(a) Prior to underflying, the respective overhead power line or bridge must have been checked for a safe underflying by reconnoitering at daylight.

NOTE: The minimum height above ground required for helicopters when underflying objects, their minimum span, the minimum airspeed for underflying and the way of reconnoitering these objects all have to be determined by the responsible major command/command/comparable activities.

(SPEC/MIL ENR 1.15-12)

c. Day Low Flying Procedures (Helicopters)

(1) Operational Hours

(a) Day low-level flights over land are permitted from Monday to Friday from 30 min. before sunrise (but not before 0700 hrs local time) until 30 min. after sunset (but not later than 1700 hrs local time).

(b) If it is required, by way of exception, for helicopters to continue flying below 500 ft AGL outside these operating times because weather conditions dictate and this is indispensable for safe completion of the flight, these cases have to be reported after landing by stating by telex or fax to FMOD-Airstaff II 4, copy to GAFO-Bundeswehr flight operations division:

1 Unit

2 number and type of helicopters

3 flight time and flight route below 500 ft AGL

4 reason for deviation

(c) This message is to be omitted if GAFO MilFltOps, upon authorization by FMOD Air Staff III, has approved in advance a request to exceed the day low flying operating times, and for flights within the scope of search and rescue service and of urgent emergency aid.

(2) Operating Heights
Flights with helicopters down to a minimum height of 100 ft AGL are permitted within the Military Low Flying Area FRG if any order for low-level flight has been given. The minimum height for helicopters carrying passengers is 100 ft AGL. Exceptions are permitted for exercises/exercise type operations and shall be determined by the responsible commands/major commands. To enhance flight safety, helicopters flying during the military low flying operating times are only permitted to use the height band from 1000 ft to 1500 ft AGL if this is required by the flight order or the meteorological situation.

(3) Terrain Following Flights

(a) Terrain following flights are permitted for the unit responsible for a HFCA over unpopulated areas within that HFCA.

NOTE: Terrain following flights are flights close to the ground during which airspeed and height are adapted to the terrain profile and the natural cover of the ground is used to avoid enemy detection and fire.

(b) If terrain following flights are to be conducted within the HFCA of another unit, the following information is to be submitted to the unit responsible for that HFCA not later than 4 hours prior to the flight, and an approval message has to be received prior to descending below 100 ft AGL:

- Number and type of helicopters

- Area/route intended to be used for terrain following flights.

- Time and duration of terrain following flight.

(USAASD-E/USA 02-0057)

d. Night Low Flying Procedures (Helicopters)

(1) Operating Hours

(a) Night low level flights are permitted from Monday to Friday 30 minutes after sunset until 2400 hours local time.

(SPEC/MIL ENR 1.15-14)

(2) Flights without night vision aids below 500 ft AGL are permitted within the HFCAs on routes within areas reconnoitered in advance (over land or sea) if the following following conditions are met:

(a) Minimum height 250 ft AGL

(b) The minimum height over the sea is 100 ft ASL if required by the mission and if this has been specifically authorized by the competent Armed Forces Staff or the Directorate General or Armaments in coordination with Bundeswehr Flight Operations Division.

(c) Minimum visibility 3 km over land or 1.5 km over sea.

(d) Remaining clear of clouds.

(e) Anti-collision and navigation lights principally turned on.

(f) For formation flying, it is sufficient if at least one helicopter shows the required lighting.

(g) The routes may be flown at the same time in one direction only.

(h) The routes are not to be used more than twice per week to reduce noise exposure to the population.

(i) Vertical separation for underflying of night low flying routes activated for terrain following flights may be reduced to 300 ft.

(j) The regulations for HFCAs are to be observed.

(SPEC/MIL ENR 1.15-15)

(3) Flights with Night Vision Aids.

(a) On principle, flights with night vision aids are not permitted at and above 1500 ft AGL.

(b) Flight with night vision aids are permitted below 1500 ft AGL if the type of aircraft is suitable for flights with night vision goggles according to the airworthiness regulation and if provisions have been laid down by the responsible commands/major commands/allies. These flights may be performed:

1 Below 500 ft AGL only on reconnoitred routes/within reconnoitred areas (over land or sea). The regulations for HFCAs are to observed.

2 Over the sea only if announced by NOTAM.

3 In control zones upon coordination with the responsible air traffic control units. Details are to be laid down in letters of agreement.

4 To/at unknown aerodromes if agreements have been made and the crew has been briefed on the respective local conditions and regulations.

5 In restricted areas and danger areas upon coordination with the authorities responsible for the utilization of these airspaces.

(c) The minimum visibility with night vision aids is 1.5 km and the flight must remain clear of clouds. For flights in controlled airspace (with the exception of control zones according to para e above) the minimum standard visibility values apply.

(d) The air traffic of civil aerodromes has to be avoided. Other night flying traffic has to be given away.

(e) Anticollision and position lights shall, on principle, be switched on.

1 For flights with night vision aids below 200 ft AGL, the anticollision and position lights may be switched off or dimmed.

2 In the height band between 200 ft AGL and 499 ft AGL, this is only permitted if the flight has been announched by NOTAM.

3 For flights over the sea, the anticollision and cposition lights are not permitted to be switched off or dimmed.

(USAASD-E/USA 02-0062)

(4) Night Low-Flying Operating Hours for Helicopter Training with Night Vision Aids from May to August.

(a) Night low-flying training flights with night vision aids for armed forces helicopters permanently stationed in Germany are permitted after midnight within the following time frame during a maximum of two nights per week.

1 From Tuesday to Friday in May and August until 0130 hrs local time.

2 From Tuesday to Friday in June and July until 0200 hrs local time.

3 Due to specific operational requirements, two nights per Helicopter Flight Coordination Area (Talon North or South) are permissible for Illesheim AHP (ETIK).

(b) After 2400 hrs local time, flight operations are only permitted for landing after night low-flying training (without practice approaches) within the above mentioned times at all helicopter airfields.

(c) Hot refueling of helicopters is prohibited after 2400 hrs local time.

(d) For every night with flying operations after 2400 hrs local time, all flight operations at the respective airfields have to be terminated:

1 from Monday to Thursday after 1900 hrs local time, or:

2 on Friday after 1500 hrs local time on another day within the May to August timeframe for compensation.

(e) During these "compensation-days" flights after the above mentioned times are only permissible when required to maintain technical readiness (e.g. functional check flights) or to execute mission-essential tasking by order of at least a Division Commander.

(f) The local civil community administrations and the affected population are to be informed annually prior to the first extended night low-flying times utilization by the units performing these operations. Flight operations within the scope of this regulation may begin at the earliest one week after this information has been disseminated.

(g) The contents and date of dissemination of this mandatory public information, all flights executed within the scope of this regulation and the resulting compensation days are to be documented and reported to the German Air Force Office (GAFO)-Bundeswehr Flight Operations Division with carbon copy, to the Federal Ministry of Defense, Air Staff III 4, no later than 15 September of the respective year.

6. Low Flying Operating Times (Jets/Prop).

a. Day low-level flights over land are permitted from Monday to Friday from 30 minutes before sunrise (but not before 0600Z++) until 30 minutes after sunset (but not later than 1600Z++). This regulation does not apply to holidays.

b. Low-level flights with jet aircraft over the territory of the Federal Republic of Germany are prohibited from 1 May until 31 October between 1130Z++ and 1230Z++. For exercises, this restriction may be suspended by a decision of the Federal Ministry of Defense, Air Staff III. In case of missions to be performed on air-to-ground ranges, this restriction shall apply to flights to and from these ranges only, unless these missions are similary restricted by the respective local operating procedures.

c. Jet aircraft flights in activated low-flying areas 250 ft are permittted from 0800Z++ until 1130Z++ and 1230Z++ until 1600Z++ only. Utilization of the low-flying areas 250 ft has been suspended. Activation is subject to special permission by the Federal Ministry of Defense (FMOD).

d. Night low-level flights over land are permitted from Monday to Thursday from 30 minutes after sunset until 2300Z++. This regulation does not apply to holidays. In justified individual cases, the night low flying system may be also activated outside these times.

e. Low-level flights over sea are not subject to any time limitations.

f. The established time reference point for sunrise and sunset is Kassel (51°19.10'N 09°30.13'E).

(SPEC/MIL ENR 1.15-2)

7. Flight operations on weekend and holidays.

a. Military flight operations are principally suspended.

(1) On weekends: from Saturday, 0001-Monday, 0600 local time.

(2) On legal and regional holidays (for flights within this region) from 0001-2400 local time.

(3) Between 24 Dec 0001 and 01 Jan 2400 local time.

b. Flight operations on weekends, legal and regional holidays and in the time between 24 Dec and 1 Jan are permitted for:

(1) Flights of the Special Air Mission Wing, Federal Ministry of Defense.

(2) Search and rescue missions and flights to maintain SAR readiness.

(3) Flights during relief operations in case of natural disasters or particulary severe accidents, and urgent emergency aid.

(4) Air defense security flights.

(5) Flights during military air shows and during participation in civil air shows as authorized by FMOD Air Staff III 4.

(6) Flights of the Federal Armed Forces due to an air transport order.

(7) Flights during exercises provided that the responsible major Command/command/comparable authority of the Federal Armed Forces has authorized or directed such flights.

(8) Federal Armed Forces reconnaissance missions over see upon directive by the responsible major command.

(9) Functional check flights to maintain operational readiness, authorized by the responsible major command/command/comparable authorities of the Federal Armed Forces.

(10) Flights with helicopters and prop aircraft which have been authorized by the staffs of the services of the Federal Armed Forces involved or the Federal Office of Defense Technology and Procurement.

(11) IFR flights, with the exception of

(a) Flights to meet training and/or flying hour requirements for crew members.

(b) Flights of more than four aircraft for ferrying or deployment purposes unless these flights have been directed or previously authorized by the responsible major command/command/comparable authorities of the Federal Armed Forces.

NOTE: If required, the regulations for the conduct of these flights are to be determined by the responsible major command/command/comparable authorities of the Federal

Armed Forces, and for allied air forces by GAFO MilFltOps. The approvals/orders for flights required as detailed above are to be given in writing. GAFO MilFltOps shall be informed.

(USAASD-E/MIL ENR 1.1-4)

8. Flight operations at military heliports.

a. As a general rule, flight operations on weekdays (Monday thru Friday) are not permitted to start before 0700 local and shall end at 2300 local, (2400 during daylight saving time). These hours apply also to ground run up operations.

b. Airfield Traffic: Approach and departure procedures, as well as closed traffic shall use routes which avoid flights over residential areas. Closed traffic shall be kept to an absolute minimum.

c. Hot Refueling: Refueling operations with helicopter engines running and/or blades turning are permissible only if they are necessary for operational or training reasons. These operations should be performed under conditions which produce the least noise taking into consideration the technical conditions applicable for the helicopter concerned.

(USAASD-E/01-0174)

SUPPLEMENTARY AIRPORT INFORMATION -

1. Place Names

a. HEIDELBERG AHP (ETIE) - Military jet aircraft will avoid flight within 1 NM and 3000' AGL of Heidelberg Hospital, N49°23' E08°41'.

b. WIES - Overflight is strictly prohibited below 1500' AGL for military jet aircraft and 500' AGL for military helicopters and military prop driven aircraft for 1 km around N47°40'53" E10°54'07". Structural damage possible result to historic church (32 NM southeast of Memmingen TACAN).

c. WURZBURG (Giebelstadt AAF (ETEU))- Flights are prohibited over the city of Wurzburg and the "High Rise" complex of Heuchelhof, located south of the east-west autobahn A3, UTM coordinates: NA693075 north-northwest to NA680118, then east to NA695122, then south-southeast to NA708080, then west to NA693075, below 2000' AGL by jet aircraft and 1000' AGL by prop aircraft/helicopters.

d. HOHENFELS CMTC TRAINING AREA (EDR137) - Flight operations within EDR137 are restricted to aircrews that have been briefed by CMTC/Base Operations Personnel. Scheduled CMTC rotation crews will receive a rules of engagement (ROE)/Safety/Miles briefing from an aviation observer controller prior to operations at DSN 466-2352/2867 or civil 09472-83-2352/2867. All other aircrews must receive a Hazard/Noise Abatement briefing from Base Operations Personnel at DSN 466-2814/2614 or civil 09472-83-2814/2614.

(USAASD-E/USA 02-0053)

2. Airport Coordination

- Notification of Arrival and Departure Times at Airports

- Applying for Slots (Airport Slots)

a. Slots shall be applied for take-offs and lands of scheduled and charter flights and/or the flight plans submitted (cf. note below) to the Airport Coordinator of the Federal Republic of Germany.
Operating hours: 0700-1600Z++
Address: For scheduled and charter flights:
Herrn Claus Ulrich,
(FAC2) TERMINAL 2 BEREICH E
5.0G.Zi.5335, HBK Nr. 37
D-60549 Frankfurt-Main
Germany
Tel: (069)
690-52331/29501/53081/52081/52341/45601/32051/52321/52351/73892
Telefax: (069) 690-50811/59603
SITA: Application for Flight Plans in the format of the IATA "Standard Schedule information Manual-SSIM": FRAZTXH
Other telexes: FRAZRXH
AFTN: EDDFYHYX

b. For flights planned at short notice on actual day "completely coordinated airports", slots shall be applied for exclusively from the Aeronautical Information Service Centre, Tel: 49(0) 180-2100280 or 69-78072530. FAX: 49(0) 180-2100270 or 69-78072535. AFTN: EDDZZPAJ.

c. Outside the office hours of the Airport Coordinator, flights with a time of arrival and/or departure until 2100 (2000) of the following day, on weekends including the following Monday until 2100 (2000), slots must also be applied for from the Aeronautical Information Service Centre.

d. The arrival and/or departure times at the "coordinated airports" included in the announcements and/or applications must conform with the flight plans published, and may be published by the air carrier and/or operator for fully coordinated airports only after allocation of the Slots by the Airport Coordinator.

e. Permission for entry and exit granted by the Federal Office of Civil Aeronautics (LBA) does not replace the obligation to report and/or submit an application to the Airport Coordinator. The same applies to flight schedules for scheduled air services approved by the Federal Office of Civil Aeronautics (LBA).

f. At "completely coordinated airports", Berlin (Schonefeld (EDDB), Tegel (EDDT) and Templehof (EDDI)), Dusseldorf (EDDL), Frankfurt Main (EDDF), Munchen (EDDM), and Stuttgart (EDDS).

(1) The carrier and/or operator of an aircraft shall apply for Slots for allocation from the Airport Coordinator for all intended take-offs and landings of the IFR flights.

(2) Take-offs and landings of an IFR flight without the allocated Slot are prohibited.

(3) The carrier and/or operator of an aircraft is obliged to return unused Slots to the Airport Coordinator in due time.

(SPEC/CIV GEN 1.2-7)

3. AIRPORTS - Listed Alphabetically

a. Ansbach AHP (ETEB)- Winds are "estimated" due to FMQ-13 wind sensors being accurate to within only plus-minus four knots. ATC/WX will not include/relay wind corrections into forecasts/ phraseology. Therefore, aircrews will incorporate a plus-minus four knot accuracy into their decision-making processes for flying operations.

(USAASD-E/USA 02-0092)

b. Coleman AAF (ETOR) - See Ansbach AHP (ETEB) Entry.

(USAASD-E/USA 03-0154)

c. Frankfurt Main (EDDF)

(1) REDUCED MINIMUM RADAR SEPARATION FOR DIAGONAL STAGGERED APPROACHES. When Rwy 18 is being

used for all departures, radar separation on final approach between aircraft executing parallel instrument approaches to Runways 07 or 25 may be reduced to 2.5 NM when beyond 10 NM from touchdown and to 2.0 NM when inside the outer marker. To avoid frequency congestion, the initial call to Frankfurt director shall include only the aircraft call sign. Pilots must strictly adhere to speed restrictions. Reduced separation will only be applied when at least Cat 1 conditions exist.

(SPEC/AIC IFR 5-02)

(2) TRANSPONDER OPERATIONS - SSR transponder shall be turned off after aircraft reaches final parking position and the engines are shut down and shall be in "Standby" mode when the aircraft is moving powered by its engines.

(SPEC/AIC IFR 8-02)

d. Giebelstadt AAF (ETEU)- See Ansbach AHP (ETEB) entry.

(USAASD-E/USA 02-0096)

e. Grafenwohr AAF (ETIC)- See Ansbach AHP (ETEB) entry.

(USAASD-E/USA 02-0094)

f. Hanau AAF (ETID)- See Ansbach AHP (ETEB) entry.

(USAASD-E/USA 02-0090)

g. Heidelberg AHP (ETIE)- See Ansbach AHP (ETEB) entry.

(USAASD-E/USA 02-0097)

h. Hohenfels AAF (ETIH)- See Ansbach AHP (ETEB) entry.

(USAASD-E/USA 02-0095)

i. Illesheim AHP (ETIK)- See Ansbach AHP (ETEB) entry.

(USAASD-E/USA 02-0091)

j. Munchen (EDDM) - Between 2100-0500Z++ take-offs and landings are not permitted except for:

(1) Scheduled air services.

(2) Using Munchen Airport (EDDM) as an emergency or for provable meteorological, technical or other safety reasons.

(3) Engaged in disaster assistance or rendering medical service.

(SPEC/CIV AD2 EDDM 1.11)

k. Ramstein AB (ETAR)

(1) Airfield Restrictions:

(a) Assault zone landings for base assigned C130s only.

(b) Hazardous Cargo Aircraft. Unless directed otherwise, all hazardous cargo aircraft will park on Ramp 8.

(c) Hot Brake, Arm/De-arm. Twy Bravo and Juliet are Hot Brake and Hung Flare locations. Twy Golf is Hot Brake, Hung Flare and Hydrazine location.

(2) Taxiway Restriction:

(a) Twy Alpha. Under construction.

(b) Taxiway Bravo closed.

(c) Taxiway Charlie closed.

(d) Twy Delta: East of Control Tower restricted to C130 or smaller.

(e) Twy Echo. No restrictions.

(f) Twy Foxtrot. No restrictions.

(g) From Rwy 08/26 to Ramp 7 restricted to aircraft with a wingspan of 90 feet and less. Closed between Rwy 08/26 and Ramp 5.

(h) Twy Hotel. Closed.

(i) Twy Juliet. Closed.

(j) Twy Kilo. Closed.

(k) Twy Lima. No restrictions.

(USAFE/USAF FIL 05-523)

(3) CAUTION: Numerous birds, deer, foxes and rabbits on and in the vicinity of the airfield throughout the year. The main bird migration periods are February thru May and September thru November. In mild winters, spring migration may start as early as the end of January. During the summer, numerous ducks gather on inland waters for molting. There are immediate movements of small birds in June and July. The highest intensities are usually in August; but when weather is mild, may be delayed until November. In the face of prevailing headwinds, the bird migration altitude frequently decreases below 500' AGL. Bird Watch Condition Codes are:

(a) LOW - Normal bird activity on and above the airfield with a low probability of hazard.

(b) MODERATE - increase bird population in locations which represent an increased potential for strike. This condition requires increased vigilance by all agencies and supervisors and caution by aircrews.

(c) SEVERE - High bird population on or immediately above the active runway or other specific location that represents a high potential for strike.

(AFFSA/XOIA FIL 86-00)

(4) Assigned radio frequencies and designated operational range: Current Frequency Authorized Use Max Range/Altitude.

(a) M121.775 GND Control 5 NM/0

(b) M133.200 VFR Control 25 NM/4000 ft

(c) M129.050 IFR Control 50 NM/25,000 ft

(d) M124.275 ATIS 150 NM/50,000 ft

(e) M140.900 IFR Control 50 NM/30,000 ft

(f) M142.125 IFR Control 50 NM/30,000 ft

(g) 308.775 GND Control 5 NM/0

(h) M369.125 PTD 25 NM/6000 ft

(i) M360.550 IFR Control 50 NM/24,000 ft

(j) M386.750 VFR Control 25 NM/4000 ft

(k) M398.200 RADAR Approach 50 NM/24,000 ft

(l) M356.225 RADAR Approach 50 NM/24,000 ft

(m) M363.800 RADAR Approach 50 NM/24,000 ft

(n) M284.325 ATIS 100 NM/10,000 ft

(o) M282.275 RADAR Approach 50 NM/24,000 ft

(p) M399.475 RADAR Approach 50 NM/24,000 ft

(86OSS/OSAM FIL 05-974)

LANDING FEES -

1. Aircrews landing at German civil airports will be required to verify the landing on a form presented by airport authorities or on an Air Force Form 15 or other receipt/delivery form. If an Air Force Form 15 is used, three copies will be given to the airport authorities. US Army aircrews will use standard Form 44, AVCARD or the appropriate form/airport service ticket (in lieu of Form 44) requested by airport authorities. They will not pay cash fees to airport officials.

(USAASD-E/USA 02-0011)

2. The following airports have airport tariffs associated with them. US military aircrews are cautioned to check with airport authorities for associated airport tariffs (e.g. landing fees, approach charges, parking fees, etc.) Altenburg-Nobitz (EDAC), Berlin/Schonenfeld (EDDB), Berlin-Tegel (EDDT), and Berlin Templehof (EDDI), Braunschweig (EDVE), Bremen (EDDW), Dortmund (EDLW), Dresden (EDDC), Dusseldorf (EDDL), Erfurt (EDDE), Frankfurt Main (EDDF), Friedrichshafen (EDNY), Hamburg (EDDH), Hannover (EDDV), Karlsruhe/Baden Baden (EDSB), Koln/Bonn (EDDK), Leipzig/Halle (EDDP), Monchengladbach (EDLN), Munchen (EDDM), Munster/Osnabruck (EDDG), Neubrandenburg (ETNU), Nurnberg (EDDN), Paderborn/Lippstadt (EDLP), Rostock-Laage (ETNL), Saarbrucken (EDDR), Stuttgart (EDDS), and Westerland/Sylt (EDXW).

NOTE: This list is not all inclusive.

(USAASD-E/CIV GEN 4.1-1)

FLIGHT HAZARDS

ELECTRONIC WARFARE RANGE INFORMATION -

POLYGONE ELECTRONICS WARFARE RANGE For Site Advisory Traffic, contact "COMMANDO" on 277.275. Back up frequency is 279.925.

(USAFE-DOTW/AFFSA

HIGH INTENSITY RADIO TRANSMITTER AREAS -

1. In order to protect military aircraft whose functionality might be impaired by electromagnetic radiation, these aircraft may not enter high radiation intensity areas.

2. High Intensity Radio Transmission Areas (HIRTAs) are protection zones established around high radiation intensity areas. Horizontally, these HIRTAs are defined by a certain radius (NM) around a reference point and their vertical dimension is stated in feet AGL.

3. HIRTAs are shown on the low flying charts LFC Germany and TFC (L) Germany.

(SPEC/MIL ENR 5.3-1-6)

HIGH MIDAIR COLLISION POTENTIAL AREA -

1. The airspace area around Ramstein AB from 3000' to 5000' MSL. The high potential area is bounded by N49°26' E08°12', N49°21.5' E07°00', N49°33' E07°00', N49°41' E08°14'. All aircrews operating in this area should be extremely vigilant.

(USAFE DO/AFFSA)

2. Numerous uncontrolled, non-transponder equipped general aviation and glider traffic in vicinity of Ramstein Class E airspace. Pilots should exercise increased vigilance in vicinity of IAF's FRANK and MAPIG.

(USAF DO/AFFSA)

OVER FLIGHT OF NUCLEAR REACTORS AND HIGH RISK INDUSTRIAL PLANTS -

Overflight of nuclear reactors should be avoided. They shall not be overflown by military aircraft below 2000' AGL within a radius of .8 NM around the reactor building.

(SPEC/MIL ENR 5.1-9)

ENROUTE

FLIGHTS IN BORDER AREAS -

Flights in area bordering on Austria, Switzerland, and Poland.

1. Jet and propeller aircraft - To avoid violations of the borders of Austria and Switzerland by military aircraft, the off-border line shall not be overflown, as a matter of principle, by jet and propeller aircraft at any altitude to the south.

2. Exceptions:

a. Security Flights, if performed under continuous radar control.

b. Coordinated reaction flights for air defence above the low-flying band.

c. IFR flight conducted on ATS routes or Upper ATS routes and the performance of published instrument approach and departure procedures.

d. Calibration flights up to a minimum distance of 1 NM to the border.

e. Forward Air Controller missions if the following conditions are met:

(1) Maintaining of a minimum distance of 2 NM to the border.

(2) Flight visibility: 8 km.

(3) The initial point shall be north of the off- border line.

(4) The mission shall not be accomplished if radio communications between the forward air controllers and the aircraft fails at the initial point.

(5) The mission is ordered by the ICAOC responsible for the respective unit after coordination with GAF Command.

(6) Prior to the mission, the Federal Armed Forces Air Force Office Flight Operations Division shall be informed by GAF Command on the daily mission planning.

f. Flights to the Friedrichshafen Airport (EDNY): For the purpose of landing only, in justified individual cases only.

3. Propeller aircraft - The Bundeswehr Command may issue exceptional regulations for propeller aircraft. However, these exceptions shall be limited to a degree indispensable for operational and training tasks. Exceptions shall be directed in writing. The GAFO MilFltOps shall be informed in each case.

4. Helicopters - Helicopters shall maintain a minimum distance of 1 NM to the border. Exceptions; SAR mission, flights directed by the Command. Flights at a distance of less than 1 NM from the border shall be conducted in accordance with regulations issued by the competent Command's in their own responsibility.

5. Flights under diplomatic clearance - Flights under diplomatic clearance for the purpose of entering the territory of Austria or Switzerland are exempt from the above mentioned restrictions.
(SPEC/MIL ENR 5.1-15, 16)

6. VFR Flights with Helicopters and Prop Aircraft will maintain a minimum distance of 1NM to the German-Polish border.
(USAASD-E/USA 05-0077)

7. MILITARY AIRCRAFT ENTRY REQUIREMENTS

a. Foreign military aircraft need a permit (military diplomatic clearance) to enter (land in) or to overfly the Federal Republic of Germany.

(1) Permits may be granted as:

(a) Individual permits, valid for one or several days (Military Diplomatic Clearance, MDC) or:

(b) Permanent permits, valid for one year (Military Diplomatic Clearance Permanent, MDC/PER).

b. Military diplomatic clearances shall be obtained from FMOD-Armed Forces Staff II 5 via the respective embassy (Military Attache).

c. Requests for individual or permanent permits must be received by FMOD-Armed Forces Staff II 5 no later than 5 working days before the intended flight.

d. To transport dangerous goods with military aircraft, an individual permit shall, on principle, be obtained. The requests shall be submitted to FMOD-Armed Forces Staff II 5 no later than 15 working days prior to the intended date.

NOTE: The "Regulations for the Transportation of Dangerous Goods by Military Aircraft" have been published in GM MIL AIP, GEN 1.4.
(USAASD-E/FCW 04-0073)

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. LOW ALTITUDE - Listed by alphanumeric designation.

B293

a. Between WRB and ESADU, westbound max. FL 200.

b. At WRB transition to UL126/UN850 not possible.

G5

a. During activity of EDR31 and EDR32, the minimum cruising level between HAM and DLE is FL 160.

b. Flights at FL 80 or below between FUL and WUR have to proceed via MAMBU.

c. Flights at FL 150 or below and flights with destination W of N850 within Bremen FIR shall proceed via LAU-Z190-WRB-N850.

d. After DKB access route to (U)L603 for flights approching via W718 only.

e. Between DKB and HAB northbound available for departure EDTY only.

f. Between GESTO and HAM not available for destination EDDH, EDHI and EDHL. These flights shall file GESTO-T901-RATIP.

G10

a. Flights with Y/Z FPL with departure/destinatiin north of G10 and southwest of L619 shall be conducted WSR-MASIX or vice versa. MNM 4000 ft. MSL. (MASIX, N53°31'30" E08°00'20", R288 WSR-DIST 33.0, R175-39.8 DME DHE).

b. Between WSR and LBE not available for destination EDDH, EDHI and EDHL. These flights shall file WSR-T903-RITSI.

G103

a. After WUR eastbound only available at FL 130 and below.

b. Between GIBSA and NISTE westbound max. FL110.

J25

a. Available only for non RNAV-equipped flights below FL 200.

b. RNAV-equipped dep LSZH and LSMD shall file Z2 via NEBEL.

J803 - Only for arr and dep to/from EDDV/EDVE.

J906 - Only for dep EDDK.

R1 - Available only between Fri 1700Z++ to Mon 0700Z++.

R12 - Section between reporting point JUIST and DHE available only between Fri 1500Z++ and Mon 0700Z++.

R15

a. Flights to/from EDXW planned along R15 shall be conducted via BASUM-WSR-OSTOR-MELDU.

b. Between NOR and HMM not available for traffic above FL 120 except destination EDLL, EDGS and departure EDLW.

c. Between NOR and KENUM only for departure/destination EDDK, EDKB, EDDL with departure/destination EBBR, EBMB, EBAW, EBCV, EBCI, EBLG, ELLX, max. FL 160.

R125

a. This ATS route crosses a danger area over the North Sea. IFR traffic is given priority over and separation from military traffic with this danger area.

b. Flights with Y/Z FPL with departure/destination north of G10 and southwest of L619 shall be conducted DHE-MASIX or vice versa. MNM 4000 ft. MSL.

V282 - Only for destination EDLV, EDLN and flights with Y FPL.

W718

a. Between SBN and NEKOM only for departure/ destination within Frankfurt FIR.

b. Between NEKOM and GOLTU not available for departure ETAR.

(SPEC/CIV ENR 3.1-1 thru 3.1-13)

c. Between NDG and DKB northbound only for destination EDTY, ETHN, ETEU, ETIK and flights with Y FPL.

2. HIGH ALTITUDE - Listed by alphanumeric designation.

UG10 - Between WSR and LBE not available for destination EDDH, EDHI and EDHL. These flights shall file WSR-T903-RITSI.

UJ158 - Not available for dep Dusseldorf FIR except EDDG.

UW189 - Only for destination EDDK.

(SPEC/CIV ENR 3.2-1 thru 3.2-8)

3. RNAV ROUTES - RNAV routes are depicted by initial true tracks rather than magnetic courses. Listed by alphanumeric designation.

L132

(1) In case of activation of ED-R138 expect re-routing by ATC.

(2) Beyond ABKIS not available for destination EDDT, EDDI, EDDB. These flights shall file ABKIS-Q240-BESIP-T203.

(3) Between AGNAV and KILNU see AIP Czech Republic.

L173

a. Northwestbound between SBG and MAH only for destination EDDS, EDSB, EDTY, ETOR, ETAR and flights with STS/HUM.

b. From MAH to SBG only for departure Munchen FIR with destination LOWS.

c. Transition to (U)M726 not possible.

L179

a. Section DLE-OSN not available for flights destin Paris TMA and Brussels FIR at FL 200 or above. These fligthts shall file DLE-Z717.

b. Between DIBIR and ROMIN not available for destination/departure EBBR and EBMB.

c. Between MEVEL and OSN northeast-bound also available above FL 240.

L602 - From TABAT to SODRO only for departure EDDE and for flights with Z flight plans.

L603

a. After DONIS not available for destination EDTY, EDDM, EDMA, EDMO, ETSI, ETSN, ETSA, ETSL, EDJA.

b. At TESGA transition not possible to UZ729 except departure EDLW, EDLE, EDLA, EDLM; UN858.

c. At TESGA transition to UL603 not possible for departure EDDL. These flights shall file SID DODEN or SID KUMIK-Y854.

d. Except for departure EDFF and departure EDMM after BOMBI not available for destination LOWS.

L604

a. Between MOOCE and LAMSI southbound only for departure EDQ*, EDMM.

b. Between ANELA and RUDNO southbound only for destn Munchen FIR max FL 130.

c. Between RUDNO and MOOCE not available for dep EDDM.

d. After SULUS, not available for destn EDDK and EDGS. These flights shall file SULUS-L984-ASKIK-T840.

L605

a. Westbound only for dep Munchen FIR with destination EDDS, EDSB, and Munchen FIR.

b. At WLD transition to Q700 not possible.

c. Transition to (U)L603 not possible.

d. Eastbound not available for dep EDDM.

L607

a. Not available for destination EDDF, EDFE, ETOU, ETID, ETAR.

b. After ULMEN not available below FL120. These flights shall file: ULMEN direct KIR direct OLIVI direct RID direct AKONI-WUR.

c. For DEP ELLX, EDDR, EDRZ, EHBK and EBLG at NANOK transition to UN858 not possible.

L608 - At position KOGOL, transition to (U)M726 not possible.

L610

a. Between FRE-GONBA not available for destn EDDF, ETOU, ETID, EDFM, ETOR, ETAR and EDDN. These flights shall file via T161.

b. At ALB, transition to (U)M726-ANELA-(U)L604 not possible for flights entering EDMM/EDUU via LNZ/FRE/ERL. These flights shall file via (U)L604.

c. At Gonba transition to UZ39/N871 not possible.

d. At Mamor transition to (U)L132 not possible.

e. Between ALB and STAUB eastbound only for flights with destination EDMM, LOWS max. FL 130.

L619

a. Between DHE and LBE when ED-R201 active highest useable alt FL 70.

b. This route crosses a danger area over the North Sea. IFR traffic on this route is given priority over and separation from military traffic within this danger area.

c. From PODUS to RADEL not available for destination EPSC. These flights shall file Z871-RAKIT-Z717.

L620

a. Between SUVOX and EXOBA only for departure EHAA to continue after EXOBA on UL620.

b. Below FL 180 only available for destn ETUO, EDLP, and EDDG.

c. At BESIP transition to T203 and Q240 not possible.

d. After LISBA not available for destination LKPR, LKKB, LKVO. These flights shall file T620.

L856

a. Eastbound available only at FL 120 and below.

b. Between KPT and MANAL, flights at FL 100 or below have to expect re-routing by ATC during times of activity within EDR141.

L984

a. Not available for destn EDDF, EDFE, ETID, ETOU.

b. Between OKG and SULUS not available for dep LKPR, LKKB, and LKVO. Exception: Non-RNAV equipped flights below FL 100 and flights destn EDQM, EDQD, and EDQC.

c. Between SULUS and OKG not available for destn LKPR, LKKB, LKPD, LKVO, LOWL, LOWS, and Munchen FIR except non-RNAV equipped flights below FL 100.

d. Between OKG and Kulok not available for destination EDDN. These flights shall file OKG-N869-ANELA.

L986

a. Between MAG and POVEL not available for destination EDDV. These flights shall file T804.

b. From BOLBO to MAG not available for destination EDDW. These flights shall file M748-BKD-Q870.

M150 - Not available for departure ELLX.

M602 - Beyond PENET not available for destn EKCH. These flights shall file via T299.

M725

a. After RODEP not available for destn EDDT, EDDI, and EDDB.

b. Between KOBUS and HDO not available for destn EDDC. These flights shall file KOBUS-P31-GARKI(IAF).

c. At KOBUS transition to (U)Z220 not possible and transition to (U)P31 only for destination EDDC.

d. At GORIG transition to (U)Z20-SUI not possible.

M726

a. Flights at FL 200 or above destn EDDM and EDMO shall file T101.

b. Flights below FL 200 with destn EDDM and EDMO shall file BZO NDB - M726 - INN NDB - NORTO - T101.

c. After MAH not available destination EDDT, EDDI and EDDB. These flights shall file (U)L132.

d. Between LONLI and ANELA southbound only available for flights with departure EDQC at FL 130 or below planning to continue via N869.

e. Between ROSOK and BKD southbound only for departures from ETNL and EDBH.

M736

a. Between KULOK and VIBUG not available for dep EDDT, EDDI, and EDDB.

b. Transition to T173, T222 and (U)L856 not possible.

c. Transition to (U)L605 not possible except destn EDME.

d. After GALMA not available for destination LOWS, LOWL, EDDM, EDMA and EDMO. These flights shall file T703.

e. After MAG not available for destination EDDF, ETOU, ETID, EDFE, LKPR, LKKB, and LKVO.

f. Between RDG and RUDNO northbound only for dep EDMS.

g. At RUDNO transition to (U)L604 not possible.

M748

a. At ESIKA, transition to (U)Z20 not possible.

b. Between HDO and ESLOR northbound not available for destination EDDT, EDDB and EDDI.

c. After RENDO northbound not available for destination EDDV, EDVE, EDBM.

M852 - Between LASTO and BIRKA not available for destination EKCH.

N624

a. Destination EDDE shall file NIKUT-Z94.

b. Flights at FL80 or below between ALUPO and HAB have to proceed via MAMBU (R171-35.9 DME FUL, R331-19.4 NM WUR, N50°00’00” E09°42’15”)to FUL.

c. Between NIKUT and HAB FL250 or above not available except for departure EDDS, EDSB, EDFM.

N851 - Not available for destination EDDC with requested FL 200 or above.

N858 - Beyond SWALM not available for destn EDDT, EDDI, EDDB, EDDE, EDDP,EDAC.

N869

a. Between DKB and ANELA northeast bound only available for dep EDDS, EDTY and EDSB.

b. Between TGO and DKB northeast bound only available for destn EDDN.

c. Transition to (U)M726 not possible.

d. Between OKG and ANELA not available for destination EDDF, ETOU, ETID.

N871

a. Between BAMUR and ALGOI not available for dep LSZH and LSMD.

b. Transition to (U)M726 not possible except for destination ETSI, EDDN, EDMS.

c. Flights with destn EDDM, EDMA and EDMO shall file via KUDES T102.

d. Transition to (U)M749 and (U)L605 not possible.

e. After TULSI not available for flights with destination LOWS.

N872 - Available only between Fri 1700Z++ and Mon 0700Z++.

N873 - This ATS route crosses a danger area over the North Sea. IFR traffic on this route is given priority over and separation from military traffic within this danger area.

P31

a. From GOVEN to KOBUS only for destination EDDC and EDAB.

b. Transition to (U)L605 not possible.

c. After MAREM not available for destination EDDM, LOWS< LOWL. These flights shall file T106.

d. Between MAREM and CERNO see publication of Czech Republic.

P96 - Eastbound only for flights planning to continue via OKX.

P994 - Only for departure EDDM.

P995 - Between CHIEM and LOMRO not available for DEP EDDM.

P999 - This ATS route crosses a danger area over the North Sea. IFR traffic on this route is given priority over and separation from military traffic within this danger area.

Q112 - Only for destination EDDM.

Q113 - Only for destination EDDM.

Q200

a. From MILGU to GOVEN only for departures EDDP and flights with Z flight plans.

b. From TADUV to MILGU only for destination EDDT, EDDI, EDDB, departures EDDP and flights with Y flight plans.

Q201

a. Between GALKU and BUREL only available for destination EDDK FL 290 and above and departure EDDT, EDDI.

b. Between BUREL and POVEL only available for destination EDDK FL 290 or above and departure EDDT, EDDI with destination EDDKI FL 250 and above.

c. Max. FL 280 for flights planned to continue via BUREL-UM736-MAG-UZ20.

Q230 - Only for flights to continue via Z21-BERDI;
- destination EDDV planned to proceed via HDO-(U)M748-RENDO FL 280 or below.
- destination EDDV planned to proceed via HDO-UM748-RENDO FL290 or above shall file UM748-BOLBO-(U)L986-MAG-T804.
- destination EDVE, EDDP, EDDE, EDAC, EDBM.
- departure EDDC, EDAB, EDCD.

Q240 - Only dep EDDC or destn EDDI, EDDT, EDDB and EDDC.

Q246 - Only for departure/destination EDAB.

Q280 - Only for destn EDBH, ETNL, ETNU, or dep EDBH, ETNL, ETNU.

Q282 - Only for destn/dep ETNU.

Q700 - Only available destn LOWI, EDMO and dep Munchen FIR.

Q760

a. Between ULMEN and NOR only for departure EDDR, ETAR, ETSB, ETAD, EDDS to continue OAT after NOR, and EDRZ with destination EDDK.

b. Between RUDOT and SBN only for departure/destination EDDR, EDRZ, ETAR, EDFH and for flights with Y/Z flight plans.

c. For departure EDFH only available FL 110 and above.

d. Between TOLEY to TOMPI additionally available for departure ELLX to continue via Z729.

Q762

a. Between RUDOT and TALUK not available for departure ETAR.

b. Between BADLI and RUDOT, FL 100.

Q763

a. Only for departure/destination EDDR, EDRZ, ETAR, ELLX.

Q800 - Only for dep/destn EDBH.

Q870 - Available for dep/destn EDDW and EDWD only.

T23 - At NORIN, transition to (U)M726 not possible.

T101

a. Available only for flights with destn EDDM and EDMO.

b. Flights planned below FL 200 shall file via M726 - INN - J25 - NORTO.

T102 - Available only for flights with destn EDDM, EDMA and EDMO.

T103

a. Eastbound only for destination EDDM, EDMA, EDMO and flights with Y flight plans at max FL 120. Flights destination EDDM shall file MERSI direct BETOS.

b. Westbound available for departure EDMM.

c. During times of activity with EDR141, flights at FL 100 or below hae to expect re-routing by ATC.

T104

a. Only for destination EDMM except EDDN, EDQ*, EDTY, LOWI, LOWI at FL 250 or above.

b. Not available for departure EDDW, EDDH, EDDV, EDVE, EDXW, EDHK, EDHL, ETNL, ETNU with destination EDDM.

c. After DKB not available for destination ETSA, ETSL, EDJA.

T105

a. Only for flights with destn within Munchen FIR.

b. Between ANKER and MIQ available for dep Munchen FIR.

T106 - Only for flights with destn within LOWS, LOWL, and Munchen FIR.

T125 - Only for destn EDDS.

T126 - Only for destinations EDDS, ETAR, ETOR, EDFM and for flights with Y flight plans.

T127 - Only for destn EDDS and for flights with Y flight plans.

T128 - Only for flights destination EDDS and for flights with Y flight plans.

T150

a. Only for destination EDDF, EDFH, ETOU, ETID and for flights with Y FPL.

b. After ROLIS, only for destination EDFH.

T152 - Only for destination EDDF, ETOU, ETID, EDFE and for flights with Y FPL.

T153 - Only for destn EDDF, ETOU, ETID and for flights with Y flight plans.

T154 - Only for departure EDDV, EDVE with destination EDDF, ETOU, ETID, EDFE and for flights with Y FPL.

T155 - Only for destination EDDF, ETOU, ETID, EDFE and for flights with Y FPL.

T157 - Only for destination EDDF, ETOU, ETID, EDFE and for flights with Y FPL.

T159

a. Between REDNI and MILKA only by ATC. Not to be filed in FPL.

b. After MILKA only for destination EDDF, ETOUK, ETID and flights with Y FPL.

T161

a. Only for destn EDDF, ETOU, ETID, EDFM, ETOR, ETAR and EDDN and for flights with Y flight plans.

b. Depending on the traffic situation, expect assignment of T159 by ATC after REDNI.

c. Transition to (U)L610/(U)M726 not possible.

T163

a. Only for destn EDDF, ETOU, ETID and for flights with Y flight plans.

b. Between KUDES and NELLI for all traffic on transit into the lower airspace with flight planned route after NELLI UZ725 or UZ726, except destination EDFM, ETOR, EDDN, EDDC and ETAR.

T164 - Only for destn EDDF, ETOU and ETID and for flights with Y flight plans.

T170 - Only available for:

a. Destination EDDF, ETOU, ETID and flights with Y flight plans.

b. Destination EDDL, EDDG, EDLE, EDLM, EDLN, EDLV, EHEH at FL 250 or above.

c. Section DEMAB-ARNIX only available for destination EDDL, EDDG, EDLE, EDLM, EDLN, or EDLV.

T172 - Only available for flights with destn EDDF, ETID, ETOU, EDDE, dep EDAC, and for flights with Y flight plans.

T173

a. Only for destination EDDF, ETOU, ETID, EDFE, EDDS, EDSB, EDTY, EDDE, EDTL, EDFM, EDFV, EDRY, EDMA, EDMO, ETOR, ETSI, ETSN, EDJA and for flights with Y FPL.

b. After TAMEB only for destination EDDF, ETOU, ETID and for flights with Y flight plans.

c. Transition to UZ94 not possible.

T174 - Only for flights destn EDDF, ETID, ETOU and for flights with Y flight plans.

T180 - Only for destination EDDF, EDFE, ETOU, ETID, ETAR, and for flights with Y flight plans. After POBIX additionally for destination EDDS, EDSB, ETOR, EDFM, EDFV, EDRY.

T200 - Only for flights with destn EDDT, EDDI, EDDB, EDAC, EDDP, and flights with Y flight plans.

T201

a. Only for flights destn EDDT, EDDI, EDDB, EDAC, EDDP, EDDE.

b. Between Sogmi and Swalm only available for destination EDDE.

T202

a. Only for flights destination EDDT, EDDI, EDDB, EDDP, EDAC.

b. Between GOLAT and TABAT southbound only available for departure EDAC.

T203 - Only for destn EDDT, EDDI, EDDB, and for flights with Y flight plans.

T204 - Only for destn EDDT, EDDI, EDDB, and for flights with Y flight plans.

T205 - Only for destn EDDT, EDDI, EDDB, and for flights with Y flight plans.

T206 - Only for flights with destination EDDT, EDDI, EDDB and for flights with Y FPL.

T220 - Only available for destination EDDE and for flights with Y flight plans.

T222 - Only available for destination EDDE and for flights with Y flight plans.

T223 - Only for flights destination EDDE and for flights with Y flight plans.

T224

a. Only for destination EDDE and for flights with Y flight plans.

b. Southbound only available for destination EDQC at FL 130 or above.

T230 - Only for flights destn EDDP.

T231 - Only for flights destn EDDP.

T281

a. Only for destination EHAM, EHEH.

b. After HMM only for destination EHAM.

T299 - Only for destn EKCH.

T700

a. Only for destn LOWS, EDME and dep Munchen FIR and flights unable to operate at 15,000 ft MSL or higher due to performance reasons.

b. Between SBG and EGG northbound only for destn within Munchen FIR until max FL 120.

c. Between EGG and STAUB northbound only for destn EDMS and dep EDME.

T701 - Not available for destn LOWW, LZIB.

T702 - Only for destn LOWS.

T703

a. Only for flights destination EDDM, EDMA, EDMO, LOWS and LOWL, and for flights with Y flight plans. For flights originating EDDH, EDDV with destination LOWW, LZIB, LHBP and RFL FL 330 or above.

b. After ARBER only for destination LOWL and for flights with Y flight plans and destination LOWW, LZIB, LHBP. These flights shall file PASAU-UL850-Q109-VENEN.

c. Between GALMA and ETIMA, not available for departure EDDT, EDDB, EDDI. These flights shall file (U)Z36.

T710 - Only for destn LFST, LFGA and LFSB.

T711 - Only for destn LFST, LFGA or dep EDTL and EDTD.

T712 - Only for destn EDTL and EDSB.

T713 - Only for destn EDTL, EDSB and aircraft with Y-FPL.

T715

a. Only for flights with destination LFSB, LFST, LFGA, LFSC, EDTD, EDTO, EDTF.

b. Between KRH and SEDOR only available for destination LFSB, LFST, LFGA, LFSC.

c. Between PABLA and DENEL also available for departure ETAR, ETOR, and EDFM.

T721

a. Only for destination LSZH, LSZR, LSMD, EDNY, LFSB, EDTD, EDTL, EDTO, EDTF.

b. Beyond SUL only for destination LSZH and LSMD.

T722

a. Only for destination LSZH, LSMD, LSZR and EDNY at FL 150 or above.

b. Flights below FL 150 shall file via N850-Nator.

T723 - Only for destn LSZH and LSMD.

T724

a. Only for destn LSZH, LSMD, LSZR, EDNY and EDTD.

b. After EMKIL, only destn LSZH and LSMD. Arr EDNY and LSZR shall file EMKIL T732 USETI.

T726 - Only for destination EDDS, EDSB, EDFM, EDFV, EDRY, EDTY, EDTL, EDMA, EDMO, ETOR, ETSI, ETSN, EDJA.

T732 - Only for destn EDNY and LSZR.

T733 - Only for destn EDNY and LSZR.

T734 - Only for destination EDNY and LSZR.

T804 - Only for flights with destination EDWW and EDBM.

T840 - Only for flights destn EDDK and EDGS.

T845 - Not available for destination EDDL.

T851 - Only for destination EDDL, EDLE, EDLV, EDLN, EHEH, EHBK.

T852

a. Only for destination EDDL, EDDG, EDLN, EDLV, EHEH and aircraft with Y flight plans.

b. Not available for departure EDDN.

c. Beyond KULIX not avilable for destination EDDG.

T853

a. Only available for destination Dusseldorf FIR.

b. Beyond NOR only available for destination EDDL and EDLV.

c. Beyond Kubim only available for destination EDLV.

d. Not available for arrival EDDG, EDLW, EDLP with RFL 245+. These flights shall file via DIK-(U)T856.

T854

a. Only for destination EDDL, EDLN, EDDG, EDLV and for flights with Y flight plans.

b. Beyond ADEMI only for destination EDDL.

T855 - Only for destination EB, Paris TMA (RFL 180 or below), ELLX (Enroute FL 180 and below).

T856 - Only for destination EDDF, EDFE, ETOU, ETID, ETAR, and Dusseldorf FIR except EDDK, EDKB, EDLN, EDGS, ETNG, EDDL, EDLV.

T857 - Only for destination Dusseldorf FIR except EDLN.

T858 - Only for destination EDDK and for flights with Y FPL.

T880 - Only for destination EBBR, EBMB, EBAW, EBCV, EBCI, EHEH, EHWO, EHGR, EHVK.

T881

a. Only for destination EHEH, EHWO, EHGR, EHVK.

b. Not available for destination EBBR, EBMB, EBAW, EBCV and EBCI. These fligths shall file UL608-NONKO-UZ211-MISGI-Z104.

T890 - Only for destination ELLX.

T901

a. Only for destination EDDH, EDHI and EDHL.

b. Between NIE and GESTO only for flights at FL 150 or below.

T902 - Only for destination EDDH, EDHI and EDHL.

T903 - Only for destination EDDH, EDHI and EDHL.

T904

a. Only for destination EDDH, EDHI and EDHL.

b. Between RITSI and LUGAX only for destination EDHL.

T905 - Only for destination EDHL.

T906 - Only for destination EDHL.

Y1

a. Only for departure LSZH.

b. Flights intending to continue via Z1 shall initiate turn early enough not to overshoot center line Z1 to the east.

Y101

a. Only for departing Munchen FIR planning to proceed:

(1) INBED-(U)L610

(2) ERNAS-T161.

b. Departing Munchen FIR planned via INBED with RFL 260 or above shall cross INBED at FL 250 or above. If unable, FL240 shall be the RFL until INBED. File higher RFL next beyond INBED.

c. At ERNAS transition to (U)M726 not possible.

Y102

a. Only for departure EDMM.

b. Southbound only available for departure EDDN with destination EDMM max FL 90. However not available for EDDM, EDMO.

c. Transition to (U)L610 not possible.

d. Departure EDMM planned via ALB-TENLO or ALB-UM726-KEMES RFL270 or higher, shall cross TENLO/KEMES at FL 270 or higher. If unable, the actual FL calculated for TENLO/KEMES shall be the RFL until TENLO/KEMES. File higher RFL next beyond TENLO/KEMES.

e. At SULUS transition to (U)L984 not possible.

Y103

a. Only for departure EDMM. Only for destination EDDN via T161.

b. Transition to T170 not possible.

c. Transition to T161 not possible. These flights shall file SID GIVMI.

Y104 - Only for dep Munchen FIR.

Y105 - Only for departure EDDM.

Y106 - Between MIQ and MUN only available for departure Munchen FIR.

Y107 - Transition to UL608 not possible for departure EDDM.

Y108 - Only for departure EDDM.

Y109

a. Only for departure EDMM.

b. Transition to (U)L604 not possible.

Y125 - Only for dep EDDS.

Y126 - Only for departure EDDS, ETAR, ETOR, EDFM, EDSB, and for flights with Z flight plans.

Y150 - Only for departure EDDF, ETOU, ETID, EDFE with RFL 250 or above.

Y152 - Only for departure EDDF, ETOU, ETID, EDFE.

Y153 - Y153 - Only for departures EDDF, ETOU, ETID, EDFE to continue at FL 240 or below. Flights with RFL 250 or above shall file EDDF SID MARUN-Y150.

Y161

a. Only for departure EDFF and departure/destination EDMM.

b. At RIDAR transition to (U)L603 not possible.

c. Section between RIDAR and MAH not available for destn LOWS.

d. Between MAH and MUN not available for flights planning to continue via Y106-(U)M736. These flights shall file MAH-Y162-MANAL-(U)M736.

Y162 - Only for dep Frankfurt FIR and Munchen FIR.

Y163

a. Only for dep EDDF, EDDR, EDRZ, ETAR, ETOU, ETID, EDFE, and EDFH.

b. Between NOKDI and ANEKI only available for departure EDFH, ETOU and ETID.

c. After BADLI, additionally available for departure from ELLX.

Y164 - Only for departure EDDF, EDDR, EDRZ, EDFH, ETAR, ETOU, ETID, EDFE, and ELLX.

Y180 - Between DONAB and BITBU only for departure EDDF, EDFE, ETOU, ETID, EDFH.

Y181

a. Only for departure EDDF, EDFE, ETOU, ETID, and EDFH.

b. Not available for flights planned to continue via UA24 at FL 250 or above, except for flights terminating within London TMA.

Y200 - Only for dep EDDT.

Y203

a. Only for dep EDDI and EDDB.

b. Max. FL 280 for flights planned to continue via BUREL-UM736-MAG-UZ20.

Y204

a. Route only available for departure EDDB.

b. Beyond LODRO FL250 or above only for destination EDDK.

c. Max. FL 280 for flights planned to continue via LODRO-UM736-MAG-UZ20.

Y205 - Only for dep EDDT.

Y206 - Only for dep EDDT.

Y207 - Only for dep EDDB.

Y208 - Only for dep EDDB.

Y220 - Only for departure EDDE and for flights with Z flight plans.

Y221 - Only for departure EDDE and for flights with Z flight plans.

Y222 - Only for departure EDDE and for flights with Z flight plans.

Y223 - Only for departure EDDE planned to proceed after EBESI at FL 260 or above.

Y230 - Only for dep EDDP.

Y231

a. Only for departure EDDP, EDDE, EDAC, EDBM with RFL270 or above.

b. Between EBESI and BAMAS FL 260 only for departure EDDE.

c. After BAMAS only for flights with RFL280 or above.

Y235 - Only for departure EDAC.

Y621

a. From DEKOV to EBASA only for departure LKPR, LKKB, LKVO.

b. Between ESLOR and GARKI also for destination EDDC via HDO-(U)M748-ESLOR.

Y700 - Only for flights originating from LOWK, LJLJ, LDPL, LDRI, LJPZ, LDLO and for flights with the destination EDME and EDMS, as well as for flights with Z flight plans originating from LOVV.

Y703 - Only for dep LOWI.

Y704

a. Only for departing LOWI.

b. Between TURBU and LIZUM also for departure EDDM planned to continue via (U)M736-BZO-(U)M984-GIGGI.

Y710

a. Only for departure LFST, LFSC, LFGA, and EDTL. After ETAGO direct HAREM UN851.

b. Between SUL and ESULI, also available for destination ETAR, ETOR, and EDFM.

Y711 - Only for dep LFST, LFJL and LFGA or arr LSZH, EDNY, EDTD, LSZR and LSMD.

Y712 - Only for departure EDSB, ETAR, EDDR, EDRZ and destination EDTY, EDDN and EDDS.

Y715

a. Only for departure LFSB, LFQM, and EDTD.

b. From HEUSE to ARSUT only for destn EDDS.

Y800 - Only for dep EDDV with FL 290 or above.

Y801 - Only for dep EDDV with destn EDDB, EDDT, EDDI.

Y802 - Only for dep Bremen FIR.

Y841 - Only for departure EDLP, EDDG, with RFL 180 or above. ALTN route: R15.

Y852

a. Only for departure EDDL with requested FL 250 or above planned to proceed via UN850 and able to cross DODEN FL 250.

b. Traffic unable to pass DODEN FL 250 or above shall file BETZO-Y853-Y854.

Y853

a. Only for departure EDDL and ETNG.

b. Departures EDDL unable to pass DODEN at FL 250 or above shall file SID GMH-Y854.

Y854 - Only for departure EDDL with RFL 250+ unable to pass DODEN FL 250 and departure EDDK with RFL 250+ planned to continue via UN850/T721/T104.

Y863 - Only for departure EBBR, EBMB, EBAW, EBCV, EBCI, EHEH.

Y865 - Only for departure EBBR, EBMB, EBAW, EBCV, EBCI.

Y866 - Only available for departure EDDK with destination EDDF and for operational transport flights EDDF.

Y867

a. Only for departure EDDK and for flights with Z FPL.

b. Transition to Z850 only for flights planning to continue FL 130 or below.

Y890 - Only for departure ELLX.

Y900 - Only for departures EDDH, EDHI requesting FL 250 or above.

Z1

a. Only for departure LSZH, LSZR and EDNY.

b. After ETAGO: either continue FL 260+ direct:
- HAREM UN851
- SUNEG UL608
- KRH UZ210 (CDR1/2) or continue via N869, N624, Z3.

Z2 - Available only for dep LSZH and LSMD.

Z3 - Only for dep LSZH, LSZR and EDNY planned to continue between FL 150 and FL 230.

Z4 - Only for dep LSZH, LSZR and EDNY with destn EDDS.

Z5 - Only for dep LSZH, LSZR and EDNY to continue at FL 140 or below or flights with destn LFST.

Z6 - Only for departure LSZH, LSMD with destination EDDM, EDMA, EDMO.

Z11

a. At position LBU, transition to L173 through Munchen FIR and beyond not possible.

b. Between ABUMO and BANIK southbound available for access to L603 and destn EDFM only.

Z16 - At GALMA transition to (U)N858 not possible.

Z20

a. Between BIRKA and MAG northbound only for destn EDBM.

b. Flights at FL 120 or below between ESIKA and MAG proceed via ROSNO, min 4000' MSL.

c. Not available for destination EDDP and EDAC. These flights shall file GOVEN-Q200-LUROS-Z36-BEBKU-Z220-BEBEX-Q230-NERID.

Z21

a. At TADUV transition to Q200 not possible.

b. After DRN not available for destination LKPR, LKKB, LKVO. These flights shall file T620.

Z22 - Only available by ATC.

Z23

a. Only for departure LKPR, LKKB, LKVO.

b. Not available for destn EDDF, EDFE, ETOU, and ETID. These flights shall file T170.

c. Not available for destination EDDP and EDAC. These flights shall file GOVEN-Q200-LUROS-Z36-BEBKU-Z220-BEBEX-Q230-NERID.

Z35 - Only for destn LKPR, LKKB, LKVO, and LKPD.

Z47 - Only for departure EDDL to continue afte EXOBA on UL620. Flights shall be able to cross EOBA FL 250 or above.

Z52

a. Eastbound only available for flights with RFL 110 or below and destination/departure EDFQ.

b. Transition to N858 and T201 not possible.

Z74 - Access route to L603/T104.

Z75 - Access route to Z104 only for flights between FL 120 and FL 200 using the alternate route for Z104 via L610-HAB-L984-BOMBI (see also Z104).

Z76 - Between NDG and GEBNO only available for departure EDMM except EDDM and only available for destination EDFF.

Z77 - Transition to (U)L984 not possible

Z85 - Only for departure EDDV with RFL 250 or above.

Z88 - Only for destination/departure EDDW.

Z90 - Only for destination EDDH, EDHL, EDHI, EDHK, EDDI, EDDT, EDDB.

Z94

a. After PIGMI, northbound only for destination EDDE.

b. Transition to T172 not possible.

Z100 - Only for departure/destination EDDR, EDRZ, ETAR.

Z102 - Between WSR and HAM not available for destination EDDH, EDHI and EDHL. These flights shall file WSR-T903-RITSI.

Z104

a. Between VADRU and OBERO not available for flights with RFL between FL 120 and FL 200. These flights shall file L610-HAB-L984-BOMBI-Z75-NOKDI.

b. Between VADRU and ARKOK not available below FL 120. These flights shall file VADRU-G103-NISTE dct RID dct OLIVI dct KIR dct KELUX.

c. Between MISGI and LUKAR FL 250 or above only available for destination EBBR, EBMB, EBAW, EBCV, EBCI.

Z112 - Only for destination EDDS, EDSB, ETOR, EDFM, EDFV, EDRY.

Z114

a. Only for departure EDDS, EDSB, EDTY, EDFM, ETOR, EDRY with requested FL 250 or above.

b. Not available for destination EBBR, EBMB, EBAW, EBCV, EBCI, EHEH, EHWO, EHGR, EHVK.

Z131 - Not available for destination EPSC. These flights shall file Z871-RAKIT-Z717.

Z190 - Between LAU and WRB northbound not available for destination EDDW.

Z220 - From BEBKU to BEBEX only for destination EDDP, EDDE, EDAC, EDBM, and departure EDCD.

Z400 - At RAKIT transition to (U)Z717-BODLA not possible. These flights shall file RENKI-(U)L132.

Z715 - After URONA southwest bound not available for destination EDDF, ETOU and ETID.

Z717

a. Only for destn/dep Paris TCA (LFFF) and Brussels FIR.

b. Between ABAMI and DLE, not available for destn EDDV and EDDH.

c. Between RUDEL and MAS FL 190 and below, only for dep EDLN.

d. Between RUDEL and MAS FL 200 and above, only for destn Paris TCA (LFFF) and dep EDDL.

e. At ABAMI transition to T150 not possible.

Z729

a. Only for flights to or from Frankfurt FIR, Munchen FIR and for flights to continue after BADLI via Y163.

b. Between KRH and LBU not available for destination EDDS.

Z738 - Transition to G103 not possible.

Z841

a. Flights destination ETUO shall be conducted from DOM to SONOR (N51°43’25” E08°34’26”) (R090-37 DME DOM, R303-24 DME WRB, MNM 4000 ft MSL).

b. Between DOM and SIGEN max. FL 110 except for departures EDLL, EHEH and destination EDDK.

Z850 - Beyond LOHRE and ARPEG only for destination EDDL, EDDG, EDLN, EDLW, EDLV, EHEH and for flights with Y FPL.

UL87

a. Between TABAT and ERETO not available for departure EDDP, EDAC, EDDE and for flights with Z flight plans.

b. After TADUV not available for flights destination EDDF, EDFE, EDFV, ETOU, ETID, EDDS, EDSB, EDTY, EDTL, EDFM.

c. Between TABAT and ANELA FL 280 is available.

d. After KETAB not available for destination EDDN, EDQD, EDDE, ETAR.

UL126

a. Between WRB and DINKU not available for destination EDMM except EDQ*, EDNY, LFSB, LSMD, LSZR, LSZH, LOWI and LOWS.

b. Between WUR and MASEK northbound only available for departure EDDS, EDSB, EDFM, EDTY.

c. At MASEK transition to G5 not possible.

d. Between WRB and MASEK not for departure EDLP, EDLI, ETUO.

e. Not available for destination EDDF, ETOU, ETID, EDFE.

UL132

a. Beyond ABKIS not available for destination EDDT, EDDI, EDDB. These flights shall file ABKIS-Q240-BESIP-T203.

b. Beyond BODLA see AIP Poland.

c. Between AGNAV and KILNU see AIP Czech Republic.

UL173

a. Northwestbound only for destination EDDS, EDTY, EDSB, and Munchen FIR except EDDM.

b. From MUN to SBG only available for dep Munchen FIR and destn LOWS.

c. Transition to (U)M726 not possible.

UL190 - Between GESTO and HAM not available for destination EDDH, EDHI and EDHL. These flights shall file GESTO-T901-RATIP.

UL602

a. Beyond VARIK not available for destination within Dusseldorf FIR, Bremen FIR and EHEH.

b. Beyond HMM not available for destn EHAM.

c. From TABAT to SODRO only for departures EDDE and for flights with Z flight plans.

UL603

a. After TEBRO not available for destination EDDF, EDFE, ETOU, and EDDK.

b. After TESGA not available for destination EDFM, ETOR, EDSB, EDDS, LFST, LFGA, LFSC, EDDR, EDRZ, EDMM, LOWI, EDTF, EDLT, EDTO, EDTD, LSZR, LSZH, LSMD, LFSB, EDTY.

c. Until DETEV, not available for departure EDDL.

d. After ESATI not available for destination LOWS. These flights shall file via UL984 SULUS UZ650 TIPAM T703 ARBER T106 STAUB T700.

UL604

a. Between MOOCE and LNZ southbound only for departure EDDN, EDQ., EDMM.

b. After SULUS flights with destn EDDL, EDDG and EDLN shall file T852.

c. Flights with destn EDLW, EDLA or EDKZ shall file DEMAB L604.

d. Between RUDNO and MOOCE not available for dep EDDM.

e. Flights with destn EDLP, EDLI, EDVK and ETUO shall file DEMAB L604 - FUL - G5 - LAU.

f. Between MASEK and SULUS, southbound only for departure EDVK, EDLI, EDLP, and ETUO.

g. At SULUS transition to UL984 westbound not possible except for flights dep EDDM.

h. After SULUS, not available for destn EDDK and EDGS. These flights shall file: SULUS-L984-ASKIK-T840.

i. Between BAMAS and DEMAB not available for departure EDDN.

UL605

a. At WLD transition to Q700 not possible.

b. Transition to (U)L603 not possible.

c. Eastbound not available for dep EDDM.

UL607

a. a. At ALGOI transition to UN871 not possible, except for destination LOWS and departure LFST with destination LOWW.

b. Not available for destination EDDF, EDFE, ETOU, ETID, ETAR.

c. After MATUG not available for EDSB, ETOR, EDFM, EDFV, EDRY, EDDS.

d. After SUNEG not available for destination LSZH, LSZR, LSMD, EDTL, EDNY. These flights shall file SUNEG - T721.

UL608

a. Not available for destination LFJL, LFSF, EDFF except EDDR, EDRZ, EDFH.

b. At KOGOL transition to (U)M726 not possible.

c. After RIDSU not available for destination EHEH, EHWO, EHGR, EHVK. These flights shall file RIDSU-T881-ROLIS-T880.

UL610

a. Not available for destination EDDF, EDDN, ETID, EDFM, ETOR, ETAR, ETOU.

b. Not available for destination EDLL. These flights shall file via (U)L604.
Exception: Between INBED and LOHRE available for departure EDMM with destination EDDL.

c. At ALB transition to (U)M726 not possible.

d. After VADRU not possible for flights destination EDDR, EDRZ, EDFH, EBLG, EHBK, LFSF, LFJL, LFSR, LFQA, LFQB, LFOK and ELLX. These flights shall file VADRU Z104 WUR.

e. After ESAMA not available for destination EBBR, EBMB, EBAW, EBCV, EBCI, EHEH, EHWO, EHGR, EHVK. These flights shall file ESAMA-T880.

f. At GONBA transition to UZ39/N871 not possible.

g. At MAMOR transition to (U)L132 not possible.

h. Between LOHRE and MAKOB, FL 260 not available.

UL619

a. During activation of ED-R302 not usable below FL 370 between DHE and LBE.

b. From PODUS to RADEL not available for destination EPSC. These flights shall file (U)Z871-RAKIT-(U)Z717.

UL620

a. Transition to T203 not possible.

b. After BESIP not available for destination LKPR, LKKB, LKVO. These flights shall file BESIP-L620-LISBA-T620.

UL867

a. Transition to (U)Z400 not possible.

b. Between RADEL and GERGA not available for destination EPPO. These flights shall continue on UL619.

UL980

a. Beyond AMSAN not available for destn EHAM.

b. Between SUI and HLZ not available for dep/destn EDDV and EDVE.

c. Between ETEBO and OSN not available for departure EHAA.

d. Between SUI and HLZ not available for destination EDLP.

e. Between GALKU and HLZ not available for destination EDDK. These flights shall file GALKU-Q201-PODER.

f. From SOBLU and SUI not available for: destination EPKK, EPKT. These flights shall file via UL986 destination EPSC. These flights shall file UN746-BATUX-UZ717.

UL984

a. Between LOHRE and ADENU not available for destination EBBR, EBMB, EBAW, EBCV, EBCI, EHEH, EHWO, EHGR, and EHVK.

b. After BOMBI not available for destination EDDN, EDQD and EDQM. These flights shall file BOMBI-L984.

c. Between KULOK and SULUS, not available for departure LKPR, LKKB, and LKVO. These flights shall file Z23.

d. After SULUS westbound not available for destination EDDK. These flights shall file SULUS-L984-T840.

e. After SULUS not avialable for destination LKPR, LKKB, LKVO, LKPD, LOWL, LOWS, EDMM except EDAB, EDDC.

f. Between LOHRE and NOSPA only available for flights to continue on UN857 or departure EDDN, EDQD, EDQM.

g. Westbound not available for destination EDDL, EDDG, EDLE, EDLM, EDLN, EDLV, EDDF, ETOU, ETID. These flights shall file via T170.

h. Westbound not available for destination ETAD, ELLX, EHBK, EBLG, EDDR, EDRZ, EDFH, EDTL, EDSB, LFSF, LFJL, LFSR, LFQA, LFQB, LFOK, except for departures LKPR, LKKB, LKVO. These flights shall file via UZ160.

UL986

a. From BOLBO to MAG FL 290 or above only for departure EPKK, EPKT. Not available for destination EDDW. These flights shall file UM748-BKD-Q870.

b. Between MAG and BOLBO eastbound only FL 290 or above and eastbound not available for departure EDVE.

c. Between MAG and POVEL not available for destination EDDV. These flights shall file T804.

d. Between BOLBO and LASIS not available for destination EPWR and EPRZ.

e. Between LASIS and BOLBO westbound only for departure EPKK, EPKT.

UM149 - Not available for destination LOWS. These flights shall file via UL607.

UM150

a. Not available for destination LFST and Frankfurt FIR.

b. Transition to UZ111 not possible.

c. After TGO not available for destination EBBR, EBMB, EBAW, EBCV, EBCI, EHEH, EHWO, EHGR, EHVK.

d. After LAMGO not available for destination LSZH, LSZR, LSMD, and EDNY. These flights shall file LAMGO-T721.

e. Not available for departure EDDF, EDDR, EDRZ, EDFH, ETAR, ETOU, ETID, EDFE, ELLX.

f. Under status CDR2 not available for departure EBBR, EBMB, EBAW, EBCV, EBCI, EHEH.

UM170

a. Between Podat and Abami not available for arrival and departure to/from Brussels FIR.

b. Between NOR and LNO not available for departure EDDK. These flights shall file NOR J906 NAVAK UY283 LNO.

c. Between PODAT-NOR not available for traffic overflying Hannover/EDBB UIR, traffic with destination and overflying EDBB FIR and EDDP, EDDC, EDDE, EDAC, EDAB.

d. Between LBE and OSN not available for destination EDLL except EDDG, EDLW.

e. At NOR transition to EDFH STAR NOR not possible.

f. Between LBE and NOR not available for destination EDDK, EDFH, EDDF, EDFE, ETOU, ETID.

UM602 - Beyond PENET not available for destn EKCH. These flights shall file T299.

UM725

a. After RODEP not available for destn EDDT, EDDI, and EDDB.

b. Between KOBUS and HDO not available for destination EDDC. These flights shall file KOBUS-P31-GARKI(IAF).

c. At KOBUS transition to (U)Z220 not possible and transition to (U)P31 only for destination EDDC.

d. At NOR transition to EDFH STAR NOR not possible.

UM726

a. Flights destn EDDM and EDMO shall file T101.

b. After MAH not available for destination EDDT, EDDI and EDDB. These flights shall file (U)L132.

c. Between ROSOK and BKD southbound only for departures ETNL and EDBH.

d. Between ANELA and NARUS FL 270 or above not available for departures EDDS, EDDF, EDFM, EDSB, EDTY.

UM736

a. Between KULOK and VIBUG not available for departure EDDT, EDDI, and EDDB.

b. Transition to T173, T222,(U)L856 and (U)L984 not possible.

c. Transition to (U)L605 not possible except destination EDME.

d. After GALMA not available for destination LOWS, LOWL, EDDM, EDMA, and EDMO. These flights shall file T703.

e. After MAG not available for destination EDDF, ETOU, ETID, EDFE, LKPR, LKKB, and LKVO.

f. Between RDG and RUDNO northbound only available for departure EDMS.

g. Between NONSA and MAG not available for destination EDDP, EDDC, and EDAC.

h. Between BUREL and GALMA even flight levels for departure EDDT, EDDI, EDDB planned to continue via UZ20 or UZ94.

i. For flights FL 270 or above transition to UZ715 not possible.

j. At RUDNO transition to (U)L604 not possible.

k. Between BUREL and MAG max. FL 280 for departure EDDT, EDDI, EDDB planned to continue via MAG-UZ20.

l. Beyond INTOK not possible for destination EDVK, EDLP. These flights shall file UZ717-BKD-B293.

UM748

a. At ESIKA, transition to (U)Z20 not possible.

b. Between HDO and ESLOR northbound not available for destination EDDT, EDDI, EDDB.

c. After RENDO, northbound not available for: destination EDVE, EDBM; destination FL 280 or below. These flights shall file via Q230-TADUV-T804.

UM852

a. Between HLZ and HAM not available for destination EDDH and EDHI.

b. Between LASTO and BIRKA not available for destination EKCH.

UM864

a. After LALUB not available for destination EDDF, ETOU, ETID, EDFE. These flights shall file via UT726-HLZ-T157.

b. Between DETNI and NONSA not available for destination EDDF, ETOU, ETID, EDFE. These flights shall file via UL87.

UM994 - Westbound minimum FL 290.

UN746 - Beyond BATUX not possible for destination EPSC. These flights shall file (U)Z717.

UN850

a. After RANAX not available for destination EDTY, EDDS. These flights shall file RANAX-Z85-ANANO-UL126-MASEK.

b. After MIC not available for destination EDDF, EDFE, ETOU, ETID. These flights shall file via T155-T157.

c. After WRB not available for destination EDFH. These flights shall file WRB-N850-GIN-Z10.

d. Between BOMBI and ABUKA not available for flights destination LFSB, LSZH, LSMD, LSZR, EDNY, EDTO, EDTF, EDTD, EDTL. Flights destination LFSB, EDTO, EDTF, EDTD, shall file BOMBI-T721-SUNEG-T715-KRH. Flights destination EDTL, LSZH, LSMD, LSZR, EDNY shall file BOMBI-T721-SUL.

e. Beyond AMETU not available for destination EDDR, EDRZ, EDSB, EDFM, EDFV, EDRY, ETAR, ETOR, ELLX, LFST, LFGA, LFSC, LFSF, LFJL.

f. After WRB not available for destination EDDM.

UN851

a. Not avialable for destination EDFM, ETOR, EDMM except EDDP, EDAC and flights with Y flight plans.

b. After LOHRE not available for destn EDDL, EDDG, EDLN and EDLW.

c. Between ROMIR and TGO not available for departure LSZH, LSZR and EDNY.

d. At MASEK transition to G5 not possible.

e. Between KEMAD and MASEK not available for departure EDDV.

f. Between KEMAD and FUL not available for destination EDDF, ETOU, ETID. These flights shall file T157-RANIN-T152.

UN858

a. Beyond MASEK not available for destn EDDT, EDDI, EDDB, EDDP and EDAC. These flights shall file MASEK-T200.

b. Not available for destination Frankfurt FIR.

c. After SOGMI not available for destination EDDE.

UN869

a. Between ANELA and DKB not available between FL 250 and FL 270. Flights concerned shall file OKG-UZ160-VADRU-UZ161-DKB.

b. Between OKG and ANELA not available for departure LKPR, LKKB, LKVO and destination EDDS. These flights shall file via UL984-KULOK-UZ715-ANELA.

c. Between OKG and ANELA not available for destination ETAR, EDFM, ETOR, EDDF, ETOU, ETID.

d. Between OKG and DKB not available for departure LKKV.

UN871

a. At KOGOL transition to (U)M726 only for destn EDDN.

b. Flights with destn EDDM, EDMA and EDMO shall file via KUDES - T102.

c. Transition to (U)M749 and (U)L605 not possible.

d. Beyond ABABI not available for destination LKPR, LKVO, LKKB, and LKPD. These flights shall file ABABI-UZ39.

e. Between BAMUR and ALGOI not available for dep LSZH and LSMD.

f. After TULSI not available for flights with destination LOWS.

UN873 - This ATS route crosses a danger area over the North Sea. IFR traffic on this route is given priority over and separation from military traffic within this danger area.

UP31

a. From GOVEN to KOBUS FL 280 or below only for destination EDDC, EDAB.

b. Between RIKLU and GOVEN northbound max. FL 270.

c. Transition to (U)L605 not possible.

d. After MAREM not available for destination EDDM, LOWS, LOWL. These flights shall fill T106.

e. Between MAREM and CERNO see publication of Czech Republic.

UP96 - Eastbound only for flights planning to continue via OKX.

UP615 - After EKERN, not available for destination EDDF, ETOU, ETID, EDFE.

UP995 - Between CHIEM and LOMRO not available for DEP EDDM.

UT23 - At NORIN, transition to (U)M726 not possible.

UT726 - Northbound only available for flights with destn: EDDH, EDHI, EDHL, EDHK.

UZ16 - At GALMA transition to (U)N858 not possible.

UZ20

a. From SUI to MAG not available at FL 290 or above for flights with destination EDDF, ETID, and ETOU. These flights shall file GOVEN-UL735-TADUV-T173-GED.

b. Not available for destination EDDP and EDAC. These flights shall file GOVEN-Q200-POGAB-Z36-BEBKU-Z220-BEBEX-Q230-NERID.

c. Not available for destination EDDW. These flights shall file UL867-RADEL-UL619-BKD-Q870.

UZ21

a. At TADUV transition to Q200 not possible.

b. After DRN not available for destination LKPR, LKKB, LKVO. These flights shall file T620.

UZ28 - Available only for dep EDDF.

UZ29

a. Only for dep EDDF.

b. Flights unable to cross BIBOS at FL 250 have to file UZ28.

UZ35 - Only for destn LKPR, LKKB, LKVO, and LKPD.

UZ36 - Departures EDDT, EDDI, EDDB with destination EDMM maximum FL 280.

UZ39 - After LALIN only for destination LKAA.

UZ94

a. After BAMKI only for departure EDDP, EDDE, EDAC.

b. Not available for destination EDDF, ETOU, ETID, EDFE.

c. Between GALMA and BAMKI max. FL 280 except for departure EDDP, EDDE, EDAC, EDBM and for flights with transition to T173.

UZ111

a. Not avialable for destination EDFF, EDDN, EDQ*.

b. Transition to UM150 not possible.

UZ112 - Only available for destination EDDS, EDSB, ETOR, EDFM, EDFV, EDRY.

UZ131 - Beyond GUDOP not available for destination EPSC. These flights shall file (U)Z871-RAKIT-Z717.

UZ160

a. Only for destination ELLX, EHBK, EBLG, EDDR, EDRZ, EDFH, EDTL, EDSB, ETAD, LFSF, LFJL, LFSR, LFQA, LFOK and for flights with Y flight plans.

b. Between OKG and VADRU additionally available for flights between FL250 and FL270 to continue via UZ161-DKB-UN869 (also see UN869).

c. Between OKG and ERETO not available for departure LKPR, LKKB, LKVO. These flights shall file UL984-KULOK-UZ715-ERETO.

UZ161 - Not available for flights with destination EDDS, EDSB, EDTY.

UZ210

a. After KRH not available for destination EBBR, EBMB, EBAW, EBCV, EBCI, EHEH, EHWO, EHGR, EHVK.

b. Not available for departure EBBR, EBMB, EBAW, EBCV, EBCI, EHEH.

c. Between PELIX and LIRSU only available for departure EHAA except EHEH, EHBK, EHBD,EHRD, EHVK, EHGR.

UZ211 - Only available for destination EBBR, EBMB, EBAW, EBCV, EBCI.

UZ220 - From BEBKU to BEBEX only available for destination EDDP, EDDE, EDAC, and EDBM.

UZ400

a. At RAKIT transition to UZ717-BODLA not possible. These flights shall file RENKI-(U)132.

b. Between RAKIT and GERGA southbound only FL 290 or above.

UZ713 - Only for flights dep Amsterdam UIR.

UZ706 - Between LENDO-NOR not available for destination EDDP, EDDC, EDDE, EDAC, EDAB, traffic overflying EDBB UIR, or traffic destination and overflying EDBB FIR.

UZ710 - Not available for destination EDDF, ETOU, EDID, EDFE.

UZ715

a. Between KULOK and ERETO, FL 300 and above only for departure EDDC, LKPR, LKKB, LKVO, EDAB and destination EDDS, EDSB, EDTY.

b. After URONA southwest-bound not available for destination EDDF, ETOU and ETID.

c. Between KULOK and PEROX max. FL 250 for departures EDDF, EDFM, EDDS, EDSB, EDTY and EDMM.

d. Between ERETO and ANELA southbound only FL 280 or above.

UZ717

a. Between ABAMI and DLE only for:
- destination/departure EBBU, EDLL and ELLX.
- departure EPWW, EYVL, EVRR, EETT and UMKK planned to continue via DLE-UL980.

b. Between AMALI and RUDEL only for destination EBBR, EBMB, EBAW and ELLX.

c. At ABAMI transition to T150 not possible.

UZ725 - Access route to lower ATS route Z11.

UZ726

a. Access route to lower ATS Route N624.

b. Not available for destn EDDN and EDDC.

UZ728 - Only available for dep ELLX, EDDR, EDRZ, EDFH, EHBK, and EBLG.

UZ729 - Not available for flights destination EDFM, ETOR, EDSB, EDDS, EDDR, EDRZ, LFST, LFGA and LFSC.

UZ738

a. Not available for departure EDLL.

b. Not available for destination EDFH.

UZ871 - Between PODUS and MAG not available for destination EDVE, EDDP, EDAC.

UZ907 - Between KOGES-KENUM not available for EDDP, EDDC, EDDE, EDAC, EDAB, traffic overflying EDBB UIR, or traffic destination and overflying EDBB FIR.

UZ920 - Only available for departure EDDS, EDSB, EDTY, EDFM.

(SPEC/CIV ENR 3.3-1 thru 3.3-73)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			GERMANY				
G21	Makot NCRP (N49°10′ E0702′)	048 228	Saarbrucken NDB (N49°13′ E07°07′)	4		FL 240 3000	EVEN ODD

NOTE: CDR1 - FL 110-FL 240, 1700Z++ Fri-0700Z++ Mon, Mon-Thu 2300-0000Z++, Tue-Fri 0000-0600Z++, and during legal holidays. Outside these times between FL 100-FL 240 not available.

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
L604	Rudno (N49°20′ E12°32′)	290T	Mooce (N49°33′ E11°32′)	41		FL 240 6000	ODD EVEN
	NOTE: CDR1 - H24, FL 100-FL 245, In case of activation of ED-R TRA 210 Sector A, expect re-routing by ATC.						
L610	Mamor NCRP (N48°53′ E12°13′) Unkul NCRP	297T	Unkul NCRP (N49°08′ E11°28′) ALB VOR/DME (N49°13′ E11°13′)	34 11		FL 240 5000	EVEN
	NOTE: CDR1 - FL 75-FL 155, H24. In case of activation of ED-R144 and/or ED-R TRA210 Sector B, expect re-routing by ATC.						
L620	Suled NCRP (N51°10′ E12°14′) Ekpek NCRP	104T	Ekpek NCRP (N50°58′ E13°19′) Besip NCRP (N50°56′ E13°29′)	43 7		FL 240 5000	ODD
	NOTE: CDR1 - FL 100-FL 240, every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: Z21.						
M150	Pites NCRP (N49°43′ E06°31′) Ladat NCRP	118T	Ladat NCRP (N49°15′ E07°50′) Karlsruhe VOR/DME	59 37		FL 240 FL 80	ODD
	NOTE: CDR 1 -Every weekend 1700Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++.						
M726	Nobri NCRP (N53°15′ E11°35′) Pambi NCRP Tagob NCRP Rosok NCRP	017T 197T 017T	Pambi NCRP (N53°24′ E11°40′) Tagob NCRP (N53°44′ W11°50′) Rosok NCRP (N54°13′ E12°05′) Nikda NCRP (N54°36′ E12°17′)	10 21 30 25		FL 240 4000	EVEN ODD
	NOTE: Between Nobri and Nikda FL 80-FL 240. CDR1 - Every weekend 1100Z++ Fri-0700Z++ Mon. CDR2 ALTN ROUTE: BKD-L619-PODUS-Z871-GUDOP-Z131-TORLO-Z400-PENET-T299-MONAK.						
M864	Nonsa NCRP (N54°36′ E13°18′) Argad NCRP	060T	Argad NCRP (N54°42′ E13°36′) Detni NCRP (N54°55′ E14°21′)	12 29		FL 240 4000	ODD EVEN
	NOTE: CDR1 - 7000-FL 240, every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: Eastbound: Z400-Bakli-Roe. Westbound: Roe-Sallo-M736.						
P992	Attus (N54°54′ E08°47)	158T 339T	Elbe VOR/DME	80		FL 240 4000	ODD EVEN
	NOTE: CDR1 - FL 80-FL 240, every weekend 1100Z++ Fri-0700Z++ Mon, every night 2300-0600Z++. CDR2 ALTN ROUTE: ALS-P615.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
P999	Helgoland VORTAC	058T 240T	Amrak (N54°49′ E09°45′)	75		FL 240 4000	ODD EVEN
	NOTE: CDR1 - FL 80-FL 100, FL 210-FL 240, H24. CDR1 - FL 110-FL 200, every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2						
Q760	Sarbrucken NDB	347T 167T	Tompi NCRP (N49°23′ E07°03′)	11		FL 240 5000	EVEN ODD
	Tompi NCRP	348T 168T	Mapig NCRP (N49°26′ E07°02′)	3			
	Mapig NCRP		Toley NCRP (N49°30′ E07°01′)	4			
	Toley NCRP		Idaro NCRP (N49°42′ E06°57′)	12			
	Idaro NCRP	354T 174T	Rudot NCRP (N49°59′ E06°54′)	17		FL 240 6000	
	NOTE: CDR 1 -1700Z++ Fri-0700Z++ Mon, 2300-0000Z++ Mon-Thu, 0000-0600Z++Tue-Fri and during legal holidays. Outside these times between FL 110 and FL 240 not available. FL 100: H24.						
Q762	Badli NCRP (N49°03′ E08°26′)	324T 144T	Manem NCRP (N49°17′ E08°11′	17		FL 100 6000	ODD EVEN
	Manem NCRP	326T 146T	Frank NCRP (N49°27′ E08°01′)	12			
	Frank NCRP	332T 152T	Bolki NCRP (N49°33′ E07°56′)	8			
	Bolki NCRP	315T 135T	Olivi NCRP (N49°46′ E07°36′)	18			
	Olivi NCRP	296T 116T	KIR VORTAC	10			
	KIR VORTAC		Rudot NCRP (N49°59′ E06°54′)	20			
	Rudot NCRP	300T	TALUK (N50°05′ E06°38′)	12			
	NOTE: CDR 1 -FL 100, H24.						
Q763	Mapig NCRP (N49°27′ E07°02′)	289T 108T	Diski NCRP (49°34′ E06°28′)	24		FL 100 6000	EVEN ODD
	NOTE: CDR1 - H24.						
T50	Lunud (FIR Boundary) (N54°48′ E09°19′)	172T 352T	Elbe VOR/DME	72		FL 240 4000	ODD EVEN
	NOTE: CDR1 - FL 80-FL 240, every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: ALS-P615						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
T104	Bombi NCRP (N50°03′ E08°48′	138T	Harem NCRP (N49°37′ E09°24′)	36		FL 660 FL 250	ODD
	Harem NCRP	131T	Dinkelsbuhl VOR/DME	43		FL 660	
	Dinkelsbuhl VOR/DME	133T	Xerum NCRP (N48°41′ E10°56′)	29		5000	
	Xerum NCRP		Buram NCRP (N48°41′ E10°56′)	10			
	Buram NCRP		Walda VOR/DME	10			
	NOTE: CDR 1 -FL 270-FL 320, FL 360-FL 460. ALTN ROUTE: By ATC.						
T105	Maxal NCRP (N49°13′ E12°44′)	206T	Vamas NCRP (N48°43′ E12°22′)	33		FL 660 6000	ODD
	Vamas NCRP	208T	Landu NCRP (N48°34′ E12°00′)	9			
	Landu NCRP	263T	Anker NCRP Mike NDB	11		FL 660 5000	
	Anker NCRP	269T 089T		16		FL 660 4000	ODD EVEN
	NOTE: CDR1 - FL 360-FL 460. ALTN ROUTE: By ATC.						
T106	Dinog NCRP (N48°37′ E12°31′)	264T	Landu NCRP (N48°36′ E12°16′)	10		FL 660 5000	EVEN
	NOTE: CDR1 - FL 360-FL 460. ALTN ROUTE: By ATC.						
T161	Ababi NCRP (N48°32′ E12°57′)	292T	Akini NCRP (N48°45′ E12°07′)	35		FL 660 5000	EVEN
	Akini NCRP (N48°48′ E11°38′)	279T	Nimdi NCRP	20			
	Nimdi NCRP		Ernas NCRP (N48°51′ E11°13′)	17			
	Ernas NCRP	318T	Redni NCRP (N49°05′ E10°53′)	19		FL 660 5500	
	Redni NCRP		Aspat NCRP (N49°12′ E10°44′)	10			
	Aspat NCRP	314T	Rotax NCRP (N49°20′ E10°31′)	11			
	NOTE: CDR1 - Akini TO Nimdi 5000-FL 120, H24. Ababi TO Rotax FL 360-FL 470. Nimdi TO Rotax FL 270-FL 320. ALTN ROUTE: By ATC.						
T172	Ekpek NCRP (N50°58′ E13°19′)	267T	Golat NCRP (N50°55′ E11°56′)	53		FL 240 5000	EVEN
	NOTE: CDR1 - FL 100-FL 240, every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 - Other times. ALTN ROUTE: (U)Z715.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
T726	Hammelburg NDB (N50°06′ E09°47′) Ralib NCRP Elmid NCRP	184T 231T	Ralib NCRP (N49°27′ E09°43′) Elmid NCRP (N48°50′ E09°39′) Tango DVORTAC (48°37′ E09°16′)	39 38 20		FL 660 FL 250	ODD
	NOTE: CDR1 - FL 270-FL 320, FL 360-FL 460. ALTN ROUTE: By ATC.						
T890	Rudot NCRP (N49°59′ E06°54′)	227T	Vetil NCRP (N49°45′ E06°31′)	20		FL 100 6000	EVEN
	NOTE: CDR 1 -FL 100, H24.						
W718	Nekom NCRP (N49°20′ E08°43′) Manem NCRP Ladat NCRP Zweibrucken VOR/DME	263 083 267 087	Manem NCRP (N49°17′ E08°11′) Ladat NCRP (N49°15′ E07°50′) Zweibrucken VOR/DME Saarbrucken NDB	21 14 17 12		FL 100 5000	EVEN ODD
	NOTE: CDR 1 -FL 100, H24.						
Y101	Givmi NCRP (N48°42′ E11°22′) Ernas NCRP Ermel NCRP	326T 342T 330T	Ernas NCRP (N48°51′ E11°13′) Ermel NCRP (N49°11′ E11°03′) Inbed NCRP (N49°23′ E10°56′)	10 22 13		FL 660 3500 FL 660 5000	EVEN
	NOTE: CDR1 - FL 270-FL 320, FL 360-FL 470. ALTN ROUTE: By ATC.						
Y102	Allersberg VOR/DME (N49°13′ E11°13′) Tenlo NCRP	340T	Tenlo NCRP (N49°13′ E11°13′) Sulus NCRP (N50°04′ E10°44′)	20 35		FL 660 5000	EVEN
	NOTE: CDR1 - FL 270-FL 320, FL 360-FL 470. ALTN ROUTE: By ATC.						
Y103	Eviva NCRP (N48°40′ E11°42′)	341T	Nimdi NCRP (N48°48′ E11°38′)	9		FL 260 3000	EVEN
	NOTE: CDR1 - Eviva to Nimdi 3000-FL 120, H24. ALTN ROUTE: In case of activation of ED-R138 expect re-routing by ATC.						
Y107	Amexo NCRP (N48°06′ E10°48′) Amemi NCRP	244T	Amexo NCRP (N47°53′ E10°10′) Raved NCRP (N47°44′ E09°40′)	29 23		FL 660 6000	EVEN
	NOTE: Outside these times, only available by ATC.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Y109	Ermel NCRP (N49°11′ E11°03′) Tenlo NCRP	360T 340T	Tenlo NCRP (N49°32′ E11°03′) Sulus NCRP (N50°05′ E10°44′)	20 35	FL 140	FL 660 5000	EVEN
	NOTE: CDR1 - FL 270-FL 320, FL 360-FL 470. ALTN ROUTE: By ATC.						
Y161	Nombo NCRP (N49°04′ E10°05′) Elvag NCRP	137T	Elvag NCRP (N48°57′ E10°15′) Nordlingen NDB	9 10		UNLTD 5000	ODD
	Nordlingen NDB Dodil NCRP Ridar NCRP	133T	Dodil NCRP (N48°44′ E10°34′) Ridar NCRP (N48°35′ E10°48′) Maisach DVOR/DME	9 13 28		UNLTD 6000 UNLTD 4000	
	Maisach DVOR/DME	104T	Munchen VOR/DME	21			
	NOTE: CDR1 - FL 270-FL 320, FL 360-FL 460. ALTN ROUTE: By ATC.						
Y162	Maisach DVOR/DME	138T	Manal NCRP (N47°54′ E11°48′)	29		UNLTD 6000	ODD
	NOTE: CDR1 - FL 270-FL 310, FL 370-FL 460. ALTN ROUTE: By ATC.						
Y282	Lima NDB	334T	Napsi (N51°51′ E07°01′)	33		FL 240 4000	EVEN
	NOTE: CDR1 - Every weekend 1600Z++ Fri-0800Z++ Mon. Every night 2200-0700Z++ Mon-Fri. Outside these times only available by ATC.						
Y850	Arter NCRP (N52°12′ E07°47′)	046T	Basum NCRP (N52°46.9′ E08°47.3′)	50		UNLTD FL 250	ODD
	NOTE: CDR1 - FL 250-FL 280, FL 370-FL 450; H24. CDR1 - FL 290-FL 350, every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++ Mon-Fri. CDR2						
Z12	Frank NCRP (N49°27′ E08°01′) Badot NCRP	104T 284T	Badot NCRP (N49°25′ E08°11′) Nekom NCRP (49°20′ E08°11′)	7 22		FL 100 5000	ODD EVEN
	NOTE: CDR 1 -H24.						
Z15	Brukendorf DVOR/DME (N53°02′ E11°01′) Gubto NCRP Perom NCRP	034T 215T	Gubto NCRP (N53°45′ E12°19′) Perom NCRP (N54°28′ E13°08′) Nonsa NCRP (N54°36′ E13°18′)	51 52 10		FL 240 4000	ODD EVEN
	NOTE: CDR1 - FL 80-FL 240, every weekend 1100Z++ Fri-0700Z++ Mon. CDR2 ALTN ROUTE: M736, L619.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Z100	Idaro NCRP (N49°42′ E06°57′)	039T 219T	Hahn NDB	20		FL 100 6000	ODD EVEN
	NOTE: CDR 1 -H24.						
Z102	Berim NCRP (N53°44′ E11°28′)	86T 269T	Tagob NCRP (N53°44′ E11°50′)	13		FL 240 4000	ODD EVEN
	Tagob NCRP		Gubto NCRP (N53°45′ E12°19′)	18			
	Gubto NCRP		Legsa NCRP (N53°45′ E12°47′)	17			
	Legsa NCRP		Gevni NCRP (N53°46′ E13°29′)	25			
	Gevni NCRP		Friedland DVOR/DME (N53°46′ E13°34′)	3			
	NOTE: CDR1 - FL 80-FL 240 1100Z++ Fri-0700Z++ Mon. CDR2 ALTN ROUTE: W93, L619, L87.						
Z104	Langi NCRP (N49°29′ E10°47′)	293T	WUR VOR (N49°43′ E09°57′)	35		FL 660 5000	EVEN
	NOTE: CDR1 - FL 270-FL 320, FL 360-FL 470. ALTN ROUTE: By ATC.						
Z717	EXOBA NCRP (N51°46′ E08°20′)	244 061	MAREK NCRP (N51°41′ E08°05′)	10		FL 240 FL 120	EVEN ODD
	MAREK NCRP	244 061	SUKAM NCRP (N51°36′ E07°48′)	12			
	NOTE: CDR1 - FL 120-FL 150, every weekend 1100Z++ Fri-0600Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: OSN-HMM-SUKAM						
Z729	Badli NCRP (N49°03′ E08°26′)	284T 104T	Gerku NCRP (N49°05′ E08°17′)	7		FL 230 5000	EVEN ODD
	Gerku NCRP	284T 104T	Pirek NCRP (49°10′ E07°45′)	21			
	Pirek NCRP		Zweibrucken VOR/DME	14			
	Zweibrucken VOR/DME	305T 125T	Tompi NCRP (N49°23′ E07°03′)	17			
	NOTE: CDR1 - Between BADLI and TOMPI, FL 100 H24 CDR1 -Between BADLI and TOMPI, FL 110-FL 230 available 1700Z++ Fri-0700Z++ Mon and during legal holidays exclusively for departure ELLX, and EDFH to continue after BADLI via Y163/Y164. Outside these times FL 110-FL 230 not available.						
UG10	Elbe VOR/DME	234	Weser VOR/DME	32		UNLTD FL 250	EVEN
	Weser VOR/DME	263 083	Dobak (N53°13′ E07°13′)	60			EVEN ODD
	NOTE: CDR1 - FL 250-FL 280, for ARR/DEP to/from Bremen FIR only. CDR1 -FL 250-FL 350, 1100Z++ Fri-0700Z++ Mon. CDR2 -FL 250-FL 350, 0700Z++ Mon-1100Z++ Fri.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UJ158	Barmen VORTAC	233	Ageni (N50°45′ E06°02′)	56		UNLTD FL 250	EVEN
	NOTE: CDR1 - Every weekend 1700Z++ Fri-0600Z++ Mon, every night 2300-0600Z++. CDR2						
UL126	Hammelburg NDB	164T	Wurzburg VOR	24		UNLTD FL 250	ODD
	Wurzburg VOR	149T	Dinku NCRP (N49°14′ E10°23′)	34			
	NOTE: CDR1 - FL 270-FL 320, FL 360-FL 460. ALTN ROUTE: By ATC.						
UL132	MAH VOR/DME (N48°16′ E11°19′)	044T	Mamor NCRP (N48°53′ E12°13′)	52		FL 660 FL 250	EVEN
	Mamor NCRP	025T	Rudno NCRP (N49°20′ E12°32′)	30			
	NOTE: CDR1 - MAH TO Rudno FL 360-FL 470. MAH TO Mamor FL 270-FL 320. ALTN ROUTE: By ATC.						
UL173	Munchen VOR/DME	284T	Maisach DVOR/DME	21		UNLTD FL 250	EVEN
	NOTE: CDR1 - FL 270-FL 320. ALTN ROUTE: By ATC.						
UL603	Esati NCRP (N50°04′ E09°11′)	136T	Detev NCRP (N49°49′ E09°33′)	20	FL 660	UNLTD FL 250	ODD
	Detev NCRP		Dinku NCRP (N49°14′ E10°23′)	48			
	Dinku NCRP	136T	Akanu NCRP (N49°06′ E10°35′)	12			
	Akanu NCRP		Tegba NCRP (N48°35′ E11°21′)	43			
	Tegba NCRP	142T	Munchen VOR/DME (N48°11′ E11°49′)	30			
	NOTE: CDR1 - FL 270-FL 320, FL 360-FL 4700 ALTN ROUTE: By ATC.						
UL605	Ridar NCRP (N48°35′ E10°48′)	092T 273T	Walda DVOR/DME	13		UNLTD FL 250	ODD EVEN
	Walda DVOR/DME	092T 272T	Tegba NCRP (N48°35′ E11°21′)	9			
	Tegba NCRP		Mike NDB	10			
	Mike NDB	102T 283T	Vibug NCRP (N48°26′ E12°28′)	35			
	Vibug NCRP		Eggenfelden NDB	12			
	NOTE: CDR1 - Between Ridar and MIQ, FL 270-FL 320. Between Ridar and EGG, FL 360-FL 470. ALTN ROUTE: By ATC.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL607	Abuka NCRP (N49°27′ E08°40′) Suneg NCRP	155T	Suneg NCRP (N49°11′ E08°51′) Tango VORTAC	18 38		UNLTD FL 250	ODD
	NOTE: CDR1 - FL 360-FL 460 ALTN ROUTE: By ATC.						
UL608	Tango VORTAC Suneg NCRP	336T	Suneg NCRP (N49°11′ E08°51′) Abuka NCRP (N49°27′ E08°40′)	38 18		UNLTD FL 250	EVEN
	NOTE: CDR1 - FL 360-FL 460 ALTN ROUTE: By ATC.						
UL610	Staub NCRP (N48°47′ E12°39′) Mamor NCRP Unkul NCRP ALB VOR/DME Inbed NCRP Langi NCRP Vadru NCRP	291T 297T 314T 300T	Mamor NCRP (N48°53′ E12°13′) Unkul NCRP (N49°08′ E11°28′) ALB VOR/DME Inbed NCRP (N49°23′ E10°57′) Langi NCRP (N49°29′ E10°47′) Vadru NCRP (N49°44′ E10°23′) Lohre NCRP (N50°04′ E09°29′)	18 34 11 15 9 22 40		FL 660 FL 250	EVEN
	NOTE: CDR1 - Between Staub and Lohre FL 360-FL 470. CDR1 - Between ALB and Lohre FL 270-FL 320. ALTN ROUTE: By ATC.						
UL620	Suled NCRP (N51°10′ E12°14′) Taleg NCRP Ekpek NCRP	102T	Taleg NCRP (N51°05′ E12°37′) Ekpek NCRP (N50°58′ E13°19′) Besip NCRP (N50°56′ E13°29′)	15 28 7		UNLTD FL 250	ODD
	NOTE: CDR1 - FL 250-FL 350, every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: UZ21.						
UM150	Pites NCRP (N49°43′ E06°31′)	118T	Karlsruhe VOR/DME	92		UNLTD FL 250	ODD
	NOTE: CDR1 - Every weekend 1700Z++-Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 -Other times ALTN Route: via SPI-UL607.						
UM170	Elbe VOR/DME Stade NCRP Basum NCRP	209T 028T	Stade NCRP (N53°30′ E09°27′) Basum NCRP (N52°46′ E08°47′) Osnabruck DVOR	11 50 39		UNLTD FL 250	EVEN ODD
	NOTE: CDR1 - FL 290-FL 350, 1100Z++ Fri-0700Z++ Mon. CDR2 ALTN ROUTE: UG9, UL126.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM726	Konin NCRP (N47°51′ E11°21′)	357T	MAH DVOR/DME (N48°16′ E11°19′)	25		FL 660 FL 250	EVEN
	MAH DVOR/DME	354T	Ernas NCRP (N48°50′ E11°13′)	35			
	Ernas NCRP	360T	ALB VOR/DME (N49°13′ E11°13′)	22			
	ALB VOR/DME		Kemes NCRP (N49°33′ E11°13′)	20			
	Kemes NCRP		Anela NCRP (N49°46′ E11°13′)	13			
	NOTE: CDR1 - Between Konin and ALB VOR/DME FL 270-FL 320. Between Konin and Anela FL 360-FL 470. ALTN ROUTE: By ATC.						
	Nobri NCRP (N53°15′ E11°35′)	017T	Pabmi NCRP (N53°24′ E11°40′)	10		FL 660 FL 250	EVEN ODD
	Pambi NCRP		Tagob NCRP (N53°44′ E11°50′)	21			
	Tagob NCRP		Rosok NCRP (N54°13′ E12°05′)	30			
	Rosok NCRP	017T	Nikda NCRP (N54°36′ E12°17′)	25			EVEN
	NOTE: Between Nobri and Nikda. CDR 1 -FL 310-FL 350, H24. CDR 1 -FL 250-FL 300 every weekend 1100Z++ Fri-0700Z++ Mon, every night 2300Z++-0600Z++. CDR 2 -Other times. ALTN ROUTE: BKD-UZ717-BATUX-UZ131-TORLO-UZ400-PENET-T299-MONAK.						
UM736	Nonsa NCRP (N54°36′ E13°18′)	200T	Legsa NCRP (N53°45′ E12°47′)	54		FL 660 FL 250	ODD
	Legsa NCRP (N53°05′ E12°14′)	206T	Intok NCRP (N53°05′ E12°14′)	50			
	NOTE: CDR1 - FL 310-FL 350, H24. CDR1 - FL 250-FL 300, 1100Z++ Fri-0700Z++ Mon. CDR2 - FL 250-FL 300, 0700Z++ Mon-1100Z++ Fri. ALTN ROUTE: NONSA-UM725-RITEV-UZ130-EBARA-UZ717-INTOK.						
UM852	Ekern NCRP (N54°30′ E09°52′)	166T 346T	Hamburg VORTAC	51		UNLTD FL 250	ODD EVEN
	NOTE: CDR1 - FL 250-FL 280, every weekend 1100Z++ Fri-0700Z++ Mon, every night 2300-0600Z++ Mon-Fri. CDR2						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM864	Sorit NCRP (N52°58′ E11°05′)	038T 220T	Pabmi NCRP (N53°24′ E11°40′)	33		UNLTD FL 250	ODD EVEN
	Pabmi NCRP		Nuven NCRP (N53°44′ E12°08′)	26			
	Nuven NCRP		Perom NCRP (N54°28′ E12°08′)	56			
	Perom NCRP	034T 214T	Nonsa NCRP (N54°36′ E13°18′)	10			
	Nonsa NCRP	062T 243T	Argad NCRP (N54°42′ E13°36′)	12			
	Argad NCRP		Asdin NCRP (N54°50′ E14°06′)	19			
	Asdin NCRP		Detni NCRP (N54°55′ E14°21′)	10			
	NOTE: CDR1 - FL 310-FL 350 H24. CDR1 -FL 250-FL 300 every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: South-westbound: KOLJA-UN746-GORPI-UL87-RAKIT-UZ717-AMALI. North-eastbound: AMALI-UZ717-BATUX-UN746-KOLJA.						
UN850	Bombi NCRP (N50°03′ E08°48′)	188T	Abuka NCRP (N49°08′ E08°37′)	56		UNLTD FL 250	ODD
	NOTE: CDR1 - FL 360-FL 460. ALTN ROUTE: By ATC.						
UN851	Tango DVORTAC	006T	Harem NCRP (N49°37′ E09°25′)	60		FL 660 FL 250	EVEN
	Harem NCRP		Lohre NCRP (N50°04′ E09°29′)	27			
	NOTE: CDR1 - FL 360-FL 460. ALTN ROUTE: By ATC.						
UN869	Kegos NCRP (N49°39′ E11°03′)	226T	Noras NCRP (N49°24′ E10°39′)	22		FL 660 FL 280	EVEN
	Noras NCRP		Dinkelsbuhl DVORTAC	23		FL 660	
	Dinkelsbuhl DVORTAC	231T	Tango DVORTAC	50		FL 250	
	NOTE: CDR1 - FL 270-FL 320, FL 360-FL 460. ALTN ROUTE: By ATC.						
UP605	Osnabruck DVOR	037T	Valki NCRP (N53°12′ E08°17′)	71		UNLTD FL 250	ODD
	Valki NCRP		Hamburg DVORTAC	42			
	NOTE: CDR1 - FL 290-FL 350, Fri 1100Z++-Mon 0700Z++. CDR2 ALTN ROUTE: UL980, UL190.						
UP615	Elbe VOR/DME	010T 191T	Ekern NCRP (N54°30′ E09°52′)	52		UNLTD FL 290	ODD EVEN
	NOTE: CDR1 - FL 250-FL 280, every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ102	Hamburg DVORTAC (N53°41′ E10°12′)	86T 269T	Berim NCRP (N53°43′ E11°28′)	45		UNLTD FL 250	ODD EVEN
	Berim NCRP		Tagob NCRP (N53°44′ E11°50′)	13			
	Tagob NCRP		Gubto NCRP (N53°45′ E12°19′)	18			
	Gubto NCRP		Legsa NCRP (N53°45′ E12°47′)	17			
	Legsa NCRP		Gevni NCRP (N53°46′ E13°29′)	25			
	Gevni NCRP		Friedland DVOR/DME (N53°46′ E13°34′)	3			
	NOTE: CDR1 - FL 310-FL 350 H24. CDR1 -FL 250-FL 300 1100Z++ Fri-0700Z++ Mon. CDR2 ALTN ROUTE: UM852, UL619, UL87.						
UZ111	Pites NCRP (N49°43′ E06°31′)	053T	Obiga NCRP (N50°01′ E07°08′)	30		UNLTD FL 250	ODD
	NOTE: CDR1 - FL 250 up to UNLTD. Every weekend 1700Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 -Other times ALTN Route: LIMGO-UN858.						
UZ210	Karlsruhe VOR/DME	311T	Nospa NCRP (N50°01′ E06°42′)	96		UNLTD FL 250	EVEN
	NOTE: CDR1 - FL 250 up to UNLTD. Every weekend 1700Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 -Other times ALTN Route: eastbound: PELIX-UL607, westbound: TGO-UL608-LIRSU.						
UZ700	Lekmo (UIR Boundary) (N53°26′ E06°55′)	062T	Nikil NCRP (N53°33′ E07°15′)	14		UNLTD FL 250	ODD
	Nikil NCRP		Movax NCRP (N54°05′ E09°00′)	70			
	Movax NCRP		Giter (UIR Boundary) (N54°39′ E11°00′)	77			
	NOTE: CDR1 - Every weekend 1900Z++ Fri-0700Z++ Sat, 1300Z++ Sat-0700Z++ Mon. CDR2 ALTN ROUTE: UN873						
UZ701	Gobot (N54°37′ E11°05′)	244T	Abano NCRP (N54°08′ E09°30′)	63		UNLTD FL 250	EVEN
	Abano NCRP		Gastu NCRP (N53°38′ E08°00′)	61			
	Gastu NCRP		Lugum (N53°18′ E07°04′)	39			
	NOTE: CDR1 - Every weekend 1900Z++ Fri-0700Z++ Sat, 1300Z++ Sat-0700Z++ Mon. CDR2 ALTN ROUTE: UN872.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ702	Sopix (N53°21′ E06°55′)	040T	Nikil NCRP (N53°33′ E07°15′)	17		UNLTD FL 250	ODD
	Nikil NCRP	042T	Mebus NCRP (N54°24′ E08°33′)	69			
	Mebus NCRP		Medel (N54°50′ E09°14′)	35			
	NOTE: CDR1 - Every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: UN873.						
UZ703	Kesur NCRP (N54°50′ E09°53′)	223T	Lisbu NCRP (N54°43′ E09°41′)	10		UNLTD FL 250	EVEN
	Lisbu NCRP		Malid NCRP (N54°39′ E09°34′)	6			
	Malid NCRP		Bados NCRP (N54°22′ E09°08′)	23			
	Bados NCRP		Gastu NCRP (N53°38′ E08°00′)	60			
	Gastu NCRP		Sipsa NCRP	45			
	NOTE: CDR1 - Every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: UN872.						
UZ706	Mobsa NCRP (N52°12′ E08°27′)	038T	Mabas NCRP (N53°31′ E10°17′)	103		UNLTD FL 250	EVEN
	NOTE: CDR1 - Every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: UM170, UP605.						
UZ707	Michaelsdorf DVOR	223T	Gulmi NCRP (N52°54′ E08°51′)	114		UNLTD FL 250	ODD
	Gulmi NCRP		Komot NCRP (N51°38′ E07°04′)	101			
	Komot NCRP (N51°38′ E07°04′) Akuxo (N50°52′ E06°04′)		Akuxo (N50°52′ E06°04′)	59			
	NOTE: CDR1 - Every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: UL126, UM170						
UZ708	Agisu (N53°53′ E06°30′)	030T	Kugal (N55°00′ E07°37′)	78		UNLTD FL 250	ODD
	NOTE: CDR1 - Every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: UN873.						
UZ709	Lanul (N55°00′ E07°42′)	210T	Kuvek (N53°44′ E06°30′)	87		UNLTD FL 250	EVEN
	NOTE: CDR1 - Every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++. CDR2 ALTN ROUTE: UN873, UA7.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ710	Warburg DVOR/DME	354T 173T	Gulmi NCRP (N52°54′ E08°51′)	84		UNLTD FL 250	EVEN ODD
	Gulmi NCRP		Mebus NCRP (N54°24′ E08°33′)	91			
	Mebus NCRP		Lutir (N55°04′ E08°25′)	40			

NOTE: CDR1 - Every weekend 1100Z++ Fri-0700Z++ Mon. Every night 2300-0600Z++.
CDR2
ALTN ROUTE: UL126, UP992.

(SPEC/CIV and MIL ENR 3)

TACAN ROUTES -

1. TB6 - In case of radio failure, aircraft shall change flight level in accordance with the filed flight plan: for southeastbound traffic between NOR and BANIM only after BANIM or for northwestbound traffic between BANIM and NOR only after NOR.

(SPEC/MIL ENR 3.2-5)

2. TG2 - Available Mon, Tue, Wed, Fri (0000-0600Z++, 1600-2359Z++) Thu (0000-1000Z++, 1600-2359Z++) Sat, Sun and French bank holidays (H24).

(SPEC/MIL ENR 3.2-6)

3. TR9 - TR9 shall be used for northwestbound flights only. Adherence to direction does not apply to flights bound for Ingolstadt/Manching (ETSI), Neuburg (ETSN), and Erding (ETSE) and/or to flights continuing to proceed from these locations according to VFR.

(SPEC/MIL ENR 3.2-7)

4. Monchengladbach (EDLN) - Departing flights intending to proceed via Brussels FIR/UIR above FL 100 shall file via MAS-ERIGO, MODRU-NAVAK, or B29, if available.

(SPEC/NOTAM A0286-02)

TERMINAL

NOISE ABATEMENT PROCEDURES -

1. The following takeoff and approach noise abatement procedures are applicable to all aircraft operating to/from civil airports in Germany.

a. Takeoff

(1) Subsonic jet aircraft certified for air worthiness prior to 6 Oct 1977:

(a) Takeoff to 1500′ AGL - Takeoff power, takeoff flaps, climb at takeoff safety speed (V2)+10KIAS (or as limited by body angle),

(b) At 1500′ AGL-Reduce power to not less than climb power;

(c) 1500′ AGL to 3000′ AGL-Climb at takeoff safety speed (V2)+10KIAS;

(d) At 3000′ AGL-Normal speed and flap retraction schedule to enroute climb.

(2) Subsonic jet aircraft certified for air worthiness on or after 6 Oct 1977 and B737-200 aircraft:

(a) Takeoff to 1500′ AGL-Takeoff power, takeoff flaps, climb at takeoff safety speed (V2)+10KIAS (or as limited by body angle).

(b) At 1500′ AGL-Reduce power to not less than climb power, acceleration and retraction of flaps, normal transition to enroute climb.

b. Approach

(1) Pilots should arrange their flights to depart the IAF at a speed which permits operation of the aircraft in clean configuration. This speed should be maintained until reaching a point approximately 12 NM track distance from touchdown. 210 ± 10 KIAS is recommended for this portion of the approach unless a higher airspeed is required for performance reasons.

(2) The subsequent portion of the approach up to a point shortly prior to or over the outer marker should be flown at 160 ±10 KIAS using an intermediate flap setting as appropriate for the type of aircraft concerned with the landing gear retracted. This phase will normally include the transition from level flight to descent on the glide slope which should be intercepted at a height not lower than 3000′ above TDZE.

(3) Landing configuration should be established shortly prior to or over the Outer Marker, i.e., at this time the landing gear would be extended, the flaps set for landing and the final approach speed be established.

NOTE: It is recommended to all pilots to apply these procedures except when safety reasons (e.g. engine failure) do not permit their application.

NOTE: Due to the modification in piloting techniques and cockpit procedures, the application of noise abatement procedures should be approved by the appropriate authority responsible for the operation of the concerned aircraft.

NOTE: These procedures may require modifications due to local requirements or for certain types of engines.

c. COMMUNICATIONS REQUIREMENTS - There is extreme congestion on NATO combined frequencies in the Ramstein and Frankfurt areas. The difficulty in maintaining contact between aircraft and ATC facilities on these frequencies presents a serious flight safety hazard. To the maximum extent possible, aircraft

equipped with 18 channel UHF radio should have primary approach control and GCA frequencies preset, aircraft with radio which can be tuned in flight must use these primary frequencies.

WARNING: UHF equipped aircraft not channelized on primary frequencies are subject to diversion when congestion on NATO combined frequencies dictates such action in the interests of safety.

d. PRACTICE GCA LOW APPROACHES - Permitted only with prior clearance by the approach control facility concerned at night or any time weather is less than 2,500′ and 5.0 NM. This includes a second approach by a flight leader when wingman lands on first approach. Prior clearance may be obtained from approach control before commencing penetration.

e. SPANGDAHLEM - Transient aircraft are encouraged to make approaches from IAP only. Airspeeds must be in consonance with noise abatement and safety considerations (350K or below). Approaches to the runway within 5 NM must be on runway centerline.

(1) Aircraft will avoid overflying towns below 3700′ MSL as much as possible, within the airport CTA and vicinity.

(2) VFR DEPARTURE JET AIRCRAFT: Runway 23, when safely airborne, but not earlier than midfield, turn left to 200°. Abeam the departure end, turn further left and fly an approximate heading of 120° equidistant between the towns of ZEMMER and HERFORST, then turn to either 090° or 180° until crossing the Mosel River. Climb at 350 KIAS maximum until above 3700′ MSL or until crossing the Mosel River. Flights heading north, flying mid-level, may turn north once above 3700′ MSL, avoiding overflights of all towns. All flight members will avoid direct overflight of all towns in the local area and are encouraged to climb above 3700′ MSL as soon as possible.

(3) Arriving aircraft (overhead traffic pattern) will be instructed to avoid overflying all towns in the vicinity of the airport. VFR aircraft descending below traffic pattern altitude must do so with intent to land.

(4) Overflying the town of Spangdahlem and US housing area below 3000′ MSL is prohibited.

(5) Expect increased bird activity of Lapwings, Culvers, Starlings and Larks during periods 15 February thru 15 May and 15 August thru 15 November.

(AFFSA/XOIA FIL #19)

2. VISUAL APPROACHES - All aircraft flying visual approaches should avoid overflight of cities and villages unless operationally necessary. Aircraft flying a visual approach to Runway 27 from due East are requested to fly a ground track that follows Autobahn 6 North of Kiaserslautern (RMS/085007).

3. ILS ARRIVAL PROCEDURES - Aircraft arriving at Ramstein should employ the same noise abatement procedures as specified for German Civil airfields, however, airspeeds will be at pilot's discretion. In lieu of the outer marker, use the final approach fix for establishing landing configuration. Formation flights and fighters are exempt.

4. MINIMIZE REVERSE THRUST - Aircraft landing at Ramstein are requested to limit the use of reverse thrust to the maximum extent consistent with safety of flight. Tactical landing training is exempt.

5. VFR DEPARTURES -

a. FIGHTER: All fighters must climb to 4,000′ MSL or higher and follow prescribed departure paths for noise abatement purposes.

(USAFE/USAFE FIL 03/03)

6. Spangdahlem AB (ETAD)

a. Arrival/Departure Procedures

(1) Transient aircraft are encouraged to make approaches from IAP only. Airspeeds must be in conconance with noise abatement and safety considerations (350K or below). Approaches to the runway within 5 NM must be on runway centerline.

(2) Aircraft will avoid overflying towns below 3700′ MSL as much as possible, within the airport CTA and vicinity.

(3) VFR DEPARTURE JET AIRCRAFT: Runway 23, when safely airborne, but not earlier than midfield, turn left to 200°. Abeam the departure end, turn further left and fly an approximate heading of 120° equidistant between the towns of ZEMMER and HERFORST, then turn to either 090° or 180° until crossing the Mosel River. Climb at 350 KIAS maximum until above 3700′ MSL or until crossing the Mosel River. Flights headng north, flying mid-level, may turn north once above 3700′ MSL, avoiding overflights of all towns. All flight members will avoid direct overflight of all towns in the local area and are encouraged to climb above 3700′ MSL as soon as possible.

(4) Arriving aircraft (overhead traffic pattern) will be instructed to avoid overflying all towns in the vicinity of the airport. VFR aircraft descending below traffic pattern altitude must do so with intent to land.

(5) Overflying the town of Spangdahlem and US housing area below 3000′ MSL is prohibited.

(AFFSA/XOIA FIL #19)

b. Taxi and Ramp Procedures

(1) Helicopters and non-based aircraft with a wing span of 54 feet or larger are not permitted to use the portion of Taxiway A through the aircraft parking area due to insufficient wing/rotor clearance. C130 aircraft or smaller, to include helicopters, may taxi across Taxiway A between Ramps 3 and 4.

(2) C5 and B747 aircraft must use Taxiways A, B, C or D and that portion of Taxiway P in between. These aircraft require wing-walker assistance when passing the PAR reflector wires on Taxiway P.

(3) Aircraft with a wingspan of 166 feet or greater will not use Twy G.

(4) Heavy aircraft will not use Taxiway E.

(5) Taxiway F is available for 52 FW aircraft use only.

(52nd OSS-OSAM/USAF FIL 01-71)

TERMINAL AREA PROCEDURES - Wiesbaden AAF (ETOU)

1. IFR flights to Wiesbaden AAF (ETOU) area airports see FIH, Section A for supplementary arrival procedures.

(USAASD-E/USA 02-0044)

2. See Ansbach AHP (ETEB) entry.

(USAASD-E/USA 02-0093)

AERIAL REFUELING

AERIAL REFUELING TRACKS/ANCHOR AREAS - See Chapter 2, Section B, AERIAL REFUELING TRACKS/ANCHOR AREAS for Chart.

TRACK	ARIP	ANCHOR POINT	ANCHOR PATTERN	REFUELING ALTITUDES	ATC CONTROL
GERMANY					
Refueling area or orbit requests are coordinated by the National Air Policing Center Germany - Flight Operations - C ++49 (0) 2824-978-3233 or 3235, Fax ++49 (0) 2824-978-3229. Written request will be submitted no later than 0900Z++ the day prior to operations, or the Friday before weekend or Monday operations. Submissions should include the following: ED-R or ED-D area; date and time (30min cycles); altitudes; number and type aircraft; type of activity; agency and point of contact. Confirmation of airspace reservation should be received by 1400Z++ the day prior. German Tactical Air Command and Control Service (Call sign: Roundup in North; Sunrise in East; Sweetapple in South; Loneship in West) frequency for all areas is 363.1.					
ANGIE	CLR 074/29 N48°03.34′ E08°06.34′ (Note 1)	CLR 046/53 N48°36.30′ E08°21.79′	CLR 031/48 CLR 046/53 N48°36.30′ N48°31.49′ E08°02.00′ E08°21.79′ CLR 050/20 CLR 074/29 N48°08.10′ N48°03.34′ E07°46.70′ E08°06.34′	FL 200/FL 230 Base FL 210	Langen Radar
REMARKS: For large scale NATO exercise use only. Note: Host defined Rendezvous Point, CLR 058/39, N48°16.08′ E08°13.29′. Anchor area protected up to 4 NM outside of defined anchor pattern. Pattern: left hand racetrack, mag course 019/199, leg length 30 NM, leg separation 14 NM. **NOTE 1:** ARIP not defined by host country.					
GINI	WUN 272/62 N52°28.69′ E07°44.81′ (Note 1)	WUN 304/47 N52°53.47′ E08°22.99′	WUN 306/60 WUN 304/47 N53°03.05′ N52°53.47′ E08°06.13 E08°22.99′ WUN 279/73 WUN 272/62 N52°38.18′ N52°28.69′ E07°27.97′ E07°44.81′	FL 270/FL 300 Base FL 290	Lippe Monitor 345.15
REMARKS: Anchor located within ED-R302 (TRA). Note: ED-R34 A+B inside of ED-R302, 4 NM NW of anchor pattern. Pattern: left hand racetrack, mag course 043/223, leg length 34 NM, leg separation 14 NM. **NOTE 1:** ARIP not defined by host country.					
GRETCHEN	TGO 122/31 N48°20.29′ E09°54.91′ (Note 1)	TGO 122/61 N48°04.44′ E10°32.98′	TGO 107/63 TGO 122/61 N48°17.96′ N48°04.44′ E10°45.73′ E10°32.98′ TGO 95/35 TGO 122/31 N48°33.88′ N48°20.29′ E10°07.56′ E09°54.91′	FL 270/FL 300 Base FL 290	Munchen Monitor 277.725 283.675
REMARKS: Plan entry and exit via TGO VORTAC. Anchor located within ED-R307 (TRA). **Note:** Wertachtal High Intensity Radio Transmission Area (HIRTA) located on the SE end of anchor pattern at N48°05.25' E010°41.72' with a 7 NM radius from gnd/33400ft MSL. Pattern: left hand racetrack, mag course 121/301, leg length 30 NM, leg separation 16 NM. **NOTE 1:** ARIP not defined by host country.					
GRETCHEN LOW	TGO 147/49 N47°55.64′ E09°55.85′ (Note 1)	TGO 111/59 N48°15.68′ E10°38.65′	TGO 104/51 TGO 111/59 N48°23.89′ N48°15.68′ E10°30.11′ E10°38.65′ TGO 147/39 TGO 147/49 N48°03.80′ N47°55.64′ E09°47.25′ E09°55.85′	FL 110/FL 150 Base FL 130	Munchen Monitor 277.725 283.675
REMARKS: Anchor located within ED-R207 (TRA). Note: Wertachtal High Intensity Radio Transmission Area (HIRTA) located SE of anchor pattern at N48°05.25' E010°41.72' with a 7 NM radius from gnd/33400ft MSL. Pattern: left hand racetrack, mag course 054/234, leg length 35 NM, leg separation 10 NM. **NOTE 1:** ARIP not defined by host country.					

TRACK	ARIP	ANCHOR POINT	ANCHOR PATTERN	REFUELING ALTITUDES	ATC CONTROL
JOJO	NOR 007/20 N51°10.42′ E06°45.43′ (Note 1)	NOR 356/50 N51°39.85′ E06°36.38′	NOR 342/50 NOR 356/50 N51°37.55′ N51°39.85′ E06°17.48′ E06°36.38′ NOR 332/20 NOR 007/20 N51°08.15′ N51°10.42′ E06°26.71′ E06°45.43′	FL 270/FL 300 Base FL 290	Lippe Radar

REMARKS: Anchor area protected up to 4 NM outside defined anchor pattern. Pattern: left hand racetrack, mag course 169/349, leg length 30 NM, leg separation 12 NM.
NOTE 1: ARIP not defined by host country.

KIM LONG	IBAGU (WUN 265/70) N52°20.70′ E07°32.39′ SWG TACAN N54°27.22′ E09°30.09′	WSR VOR (WUN 339/57) N53°20.86′ E08°52.52′ SWG 212/63 N53°33.81′ E08°34.33′ (Note 1)	SWG 203/13 SWG 159/23 N54°15.27′ N54°06.18′ E09°21.43′ E09°43.81′ WUN 283/69 WUN 277/54 N52°42.42′ N52°33.64′ E07°36.96′ E07°58.91′	FL 270/FL 300 Base FL 290	Lippe Monitor 345.15

REMARKS: Anchor only for refueling of NATO E-3A/D aircraft. Pattern is located within ED-R302 (TRA). Note: ED-R34 A+B within ED-R302, 6.75 NM NW of anchor pattern. Southern IP mag course 037 for 80 NM. Northern IP mag course 212 for 62 NM. Pattern: left hand racetrack, mag course 033/213, leg length 112 NM, leg separation 16 NM.
NOTE 1: Anchor points defined as ARCP by ETNG local procedures.

KIM SHORT	WSR VOR (WUN 339/57) N53°20.86′ E08°52.52′ SWG TACAN N54°27.22′ E09°30.09′	SWG 159/23 N54°06.18′ E09°43.81′ SWG 212/63 N53°33.81′ E08°56.62′	SWG 203/13 SWG 159/23 N54°15.27′ N54°06.18′ E09°21.43′ E09°43.81′ SWG 212/63 SWG 198/65 N53°33.81′ N53°24.95′ E08°34.33′E08°34.33′	FL 270/FL 300 Base FL 290	Lippe Monitor 345.15

REMARKS: Anchor only for refueling of NATO E-3A/D aircraft (exercises excepted). Pattern is located within ED-R302 (TRA). Southern IP mag course 034 for 55 NM. Northern IP mag course 212 for 62 NM. Pattern: left hand racetrack, mag course 035/215, leg length 50 NM, leg separation 16 NM.

MAGGIE Monitor	LAG 152/15 N53°41.70′ E12°29.24′ (Note 1)	LAG 035/31 N54°20.23′ E12°47.04′	LAG 357/30 LAG 035/31 N54°25.44′ N54°20.23′ E12°14.03′ E12°47.04′ LAG 235/15 LAG 152/15 N53°46.82′ N53°41.70′ E11°56.69′ E12°29.24′	FL 110/FL 140 Base FL 120	Berlin 311.675

REMARKS: Anchor located within ED-R (TRA). Pattern: left hand racetrack, mag course 013/193, leg length 40 NM, leg separation 20 NM.
NOTE 1: ARIP not defined by host country.

NORTHSEA	NDO 318/88 N54°50.75′ E06°58.63′ (Note 1)	NDO 298/79 N54°22.58′ E06°41.13′	NDO 300/64 NDO 298/79 N54°17.49′ N54°22.58′ E07°05.22′ E06°41.13′ NDO 324/74 NDO 318/88 N54°45.60′ N54°50.75′ E07°22.97′ E06°58.63′	FL 200/FL 230 Base FL 210	Bremen Radar

REMARKS: Anchor located within ED-D44, 46, and 100. Note: Host defined Rendezvous Point, NDO 309/82, N54°36.67′ E06°49.83′. Pattern: left hand racetrack, mag course 020/200, leg length 30 NM, leg separation 16 NM.
SPECIAL INSTRUCTIONS: ARIP not defined by host country.

ROSY	IBAGU (WUN 265/70) N52°20.70′ E07°32.39′	WUN 306/51 N52°57.09′ E08°18.89′	WUN 303/64 WUN 306/51 N53°01.89′ N52°57.09′ E07°57.13′ E08°18.89′ WUN 276/65 WUN 272/52 N52°33.72′ N52°28.96′ E07°40.35′ E08°01.90′	FL 090/FL 230 Base Not Defined	Bremen Monitor 280.7

REMARKS: Anchor located within ED-R202 (TRA). Note: ED-R34 A+B and ED-R37A are within ED-R202, 13 NM W and 11 NM NW of anchor pattern. Pattern: left hand racetrack, mag course 020/200, leg length 30 NM, leg separation 14 NM.

TRACK	ARIP	ANCHOR POINT	ANCHOR PATTERN	REFUELING ALTITUDES	ATC CONTROL
SAXON	HOZ 198/49 N51°00.31′ E12°44.93′ (Note 1)	HOZ 208/72 N50°44.24′ E12°14.73′	HOZ 201/76 HOZ 208/72 N50°36.61′ N50°44.24′ E12°24.87′ E12°14.73′ HOZ 189/54 HOZ 198/49 N50°52.64′ N51°00.31′ E12°55.05′ E12°44.93′	FL 140/FL 190 Base FL 160	Munchen Monitor 250.85

REMARKS: Anchor located within ED-R208. Note: Host defined Rendezvous Point, HOZ 204/59, N50°52.65′ E12°30.46′. Pattern: left hand racetrack, mag course 048/228, leg length 25 NM, leg separation 10 NM.
NOTE 1: ARIP not defined by host country.

UTE	RMS 050/18 N49°37.22′ E07°55.95′ (Note 1)	RMS 116/28 N49°13.86′ E08°13.34′	RMS 116/28 RMS N49°13.86′ N49°09.50′ E08°13.34′ E07°59.63′ RMS 050/18 RMS 034/8 N49°37.22′ N49°32.82′ E07°55.95′ E07°42.16′	FL 130/FL 230 Base FL 150	Langen Monitor 281.175

REMARKS: Anchor located within ED-R205 B+C (TRA). Note: ED-R116 within ED-R205A, 7 NM NW of anchor pattern. Pattern: right hand racetrack, mag course 153/333, leg length 26 NM, leg separation 10 NM.
NOTE 1: ARIP not defined by host country.

VIRGIN	RMS 056/20 N49°36.81′ E08°00.19′ (Note 1)	RMS 312/30 N49°46.51′ E07°00.42′	RMS 276/27 RMS 312/30 N49°29.03′ N49°46.51′ E06°53.90′ E07°00.42′ RMS 119/14 RMS 056/20 N49°19.39′ N49°36.81′ E07°53.33′ E08°00.19′	FL 260/UNL Base FL 280	Rhein Monitor 388.250 337.075

REMARKS: Anchor located within ED-R305 (TRA). Pattern: left hand racetrack, mag course 104/284, leg length 40 NM, leg separation 18 NM.
NOTE 1: ARIP not defined by host country.

TELEPHONE CONTACTS

THE APPROPRIATE OFFICES SHOULD BE CONTACTED BY USAF MILITARY USERS TO RESERVE AIR REFUELING TRACKS OR ANCHOR AREAS IN THE FOLLOWING COUNTRIES:

GERMANY: German Air Force Tactical Command North (GAFTAC N), DSN 314-454-8607 -Commercial: (49) 2824-90-2039, Commercial FAX: same as above. For immediate requests outside normal duty hours (CET) contact: Approved Agency South (TACREG 2) - Commercial: (49) 7431-6347-3033/4/5/6/7, Fax: (49) 7431-6347-3039.

NOTE: DOD Users - to reserve Air refueling corridors in Italy and Greece, contact the European Central Altitude Reservation Facility (EUCARF) via: E-mail: eucarf@ramstein.af.mil, Military message: EUCARF RAMSTEIN AB GE, ICAO Aeronautical Fixed Telecommunications Network (AFTN): EDDFYXYR, DSN: 480-7346/7839 Fax: 9855 Commercial: (49) 6371-47-7346/7839 Fax: 9855.

NOTE: For information concerning Altitudes Reservations, contact: EUCARF.

NOTE: In areas designated as permanently available for Air-to-Air Refueling (AARA), the amount of warning concerning refueling operations can be so minimal as to preclude notification by normal methods. However, the units listed under ATC control column will be able to advise pilots on activity status in appropriate (AARAs).

Where Air-to-Air Refueling Areas conflict with Airways, Advisory Routes or Upper Air Routes, civil/military coordination procedures are applied to minimize disruption to the plan flight profiles or the aircraft concerned.

(AFFSA/XOIA FIL 96-99)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for Charts.

GERMANY - The main migration periods are between 20 February and 10 May and between 1 September and 15 November. In mild winters spring migration may start as early as the end of January. The highest intensities are reached in March. Long distance migrants from Africa cross central Europe in April/May. During the summer, numerous ducks gather in the Heligoland Bight and on inland waters for moulting. There are intermediate movements of small birds in June and July. The first long-distance migrants leave Central Europe at the end of August. The highest intensities are usually in August; but when weather is mild, may be delayed til November. In spring bird migration would be favored by a south-westerly wind and advection of warm air, in autumn by a high-pressure influence. In the face of prevailing headwinds the migration altitude frequently decreases below 500′ AGL. There are about 26 bird strike high risk days.

Spangdahlem AB (ETAD)

1. CAUTION: Numerous birds, foxes, and rabbits in the vicinity of the airfield throughout the year. Spangdahlem AB (ETAD) is located in the Eifel region of Germany near several waterways including Kyll (5 miles SW) and Mosel River (20 miles S), as well as Lake Echternach, Luxembourg (30 miles SW). The Kyll River valley, a major nesting area for ducks, bounds the base to the

southwest. The remaining sides consist of privately owned farmland and the Wittlich forest. The forest and farmlands are major attractions for various birds during the growing season between March and November. Expect increased bird activity of Lapwings, Culvers, Starlings, and Larks during periods 15 February thru 15 May and 15 August thru 15 November.

a. Bird-watch Condition LOW. Normal bird activity on and above the airfield with a low probability of hazard.

b. Bird-watch Condition MODERATE. Concentration of birds observed in locations which represent a probable hazard to safe flying operations. This condition requires increased vigilance by all agencies and extreme caution by aircrews.

c. Bird-watch Condition SEVERE. Heavy concentrations of birds on or immediately above the active runway or other specific locations that represent an immediate hazard to safe flying operations. Pilots, supervisors and transient aircrews must thoroughly evaluate mission needs before operating in areas under condition SEVERE.

(USAF/USAF FIL 02-95)

2. Bird Phase II period (high activity) is active from March through October. Large concentrations of birds are routinely observed near the surface. Numerous flocks are active throughout Phase II near river valleys, lakes, and fields in the local areas. Unnecessary approaches or low altitude operations during this time are discouraged. Phase I (normal activity) is active the remainder of the year.

(USAF/USAF FIL 03-35)

ADDITIONAL INFORMATION

RADAR ASSISTED FLIGHT INFORMATION SERVICES -

1. For the purpose of increasing safety in the airspace, a Radar Assisted Flight Information Service (RAFIS) will be provided for military flights according to Visual Flight Rules (OAT VFR Flights). This service will be performed by the ATC unit of the DFS responsible for the respective Flight Information Region, by local military approach control units within their area of responsibility or remote military units (e.g. POLYGONE INFORMATION).

2. On request, RAFIS will assist OAT-VFR flights requiring a special operational assistance by radar; in particular, RAFIS is intended to facilitate the change from VFR flight to IFR flight and the transits through classes C and D airspace for flights according to Visual Flight Rules.

3. In addition to providing general flight information service, RAFIS has the following tasks:

a. Radar traffic information is given to identified flights conducted according to Visual Flight Rules if the closure if an unidentified aircraft might result in a collision hazard.

b. Recommended traffic avoidance if required by the situation and if the pilot has no visual contact with reported traffic.

c. Navigational assistance if pilot requests comprising:

(1) position information

(2) flight path tracking

(3) magnetic headings

4. Upon request by the pilot, RAFIS coordinates the transit through airspace C/D. For this purpose, an ATC clearance for entry into airspace C/D has to be obtained from the ATC unit's ground controller responsible for the airspace and transmitted to the pilot. The ATC unit responsible for issuing the ATC clearance for entry into airspace C/D determines whether frequency is necessary or not.

5. Calling frequencies are contained in the DOD VFR ARRIVAL/DEPARTURE ROUTES EUROPE book.

6. Military VFR flights using RAFIS will be identified. The ATC unit will direct the pilot to switch to mode 3/A, code XXX7, and mode C.

7. The provision of ATC service has priority over the provision of RAFIS. If RAFIS cannot be provided by the ATC unit, the pilot will be notified accordingly and, if possible, given an alternative recommendation.

(SPEC/MIL GEN 3.3-3,4)

8. RAFIS mandatory Area within the Berlin FIR. In areas with high air traffic density, RAFIS Mandatory Areas have been established in order to ensure the safe conduct of air traffic and for the special support of military OAT VFR flights. In such areas, military aircraft have to use RAFIS for these flights. Vertical and lateral limits are defined as follows: Airspace east of radial 360/180 Tegel DVOR-DME (TGL, CH70x, 112.3 MHz) between N53° and N52° from 1000 ft AGL to FL 100.

9. RAFIS Mandatory Area within the Frankfurt FIR - To improve flight safety for POLYGONE operation in regard to IFR traffic in Zweibruecken a RAFIS Mandatory Area POLYGON INFORMATION is established within the lateral limits of: N49°25’28” E07°06’17” to N49°26’38” E07°46’90” to N49°08’06” E07°48’00” to N49°03’17” E07°43’77” then along the French-German border to N49°08.38’ E07°07.37’ to N49°25.28’ E07°06.17’ except Airspace D of Saarbrucken (EDDR) and Ramstein (ETAR), from GND to 5000 ft MSL.
Times of activation: Mon-Thu 0800-1600Z++ and Fri 0800-1100Z++, except on legal holidays.
Military VFR traffic except VFR arrival/departures to/from Ramstein have to contact POLYGONE INFORMATION 2 Minutes prior to entering RAFIS mandatory area. Outside activation times of RAFIS mandatory area the airspace F of Zweibruecken (EDRZ) is prohibited for military aircraft up to 3600 ft MSL when active. For information about activation of airspace F Zweibrucken (EDRZ) contact Langen Information or Langen RADAR or Zweibrucken info. Exception: Use of military Night Low Flying System.

(SPEC/MIL ENR 2.2-1)

NATIONAL HOLIDAYS - GERMAN HOLIDAYS - See chart.

(SPEC/CIV GEN 2.1-3)

German Holidays 2006

		Baden-Wurttemberg	Bayern	Berlin	Brandenburg	Bremen	Hamburg	Hessen	Mecklenburg-Vorpommern	Niedersachsen	Nordrhein-Westfalen	Rheinland-Pfalz	Saarland	Sachsen	Sachsen-Anhalt	Schleswig-Holstein	Thuringen
New Year's Day	1 JAN ①	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Epiphany	6 JAN ②	X	X	–	–	–	–	–	–	–	–	–	–	–	X	-	–
Good Friday	14 APR ①	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Easter Sunday	16 APR ①	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Easter Monday	17 APR ①	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Labor Day	1 MAY ①	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ascension Day	25 MAY ①	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Whit Sunday	4 JUN ①	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Whit Monday	5 JUN ①	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Corpus Christi Day	15 JUN ③	X	X	–	–	–	–	X	–	–	X	X	X	X⑦	–	–	X⑧
Assumption Day	15 AUG ④	–	X	–	–	–	–	–	–	–	–	–	X	–	–	–	–
Day of German Unity	3 OCT ①	X	X⑧	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Reformation Day	31 OCT ⑤	–	–	–	X	–	–	–	X	–	–	–	–	X	X	–	X
All Saints' Day	1 NOV ③	X	X	–	–	–	–	–	–	–	X	X	X	–	–	–	X
Day of Repentance and Prayer	22 NOV ⑥	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–
Christmas Day	25 DEC ①	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Boxing Day	26 DEC ①	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

① TRA deactivated.
② EDR 207, 208, 210, 307, 308 and 310 deactivated.
③ EDR 202 + 302 north of line HOP TACAN-DP NDB active.
④ EDR 205, 207, 305 and 307 deactivated.
⑤ EDR 206, 208, 306 and 308 deactivated.
⑥ EDR 208, 308 deactivated.
⑦ In certain municipalities of the districts of Bautzen and Westlausitzkreis.
⑧ Only in municipalities with a prevailing Catholic population.

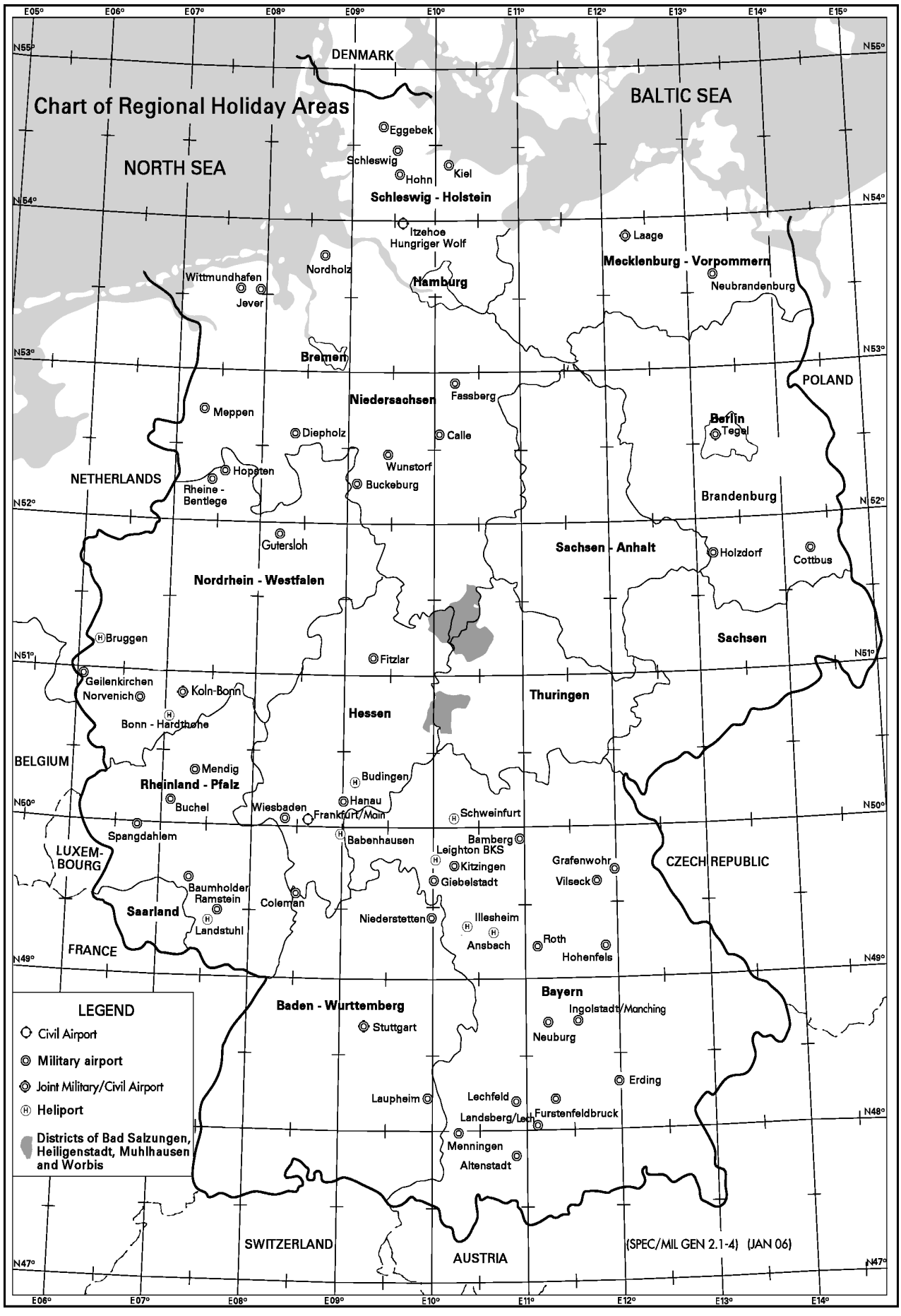


Chart of Regional Holiday Areas
DENMARK
BALTIC SEA
NORTH SEA
Eggebek
Schleswig
Hohn
Kiel
Schleswig - Holstein
Itzehoe
Hungriger Wolf
Laage
Mecklenburg - Vorpommern
Nordholz
Wittmundhafen
Jever
Hamburg
Neubrandenburg
Bremen
POLAND
Niedersachsen
Fassberg
Meppen
Diepholz
Calle
Berlin
Tegel
Wunstorf
NETHERLANDS
Hopsten
Rheine - Bentlage
Buckeburg
Brandenburg
Gutersloh
Sachsen - Anhalt
Holzdorf
Cottbus
Nordrhein - Westfalen
Bruggen
Sachsen
Fitzlar
Geilenkirchen
Norvenich
Koln-Bonn
Thuringen
Hessen
Bonn - Hardthohe
BELGIUM
Mendig
Budingen
Rheinland - Pfalz
Buchel
Wiesbaden
Hanau
Frankfurt/Main
Schweinfurt
Spangdahlem
Babenhausen
Bamberg
Leighton BKS
LUXEM-BOURG
Kitzingen
Grafenwohr
CZECH REPUBLIC
Giebelstadt
Vilseck
Baumholder
Ramstein
Coleman
Saarland
Niederstetten
Illesheim
Landstuhl
Ansbach
Roth
FRANCE
Hohenfels
Bayern
Baden - Wurttemberg
Ingolstadt/Manching
Stuttgart
Neuburg
Erding
Laupheim
Lechfeld
Furstenfeldbruck
Landsberg/Lech
Menningen
Altenstadt
LEGEND
Civil Airport
Military airport
Joint Military/Civil Airport
Heliport
Districts of Bad Salzungen, Heiligenstadt, Muhlhausen and Worbis
SWITZERLAND
AUSTRIA
(SPEC/MIL GEN 2.1-4) (JAN 06)
N55°
N54°
N53°
N52°
N51°
N50°
N49°
N48°
N47°
E05°
E06°
E07°
E08°
E09°
E10°
E11°
E12°
E13°
E14°
E15°

GHANA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the ACCRA FIR.

DIMENSIONAL UNITS - Blue Table, except altimeter in hectopascals.

(SPEC/GEN 2-1-1)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Position reports shall be transmitted to ACCRA Air Traffic Control Center by all flights operating within ACCRA FIR. When flying off airways or advisory routes, position reports are required one half-hour after take-off and thereafter.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Standard, except flight over populated area is prohibited below 1500 feet. Except for the purpose of navigation or in emergency, no object shall be dropped or sprayed from an aircraft in flight.

INSTRUMENT FLIGHT RULES

Same as Regional Procedures.

FLIGHT PLANNING

Flight plans shall be submitted for all flights to be operated within the ACCRA FIR. Updated flight plans shall be deemed cancelled 2 hours after Estimated Time of Departure and a new flight plan will therefore have to be submitted.

(SPEC/GEN 1.7-1)

GREECE

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes Athinai FIR/UIR (LGGG).

DIMENSIONAL UNITS - Blue Table except use altimeter setting in hectopascals.

(SPEC/GEN 4-1)

ALTIMETER SETTING PROCEDURES - Standard.

(SPEC/RAC 2-1)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard except:
All flights must make position reports to Athinai ACC (LGGG) prior to entering Missile and Gun Training Range (LG) C101, A, A1, A2, B, C). Depending on direction of flight, report over Milos VOR-DME or Sitia VOR-DME.

(SPEC/RAC 5-1-13)

VISUAL FLIGHT RULES

Standard.

(SPEC/RAC 1-1-4)

INSTRUMENT FLIGHT RULES

FM IMMUNITY - Waiver extension approved for non-FM immune aircraft (B-52, HH-60G, MH-53, and P3C) to operate within Athinai FIR as follows:

1. Enroute: As GAT provided they meet RNP5 navigation accuracy performance requirements or within routes defined by TACAN without use of VOR's.

2. TMA operations: As GAT to aerodromes equipped with Precision Approach RADAR (PAR), Aerodrome Surveillance Radar (ASR), Tactical Navigation AID (TACAN) or NDB. In any case UHF voice communications recommended.

NOTE: Furthermore, the following airports may be used by the US State aircraft as weather alternates: Andravida, Aros, Diagoras/Rodos, Larrisa, Limnos, Nea Anghialos, Preveza, Skyros, Souda/Chania, Tanagra and Fillipos/Kozani.

(TFMWGE/USA04-0041)

3. For USAF Only: Enhanced Traffic Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS will operate in the standard TCAS II mode and will not use the enhanced mode when flying in Greek airspace.

(HQ USAFE-DOV/USAF FIL 01-62)

RVSM RULES - Standard.

(SPEC/RAC 1-1-3)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC -

1. ATHINAI AIRPORT (LGAV)

a. The SSR ground equipment concerned is capable of interrogating on Modes A, B, C, D and of decoding up to 4096 Codes with automatic activation of Codes 75(00), 76(00), 77(00) and is associated with primary radar.

b. OPERATION OF TRANSPONDERS.

(1) Interrogating is normally made on Modes A and C.

(2) ATC instructions will generally specify: Code 7001 for arriving aircraft. Code 7003 for departing aircraft.

2. ATHINAI FIR/UIR (LGGG)

a. SSR (IFF/SIF) is in use within Athinai FIR/UIR (LGGG) in order to facilitate the coordination of general traffic and operational traffic.

b. OPERATION OF TRANSPONDERS

(1) Pilots of transponder equipped aircraft entering Athinai FIR/UIR (LGGG) or departing from airports located within Athinai FIR/UIR, with the exception of Athinai Airport (LGAV or LGAT) where procedures as given in paragraph 2a above are applicable, are requested to operate on Mode 3A, Code 20(00).

OPERATIONAL AIR TRAFFIC -

1. ARRIVAL RESTRICTIONS

a. Southbound flight levels available entering Makedonia ACC.

(1) From Skopje AAC (LWSK) at CRP TALAS as follows: odd flight levels below FL 245 and FL 270, FL 290, FL 330, FL 370, FL390, FL 410 and FL 450. For other levels PPR.

(2) From Skopje ACC (LWSK) at CRP RUGAS as follows: FL 270, FL 290, FL 330, FL 370, FL 390, FL 410 and FL 450. For other levels PPR.

(3) From Sofia ACC (LBSF) at CRP TIMUR as follows: FL250, FL 310 and FL 350. Other levels PPR.

(SPEC/AIP SUPP 05/2003)

2. For overflying permission of civil or military Acft, Technical landings, extension of aerodrome's service hours etc, the following telephone numbers to be used.

a. For the Winter period
Daily from 06:00 UTC until 22:00 UTC
Tel +30 210 8916000 FAX +30 210 8947101
AFTN Address LGACYAYX
Daily from 22:00 UTC until 06:00 UTC
Tel +30 210 3534147 FAX +30 210 3532536

b. For the Summer period
Daily from 05:00 UTC until 21:00 UTC
Tel +30 210 8916000 FAX +30 210 8947101
AFTN Address LGACYAYX
Daily from 21:00 UTC until 05:00 UTC
Tel +30 210 3534147 FAX +30 210 3532536

(SPEC/AGA04)

3. FLIGHT PLAN ADDRESSEES

(USAFE-DO/AFFSA)

a. ATHINAI FIR/UIR (LGGG):

(1) IFR/LGGGZQZX

(2) VFR/LGGGZFZX

b. Flow Control: LGGGZDZX

c. Destination/Subsequent Legs:

(1) Civil:

(a) . . . . ZPZX

(b) . . . . ZTZX

(2) Military: ZPZX

d. All military flights: LGATZXAV

CLEARANCE INFORMATION - All aircraft, before entering a TCA, Military TCA or Control Zone, should contact the appropriate ATC unit. Aircraft on VFR who fail to communicate, should avoid the instrument approach areas.

(SPEC/RAC 3-0-2)

FLIGHT PLANNING

SUPPLEMENTARY AIRPORT INFORMATION -

Nikos Kazantzakis/Iraklion (LGIR) All flights which violate their designated airport slot time beyond 60 minutes by arriving earlier or later will not be accepted in the event that the airport has no facilities to serve them for capacity or safety reasons. In this case, the aircraft shall be diverted to an alternate airport. In the event that the airport has the capability to serve a flight which has violated the slot time beyond 30 minutes, a penalty will be submitted which will be doubled, tripled, etc according to the number of violations.

(SPEC/CL I NOTAM A-1009-00)

ENROUTE

AIRWAYS/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. Airway A1/UA1 - FL 290 is not available to traffic inbound to Athinai FIR (LGGG) from Malta FIR (LMMM) or the segment TITUS CRP - PLH VOR.

2. Airway A14 - Traffic through Athinai FIR/UIR (LGGG) from Italy (Roma FIR, LIRR, Brindisi FIR, LIBB) to point east and southeast (RODOS or SITIA) and vice- versa should use Airway A14 to avoid Athinai/Eleftherios Venizelos (LGAV) TCA.

3. Airway B1

a. UFN, FL 290 is only assigned for traffic directed to Athinai UIR through Tripoli FIR on airway B1 to ARLOS CRP in upper airspace due to congestion at PLH VOR.

b. Tanagra APP CON may clear IFR traffic from Tangara VOR or NDB direct to Nea Anchialos VOR.

c. FL 80 and FL 90 are reserved 24 hours between 25 NM north of Skopelos VORTAC and 25 NM south of Thessaloniki VORTAC.

d. IFR through Tanagra MTCA (LGTG) shall be cleared by adjacent ATC units to maintain one of the following flight levels: 140, 150, 160, 170, 180, 310 and above. Other flight levels may be assigned after prior coordination between Athinai Control and Tanagra Approach Control.

4. A10/UA10 - PAXIS CRP available for southbound traffic only if destination is Alexandria, EG airport.

5. Airway G18

a. The segment between Fiska VOR-DME and Mesta VOR-DME may be used Mon-Fri 1900-0500Z and Sat-Sun 1400-0500Z. At other times, airway J60 will be used.

b. Athinai ACC may suspend the use of G18 with 1 hour prior notice to Beograd and Nicosia ACC's and direct traffic viaAirway J60 when air traffic warrants.

6. B12/UB12 - Southbound traffic from TANSA CRP with destination Cairo Intl, EG (HECA) airport is not available.

7. Domestic airways W54, H55, H59, J56, V62, W50, V57 between IRA VOR-DME and RDS VOR-DME, and G80 between RDS VORDME and KRC NDB may be used by international traffic.

8. Airway H55 - the segment between TRL VOR-DME and LORNO CRP will be used when necessary to meet additional requirements on weekdays subject to ATC approval.

9. Airway J60 - This airway will be used when the segment of G18 between Fiska VOR-DME and Mesta VOR- DME is not being used. It is also used for arrivals/departures from Mitilini and Limnos International Airports.

10. R19/UR19 and L995/UL995

a. Flights departing from Diagoras (LGRP), Kos (LGKO), Samos (LGSM) or Mikonos (LGMK) via RUTOM CRP to Brindisi FIR (LIBB) or Triana FIR (LATI) must file via MIL VOR to TRL VOR/DME or KOR NDB. Flight planning via R19/UR19 or L995/UL995 to KEA VOR is not permitted.

b. The segment between ATH VOR and KRK VOR may be used during weekends from 1200Z++ Fri to 0400Z++ Mon and holidays subject to ATC approval.

c. R19 only - FL 130 is reserved between GERMI CRP and KRK VOR R-118/46 DME.

d. Flights transiting that portion of the route between CRP KOPAR and RDS VOR/DME consult Turkey, FLIGHT PLANNING and ROUTE AND AREA RESTRICTIONS for further guidance.

11. Airway R78/UR78 - From Fri 1200 until Mon 0400 UTC the lower limit and minimum flight altitude on the segment PLH VOR - SIT VOR will be lowered to 9500 and 10,000 respectively. On holidays subject to ATC approval.

12. Airway R193/UR193 - FL 130 is reserved on the segment KOR NDB and GARTA CRP 24 hours except Sat, Sun and holidays.

13. Airway W58/UW58 - International air traffic operating on B1 or G33 may use the segment KOROS CRP - Skopelos VORTAC as a transition route after clearance from Athinai ACC.

14. Airway M77/UM77 - Flight levels available: 260-390. Useable for northwest bound traffic only.

15. Airway UR45 - Flight levels available between DDM VOR-DME and YNN VOR-DME: even levels from 310 to 460.

16. UL613 - Will be used for northbound traffic except for southbound traffic destination Alex.

17. For restrictions on airways within North Sector Andravida MTCA (LGAD), see paragraph 1.a. (Terminal Control Areas).

18. Attention is drawn to all aircraft flying any route on segment: LMO VOR - FSK VOR - RUGAS or MES VOR - FSK VOR - RUGAS to navigate strictly along route centerline of the relevant route.

(SPEC/RAC 3-0-1 thru 3-0-7)

19. For traffic congestion reasons in the vicinity of Milos VOR-DME, Athinai ACC may reroute flights on ATC clearance as follows:

a. Flights planned via Sitia VOR-DME to Kea VOR-DME to Skopelos VOR-DME may be rerouted via Sitia VOR-DME to Iraklion VOR-DME to Milos VOR-DME to Athinai VOR-DME to Skopelos VOR-DME.

b. Flights planned via Sitia VOR-DME to Milos VOR-DME to Korinthos NDB may be rerouted via Sitia VOR-DME to Iraklion VOR-DME to Korinthos NDB.

(SPEC/SUP 8-9-00)

20. Aircraft destined to an aerodrome not connecting with domestic or international ATS routes shall proceed directly if in VFR flight avoiding airspace restrictions and complying with local regulations. If in IFR flight, via the ATS route to ABEAM point of the facility serving the aerodrome and then direct to the aerodrome.

(SPEC/RAC 3-0-6)

21. Airway UG18 - Flights transiting that portion of the route between CRP LARKI and RDS VOR/DME consult Turkey, FLIGHT PLANNING and ROUTE AND AREA RESTRICTIONS for further guidance.

22. CRP ARLOS - Flights entering LGGG FIR via ARLOS must flight plan accordingly: P868/UP868 - OLIKI - SALUN (RVSM EXIT POINT) or ARLOS - B1/UB1 - PLH VOR/DME. Flights exiting LGGG FIR for LMMM FIR via AROLO must flight plan PLH VOR/DME - B1/UB1 - ARLOS or METRU (RVSM ENTRY POINT) - P868/UP868 - ARLOS.

(SPEC/CL I A0130-02)

23. Airways B/UB12 and L/UL607 - North bound only between CRP TANSA and Sitia VOR/DME. Additionally, flights along this segment permitted above FL 250 only if destination is Nikos Kazantzakis (LGIR).

(SPEC/CL I A0169)

NOTE: For route availability for aircraft arriving and departing Greece consult Annex 16 on CFMU website: www.cfmu.eurocontrol.be.

(SPEC/SUP 01-01)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			GREECE				
L607	Pikos (N39°57′ E21°33′)	137	Athinai VOR/DME	182	FL 170	FL 245 16,500	ODD
	CONTROL: Athinai CON NOTE: CDR1 From Segments Pikos to ATV, FL 170 and above, Fri 1200Z to Mon 0400Z & public holidays 2100Z the day before to 0400Z the day after. Other times from FL 310 and above.						
M872	Paleochora VOR-DME (N33°13′ E23°41′)	318 138	Kefallinia VOR-DME (N38°06′ E20°30′)	230		FL 245 10,000	ODD EVEN
	CONTROL: Athinai CON NOTE: CDR 3						
UL607	Pikos (N39°57′ E21°33′)	137	Athinai VOR/DME	182	FL 245	FL 460 FL 245	ODD
	CONTROL: Athinai CON NOTE: CDR1 From Segments Pikos to ATV, FL 170 and above, Fri 1200Z to Mon 0400Z & public holidays 2100Z the day before to 0400Z the day after. Other times from FL 310 and above.						
UM872	Paleochora VOR-DME (N33°13′ E23°41′)	318 138	Kefallinia VOR-DME (N38°06′ E20°30′)	230		FL 450 FL 250	ODD EVEN
	CONTROL: Athinai CON NOTE: CDR 3						

TERMINAL

NOISE ABATEMENT PROCEDURES -

1. ATHINAI/ELEFTHERIOS VENIZELOS (LGAV)

a. All aircraft departing or arriving Athinai/Eleftherios Venizelos Airport (LGAV) should avoid overflying the residential areas of Artemis, Rafina, Markopoulo, Koropi and Spata. If unable to do so, they should fly over these areas for the minimum required time while maintaining the minimum safe height.

b. Aircraft flying within the Athinai TCA (LGAV) and not intending to land at Eleftherios Venizelos (LGAV) preferably should not fly over the above residential areas below 3000 feet AGL.

c. Rapid change in engine power should be avoided unless flight safety reasons render them imperative.

d. Use minimal reverse thrust consistent with safe operating procedures.

e. Night time (2000-0400Z++) restrictions.

(1) Restrictions should not be applicable to ambulance flights, other humanitarian aid services and emergency flights.

(2) Engine run-up is prohibited between the above night time hours. Maintenance aircraft test runs are permitted during the day only at the specially designed facility and in the designated areas. All other maintenance aircraft maintenance require the authorization of the Airport Duty Officer.

(3) Runway 21L preferably should not be used for landing at night.

(4) Runway 03R preferably should not be used for take-off at night expecially by Chapter 2 aircraft or aircraft with a maximum takeoff weight in excess of 300 metric tons (660,000 pounds).

(5) Deviations from (c) and (d) above may be accepted when the capacity demand requires, during times of extreme weather, or when operation restrictions apply.

f. During parking at an aircraft stand supplied with ground power unit and preconditioned air, the use of Auxiliary Power Unit (APU) shall be avoided and not exceed 15 minutes after arrival or 15 minutes before departure to/from the ground power stand.

g. ARRIVALS

(1) The Standard Arrival procedures are designed according to the Noise abatement procedures and should be strictly followed.

(2) Use delayed gear and flap extension and low power/drag configurations consistent with SAFE operating procedures.

(3) VFR flights approaching to land are requested to make adjustments for a short final approach, unless otherwise instructed by ATC.

h. DEPARTURES

(1) All aircraft having a maximum take-off weight more than 5700kg (12,540 lb) departing from Runways 03L and 03R, shall climb after take-off at least 3000 feet with the speeds, use of power and flaps as described in ICAO Procedures for Air Navigation Services - Aircraft Operations Noise Abatement Take-off/Climb - Procedure B (PANS-OPS Doc 8168, Vol. 1, Flight Procedures).

(2) All aircraft having a maximum take-off weight more than 5700kg (12,540 lb) departing from Runways 21R and 21L, shall climb after take-off at least 3000 feet with the speeds, use of power and flaps as described in ICAO Procedures for Air Navigation Services Aircraft Operations Noise Abatement Take-off/Climb - Procedure A (PANS-OPS Doc 8168, Vol. 1, Flight Procedures).

2. IRAKLION/NIKOS KAZANTZAKIS AIRPORT (LGIR).

a. All aircraft departing from or arriving at Iraklion/Nikos Kazantzakis Airport should avoid overflying Iraklion city.

b. Rapid changes in engine power should be avoided unless flight safety reasons render them imperative.

c. Run up tests must be approved in advance by the Airport Authority.

d. ARRIVAL

(1) Final approach shall be carried out strictly at the angle defined by the visual approach indicator.

(2) Aircraft approaching to land on runway 09 are requested to make adjustments for a short final approach unless otherwise instructed by the control tower.

e. DEPARTURE

(1) All aircraft departing runway 27 with a take-off weight in excess of 12,566 lbs. shall climb after take-off to at least 3000 feet with the speeds, use of power and flaps as directed in ICAO procedures for Air Navigation Services - Aircraft Operations Noise Abatement Take-off Climb Procedure NDAP1 (PANS-OPS Doc. 8168 Vol. 1 Flight Procedures).

(2) Normal take-off thrust is recommended.

(3) All aircraft as soon as possible after take-off at 600 ft (QNH) should turn right on heading for departure from runway 27.

(4) Deviations permitted only for safety reasons.
(SPEC/SUP 03-02)

TERMINAL AREA PROCEDURES -

1. ANDRAVIDA MTCA - Within the lateral limits of North Sector flight levels: FL 120 from Apr 1st to Oct 31st, FL 140 from Nov 1st to Mar 31st, FL 130 on a yearly basis are reserved daily 0530-1300 UTC except Sat, Sun and holidays on:

a. Airway A14 from KRK VOR-DME to TRL VOR-DME,

b. Airway H51 and Airway G8 from position BAMBI to ARA VOR-DME fix R098/40 DME,

c. Airway J52 and Airway B34 segment ARA VOR-DME to DDM VOR-DME, and

d. Airway R193 from KRK VOR-DME to IXONI Airway W50.
(SPEC/RAC 3-0-5)

2. ATHINAI/HELLENICON (LGAT) TCA

a. When entering Athinai TCA airspace below FL 220, speed should be reduced to not in excess of 240 kt for jet aircraft and 180 kt for conventional aircraft. However, if the minimum safe airspeed for any particular operation is greater than the maximum speed prescribed above, the aircraft may be operated at that minimum speed provided that approach control is promptly notified.
(SPEC/RAC 4-2-1)

b. All flights over ACROPOLIS monument located in the center of ATHINAI city (N37°58'30" E23°43'33" and FILOPAPU monument, located at a distance 600m 200° True from ACROPOLIS should be performed at least 5000' AMSL (propeller aircraft) and 10,000' AMSL (jet aircraft) in order to protect the monuments from vibration.
(SPEC/AGA 2-3-3)

c. ATHINAI/ELEFTHERIOS VENIZELOS (LGAV) TCA - To relieve traffic congestion, pilots of overflying aircraft are advised to avoid crossing this TCA at levels lower than FL 200.
(SPEC/RAC 3-1-5)

d. TANAGRA (LGTG) MTCA - IFR flights through Tanagra MTCA on Airway B1 cleared by adjacent ATC units to maintain one of the following flight levels: 140-150-160-170-180-310 and above. Other flight levels may be assigned after prior coordination between Athinai CON and Tanagra APP CON.
(SPEC/RAC 3-0-6)

AERIAL REFUELING

AERIAL REFUELING TRACKS/ANCHOR AREAS -

See Chapter 2, Section B, AERIAL REFUELING TRACKS/ANCHOR AREAS for Chart.

AREA	ARIP	ARCP/ ANCHOR	AR FREQ	AR BLOCK	AR ALT	ATC CONTROL

GREECE

NOTE 1: All requests should be forwarded thru EUCARF seven duty days in advance. The approved segment will be activated by a CL I NOTAM.

NOTE 2: Altitudes FL 160 thru 280 are authorized within the established areas. Simultaneous usage will only be approved when the altitude blocks are separated by at least two useable flight levels (for example, FL150B160 and FL210B230, FL210B230 and FL250B270, etc.). Exceptions to the above must be coordinated with the Head of Athinai ATCC.

NOTE 3: Aircraft may operate within the specified dimensions but in Area Crete, must enter/exit Italian airspace via N36°46′ E19°00′ only when utilizing Delta Corridor.

(EUCARF/HCAA MOU, 4/18/00)

NOTE 4: a. Five minutes prior to entering either corridor, transitioning from one corridor to another, or exiting either corridor, aircraft will broadcast in the blind on 299.6 aircraft's position, next position, ETA to next position, altitude, and cardinal direction (east, west).

b. While transiting either corridor, aircraft will monitor 299.6.

c. Transiting EASTBOUND-set APN/69 Beacon to "Operate" and set code "2-0-0"; set Air-to-Air TACAN to "29Y"; utilize APN/59 Search Radar in "Beacon" if conditions permit.

d. Transiting WESTBOUND-set APN/69 Beacon to "Operate" and set code "2-0-3"; set Air-to-Air TACAN to "92Y"; utilize APN/59 Search Radar in "Beacon" if conditions permit.

(CORONET PLANNING ELEMENT MSG 10/99)

AREA CRETE	283.05 299.6	FL 150 thru FL 280

TRACK AREA: N37°06′ E19°00′ to N34°00′ E25°28′ to N34°00′ E24°46′ to N36°44′ E19°00′ to beginning.

AREA KARPATHOS	283.05 299.6	FL 150 thru FL 280

TRACK AREA: N34°38′ E24°14′ to N35°08′ E30°00′ to N34°48′ E30°00′ to N34°22′ E24°46′ to beginning.

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for Charts.

1. GREECE

a. The concentration areas marked on the map indicate the breeding areas (mid-April until mid-June) of more than 29,000 birds which constitute a high bird strike risk. During the winter period (mid-November until mid-February) the number of waterfowl increases to a total of 700,000 birds in addition to more than 1 1/2 million starlings.

b. In the concentration areas from March until May and August until September, thousands of storks and pelicans ascend in up currents so that aircraft flying below 3000′ AGL day, 4000′ AGL night may encounter a heavy bird strike risk.

c. The number of storks and pelicans which come from east and southeast Europe is greatest from mid-February until mid-May and from mid-August until October.

d. From mid-March until early May other large birds pass through on a broad front. Concentrations of these birds may occur in the Evros Delta and in the Gulf of Salonika which witness the movements of more than 40,000 birds.

e. From mid-August until end of October broad front migration occurs in the eastern parts, but narrow front movements are observed in central and western Greece. More than 10,000 birds may pass thru each day at heights between 1000 and 3000′ AGL. These movements seem to be favored by high pressure conditions.

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

1. All Saturdays and Sundays are considered holidays.

2. GREEK HOLIDAYS

NAME OF HOLIDAY	DATE
New Year	1 Jan
Epiphany	6 Jan
Shrove Monday	6 Mar
National Holiday	25 Mar
Good Friday	21 Apr
Easter	23 Apr
Day after Easter	24 Apr
Labor Day	1 May
Pentecost	12 Jun
Virgin Mary's Day	15 Aug
National Holiday	28 Oct
Christmas	25 Dec
Day after Christmas	26 Dec

(SPEC/AIC A8/05)

3. Additional holidays recognized on different yearly dates.

First Day of Lent
Good Friday
Easter Monday

First Day of Lent
Holy Spirit Day

(SPEC/AIC A16-96)

GUINEA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - The airspace of Guinea is divided between the DAKAR FIR/UIR and the ROBERTS FIR/UIR. For information pertaining to DAKAR FIR operations, see Bissau.

DIMENSIONAL UNITS - ICAO table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Standard.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Liberia and guinea have implemented icao annex 11 airspace classification with the following exceptions:

1. Classes B, E, F not yet implemented.

(SPEC/CL II NOTAM A2-92)

FLIGHT PLANNING

CLEARANCE INFORMATION - Request for overflight and landing clearance should now be made to reach the director of civil aviation SIERRA LEONE, at least five days (120 hours) before the date of commencement of the flight.

FLIGHT HAZARDS

There have been reports of anti-aircraft firing within the territory of SIERRA LEONE. Aircraft operators are advised to plan their flight so as to avoid flying within the territorial airspace of SIERRA LEONE. The Roberts ATCC will assist pilots as much as practicable by giving suggestions and advice regarding alternative safe routing.

(SPEC/AIP SUP 4-98)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

FREETOWN/LUNGI (GFLL) - arrival and departure routes B614 and B600 only.

(SPEC/CL11A A-11)

HUNGARY

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes BUDAPEST FIR.

DIMENSIONAL UNITS - Blue Table, altimeter setting given in hectopascals.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard.

(SPEC/ENR 1.7-1)

1. The Transition Altitude for Budapest FIR is 9000'.

(SPEC/ENR 1.7-2)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

SECONDARY SURVEILLANCE RADAR -

1. GENERAL

a. All IFR flights and international VFR flights in Budapest FIR shall be carried out with operating SSR transponder.

b. Pilots of aircraft equipped with Mode C transponder shall operate this mode unless ATS units specifically direct otherwise.

(SPEC/ENR 1.6-3)

2. For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Prior coordination must be obtained on a case-by-case basis for an aircraft equipped with E-TCAS version 6.04 to use the enhanced mode while flying in Hungarian airspace.

(HQ USAFE-DOV/USAF FIL 01-62)

VISUAL FLIGHT RULES

Standard and as noted.

(SPEC/ENR 1.2)

1. Hungary has implemented the ICAO Annex 11 airspace classification.

(SPEC/GEN 1.7-3)

Lower flight visibilities to 750m is permitted for flights operating:

a. Helicopters, if maneuvered at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision;

b. Balloons.

2. VFR flights shall not be operated:

a. Above FL 285.

b. Below FL 100 at more than 250 KIAS.

c. Over congested areas of cities, towns or settlements or an open-air assembly of persons below 1000' above the highest obstacle within 2000'.

d. Elsewhere below 500' without a special clearance.

3. All VFR flights shall maintain continuous listening watch on the appropriate radio frequency and report their position as necessary to the air traffic services unit providing flight information service.

4. VFR flights entering Budapest FIR shall establish radio contact 10 minutes prior to crossing the FIR boundary with aircraft identification, type, "VFR", destination, ETA FIR boundary, and cruising level/altitude.

(SPEC/ENR 1.2-1 thru 1.2-3)

INSTRUMENT FLIGHT RULES

Standard except as noted. With regards to FM Immunity as of 1 Jan 2001, the below listed requirements will be in effect.

1. Enroute Operations-State aircraft with nav equipment not meeting the ICAO Standards may continue operations within Budapest FIR providing they are equipped with suitable RNAV equipment meeting RNP5 without the use of VOR.

2. TCA Operations: As of the date of this publication, in Budapest FIR, no interference problems have been detected using the ICAO Generic Method for ILS and VOR Broadcast Compatibility Assessment and there have been no areas identified within the service volumes of ILS and VOR equipment, where interference to less immune aircraft receivers was above the agreed ICAO limits.

(SPEC/GEN 1.5-2)

RVSM RULES -

1. The airspace within Budapest FIR between FL 290 and FL 410 inclusive, is EUR RVSM airspace. Within this airspace, the vertical separation minimum shall be:

a. 1000 feet between RVSM approved aircraft.

b. 2000 feet between:

(1) non-RVSM approved State aircraft and any other aircraft operating within the EUR RVSM airspace;

(2) formation flights of state aircraft and any other aircraft operating within the EUR RVSM airspace; and

(3) an aircraft experience a communications failure in flight and any other aircraft, when both aircraft are operating within the EUR RVSM airspace.

(SPEC/ENR 1.8-1)

OPERATIONAL AIR TRAFFIC

Flights which do not comply with the provisions of GAT and are conducted under the control or authority of the Military ATC organization in most countries.

(SPEC/ENR 1.10-2)

ENROUTE

AIRWAYS/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. AIRSPACE CLASSIFICATION - Standard with General Planning Chapter 6 except maximum speed limitation is 250 K.

2. ATS AIRSPACE CLASSIFICATION - Classification of ATS airspaces in Budapest FIR are as follows:

a. Class C: IFR and VFR flights are permitted, all flights are subject to air traffic control service and IFR flights are separated from other IFR flights and from VFR flights. VFR flights are separated from IFR flights and receive traffic information in respect of other VFR flights. These are the controlled airspaces below FL 660 excluding Taszar MTCA/MCTLZ and Kosice MTCA2.

b. Class D: IFR and VFR flights are permitted, all flights are subject to air traffic control service and IFR flights are separated from other IFR flights and from VFR flights. VFR flights are separated from IFR flights and receive traffic information in respect of other VFR flights (and traffic avoidance advice on request). These are the controlled airspaces of Taszar MTCA/MCTLZ and Kosice MTCA2.

c. Classes B and E not applicable.

(SPEC/ENR 1.4-1)

3. AIRWAYS/ROUTES

a. LOW ALTITUDE AIRWAYS - Listed by alphanumeric designation.

L605 - Between Sirdu CRP and Tegri CRP not available for traffic via Mokru. Segment Boksi CRP to Tegri CRP not available for eastbound traffic with destinations LRTR, LRAR and for westbound traffic departing LRTR, LRAR.

L606 - Segment Mopug CRP to Mavir CRP not available for traffic departing LRTR and LRAR.

L610 - Not available for destination LOWW.

L616 - Not available for traffic departing LZIB and LOWW.

L617 - Between Parak CRP and Dodar CRP not available for traffic with destination LO**, LZ** except departing LRAR, LRTR.

L867 - For westbound traffic available only for departing LR** except LROP.

M173 - Only available for destination LZKZ.

M748 - Between Ergom CRP and Epari CRP available only via Deget.

M859 - For eastbound only departing LJ** and LIPA.

M986 - Between Sogmo CRP and Pusta NCRP not available for traffic with destination LHBP TMA. Between Pusta NCRP and Sogmo CRP only available for destination LJ**, LD**, LHPP and LHSM.

Y50 - Available departing LH only.

Y51 - Available departing LH only.

Y52 - Available departing LH only.

Y53 - Available departing LH only.

Y54 - Not available for traffic with destination LHBP TMA. Between Sasal CRP and Olati CRP not available for traffic via Tegri.

Y55 - Available departing LZ only.

Y58 - Available destination LH** only.

Y553 - Available destination LH only.

Y554 - Available destination LH only.

Y563 - Not available departing LHBP.

Y570 - Segment Mavir CRP to Tegri CRP not available for traffic via Mokru. Westbound traffic in this segment available only departing LRTR and LRAR.

Y571 - Between Sasal CRP and Sogmo CRP only available departing LO**, LK**.

Y580 - Available departing/destination LHSM only.

Y581 - Available departing/destination LHSM only.

Y582 - Available departing/destination LHSM only.

Y583 - Available departing/destination LHSM only.

Y585 - Available departing/destination LHSM only.

Y586 - Available departing/destination LHSM only.

Y587 - Available departing/destination LHSM only.

Z200 - Not available for destination Budapest TMA.

Z210 - Segment Gotar CRP to Pidon CRP only available for departure/destination LHPP.

b. HIGH ALTITUDE AIRWAYS - Listed by alphanumeric designation.

UL605 - Between Sirdu CRP and Tegri CRP not available for traffic via Mokru.

UL610 - Not available for destination LOWW.

UL616 - Not available for traffic departing LZIB and LOWW.

UL617 - Between Parak CRP and Dodar CRP not available for traffic with destination LO**, LZ** except departing LRAR, LRTR.

UL867 - For westbound traffic available only for departing LR** except LROP.

UM173 - Only available for destination LZKZ.

UM748 - Between Ergom CRP and Epari CRP available only via Deget.

UM859 - For eastbound only departing LJ** and LIPA.

UM986 - Between Sogmo CRP and Pusta NCRP not available for traffic with destination LHBP TMA. Between Pusta NCRP and Sogmo CRP only available for destination LJ**, LD**, LHPP and LHSM.

UY50 - Available departing LH only.

UY51 - Available departing LH only.

UY52 - Available departing LH only.

UY53 - Available departing LH only.

UY54 - Not available for traffic with destination LHBP TMA. Between Sasal CRP and Olati CRP not available for traffic via Tegri.

UY55 - Available departing LZ only.

UY58 - Available destination LH** only.

UY553 - Available destination LH only.

UY554 - Available destination LH only.

UY563 - Not available departing LHBP.

UY570 - Segment Mavir CRP to Tegri CRP not available for traffic via Mokru. Westbound traffic in this segment available only departing LRTR and LRAR.

UY571 - Between Sasal CRP and Sogmo CRP only available departing LO**, LK**.

UZ200 - Not available for destination Budapest TMA.

UZ210 - Segment Gotar CRP to Pidon CRP only available for departure/destination LHPP.

(SPEC/ENR 3.1-1 thru 3.2-15)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			HUNGARY				
L602	Budop CRP (N46°41′ E21°30′)	126 307	Norah CRP (N47°37′ E19°48′)	89	4000	FL 245 4000	EVEN
	REMARKS: CDR2 below FL 145.						
L605	BUG VOR/DME	110	Boksi CRP (N46°38′ E19°50′)	6.7	5000	FL 245 5000	ODD
	Boksi CRP	110 291	Tegri CRP (N46°16′ E21°06′)	57.3		ODD EVEN	
	REMARKS: CDR1 below FL 175						
L606	Mavir CRP (N46°24′ E19°50′)	095 277	Sogmo CRP (N46°37′ E17°41′)	89.6	4000	FL 245 4000	ODD EVEN
	REMARKS: CDR2 below FL 215						
L610	Tondo CRP (N46°03′ E19°21′) Subes	135 315 130 312	Subes CRP (N47°25′ E17°26′) Abeti CRP (N47°41′ E17°01′)	114.6 22.8	4100	FL 245 4000	EVEN
	REMARKS: CDR1 below FL 145						
L616	Pusta CRP (N47°09′ E18°45′)	143 324	Kerop CRP (N46°11′ E19°42′)	70.3	4000	FL 245 4000	ODD
	REMARKS: CDR1 below FL 215						
L617	Parak CRP (N46°10′ E20°06′)	156 336	Boksi CRP (N46°38′ E19°50′)	30.4	5000	FL 245 5000	ODD
	REMARKS: CDR1 below FL 175						
L850	Budop CRP (N46°41′ E21°30′)	108 289	Dodar CRP (N47°13′ E19°32′)	86.9	4000	FL 145 4000	EVEN
	REMARKS: CDR2 below FL 145						
L851	Deget CRP (N46°30′ E21°16′) Babox CRP	106 288	Babox CRP (N46°54′ E19°41′) Subes CRP (N47°25′ E17°26′)	70 98	4000	FL 245 4000	EVEN
	REMARKS: CDR2 below FL 215						
M173	Parak CRP (N46°10′ E20°06′)	016 197	SAG VOR/DME	116.8	4000	FL 245 4000	EVEN ODD
	REMARKS: CDR1 above FL 125						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
M748	Ergom CRP (N47°48′ E18°44′) Epari CRP	124 305	Epari CRP (N47°41′ E18°59′) Deget CRP (N46°30′ E21°16′)	12.3 118.0	5000	FL 245 5000	ODD
	REMARKS: CDR1 up to FL 210.						
M749	Tondo CRP (N46°03′ E19°21′) Tekno CRP	140 320 134 316	Tekno CRP (N47°37′ E17°25′) Begla CRP (N47°50′ E17°07′)	124 16.2	4000	FL 245 4000	EVEN
	REMARKS: CDR1						
N95	Kovek CRP (N47°15′ E21°52′)	119 301	Narka CRP (N47°51′ E20°30′)	65.8	5500	FL 245 5500	ODD EVEN
	REMARKS: CDR2 above FL 125						
N739	Gotar CRP (N47°00′ E16°13′)	117 299	Babit CRP (N45°56′ E18°56′)	129.1	4000	FL 245 4000	ODD
	REMARKS: CDR1 below FL 215						
Q571	Bareb CRP (N45°45′ E18°25′)	041 222	BUG VOR/DME	76.9	4100	9500 4000	ODD EVEN
	REMARKS: CDR2						
Q572	SVR VOR/DME GYR VOR/DME	158 338 162 342	GYR VOR/DME Vamog CRP (N47°47′ E17°40′)	52.5 8.1	4000	9500 4000	ODD EVEN
	REMARKS: CDR1						
Q573	SVR VOR/DME	175 355	Xomba CRP (N47°45′ E18°04′)	55.9	4000	9500 4000	ODD EVEN
	REMARKS: CDR1						
Q574	SVR VOR/DME	128 309	Sopro CRP (N47°35′ E16°48′)	70.5	4000	9500 4000	ODD EVEN
	REMARKS: CDR1						
Q575	GYR VOR/DME	081 262	Sopro CRP (N47°35′ E16°48′)	37.7	4000	9500 4000	ODD EVEN
	REMARKS: CDR1						
Y33	Norah CRP (N47°36′ E19°48′)	101 283	Narka CRP (N47°14′ E21°51′)	86.3	4000	FL 245 4000	EVEN
	REMARKS: CDR1						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Y43	Gotar CRP (N47°00′ E16°13′)	109 290	Sogmo CRP (N46°37′ E17°41′)	64.5	4000	FL 245 4000	ODD
	REMARKS: CDR1 below FL 215						
Y52	Sirdu CRP (N47°15′ E17°20′)	078 259	Sunis CRP (N47°09′ E16°21′)	40.7	4000	FL 245 4000	EVEN
	REMARKS: CDR1 below FL 215						
Y54	Sasal CRP (N47°17′ E16°28′) Olati CRP	111 292	Olati CRP (N46°59′ E17°29′) Svr VOR/DME	44.9 28	4000	FL 245 4000	ODD
	REMARKS: CDR1						
Y55	Vamog CRP (N47°47′ E17°40′) Gitas CRP	152 333	Gitas CRP (N47°03′ E18°10′) Okora CRP (N46°46′ E18°22′)	48.7 19.1	4000	FL 245 4000	ODD
	REMARKS: CDR1						
Y56	Parak CRP (N46°10′ E20°06′)	148 328	Balux CRP (N47°20′ E19°08′)	81.1	4000	FL 245 4000	EVEN
	REMARKS: CDR1 below FL 175						
Y58	Olati CRP (N46°59′ E17°29′)	089 269	Gotar CRP (N47°00′ E16°13′)	52	4000	FL 245 4000	ODD
	REMARKS: CDR1 below FL 215						
Y553	Deget CRP (N46°30′ E21°16′)	128 309	Abony CRP (N47°16′ E19°59′)	70.6	4000	FL 245 4000	EVEN
	REMARKS: CDR1 below FL 215						
Y554	Parak CRP (N46°10′ E20°06′) Eboro CRP	173 353	Eboro CRP (N46°31′ E20°03′) Abony CRP (N47°16′ E19°59′)	21.1 45.6	4000	FL 245 4000	EVEN
	REMARKS: CDR1 below FL 175						
Y555	Romka CRP (N48°13′ E21°50′)	030 210	Parak CRP (N46°10′ E20°06′)	142.7	4000	FL 245 4000	ODD EVEN
	REMARKS: CDR2 above FL 125						
Y557	Erlos CRP (N47°04′ E19°16′)	148 328	Mavir CRP (N46°24′ E19°50′)	46.2	4000	FL 245 4000	EVEN
	REMARKS: CDR1 below FL 175						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Y558	Budop CRP (N46°41′ E21°29′) Abony CRP	116 297 139 299	Abony NCRP (N47°16′ E19°58′) TPS VOR/DME	72 26	2100	FL 245 4000	EVEN
	REMARKS: CDR1						
Y563	Pusta CRP (N47°09′ E18°45′)	087 268	Sunis CRP (N47°08′ E16°21′)	98	4000	FL 245 4000	ODD
	REMARKS: CDR1 below FL 215						
Y570	Gotar CRP (N47°00′ E16°13′) SVR VOR/DME Okora CRP	095 276 107 289	SVR VOR/DME Okora CRP (N46°46′ E18°22′) Mavir CRP (N46°24′ E19°50′)	78.5 11.1 64.2	4000	FL 245 4000	ODD
	REMARKS: CDR2 below FL 215						
Y571	Sasal CRP (N47°17′ E16°28′) Sogmo CRP	127 308 126 307	Sogmo CRP (N46°37′ E17°41′) Babit CRP (N45°56′ E18°56′)	64.1 65.9	4000	FL 245 4000	EVEN
	REMARKS: CDR1 below FL 215						
Y572	Kopry CRP (N46°14′ E16°58′)	082 264	Mavir CRP (N46°24′ E19°30′)	119.2	5000	FL 245 5000	ODD EVEN
	REMARKS: CDR1 below FL 215						
Y573	Vebal CRP (N45°59′ E17°18′)	079 255	Mavir CRP (N46°24′ E19°50′)	108	4000	FL 245 4000	ODD EVEN
	REMARKS: CDR1 below FL 215						
Y580	Gotar CRP (N47°00′ E16°13′)	105 286	Nalox CRP (N46°52′ E16°49′)	25.6	4000	FL 245 4000	ODD EVEN
	REMARKS: CDR1						
Y581	SVR VOR/DME	055 235	Sunor CRP (N46°29′ E17°18′)	39.8	4000	FL 245 4000	ODD EVEN
	REMARKS: CDR1.						
Y582	Dimlo CRP (N46°41′N E16°25′)	054 234	Nalox CRP (N46°52′ E16°49′)	19.8	4000	FL 245 4000	ODD EVEN
	REMARKS: CDR1.						
Y585	Stein CRP (N47°26′ E16°36′)	163 363	Nalox CRP (N46°52′ E16°49′)	34.7	4000	FL 245 4000	ODD EVEN
	REMARKS: CDR1.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Y587	Sunis CRP (N47°09′ E16°21′) Nalox CRP REMARKS: CDR1.	128 308 128 309	Nalox CRP (N46°52′ E16°49′) SME NDB	25.3 18.8	4000	FL 245 4000	ODD EVEN
UM173	Parak CRP (N46°10′ E20°06′) REMARKS: CDR1	016 197	SAG VOR/DME	116.8	FL 245	FL 660 FL 245	EVEN ODD
UN95	Litku CRP (N48°14′ E19°36′) Argiv CRP Kovek CRP REMARKS: CDR1	119	Argiv CRP (N48°07′ E19°51′) Kovek CRP (N47°51′ E20°30′) Narka CRP (N47°15′ E21°52′)	12.2 30.9 65.8	FL 245	FL 660 FL 245	ODD
UY33	Norah CRP (N47°36′ E19°48′) REMARKS: CDR1	101 283	Narka CRP (N47°14′ E21°51′)	86.3	FL 245	FL 660 FL 245	EVEN
UY555	Romka CRP (N48°13′ E21°50′) REMARKS: CDR1	030 210	Parak CRP (N46°09′ E20°05′)	142.7	FL 245	FL 660 FL 245	ODD EVEN

ADDITIONAL INFORMATION

ICELAND

NATIONAL HOLIDAYS -

HUNGARIAN HOLIDAYS

(SPEC/GEN 2.1-2)

NAME	DATE
New Year's Day	1 Jan
National Day	15 Mar
Easter Monday	
Labor Day	1 May
Whitsun Monday	
St. Stephan's Day	20 Aug
Revolution Day	23 Oct
All Souls' Day	1 Nov
Christmas	25, 26 Dec

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

This entry includes REYKJAVIK FIR and the oceanic sector of Reykjavik Control Area that also includes that airspace within the Sonderstrom FIR north of N63°30′ above FL 195.

(SPEC/GEN 3.3-1)

DIMENSIONAL UNITS -

Standard except:

1. Altimeter setting in inches of mercury on request.

2. Visibility in statue miles and fractions and temperature in degrees Fahrenheit on request at Keflavik airport (BIKF) only.

(SPEC/GEN 2.2-1)

3. Visibility in statue miles and fractions and temperature in degrees Fahrenheit on request at Keflavik airport only.

(SPEC/GEN 2.1-2)

AIRSPACE STRUCTURE -

For the performance of the flight information service and alerting service, the Minister of Transport establishes standard ICAO airspace classifications A, B,

C, D, E, F, and G, according to the extent of the air traffic services maintained there.

(SPEC/ENR 1.1-3, 4-1)

ALTIMETER SETTING PROCEDURES - Standard except: For terrain clearance purposes during enroute flight a forecast Regional QNH value is made available. This Regional QNH is calculated as the lowest possible value on the ground anywhere in Iceland. QNH values are given in whole hectopascals.

(SPEC/ENR 1.7-1)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard except:

1. The 60° west meridian is designated as a compulsory reporting line in the Sondrestrom FIR north of N63°30′ above FL 195. However, the W60° may be omitted in lieu of the eastern exit/entry points LT and N80°10′ W69°.

(SPEC/ENR 1.8-6)

2. All aircraft operating within the oceanic sector of Reykjavik Control Area shall maintain continuous watch on the appropriate frequency of Iceland Radio. High frequencies radio communications equipment with appropriate frequency available is mandatory outside VHF coverage. Aircraft unable to establish communications with Iceland Radio, particularly those flying within the Sondrestrom portion of Reyjavik Control Area should attempt communications with Montreal Radio, Arctic Radio.

(SPEC/GEN 3.4-2)

3. All routine position reports, MET and company messages shall be delivered through Iceland Radio on voice or via ADS (duplication not required). Aircrews are reminded if they are in contact with Reykjavik Control that they are to maintain listening watch on the control frequency while transmitting reports to Iceland Radio.

(SPEC/ENR 1.8-27)

SECONDARY SURVEILLANCE RADAR - Pilots of aircraft about to enter the Reykjavik FIR/CTA, and will be flying within radar coverage, and have not received specific instructions from ATC concerning the setting of the transponder shall operate the transponder on Mode C Code 2000 upon entry and maintain that Code setting until otherwise instructed.

(SPEC/ENR 1.6-3)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Standard except Iceland has implemented the ICAO annex 2 and 11 airspace classifications.

(SPEC/ENR 1.1-1)

INSTRUMENT FLIGHT RULES

FM IMMUNITY - The Icelandic Civil Aviation Administration grants a waiver to non-FM immune state aircraft to operate within the Reykjavik FIR until 31 Dec 2006 using the following restrictions:

1. ENROUTE - No FMI restrictions.

2. TERMINAL - For VOR, ILS, or LLZ approaches above 109.0 MHz no restrictions apply. When flying ILS or LLZ based on approaches at or below 109.0 MHz, (Runway 29 at Keflavik and Runway 01 at Akureyri), the azimuth of the approach must be monitored by ground radar or other independent navigation aids as appropriate.

(TFMWG-E/USA 05-0044)

RVSM RULES - Standard.

(SPEC/ENR 1.8-2)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC - FOR USAF ONLY: ENHANCED TRAFFIC COLLISION AVOIDANCE SYSTEM (E-TCAS)

Aircraft equipped with E-TCAS will operate in the standard TCAS II mode and will not use the enhanced mode when flying in Icelandic airspace.

(HQ USAFE-DOV/USAF FIL 01-62)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. Flights operating along track through successive points situated on the southern boundary of Reykjavik FIR shall be provided with air traffic services by:

a. Reykjavik OACC, at and east of W10° (except for Helicopter Operations Area).

b. Shanwick and Gander OACCs, as appropriate, west of W10°.

(SPEC/ENR 1.8-35)

2. Turbojet aircraft intending to operate within the Reykjavik FIR/CTA must specify the Mach number plan to be used in item 15 of the flight plan.

(SPEC/ENR 1.8-7)

CLEARANCE INFORMATION -

1. Aircraft not approved for operation in Minimum Navigation Performance Specifications (MNPS) airspace may be cleared by the responsible ATC unit to climb or descend through MNPS airspace provided:

a. the climb is completed within the usable coverage of selected VORDME's or NDB's, and/or within radar coverage of the ATC unit issuing such clearance, and the aircraft is able to maintain Direct Controller/Pilot Communication (DCPC) on VHF, and

b. MNPS approved aircraft operating in that part of the MNPS airspace affected by such climbs or descents are not penalized.

c. NON-MNPS approved aircraft may also be cleared to climb or descend through MNPS airspace for the sole purpose of landing or departing from an airport which underlies MNPS airspace, but which does not have serviceable short range navaids, radar, or DPCP. Details of the required provision will be found in the AIS publications for the appropriate ATC Provider State.

(SPEC/ENR 1.8-3)

2. Due to their sensitivity to atmospheric conditions, HF communications are inherently less reliable than VHF. Adverse propagation conditions may completely preclude communications in specific volumes of airspace, especially at high latitudes during periods of sunspot activity. Such failure of HF communications is likely to impact all aircraft in the affected area.

It is therefore imperative under such HF-blackout circumstances that all aircraft continue to adhere to their clearances and do not invoke radio communications failure procedures that stipulate divergence from the cleared flight level.

(SPEC/ENR 1.8-19)

3. OCEANIC CLEARANCE

a. A clearance issued by Reykjavik Center to an aircraft entering the Reykjavik CTA becomes effective only at the Reykjavik CTA boundary. It is the responsibility of the pilot to obtain, from the appropriate ATC authority, any necessary clearance or re-clearance to enable him/her to comply with the oceanic clearance.

b. Aircraft entering Reykjavik CTA from adjacent areas will normally be cleared to landfall. Except for Stavanger FIR and Scottish FIR.

c. REQUESTS FOR CLEARANCES: Aircraft entering Reykjavik Control Area shall contact Iceland Radio with their oceanic clearance request prior to entering Reykjavik OCA:

(1) From Edmonton/Mumansk Control Areas on HF frequencies.

(2) Aircrews approaching Reykjavik airspace from the Scottish and Stavanger (southern Norway) areas shall contact Iceland Radio on VHF 127.85 or HF frequencies to obtain the oceanic clearance. The oceanic clearance is transmitted from Reykjavik OACC to Iceland Radio one Scottish or Stavanger have coordinated the flight with Reykjavik. Therefore, the clearance should be available within 10 to 30 minutes prior to entry into the Reykjavik FIR/CTA. Aircrews unable to obtain their oceanic clearance prior to entry should seek confirmation of their authorization to enter Reykjavik airspace from their current ATS unit (Scottish/Stavanger). Having received confirmation, the aircrew should enter Reykjavik airspace at the level cleared by that unit and continue attempts to obtain the oceanic clearance from Iceland Radio.

(3) Independent of the above procedure for obtaining oceanic clearance, aircrews are reminded to maintain listening watch on the Scottish or Stavanger frequency until instructed to contact Reykjavik Control.

(SPEC/ENR 1.8-27)

4. OCEANIC CLEARANCES VIA NAT TRACKS

a. Reykjavik OACC will issue oceanic clearances for NAT tracks using the track letter without the current NAT track message identification number (TMI).

b. Pilots are expected to include the NAT track message identification number in the read back of the Oceanic clearance.

c. If the track message identification number is included in the read back, there is no requirement for the pilot to read back the NAT track coordinates.

d. If any doubt exists as to the track message identification or NAT track coordinates, the pilot should request the full track coordinates. Similarly, if the pilot cannot correctly identify the track message identification, the NAT track coordinates will be read in full and a read back of those coordinates are required.

5. Aircraft unable to contact Iceland Radio on HF should request that ATC authority for the airspace in which they are operating to relay their request for oceanic clearance to Reykjavik Center. Aircraft in communication with Iceland Radio on HF should also maintain communication with the ATC authority for the airspace in which they are operating.

(SPEC/ENR 1.8-27)

6. All routine position reports, MET, and company messages shall be delivered through Iceland Radio on voice or via ADS (duplication not required). Aircrews are reminded if they are in contact with Reykjavik Control that they are to maintain listening watch on the Control frequency while transmitting reports to Iceland Radio.

(SPEC/ENR 1.8-27)

7. Iceland and the United Kingdom have arranged to transfer providing ATS to all aircraft at FL 85 or below within a designated part of Reykjavik FIR/CTA, to the United Kingdom. Transfer of responsibility will only be during published hours of operation of Sumburgh ATSU, 0800-2000Z++ Mon-Fri, 0800-1800Z++ Sat, and 0900-1700Z++ Sun. Area bounded by N61°00′ 00°00′ to N61°00′ W04°00′ to N63°28′33″ W00°46′22″ to N63°28′33″ 00°00′ to 61°00′ 00°00′.

8. Iceland and the United Kingdom have arranged to transfer providing ATS to all aircraft between FL 245-FL 460 within a designated part of the United Kingdom's airspace to Iceland (Reykjavik Control - 126.75, 250.5). Area bounded by N61°00′ W10°00′ to N61°00′ W07°00′ to N60°30′ W10°00′ to N61°00′ W10°00′.

SUPPLEMENTARY AIRPORT INFORMATION -

Keflavik NAS (BIKF)

1. NOISE ABATEMENT - Keflavik NAS is extremely sensitive to the effect of noise on the surrounding communities and the environment. Numerous mink and fox farms exist in Iceland and are extremely noise sensitive. The following procedures are in effect:

a. All fixed wing aircraft, except as provided in Joint ICAA/IDF agreement 4-1, shall not fly at an altitude below 5000 feet AGL over Iceland except:

(1) During a SAR mission.

(2) When complying with an approved traffic or approach pattern.

(3) When in an authorized low-level route or area.

b. Helicopters will avoid all noise sensitive areas by a minimum of 2 NM horizontally or 2000 feet AGL. Helicopters shall maintain a minimum of 500 feet AGL over Iceland except:

(1) During a SAR mission.

(2) When complying with and approved traffic or approach pattern.

(3) When operational missions dictate.

(4) When operating within the boundaries of approved SAR training areas I, II and III.

c. Departing flights for Runway 11.

(1) Climb runway heading to 800′ then turn right heading 130° until reaching 2000′.

(2) For aircraft unable to comply with (1), climb runway heading until 2000'.

d. Quiet hours are 2200-0700Z Monday-Saturday and 2200Z Saturday to 1200Z Sunday. Aircraft may expect to be vectored away from the most densely populated areas of southwest Iceland.

e. High power turns shall be performed at the following locations: Hot cargo ramp, the western end of taxiway "K" or the run-up apron for Runway 11 and will not be routinely performed during quiet hours. Permission for quiet hour turns for mission essential flights may be requested from the Operations Duty Officer.

2. VFR flights shall fly the Keflavik traffic circuit at 1200 ft. Military flights shall fly the traffic circuit at 1700 ft.

(AIP SUP 03/2002)

3. OVERFLY RESTRICTIONS - Aircraft, including helicopters, are prohibited below 500 feet over magazines or ammunition staging areas.

4. WEATHER CONDITIONS - Aircraft enroute are encouraged to contact KEFLAVIK METRO on 344.6 particularly between September and May. Weather conditions change rapidly with various wind conditions associated with low ceilings and visibilities.

5. TRANSIENT

a. All transient aircraft contact ATOC on 131.1 or 349.4 at least 30 minutes prior to arrival for services. Aircraft in support of 85th Air Defense and SAR missions should also contact the Joint Command Post on 390.0 prior to arrival.

(USN/NAVFIG FIL 0007-01)

b. Ground Movement Hazard: POV road crosses military ramp area. Contact tower to activate traffic signals prior to taxi. Be alert for vehicle traffic not in contact with the tower on the ramp and movement areas.

(USN/NAVFIG FIL 0079/03 AMDT)

6. FLIGHT PLANNING - Base operation frequency is 129.0. The following information is required on all flight plans departing NAS Keflavik:

a. SIDS (EET required).

b. All FIR Boundaries (EETs required). Westbound aircraft include FIR Boundary SONDRESTROM (BGGL) if aircraft penetrates BGGL at or below FL 195.

c. First landfall (EET required).

d. Westbound flights - The following points shall be cited in the Route of Flight: 30W, 40W and 50W (EETs required).

e. Eastbound flights - 10W shall be cited in the Route of Flight (EET required).

f. Eastbound and Westbound flights flying below 15,000 feet with an airspeed of 200 knots or less shall cite each 5 degrees of longitude in the Route of Flight (EET required for each 5 degrees).

g. North/Southbound flights - Every 5 degrees of latitude between 20 degrees North and 90 degrees North shall be cited in the Route of Flight (EET required for each 5 degrees).

h. Changes in speed, flight level and flight rules (IFR/VFR).

NOTE: Per Host Nation Center, if G3 is in the Route of Flight the first point following KEF shall be ING.

NOTE: HOST NATION CENTER REQUIRES DEPARTING FLIGHT TO HAVE THESE EETS ON THEIR FLIGHT PLAN. IF THE REQUIRED EETS ARE NOT PROVIDED, THE HOST NATION CENTER WILL NOT PROCESS THE FLIGHT PLAN.

(USN/NAVFIG FIL 0028-02)

7. No support for ordnance operations, which includes the capabilities of providing armament weapons support equipment (AWSE), logistical storage/stowage or qualified weapons handlers. Small arms FP/AT ordnance related support shall be coordinated through NASKEF Security Department. NATO ordnance related operations shall be coordinated through Iceland Defense Force J-3 (Operations) Division.

(USN/NAVFIG FIL 0026-05)

Reykjavik (BIRK)

1. NOISE ABATEMENT

a. Approach paths below the PAPI vertical approach guidance are prohibited within 2.5 DME.

b. Runway 13/31 will be designated runway in use when it's crosswind component is 10 knots or less.

c. Pilots flying single engined variable pitch propeller aircraft are strongly advised to take all possible measures for noise abatement.

d. The use of reverse thrust or ground fine pitch operations should be kept to a minimum during landng.

e. Rwy 06/24: Touch and go landings are not permitted. Take-offs Rwy 06 not permitted. Landings on Rwy 06 and 24 are not permitted unless crosswind component on other Rwy exceeds 15 Kt and when breaking action is hazardous for take-offs and/or landings on other runways.

f. All aircraft shall plan to reach the highest possible altitude over departure runway end using normal take-off procedures. Aircraft in left-hand circuit fly normal circuit. Traffic planning to make a right hand turn after take-off shall continue climbing on runway heading to 1000 feet, or until passing Reykjavik harbor (fuel tanks in Orfirisey) before proceeding on course. Rwy 01: (at the beginning), rest remains the same.

(1) Single engine aircraft shall plan their take-off so as to have reached at least 400 feet mean sea level when passing runway end.

(2) Single engine aircraft shall plan their approach so as to pass Karsnes peninsula at 500 feet mean sea level or above, or fly offset final and normal glide path via Rani, the Harbor in Kopavogur onto final.

g. Rwy 19: After take-off Rwy 19, right turn to a heading 240° is mandatory for all aircraft (turn not to be initiated until after passing hangar 3) to avoid overflying Karsnes peninsula, maintain this heading until 1000 feet mean seal level. Exceptions can only be granted for safety reasons.

h. Rwy 13/31: If a right turn is planned after take-off Rwy 31 maintain rwy heading to 800 feet before initiating the turn.

(SPEC/AD BIRK 2-9, 2-10, 2-11)

2. Night restrictions - Takeoff is not permitted during the following periods:

a. Weekdays 2330-0700Z.

b. Weekends and public holidays 2330-0800Z.

c. Exceptions for ambulance, humanitarian, search and rescue, and flights due to national security and other State affairs.

d. Use of Rwy 06 and 24 from sunset to sunrise is not permitted except in emergencies. Thirty minutes prior notice required.

(SPEC/AD BIRK 2-12)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. All flights within the Reykjavik FIR shall be VFR/IFR navigation equipped. Additionally, flights in the FAXI TMA shall be SSR transponder equipped.

(SPEC/GEN 1.5-2)

2. The Icelandic ATS route system differs form traditional airway systems whereas air traffic control is exercised outside as well as within the ATS route system. The minimum levels on ATS routes have been determined so as to ensure 2,000' vertical clearance above the highest obstacle within the lateral limits of the route. The total width of routes based on RNAV is 6 NM on either side of the centerline, while NDB or VOR widths are 5 NM on either side of centerline. Aircraft shall be flown:

a. Along the centerline of published ATS routes, aircraft shall be established on their route within 15 NM from point of departure.

b. If the route is not published, direct between significant points.

(SPEC/GEN 3.3-3)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS -

Keflavik NAS (BIKF)

1. CAUTION - Heavy concentrations of birds are located in the vicinity of the airfield from May to September. Bird conditions are in effect during these months and are as follows:

a. SEVERE - Bird activity on or immediately above the active runway or along the runway extended centerline approach and departure corridors representing high potential for bird strikes.

b. MODERATE - Bird activity near active runway representing increased potential for bird strikes. Increased vigilance and caution required by all activities and aircrews.

c. LOW - Bird activity on and around the airfield represents a low potential for bird strikes.

(USN/NAVFIG FIL 0028-02)

NOTE: Some of the species of birds found are black-backed gulls, arctic sauk, golden player, ptarmigan, whimbrel, snipe, tern, wheatear, snow bunting and raven. The greatest hazard is the black-backed gulls. For current bird conditions contact ATOC on 131.1/349.4.

IRAN

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes TEHRAN FIR.

DIMENSIONAL UNITS - ICAO Blue Table except:

1. Relatively short distances such as relating to aerodromes (e.g. runway lengths)- Feet.

2. Altimeter settings in hectopascals.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard except:

1. The making and transmission of AIREP is required at the following ATS/MET reporting points: ABADAN VOR/DME, BIRJAND VOR/DME, ESFAHAN VOR/DME, SABZEVAR VORTAC, UROMIYEH VOR/DME and ZAHEDAN VORTAC (on request).

(SPEC/GEN 3.5-7)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Iran has implemented the ICAO Annex 11 airspace classification. Standard.

(SPEC/ENR 1.2-1)

INSTRUMENT FLIGHT RULES

Iran has implemented the ICAO Annex 11 airspace classification. Standard.

(SPEC/ENR 1.3-1)

MINIMUM SAFE HEIGHTS - Where no minimum flight level has been established, IFR flight shall be flown at a minimum flight level of 2500 feet above the highest obstacle located within 5 miles of the estimated position of the aircraft.

(SPEC/ENR 1.3-1)

RVSM RULES -

1. Between FL 290 and FL 410 inclusive, will be applied between RVSM compliant aircraft operating in the Tehran FIR (OIIX). Transition areas and procedures for transition from RVSM airspace within the Tehran FIR (OIIX) will be notified by NOTAM.

(SPEC/AIP SUP 3/03 2.1 11.1)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC -

1. All turbine-engined aircraft having a maximum take-off weight in excess of 33,069 lb or approved passenger seating configuration of more than 30, are required to be equipped with ACAS II.

2. Effective January 1, 2005, all turbine-engined aircraft having a maximum take-off weight in excess of 12,566 lb or approved passenger seating configuration of more than 19, will be required to be equipped with ACAS II.

FLIGHT PLANNING

1. All flights before entering Tehran FIR are required to contact at least 10 minutes prior to entering the Tehran FIR with the following appropriate defense radar station on 127.8 MHZ or 135.1 MHZ for the purpose of military identification and avoidance of interception especially for those aircraft entering via Persian Gulf and Oman sea, while to in-from Tehran ACC accordingly:
ALRAM, BONAM, DASIS, DULAV, MEGRI and AGINA - Tabriz Radar.
LALDA and ULDUS - Babolsar Radar.
GIRUN, RIKOP, ORPAB, OTRUZ and CHARAN - Mashhad Radar.
SOKAM and KAMAR - Birjand Radar.
DERBO and DANIB - Zabol Radar.
KEBUD, EGSAL, EGRON, METBI, DENDA and IMLOT - Char Bahar Radar.
DARAX, KUMUN, and ORSAR - Bandar Abbass Radar.
MIDSI, ALSER, KUVER, VUXAL, PATIR, NANPI and TULAX - Busher Radar.
MIGMI, RAGET and PAXAT - Hamadan Radar.
(SPEC/ENR 1.1-1)

2. Aircraft flying into or departing from Islamic Republic of Iran (Tehran FIR) shall make their first landing at or final departure from an international aerodrome.
(SPEC/GEN 1.2-1)

3. An ATS unit will authorize an aircraft to deviate form the ATS route published in the flight plan when emergency circumstances, bad weather conditions or failure of navigation aids make the deviation necessary.

FILING FLIGHT PLANS (DAY/NIGHT) - Foreign aircraft shall not file flight plans for routes other than published ATS routes unless prior permission has been obtained from the appropriate ATS authority.

ENROUTE

FLIGHTS IN BORDER AREAS - All aircraft entering Iran ADIZ/Tehran FIR shall be at FL 150 or above unless prior permission is received from ATC. FIR ETA shall be made good within plus or minus 5 minutes. Enter via published ATS routes only. Aircraft not complying with these regulations are subject to interception. ADIZ coincides with FIR.
(SPEC/ENR 1.1-1)

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. G792 - FL 200 to FL 260 not available between MSD VOR/DME and BRID NDB/DME.
(SPEC/ENR 3.1-27)

2. W133 - Lower limit SR-SS FL 290, SS-SR FL 200.
(SPEC/ENR 3.1-47)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			IRAN				
T200	BJD VOR/DME	006	Kuvav CRP	88.7		UNLTD	EVEN
	(N32°58′ E59°12′)	185	(N31°31′ E58°57′)			FL 280	ODD
	Kuvav CRP	006	Bopag CRP	46.8			
		186	(N30°44′ E58°50′)				
	Bopag CRP	006	Silko CRP	48.7			
		186	(N29°56′ E58°42′)				
	Silko CRP	006	Nabod CRP	100.8			
		186	(N28°16′ E58°26′)				

CONTROL: Tehran ACC
REMARKS: Temporary route activated by NOTAM.

IRAQ

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes BAGHDAD FIR.

1. The Combined Forces Air Component Commander (CFACC) is the Airspace Control Authority (ACA) for Iraq and the Baghdad FIR, effective from 19 March 2003 until further notice. The procedures for flight operations detailed in the Iraq AIP on the RAMCC web site are mandatory for all aircraft operators authorized to fly in the Baghdad FIR.
(SPEC/GEN 1.2.1.1)

DIMENSIONAL UNITS - ICAO Blue table except: Altimeter settings in Hectopascals.
(SPEC/GEN 2.1.1)

AIRSPACE STRUCTURE - The Baghdad FIR is classified into Class A, B, D, E and G airspace. Class C and F airspace are not used in the Baghdad FIR.

(SPEC/ENR 1.4.1.1)

NOTE: Due to equipment limitations, two-way communications may not be available in western Iraq. In the event of an emergency requiring descent in an area of poor radio coverage, pilots are to attempt to contact any air traffic agency via emergency frequencies.

(SPEC/ENR 1.4-3)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard except: All Iraqi airspace (except ATS routes and Terminal Control Areas) is prohibited for civilian aircraft use. Aircraft are advised to strictly adhere to the route center line. Failure to comply with the procedures in this AIP may result in interception by armed coalition fighter aircraft.

(SPEC/ENR 1.1.2)

INSTRUMENT FLIGHT RULES

Standard.

CHANGE OF IFR TO VFR

1. An aircraft electing to change the conduct of its flight from compliance with the instrument flight rules to compliance with the visual flight rules shall notify the appropriate air traffic services unit specifically that the IFR flight is cancelled and communicate thereto the changes to be made to its current flight plan.

(SPEC/ENR 1.3.5.1)

2. When an aircraft that is operating under the instrument flight rules and arriving at Baghdad (ORBI) or Basrah (ORMM) encounters visual meteorological conditions, it shall cancel its IFR flight provided it is anticipated, and intended, that the remainder of the flight to the destination aerodrome will be conducted in uninterrupted visual meteorological conditions. In this case, the pilot shall report to the appropriate air traffic service agency "callsign VISUAL, CANCEL IFR". Air traffic service agencies shall not approve such cancellation of IFR above FL290 (Class A airspace).

(SPEC/ENR 1.3.5.2)

3. Military aircraft which are IFR and established on the airway or established within Class E airspace and are requesting to land at airports which are outside of these areas shall, if applicable, advise air traffic control when able to proceed tactical. Air traffic control shall acknowledge and terminate radar service. Aircraft that are tactical shall cancel IFR and comply with applicable military directives. Aircraft that cannot proceed tactical will not be descended below the airway's minimum enroute altitude or be permitted to exit the ATS route or Class E airspace.

(SPEC/ENR 1.3.5.3)

RVSM RULES - Bordering countries have commenced using RVSM procedures however RVSM is not approved in Iraq. The Iraq ACCs will continue to provide 2000 FT vertical separation for all aircraft above FL 290. In some instances RVSM levels may be used in Iraq however this to ensure that aircraft are not transferred between RVSM and non-RVSM altitudes when entering and exiting the Baghdad FIR. At all times ATC is required to ensure that 2000 FT vertical separation exists if a lateral, radar or longitudinal standard can not be guaranteed.

(SPEC/ENR 3.5.1.2)

RNP REQUIREMENTS -

1. All civil and State overflight aircraft operating within the Baghdad FIR must be approved by the State of the operator or the State of Registry for Basic Area Navigation (B-RNAV) or Required Navigation Performance 5 (RNP5). B-RNAV/RNP5 approved aircraft shall have the capability to maintain an en-route lateral navigation accuracy along track position fixing of +/- 5NM or better, for 95% of the flight time in Iraqi airspace. Any aircraft unable to meet the navigation criteria will not be authorized to fly within Iraqi airspace.

(SPEC/GEN 1.5.2.1)

2. Pilots of aircraft meeting B-RNAV/RNP5 standards must indicate R in field 10 of the ICAO flight plan. Operators are to ensure that all relevant procedures, publications and training are in accordance with B-RNAV/RNP 5 standards. Pilots must advise ATC of any deterioration or failure of their navigation system by stating "Unable RNAV due to equipment". ATC will then attempt to provide alternative separation standards and/or routings.

(SPEC/GEN 1.5.2.2)

3. There may be insufficient ground-based navigation aids (NAVAIDS) suitable for RNAV or Inertial Navigation System updating along the Iraqi air routes. Therefore, operators whose aircraft navigation systems depend upon ground-based NAVAID updating to meet RNP5 criteria shall conduct an analysis of the routes to be flown to ensure suitable NAVAID reception.

(SPEC/GEN 1.5.2.3)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC -

All aircraft operating in the Baghdad FIR shall be equipped with a serviceable Mode 3/A Transponder.

(SPEC/GEN 1.5.2.4)

FLIGHT PLANNING

1. The approving authority for flights intending to land at or depart from an Iraqi aerodrome, or to overfly the Baghdad FIR, is the Iraq Civil Aviation Authority (ICAA). All aircraft require ICAA approval and deconfliction by the ACA to land, depart, and overfly Iraq. Until ICAA is in a position to manage all requests, RAMCC will coordinate with ICAA for flight approval. The deadline for slot request submittal to the RAMCC will be 0800Z the day prior to the intended flight. Any requests received by RAMCC Iraq after 0800Z/UTC WILL BE DENIED - NO EXCEPTIONS. Compliance is mandatory and appreciated. Once approved, RAMCC is responsible for slotting takeoff and landing times at the approved aerodromes. Changes in slot times will be coordinated through the RAMCC. Itinerary changes that result in the use of aerodromes different to that previously approved require a new ICAA approval. Only a limited approval for aerodrome changes is available. Once approved, aircraft operators will be assigned a discrete Mode 3/A code and a slot time. For slot times, RAMCC Iraq can be contacted via:

RAMCC Iraq Mobile Phone:	+974 589 2695
RAMCC Iraq LDG Slots	
Commercial Phone:	+974 (QATAR) 458 9555 Extension 436 5184 or 5187
RAMCC Iraq Commercial Fax:	+974 (QATAR) 432 7382 Extension 436 2669
DSN Phone:	(318) 436 5184/5187
DSN Fax:	(318) 436 2669
NIPRNET (non-secure e-mail):	ramcc.iraq@auab.aorcentaf.af.mil
Web address:	http://ramcc.dtic.mil

Operators of aircraft intending to overfly Iraq are required to contact the Overflights Section of RAMCC for approval. RAMCC will confirm with the ICAA that the operator is on the approved carrier list before notifying the operator of any restrictions and allocating a discrete Mode 3/A code. RAMCC Overflights Section can be contacted via:

RAMCC Iraq Mobile Phone:	+974 589 2695
RAMCC Iraq Overflights	
Commercial Phone:	+974 (QATAR) 458 9555 Extension 436 2671
RAMCC Iraq Commercial Fax:	+974 (QATAR) 432 7382 Extension 436 2669
DSN Phone:	(318) 436 2671
DSN Fax:	(318) 436 2669
NIPRNET (non-secure e-mail):	ramcc.overfly.iraq@ auab.aorcentaf.af.mil
Web address:	http://ramcc.dtic.mil/

Should discrepancies arise as to whether or not an operator is approved for overflights, the problem is to be resolved directly between the operator and ICAA. RAMCC will not be the arbiter of disagreements. The contact numbers for ICAA representatives are:

ICAA Aviation Adviser Work Phone:	0 + 1 + 703 343 7906
Mobile Phone:	0 + 1 + 914 360 7755

All Iraqi airports are closed to civil overflight aircraft except in an emergency situation.

(SPEC/GEN 1.2.1.2/3/4)

2. Caution, due to the rapidly changing non-standard en-route procedures in Iraq, it is mandatory that pilots check the RAMCC web site for current information.

(SPEC/NGA)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

Check NOTAM's and the Iraq AIP posted on the RAMCC web site for current enroute information.

(SPEC/NGA)

BIRD HAZARD DATA

Historical bird/wildlife activity and migration data is not available. However, an increase in bird and wildlife activity has been observed near runways at Baghdad (ORBI) and Kirkuk (ORKK) within +/- one hour of sunrise and sunset. Exercise caution when arriving and departing during these periods.

(SPEC/ENR 5.6)

IRELAND

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

This entry includes SHANNON FIR/UIR.

DIMENSIONAL UNITS -

Non-SI Alternative Units.

AIRSPACE STRUCTURE -

Ireland has implemented the ICAO Annex 11 Airspace Classifications, with the following exceptions:

1. In accordance with Annex 2 the appropriate ATS authorization for the Shannon FIR prescribed that:

a. A lower flight visibility of 1.6 NM is permitted for flights operated at indicated speeds of 140 kt or less.

b. That helicopters may operate below 1000 ft above terrain in a flight visibility not less than .54 NM if maneuvered at a speed which would give the pilot-in-command adequate opportunity to observe other traffic or any obstacle in good time to avoid collision.

(SPEC/ENR 1-9)

2. Maintain Mode and Code previously assigned. If no Code and Mode assigned, squawk Mode A Code 2000. Do not operate SSR Special Position Indicator (SPI) feature unless requested by ATC.

(SPEC/ENR 1-14)

ALTIMETER SETTING PROCEDURES -

Standard.

NOTE: The QFE supplied to aircraft for approach, landing and takeoff in respect of Instrument Runway (including Precision Approach Runway), where the landing threshold is 7' or more below the airport elevation, shall be the "Runway Threshold QFE". The reference datum in this case will be the threshold elevation of the particular runway.

(SPEC/ENR 1-18)

VERTICAL SEPARATION -

Semicircular.

POSITION REPORTING -

Position reports will be required at the Shannon UTA/SOTA/Shanwick OCA Boundry and at compulsory reporting points or as otherwise instructed b Shannon ATCC.

(SPEC/ENR 1-1)

SECONDARY SURVEILLANCE RADAR -

If the flight is in the Shannon UIR in addition to the minimum radio and navigation equipment a SSR transponder capable of responding to Mode 3/A interrogations with 4096 codes and to Mode C interrogations with Automatic Pressure Altitude Reporting is required.

(SPEC/ENR 1-14)

INTERCEPT PROCEDURES -

An aircraft which is intercepted by another aircraft shall immediately:

1. Follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals.

2. Notify, if possible, the appropriate air traffic services unit;

3. Attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5MHz, using the call sign "INTERCEPTED AIRCRAFT" and giving the identity of the intercepted aircraft and the nature of the flight; and if no contact has been established and if practicable, repeating this call on the emergency frequency 243MHz.

4. If equipped with SSR transponder, select Mode A, code 7700, unless otherwise instructed by the appropriate air traffic services unit.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Ireland has adopted the seven (7) ICAO Airspace Classifications, which are designated with the letters A to G, and the use of three (3) of these classifications: A, C and G, is made in accordance with ICAO specifications as detailed in Annex 11, 9th edition.

(SPEC/ENR 1-5)

INSTRUMENT FLIGHT RULES

FM IMMUNITY - Foreign operators operating aircraft through Irish airspace which are not equipped with compliant receivers should ensure that:

1. Aircrews are aware of potential FM immunity hazards.

2. Non-compliant receivers are individually identified as such.

3. ENROUTE: The flight (including diversions) be planned IAW ICAO enroute navigation requirements, avoiding the use of VOR facilities.

4. TERMINAL: The approach to the final destination (or alternate) within Ireland be planned to avoid the use of ILS (localizer) or VOR facilities.

(SPEC/AIC 31-00)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. FIR BOUNDARY ESTIMATES - Flight plan estimates for the boundary crossing points between SOTA airspace and adjoining UK and Brest FIR's and Shanwick OCA are required.

(SPEC/ENR 2-22)

2. A flight plan shall be submitted within the State for any international flights or any flight of which at least a total of 30 nautical miles is over water.

(SPEC/ENR 1.10-1)

3. FLIGHT PLAN ADDRESSEES

a. Ireland is a participating state in the Integrated Initial Flight Plan Processing System (IFPS) which is an integral part of the Eurocontrol Central Flow Management System (CFMU).

(SPEC/ENR 1-10-1)

b. IFR flights wholly within the IFPS Zone (Including Shannon FIR/UIR and SOTA) Flight plans and associated messages need ONLY be addressed to the two IFPS units as follows:

(1) For AFTN: EBBDZMFP AND LFPYZMFP

(2) For SITA: BRUEP7X AND PAREP7X

(SPEC/ENR 1.10-5)

FLIGHT HAZARDS

HIGH MIDAIR COLLISION POTENTIAL AREA -

1. Military exercise and Training areas - Active Mon-Fri, 0900-1700Z++. May be activated at short notice outside published hours. Prior permission required for VFR and uncontrolled IFR penetration above 4500 ft AMSL. Acft must be transponder equipped. PPR from Mil ATS, Casement, 122.0 MHz. Controlled IFR flight penetration is coordinated by Civil ATS. Information on activity status available from ATS Dublin, ATS Shannon and Mil ATS 122.0 MHz. Military Operations Areas in the Shannon FIR operate within the following areas from the SFC up to FL 450:

a. a. Military Operations Area 3- Area contained by N53°08' W06°32' to N53°04' W06°29' to N52°30' W06°35' to N52°40' W07°20' to N53°08' W06°32'.

b. Military Operations Area 4- Area contained by N53°23' W06°43' to N53°08' W06°32' to N52°47' W07°08' arc 40 NM radius of N53°18' W06°27' to 53°25' W07°33' to N53°32' W07°22' to N53°24' W06°59' to N53°23' W06°43'.

c. Military Operations Area 5 - Area contained by N53°25' W07°33' arc 40 NM radius of N53°18' W06°27' to N52°47' W07°08' to N52°40' W07°20' to N52°46' W07°51' arc 60 NM radius of N53°18' W06°27' to N53°06' W08°04' to N53°25' W07°33'.

(SPEC/ENR 5-4)

2. Ballooning - ballooning takes place in uncontrolled airspace at the following locations:

NAME OF SITE GEOGRAPHIC POSITION
Blessington N53°11' W06°34'
Barberstown Castle N53°19' W06°36'
Clonbullogue N53°15' W07°07'
Kinnity N53°06' W07°43'
Camolin N52°36' W06°25'
Wells House N52°31' W06°21'
Boyle N53°59' W08°14'

3. Glider Flying - glider flying takes place in uncontrolled airspace from the following locations:

NAME OF SITE GEOGRAPHIC POSITION
Gowran Grange N53°11' W06°38'
Kilkenny N52°39' W07°19'
Clonmel Ridge N52°18' W07°37'
Dingle Peninsula
Inch Strand N52°08' W09°58'
Fermoyle Strand N52°15' W10°06'
Glenbelly Strand N52°04' W09°58'

4. Model Aircraft - Radio controlled small aircraft flying takes place at the following location:

Horsehill Dunderrow N51°44' W08°35'

5. Parachuting - parachuting takes place in uncontrolled airspace at the following locations:

Clonbullogue N53°15 W07°07'
Punchestown N53°11'W06°37'

ENROUTE

FLIGHTS IN BORDER AREAS -

Communications between aircraft and the responsible Air Traffic Control Sector(s) in the Shannon ATCC will be via VHF. As the SOTA airspace remains oceanic airspace, the communications requirements currently outlined in UK AIP will continue to apply to all aircraft in SOTA airspace. If unable to contact Shannon Control on VHF, aircraft should utilize the appropriate HF facility, addressing their message to Shannon Control.

(SPEC/ENR 2-23)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			IRELAND				
L18	Lipgo NCRP (N53°04′ W05°00′)	317	DUB VOR/DME	39.1		FL 245 FL 75	EVEN
	CONTROL: Dublin ACC REMARKS: CDR 1, 2, 3. Avbl for flight planning Mon-Thu 1730-0800Z (1730-0700Z summer) and avbl from 1700Z Fri (or day preceding a public holiday) to 0800Z (0700Z summer) Mon (or day after a holiday).						
UL18	Lipgo NCRP (N53°04′ W05°00′)	317 137	DUB VOR/DME	39.1	FL 250	FL 660 FL 245	EVEN (NW)
	CONTROL: Shannon ACC REMARKS: WESTBOUND: CDR 1, 2, 3. Avbl for flight planning Mon-Thu 1730-0800Z (1730-0700Z summer) and avbl from 1700Z Fri (or day preceding a public holiday) to 0800Z (0700Z summer) Mon (or day after a holiday). EASTBOUND: CDR 1, 3. Available for DUB VOR overflights only daily from 2200-0700Z++.						
UL180	Bandu NCRP (N50°29′ W10°09′)	075 256	Leslu CRP (N51°00′ W08°00′)	87.5	FL 250	FL 660 FL 245	ODD (ENE)
	CONTROL: Shannon ACC REMARKS: CDR 1, 3 available subject to UK SWMDA activity: Mon-Thu 2000-0900Z++, Fri-Mon 1800-0900Z++. CDR 2, 3 all other times.						
UM142	Luvis NCRP (N51°23′ W09°29′)	118 299	Leslu CRP (N51°00′ W08°00′)	60.4	FL 250	FL 660 FL 245	ODD (SE)
	CONTROL: Shannon ACC REMARKS: CDR 1, 3 available subject to UK SWMDA activity: Mon-Thu 2000-0900Z++, Fri-Mon 1800-0900Z++. CDR 2, 3 all other times.						
UN160	Erter NCRP (N51°34′ W08°34′)	142 322	Ledgo NCRP (N51°14′ W07°34′)	26.8	FL 250	FL 660 FL 245	ODD (SE)
	CONTROL: Shannon ACC REMARKS: CDR 1, 3 available subject to UK SWMDA activity: Mon-Thu 2000-0900Z++, Fri-Mon 1800-0900Z++. CDR 2, 3 all other times.						
UN514	Giper NCRP (N51°00′ W12°00′)	096 296	LESLU CRP (N51°00′ W08°00′)	151.6	FL 250	FL 660 FL 245	ODD (NE)
	CONTROL: Shannon ACC REMARKS: CDR 1, 3 available subject to UK SWMDA activity: Mon-Thu 2000-0900Z++, Fri-Mon 1800-0900Z++. CDR 2, 3 all other times.						

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for Charts.

USE OF LANDING LIGHTS - It has been shown that the display of landing lights has reduced the number of bird strikes on aircraft. Therefore, where the design limitations of aircraft installations permit, landing lights should be operated in flight within terminal areas and during take-off, approach to land and climb and descent procedures.

(SPEC/ENR 5-33)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

IRELAND HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
St. Patrick's Day	17 Mar
Good Friday	Friday before Easter
Easter Monday	Monday after Easter
May Day Holiday	First Monday in May
June Holiday	First Monday in June
August Holiday	First Monday in August
October Holiday	Last Monday in October
Christmas Day	25 Dec
St. Stephen's Day	26 Dec

(SPEC/GEN 2-2)

ISRAEL

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

This entry includes ISRAEL, territorial waters and occupied territories.

DIMENSIONAL UNITS -

Blue Table.

ALTIMETER SETTING PROCEDURES -

Within the Tel Aviv FIR, procedures are standard over water, and terms of altitude according to regional QNH over land. Arriving traffic shall change from flight level to altitude when leaving FL 115 on descent, or when crossing coastline and over land, whichever is earliest. Aircraft departing airports shall change from altitude to flight level when leaving 10,500' or when crossing coastline and flying over water, whichever latest. Aircraft shall remain under regional QNH when flying over water below 10,500'. A regional QNH will be made available to aircraft flying over land except within the Tel Aviv/Ben Gurion TMA.

VERTICAL SEPARATION -

SEMICIRCULAR (NON-STANDARD).

1. Vertical separation during enroute flight will be expressed in terms of altitudes when flying over the land area and in terms of flight levels when over the water area.

2. Maintain odd altitude/flight level on headings 090.... to 269...., IFR or Controlled VFR.

3. Maintain even altitude/flight level on headings 270.... to 089...., IFR or Controlled VFR.

(SPEC/ENR 1.7-1)

4. POSITION REPORTING- Standard.

VISUAL FLIGHT RULES

Standard except:

1. VFR flight in Israel shall be operated as Controlled VFR flights (CVFR).

2. Flights must take place below 15,000' and during daylight hours.

(SPEC/ENR 1.2-1)

INSTRUMENT FLIGHT RULES

Same as Regional Procedures except IFR flight shall be flown at a level which is not below 1000' above the highest obstacle located within 8 km of the estimated position of the aircraft.

(SPEC/ENR 1.3-1)

FLIGHT PLANNING

Operators are required to route flight plans for incoming flights within the Tel Aviv FIR as follows:

1. Flights from the West - LLBGYDYX, LLBGZYZY, or LLTAZOZX.

2. Flights from the South - LLBGYDYX, LLSCZRZX, or LLBGZYZY.

3. Flights from Jordan - LLBGXDYX, LLTAZQZX, or LLBGZTZX.

(SPEC/ENR 1.10-1 and 1.10-2)

GENERAL AIR TRAFFIC ADDITIONAL INFORMATION -

1. Aircraft about to enter Tel Aviv FIR that have not received specific instructions from ATC concerning the setting of transponder shall operate the transponder on Mode A/3, Code 6400 (or 6400) before entry and maintain that code setting until otherwise instructed.

2. Individual codes will be assigned by the relevant ATC unit.

3. The following codes are to be used by aircraft entering/exiting the Tel Aviv FIR/CTA/UTA, or when operating within it:

a. Code 32 (3200 - 3277) will be assigned for all international traffic overflying and within the Tel Aviv FIR.

b. Code 31 (3100) for training/tranisition flights within Ben Gurion TCA.

c. Code 50 (5000) for all domestic flights to/from Eilat (LLET) and Ovda (LLOV).

d. Code 51 (5100) for all flights along the CVFR route.

e. Code 64 (6400-6477) for all departing international flights.

f. Code 42 (4200-4277) for all arriving international flights.

4. Other codes in addition to the above, may be assigned by ATC.

(SPEC/ENR 1.6-2)

SUPPLEMENTARY AIRPORT INFORMATION -

Ben Gurion (LLBG)

1. NOISE ABATEMENT:

a. Runway 12 will be the preferred runway assigned to landing aircraft provided the tailwind component does not exceed 10 kt on a dry runway and 5 kt on a wet runway. Runway 26 and 30 will be the preferred runway assigned to departing aircraft provided the tailwind component does not exceed 5 kt.

b. Runway 30 is not available for takeoff daily between 2100-0400Z. Landing on Runway 26 and takeoff on Runway 08 are restricted unless conditions dictate their use.

c. No training flights are permitted daily between 2100-0400Z.

d. Reverse thrust, other than idle thrust, shall not be used between 2100-0400Z except for safety reasons.

(SPEC/AD 2.5-8 and 2.5-9)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. ARRIVING FLIGHTS

a. Flights entering the Tel Aviv FIR are required to make first contact with the appropriate ACC unit for identification purposes. Pilots are required to remain on the frequecy until receiving positive radar control by the appropriate unit, as follows:

b. From Amman FIR contact Tel Aviv control as soon a practicable after take off from Amman and not later than 10 NM East of position TALMI for overflying traffic or 10 NM East of position SALAM for traffic entering the Ben Gurion TMA.

c. From the South contact "South Identification" frequency 132.0 Mhz primary or 127.75 Mhz secondary not later than Sharm-El-Sheik en-route R-650. Level assignment remain the same.

d. From the West and the Northwest contact "Tel Aviv Identification" frequency 118.80 Mhz primary or 132.05 Mhz secondary not later that 180 NM from Ben Gurion (BGN) VOR/DME.

(SPEC/CL I NOTAM A0377-02)

2. NATANIA VOR - NAT VOR not to be used except for ATS Routes as follows.

a. Between NAT VOR and 28 DME at 5000 ft or above, and between NAT VOR and 32 DME 6000 ft or above.

b. Between NAT VOR and 26 DME at 5000 ft or above, and between NAT VOR and 30 DME at 7000 ft or above.

c. Between NAT VOR and 20 DME at 4000 ft.

d. Between NAT VOR and 25 DME at 5000 ft or above. At 6000 ft or above up to 30 DME.

e. Between NAT VOR and 17 DME at 4000 ft or above. Above 5000 ft unrestricted.

f. Between NAT VOR and position "YOSEF" at 4000 ft or above.

g. In addition, unrestricted use at 5000 ft or above is authorized in the following sectors:

(1) BetweenRDL 080 to RDL 115 RDL 180 to RDL 220 RDL 275 to RDL 295.

NOTE: Beyond the above route segments and sectors, proceed in VMC or in IMC under Radar Control.

(SPEC/ENR 4.1-2)

3. AIRWAYS/ROUTES

a. J10

(1) For use daily, only by aircraft whose cruising speed is 140 KIAS or above.

(2) On Monday, Wednesday, Friday, Saturday and holidays, aircraft whose cruising speed is less than 140 KIAS will be permitted to cruise at 6000 & 7000 only.

(3) Route is PPR from Israel CAA.

(SPEC/ENR 3.1-3)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

ISRAELI HOLIDAYS FOR 2006

NAME	DATE
Passover's Eve	12 Apr 06
Passover	13 Apr 06
Passover's 7th Day	19 Apr 06
Independence Day	3 May 06
Shavouoth	2 Jun 06
Jewish New Year's Eve	22 Sep 06
Jewish New Year's 1st Day	23 Sep 06
Jewish New Year's 2nd Day	24 Sep 06
Yom Kippur's Eve (Day of Attonement Eve)	1 Oct 06
Yom Kippur	2 Oct 06
Sukkot's Eve	6 Oct 06
Sukkot	7 Oct 06
Sukkot's 8th Day	14 Oct 06

(GEN 2.1-2)

ITALY

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

This entry includes BRINDISI FIR/UIR, MILANO FIR/UIR and ROMA FIR/UIR. Also includes islands of PANTELLERIA, SARDINIA and SICILY.

DIMENSIONAL UNITS -

ICAO Table.

ALTIMETER SETTING PROCEDURES - Standard.

NOTE: Use of QNH altimeter settings when operating below TRANSITION LEVEL does not preclude a pilot from using a QFE setting for terrain clearance purposes during approach.

(SPEC/RAC 2-4)

VERTICAL SEPARATION - Semicircular

POSITION REPORTING - Standard

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Standard except:

1. Italy has implemented the ICAO Annex 11 airspace classifications.

a. Within Italy, Lower Airspace Flight Information Regions are composed of the airspace between the surface and FL 195, inclusive.

b. No portion of airspace within Italy has been classified as Class B airspace.

c. Upper Flight Information Regions (Milano, Roma, Brindisi) from above FL 195 to FL 460 are classified Class C; above FL 460 to unlimited Class G, except as classified differently due to services provided (Military Control Zone, and active Restricted, Danger, or Prohibited Areas).

(SPEC/RAC 1-9/10)

d. Flight Information Regions (Milano, Roma, Brindisi) from Ground to FL 195 inclusive are classified Class G except as classified differently due to ATC services provided (TMA, AWY, Advisory Route, air traffic zones (ATZ) within control zones).

(SPEC/RAC 1-9/10)

e. Airport Traffic Zone (ATZ). ATZs within control zones adopt the same classification of the control zone. ATZs at uncontrolled airfields are Class G.

(SPEC/RAC 1-11)

f. The following ATZs are outside a Control Zone and classified as Class G, but are subject to special regulations: Frosinone (LIRH), Viterbo (LIRV), Rome/Guidonia (LIRG), Vincenza (LIPT), Pantelleria (LICG), Roma/Urbe (LIRU) and Luni Sarzana (LIQW), Perugia (LIRZ).

(SPEC/RAC 1-11)

(1) To enter the traffic patterns of these airports:

(a) Radio contact is required.

(b) When ground visibility is less than 5 km a maximum of three aircraft, at controllers discretion, might be authorized for flight operations (landing and takeoff operations included), provided that the ground visibility is equal or greater than 1500m. Training flights might temporarily be requested either to land or to leave the airport traffic pattern or to hold clear in appropriate areas outside the ATZ. Permission must be requested from the controlling agency when entering or departing the pattern or conducting closed traffic when visibility is less than 1500m.

(SPEC/RAC 1-25)

g. VFR Transponder requirements- Within Class C, D and E airspace, Modes A and C are required.

h. Night VFR flight is authorized for allied military aircraft.

i. Except when authorized to operate special VFR: VFR flights shall not takeoff or land at an airport within a Control Zone or enter the Control ATZ of the primary airport within a Control Zone when:

(1) The ground visibility is less than 5 km;

(2) The ceiling is less than 1500'.

NOTE: During daylight hours, IFR capable multi- engine helicopters require 1 km visibility.

(SPEC/RAC 1-26/33)

2. SPECIAL VFR -

a. In order to comply with IFR and to facilitate the flow of air traffic, the appropriate ATC unit may issue, on pilot's request and traffic conditions permitting, special VFR authorization, provided that:

(1) Ground visibility is not less than 1.5 km;

(2) The aircraft maintains continuous two-way communications with the appropriate ATC unit and proceeds below clouds if any, and in visual reference with ground or water.

b. Special VFR is authorized, at pilot's request to enter a Control Zone:

(1) For the purpose of landing at the primary airport within the Control Zone.

(2) To takeoff from the primary airport within the Control Zone for the purpose of departing the Control Zone or to operate within the Control Zone.

c. The visibility and ceiling requirements for special VFR operations are:

(1) 1500m ground visibility for fixed wing aircraft.

(2) 1000m ground visibility for helicopters.

(3) Ceiling is not lower than a height enabling the pilot to remain below the clouds and in sight of the surface in accordance with any other minimum heights for VFR flights (see RAC 6.1.6) or in accordance with any other minimum heights when so defined locally by the appropriate authorities and published in RAC 4. (U.S. Army pilots see AE95-1).

(SPEC/RAC 1-25/34)

VFR FOR HELICOPTERS -

1. Helicopters may operated in less than 1500m flight visibility, if maneuvered at a speed that will give adequate opportunity to observe other traffic or any obstacle in time to avoid collision.

2. No minimum heights are established for helicopters in VFR. Helicopters shall be flown at such heights as would enable it, in the event of an emergency arising, to land without danger to persons or property.

3. Helicopter VFR night flight is authorized:

a. Pilot in command must hold an IFR rating

b. Take-off and landing shall be carried out on the areas properly equipped for night time maneuvers. Where not available, take-offs and landings shall be carried out on the runways.

4. Helicopters shall not take-off or land at an airdrome/heliport classified as 'G' Airspace when the ground visibility is less than 1.6 NM.

INSTRUMENT FLIGHT RULES

Standard.

FM IMMUNITY -

1. After 1 Jan 2001, only aircraft with navigational equipment compliant with applicable interference immunity performance requirements for ILS localizer and VOR receiving systems will be allowed to operate in Italy until 31 Dec 2005.
(TFMWG-E/USAASDE 00-0174)

NOTE: US aircrews operating in the EUCOM AOR will observe the following restrictions regarding FM immunity in Italian airspace: ENROUTE - Permitted for RNP/5 compliant aircraft. TERMINAL - No VOR or ILS as primary approach system.
(TFMWG-E/USAASDE 02-0083)

2. Italy has implemented the ICAO Annex 11 airspace classifications.

a. For IFR operations, a transponder with Mode A and C is required for all classifications of airspace.
(SPEC/RAC 1-26)

3. For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS version 7.0 may use the enhanced mode only on a non-interfering basis when flying in Italian airspace.
(USAFE-DOV/AFFSA XOIA FIL 01-62)

RVSM RULES - Standard.

OPERATIONAL AIR TRAFFIC

1. Military flights which do not comply with the provisions stated by ICAO are settled as Operational Air Traffic (OAT). For such traffic, rules and procedures have been specified by Italian Air Force. OAT shall be conducted in contact with coordination and control service of Italian Air Force (SCCAM).

2. When not operating as GAT, state aircraft belonging to those state departments that following-up an agreement with the ministry of defense, comply with the same provisions stated for Military Air Traffic (OAT) and shall be conducted in radio contact with the relevant ATS units (civil or military).

3. Operational air traffic has normally priority over other traffic for the use of the airspace except for emergency traffic, military traffic operating for defense purposes, rescue traffic, and take-off and landing traffic.

4. If conditions exist for a pilot to change his flight from GAT to OAT the ATS unit receiving the notification of the new status of the flight, will consider the current GAT FPL closed.
(SPEC/RAC 1-1)

FLIGHT PLANNING

GENERAL AIR TRAFFIC -

1. The Central Flow Management Unit (CFMU) provides Air Traffic Flow and Capacity Management (ATFCM) for the European Civil Aviation Conference (ECAC). Italian Flow Management Position(s) (FMP) are established ACCs (Roma, Brindisi, Milano, Padova) and operate H24. These functions are in accordance with ICAO DOC 4444/14-7030/6 EUR RAC.

a. CFMUs ensure Calculated Take Off Time(s) (CTOT) for departing traffic to optimize traffic flow.

NOTE: CTOT is accurate within 1 minute (CTOT-5' to +10' - called "departure slot").

b. AFTMs provide services for:

(1) ATS units with flight plan data, best use of airspace capacity, smooth traffic flow, and prevention of sector overloads.

(2) Aircraft operators with advice on flight planning and airspace restrictions.

c. Aircraft operators shall comply with ATFM procedures for flight planning to include revelant strategic, tactical, and operational ATFM messages. In particular, aircrews:

(1) Are responsible for CTOT adherence.

(2) Shall notify ATC of any estimate off block times (EOBT) of more than 15 minutes or issue the appropriate delay message.

(3) Re-apply for a new CTOT as appropriate.

(4) Issue the appropriate cancellation message (CNL) with a "DD" priority to all appropriate addresses on the previous flight plan.

(5) File the replacement flight plan 5+ minutes after the CNL message.

NOTE: A replacement flight plan can only be filed after acknowledgment (ACK) of the CNL flight plan).

(a) The replacement flight plan shall also contain the original call sign without the "Q" suffix in item 7, the complete new route in item 15, and in item 18 "RFP/Qn" (RFP=replacement flight plan, n=number relating to the replacement flight plan.)

(b) Aircrews may inform ATC they are operating on a replacement flight plan if doubt exists regarding the route to be flown.

d. ATC:

(1) May make the CTOT part of the ATC clearance.

(2) Shall not issue start-up clearance once CTOT+10' has elapsed.

(3) Shall not issue take-off clearance before CTOT-5'.

(4) May allow start-up and departure irrespective of CTOT based on weather, technical, or operational situations, etc.
(SPEC/RAC 1-61/62)

NOTE: Aviano does not accept DD FM 1801. If the outbound flight plan is not in the system, pilots must be prepared to fill out a "PIANO DI VOLO" Italian version of DD FM 1801 in ink. Attention all aircrews! If you are inbound to Aviano from any station other than the station you notified Airfield Management Operations of on your PPR, you must call and change your PPR. All aircrews using STS/AFTMEXEMPTAPPROVED in Block 18 of your flight plan must coordinate with Rome, "PRESIDENZA DEL CONSIGLIO DEL MINISTRIUFFICIO PER I VOLI DI STATO, DI GOVERNO ED UMANITARI, ETC", to obtain an authorization code. Authorization codes are required or remark must be removed from the flight plan. Contact Base Operations for assistance.

(USAF AFFSA/FIL 04-520)

2. FLIGHT PLAN AND FLIGHT NOTIFICATION

a. All aircraft departing Aviano (LIPA/LIYW) on local training or ATO missions must be coordinated with the 31 OSS/OSOS DSN 632- 8832 NLT 0900 local the working day prior to the flight.

(OSS/USAFE-DOYP)

b. Prior to departure from an airport, information on the intended flight shall be provided to the appropriate ATC unit in the form of:

(1) Flight Plan (FPL), or;

(2) Flight Notification

c. A flight plan is required for:

(1) Any IFR flight, or;

(2) Any flight across international borders, or;

(3) Any flight conducted east of Tangliamento River and within or into designated areas or along designated routes, when so required by the ATC authority to facilitate coordination with appropriate military ATC in order to avoid the possible needs of intercept for identification, or;

(4) Any flight within or into Class C, D or E airspace, or;

(5) Any flight departure and/or landing on airports provided with ATC.

d. A flight plan is not required for:

(1) An aircraft taking off from and landing at the same airport not provided with ATC, or;

(2) Taking off from an airport not provided with ATC service and bound to an airport not provided with ATC service and flying within class F and G airspaces.

e. A flight plan shall be submitted to the departure airport ATC Service Office (ARO) (or the jurisdictional ARO if not available at the departure airport) within 24 hours for the EOBT, as follows:

(1) Filling in the appropriate FPL form, or,

(2) By teletype, or,

(3) by telefax (pilot is responsible to verify its receptions, or,

(4) By telephone, when the communications are recorded at ATC unit.

NOTE: When in exceptional cases it is impossible to accomplish the above, communication of flight plans are permitted on tower or AFIS radio frequency, or on Ground Control frequency, where available.

f. For flights departing from airports where no ATC unit is established, information on an IFR flight plan shall be provided to the jurisdictional ATC unit.

g. The FPL must be submitted to the appropriate ATC unit at least:

(1) VFR: 30 minutes before the EOBT

(2) IFR:

(a) 3 hours before the EOBT. Exceptional cases where it is impossible to meet this requirement, operators should give as much notice as possible, and never less than one hour. Operators are reminded that delays from ATC/FM may be expected in the event the FPL is submitted less than 3 hours of EOBT.

(b) 30 minutes before the EOBT for:

1 Aircraft, that due to bad weather conditions or an emergency situation diverted to another airport, but still takeoff from the diversion airport within the same day, or;

2 Military or State aircraft, or;

3 Aircraft with "State Flight" status as specified, or;

4 Flights which, subject to ATFM measures, select an alternative (Replacement Flight Plan).

(c) Without time limits (IFR and VFR)

1 Ambulance and humanitarian flights, or;

2 Flights operating for Search and Rescue (SAR), or;

3 "Patrol" flights, or;

4 Aircraft with "State Flight" status as specified.

h. The pilot or his representative must transmit to the departure airport ARO any possible cancellation of the FPL. Compliance with such obligation is a necessary condition for the acceptance of a new flight plan.

i. In case of more than two hours delay, as regards EOBT, the FPL must be updated or cancelled.

j. No updating or resubmission of the FPL is required if the delay is due to ATC reasons.

k. Abbreviated FPL for VFR flights:

(1) Taking off and landing at the same airport provided with ATC unit, or;

(2) Taking off from an airport provided with ATC unit and bound to an airport not provided with ATC unit, and vice versa, or;

(3) Taking off and landing at airports provided with Airport Flight Information Service (AFIS) and operating in class F and G airspace.

(a) The FPL should contain the following at minimum:

1 Call sign and flight rules;

2 Type of aircraft;

3 Departure Airport;

4 EOBT;

5 Planned route;

6 Destination airport and total estimated elapsed time (EET);

7 Endurance;

8 Persons on board.

REMARKS: Flight activities within Airport Traffic Zone (ATZ) or Control Zone (CTZ) may be granted possible exceptions, exemptions or modifications to abbreviated FPL and related submission procedures, under conditions locally agreed upon, among civil aviation authority (CDC), ATC unit and users. Such agreement may as well state that the above mentioned derogation may be applicable for specific operational (i.e. training and test flights, gliders, etc.) conducted in Class G airspace outside and in the vicinity of ATZ/CTR, when it is deemed convenient that such traffic is handled by AFIS/TWR/APP concerned.

l. The jurisdictional ATC unit and to the ATC unit that furnish ATC services on the planned route.

m. Closing the FPL is the responsibility of the pilot in command (PIC). When failure to ensure its closure, a PIC may be called upon to pay for all SAR expenses.

3. The following restrictions apply to flight plans already submitted and acknowledged:

a. Flight plans should be filed a minimum of 3 hours prior to the EOBT. RON aircrews are recommended to file before entering crew rest.

b. Changes to the EOBT, callsign, destination, and route of flight requires the filed flight plan to be cancelled followed by a submission of a new flight plan. If changes are made within 2 hours of EOBT, expect delays.

c. When EOBT is within 30 minutes, changes to the EOBT could cause delays.

d. According to Flow Control, the EOBT is calculated at 5 minutes minus departure time for taxiing purposes.

(SPEC/RAC 1-19 thru 1-22)

NOTE: Any unit that deploys to AVIANO AB (LIPA/LIYW) must contact the 31 OSS/OSOS (Wg Scheduling) DSN 314-632-7634 to receive a briefing on proper flight planning procedures prior to the first flight.

(31 OSS/RAC 1-19 thru 1-22)

4. FLIGHT PLANNING ADDRESSEES

a. FIR/UIR:

(1) ROMA:

(a) IFR/LIRRZQZX

(b) VFR/LIRRZFZX

(2) MILANO:

(a) IFR/LIMMZQZX

(b) VFR/LIMMZFZX

(3) BRINDISI:

(a) IFR/LIBBZQZX

(b) VFR/LIBBZFZX

b. Flow Control: LIRRZDZO

c. Destination/Subsequent Legs:

(1) Civil:

(a) . . . . ZPZX

(b) . . . . ZTZX

(2) Military: . . . . ZPZX

d. Additional information:

(1) Flight plans for military aircraft with destination Naples/Capodichino must be addressed to: LIRNYXYX.

(2) Flights routed into/through Milano FIR/UIR and penetrate LIP5: LIPPZQZX.

(3) Flights to/from Aviano (LIPA): LIRSZAZX.

(USAFE-DO/AFFSA)

CLEARANCE INFORMATION -

1. All departing aircraft with an IFR flight plane shall request a start-up clearance on the appropriate frequency only when the aircraft is ready to start engines immediately.

2. When the expected delay is 15 minutes or more, ATC will provide an expected delay to start-up. Pilots shall hold apron position maintaining a continuous listening watch on the appropriate frequency in order to receive possible updates of the expected delay time.

3. When the expected delay is less than 15 minutes, ATC will provide a clearance to start-up at its own discretion.

4. Aircraft, not ready to clear the apron within 10 minutes after start-up clearance, may be subject to a new modified clearance for ATC necessities.

5. When requesting start-up clearance and successive taxi clearance, destination and stand number must be given.

6. Start-up and taxi clearance does not constitute priority for take-off, since flow sequence of departing traffic may be changed to meet ATC requirements. When an aircraft is subject to ATFCM regulations, it should be advised to start up in accordance with its CTOT.

7. If a start-up clearance is denied, the flight crew shall be advised of the reason.

8. When EOBT exceeds more than 15 minutes changes, the AO/Pilot shall send a DLA/CHG message.

9. AO shall update their FPL with the new EOBT and begin their taxi maneuver in accordance with the ETOT/CTOT.

10. If the EOBT has not been updated, the TWR/APP will deny the start up clearance if it is asked for at EOBT + 15 minutes.

SUPPLEMENTARY AIRPORT REMARKS -

Aviano AB (LIPA/LIYW)

1. All aircrews note hazards of winter weather conditions and comply with the following procedures:

a. Aviano weather is normally good, even after most nearby airports experience conditions of low visibility caused by fog and haze. Slight change in wind direction, however, can cause these same low visibility conditions at Aviano AB. Suitable alternates are as much as 200 NM away. Since all of them are non-USAFE airports, aircrews must take appropriate weather minima into consideration while pre planning flights to Aviano AB, and include a thorough check of all airports in Northern Italy. If doubt exists before departing, call Aviano Command Post for the latest information. Also, when approaching Aviano, contact METRO of Command Post for local conditions.

(31 OSS/USAFE-DOYP)

2. SERVICES

a. TRANSIT ALERT - No drag chute repack capability. JOAP available USAF aircraft only, 0630-1530Z++ weekdays, except holidays. If aircraft maintenance status changes, contact MOCC 632-7688/9. Fleet service available 24 hours, PN with fund cite number for transient aircraft, fleet service available to AMC aircraft. For trash pick-up, call TA/AMC (no hazard authorized).

b. RESTRICTIONS - All aircraft must have diplomatic clearance to land, all foreign/civilian aircraft require Italian approval prior to landing. All aircraft transiting loops/restricted areas must be pre-announced to SFS (via MOCC) prior to returning to aircraft. When aircraft approach Aviano under IFR, expect handoff to Approach Control from Padova or Treviso non-radar center. Expect clearance to Nikel/Penny IAF with possible late transfer from Padova. Aircraft requesting ASR/PAR service are required to advise Approach Control on initial contact.

(31 OSS/USAFE-DOYP)

3. CAUTION: All aircrews and mission planners: be advised that during periods of electrical power failure, numerous obstacles in the vicinity of the runway will not have operational obstacle lights. Pilots are advised to exercise extreme caution when determining turnouts before reaching departure end of runway.

(AFFSA/XOIA FIL 02-78)

4. Public Health Measures: All aircraft originating from cholera infected countries must land at a sanitary airport and be decontaminated prior to arrival. Sanitary airports: Roma/Fiumicino (LIRF), Roma/Ciampino (LIRA), Milano/Malpensa (LIMC), and Milano/Linate (LIML). Known cholera infected countries: Afghanistan, Angola, Benin, Bhutan, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, China, Comoros, Congo, Cote d'Ivoire, Djibouti, Ecuador, El Salvador, Ghana, Guatemala, Guinea, Guinea-Bissau, India, Iran, Iraq, Kenya, Laos, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Nicaragua, Niger, Nigeria, Peru, Democratic Republic of the Congo (fmr. Zaire), Rwanda, Philippines, Sao Tome/Principe, Senegal, Sierra Leone, Somalia, South Africa, Swaziland, Tanzania, Togo, Uganda, Venezuela, Vietnam, Zambia, Zimbabwe.

CAPODICHINO (LIRN)

NOISE ABATEMENT: RWY 24 STANDARD INSTRUMENT DEPARTURE NOISE ABATEMENT PROCEDURE- In order to reduce the exposure to noise of highly populated areas, aircraft on track 222 degrees that:
- have reached 1200 feet before NPC 2 DME or
- can perform the turn with a bank angle higher than 15 degrees or
- can maintain an KIAS of less than 160,
Shall make the left turn on track 180 degrees to intercept afterwards and join SOR VOR/DME R-342.

Ciampino (LIRA)

TRANSIENT AIRCREWS - Parking from Military Stands W1 to W22, Military Stand A1 and Military Northwest Parking Area of Ciampino available with PPR 24 hr PN prior arrival, 31st Wing Base OPS, Tel C06-4940923, 06-79492632 or 06- 79492378, Fax 06-79492210. PPR for Sat, Sun must be requested Fri til 1300Z++. PPR Nr. must be reported on Flight Plan, Item 18.

(AFFSA/XOIA FIL 99-32)

ADDITIONAL INFORMATION

1. AERODROME FLIGHT INFORMATION SERVICE (AFIS)

a. The Aerodrome Flight Information Service (AFIS) is a service provided at non-controlled aerodromes with the aim of issuing information as useful for a flight to be safely and efficiently conducted in the Aerodrome Traffic Zone (ATZ). Upon receipt of the information and having regard to the safety during take-off, landing or flight in the ATZ, pilots shall decide the course of actions to be undertaken as appropriate. The service is provided by an AFIS Operator. The AFIS Operator issues information to aircraft in flight in the ATZ as well as to aircraft moving on the movement area.

b. The AFIS operator will provide pertinent and available information to pilots in contact on the appropriate frequency or in the range of visual signaling as:

(1) Aerodrome conditions:

(a) construction or maintenance work on the maneuvering area;

(b) rough portions of runway and taxiways;

(c) presence of snow, mud, water or ice on runway and taxiways;

(d) presence of any object on the runway and its vicinity that may affect safety.

(2) Local meteorological information (such as pressure data, surface wind direction and speed);

(3) Landing and take-off direction;

(4) Traffic information

NOTE: AFIS uses the call sign INFO.

c. Such information as well as visual signals to aircraft experiencing a radio failure shall be recorded just as information.

d. AFIS is not to be intended as an ATC Service. Information issued never constitutes authorization.

e. Pilots interested in getting information listed above shall contact and maintain a listening watch on the appropriate AFIS radio frequency:

(1) before entering the ATZ, where established;

(2) in the aerodrome traffic circuit;

(3) before starting any operation on the maneuvering area;

(4) Pilots, either on the ground or in flight, shall inform AFIS of the selected landing or take-off direction.

f. Pilots of VFR flights intending to operate within ATZ of the following AFIS: Albenga (LIMG), Bolzano (LIPB), Crotone (LIBC), Levaldigi (LIMZ), Gino Lisa (LIBF), Lampedusa (LICD), Padova (LIPU), Parma (LIMP), Pontecagnano (LIRI) and Ampugnano (LIQS) shall contact AFIS information on the appropriate frequency before overflying and/or crossing departure and/or approach slopes or before entering the aerodrome traffic circuit in order to receive pertinent and available information.

(SPEC/RAC 1-45)

FLIGHT HAZARDS

1. AVIANO AB (LIPA/LIYW) - Aircrews are cautioned that there is a radio blind spot north of the Aviano TACAN 235 degree radial. This is a particularly hazardous situation because the radio blind spot varies with distance, altitude and type of aircraft. It is located on/or north of final approach and since base leg heads northeast toward the mountains, aircrews are advised to use TACAN or ADF as backup for their turn onto final. Aircraft approaching Aviano from the north may not be under radio control. Aviano APP CON utilizes non-radar procedures which are dependent on accurate position reporting. The mountainous terrain north of Aviano poses a potential hazard any time the aircrew or controller is unsure of the aircraft's exact position. For information on weather phenomena in the Aviano area, see ADDITIONAL INFO.

a. Bird hazards increase during the months of April and May and remain high throughout September. Bird strikes statistically occur below 3000' AGL between the hours of 0800-1200Z (local traffic pattern). Hazardous bird activity should be reported to SOF and/or PTD.

2. MT ETNA - Possible presence of volcanic cloud originated by the crater of Mt Etna (N37°45' E15°00') may affect air navigation. This cloud occurrence will be notified by NOTAM, can extend from the top of Mt Etna to FL 200 with direction depending on the wind.

(SPEC/RAC 4-3-11)

3. ANTI-HAIL ROCKETS-Catania CTR includes an "Antihail rockets firing" zone which is activated without warning when weather conditions are such that hail shower is forecasted. Vertical limits: Surface to FL 120. Horizontal limits: Line joining the points N37°35'15" E15°02'15" to N37°36'00" E15°06'00" to N37°35'15" E15°08'00" to N37°33'30" E15°08'10" to N37°32'00" E15°07'00" to N37°31'00" E15°01'30" to N37°31'40" E15°00'45" to beginning.

(SPEC/RAC 4-3-11.1)

4. GLIDER FLYING ACTIVITIES - In addition to the glider activity locations listed as Special Use Airspace, glider flying at the airports listed below is also considered to be a possible hazard to aircraft.

a. GORIZIA (LIPG) - N45°54' E13°36'.

b. RIETI (LIQN) - N42°25' E12°51'. Overflight of airport below 3800' MSL is prohibited.

c. TORINO/AERITALIA (LIMA) - N45°05' E07°36'.

d. VERONA/BOSCOMANTICO (LIPN) - N45°28' E10°56'.

5. AEROBATIC TRAINING AREAS

a. Milano (LIMM) TCA

(1) TORINO/AERITALIA (LIMA), 1500 to 4000 - From N45°05'04" E07°35'09" to N45°05'03" E07°36'02" to N45°04'08" E07°36'00" to N45°05'00" E07°35'05" to beginning.

(2) GAVIRATE, Surface to 5500' (QNH Malpensa) - From N45°54' E08°40' to N45°51' E08°42'15" to N45°51' E08°40' to beginning.

(3) BOLLATE, Surface to 3000'AMSL - From N45°34'30" E09°04'30" to N45°34'30" E09°07'30" to N45°32' E09°07'30" to N45°32" E09°04'30" to beginning.

(4) GAGGIANO, 500' AGL to 3000'AMSL - From N45°26'22" E09°02'11" to N45°26'22" E09°02'58" to N45°25'17" E09°02'58" to N45°25'17" E09°02'11" to beginning.

(5) CUNEO LEVALDIGI (LIMZ), 2500' to 5500' - From N44°33'19" E07°38'48" to N44°33'21" E07°39'50" to N44°31'49" E07°38'22" to N44°32'08" E07°37'41" to beginning.

(6) ALBENGA, 2800'AMSL TO 5000' AMSL - From N44°02' E08°01'30" to N44°01' E08°08' to N43°59'30" E08°07' to N44°00'30" E08°01'15" to beginning.

(7) UDINE-CAMPOFORMIDO, 2000' AMSL to 5000' AMSL- From N46°02'26" E013°12'21" to N46°00'15" E013°13'07" to N45°59'49" E013°11'21" to N46°01'06" E013°09'30" to beginning.

(SPEC/RAC 5-7-1.1)

b. ROMA (LIRR) TCA

(1) "ALFINA" zone, Surface to 5000 - 0.67 NM radius centered on N42°44' E11°58'.

(2) SIENA, 500 AGL to 3000 AGL - From N43°16'00" E11°16'20" to N43°16'00" E11°17'00" to N43°15'00" E11°17'00" to N43°15'00" E11°16'20" to beginning.

(3) PRETURO, 3000'AGL to 8000' AGL - From N42°22'55" E13°16'50" to N42°23'15" E13°19'30" to N42°21'15" E13°20'10" to N42°20'50" E13°17'20" to beginning.

(4) COMMENDA, 2000' AGL to 4000' - 0.54 NM radius centered on N42°29'31" E12°00'59".

(5) MOLIN BIANCO, 1500' AGL to 6500' MSL, N43°27'39" E11°49'54" to N43°26'47" E11°49'48" to N43°26'41" E11°51'23" to N43°27'33" E11°51'29" to beginning.

(6) GROSSETO, 2000′ MSL to 5000′ MSL, N42°44′00" E11°01′30" to N42°45′00" E10°58′40" to N42°48′10" E11°01′00" to N42°47′00" E11°04′00" to beginning.

(SPEC/RAC 5-7-2.1)

c. PADOVA TCA

(1) LUGO DI ROMAGNA, 1000 AGL to 3000 - 1 NM radius centered on N44°23′30" E11°53′00".

(2) RIMINI, 1000 AGL to 5000 - 1.5 NM radius centered on N43°48′50" E12°30′00".

(3) OSSOPPO, Surface to 5000′ - Clockwise arc of circle of 3 NM radius from N46°12′36" E13°01′23" centered on N46°15′ E13°04′ to N47°17′24" E13°06′37".

(4) LATISANA, Surface to 4500′ AGL - Clockwise arc circle 3 NM radius from N45°53′ E13°01′ centered on N45°50′ E13°01′ to N45°47′ E13°01′.

(5) ESTE, Surface to 4000′ MSL, cir 3.5 NM radius centered on N45°10′ E11°35′.

(6) AERDELTA, Surface to 2000′ - Circle 0.5 NM radius centered at N44°28′03″ E11°33′14″.

(7) RIVOLTO PAN, Surface to 6000′ MSL, cir 5.0 NM radius centered on N45°58′54" E13°03′03".

(8) CASTELLETTO, 4000′ AMSL to 7000′ AMSL, From N45°50′ E11°22′ to N45°50′ E11°25′ to N45°52′ E11°25′ to begining.

(9) CORTINA ALL′ADIGE, 3500′ AMSL to 6500′ AMSL, From N45°17′ E11°12′ to 46°17′ E11°15′ to 46°15′ E11°15′ to N46°15′ E11°12′ to beginning.

(10) TESIMO, 3000′ MSL to 6000′ MSL, N46°35′ E11°10′ to N46°35′ E11°13′ to N46°37′ E11°13′ to N46°37′ E11°10′ to beginning.

(11) CALDONAZZO, 2000′ AMSL to 5000′ AMSL, From N46°02′ E11°14′ to N46°02′ E11°17′ to N46°00′ E11°17′ to N46°00′ E11°14′ to beginning.

(12) BOLZANO S. GIACOMO, 1800′ MSL to 4800′MSL, N46°28′ E11°18′ to N46°28′ E11°21′ to N46°26′ E11°21′ to N46°26′ E11°18′ to beginning.

(13) GARDA OVEST, 1000′ AGL to 3000′ AGL, Circle 1 NM radius centered at N45°36′30″ E10°36′30″.

(14) FLYING WORK, 2000′ AMSL to 4000′ AMSL, From N49°49′43″ E13°02′01″ to N43°48′57″ E13°03′28″ to N43°48′07″ E13°02′08″ to N43°48′51″ E13°00′42″ to beginning.

(15) THIENE, 2000′ AMSL to 5000′ AMSL, From N45°41′50″ E11°29′45″ to N45°41′50″ E11°31′45″ to N45°39′50″ E11°31′45″ to N45°39′50″ E11°29′45″ to beginning.

(16) AEROCLUB REGGIA EMILIA, 2000′ AMSL to 4000′ AMSL, Circle 0.5 Nm radius centered at N44°42′ E10°41′46″.

(17) BOSCO, 2000′ AMSL to 4000′ AMSL, From N45°29′ E10°56′ to N45°29′ E10°53′ to N45′31″ E10°53′ to N45°31′ E10°56″ to beginning.

(18) CAPRINO, 3000′ AMSL to 5000′ AMSL, From N45°35′ E10°45′ to N45°35′ E10°48′ to N45°36′30″ E10°48′ to N45°36′30″ E10°45′ to beginning.

(19) LEGNAGO. 2000′ AMSL to 4000′ AMSL, Circle radius 2 NM centered at N45°08′ E11°81′.

(20) RAVENNA AD, 1000′ AMSL to 3000′AMSL, Circle .75 NM radius centered on N44°22′00″ E12°13′24″.

(SPEC/RAC 5-7-4.1)

d. BRINDISI (LIBB)TCA

(1) LISA, 2500′ to 5500′, square with sides of 2 NM West of GINA LISA (LIBF) so that runway represents East side.

(SPEC/RAC 5-7-3)

(2) SHARP AREA, 1000′ AGL to 4000′ AMSL, From N41°02′37″ E16°46′35″ to N41°02′37″ E16°47′05″ to N41°02′07″ E16°46′35″ to N41°02′07″ E16°47′05″.

6. STUDENT PILOT NIGHT FLYING - VFR flight training activity within the following airports traffic zones:
Alghero (LIEA) Genova/Sestri (LIMJ)
Bologna (LIPE) Malpensa (LIMC)
Brindisi (LIBR) Rimini (LIPR)
Capodichino (LIRN) Ronchi De Legionari (LIPQ)
Catania/Fontanarossa (LICC) Torino (LIMF)
Ciampino (LIRA) Venezia/Tessera (LIPZ)
Falconara (LIPY) Villafranca (LIPX)
Forli (LIPK)

(USAFE-DO/AFFSA)

7. GHEDI (LIPL) - USAFE aircraft operating at Ghedi are restricted from flying over the Italian Munitions factory located on centerline, approximately 4750 feet prior to the approach end of Rwy 31. USAFE/DO may waive this restriction to allow mission accomplishment when adverse weather, tailwinds or other operational requirements require overflight. Request waivers through USAFE Stan Eval (usafe.dov@ramstein.af.mil mail to: usafe.dov@ramstein.af.mil>).

(AFFSA/XOIA FIL 02-100)

8. LASER BEAM EMISSIONS- Vertical laser beam emissions are becoming frequent throughout Italy. These emissions will not affect air navigation, however, they can be potentially harmful and aircrews should avoid looking directly at the laser source Listed below are vertical laser beam emission sites.

a. Valenzano-South Bari - 10 HZ laser N41°02′38″ E016°53′07″, GND to UNL.

b. Roma/Ciampino aerodrome- 10 HZ laser beam located N41°50′24″ E012°38′49″ (RDL 049/3.5 NM ROM VOR/DME, 3 NM from THR Rwy 15 at Ciampino).

c. Potenza Town- Intermittent laser beam emissions for meteorological research located N40°38′45″ E015°48′29″ will take place daily. Pulse repetition frequency is 20 HZ.

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. US MILITARY LOW LEVEL

a. US aircrew will obtain Italian Air Staff approval prior to conducting low-level sorties below 2000′ AGL.

b. Units based on carriers and Amphibious Ready Groups (ARGs) must submit low level training plan NLT 30 days in advance, specific low level must be submitted 48 hours in advance by Designated US Authority (Tricarico-Prueher Report, Bilateral Commission, 13 Apr 99).

c. US aircrews are prohibited from conducting flight operations of any type over the Fiemme Valley.

d. Prior to flying low-level sorties in Italy, US aircrews must personally receive:

(1) Italian ATC briefing.

(2) Italian Low-level briefing.

(3) Local area briefing, if flying out of Aviano AB (LIPA/LIYW) (31OG/OGV).

(4) These must be accomplished each time an aircrew arrives in Italy. (OPR:16AF/DOT, DSN 632-8425)

e. US aircrews must contact their Italian host wing prior conducting low-level operations for the most current information pertaining to low-level restrictions before mission planning and execution.

f. US aircrews will notify the following prior to low-level flights:

(1) Italian Air Staff (Prior approval mandatory).

(2) STAMADIFESA OPS ROMA.

(3) COA/COM MARTINA FRANCA.

(4) 16AF/DO NLT 45 days prior to event(s).

(5) ODC ROME.

(6) Balkan CAOC, Vicenza, Italy.

g. US aircrews will review and comply with the following publications/information:

(1) Italian SOP ADD-1 (Planning and Execution).

(2) ITAIRSTAFF Directive SMA-7 (Mission Planning).

(3) B.O.A.T. Manual.

(4) ITAIRSTAFF SMA-73 (Low Level Rules).

(5) SOP ADD-8 (Standard Low Level Routes).

(6) PIV (Italian FLIP).

(7) Foreign Clearance Guide.

(8) Applicable HQ USAFE/DO Flight Crew Information File's (FCIF).

(9) Italian AMI-CNBBQ 1:500,000 Low Level Charts.

(10) AIP.

(11) NOTAMS.

h. Obtain PPR number for low level sortie.

i. All US aircrews will obtain a "Certification of low level training" by the "Designated US Authority" prior to executing low-level missions in Italy. Current "Designated US Authority" is 31 WG/CC, Aviano AB (LIPA/LIYW) Italy.

j. Units desiring to conduct low-level operations in Italy, must contact HQ USAFE/DOV (DSN: 480-9361) and 16AF/DOT (DSN: 632- 8425) for most current unit requirements.

(USAFE-DO/AFFSA)

2. MILITARY LOW LEVEL FLIGHTS (Fixed and rotary wing)

a. In all Italian territory and territorial waters, low level flights will be conducted by national and allied military jet aircraft as specified:

(1) HOURS

(a) From Mon-Fri only, except legal holidays in Italy excepted.

(b) Hours 0700Z-2100Z++, when the activity is conducted over the territory or within 3 NM from the shoreline.

(c) H24 for activities conducted at a distance more than 3 NM from the shorelines.

(2) ROUTES

(a) Flights over the Italian territory and within 3 NM from the shoreline will be conducted along the direction shown on the military low level flying graphic and restricted level zones as depicted on the military low level zones graphic.

(3) LEVELS

(a) Military training flight activity will be conducted according to following rules:

1 Northern Italy over the Alps: Minimum level shall be 2000'AGL. (Remark: By Alps, it is meant the area between the line joining mountains higher than 2000' MSL and located West, Northwest, North, and Northeast of Po Valley and State boundary.

2 All over the remaining Italian territory minimum level shall be 1000' AGL except within Tactical Areas (ref Italy AIP RAC 5-5-3 and MANUALE BOAT), where minimum level shall be 500'AGL instead of 250' AGL.

3 Within area N46°00' E11°00' to N46°00' E12°00' to N46°30' E12°00' to N46°30' E11°00' to N46°00' E11°00', fixed wing aircraft training activity shall be conducted not below 13,000' MSL except during takeoff and landing operations of aircraft to Bolzano (LIPB) airport.

4 Minimum level for helicopter flight shall be:

a 500' AGL along route to/from operational areas and firing ranges.

b 150'AGL instead of 50'AGL within Tactical Areas (described below).

c Exclusively within permanent ranges and Defense Administration's uninhabited areas, training helicopter activity is authorized at suitable levels to accomplish specific training flight operations.

5 Above mentioned rules do not apply during

takeoff and landing and during all flight activity connected to training and real search, rescue, and civil protection events.

6 Above mentioned rules do not exempt aircrews to comply with other published restrictions to flight activity.

7 Training civil protection flight operations (search, rescue, fire fighting, etc.) can be conducted up to specific height for each event and with caution to avoid overflying populated areas and to avoid altitudes that may endanger people and/or aircrews.

8 For flight activity conducted further than 3 NM from shoreline, current rules in force are unchanged.

9 In the period 1st Jun - 30th Sep, both dates inclusive, all aircraft and ultra light machines are not allowed to overfly the shore within 100 meters (328 ft) each side of coastline at height less than 1000 ft.

(USAASDE/RAC 1-35)

(b) From 500′ AGL up to 2000′ AGL, within tactical areas listed:

BASILICATA AREA
From N41°00′ E16°06′ to N40°42′ E16°25′ to N40°30′ E16°22′ to N40°30′ E16°40′ to N39°53′ E16°24′ to N39°45′ E16°06′ to N40°25′ E15°50′ to N40°42′ E15°58′ to N40°51′ E15°50′ to beginning.

EMILIA AREA
From N44°39' E09°00' to N45°00' E09°12' to N44°15' E11°00' to N44°05' E11°00' to N44°30' E09°32' to N44°36' E09°30' to beginning.

MOLISE AREA
N41°48′ E14°00′ to N42°02′ E14°00′ to N41°53′ E15°00′ to N41°35′ E15°15′ to N41°24′ E15°04′ to N41°41′ E14°45′ to beginning.

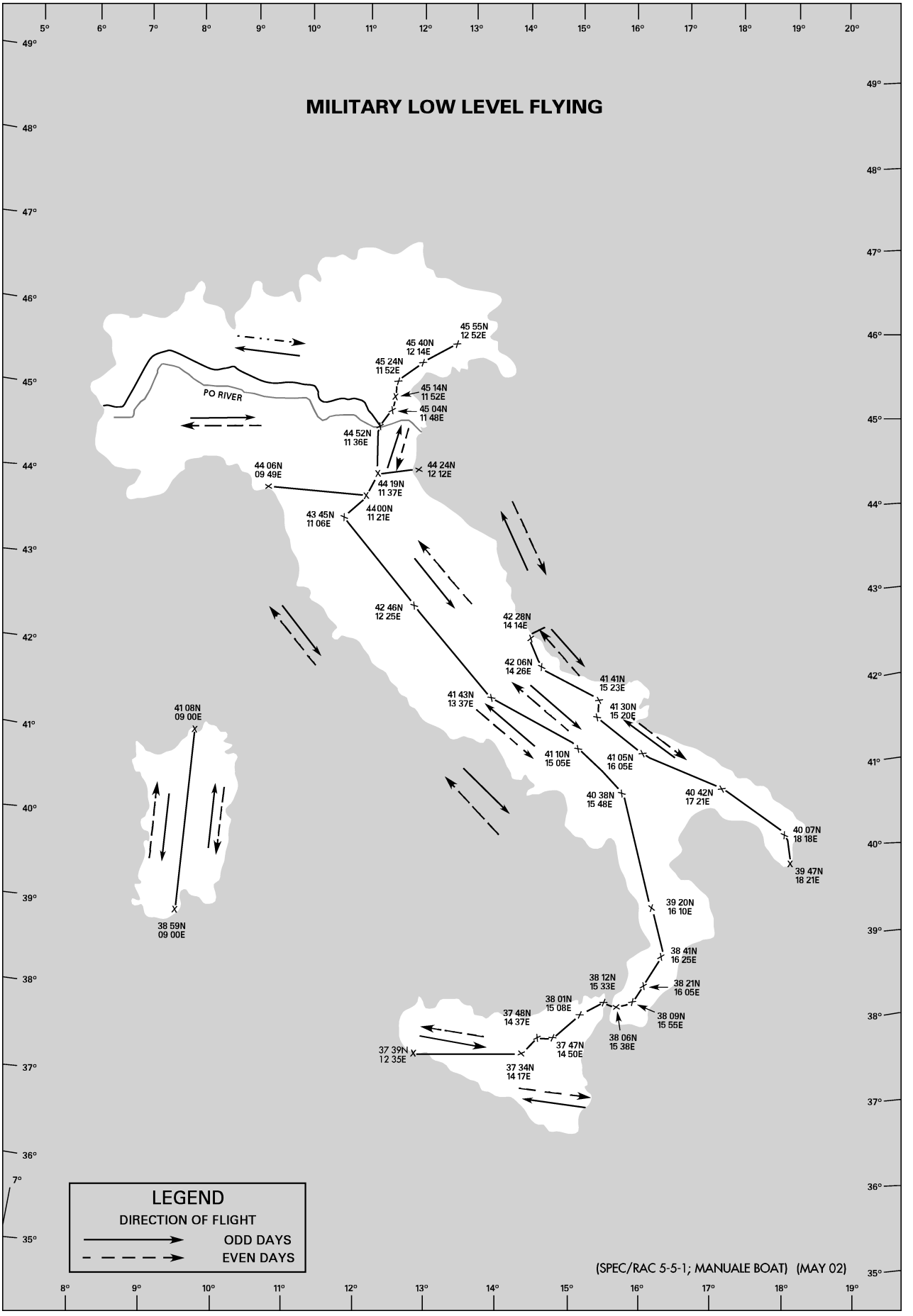
NORTH MARCHE AREA
From N44°06′N E11°27′ to N44°15′N E11°45′ to N43°37′N E12°50′ to N43°26′N E12°40′ to N43°50′ E11°45′ to beginning.

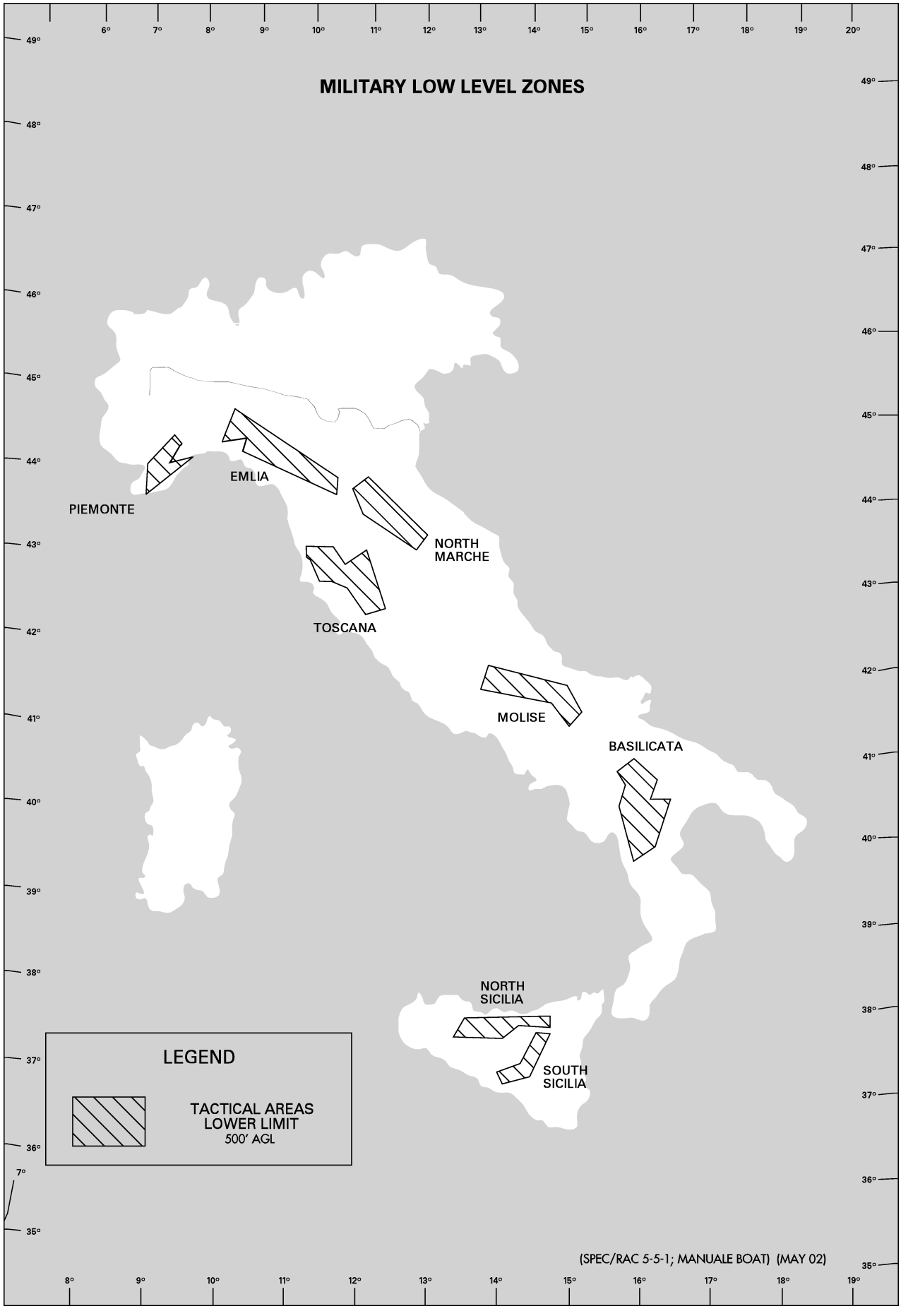
NORTH SICILIA AREA
From N37°53′ E13°25′ to N37°57′ E14°45′ to N37°48′ E14°43′ to N37°50′ E14°15′ to N37°40′ E14°00′ to N37°40′ E13°15′ to beginning.

PIEMONTE AREA
From N43°55' E07°45' to N44°20' E07°45' to N44°40' E08°10' to N44°35' E08°17' to N44°30' E08°12' to N44°19' E08°10' to N44°24' E08°30' to beginning.

SOUTH SICILIA AREA
From N37°47′ E14°36′ to N37°45′ E14°50′ to N37°15′ E14°30′ to N37°08′ E14°05′ to N37°17′ E14°02′ to N37°25′ E14°23′ to beginning.

TOSCANA AREA
From N43°28′ E11°00′ to N43°15′ E11°18′ to N43°25′ E11°35′ to N42°45′ E12°00′ to N42°41′ E11°38′ to N42°59′ E11°18′ to N43°03′ E10°49′ to N43°22′ E10°33′ to N43°27′ E10°38′ to beginning.


MILITARY LOW LEVEL FLYING
PO RIVER
45 55N 12 52E
45 40N 12 14E
45 24N 11 52E
45 14N 11 52E
45 04N 11 48E
44 52N 11 36E
44 06N 09 49E
44 24N 12 12E
44 19N 11 37E
44 00N 11 21E
43 45N 11 06E
42 46N 12 25E
42 28N 14 14E
42 06N 14 26E
41 41N 15 23E
41 43N 13 37E
41 30N 15 20E
41 10N 15 05E
41 05N 16 05E
41 08N 09 00E
40 38N 15 48E
40 42N 17 21E
40 07N 18 18E
39 47N 18 21E
39 20N 16 10E
38 59N 09 00E
38 41N 16 25E
38 12N 15 33E
38 21N 16 05E
38 01N 15 08E
38 09N 15 55E
37 48N 14 37E
38 06N 15 38E
37 47N 14 50E
37 39N 12 35E
37 34N 14 17E
LEGEND
DIRECTION OF FLIGHT
ODD DAYS
EVEN DAYS
(SPEC/RAC 5-5-1; MANUALE BOAT) (MAY 02)


MILITARY LOW LEVEL ZONES
PIEMONTE
EMLIA
NORTH MARCHE
TOSCANA
MOLISE
BASILICATA
NORTH SICILIA
SOUTH SICILIA
LEGEND
TACTICAL AREAS
LOWER LIMIT
500' AGL
(SPEC/RAC 5-5-1; MANUALE BOAT) (MAY 02)

(4) FLIGHT RULES

(a) Very low level military jet activity will be performed according to flight rules similiar to GAT rules and in compliance with flight visibility and distance from clouds stated by the Italian Air Staff.

(b) Flight crews authorized OAT (Operational Air Traffic) missions in Italy must use the AMI-CNBBQ aeronautical chart, at scale 1:500.000, together with the BOAT Manual 2nd part, published by the Italian Air Force. Current editions must be used, as well as other required charts and/or publications.

(5) GENERAL RULES

(a) Except when a clearance is obtained from an ATC unit, flights must not enter Class A, B, C, D and E airspace, airport traffic circuits or air traffic control zones. Furthermore, wherever flights, without the necessary clearance stated above penetrate class A through E airspace area, due to maneuvers taken in exceptional circumstances, shall maintain VMC whenever possible and notify the appropriate controlling authority using 121.5 or 243.0 and squawking 7700 on mode 3/4 as soon as practicable.
(SPEC/RAC 5-5-1; MANUALE BOAT)

(6) OBSTACLE WARNING

(a) Except when following the standard instrument procedures in force, pilots intending to fly as low and very low altitudes in planning and conducting the flight shall be aware that not all the artificial structures (overhead wires, antennae, tanks, chimneys, etc.) which might constitute danger to air navigation, are equipped with day and night signals. Such structures might not be reported in aeronautical publications.
(SPEC/RAC 5-2-0)

3. TERMINAL CONTROL AREAS

a. Brindisi (LIBB) - VFR flights within the TCA (even if the TCA is classified "E" up to FL 115) shall maintain continuous bilateral listening watch on Brindisi information and Padova FCC frequencies and carry working MODE A and C transponder capability.
(SPEC/RAC 4-3-1.1)

b. MILANO (LIMM)

(1) Aircraft flying VFR in the TCA shall establish and maintain radio contact with Milano FIC.
(SPEC/RAC 4-1-1)

c. ROMA

(1) VFR FLIGHTS - VFR flights are restricted to specific routes and altitude. It is prohibited to overfly the city of Rome other than State aircraft, helicopters, ambulance and airwork.

(2) ATC shall be notified 5 minutes prior to TCA entry point concerning cancellation of IFR flight plan. On receiving notification ATC shall:

(a) Acknowledge receipt.

(b) Instruct aircraft to descend VMC to an altitude at least 500' below existing IFR traffic.

(c) Notify other VMC aircraft concerning traffic information.
(SPEC/RAC 4-2-1)

(3) ENTRY SPEED LIMIT. Unless otherwise instructed by ATC, aircraft in Roma (LIRR) TCA shall reduce speed to:

(a) 250 KIAS at FL 100 or below.

(b) 210 KIAS turning to intercept final approach or at a distance of 12 NM from threshold on straight-in approaches.

(c) 180 KIAS after completing turn to final or at a distance of 9 NM from runway threshold.

(d) 160 KIAS 5 NM from runway threshold.

NOTE: Aircraft unable to comply with above speed adjustments will notify ATC specifying speeds they are able to maintain.
(SPEC/RAC 4-2-0.29)

4. CONTROL ZONES

a. AVIANO (LIPA/LIYW) - All US military aircraft flying into Aviano AB will file to Vicenza NDB/VOR or Istrana TACAN as feeder fix. If unable, contact Aviano APP CON within two minutes of passing the feeder fix, contact Padova Control.
(USAFE-DO/AFFSA)

b. ELMAS (LIEE)

(1) Airport Traffic Zone - Traffic pattern always east of runway. Entry into traffic pattern shall be made at an altitude of 1500'. Jet aircraft shall maintain 1500' along downwind leg.
(SPEC/MIL LIEE AD 2-8)

c. GIOIA DEL COLLE (LIBV) - Reserved for military aircraft traffic only. Flights from outside the Control Zone must request authorization for entry from Brindisi ACC one day prior and must have confirmation at least 15 minutes prior takeoff from the airport of departure. Overflight of Control Zone must be effected under Gioia Del Colle radar control after coordination with Brindisi ACC/FIC, and landing and take-offs will be under Gioia Del Colle radar control.
(USAFE-DO/AFFSA)

d. CAPODICHINO (LIRN)

(1) Entry into airport traffic pattern will be at an altitude of 1500' on the following routes: Iskia - Napoli, Capri - Napoli, Nocera - Pomigliano - Napoli, Maddaloni - Pomigliano - Napoli.

(a) Jet aircraft will maintain an altitude of 1500' on downwind leg.

(2) HELICOPTERS - High density commercial helicopters operations are conducted within the port of Napoli area 0700-1900Z daily. For safety of flight, all helicopter flights entering or operating within Capodichino (LIBV) ATZ will contact Napoli Tower when:

(a) ENTERING AIRPORT TRAFFIC ZONE FROM GAETA - Flights from Gaeta to Napoli will fly a maximum altitude of 2,000' until passing Iskia. Iskia to Capodichino or Iskia to Bagnoli Heliport maximum altitude is 1,000'. Contact Napoli Tower after Iskia for advisory control, and provide position, time, altitude and destination.

(b) DEPARTING - Helicopter departure from within the ATZ and when departing Bagnoli or Ship, advise Napoli Tower of position, intended flight operations, route and altitude prior to liftoff. If no radio contact possible, advise Napoli Tower as soon as possible after airborne from Bagnoli Heliport, or relay via shipboard radio prior to departing ship. Advise Napoli Tower of

flight termination prior to landing within the Napoli CTLZ if landing at position other than Capodichino (LIBV) Airport.

(3) All helicopters operations maintain VFR. Ensure all quadrants clear prior to lift off in Bay of Napoli. Commercial helicopters landing at Napoli Fleet Landing Heliport remain on deck only 3 minutes while operating between Capri, Sorrento and Iskia. Maximum altitude flown by commercial helicopters within 5 NM area of Capodichino is 800'.

(4) Use of CINCSOUTH helipad must be approved by CINCSOUTH.

(NAVFIG/USN FIL)

e. PISA (LIRP)

(1) Aircraft coming from the FIR and intending to enter the Pisa CTLZ shall request entry clearance at least 10 minutes before estimate over Control Zone boundaries.

(2) Departing aircraft will be given an IFR SID clearance including altitude restrictions. If necessary, ATC will provide the full details of the clearance. VOR equipment failures should be reported to ATC immediately.

(SPEC/RAC 4-2-5.2)

5. AIRWAYS/ROUTES.

a. Military traffic departing Italy north/northwest bound shall exit via PIGOS/ Torino VOR/DME (TOP).

b. Rome CTLZ for route restrictions through Italy includes: Fiumicino (LIRF), Ciampino (LIRA), Pratica Di Mare (LIRE) and Urbe (LIRU).

c. Milano Area for route restrictions through Italy includes: Aeritalia (LIMA), Bresso (LIMB), Malpensa (LIMC), Bergamo Orio Al Serio (LIME), Torino (LIMF), Albenga (LIMG), Genova Sestri (LIMJ), Linate (LIML), Cameri (LIMN), Parma (LIMP), Piacenza (LIMS), Levaldigi (LIMZ), Lugano (LSZA), Locarno (LSZL) and Samedan (LSZS).

d. Padova Area for route restrictions through Italy includes: Aviano (LIPA), Bolzano (LIPB), Cervia (LIPC), Campoformido (LIPD), Bologna (LIPE), Gorizia (LIPG), Treviso (LIPH), Rivolto (LIPI), Forli (LIPK), Ghedi (LIPL), Verona Boscomantico (LIPN), Montichari (LIPO), Ronchi Dei Legionari (LIPQ), Rimini (LIPR), Istrana (LIPS), Vicenza (LIPT), Padova (LIPU), Venezia San Nicolo (LIPV), Villafranca (LIPX), Falconara (LIPY) and Venezia Tessera (LIPZ). Pisa (LIRP) and Peretola (LIRQ) only for traffic departures/overflight Wien (LOVV) FIR, Ljubljana (LJLA) FIR, Zagreb (LDZO) FIR, Munchen (EDMM) FIR and Brindisi (LIBB) FIR.

(SPEC/AIP RAC 3-0-15)

e. LOW ALTITUDE AIRWAYS - Listed by alphanumeric designation:

NOTE: For preferred IFR routes, aircrews should check the Central Flow Management Unit, EUROCONTROL, Route Availability Documents (RAD) website at http://www.cfmu.eurocontrol.int/rad/.

A1 - Minimum enroute IFR flight level determined by Geneva TC according to information available from Geneva MET office. Geneva TC shall inform Milano ACC of any change of minimum safe level available over the Alps. FL 180 usable only under radar control. In the segment Amrex CRP to Lorno CRP airway is 20 NM wide.

A48 - In the segment from Bevis CRP to Craye CRP ATS services are temporarily provided by Brindisi ACC/FIC. Same segment not available at levels and during activation periods of LION area and/or PAM area as published and activated by Croatian aeronautical publications.

A482 - In the segment from Craye CRP to Balem CRP ATS services are temporarily provided by Brindisi ACC/FIC. Same segment not available at levels and during activation periods of LION area and/or PAM area as published and activated by Croatian aeronautical publications.

B4 - Minimum enroute IFR flight level determined by Geneva TC according to information available from Geneva MET office. Geneva TC shall inform Milano ACC of any change of minimum safe level available over the Alps.

B9 - In the segment from Gisam CRP to Craye CRP ATS services are temporarily provided by Brindisi ACC/FIC. Same segment not available at levels and during activation periods of LION area and/or PAM area as published and activated by Croatian aeronautical publications.

G32 - Minimum enroute IFR flight level determined by Geneva TC according to information available from Geneva MET office. Geneva TC shall inform Milano ACC of any change of minimum safe level available over the Alps.

L5 - Airway is a RNAV route. In the segment Valma CRP to Ostia VOR/DME aircraft shall strictly follow the center line of the airway and any deviation shall be reported to Roma ACC.

L12 - Airway is a RNAV route.

L42 - Airway is a RNAV route. In case of Alghero VORTAC (ALG) failure, change over point between Ajaccio VOR/DME (AJO) and Alghero NDB (ALG) is Ivory CRP.

L53 - Airway in a RNAV route. Segment Olgat CRP-Enoxa CRP not available during activation of LID 25B or LID 25C. Route useable provided radar service available.

L125 - Airway is a RNAV route. In the segment from Baren CRP to Kovas CRP aircraft shall strictly follow the center line of the airway and any deviation shall be reported to ATC.

L153 - Airway is a RNAV route. Part of airway in Swiss airspace is considered CDR.

L607 - Airway is a RNAV route. In the segment Lizum CRP to Arnos CRP to Kanin CRP ATS services are provided by Wien ACC. Flights using route segment Arnos CRP to Kanin CRP to Bistrica VOR/DME (ILB) shall address their flight plan message also to LIPWYWYX.

L612 - Airway is a RNAV route. Segment Adosa CRP to Albet CRP to be flown only if radar service is provided. In the segment from Lanli CRP to Nutro CRP FL 70 and FL 80 are usable subject to Romagna Approach Control clearance.

L982 - Airway is a RNAV route. In the segment from Erdux CRP to Pescara VOR/DME (PES), above FL 120, aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC.

L995 - Airway is a RNAV route. In the segment radial 150/25 NM FRZ VORTAC-radial 330/20 NM BOL VORTAC pilots shall not plan FL 140 and FL 150 as cruising level.

M126 - Airway is a RNAV route. In the segment from Carbonara VOR/DME (CAR) to Quenn CRP aircraft shall strictly follow the center line of the airway and any deviation shall be reported to ATC.

M167 - Airway is a RNAV route. Segment Gorep CRP to Argex CRP usable only if radar service is provided. Aircraft shall strictly follow the center line of the airway and immediately report any deviation to ATC.

M169 - Airway is a RNAV route. Segment Polyp CRP to Katti CRP not available at levels and during activation periods of SONNY and/or LION areas.

M603 - Airway is a RNAV route. In the segment from Ponza VORTAC (PNZ) to Sorrento VOR/DME (SOR) aircraft shall strictly follow the centerline of the airway and any deviation shall be immediately reported to ATC.

M621 - Airway is a RNAV route. Segment Evira CRP-Ernam CRP not available during activation of LID 75 zone.

M725 - Airway is a RNAV route. Segment Giano CRP to Pinin CRP usable subject to Trapani Approach Control clearance.

M726 - Airway is a RNAV route. Segment Londi CRP to Mabox CRP usable southbound on a tactical basis if M742 is unavailable. In the segment from Latina VOR/DME (LAT) to Circe CRP to Ponza VORTAC (PNZ) aircraft shall strictly follow the centerline of the airway and any deviation shall be immediately reported to ATC. In the segment radial 177/14 NM PAL VOR/DME to Mabox CRP pilots shall not plan FL 190 as cruising level.

M729 - Airway is a RNAV route. In the segment from Belel CRP to Genova VOR/DME (GEN) aircraft shall strictly follow the center line of the airway and any deviation shall be reported to ATC.

M730 - Airway is a RNAV route. In the segment from Ancona VOR/DME (ANC) to Lisko CRP FL 70 and FL 80 are usable subject to Romagna Approach Control clearance.

M742 - Airway is a RNAV route. In the segment radial 156/19 NM PAL VOR/DME to Maron CRP pilots shall not plan FL 190 as cruising level.

M871 - Airway is a RNAV route. In the segment from Adami CRP to Carbonara VOR/DME (CAR) aircraft shall strictly follow the center line of the airway and any deviation shall be reported to ATC. Segment Ernam CRP-Subok CRP not available during activation of LID 75 zone.

M985 - Airway is a RNAV route. In the segment from Sumir CRP to Malug CRP aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC.

N492 - Airway is a RNAV route. Route usable only if radar service is available. All aircraft shall strictly follow the center line of the airway and immediately report any deviation to ATC.

N504 - Airway is a RNAV route. Route usable only if radar service is available. Along segment from Bologna VOR/DME to Rovig CRP aircraft shall strictly follow the center line of the airway and immediately report any deviation to ATC.

N982 - Segment Vakor CRP to Libro CRP to be flown provided radar service is available.

P77 - Airway is a RNAV route. Route usable provided radar service is available.

P92 - Airway is a RNAV route. Route not available during activation of LID25B zone.

P125 - Airway is a RNAV route. In the segment from Roska CRP to Tibro CRP aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC.

P748 - Airway is a RNAV route. Segment Aiosa CRP-Banav CRP not available during Activation of LION area. Segments Topno-Vegan-Polit CRPs fly strictly on centerline, any deviation shall be reported to ATC immediately.

P873 - Airway is a RNAV route. Route usable provided radar service is available.

P874 - Airway is a RNAV route. Segment Nikma CRP to Gitod CRP usable provided radar service is available. Along same segment aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC.

W36 - In the segment Pinuk CRP to Craye CRP ATS services are temporarily provided by Brindisi ACC/FIC. Same segment not available at levels and during activation periods of PAM area as published and activated by Yogoslav and Croatian aeronautical publications.

Y15 - Airway is a RNAV route. Segment Usano CRP to Basip CRP from FL 95 to FL 115 is classified "D."

Z651 - Airway is a RNAV route. Alternate route for N851.

Z710 - Airways is a RNAV route. Route usable only for aircraft with destination Milano/Malpensa airport (LIMC).

Z906 - Airway is a RNAV route. In the segment from Bolzano NDB (BZO) to Lapab CRP aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC.

Z907 - Airway is a RNAV route. Aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC.

f. HIGH ALTITUDE AIRWAYS - Listed by alphanumeric designation:

NOTE: For preferred IFR routes, aircrews should check the Central Flow Management Unit, EUROCONTROL, Route Availability Documents (RAD) website at http://www.cfmu.eurocontrol.int/rad/.

UA48 - In the segment from Bevis CRP to Craye CRP ATS services are temporarily provided by Brindisi ACC/FIC. Same segment not available at levels and during activation of LION area and/or PAM area/CLASKO corridor as published and activated by Croatian aeronautical publications.

UA482 - In the segment from Craye CRP to Balem CRP ATS services are temporarily provided by Brindisi ACC/FIC. Same segment not available at levels and during activation of PAM area as published and activated by Yugoslav and Croatian aeronautical publications.

UB9 - In the segment from Gisam CRP to Craye CRP ATS services are temporarily provided by Brindisi ACC/FIC. Same segment not available at levels and during activation of LION

area and/or PAM area as published and activated by Croatian aeronautical publications.

UL50 - Airway is a RNAV route. Minimum enroute IFR flight level determined by Geneva TC according to info available from Geneva MET office. Geneva TC shall inform Milano ACC of any change of minimum safe level available over the Alps. Segment Torino VOR/DME (TOP) to Banko CRP usable North/Westbound and below FL 245 only.

UL53 - Airway is a RNAV route. Segment Olgat CRP-Okimo CRP not available during activation of LID 25B, LID 25C. Segment Enoxa CRP-Olgat CRP useable only if radar service available. Segment GargaCRP-Enoxa CRP not available during activation of LION area.

UL125 - Airway is a RNAV route. In the segment from Baren CRP to Kovas CRP aircraft shall strictly follow the center line of the airway and any deviation shall be reported to ATC.

UL153 - Airway is a RNAV route. Route segment in Swiss airspace considered CDR. Crossing radial 260 from Bolsena VORTAC (BOL) will indicate entry into Roma TMA.

UL168 - Airway is a RNAV route. In the segment Pescara VOR/DME (PES) to Vieste VOR/DME (VIE) aircraft shall strictly follow the airway center line and any deviation shall be immediately reported to ATC.

UL607 - Airway is a RNAV route. In the segment from Lizum CRP to Arnos CRP to Kanin CRP ATS services provided by Wien ACC. Flights using the route segment from Arnos CRP to Bistrica VOR/DME (ILB) shall address their flight plan message to LIPWYWYX.

UL612 - Airway is a RNAV route. Segment Adosa CRP to Albet CRP to be flown only if radar service is available.

UL613 - Airway is a RNAV route. Segment Lisko CRP to Akado CRP not available at levels and during activation periods of SPEEDY area. Segment Lumar CRP to Dipep CRP not available at levels and during activation of LION area.

UL740 - Airway is a RNAV route. Segment Enoxa CRP to Tigra CRP not available during activation of LID25B and LID25C zones. Segment Garga CRP to Enoxa CRP not available at levels and during activation of LION area.

UL862 - Airway is a RNAV route. Route not available at levels and during activation of LION area.

UL982 - Airway is a RNAV route. In the segment from Erdux CRP to Pescara VOR/DME (PES), below FL 250, aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC.

UM126 - Airway is a RNAV route. In the segment from Carbonara VOR/DME (CAR) to Quenn CRP aircraft shall strictly follow the center line of the airway and any deviation shall be reported to ATC.

UM159 - Airway is a RNAV route. Segment Lomat CRP to Sorrento VOR/DME (SOR) usable only if radar service is provided.

UM167 - Airway is a RNAV route. Segment Gorep CRP to Argex CRP usable only if radar service is provided. Aircraft shall strictly follow the center line of the airway and immediately report any deviation to ATC.

UM169 - Airway is a RNAV route. Segment Polyp CRP to Katti CRP not available at levels and during activation of SONNY and/or LION areas.

UM415 - Airway is a RNAV route. Segmet VIE VOR/DME-BAR VOR/DME adhere strictly to Centerline, any deviation shall immediately be reported to ATC.

UM603 - Airway is a RNAV route. FL 195 to FL 220 usable from Sorrento VOR/DME (SOR) to Luxil CRP as RNAV route M603. In the segment from Ponza VORTAC (PNZ) to Sorrento VOR/DME (SOR) aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC.

UM622 - Airway is a RNAV route. Segment radial 325/54 NM Trapani VOR (TRP) to Mabox CRP, FL 200 to FL 240 usable subject to Trapani Approach Control clearance.

UM623 - Airway is a RNAV route. In the segment from Medam CRP to Barso CRP the route is under UAC Switzerland/Geneva TC and Marseille ACC jurisdiction.

UM725 - Airway is a RNAV route. In the segment from Giano CRP to Pinin CRP FL 200 to FL 240 usable subject to Trapani Approach Control clearance.

UM726 - Airway is a RNAV route. Segment Palermo VOR/DME (PAL) to Mabox CRP usable southbound only and on a tactical basis in case UM742 and UP623 are not available.

UM727 - Airway is a RNAV route. Segment Ruxol CRP to Amtel CRP available only if radar service is provided.

UM739 - Airway is a RNAV route. Air navigation on Capo Bon (CBN) VOR R-312 only and cross check radial and distance with Carbonara VOR/DME (CAR) as appropriate. Segment Sonak CRP to Lampedusa VOR/DME (LPD) under Tunis ACC and Malta ACC jurisdiction.

UM871 - Airway is a RNAV route. In the segment from Adami CRP to Carbonara VOR/DME (CAR) aircraft shall strictly follow the center line of the airway and any deviation shall be reported to ATC.

UM872 - Airway is a RNAV route. Route segment in Swiss airspace considered CDR. Alternate route UL615. Between Luxil CRP and Grottaglie Locator (GRT) CRP flight levels 200-210-220 are usable subject to Gioia Approach Control clearance.

UM978 - Airway is a RNAV route. Route under Tunis ACC and Malta ACC jurisdiction.

UM979 - Airway is a RNAV route. Route under Tunis ACC and Malta ACC jurisdiction.

UM985 - Airway is a RNAV route. In the segment from Sumir CRP to Malug CRP aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC.

UN492 - Airway is a RNAV route. Route usable only if radar service is available. All aircraft shall strictly follow the center line of the airway and immediately report any deviation to ATC.

UN504 - Airway is a RNAV route. Route usable only if radar service is available. In the segment from Bologna VOR/DME to Rovig CRP all aircraft shall strictly follow the center line of the airway and immediately report any deviation to ATC.

UN982 - Airway is a RNAV route. Segment Vakor CRP to Libro CRP to be flown only provided that radar service is available.

UP77 - Airway is a RNAV route. Route usable provided that radar service is available.

UP92 - Airway is a RNAV route. Route not available during activation of LID25B zone.

UP125 - Airway is a RNAV route. In the segment from Roska CRP to Tibro CRP aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC.

UP131 - Airway is a RNAV route. Segment Resia CRP to Adosa CRP usable under radar control. Route segment in Swiss airspace to be considered CDR.

UP167 - Airway is a RNAV route. Airway considered permanent ATS route Sundays, holidays, Saturdays 0001-0359Z++ and 1301-2400Z++, Monday through Friday 0001-0359Z++ and 2301-2400Z++. Route not available between September 21 and June 20, Monday through Friday from 0700-1900Z++ due to LIR39 area.

UP735 - Airway is a RNAV route. Route under Wien ACC and Ljubljana ACC jurisdiction.

UP748 - Airway is a RNAV route. Segment Aiosa CRP-Banav CRP not available during activation of LION area. Segment Topno CRP-Polit CRP below FL 230 strictly adhere to centerline, any deviation shall be reported to ATC immediately.

UP873 - Airway is a RNAV route. Segment Olgat CRP to Okimo CRP not available during activation of LID25B or LID25C zones. Route usable provided radar service is available.

UP874 - Airway is a RNAV route. In the segment from Nikma CRP to Gitod CRP, below FL 250, aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC. Route usable provided radar service is available.

UW36 - In the segment from Pinuk CRP to Craye CRP ATS services are temporarily provided by Brindisi ACC/FIC. In the same segment FL 200 to FL 250 is not usable and reserved for military traffic. Same segment not available at levels and during activation of PAM area/CLASKO corridor as published and activated by Yugoslav and Croatian aeronautical publications.

UW95 - Segment Trezzo VOR/DME (TZO) to Bologna VOR/DME (BOA) usable only if radar service is provided.

UW704 - Route usable only if radar service is provided.

UW920 - Route usable only if radar service is provided. In the segment from Enoxa CRP to Abadi CRP to Gokel CRP not available during activation of LID25B and LID25C zones.

UY24 - Airway is a RNAV route. Route under UAC Switzerland/Geneva TC and Marseille ACC jurisdiction.

UZ185 - Airway is a RNAV route. Alternate route to UM984.

UZ637 - Airway is a RNAV route. Route under UAC Switzerland/Geneva TC.

UZ651 - Airway is a RNAV route. Alternate route to UN851.

UZ710 - Airway is a RNAV route. Route usable southbound only and by traffic with destination Milano/Malpensa Airport (LIMC).

UZ906 - Airway is a RNAV route. In the segment from Bolzano NDB (BZO) to Lapab CRP aircraft shall strictly follow the center line of the airway and any deviation shall be immediately reported to ATC.

UZ907 - Airway is a RNAV route. In the segment from Bakor CRP to Vicenza VOR/DME (VIC) aircraft shall strictly follow the center line of the airway and any deviation shall be immediately be reported to ATC.

UZ910 - Airway is a RNAV route. Route not available for traffic with destination Capodichino (LIRN) if radar service is not provided.

6. PLACE NAMES

a. AVIANO AB (LIPA/LIYW) - All VFR jet aircraft arriving or departing Aviano AB will not overfly the city of Pordenone (N45°58′ E12°39′) 4 NM southeast of airport below 2500′ AGL. (USAFE-DO/AFFSA)

b. NICOSIA - Overflying of area 1 NM radius centered on N37°44′46" E14°24′15" from surface to 1500′ AGL is prohibited. (SPEC/RAC 5-8-4)

7. CONDUCT OF SUPERSONIC ACTIVITY

a. Supersonic flight is authorized only on specific order of competent military authority and requires prior coordination with the pertinent Italian Military Region Operations Center (ROC).

b. A record of each supersonic flight will be retained for five years by the unit and airbase from which the flight originated and will contain the following information:

(1) Type aircraft.

(2) Call sign.

(3) Mission number.

(4) Date and Zulu time of flight.

(5) Position or area.

(6) Altitude.

(7) List of Agency with which radio contact had been established.

(8) Frequencies used.

(9) IFF/SIF settings.

c. To insure correct positioning, all supersonic flights must be performed under the control of the appropriate Air Defense Radar Station.

d. Level supersonic flight may be conducted at FL 360 and above, over territorial waters. Territorial waters are those within the 6 NM sea zone running along the insular and continental coasts, and for the purposes of supersonic flight, include a 15 NM buffer zone adjacent and parallel to the external limit of territorial waters.

e. Level supersonic flight may also be conducted over Italian territory excluding the following prohibited areas:

(1) ROME - Circle with 12 NM radius with center at N41°54′ E12°28′.

(2) MILAN - Circle with 12 NM radius with center at N45°28′ E09°11′.

(3) NAPLES - Circle with 12 NM radius with center at N40°52′ E14°15′.

(4) TORINO - Circle with 12 NM radius with center at N45°04′ E07°40′.

(5) VENICE - Circle with 10 NM radius with center at N45°26′ E12°21′.

(6) BOLOGNA - Circle with 10 NM radius with center at N44°30′ E11°21′.

(7) FIRENZE - Circle with 10 NM radius with center at N43°47′ E11°13′.

(8) PALERMO - Circle with 10 NM radius with center at N38°05′ E13°22′.

(9) BARI - Circle with 10 NM radius with center at N41°07′ E16°52′.

(10) GENOVA - Circle with 10 NM radius with center at N44°24′ E08°56′.

(11) COUNTRY BORDERS - A buffer zone 15 NM in depth extending outward from terrain boundary and the external limit of territorial waters.

(12) ALPS AREA - Between the Northern boundary and a line linking the following points: N46°04′ E13°30′ to N46°19′ E13°14′ to N45°34′ E10°55′ to N45°50′ E08°30′ to N45°21′ E07°32′ to N44°45′ E07°15′ to N44°10′E07°41′.

(13) Within the area joining the following points: N42°51′E13°35′ to N42°48′E13°06′ to N42°44′E12°44′ to N43°03′E12°13′ to N43°26′E12°51′ to N43°18′E13°26′ to N42°51′ E13°35′.

(SPEC/MIL RAC 6)

f. Supersonic diving flight must not descend below FL 410.

g. If a pilot knows or suspects that he has inadvertently made a supersonic flight below established flight levels and/or outside designated areas, he should immediately notify the controlling agency with which the flight is in contact and after landing, submit a written report to the unit commander. In both cases, provide information contained in paragraph b. above.

h. Supersonic flight training may be conducted between 0500Z-2200Z++ Mon-Fri, 0500-1300Z++ Sat within the areas and flight levels previously mentioned and those listed in DOD FLIP AP/2A. Additional areas can be activated by NOTAM during exercises.

(USAFE-DO/AFFSA)

8. 8. INTERDICTION TO OVERFLY AND/OR TO LAND ON PROTECTED AREAS: To protect the environment of some areas like natural parks, areas of biological, faunistic and archeological interest, take-off, landing and low level overflying are prohibited. Under the provision of art. 11 of Law 6.12.91 n° 394, further local and regional restrictions, and according to Italian civil aviation Authority's provision n°42/1060/R1/6-1-1 dated 14-05-98, takeoff, landing low level overflying are prohibited to all aircraft (ultra light machines also) over Natural Reserves unless under emergency, rescue, fire fighting operations for wild life reserve advantages, autoriized by the Reserve's Authority.

(SPEC/RAC 5-8-7)

9. SPECIAL AREAS FOR NATO OPERATIONS - Area "INDIA 5 SOUTH" (LITRA5S), Danger Areas "SPEEDY" (LID113), "SONNY" (LID114), and "LION" (LID115), and corridor "BRANDY" (LID116) are established over the Adriatic Sea.

a. "INDIA 5 SOUTH" (LITRA5S)

(1) Lateral limits: N42°11′22" E16°41′38" to N41°31′ E18°01′ to N41°10′ E17°35′ to N41°51′34" E16°18′07" to beginning.

(2) Vertical limits: FL 290 to FL 310.

(3) Activation upon direct coordination between the controlling ATC (CRAV) and military authorities.

b. "SPEEDY" area (LID113)

(1) Lateral limits: N44°49′15" E12°45′43" to N44°46′00" E13°30′00" to N44°34′03" E13°42′26" to N44°18′23" E14°09′59" to N43°43′58" E14°54′29" to N43°44′30" E14°08′00" to N43°50′34" E13°31′45" to beginning.

(2) 5000′ AMSL to FL 250 Mon-Fri 0001-1500Z, 5000′ AMSL to FL 280 Mon-Fri 0730-1030Z (0600-0900Z sum) and Mon-Thu 1700-2000Z (1800-2100Z sum).

(3) Heavy multinational military forces activity; every aircraft operating or penetrating such area will be subject to interception for visual identification purposes.

(4) Aircraft operating or penetrating the area are suggested to:

(a) Avoid abrupt maneuvers.

(b) Maintain continuous listening watch on international emergency frequencies.

(c) Receipt of advisory calls should be acknowledged and intention notified.

(d) Keep meteorological radar and transponder on.

(e) Comply with navigation warnings in force.

(5) Contact appropriate ATC agency before leaving to ensure deconfliction from civil air traffic.

(6) Aircraft operating within the areas must stay within 5 NM of the area border.

(7) Portion of the area is within Zagreb FIR.

c. "SONNY" area (LID114)

(1) Lateral limits: N43°13′54" E16°10′13" to N42°43′56" E15°09′34" to N42°03′43" E16°09′54" to N41°55′25" E16°53′22" to N42°09′33" E17°16′12" to N43°05′07" E16°24′59" to beginning.

(2) Vertical limits: FL 100 to FL 250.

(3) Heavy multinational military forces activity; every aircraft penetrating such area will be subject to interception for visual identification purposes.

(4) Operational: From 0300-1400Z++ Mon-Fri. Other hours by NOTAM (notification at least 48 hours in advance).

(5) Aircraft operating or penetrating the area are suggested to:

(a) Avoid abrupt maneuvers.

(b) Maintain continuous listening watch on international emergency frequencies.

(c) Receipt of advisory calls should be acknowledged and intention notified.

(d) Keep meteorological radar and transponder on.

(e) Comply with navigation warnings in force.

(6) Contact appropriate ATC agency before leaving to ensure deconfliction from civil air traffic.

(7) Aircraft operating within the area must stay within 5 NM by the area border.

(8) Portion of the area is within Zagreb FIR.

d. "LION" area (LID115)

(1) Lateral limits: line joining following points: N42°41'31" E16°19'32" to N42°12'36" E18°22'01" to N41°41'19" E17°51'07" to N42°09'44" E15°59'39" to beginning.

(2) Vertical limits: To FL 210.

(3) Heavy multinational military forces activity, every aircraft penetrating such area will be subject to interception for visual identification purposes.

(4) Activated by NOTAM (notification at least 48 hours in advance). Every Fri from 0500Z++ to 1400Z++ with upper limit raised to FL 270.

(5) Aircraft operating or penetrating the area are suggested to:

(a) Avoid abrupt maneuvers.

(b) Maintain continuous listening watch on international emergency frequencies.

(c) Receipt of advisory calls should be acknowledged and intentions notified.

(d) Keep meteorological radar and transponder on.

(e) Comply with navigation warnings in force.

(6) Contact appropriate ATC agency before leaving to ensure deconfliction from civil aircraft.

(7) Aircraft operating within the area must stay within 5 NM of the area border.

(8) Portion of the area is within Zagreb FIR.

e. Corridor "BRANDY" (LID116)

(1) Lateral limits: 2.5 NM width each side of line joining points: N41°12'00" E17°45'00" to N42°24'51" E17°45'00".

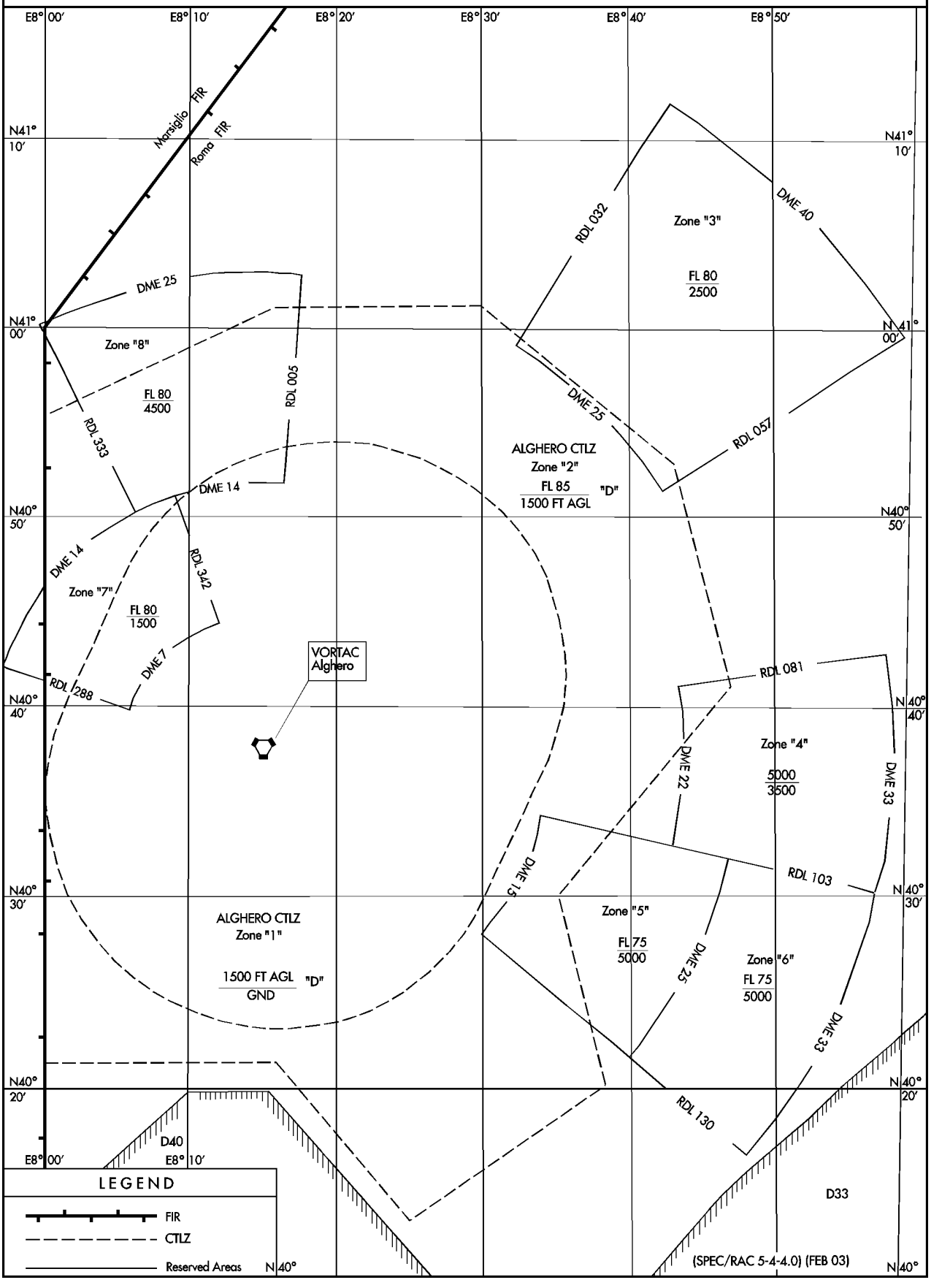
(2) Vertical limits: To 4000' AMSL.

(3) Heavy multinational military force activity.

(4) Operational: Activated By NOTAM.

CORRIDORS LEADING TO THE SPECIAL AREAS FOR NATO OPERATIONS

CIVIL AIRCRAFT TRAINING AREAS WITHIN ALGHERO CONTROL ZONE



10. OPERATIONAL AIR TRAFFIC CORRIDORS: Corridors are established for military activity:

a. Corridor "YANKEE"

(1) Lateral limits: 2 NM width each side of the joining points: N40°53'20" E17°05'20" to N41°12'00" E17°43'30" to N41°45'00" E17°30'21" (340/72 NM BRD VORTAC).

(2) Vertical limits: FL 50 (or Transition Level if higher) to FL 60 (or Transition Level if higher).

(3) Corridor shall be avoided by non-participating aircraft.

(4) Aircraft shall maintain continuous radio contact with Gioia APP/Brindisi SCCAM.

(5) Air traffic to/from Gioia del Colle (LIBV) airport shall cross Gioia boundary at FL 50 (or Transition Level if higher) to FL 60 (or Transition Level if higher).

(6) Activation of corridor will be subject to specific request by Brindisi SCCAM to Brindisi CRAV.

(7) Higher levels are available on tactical basis and previous coordination between Brindisi SCCAM and Brindisi CRAV.

b. MILANO FIR (Padova Area) Corridor "ALPHA 1" - (Exit)

(1) Lateral limits: 2.5 NM width each side of line joining points:

(a) PATTY (N45°47'00" E12°51'00")

(b) PA 2 (N45°37'00" E12°56'00")

(c) ROTAR (N45°16'00" E13°00'00")

(d) LABIN (N44°59'00" E13°05'00")

(2) Activated on tactical basis after coordination between Padova ACC and Padova SCCAM.

(3) Engaged flight level/levels coordinated between Padova ACC and Padova SCCAM.

c. Corridor "ALPHA 2" - (Entry)

(1) Lateral limits: 2.5 NM width each side of line joining points:

(a) AA 3 (N44°47'00" E13°00'00")

(b) AA 2 (N45°31'00" E12°24'00")

(c) POUND (N45°47'00" E12°41'00")

(d) PENNY (N45°51'00" E12°39'00")

(2) Activated on tactical basis after coordination between Padova ACC and Padova SCCAM.

(3) Engaged flight level/levels coordinated between Padova ACC and Padova SCCAM.

d. Corridor "BRAVO" - (Entry)

(1) Lateral limits: 2.5 NM width each side of line joining points:

(a) AL 4 (N44°50'00" E12°28'00")

(b) SIERRA (N44°59'00" E11°22'00")

1 To GHE/PIA

(2) Activated on tactical basis after coordination between Padova ACC and Padova SCCAM.

(3) Engaged flight level/levels coordinated between Padova ACC and Padova SCCAM. Preferential levels being 6000' or FL 200.

e. Corridor "CHARLIE" - (Exit)

(1) Lateral limits: 2.5 NM width each side of line joining points:

(a) ROLDI (N44°52'00" E11°35'00")

(b) PETER (N44°50'00" E11°01'00")

(c) FEBO (N44°40'00" E11°32'00")

(d) PL 4B (N44°25'00" E12°19'00")

(2) Activated on tactical basis after coordination between Padova ACC and Padova SCCAM.

(3) Engaged flight level/levels coordinated between Padova ACC and Padova SCCAM. Preferential levels being FL 190 or FL 250.

(SPEC/RAC 5-4-3.1 thru 5-4-3.5)

11. AREAS AND CORRIDORS FOR UAV (Unmanned Aerial Vehicles) ACTIVITY

a. Areas SUA LIR116A, LIR116B, LIR118A, LIR118B, LID117 and Corridors OMEGA, GAMMA, and SIGMA are established in the airspace of Brindisi FIR (LIBB).

b. Corridor "OMEGA"

(1) Lateral limits: 3 NM width each side of the following points:

(a) (MEGA1) (N41°32'29" E15°43'05")

(b) (MEGA2) (N41°51'00" E15°22'00")

(2) Military UAV activity carried out while radar service is available. Air traffic prohibited. Activated by NOTAM. Responsible ATS unit is Amendola APP.

(3) Vertical limits are Ground to FL 80.

c. Corridor "GAMMA"

(1) Lateral limits: 3 NM width each side of the following points:

(a) (GAMM1) (N42°00'00" E15°26'30")

(b) (GAMM2) (N41°51'00" E16°30'00")

(2) Military UAV activity carried out while radar service is available. Air traffic prohibited. Activated by NOTAM. Responsible ATS units are Brindisi Military and Amendola APP.

(3) Vertical limits are Ground to FL 80.

d. Corridor "SIGMA"

(1) Lateral limits: 3 NM width each side of the following points:

(a) (MEGA1) (N41°32'29" E15°43'05")

(b) (SIGM1) (N41°31'00" E16°00'00")

(c) (SIGM2) (N41°45'00" E17°00'00")

(d) (SIGM3) (N41°20'00" E18°00'00")

(e) (SIGM4) (N41°00'00" E18°35'00")

(f) (SIGM5) (N40°30'00" E18°50'00")

(g) (SIGM6) (N40°21'00" E18°50'00")

(SPEC/RAC 5-4-3.6)

(2) Military UAV activity carried out while radar service is available. Air Traffic prohibited. Activated by NOTAM. Responsible ATS units Brindisi Military/Amendola APP.

(3) Vertical limits are Ground to 4000 AMSL.

12. AREAS FOR CIVIL AIRCRAFT TRAINING PURPOSES WITHIN ALGHERO Control Area.

a. Characteristics:

(1) Type of restriction; reserved to civil aircraft training in VFR.

(2) Hours: SR-30 to SS+30.

(3) Training traffic shall maintain radio contact with Alghero APP. Other traffic planning to cross the areas shall request Alghero APP for instructions.

b. Zone "3"

(1) Lateral limits: N40°58'54" E08°32'03" to N41°11'38" E08°42'34" then arc of circle radius 40 NM from Alghero VORTAC in clockwise direction to N40°59'29" E08°58'57" to N40°51'20" E08°42'17", then arc of circle radius 25 NM from Alghero VORTAC, counterclockwise to beginning.

(2) Vertical limits: 2500' To FL 80

c. Zone "4"

(1) Lateral limits: N40°41'10" E08°43'18" to N40°42'52" E08°57'38", then arc of circle radius 33 NM from Alghero VORTAC in clockwise direction to N40°30'18" E08°57'01" to N40°32'46" E08°42'55", then arc of circle radius 22 NM from Alghero VORTAC, counterclockwise direction to beginning.

(2) Vertical limits: 3500' To 5000'

d. Zone "5"

(1) Lateral limits: N40°34'20" E08°33'56" to N40°32'06" E08°46'46", then arc of circle radius 25 NM from Alghero VORTAC in clockwise direction to N40°21'39" E08°39'55" to N40°28'04" E08°29'51", then arc of circle radius 15 NM from Alghero VORTAC, counterclockwise direction to beginning.

(2) Vertical limits: 5000' To FL 75

e. Zone "6"

(1) Lateral limits: N40°32'06" E08°46'46" to N40°30'18" E08°57'01", then arc of circle radius 33 NM from Alghero VORTAC in clockwise direction to N40°16'30" E08°47'58" to N40°21'39" E08°39'55", then arc of circle radius 25 NM from Alghero VORTAC, counterclockwise direction to beginning.

(2) Vertical limits: 5000' To FL 75.

f. Zone "7"

(1) Lateral limits: N40°39'46" E08°05'52" to N40°41'53" E07°57'04" then arc of circle radius 14 NM from Alghero VORTAC in clockwise direction to N40°50'56" E08°08'51" to N40°44'18" E08°11'46" then arc of circle radius 7 NM from Alghero VORTAC, counterclockwise direction to beginning.

(2) Vertical limits: 1500' To FL 80.

g. Zone "8"

(1) Lateral limits: N40°50'05" E08°06'10" to N40°59'51" E07°59'27", then arc of circle radius 25 NM from Alghero VORTAC in clockwise direction to N41°02'34" E08°17'22" to N40°51'36' E08°16'10" then arc of circle radius 14 NM from Alghero VORTAC, counterclockwise direction to beginning.

(2) Vertical limits: 4500' To FL 80.

(SPEC/RAC 5-4-4.1 thru 5-4-4.2)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			ITALY				
A482	Vieste VOR/DME	102 283	Banav CRP (N41°44′ E17°01)	44.6	FL 70	FL 195 FL 65	ODD EVEN
	Banav CRP		Lumar CRP (N41°37′ E17°34′)	25.7			
	CONTROL: Brindisi ACC REMARKS: Segment VIE VOR/DME-Lumar CRP CDR3 to FL 80 inclusive during activation of LIR 116B and/or Gamma Corridor.						
L12	Ronab CRP (N39°52′ E11°54′)	155 335	Giano CRP (N38°52′ E12°27′)	65.3	FL 100	FL 195 FL 100	ODD EVEN
	Bolzano NDB	162 342	Alese CRP (N46°17′ E11°24′)	11.8	FL 130	FL 195 FL 125	
	Alese CRP		Vicenza VOR/DME	39.9			
	CONTROL: Padova ACC REMARKS: Segment Ronab CRP to Giano CRP is considered CDR1 from FL 115 up to FL 195 included, during activation periods of LID84 (Ponza) SUA. Segment Bolzano NDB to Vicenza VOR/DME from FL 125 to FL 140 considered CDR3 due to possible traffic to/from Bolzano Aerodrome (LIPB) holding over Forer.						
L44	Betot CRP (N40°23′ E11°28′)	196	Velex CRP (N39°58′ E11°28′)	26.4	FL 110	FL 195 FL 95	ODD
	Velex CRP		Lager CRP (N39°00′ E11°00′)	61.2			
	Lager CRP		Adami CRP (N38°42′ E10°57′)	18.1			
	Adami CRP		Bular CRP (N38°19′ E10°48′)	25			
	Bular CRP		Abdab CRP (N37°53′ E10°38′)	27			
	CONTROL: Roma ACC REMARKS: Between Betot CRP and Adami CRP airway considered CDR1 0500-2200Z++ Mon-Fri. 21 Jun-20 Sep, 0500-0659Z++ and 1701-2200Z++ Mon-Fri. 21 Sep-20 Jun., CDR3 0700-1700Z++ Mon-Fri. 21 Sep-20 Jun. Alternate route L12-M738-M725.						
L58	Pimor CRP (N37°34′ E15°52′)	155 336	Ernam CRP (N36°52′ E16°10′)	50.2		FL 195 FL 95	ODD EVEN
	CONTROL: Roma ACC REMARKS: CDR 3 during LID75 activity.						
L125	Gilet CRP (N42°23′ E10°13′)	199 018	Bekos CRP (N41°48′ E09°56′)	37.2	FL 100	FL 195 FL 100	ODD EVEN
	Bekos CRP		Pitor CRP (N41°13′ E09°39′)	36.6			
	Pitor CRP		Talin CRP (N41°02′ E09°34′)	11.5			
	CONTROL: Roma ACC REMARKS: Between Gilet CRP and Talin CRP, airway to be considered CDR3 during activation periods of LID67 (Solenzara) SUA.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
L612	Chioggia VOR/DME	148 328	Amlon CRP (N44°20′ E12°53′)	50.8	FL 70	FL 195 FL 65	ODD EVEN
	Amlon CRP		Lanli CRP (N43°57′ E13°11′)	26.4			
	Lanli CRP		Ancona VOR/DME	25.6			
	Polyp CRP (N42°29′ E15°12′)	128 310	Vieste VOR/DME	50.8			
	Vieste VOR/DME	128 309	Uvoka CRP (N41°23′ E16°52′)	48.6			
	Brindisi VOR/DME	133 314	Nosto CRP (N39°49′E19°00′)	66.1	110	FL 195 FL 95	
	CONTROL: Padova ACC REMARKS: Segment from 10 DME north of Ancona VOR/DME (ANC) to 20 DME south of Chioggia VOR/DME (CHI) considered CDR1 from FL 125 up to FL 195 included during activation periods of LIR21 (Sara) and LID87 (Falconara) SUA. Segment Polyp CRP to Uvoka CRP considered CDR3 up to FL 80 included, during activation periods of GAMMA corridor. Segment Vieste VOR/DME (VIE) to Uvoka CRP considered CDR 3 up to FL 80 included, during activation periods of LIR116B (Golfo di Manfredonia) SUA and CDR3 up to FL 150 included, during activation periods of LIR116A (Golfo di Manfredonia) SUA. Segment Brindisi VOR/DME to Nosto CRP considered CDR 3 during activation periods of LIR60 zone.						
L613	Vicenza VOR/DME	317	Bormi CRP (N46°02′ E11°10′)	32.1	FL 120	FL 195 FL 115	EVEN
	CONTROL: Milano ACC REMARKS: Segment Vicenza VOR/DME to Bormi CRP from FL 115 to FL 140 considered CDR3 due to possible traffic to/from Bolzano Aerodrome (LIPB) holding over Forer.						
L865	Ancona VOR/DME	226 045	Leonn CRP (N43°18′ E13°02′)	25.8	FL 90	FL 195 FL 85	ODD EVEN
	Leonn CRP		Katar CRP (N43°03′ E12°41′)	21.5			
	Katar CRP		Gitod CRP (N42°48′ E12°19′)	22.1			
	CONTROL: Roma ACC/Padova ACC REMARKS: Segment Ancona VOR/DME (ANC) to Gitod CRP considered CDR3 from FL 125 included up to FL 195 included during activation periods of LIR48 (Foligno) SUA.						
L869	Pelen CRP (N38°20′ E14°29′)	253 071	Palermo VOR/DME	63	FL 100	FL 195 FL 95	ODD EVEN
	CONTROL: Roma ACC REMARKS: Segment Pelen CRP to Palermo VOR/DME (PAL) considered CDR1 during activation periods of LIR105 (Cefalu) SUA.						
L982	Pescara VOR/DME	186 006	Emily CRP (N42°10′ E14°08′)	16.2	FL 130	FL 195 FL 125	ODD EVEN
	Emily CRP		Kastu CRP (N41°49′ E01°04′)	21.4			
	Kastu CRP		Erika CRP (N41°37′ E14°02′)	11.6			
	Erika CRP		Teano VOR/DME	19.7			
	CONTROL: Brindisi/Roma ACC REMARKS: Segment Pescara VOR/DME (PES) to Teano VOR/DME (TEA) considered CDR3 during activation periods of LIR50 (Sulmona) SUA. Alternate route L5-L995.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
M126	Roxan CRP (N40°50′ E11°13′)	217 036	Quenn CRP (N40°10′ E10°33′)	50.4	FL 90	FL 195 FL 85	ODD EVEN
	Quenn CRP		Aledi CRP (N39°37′ E10°00′)	41.8			
	Aledi CRP		Ledro CRP (N39°17′ E09°41′)	24.5			
	Ledro CRP		Carbonara VOR/DME	13			
	CONTROL: Roma ACC REMARKS: Between Roxan CRP and Carbonara VOR/DME (CAR) considered CDR1 0500-0659Z++, 1701-2200Z++ Mon-Fri. CDR3 0700-1700Z++ Mon-Fri. Alternate route M603- L125- M732.						
M131	Agasa CRP (N41°48′ E10°46′)	269 087	Bekos CRP (N41°48′ E09°56′)	37.2	FL 70	FL 195 FL 65	ODD
	Bekos CRP		Idori CRP (N41°47′ E09°45′)	8.3			
	CONTROL: Roma ACC REMARKS: Segment Agasa CRP to Idori CRP considered CDR 3 during activation periods of LID67.						
M152	Giano CRP (N38°52′ E12°27′)	275 094	Lager CRP (N39°00′ E11°04′)	65.2	FL 100	FL 195 FL 95	EVEN ODD
	Lager CRP		Carbonara VOR/DME	73.1			
	CONTROL: Roma ACC REMARKS: Between Giano CRP and Carbonara VOR/DME (CAR) considered CDR1 0500-0659Z++, 1701-2200Z++ Mon-Fri. 21 Sep-20 Jun. 0500-2200Z++ Mon-Fri. 21 Jun-20 Sep. CDR3 0700-1700Z++ Mon-Fri. 21 Sep-20 Jun. Alternate route L869-M871.						
M159	Carbonara VOR/DME	066 248	Belok CRP (N39°23′ E10°22′)	43.1	FL 100	FL 195 FL 95	EVEN ODD
	Belok CRP		Ronab CRP (N39°52′ E11°54′)	76.6			
	Ronab CRP		Berol CRP (N40°12′ E13°01′)	58.5			
	CONTROL: Roma ACC REMARKS: Segment Carbonara VOR/DME (CAR) to Ronab CRP considered CDR1 0500-0659Z++, 1701-2200Z++ Mon-Fri. CDR1 from Berol CRP-Belok CRP FL 115-FL 195 during activation during activation of LID 84 zone. CDR3 0700-1700Z++ Mon-Fri. Alternate route M732-L125-M603.						
M167	Gorep CRP (N44°55′ E12°06′)	218 038	Argex CRP (N44°33′ E11°40′)	28.6	FL 110	FL 195 FL 95	EVEN ODD
	CONTROL: Roma ACC REMARKS: Segment Gorep CRP to Argex CRP considered CDR3 up to FL 155 due to Romagna CTR.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
M601	Doras CRP (N39°36′ E13°04′)	286 103	Corad CRP (N39°45′ E12°23′)	32.6	FL 100	FL 195 FL 95	EVEN ODD
	Corad CRP		Ronab CRP (N39°52′ E11°54′)	23.9			
	Ronab CRP		Velex CRP (N39°58′ E11°28′)	20.8			
	Velex CRP		Quenn CRP (N40°10′ E10°33′)	43.8			
	Quenn CRP		Baren CRP (N40°25′ E09°20′)	57.5			
	CONTROL: Roma ACC REMARKS: Segment Baren CRP to Ronab CRP considered CDR1 0500-0659Z++, 1701-2200Z++ Mon-Fri. 21 Sep-20 Jun, 0500-2200Z++ Mon-Fri. 21 Jun-20 Sep. CDR3 0700-1700Z++ Mon-Fri. 21 Sep-20 Jun. Alternate route M603-L12.						
M726	Venda CRP (N45°28′ E11°30′)	351 171	Sumir CRP (N46°16′ E11°22′)	47.5	FL 140	FL 195 FL 125	EVEN ODD
	Sumir CRP		Bolzano NDB	12.4			
	CONTROL: Padova ACC REMARKS: Segment Venda CRP to Bolzano NDB considered CDR3 from FL 125 to FL 140 due to possible traffic to/from Bolzano Aerodrome (LIPB) holding over Forer.						
M727	Rotun CRP (N40°53′ E12°18′)	175	Corad CRP (N39°45′ E12°23′)	67.7	FL 110	FL 195 FL 95	ODD
	Corad CRP		Uveto CRP (N39°27′ E12°24′)	18.5			
	Uveto CRP		Giano CRP (N38°52′ E12°27′)	34.8			
	CONTROL: Milano ACC REMARKS: Segment ROTUN CRP to GIANO CRP is considered CDR1 from FL 115 to FL 195 included during activation periods of LID84 (Ponza) SUA.						
M734	Aspir CRP (N38°07′ E11°06′)	009	Germo CRP (N39°15′ E11°21′)	68.7	FL 100	FL 195 FL 95	EVEN
	Germo CRP		Betot CRP (N40°23′ E11°38′)	69.3			
	CONTROL: Roma ACC REMARKS: Segment Aspir CRP to Betot CRP considered CDR1 0500-0659Z++, 1701-2200Z++ Mon-Fri. 21 Sep-20 Jun, 0500-2200Z++ Mon-Fri. 21 Jun-20 Sep. CDR3 0700-1700Z++ Mon-Fri. 21 Sep-20 Jun. Alternate route M725-M738-L12.						
M738	Adosa CRP (N45°39′ E11°02′)	169	Osteg CRP (N45°11′ E11°08′)	28.4	FL 170	FL 195 FL 155	ODD
	CONTROL: Padova/Roma ACC REMARKS: CDR3 due to Garda CTR.						
	Ronab CRP (N39°52′ E11°53′)	190 010	Pinin CRP (N37°56′ E11°24′)	118.6	FL 110	FL 195 FL 95	ODD EVEN
	CONTROL: Padova/Roma ACC REMARKS: Segment Ronab CRP to Pinin CRP considered CDR1 from FL 115 to FL 195 during activation of LID84 zone.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
M742	Palermo VOR/DME	156 336	Maron CRP (N37°07′ E13°39′)	59.1	FL 90	FL 195 FL 85	ODD EVEN
	Maron CRP		Ekola CRP (N36°30′ E13°58′)	40.4	FL 80	FL 195 FL 75	
	CONTROL: Roma ACC REMARKS: Segment Palermo VOR/DME (PAL) to Ekola CRP considered CDR1 during activation periods of LIR106 (Licata) SUA (alternate route southbound (PAL)-M726-Mabox-M622-Gozo VOR/DME (GZO). Alternate route northbound (GZO)-M622-Mabox-M726-(PAL)).						
M872	Pescara VOR/DME	124 305	Amendola NDB	92.9	FL 110	FL 195 FL 105	ODD EVEN
	CONTROL: Brindisi ACC REMARKS: Between Pescara VOR/DME (PES) and Amendola NDB (AME) considered CDR3 due to LIR118A (Termoli) SUA and Amendola CTLZ and usable by traffic from/to Bari (LIBD) and Pescara (LIBP) airports only.						
M985	Nesti CRP (N45°48′ E10°26′)	053	Sumir CRP (N46°16′ E11°22′)	47.6	FL 140	FL 195 FL 135	EVEN
	CONTROL: Milano ACC REMARKS: Segment Nesti CRP to Sumir CRP from FL 135 to FL 140 considered CDR3 due to possible traffic to/from Bolzano Aerodrome (LIPB) holding over Forer.						
N157	Tinto CRP (N41°29′ E11°04′)	196 015	Quenn CRP (N40°10′ E10°33′)	82.3	FL 110	FL 195 FL 65	ODD EVEN
	CONTROL: Roma ACC REMARKS: CDR 1 21 Jun-20 Sep 0500-2200Z Mon-Fri; 21 Sep-20 Jun 0500-0659Z++ and 1701-2200Z++ Mon-Fri. CDR 3 21 Sep-20 Jun 0700-1700Z++ Mon-Fri. Alternate route L5-L125-M732.						
N504	Bologna VOR/DME	085	Argex CRP (N44°33′ E11°40′)	16.3	FL 100	FL 195 FL 95	EVEN
	Argex CRP	022	Rovig CRP (N44°55′ E11°54′)	24.3			
	CONTROL: Roma ACC REMARKS: Segment Bologna VOR/DME to Rovig CRP considered CDR3 up to FL 155 due to Romagna CTR.						
N535	Lobsi CRP (N44°54′ E12°10′)	203 023	Peleg CRP (N44°14′ E11°44′)	44.8	FL 110	FL 195 FL 95	ODD EVEN
	CONTROL: Roma ACC REMARKS: Segment Lobsi CRP to Peleg CRP considered CDR3 up to FL 155 due to Romagna CTR and CDR1 from FL 160 and above during activation of LIR21 (sector B) zone. Alternate route is M167-M726.						
N737	Gubin CRP (N43°29′ E12°46′)	224	Umbed CRP (N43°13′ E12°23′)	23.3	FL 110	FL 195 FL 95	ODD
	Umbed CRP		Nikma CRP (N43°04′ E12°11′)	12.9			
	Bolsena VORTAC	168	Ostia VOR/DME	49.6			
	Ostia VOR/DME	175	Rotun CRP (N40°53′ E12°18′)	55.3			
	CONTROL: Padova ACC/Roma ACC REMARKS: Segment Gubin CRP to Nikma CRP considered CDR3 from FL 125 included up to FL 195 included during activation periods of LIR48 (Foligno) SUA. Segment Bolsena VORTAC (BOL) to Ostia VOR/DME (OST) to Rotun CRP considered CDR3.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
P54	Elba VORTAC	180	Digix CRP	50.5	FL 110	FL 195	ODD
		360	(N41°53′ E10°22′)			FL 95	EVEN
	Digix CRP	199	Ruxop CRP	45.9			
		019	(N41°10′ E10°01′)				
	CONTROL: Roma ACC						
	REMARKS: Route considered CDR 3 during activation of LID67.						
W92	Sorrento VOR/DME	310	Latina VOR/DME	86.3	FL 110	FL 195	EVEN
		129				FL 110	ODD
	CONTROL: Roma ACC						
	REMARKS: CDR3 due to LIR62 (Grazzanise) SUA. Alternate route L982-Z803.						
W93	Adosa CRP	012	Bormi CRP	24.2	FL 140	FL 195	EVEN
	(N45°39′ E11°02′)	193	(N46°02′ E11°10′)			FL 135	ODD
	Bormi CRP		Bolzano NDB	26.5			
	CONTROL: Milano ACC						
	REMARKS: FL 135 to FL 140 considered CDR3 due to possible traffic to/from Bolzano Aerodrome (LIPB) holding over Forer.						
W97	Amendola NDB	114	Bari VOR/DME	47.5	FL 110	FL 195	ODD
		294				FL 105	EVEN
	CONTROL: Brindisi ACC						
	REMARKS: Between Amendola NDB (AME) and Bari VOR/DME (BAR) considered CDR3 due to Amendola CTLZ and LIR116A (Golfo di Manfredonia) SUA and usable by traffic from/to Bari (LIBD) and Pescara (LIBP) airports only.						
Z710	Degad CRP	211	Basgo CRP	11.5	FL 150	FL 195	ODD
	(N46°26′ E08°37′)		(N46°16′ E08°28′)			13000	
	Basgo CRP	173	Akasu CRP	9.8			
			(N46°06′ E08°29′)				
	CONTROL: Milano ACC						
	REMARKS: Route to be considered CDR1. Alternate route is N850.						
Z7910	Velim CRP	130	Erika CRP	46.4	FL 130	FL 195	ODD
	(N42°09′ E13°16′)	311	(N41°37′ E14°02′)			FL 130	
	Erika CRP		Akamo CRP	38.2	FL 110	FL 195	
			(N41°11′ E14°39′)			FL 110	
	CONTROL: Roma ACC						
	REMARKS: Route to be considered CDR 1 during activation periods of LIR50. Alternate route L995.						
Z923	Ronab CRP	135	Uveto CRP	34.8	FL 100	FL 195	ODD
	(N39°52′ E11°54′)	315	(N39°27′ E12°24′)			FL 95	EVEN
	Uveto CRP		Luron CRP	48.4			
			(N38°52′ E13°07′)				
	CONTROL: Roma ACC						
	REMARKS: Route considered CDR3 and not usable from FL 115 up to FL 195 included during activation periods of LID84 (Ponza) SUA.						
Z925	Amano CRP	172	Enepa CRP	99.2	FL 110	FL 195	ODD
	(N39°25′ E13°48′)	353	(N37°46′ E14°00′)			FL 105	EVEN
	CONTROL: Roma ACC						
	REMARKS: Route considered CDR3 and usable by traffic departures/arrivals at Catania/Fontanarossa (LICC) and Sigonella (LICZ) only.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL5	Pemar CRP (N42°02′ E12°55′)	064 245	Velim CRP (N42°09′ E13°16′)	16.9	FL 200	FL 460 FL 195	ODD EVEN
	Velim CRP		Aneda CRP (N42°16′ E13°40′)	19.4			
	Aneda CRP		Lanno CRP (N42°21′ E13°53′)	10.8			
	Lanno CRP		Pescara VOR/DME	14.3			
	Pescara VOR/DME	053 234	Arpik CRP (N42°45′ E14°48′)	32.8			
	CONTROL: Roma ACC/Brindisi ACC REMARKS: Segment Pemar CRP to Lanno CRP considered CDR1 from FL 240 to FL 380 included during activation periods of LIR51B (Appeninica) SUA. Between Pemar CRP and Arpik CRP is considered CDR1 from FL 360 and above during activation periods of LITSA74A (Gran Sasso d'Italia) SUA.						
UL12	Vicenza VOR/DME	181 001	Koper CRP (N45°09′ E11°39′)	29	FL 200	FL 460 FL 195	ODD EVEN
	Koper CRP		Ferrara NDB	20.4			
	Ferrara NDB	208 027	Lutor CRP (N44°29′ E11°22′)	22.4			
	Lutor CRP		Firenze VORTAC	31.7			
	CONTROL: Milano ACC REMARKS: Between Vicenza VOR/DME (VIC) and Firenze VORTAC (FRZ), considered CDR1 from FL 360 and above during activation period of LITSA73 (Cisalpina) SUA.						
UL44	Betot CRP (N40°23′ E11°28′)	196	Velex CRP (N39°58′ E11°28′)	26.4	FL 210	FL 460 FL 195	ODD
	Velex CRP		Lager CRP (N39°00′ E11°00′)	61.2			
	Lager CRP		Adami CRP (N38°42′ E10°57′)	18.1			
	CONTROL: Roma ACC REMARKS: Between Betot CRP and Adami CRP airway considered CDR1 0500-2200Z++ Mon-Fri. 21 Jun-20 Sep, 0500-0659Z++ and 1701-2200Z++ Mon-Fri. 21 Sep-20 Jun., CDR3 0700-1700Z++ Mon-Fri. 21 Sep-20 Jun. Alternate route UL12-UM738-UM725.						
UL50	Torino VOR/DME	188 320	Neded CRP (N44°41′ E08°08′)	18.3	FL 200	FL 460 FL 195	ODD EVEN
	Neded CRP		Lagen CRP (44°23′ E08°29′)	23.6			
	CONTROL: Milano ACC REMARKS: Between Torino VOR/DME (TOP) and Lagen CRP, airway considered CDR1 from FL 360 and above during activation periods of LITSA 73B (Cisalpina) SUA.						
UL58	Vulka CRP (N38°48′ E15°17′)	155 336	Piger CRP (N38°33′ E15°24′)	16.3		FL 460 FL 195	ODD EVEN
	Piger CRP		RCA VOR/DME	30.4			
	Pimor CRP (N37°34′ E15°52′)	159 339	Ernam CRP (N36°52′ E16°10′)	45.3			
	CONTROL: Roma ACC REMARKS: Segment Vulka CRP to RCA VOR/DME CDR1 from FL 360 and above during activation of LITSA77. Segment Pimor CRP to Ernam CRP CDR3 from FL 200-FL 240 during activation of LID75.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL72	Bermi CRP (N37°30′ E15°21′) Indax CRP CTF VOR/DME	258 078 262 082	Indax CRP (N37°30′ E15°17′) CTF VOR/DME CAT VOR/DME	3.2 11.0 4.5	FL 210	FL 460 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: Segment CAT VOR/DME to Bermi CRP CDR1 FL360 and above during activation LITSA77.						
UL125	Gilet CRP (N42°23′ E10°13′) Bekos CRP Pitor CRP	199 018	Bekos CRP (N41°48′ E09°56′) Pitor CRP (N41°13′ E09°39′) Talin CRP (N41°02′ E09°34′)	37.2 36.6 11.5	FL 200	FL 460 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: Between Gilet CRP and Talin CRP, considered CDR3 during activation periods of LID67 (Solenzara) SUA.						
UL137	Divar CRP (N37°46′ E15°19′) Catania VOR/DME	219 039 216 036	Catania VOR/DME Nelda CRP (N36°52′ E14°24′)	25 45	FL 200	FL 460 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: Between Divar CRP and Nelda CRP considered CDR1 from FL 360 and above during activation periods of LITSA77 (Etna) SUA.						
UL153	Saronno VOR/DME Robas CRP Parma NDB	131 175 355	Robas CRP (N45°12′ E09°44′) Parma NDB Berok CRP (N44°10′ E10°21′)	40.3 32.9 39.5	FL 210	FL 460 FL 195	ODD ODD EVEN
	CONTROL: Milano ACC REMARKS: Between Saronno VOR/DME (SRN) and Berok CRP, to be considered CDR1 from FL 360 and above during activation periods of LITSA73 (Cisalpina) SUA. Route segment in Swiss airspace considered CDR.						
UL165	Amano CRP (N39°25′ E13°48′) Vakor CRP Pelen CRP Cobba CRP	153	Vakor CRP (N38°50′ E14°09′) Pelen CRP (N38°20′ E14°27′) Cobba CRP (N37°49′ E14°46′) Notri CRP (N37°27′ E14°58′)	38.9 33.2 34.5 23.5	FL 210	FL 460 FL 195	ODD
	CONTROL: Roma ACC REMARKS: Between Amano CRP and Notri CRP, to be considered CDR1 from FL 360 and above during activation periods of LITSA77 (Etna) SUA.						
UL168	Preki CRP (N45°53′ E13°07′) PES VOR/DME	117 108 289	PES VOR/DME (N42°26′ E14°11′) VIE VOR/DME (N41°55′ E16°03′)	54.1 88.9		FL 460 FL 245 FL 460 FL 195	ODD
	CONTROL: Roma ACC REMARKS: Between Preki CRP and VIE VOR/DME CDR 1 from FL 360 inclusive and above during activation of LITSA 74A. Between PES VOR/DME AND VIE VOR/DME CDR 1 from FL 360 inclusive and above during activation of LITSA 74B.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL172	Vicenza VOR/DME	141 321	Chioggia VOR/DME	42.5	FL 200	FL 460 FL 195	ODD EVEN
	CONTROL: Padova ACC REMARKS: Airway is considered CDR1 from FL 360 and above during activation periods of LITSA78 (Alto Adriatico) SUA.						
UL612	Albet CRP (N45°26′ E11°31′)	121	Chioggia VOR/DME	39.1	FL 210	FL 460 FL 195	ODD
	Chioggia VOR/DME	148 328	Amlon CRP (N44°20′ E12°53′)	50.8	FL 210		ODD EVEN
	Amlon CRP		Lanli CRP (N43°57′ E13°11′)	26.4			
	Lanli CRP		Ancona VOR/DME	25.6			
	CONTROL: Padova ACC REMARKS: Between Albet CRP and Ancona VOR/DME (ANC) to be considered CDR1 from FL 360 and above during activation periods of LITSA78 (Alto Adriatico) SUA. Between 10 DME North of (ANC) and 20 DME South of Chioggia VOR/DME (CHI), to be considered CDR1 up to FL 240 included, during activation periods of LIR21 (Sara) SUA. Between Brindisi VORTAC (BRD) and Nosto CRP considered CDR3 up to FL 240 included due to LIR60 (Lecce) SUA.						
UL613	Lisko CRP (N43°34′ E14°08′)	325 144	Buser CRP (N44°06′ E13°39′)	38.4	FL 260	FL 460 FL 255	EVEN ODD
	Buser CRP		Akado CRP (N45°20′ E12°30′)	88.5			
	Akado CRP	296 116	Lapab CRP (N45°32′ E11°58′)	25.2			
	Lapab CRP	296	Vicenza VOR/DME	14			EVEN
	CONTROL: Padova ACC REMARKS: Between Lisko CRP and Vicenza VOR/DME (VIC), considered CDR1 from FL 360 and above during activation periods of LITSA78 (Alto Adriatico) SUA.						
UL614	Osteg CRP (N45°11′ E11°08′)	092 272	Koper CRP (N45°09′ E11°38′)	21.4	FL 210	FL 460 FL 195	ODD EVEN
	Koper CRP	098 279	Chioggia VOR/DME	27.6			
	Chioggia VOR/DME	096	Labin CRP (N44°59′ E13°05′)	34.8			
	CONTROL: Padova ACC REMARKS: Route considered CDR1 from FL 360 and above during activation of LITSA73 and/or LITSA78 zones.						
UL615	Rotar CRP (N45°16′ E13°00′)	280	Akado CRP (N45°20′ E12°30′)	21.4	FL 260	FL 460 FL 255	EVEN
	Akado CRP	296	Lapab CRP (N45°32′ E11°58′)	25.2			
	Lapab CRP		Vicenza VOR/DME	14			
	CONTROL: Padova ACC REMARKS: Segment Vicenza VOR/DME (VIC) to Akado CRP to Rotar CRP considered CDR1 from FL 360 and above during activation periods of LITSA78 (Alto Adriatico) SUA.						
UL862	BRD VORTAC	150	Lupal CRP (N39°28′ E18°46′)	77	FL 210	FL 460 FL 195	ODD
	CONTROL: Brindisi ACC REMARKS: CDR3 to FL 240 included during activation of LIR 60 zone. CDR1 from FL 250-FL 360 inclusive during activation of LIR 66B zone, and from FL 340 inclusive and above during activation of LITSA 76B zone. Alternate route UL612.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL865	Buser CRP (N44°06′ E13°39′)	012	Nikol CRP (N44°13′ E13°41′)	7.1	FL 260	FL 460 FL 245	EVEN
	Ancona VOR/DME		Buser CRP	32.2			
	Ancona VOR/DME	226 045	Leonn CRP (N43°18′ E13°02′)	25.8	FL 210	FL 460 FL 195	ODD EVEN
	Leonn CRP		Katar CRP (N43°03′ E12°41′)	21.5			
	Katar CRP		Gitod CRP (N42°48′ E12°19′)	22.1			
	Gitod CRP		Bolsena VORTAC	15.9			
	CONTROL: Padova ACC/Roma ACC REMARKS: Between Ancona VOR/DME (ANC) to Gitod CRP considered CDR3 up to FL 240 included during activation periods of LIR48 (Foligno) SUA. Between Leonn CRP and Bolsena VORTAC (BOL) considered CDR1 from FL 250 to FL 380 included during activation periods of LIR51A (Appenninica) SUA. Between (ANC) and (BOL) considered CDR1 from FL 360 and above during activation periods of LITSA74A (Gran Sasso d'Italia) SUA. Between (ANC) and Nikol CRP considered CDR1 from FL 360 and above during activation periods of LITSA78 (Alto Adriatico) SUA and not available at levels and during activation periods of Speedy SUA.						
UL869	Caraffa VORTAC	071 253	Peros CRP (N38°38′ E15°49′)	26.2	FL 200	FL 460 FL 195	ODD EVEN
	Peros CRP		Piger CRP (N38°33′ E15°24′)	20.2			
	Piger CRP		Pelen CRP (N38°20′ E14°27′)	46			
	Pelen CRP		Palermo VOR/DME	63			
	CONTROL: Roma ACC REMARKS: Between Pelen CRP and Palermo VOR/DME (PAL) considered CDR1 up to FL 380 during activation periods of LIR105 (Cefalu) SUA. Between Caraffa VORTAC (CDC) and (PAL) considered CDR1 from FL 360 and above during activation periods of LITSA77 (Etna) SUA.						
UL982	Trezzo VOR/DME	115 296	Kampa CRP (N45°23′ E10°00′)	23.2	FL 250	FL 460 FL 245	ODD EVEN
	Kampa CRP		Mamto CRP (N45°19′ E10°13′)	10			
	Mamto CRP		Ferrara NDB	66.9			
	Ferrara NDB	130 311	Ancona VOR/DME	108.8			
	Ancona VOR/DME	153 334	Erdux CRP (N43°15′ E13°41′)	22.2	FL 200	FL 460 FL 195	ODD EVEN
	Erudx CRP		Pescara VOR/DME	53.7			
	Pescara VOR/DME	186 006	Emily CRP (N42°10′ E14°08′)	16.2			
	Emily CRP		Kastu CRP (N41°49′ E14°04′)	21.4			
	Kastu CRP		Erika CRP (N41°37′ E14°02′)	11.6			
	Erika CRP		Teano VOR/DME	19.7			
	CONTROL: Roma ACC/Padova ACC/Brindisi ACC REMARKS: Segment Trezzo VOR/DME (TZO) to Ancona VOR/DME (ANC) considered CDR3. Between (ANC) to Pescara VOR/DME (PES) considered CDR1 from FL 360 and above during activation periods of LITSA74A (Gran Sasso d'Italia) SUA. Between (PES) to Teano VOR/DME (TEA) considered CDR3 to FL 240 included, during activation periods of LIR50 (Sulmona) SUA and CDR1 from FL 250 to FL 380 included during activation periods of LIR51C (Appenninica) SUA (alternate route UL5-UL995) and from FL 360 and above during activation periods of LITSA74A (Gran Sasso d'Italia) SUA.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL995	Firenze VORTAC	326	Lupos CRP	33.9	FL 200	FL 460	EVEN
		146	(N44°30′ E10°35′)			FL 195	ODD
	Lupos CRP		Parma NDB	22.7			
	Parma NDB	322	Maxim CRP	15.1			
		142	(N45°01′ E10°05′)				
	Maxim CRP	322	Trezzo VOR/DME	40.3			EVEN
	CONTROL: Milano ACC						
	REMARKS: Segment Trezzo VOR/DME (TZO) to Firenze VORTAC (FRZ) considered CDR1 from FL 360 and above during activation periods of LITSA73 (Cisalpina) SUA.						
UM126	Roxan CRP	217	Quenn CRP	50.4	FL 200	FL 460	ODD
	(N40°50′ E11°13′)	036	(N40°50′ E11°13′)			FL 195	EVEN
	Quenn CRP		Aledi CRP	41.8			
			(N39°37′ E10°00′)				
	Aledi CRP		Ledro CRP	24.5			
			(N39°17′ E09°41′)				
	Ledro CRP		Carbonara VOR/DME	13			
	CONTROL: Roma ACC						
	REMARKS: Between Roxan CRP and Carbonara VOR/DME (CAR) considered CDR1 0500-0659Z++, 1701-2200Z++ Mon-Fri. Mon-Fri. From 21 Jun-20 Sep from FL250 and above 0500-2200Z++. CDR3 0700-1700Z++ Mon-Fri. 21 Sep-20 Jun. 21 Jun-20 Sep from FL 200 up to FL240 0700-1700Z, Mon-Fri. Alternate route UM603- UL125- UM732.						
UM131	Agasa CRP	269	Bekos CRP	37.2	FL 210	FL 460	ODD
	(N41°48′ E10°46′)	087	(N41°48′ E09°56′)			FL 195	
	Bekos CRP		Idori CRP	8.3			
			(N41°47′ E09°45′)				
	CONTROL: Roma ACC						
	REMARKS: Between Agasa CRP and Idori CRP considered CDR3 during activation periods of LID67 (Solenzara) SUA.						
UM152	Vulka CRP	271	Tadix CRP	43	FL 200	FL 460	ODD
	(N38°48′ E15°17′)	089	(N38°49′ E14°21′)			FL 195	EVEN
	Tadix CRP		Vakor CRP	9.7			
			(N38°50′ E14°09′)				
	Vakor CRP		Rosas CRP	28.8			
			(N38°51′ E13°32′)				
	Giano CRP	275	Lager CRP	65.2			
		094	(N39°00′ E11°04′)				
	Lager CRP		Carbonara VOR/DME	73.1			
	CONTROL: Brindisi/Roma ACC						
	REMARKS: Between Giano CRP and Carbonara VOR/DME (CAR) considered CDR1 0500-0659Z++, 1701-2200Z++ Mon-Fri. 21 Sep-20 Jun. 0500-2200Z++ Mon-Fri. 21 Jun-20 Sep. CDR3 0700-1700Z++ Mon-Fri. 21 Sep-20 Jun. Alternate route UL869-UM871.						
UM159	CAR VOR/DME	066	Belok CRP	43.1	FL 200	FL 460	EVEN
		248	(N39°23′ E10°22′)			FL 195	ODD
	Belok CRP		Ronab CRP	76.6			
			(N39°52′ E11°54′)				
	Lomat CRP	101	Sirgi CRP	51.5	FL 250	FL 460	ODD
	(N40°21′ E15°37′)	282	(N40°08′ E16°42′)			FL 245	EVEN
	CONTROL: Roma ACC						
	REMARKS: Segment Carbonara VOR/DME (CAR) to Ronab CRP considered CDR1 0500-0659Z++, 1701-2200Z++ Mon-Fri. 21 Jun-20 Sep from FL 250 and above 0500-2200Z++. CDR3 0700-1700Z++ Mon-Fri. 21 Sep-20 Jun. From 21 Jun-20 Sep from FL 200 up to FL 240 0700-1700Z++ Mon-Fri.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM167	Rotar CRP (N45°16′ E13°00′)	248 067	Chioggia VOR/DME	32.4	FL 210	FL 460 FL 195	ODD EVEN
	Chioggia VOR/DME	218 038	Gorep CRP (N44°55′ E12°06′)	12			
	Gorep CRP		Argex CRP (N44°33′ E11°40′)	28.6			
	Argex CRP	221 041	Firenze VORTAC	42.6			
	CONTROL: Padova ACC REMARKS: Route considered CDR1 from FL 360 and above during activation of LITSA73 and LITSA78 zones. Segment Gorep CRP to Argex CRP considered CDR1 from FL 240 and above during activation of LIR26 zone. Alternate routes are UM726-UM859 and UM859-UZ902-UZ805.						
UM169	Pescara VOR/DME	084 266	Polyp CRP (N42°29′ E15°12′)	45.3	FL 200	FL 460 FL 195	ODD EVEN
	CONTROL: Brindisi ACC REMARKS: Between Pescara VOR/DME (PES) and Polyp CRP, considered CDR1 from FL 360 and above during activation periods of LITSA74A (Gran Sasso d'italia) SUA.						
UM198	Tortu CRP (N43°23′ E08°58′)	347	Anaki CRP (N44°12′ E08°44′)	49.8	FL 260	FL 460 FL 245	EVEN
	Anaki CRP	338	Tonda CRP (N45°07′ E08°14′)	58.5			
	CONTROL: Milano ACC REMARKS: Segment Tortu CRP to Anaki CRP considered CDR1 from FL 370 and above during activation of LITSA72. Segment Anaki CRP to Tonda CRP considered CDR1 from FL 360 and above during activation of LITSA73 (bis zone).						
UM416	Mated CRP (N40°37′ E16°10′)	154	CRN VOR/DME	105.6	FL 250	FL 460 FL 254	ODD
	CONTROL: Brindisi ACC REMARKS: CDR1 from FL 250-FL 360 inclusive during activation of LIR 66A and from FL 340 inclusive and above during activation of LITSA 76A. Alternate route UP748-UM620-UM728.						
UM445	Tonda CRP (N45°07′ E08°14′)	164 344	Lagen CRP (N44°24′ E08°30′)	44.4	FL 210	FL 460 FL 195	ODD EVEN
	CONTROL: Milano ACC REMARKS: Route to be considered CDR1 from FL 360 and above during activation of LITSA73 (bis zone).						
UM600	Abako CRP (N37°11′ E16°40′)	230 049	Ernam CRP (N36°52′ E16°10′)	31.1	FL 200	FL 460 FL 195	EVEN ODD
	Ernam CRP		Lored CRP (N36°30′ E15°37′)	34			
	CONTROL: Roma ACC REMARKS: Segment Abako CRP to Lored CRP considered CDR3 up to FL 240 included during activation periods of LID75 (Est Sicilia) SUA.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM601	Baren CRP (N40°25′ E09°20′)	103 286	Quenn CRP (N40°10′ E10°33′)	57.5	FL 200	FL 460 FL 195	ODD EVEN
	Quenn CRP		Velex CRP (N39°58′ E11°28′)	43.8			
	Velex CRP		Ronab CRP (N39°52′ E11°54′)	20.8			
	CONTROL: Roma ACC REMARKS: Segment Baren CRP to Ronab CRP considered CDR1 0500-0659Z++, 1701-2200Z++ Mon-Fri. 21 Sep-20 Jun, 0500-2200Z++ Mon-Fri. 21 Jun-20 Sep. CDR3 0700-1700Z++ Mon-Fri. 21 Sep-20 Jun. Alternate route UM603-UL12.						
UM621	Askot CRP (N36°30′ E16°27′)	325	Ernam CRP (N36°52′ E16°10′)	25.6	FL 200	FL 460 FL 195	EVEN
	Ernam CRP	322	Tadix CRP (N38°50′ E14°22′)	145.9	FL 260	FL 460 FL 245	EVEN
	Tadix CRP		Amano CRP (N39°25′ E13°48′)	44.2			
	CONTROL: Roma ACC/Brindisi ACC REMARKS: Segment Ernam CRP to Amano CRP considered CDR1 from FL 360 and above during activation period of LITSA77 (Etna) SUA. Segment Ernam CRP to Askot CRP considered CDR3 up to FL 240 included during activation periods of LID75 (Est Sicilia) SUA.						
UM622	Kapil CRP (N38°22′ E12°08′)	325	Germo CRP (N39°15′ E11°21′)	64.6	FL 200	FL 460 FL 195	EVEN
	Germo CRP		Quenn CRP (N40°10′ E10°33′)	66.6			
	Quenn CRP	319	Sukun CRP (N40°45′ E09°55′)	45.5			
	CONTROL: Roma ACC REMARKS: Segment Kapil CRP to Sukun CRP considered CDR1 0500-0659Z++, 1701-2200Z++ Mon-Fri 21 Sep-20 Jun, 0500-2200Z++ Mon-Fri 21 Jun-20 Sep. CDR3 0700-1700Z++ Mon-Fri 21 Sep-20 Jun. Alternate route UL12-UM603, or UM732-UM733.						
UM623	Oktav CRP (N41°17′ E08°09′)	172	Pelos CRP (N41°10′ E08°10′)	7.6	FL 210	FL 460 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: CDR1						
UM725	Xolta CRP (N42°42′ E15°45′)	205 024	Molux CRP (N41°19′ E14°48′)	93.8	FL 260	FL 460 FL 255	ODD EVEN
	CONTROL: Brindisi ACC REMARKS: Between Xolta CRP to Molux CRP considered CDR1 up to FL 380 during activation periods of LIR51D and LIR51E (Appenninica) SUA and from FL 360 and above during activation periods of LITSA74B (Gran Sasso d'Italia) SUA.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM726	Bagno CRP (N43°53′ E11°48′) Peleg CRP	350 170	Peleg CRP (N44°14′ E11°44′) Argex CRP (N44°33′ E11°40′)	20.4 19.7	FL 200	FL 460 FL 195	EVEN ODD
	Argex CRP Ferrara NDB	350	Ferrara NDB Albet CRP (N45°26′ E11°31′)	15.9 37			
	CONTROL: Roma ACC/Padova ACC REMARKS: Segment Bagno CRP to Albet CRP considered CDR1 from FL 360 and above during activation of LITSA73 zone.						
	Pemar CRP (N42°02′ E12°55′) Gitod CRP	328	Gitod CRP (N42°48′ E12°19′) Verun CRP (N43°17′ E11°55′)	53.6 33.6	FL 260	FL 460 FL 245	EVEN
	CONTROL: Roma ACC/Padova ACC REMARKS: Segment Pemar CRP to Verun CRP considered CDR1 from FL 250 up to FL 380 during activation of LIR51 (sector A) zone and from FL 360 and above during activation of LITSA74 (sector A) zone. Alternate route UL995-UZ806.						
UM727	Saronno VOR/DME	144	Karpi CRP (N44°29′ E10°10′)	84.9	FL 250	FL 460 FL 245	ODD
	Karpi CRP	139	Ruxol CRP (N44°07′ E10°36′)	28.9	FL 210	FL 460 FL 195	
	Amtel CRP (N44°13′ E11°37′)	173	Tarquinia VOR/DME	60.5			
	CONTROL: Milano ACC REMARKS: Between Saronno VOR/DME (SRN) and RUXOL CRP, to be considered CDR 1 from FL 360 and above during activation periods of LITSA73 (Cisalpina) SUA. Segment AMTEL CRP to TAQ VOR/DME to be considered CDR1 during activation periods of LIR107B (Maremma) SUA (alternate route UL995-UL865) and not plannable by traffic with destinations within Roma CTLZ (except LIRF).						
UM729	Genova VOR/DME	318	Tonda CRP (N45°07′ E08°14′)	54.9	FL 260	FL 460 FL 245	EVEN
	CONTROL: Milano ACC REMARKS: Between Genova VOR/DME (GEN) and Tonda CRP considered CDR1 from FL 360 and above not during activation periods of LITSA73B (Cisalpina) SUA.						
UM730	Torino VOR/DME	119 299	Genova VOR/DME	60.3	FL 250	FL 460 FL 245	ODD
	CONTROL: Milano ACC REMARKS: Between Torino VOR/DME (TOP) and Genova VOR/DME (GEN), airway considered CDR1 from FL 360 and above during activation periods of LITSA 73B (Cisalpina) SUA.						
UM731	Rekto CRP (N41°06′ E07°37′) Arpag CRP	133 313	Arpag CRP (N40°50′ E07°59′) Risga CRP (N40°49′ E08°00′)	23 2	FL 210	FL 460 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: CDR1						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM734	Aspir CRP (N38°07′ E11°06′) Germo CRP	009	Germo CRP (N39°15′ E11°21′) Betot CRP (N40°23′ E11°38′)	68.7 69.3	FL 200	FL 460 FL 195	EVEN
	CONTROL: Roma ACC REMARKS: Segment Aspir CRP to Betot CRP considered CDR1 0500-0659Z++, 1701-2200Z++ Mon-Fri. 21 Sep-20 Jun, 0500-2200Z++ Mon-Fri. 21 Jun-20 Sep. CDR3 0700-1700Z++ Mon-Fri. 21 Sep-20 Jun. Alternate route UM725-UM738-UL12.						
UM738	Adosa CRP (N45°38′ E11°02′) Osteg CRP Kreva CRP Bologna VOR/DME	169 169 349 162 342	Osteg CRP (N45°11′ E11°08′) Kreva CRP (N44°46′ E11°14) Bologna VOR/DME Valen CRP (N43°56′ E11°32′)	28.4 24.6 14.5 37.5	FL 210	FL 460 FL 195	ODD ODD EVEN
	CONTROL: Padova ACC REMARKS: Segment Adosa CRP to Osteg CRP considered CDR3 up to FL 245 due to Garda CTR (zones 2 and 3). Segment Adosa CRP to Valen CRP considered CDR1 from FL 360 and above during activation of LITSA73 zone.						
	Amtel CRP (N43°13′ E11°37′)	173	Tarquinia VOR/DME	60.5	FL 210	FL 460 FL 195	ODD
	CONTROL: Padova ACC REMARKS: Segment Amtel CRP to Tarquinia VOR/DME considered CDR1 due to LIR107 (B zone). Alternate route is UL995-UL865.						
UM739	Sardi CRP (N38°31′ E08°53′)	312 131	Tabot CRP (N39°09′ E08°00′)	55.9	FL 220	FL 460 FL 215	EVEN ODD
	CONTROL: Roma ACC REMARKS: Between Tabot CRP to Sardi CRP considered CDR3 Mon-Fri with lower vertical limit FL 280 subject to coordination with Cagliari APP CON and coordination between Tunis and Roma ACC.						
UM742	Palermo VOR/DME Maron CRP	156 336	Maron CRP (N37°07′ E13°39′) Ekola CRP (N36°30′ E13°58′)	59.1 40.4	FL 200	FL 460 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: Between Palermo VOR/DME (PAL) to Ekola CRP considered CDR1 up to FL 280 included during activation periods of LIR106 (Licata) SUA. Alternate routes southbound use Giano-UM727-Asbol-UM732-Gozo VOR/DME (GZO) and Palermo VOR/DME (PAL)-UM726-Mabox-UM622-(GZO)(for traffic coming from Sorrento VOR/DME (SOR) only). Alternate routes northbound use UM622-Mabox-UM726-(PAL) and UN982.						
UM858	Voghera VOR/DME	171 351	Genova VOR/DME	32.8	FL 200	FL 460 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: Between Voghera VOR/DME (VOG) and Genova VOR/DME (GEN), airway considered CDR1 from FL 360 and above during activation periods of LITSA73B (Cisalpina) SUA.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM859	Genova VOR/DME	084 265	Kalik CRP (N44°28′ E09°51′)	33	FL 200	FL 460 FL 195	EVEN ODD
	Kalik CRP		Lupos CRP (N44°30′ E10°35′)	31.6			
	Lupos CRP		Bologna VOR/DME	30.5			
	Bologna VOR/DME	038 218	Ferrara NDB	21.7			
	Ferrara NDB	060 240	Rovig CRP (N44°55′ E11°54′)	13.7			
	Rovig CRP		Chioggia VOR/DME	18.6			
	Chioggia VOR/DME	057 239	Tulik CRP (N45°17′ E12°47′)	25			
	Tulik CRP		Roska CRP (N45°19′ E12°52′)	3.6			
	Roska CRP		Monfa CRP (N45°29′ E13°17′)	20.5			
	CONTROL: Roma ACC/Padova ACC REMARKS: Between Monfa CRP and Ferrara NDB (FER) considered CDR1 from FL 360 and above during activation periods of LITSA 78 (Alto Adriatico) SUA. Between Chioggia VOR/DME (CHI) and Genova VOR/DME (GEN) considered CDR1 from FL 360 and above during activation periods of LITSA73 (Cisalpina) SUA.						
UM871	Palermo VOR/DME	110 291	Inter CRP (N37°53′ E13°40′)	25.1	FL 200	FL 460 FL 195	ODD EVEN
	Inter CRP		Enepa CRP (N37°46′ E14°00′)	16.9			
	Enepa CRP		Libro CRP (N37°37′ E14°28′)	24			
	Libro CRP		Catania VOR/DME	26			
	Catania VOR/DME	120 301	Ernam CRP (N36°52′ E16°10′)	67.5			
	Ernam CRP		Subok CRP (N36°30′ E16°51′)	39.8			
	CONTROL: Roma ACC REMARKS: Between Palermo VOR/DME (PAL) to Ernam CRP considered CDR1 from FL 360 included and above during activation periods of LITSA77 (Etna) SUA. Between Catania VOR/DME (CAT) to Subok CRP considered CDR3 up to FL 240 included during activation periods of LID75 (Est Sicilia) SUA.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM872	Botal CRP (N45°08′ E09°07′)	127 309	Firenze VORTAC	104.5	FL 250	FL 460 FL 245	ODD EVEN
	Urban CRP (N43°48′ E12°21′)	133 314	Gubin CRP (N43°29′ E12°46′)	26.1	FL 230	FL 460 FL 225	ODD EVEN
	Gubin CRP		Leonn CRP (N43°18′ E13°02′)	16.3			
	Leonn CRP		Norki CRP (N43°05′ E13°20′)	18.2			
	Norki CRP		Pescara VOR/DME	54			
	Pescara VOR/DME	124 305	Amendola NDB	92.9	FL 200	FL 460 FL 195	ODD EVEN
	Amendola NDB	128 309	Luxil CRP (N40°49′ E16°52′)	62.1			
	Mokto CRP (N40°37′ E17°11′)		Grottaglie NDB	15.2			
	Grottaglie NDB	130 311	Lupal CRP (N39°28′ E18°46′)	85.4			

CONTROL: Padova ACC/Brindisi ACC

REMARKS: Segment Mokto CRP to Lupal CRP considered CDR3 up to FL 240 included due to LIR60 SUAs and CDR1 from FL 250 to FL 360 during activation periods of LIR66B (Golfo Di Taranto) SUA and from FL 340 and above during activation periods of LITSA76B (Cosenza) SUA. Segment Urban CRP to Pescara VOR/DME (PES) considered CDR3 up to FL 240 included due to LIR48 (Foligno) SUA. Segment Urban CRP to Luxil CRP considered CDR1 from FL 360 included and above during activation periods of LITSA74A and LITSA74B (Gran Sasso d'Italia) SUA. Segment Pescara VOR/DME (PES) to Luxil CRP considered CDR3 up to FL 200 included due to Amendola CTLZ (Zone 2) and CDR1 from FL 210 included up to FL 380 included during activation periods of LIR51D (Appenninica) SUA. Alternate route UL982-UZ904-UL995. Segment Mokto CRP to Lupal CRP considered CDR3 up to FL 240 included due to LIR60 (Lecce) SUA and CDR1 from FL 250 to FL 360 included during activation periods of LIR66B (Golfo Taranto) SUA and from FL 340 and above during activation periods of LITSA76B (Cosenza) SUA. Route segment in Swiss airspace considered CDR. Alternate route UL615.

UM984	Evano CRP (N45°20′ E08°46′)	214	Neded CRP (N44°42′ E08°08′)	46.8	FL 210	FL 460 FL 195	ODD
	Neded CRP		Vamtu CRP (N44°09′ E07°38′)	39.7			

CONTROL: Roma ACC

REMARKS: Between Neded and Vamtu CRP, considered CDR1 up to FL 310 during activation periods of LIR64 (Cueno) SUA (alternate route UZ185), from FL 290 and above during activation periods of LIR4 (Fossano) SUA (alternate route UZ185), and from FL 370 and above during activation periods of LITSA72 (Albenga) SUA. Between Evano CRP and Vamtu CRP, CDR1 from FL 360 and above during activation periods of LITSA73B (Cisalpina) SUA.

UM985	Nosta CRP (N43°49′ E07°45′)	054	Albenga NDB (N45°39′ E10°07′)	24.7	FL 200	FL 460 FL 195	EVEN
	Albenga NDB	058	Dorav CRP (N44°20′ E08°51′)	31.7			
	Genova NDB	029	Moneb CRP (N44°38′ E09°15′)	14.1			
	Moneb CRP		Robas CRP (N45°12′ E09°44′)	39.6			
	Robas CRP		Giblo CRP (N45°22′ E09°52′)	11.5			
	Giblo CRP		Oskor CRP (N45°39′ E10°07′)	20.4			

CONTROL: Padova ACC

REMARKS: Between Giblo CRP to Oskor CRP, considered CDR3 up to FL 210 included, and CDR1 from FL 220 to FL 245 included due to Garda CTLZ (2 and 3 zones). Alternate route UN851-UL615. Between Genova NDB (GEN) and Oskor CRP, to be considered CDR1 from FL 360 and above during activation periods of LITSA73 (Cisalpina) and LITSA73B (Cisalpina) SUA. Between Nosta and Dorav CRP, to be considered CDR1 from FL 370 and above during activation periods of LITSA72 (Albenga) SUA.

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM986	Ancona VOR/DME	035	Ibeni CRP (N44°01′ E13°55′)	32.3	FL 260	FL 460 FL 245	EVEN
	CONTROL: Padova ACC REMARKS: Between Ancona VOR/DME (ANC) and Ibeni CRP considered CDR1 from FL 360 included and above during activation periods of LITSA78 (Alto Adriatico) SUA and not available at levels and during activation periods of Speedy SUA (LID113).						
UN157	Tinto CRP (N41°29′ E11°04′)	196 015	Quenn CRP (N40°10′ E10°33′)	82.3	FL 210	FL 460 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: CDR1 21 Jun-20 Sep 0500-2200Z Mon-Fri; 21 Sep-20 Jun 0500-0659Z++ and 1701-2200Z++ Mon-Fri. CDR 3 21 Sep-20 Jun 0700-1700Z++ Mon-Fri. Alternate route UL5-UL125-UM732.						
UN504	Bologna VOR/DME	085	Argex CRP (N44°33′ E11°40′)	16.3	FL 200	FL 355 FL 195	EVEN
	Argex CRP	022	Rovig CRP (N44°55′ E11°54′)	24.3			
	CONTROL: Roma ACC REMARKS: Segment from Bologna VOR/DME to Rovig CRP considered CDR1 from FL 240 and above during activation of LIR26 zone. Alternate route is UM726-UM859.						
UN535	Chioggia VOR/DME	203 023	Lobsi CRP (N44°54′ E12°10′)	11	FL 210	FL 460 FL 195	ODD EVEN
	Lobsi CRP		Peleg CRP (N44°14′ E11°44′)	44.8			
	CONTROL: Roma ACC REMARKS: Route considered CDR1 from FL 360 and above during activation of LITSA73 and/or LITSA78 zones. Segment Lobsi CRP to Peleg CRP considered CDR1 up to FL 240 during activation of LIR21 (sector B) zone and from FL 240 up to FL 380 during activation of LIR26 zone. Alternate routes are UM859-UZ902-UZ805 and UM726-UM859.						
UN606	Bolzano NDB	128	Babag CRP (N45°23′ E13°08′)	99.5	FL 290	FL 460 FL 285	ODD
	CONTROL: Padova ACC REMARKS: Between Bolzano NDB (BZO) and Babag CRP, considered CDR1 up to FL 380 included during activation periods of LIR49 (Zita) SUA and from FL 360 and above during activation periods of LITSA78 (Alto Adriatico) SUA. Alternate route UZ906-UL614.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN737	Baxon CRP (N44°25′ E13°28′)	202	Lanli CRP (N43°57′ E13°11′)	30.1	FL 250	FL 460 FL 245	ODD
	Lanli CRP		Vapix CRP (N43°38′ E12°59′)	21.2	FL 210	FL 460 FL 205	ODD
	Vapix CRP	224	Gubin CRP (N43°29′ E12°46′)	12.7	FL 210	FL 460 FL 195	ODD
	Gubin CRP		Umbed CRP (N43°13′ E12°23′)	23.3			
	Umbed CRP		Nikma CRP (N43°04′ E12°11′)	12.9			
	Nikma CRP	190	Bolsena VORTAC	27.5			
	Bolsena VORTAC	168	Ostia VOR/DME	49.6			
	Ostia VOR/DME	175	Rotun CRP (N40°53′ E12°18′)	55.3			
	CONTROL: Padova ACC/Roma ACC REMARKS: Segment Baxon CRP to Vapix CRP considered CDR1 from FL 360 and above during activation periods of LITSA78 (Alto Adriatico) SUA and not available at levels and during activation periods of Speedy SUA. Segment Vapix CRP to Nikma CRP to Bolsena VORTAC (BOL) considered CDR1 from FL 250 to FL 380 included during activation periods of LIR51A (Appenninca) and from FL 360 and above during activation periods of LITSA74A (Gran Sasso d'Italia) SUA. Segment Vapix CRP to Nikma CRP considered CDR3 up to FL 240 included during activation periods of LIR48 (Foligno) SUA. Segment (BOL) to Ostia VOR/DME (OST) to Rotun CRP considered CDR3.						
UN748	Xamit CRP (N43°19′ E14°48′)	206	Pescara VOR/DME	59.1	FL 200	FL 460 FL 195	EVEN
	CONTROL: Brindisi ACC REMARKS: Between Xamit CRP and Pescara VOR/DME (PES) considered CDR1 FL 360 and above during activation periods of LITSA74A (Gran Sasso d'Italia) SUA.						
UN850	Evano CRP (N45°20′ E08°46′)	175	Lesan CRP (N44°47′ E08°49′)	33.8	FL 210	FL 460 FL 195	ODD
	Lesan CRP		Dorav CRP (N44°19′ E08°51′)	27			
	Ixito CRP (N44°08′ E08°48′)	185	Talep CRP (N43°28′ E08°43′)	40.5			
	CONTROL: Roma ACC REMARKS: Between Ixito CRP and Talep CRP, considered CDR1 up to FL 240 included during activation periods of LID91(B) (Liguria) SUA and FL 370 and above during activation periods of LITSA72 (Albenga) SUA. Between Evano CRP and Dorav CRP, considered CDR1 from FL 360 and above during activation periods of LITSA73B (Cisalpina) SUA.						
UN851	Lukim CRP (N44°08′ E09°18′)	354	Moneb CRP (N44°37′ E09°15′)	29.3	FL 200	FL 460 FL 195	EVEN
	Moneb CRP		Desip CRP (N45°38′ E09°07′)	61.4			
	CONTROL: Roma ACC REMARKS: Route considered CDR1 within Swiss airspace. Alternate route UZ651. Between Lukim CRP and Desip CRP, CDR1 from FL 360 and above during activation periods of LITSA73B (Cisalpina) SUA.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN982	Dirka CRP (N36°30′ E14°19′)	008 189	Nelda CRP (N36°52′ E14°24′)	22.1	FL 200	FL 460 FL 195	EVEN ODD
	Nelda CRP	002 182	Libro CRP (N37°37′ E14°28′)	45.6			
	Libro CRP	347 166	Vakor CRP (N38°50′ E14°09′)	74.3			
	Vakor CRP	333 153	Amano CRP (N39°25′ E13°48′)	38.9			
	Malog CRP	350 169	Alaxi CRP (N41°44′ E13°21′)	72.9	FL 260	FL 460 FL 245	EVEN ODD
	Alaxi CRP		Velim CRP (N42°09′ E13°16′)	24.7			
	CONTROL: Roma ACC REMARKS: Segment Velim CRP to Alaxi CRP is considered CDR1 from FL 250 up to FL 380 included during activation periods of LIR51B and LIR51C (Appenninica) SUA and from FL 360 and above during activation periods of LITSA74A (Gran Sasso d'Italia) SUA (alternate route UL995). Segment Alaxi CRP to Malog CRP is considered CDR1 due to LIR62 (Grazzanise) SUA (alternate route UM729-UM726). Segment Amano CRP to Dirka CRP is considered CDR1 from FL 360 and above during activation periods of LITSA77 (Etna) SUA.						
UP3	Vento CRP (N39°18′ E14°16′)	136	Reggio Calabria VOR/DME	98.1	FL 250	FL 460 FL 245	ODD
	CONTROL: Roma ACC REMARKS: Segment Vento CRP to Reggio Calabria VOR/DME (RCA) considered CDR1 from FL 360 and above during activation periods of LITSA77 (Etna) SUA.						
UP54	Elba VORTAC	180 360	Digix CRP (N41°53′ E10°22′)	50.5	FL 210	FL 460 FL 195	ODD EVEN
	Digix CRP	199 019	Ruxop CRP (N41°10′ E10°01′)	45.9			
	CONTROL: Roma ACC REMARKS: Route to be considered CDR 3 during activation of LID67 zone.						
UP125	Roska CRP (N45°19′ E12°52′)	032 212	Ronchi NDB	37.3	FL 200	FL 460 FL 195	EVEN ODD
	CONTROL: Padova ACC REMARKS: Segment Roska CRP to Ronchi NDB (RON) considered CDR1 from FL 360 and above during activation periods of LITSA78 (Alto Adriatico) SUA. Route segment in Swiss airspace considered CDR.						
UP131	Adosa CRP (N45°39′ E11°02′)	152 332	Ferraro NDB	55.7	FL 250	FL 460 FL 245	ODD EVEN
	Ferraro NDB	151 331	Urban CRP (N43°48′ E12°21′)	68.9			
	CONTROL: Padova ACC REMARKS: Segment Adosa CRP to Ferraro NDB (FER) considered CDR1 from FL 360 and above during activation periods of LITSA73 (Cisalpina) SUA. Segment (FER) to Urban CRP considered CDR1 from FL 250 to FL 380 included during activation periods of LIR26 (Sara Bis) SUA (alternate route UZ902-UM872) and from FL 360 and above during activation periods of LITSA73 (Cisalpina) and LITSA78 (Alto Adriatico) SUA. Route segment in Swiss airspace considered CDR.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UP167	Alghero VORTAC	113 298	Ortap CRP (N36°30′ E18°20′)	534.9	FL 290	FL 460 FL 285	ODD EVEN
	CONTROL: Brindisi/Roma ACC REMARKS: Route considered CDR1 September 21 to June 20, Monday through Friday from 0400-0659Z++ and 1901-2300Z++; June 21 to September 20, Monday through Friday from 0400-2300Z++; Saturdays from 0400-1300Z++. Alternate routes are UM732-UM871, UL40-UM728-UM601 and UL40-UM728-UM601-UL12-UM603.						
UP187	Bolzano NDB Lampo CRP	142 323	Lampo CRP (N46°06′ E11°42′) Akado CRP (N45°20′ E12°30′)	26.7 57.2	FL 290	FL 460 FL 285	ODD EVEN
UP623	PAL VOR/DME	188 008	Adexi CRP (N45°16′ E13°00′)	41.9	FL 210	FL 460 FL 205	ODD EVEN
	CONTROL: Roma ACC REMARKS: Segment PAL VOR/DME to Adexi CRP considered CDR1 up to FL 245 included due to Trapani CTLZ. Alternate route southbound UM726-UQ723.						
UP748	Banav CRP (N41°44′ E17°00′)	232 052	Topno CRP (N40°57′ E16°06′)	61.9	FL 210 FL 200	FL 460 FL 195	ODD EVEN
	CONTROL: Brindisi ACC REMARKS: CDR1 to FL 380 inclusive during activation of LIR 51D and from FL 360 inclusive and above during activation of LITSA 74B. Alternate route Banav-BAR-Topno CRPs.						
UP874	Nikma CRP (N43°04′ E12°11′) Gitod CRP	158 338 157 337	Gitod CRP (N42°48′ E12°19′) Tiber CRP (N42°15′ E12°36′)	17 35.5	FL 210	FL 355 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: Route to be considered CDR 1 from FL 240 and above during activation periods of LIR51A. Alternate routes UZ806-UL995 and UL5-UL982-UL612.						
UW75	Vulka CRP (N38°48′ E15°17′) Piger CRP	155 336	Piger CRP (N38°33′ E15°24′) Reggio Calabria VOR/DME	16.3 30.4	FL 200	FL 460 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: Between Vulka CRP and Reggio Calabria VOR/DME (RCA), considered CDR1 from FL 360 and above during activation periods of LITSA77 (Etna) SUA.						
UW92	Sorrento VOR/DME	310 129	Latina VOR/DME	86.3	FL 200	FL 460 FL 195	EVEN ODD
	CONTROL: Roma ACC REMARKS: CDR3 to FL 230 excluded and CDR1 from FL 230 and above due to LIR62 (Grazzanise) SUA. Alternate route UL982-UZ803.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UW95	Urban CRP (N43°48′ E12°21′)	313	Peleg CRP (N44°14′ E11°44′)	37.2	FL 240	FL 460 FL 225	EVEN
	Peleg CRP		Lutor CRP (N44°29′ E11°22′)	22.4			
	Lutor CRP		BOA VOR/DME	4.2			
	Bologna VOR/DME	308	Nerbo CRP (N45°17′ E10°00′)	70.9			
	Nerbo CRP		TZO VOR/DME	26.6			
	CONTROL: Milano ACC/Padova ACC/Milano ACC REMARKS: Segment Nerbo CRP to Bologna VOR/DME (BOA) considered CDR3 to FL 240 included due to LIR65 (Golfo di Taranto) SUA. Route considered CDR3 up to FL 240 included due to LIR21 (Sara) SUA. Route considered CDR1 from FL 360 and above during activation periods of LITSA73 (Cisalpina) SUA.						
UW97	Amendola NDB	114 294	Bari VOR/DME	47.5	FL 200	FL 460 FL 195	ODD EVEN
	CONTROL: Brindisi ACC REMARKS: Between segment Amendola NDB (AME) to Bari VOR/DME (BAR) considered CDR1 up to FL 380 included during activation periods of LIR51D SUA and FL 360 and above during activation periods of LITSA74B SUA.						
UW705	Karpi CRP (N44°29′ E10°10′)	156	Berok CRP (N44°10′ E10°21′)	20.8	FL 210	FL 460 FL 195	ODD
	Berok CRP	161	Xibil CRP (N42°48′ E10°59′)	86.6	FL 230	FL 275 FL 215	
	Xibil CRP		Grosseto NDB	5.8			
	CONTROL: Milano/Roma ACC REMARKS: Segment Karpi CRP to Berok CRP considered CDR1 from FL 360 and above during activation periods of LITSA73 (Cisalpina) SUA. Segment Berok CRP to Grosseto NDB (GRO) is considered CDR3 up to FL 240 included due to LIR107A (Maremma) SUA.						
UW708	Novig CRP (N44°24′ E08°45′)	289	Torino VOR/DME (N44°42′ E08°45′)	40.2	FL 200	FL 460 FL 195	EVEN
	CONTROL: Milano ACC REMARKS: Airway considered CDR1 from FL 360 and above during activation periods of LITSA73B (Cisalpina) SUA.						
UW709	Lagen CRP (N44°24′ E08°30′)	248	Vamtu CRP (N44°09′ E07°38′)	40.5	FL 210	FL 460 FL 195	ODD
	CONTROL: Roma ACC REMARKS: Segment Lagen CRP to Vamtu CRP considered CDR1 to FL 310 included during activation periods of LIR64 (Cueno) SUA (alternate route UZ185), from FL 290 and above during activation periods of LIR4 (Fossano) SUA (alternate route UZ185) and from FL 370 and above during activation periods of LITSA72 (Albenga) SUA.						
UW712	Voghera VOR/DME	210 029	Lesan CRP (N44°46′ E08°48′)	13.2	FL 210	FL 460 FL 195	ODD even
	Lesan CRP		Novig CRP (N44°41′ E08°44′)	5.5			
	Novig CRP		Testo CRP (N44°35′ E08°39′)	6.9			
	Testo CRP		Lagen CRP (N44°23′ E08°29′)	14.1			
	CONTROL: Milano ACC REMARKS: Between Voghera VOR/DME (VOG) and Lagen CRP, airway considered CDR1 from FL 360 and above during activation periods of LITSA73B (Cisalpina) SUA.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UW902	Vieste VOR/DME	213 032	Dagor CRP (N41°05′ E15°17′)	60.2	FL 250	FL 460 FL 245	ODD EVEN
	CONTROL: Brandisi REMARKS: Between Vieste VOR/DME (VIE) to Dagor CRP considered CDR1 up to FL 380 included during activation periods of LIR51D and LIR51E (Appenninica) SUA and from FL 360 and above during activation periods of LITSA74B (Gran Sasso d'Italia) SUA.						
UZ185	Evano CRP (N45°20′ E08°46′)	196	Enoba CRP (N44°18′ E08°18′)	65.2	FL 210	FL 460 FL 195	ODD
	Enoba CRP	235	Bordi CRP (N44°01′ E07°45′)	29.1			
	CONTROL: Roma ACC/Milano ACC REMARKS: Between Enoba CRP to Bordi CRP considered CDR1 from FL 370 and above during activation periods of LITSA72 (Albenga) SUA. Between Evano CRP and Enoba CRP considered CDR1 from FL 360 and above during activation periods of LITSA73B (Cisalpina) SUA.						
UZ710	Degad CRP (N46°26′ E08°37′	211	Basgo CRP (N46°16′ E08°28′)	11.5	FL 210	FL 460 FL 195	ODD
	Basgo CRP	173	Akasu CRP (N46°06′ E08°29′)	9.8			
	CONTROL: Milano ACC REMARKS: Route to be considered CDR1. Alternate route is UN850.						
UZ904	Parma NDB	133	Valen CRP (N43°56′ E11°32′)	75.3	FL 250	FL 460 FL 245	ODD
	Verna CRP (N43°45′ E11°50′)	130	Preki CRP (N42°53′ E13°07′)	76.6			
	Preki CRP		Lanno CRP (N42°21′ E13°53′)	46.8			
	Lanno CRP		Emily CRP (N42°10′ E14°08′)	15.1			
	Emily CRP	131 313	Ermot CRP (N41°41′ E14°48′)	41.9	FL 250	FL 460 FL 245	ODD EVEN
	Ermot CRP		Vebox CRP (N41°09′ E15°32′)	45.7	FL 210	FL 460 FL 205	
	Vebox CRP		Dogus CRP (N41°01′ E15°42′)	11.1	FL 200	FL 460 FL 195	
	Dogus CRP	137 318	Mated CRP (N40°37′ E16°10′)	32.4	FL 250	FL 460 FL 245	
	Mated CRP		Sirgi CRP (N40°08′ E16°42′)	37.8			
	Sirgi CRP		Alixi CRP (N39°27′ E17°27′)	53.1			
	Alixi CRP		Gemvi CRP (N39°07′ E17°48′)	26.4	FL 200	FL 460 FL 195	
	CONTROL: Padova ACC/Brindisi ACC REMARKS: Segment Parma NDB (PAR) to Valen CRP considered CDR1 up to FL 360 included and above during activation periods of LITSA73 (Cisalpina) SUA. Between Emily CRP and Ermot CRP considered CDR1 from FL 250 up to FL 380 included, during activation periods of LIR51E (Appenninica) SUA (alternate route UM872 or UL995-UL982). Between Mated CRP and Gemvi CRP, considered CDR1 from FL 250 up to FL 360 included, during activation periods of LIR66A (Golfo di Taranto) SUA and from FL 340 and above during activation periods of LITSA76A (Cisalpina) SUA (alternate route UM872-UL995). Segment Verna CRP to Dogus CRP considered CDR1 from FL 360 and above during activation periods of LITSA74A and LITSA74B (Gran Sasso d'Italia) SUA. Segment Ermot CRP to Vebox CRP considered CDR1 up to FL 380 included during activation periods of LIR51E (Appenninca) SUA. Alternate route UM872 or UL995-UL982.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ905	Emily CRP (N42°10′ E14°08′)	325	Norki CRP (N43°05′ E13°20′)	65.3	FL 260	FL 460 FL 245	EVEN
	Norki CRP	334	Vapix CRP (N43°38′ E12°59′)	36.5			
	Vapix CRP		Vicenza VOR/DME	132.6			
	CONTROL: Padova ACC/Brindisi ACC REMARKS: Between Vicenza VOR/DME (VIC) and Vapix CRP considered CDR1 from FL 250 up to FL 380 included, during activation periods of LIR26 (Sara Bis) SUA. Route considered CDR1 from FL 360 and above during activation periods of LITSA73 (Cisalpina), LITSA74A (Gran Sasso d'Italia) and LITSA78 (Alto Adriatico) SUA.						
UZ906	Bolzano NDB	152 333	Rokib CRP (N45°56′ E11°42′)	35.3	FL 210	FL 460 FL 195	ODD EVEN
	Rokib CRP		Lapab CRP (N45°32′ E11°58′)	27.1			
	Lapab CRP		Chioggia VOR/DME	30.5			
	CONTROL: Padova ACC REMARKS: Route considered CDR1 from FL 360 and above during activation of LITSA78 zone.						
UZ907	Bakor CRP (N46°37′ E11°44′)	180	Lampo CRP (N46°06′ E11°42′)	30.2	FL 210	FL 460 FL 195	ODD
	Lampo CRP		Rokib CRP (N45°56′ E11°42′)	10.2			
	Rokib CRP		Vicenza VOR/DME	17.9			
	CONTROL: Padova ACC REMARKS: Segment Bakor CRP to Vicenza VOR/DME considered CDR1 from FL 360 and above during activation of LITSA78 zone. Alternate route is UM736-UL12.						
UZ909	Eltar CRP (N45°39′ E10°38′)	155 336	Bologna VOR/DME	72.3	FL 250	FL 460 FL 245	ODD EVEN
	CONTROL: Padova ACC REMARKS: Segment Eltar CRP to Bologna VOR/DME (BOA) considered CDR1 from FL 250 to FL 380 included during activation periods of LIR68 (Lola Bis) SUA (alternate route UL615-UM738) and from FL 360 and above during activation periods of LITSA73 (Cisalpina) SUA.						
UZ910	Akamo CRP (N41°11′ E14°39′)	311 130	Erika CRP (N41°37′ E14°02′)	38.2	FL 250	FL 460 FL 245	EVEN ODD
	Erika CRP		Velim CRP (N42°09′ E13°16′)	46.4			
	Velim CRP	318	Nikma CRP (N43°04′ E12°11′)	73.4	FL 260		EVEN
	Nikma CRP		Verun CRP (N43°17′ E11°55′)	17.2			
	Verun CRP		Ixusi CRP (N43°03′ E11°53′)	12.6			
	CONTROL: Roma ACC REMARKS: Segment Ixusi CRP to Akamo CRP considered CDR1 from FL 250 to FL 380 included during activation periods of LIR51A, B, C (Appenninica) SUA and from FL 360 and above during activation periods of LITSA74A and B (Gran Sasso D'Italia) SUA. Alternate route UZ805-UL995. Segment Velim CRP to Akamo CRP considered CDR 1 from FL 200 to FL 240 during activation periods of LI R50. Alternate routes UL995 and UL982-UL995.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ923	Ronab CRP (N39°52′ E11°54′) Uveto CRP	135 315	Uveto CRP (N39°27′ E12°24′) Luron CRP (N38°52′ E13°07′)	34.8 48.4	FL 200	FL 460 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: Route considered CDR3.						
UZ925	Amano CRP (N39°25′ E13°48′)	172 353	Enepa CRP (N37°46′ E14°00′)	99.2	FL 200	FL 460 FL 195	ODD EVEN
	CONTROL: Roma ACC REMARKS: Route considered CDR3 and usable by traffic departures/arrivals at Catania/Fontanarossa (LICC) and Sigonella (LICZ) only.						

AERIAL REFUELING

AERIAL REFUELING TRACKS/ANCHOR AREAS - See Chapter 2, Section B, AERIAL REFUELING TRACKS/ANCHOR AREAS for Chart.

NOTE 1: All requests shall be forwarded to EUCARF 14 days in advance. Contact EUCARF at DSN 314-480-7065. Vertical limits of below listed corridors will be as depicted. Lateral limits are 20 NM, except ALPHA Corridor and portion of BRAVO Corridor between N38°51′ E09°56′ and BULAR which are 10 NM wide. Operated on a tactical basis without NOTAM publication. The block levels cannot be used simultaneously.

(USAFE-DOYP/CIV RAC 5-4-1.1)

NOTE 2: ILL Corridor can be reserved through EUCARF with the following characteristics: Lateral limits: 5 NM either side centerline joining points BULAR (N38°18.8′ E10°47.7′) to RITMO (N37°15.9′ E12°24.5′) to (CAT53) (N36°44′ E15°36′) to (ILL01) (N36°46′ E19°00′). Roma Control frequencies to be used: Between CAR VOR and BULAR, 132.525; Between BULAR and Southeast CAT VOR (CAT53), 128.8; Between Southeast CAT VOR (CAT53) and FIR Boundary (ILL01) 133.25. Alternate frequencies are ROMA MIL 123.25 and 388.85. ILL Corridor is not published in the Italian AIP, but can be activated by NOTAM. The activation request must be sent 10 duty days in advance in order to issue an appropriate NOTAM with 7 days prior notice.

(USAFE-DOYP/IT Airspace Coordination Unit MSG, 141515 10/98)

AREA	ARIP	ARCP/ ANCHOR	AR FREQ	AR BLOCK	AR ALT	ATC CONTROL

ITALY

NOTE 1: All requests shall be forwarded to EUCARF 14 days in advance. Contact EUCARF at DSN 314-480-7065. Vertical limits of below listed corridors will be as depicted. Lateral limits are 20 NM, except ALPHA Corridor and portion of BRAVO Corridor between N38°51′ E09°56′ and BULAR which are 10 NM wide. Operated on a tactical basis without NOTAM publication. The block levels cannot be used simultaneously.

(USAFE-DOYP/CIV RAC 5-4-1.1)

NOTE 2: ILL Corridor can be reserved through EUCARF with the following characteristics: Lateral limits: 5 NM either side centerline joining points BULAR (N38°18.8′ E10°47.7′) to RITMO (N37°15.9′ E12°24.5′) to (CAT53) (N36°44′ E15°36′) to (ILL01) (N36°46′ E19°00′). Roma Control frequencies to be used: Between CAR VOR and BULAR, 132.525; Between BULAR and Southeast CAT VOR (CAT53), 128.8; Between Southeast CAT VOR (CAT53) and FIR Boundary (ILL01) 133.25. Alternate frequencies are ROMA MIL 123.25 and 388.85. ILL Corridor is not published in the Italian AIP, but can be activated by NOTAM. The activation request must be sent 10 duty days in advance in order to issue an appropriate NOTAM with 7 days prior notice.

(USAFE-DOYP/IT Airspace Coordination Unit MSG, 141515 10/98)

ALPHA CORRIDOR		316.35 299.6	FL 260B280 or FL 210B230
NAVIGATION CHECK POINTS: N38°52′ E09°00′, BULAR			
BRAVO CORRIDOR		316.35 299.6	FL 260B280 or FL 210B230
NAVIGATION CHECK POINTS: N38°51′ E09°56′, BULAR, TRP TACAN, SIG TACAN.			

AREA	ARIP	ARCP/ ANCHOR	AR FREQ	AR BLOCK	AR ALT	ATC CONTROL
DELTA CORRIDOR			316.35 299.6	FL 260B280 or FL 210B230		

TRACK AREA: N37°33′24" E15°01′33" to N37°09′00" E17°47′00" to N37°08′00" E19°00′00" to N36°36′00" E19°00′00" to N37°14′06" E14°54′59" to beginning.

ILL CORRIDOR				FL 160B170		ROMA CONTROL 132.525, 128.8, 133.25 (Altn 123.25, 388.85)

NAVIGATION CHECK POINTS: BULAR, RITMO, SE CAT(CAT53), (ILL01).

POLLY (Track)	EAST LWD R-334/016 DME (N53°27′ E05°32′) WEST LWD R-245/030 DME (N53°00′ E05°01′)	LWD R-272/034 DME (N53°13′ E04°48′) LWD TACAB (N53°13′ E05°45′)	363.32	FL260/290	DUTCH MIL

NAVIGATION CHECK POINTS: NOT DEFINED
TRACK AREA: N52°56′ E04°49′; to N53°17′ E05°57′; to N53°31′ E05°35′; to N53°10′ E04°37′; to beginning.
SPECIAL INSTRUCTIONS: POLLY TRACK is a left hand racetrack based on the WITTMUND TACAN (WTM) TACAN R-270, between 61 and 135 DME. NIGHT track is flown as during daylight operations.

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for Charts.

1. There are few concentration areas in Italy and the bird density in summer is small compared with Mid- Europe. The greatest bird strike danger will probably be encountered in low level flight in coastal areas rather than over the open sea or mountains. Flying below 1500′ AGL in the concentration areas will involve a risk.

2. The whole of Italy, Sicily, Corsica and Sardinia and the seas around are crossed by broad front movements of migrating birds passing between Europe and North Africa. In the autumn the prevailing direction of movements is towards the southwest and in the spring towards the northeast with flight height up to 8000′ AGL. At lower levels some movements may appear more pronounced along certain coast lines; in Corsica and Sardinia the greatest movements of birds in spring is reported to be along the western coast whereas in autumn Italy is more prominent along the eastern coast.

3. In the vicinity of Naples the northeast migration of cranes is sometimes seen in the spring but their southwest passage is not observed in the autumn as the birds then take a different route (looping migration).

4. Generally good weather with little cloud coverage and with light or following wind is required for much migration to take place.

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

ITALY HOLIDAYS

DATE

All Sundays
6 Jan 06
17 Apr 06
25 Apr 06
1 May 06
2 Jun 06
15 Aug 06
1 Nov 06
8 Dec 06
25 Dec 06
26 Dec 06

(SPEC/GEN 2.1-3)

IVORY COAST

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the DAKAR FIR and ROBERTS FIR. For information regarding DAKAR FIR, see Bissau. For information regarding ROBERTS FIR, see Guinea.

JORDAN

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes JORDAN and portions of Israeli occupied territory.

DIMENSIONAL UNITS - Blue Table.

ALTIMETER SETTING PROCEDURES - Standard except:

1. QNH values are given in whole Hectabascal in Jordan.

2. The Transition Altitude for Jordanian airports controlled airspace is 13,000′ and the Transition Level is FL 150.

(SPEC/ENR 1.7-1)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

(SPEC/ENR 1.8-1)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Jordan has implemented the ICAO Annex 11 Airspace Classifications with the following exceptions:

1. Transition level for VMC visibility and cloud minima is FL 110.

2. VMC flights shall not be conducted:

a. Between 30 minutes after sunset until 30 minutes before sunrise.

b. Above FL 150.

(SPEC/GEN 1.7-3)

3. No VFR aircraft are permitted to operate in the Dead Sea area (1296′ below MSL) below 2000′ above the level of the Dead Sea.

(SPEC/GEN 1.7-2)

MAXIMUM AIRSPEEDS - Aircraft operating in the vicinity of any airport shall comply with speed limitations as follows:

a. Unless otherwise authorized by ATC no person may operate an aircraft below 10,000′ at an IAS of more than 250 kts.

b. Unless otherwise authorized, or required by ATC, no person may operate an aircraft within an Airport Traffic Area at an IAS of more than;

(1) For propeller aircraft 156 kt.

(2) For turbine pwr aircraft 200 kt.

c. No person may operate aircraft in the airspace beneath the lateral limits of any terminal control area at an IAS of more than 200 kt.

d. However, if the minimum safe airspeed for any particular operation is greater than the maximum speed prescribed, then the aircraft may be operated at that minimum speed.

(SPEC/ENR 1.4-1)

INSTRUMENT FLIGHT RULES

Jordan has implemented the ICAO Annex 11 airspace classifications with the following exceptions:

1. Within the Jordan Valley/Dead Sea area no aircraft shall be flown at less than FL 110, except for landing, takeoff, or when specifically authorized.

(SPEC/GEN 1-7.2)

RVSM RULES - RVSM shall be applicable in that volume of airspace between FL 290 and FL 410 inclusive in the Amman FIR (OJAC).

(SPEC/AIRAC AIP SUP 8/03 2.1)

FLIGHT PLANNING

GENERAL AIR TRAFFIC - A flight plan for all types of flights shall be submitted to the ATS at airports of departure 30 minutes before departure. Traffic bound for Jeddah FIR submit flight plans at least one hour prior but not more than 8 hours before departure. In-flight plans contact ATC at least 10 minutes prior to reaching point of entry into Amman FIR or a point of crossing an airway or terminal area.

(SPEC/ENR 1.10-1)

FLIGHT HAZARDS

WARNING - Laser will be displayed within a circle centered at N31°57′48″ E35°54′50″ approximately 5.0 NM southwest of Marka Intl (OJAM). Avoid looking at center of circle and flying within circle below 3500′.

(SPEC/ENR 5.3-1)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION - Flying outside airway, advisory routes and control zones over the territories of the Hashemite Kingdom of Jordan is completely prohibited unless authorized by appropriate authorities.

(SPEC/ENR 5.1-1)

ADDITIONAL INFORMATION

RADAR ASSISTED FLIGHT INFORMATION SERVICES -

1. All aircraft overflying Amman FIR should call Amman Control 128.5 MHz at least 10 minutes before entering the FIR boundary and squawk Code 2000 Mode C, otherwise they might be subjected to delay, change of flight level or route.

(SPEC/ENR 1.6-2-3)

2. Amman Terminal Area Control Center is using the CODES from 0400-0477 for inbound traffic to Jordanian international airports, and codes from 0700-0777 for departure and overflying traffic.

(SPEC/ENR 1.6-2-1)

KENYA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the NAIROBI FIR, ADDIS ABABA FIR, the territory of KENYA, territorial waters, and parts of

the Indian Ocean. For operational information for the ADDIS ABABA FIR, see Djibouti.

DIMENSIONAL UNITS - Blue Table.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - The Nairobi FIR has implemented the ICAO Annex 11 airspace classifications except:

1. VFR not permitted on airways.

(SPEC/ENR 1.4-1)

2. Flights operating above 300 meters (1000 feet) AGL will be conducted at flight level appropriate to the track.

(SPEC/ENR 1.2-2)

3. Airspace Classification B, F have not yet been implemented.

(SPEC/ENR 1.4-2)

INSTRUMENT FLIGHT RULES

The Nairobi FIR has implemented the ICAO Annex 11 airspace classifications except:

1. IFR mandatory on all airways.

(SPEC/ENR 1.4-1)

a. Airspace Classification B, F have not yet been implemented.

(SPEC/ENR 1.4-2)

RVSM RULES - Kenya proposes to implement RVSM airspace in the Nairobi FIR effective 28 September 2006 in accordance with the following: the airspace within Nairobi FIR between FL 410/290 inclusive, is RVSM airspace. Only RVSM compliant aircraft will be cleared to operate in the Nairobi FIR between FL 410/290 inclusive. Aircraft that are not RVSM compliant will only be cleared to operate in the Nairobi FIR between FL 410/290 inclusive after prior coordination with the adjacent FIR. 2000 ft vertical separation will be applied to such aircraft.

(SPEC/NOTAM A0008/06)

ENROUTE

AIRCRAFT ON ATS ROUTE A609 - For terrain clearance aircraft flying below FL 120 must route overhead Narok (NK) NDB.

(SPEC/AIP ENR 3.1-5)

TERMINAL

NOISE ABATEMENT PROCEDURES - Aircraft shall not fly below 1500 feet AGL over National Parks, National Reserves and Game Reserves in Kenya except in emergency or when taking off or landing.

(SPEC/ENR 1.1-12)

KUWAIT

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry contains KUWAIT, the KUWAIT FIR, and KUWAIT terminal control area.

DIMENSIONAL UNITS - Blue Table except altimeter setting is in Hectopascals.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Same as Regional Procedures.

(SPEC/ENR 1.7-1)

VERTICAL SEPARATION - Semicircular.

(SPEC/ENR 1.7-1)

POSITION REPORTING - Same as Regional Procedures except:

1. ATS/MET (AIREP) Reporting Points: KURSI CRP (N27°58' E49°19').

(SPEC/GEN 3.5-1)

VISUAL FLIGHT RULES

Same as Regional Procedures.

(SPEC/ENR 1.2-1)

INSTRUMENT FLIGHT RULES

Same as Regional Procedures.

(SPEC/AIP ENR 1.3-1)

RNAV PROCEDURES -

1. Effective 28 November 2002 Kuwait will implement Area Navigation (RNAV) RNP 5 within designated Airspace in Kuwait FIR. Kuwait RNP 5 airspace is that entire airspace within the Kuwait FIR above FL 195 up to and including FL 460. Only RNAV equipped aircraft having a navigation accuracy meeting RNP 5 may plan for operations under IFR within designated RNP 5 airspace, unless other wise indicated. Non-RNAV equipped aircraft and RNAV equipped aircraft that are not certified for RNP 5 operations may operate within Kuwait RNP 5 airspace, provided that they are only operated on published ATS routes that are defined by VOR/DME navigation.

(SPEC/AIC 1-02)

RVSM RULES - Implementation of RVSM in Kuwait FIR

1. RVSM will be applied between FL 290 and FL 410 with the Kuwait FIR.

2. RVSM transition area is that airspace between FL 290 and FL 410 inclusive, contained within the confines of the following airways:

Awy G667: Between KATOD and ALSAN

Awy G795: Between SELEG and TAMIM

Awy R784: Between NANPI and SIDAD

The following are the EXIT and ENTRY points between the Kuwait FIR RVSM Transition Area and Baghdad FIR; TAMIM on Awy G795, inbound and outbound. ALSAN on Awy G667, inbound and outbound. SIDAD on Awy R784, inbound and outbound.

(SPEC/AIPSUP 05/03)

FLIGHT PLANNING

SUPPLEMENTARY AIRPORT INFORMATION -

Ali Al Salem AB (OKAS)

1. CAUTION - High potential for midair collision exists due to extensive helicopter operations from surface to 3000 feet within a 12 NM radius of the field. Host nation trainer aircraft operations are in effect Saturday-Wednesday, 0400-1200Z.

2. ARRIVALS - Entry into tower airspace is via point YANKY (ASB R077/13 DME)

a. VFR - Cross YANKY at 5000 feet. Expect clearance to north initial (ASB R300/6 DME) or south initial (ASB R120/6 DME). Do not descend below 4500 feet until cleared by tower.

b. IFR - Cross YANKY at 8000 feet then proceed direct to ASB for the full instrument procedure. Radar services are not available.

3. DEPARTURES

a. Runway 30L/R - Maintain runway heading and contact Mohalab control passing 3000 feet. Continue to monitor tower until passing 5000 feet. Do not turn until radio contact with Mohalab has been established.

b. Runway 12L/R - Maintain runway heading until 3000 feet or ASB 5 DME, whichever occurs first, then proceed direct to YANKY and contact Mohalab control. Continue to monitor tower until passing 5000 feet.

4. RESTRICTIONS - Overflight of the base area to the northeast of the runways is prohibited.

5. MISCELLANEOUS - Aircraft should use UHF radio for ground, tower, and Mohalab control.

(AFFSA/XOIA FIL 05-331)

(UPDATE TOC WITH FLIGHT PLANNING, SUPPLEMENTARY AIRPORT INFORMATION)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC -

All fixed-wing aircraft having a maximum certificated take-off weight in excess of 33,069 lb, or authorized to carry more than 30 passengers, operating in Kuwait airspace, shall be equipped with an ACAS II system (TCAS II Software Version 7.0). Effective January 1, 2005, all fixed-wing aircraft having a maximum certificated take-off weight in excess of 12,566 lb or authorized to carry more than 19 passengers, operating in Kuwait airspace, shall be equipped with an ACAS II system (TCAS II Software Version 7.0). The procedures for unserviceable ACAS/TCAS equipment should be in accordance with the Minimum Equipment List (MEL) of the respective operators.

(SPEC/ENR 1.6-3)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. No aircraft is permitted to operate between Israel and the State of Kuwait.

(SPEC/GEN 1.2-1)

LATVIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

This entry includes RIGA FIR/UIR.

(SPEC/GEN 2.1-2)

DIMENSIONAL UNITS - Blue table, altimeter setting given in hectopascals.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard.

INSTRUMENT FLIGHT RULES

Standard except:

1. FM Immunity - The Republic of Latvia Civil Aviation Administration has granted permission for the following aircraft operations in Latvian airspace through 31 Dec 2007:

a. ENROUTE -

(1) Unrestricted access in Latvian airspace by US state aircraft capable of meeting RNP-5.

(2) Use of TACAN or VORTAC navigation systems in place of VOR.

b. TERMINAL - Latvia's continued application of the Generic analysis method for RIGA International Airport (EVRA).

c. The permission number for this authorization is 10/3775-9785 dated 27 Nov 2002.

d. The Latvian Civil Aviation Administration requests notification of aircraft that are not FM immune equipped be included in requests for overflight/landing clearance.

(TFMWG-E/USA 05-0046)

2. AIRWAYS/ROUTES

a. LOW ALTITUDE AIRWAYS- Listed by alphanumeric designation.

M864 - M864 - Adaxa - LIE not available for traffic to EVRA. Traffic to EVRA shall flight plan M405 Adaxa - Teksa.

b. HIGH ALTITUDE AIRWAYS - Listed by alphanumeric designation.

UM864 - Adaxa - LIE not available for traffic to/from EVRA. Traffic to/from EVRA shall flight plan M405 Adaxa - Teksa.

(SPEC/ENR 3.3.1-8, 2-7)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

LATVIA HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
Good Friday	Fri before Easter
First Easter	Easter
Easter Monday	Mon after Easter Sun
The First of May	1 May
Independence Declaration Day	4 May
Whit Sunday	7 Sun after Easter Sun
Ligo Day	23 Jun
Janis Day	24 Jun
Independence Day	18 Nov
Christmas Days	25, 26 Dec
New Year's Eve	31 Dec

(SPEC/GEN 2.1-2)

LEBANON

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - Includes LEBANON and adjacent international waters.

DIMENSIONAL UNITS - ICAO Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. Same as Regional Procedures except:

a. LEBANON has implemented the ICAO Annex 11 airspace classifications with the following exceptions:

(1) Class D, E and F not yet implemented.

(SPEC/ENR 1.4-1)

(2) VFR flights shall not be operated above FL 200.

(SPEC/GEN 1.2-1)

(3) Formation flights prohibited without ATC-approval.

NIGHT VFR FLIGHTS - VFR flights shall not be operated between 30 minutes after sunset to 30 minutes before sunrise.

(SPEC/GEN 1.7-2)

MINIMUM HEIGHTS FOR VFR OPERATIONS - Flights shall not be flown over a town, populated area, or open air public meeting place at an altitude below 2000' for multi-engine aircraft and 2500' for single engine aircraft.

(SPEC/GEN 1.7-1)

INSTRUMENT FLIGHT RULES

1. Same as Regional Procedures except: LEBANON has implemented the ICAO Annex 11 airspace classifications with the following exceptions:

a. Flights shall be conducted in accordance with Instrument Flight Rules (even when operating in non-IMC conditions) when operated at or above FL 200.

(SPEC/ENR 1.3-1)

b. Class D, E and F not yet implemented.

(SPEC/GEN 1.4-1)

RVSM RULES - Reduced Vertical Separation Minimum (RVSM) within the Beirut FIR between FL 290 and FL 410. Acceptance of State aircraft that are not RVSM certified is subject to prevailing traffic conditions.

(SPEC/ENR 1.10-3)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

Aircraft over flying the territory of Lebanon are required to maintain an altitude of not less than 10,000' AMSL except as cleared by ATC.

(SPEC/GEN 1.7-1)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

LEBANESE HOLIDAYS

(SPEC/GEN 2.1-3)

NAME	DATE
Gregorian New Year	1 Jan
Saint Maroun Day	9 Feb
Eid Al Fiter	20 Feb
Good Friday Friday before Easter	
Easter Monday Monday after Easter	
Labor Day	1 May
Martyr's Day	6 May

NAME	DATE
Assumption Day	15 Aug
All Saint's Day	1 Nov
Independence Day	22 Nov
Christmas Day	25 Dec

LIBERIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the ROBERTS FIR. See Guinea.

LIBYA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes LIBYA, TRIPOLI FIR and part of CHAD, NIGER.

DIMENSIONAL UNITS - Blue Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Same as Regional Procedures except:

1. Aircraft entering Tripoli (HLLL) FIR, at FIR points located over international waters, should contact Tripoli or Benghazi Control (as appropriate) at least five minutes prior FIR boundary crossing.

2. Aircraft entering Tripoli (HLLL) FIR, at FIR points located over land area, should contact Tripoli or Benghazi Information (as appropriate) at least ten minutes prior FIR boundary crossing or the nearest ATC Tower to relay their position (when within VHF range).

(SPEC/ANNEX 5 CL II NOTAM 001-92)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. LIBYA has implemented the ICAO Annex 11 airspace classifications with the following exception:

a. Class B, D, and E not yet implemented.

INSTRUMENT FLIGHT RULES

1. LIBYA has implemented the ICAO Annex 11 airspace classifications with the following exception:

a. Class B, D, and E not yet implemented.

(SPEC/AIC 001-92)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) - Repetitive flight plans are not accepted.

(SPEC/RAC 1-2)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

Foreign registered aircraft shall operate over the territory of Socialist People's Libyan Arab Jamahiriya only along established and published ATS routes and/or within controlled airspace.

(SPEC/AIP RAC 1-4)

LITHUANIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes VILNIUS FIR/UIR.

(SPEC/GEN 2.1-2)

DIMENSIONAL UNITS - Blue table, altimeter setting given in hectopascals.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard.

INSTRUMENT FLIGHT RULES

Standard except:

1. FM Immunity - Lithuanian authorities have granted permission for U.S. State aircraft to use airspace of the Republic of Lithuania and airports in Vilnius, Kaunas, Siauliai and Palanga until 2010 under the following conditions:

a. ENROUTE AIRSPACE -

(1) The aircraft is certified to RNP-5 in accordance with ICAO standards.

(2) The aircraft is equipped with a VORTAC navigation system.

b. TERMINAL AIRSPACE -

(1) In (EYVI) Vilnius, (EYKA) Kaunas and (EYPA) Palanga International airport airspace's. The aircraft is equipped with a NDB system (PAR, TACAN and ASR systems are not available).

(2) In (EYSA) Siauliai International airspace. The aircraft is equipped with ILS or VOR/DME systems.

c. The Lithuanian Ministry of Foreign Affairs requests notification of aircraft that are Non-FM Immune equipped, be included in requests for overflight/landing clearance. (Ministry of Foreign Affairs of the Republic of Lithuania, Diplomatic note PR-402/2004, dated 25 August 2004).

(TFMWG-E/USA 04-0197)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

LITHUANIA HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
Independence Day	16 Feb
Re-establishment of the State	11 Mar
Easter Monday	Mon after Easter Sunday
International Labor Day	1 May
Mother's Day	First Sun in May
Midsummer Day	24 Jun
Day of Statehood	6 Jul
Assumption Day	15 Aug
All Saints' Day	1 Nov
Christmas Days	25, 26 Dec

(SPEC/GEN 2.1-3)

MADAGASCAR

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes the ANTANANARIVO FIR and the COMORO ISLANDS. Though the Reunion Islands and a part of the Seychelles Islands are contained within the ANTANANARIVO FIR/UIR, these entries are published for operational purposes in AP/3.

DIMENSIONAL UNITS - Blue Table except.

1. Altitudes, elevations and heights in meters.

2. Altimeter setting in hectopascals (hPa).

(SPEC/0 GEN 2.1-01)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Antananarivo FIR/UIR has implemented the ICAO Annex 11 airspace classifications except:

1. The division of airspace classes F and G (non-controlled airspace) for VFR criteria is based on the higher of FL 30 or 1000 feet AGL. The minimum visibility required at this level or below is 1500 meters (1 SM).

2. The minimum visibility for helicopters in the lower levels outside controlled airspace is 800 meters (½ SM).

3. Flights are not permitted between SS+15 and SR-15, except when allowed in airport traffic patterns.

4. Flights will be at a minimum height of 50 meters (170 feet) above the surface and at a distance of at least 150 meters (500 feet) from a person or man-made obstruction.

5. The minimum horizontal visibility required in class A, B, C, D, E, F and G airspace above the levels cites in items 1. and 2. is 8 km (5 SM) with no differentiation linked to FL 100.

6. VFR not authorized at FL 150 and above.

(SPEC/0 GEN 1.7-06)

INSTRUMENT FLIGHT RULES

The Antananarivo FIR/UIR has implemented the ICAO Annex 11 airspace classification except: Minimum altitude for IFR flights is 1500 feet above the highest obstruction within 8 km (5 SM) of the established flight path.

(SPEC/0 GEN 1.7-07)

FLIGHT HAZARDS

Madagascar Threat To Airspace Violations. The Madagascar government has issued a threat to shoot down any aircraft that enters Madagascar airspace without authorization.

(PACAF DO/AFFSA)

TERMINAL

TERMINAL AREA PROCEDURES -

1. TERMINAL CONTROL AREAS

a. TOAMASINA (FMMT)

(1) Minimum altitude of entry into the TCA is FL 40 in sector 200-040 M, FL 50 in sector 040-095 M, and FL 70 in sector 095-200 M.

(2) Except for approach/landing/takeoff, flights below FL 30 are prohibited.

(SPEC/9 ENR 2.1-07)

b. ANTANANARIVO (FMMI)

(1) Minimum altitude of entry into the TCA is FL 80 except in sector 005-065 M from VOR TNV where the minimum altitude is FL 110.

(2) For transient traffic thru the TCA, overflying of Antananarivo/Antanetibe NDB TAN is mandatory.

(SPEC/9 ENR 2.1-05)

(3) Caution advised in the 005-065 M quad of VOR "TNV" due to high peaks.

(SPEC/9 ENR 2.1-06)

2. UFN, overflight of the city of Antananarivo, defined by the following coordinates, is prohibited to all traffic: S18°53'30"

E47°31'00", S18°53'30" E47°32'20", S18°56'30" E47°32'20", S18°56'30" E47°31'00".

(SPEC/9 AD 2.1-07)

MALAWI

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - Malawi services and constitutes the major part of LILONGWE FIR. Zambia services the portion of Malawi above FL 145, North of S11°34', contained in LUSAKA FIR.

DIMENSIONAL UNITS - Blue Table, except altimeter settings in hectopascals.

(SPEC/AIP GEN 2.1-2)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

(SPEC/RAC 2-3)

1. The Transition level is normally passed to aircraft in the approach and landing clearance only when the QNH value at an airport falls below 1013.2 mb (29.92 in) but is available at all times upon request.

(SPEC/RAC 2-1)

2. Aircraft operating in vicinity of airports without transition altitude, shall express vertical position in terms of altitude when at or below 3000 feet above MSL or 1000 feet above terrain, whichever is higher, and in terms of flight level when above such level, except that an aircraft which has commenced descent to land at such an airport may express vertical position in terms of altitude (QNH) irrespective of the level through which it is descending.

(SPEC/RAC 2-2)

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Same as regional procedures, except:

1. VFR flights shall not be operated above FL 150.

2. The semi-circular rule shall apply to VFR flights operated outside controlled airspace in level flight above 3,000 feet MSL or 1,000 feet AGL whichever is higher.

(SPEC/AIP GEN 1.7-1)

INSTRUMENT FLIGHT RULES

Same as Regional Procedures

(SPEC/RAC 3-1)

MALI

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the DAKAR FIR. See Bissau.

MALTA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the MALTA FIR and the Italian controlled island of LAMPEDUSA.

DIMENSIONAL UNITS - Blue Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Same as Regional Procedures.

1. VISUAL FLIGHT RULES - An aircraft flying within controlled airspace, whenever applicable, shall comply with instructions issued by the appropriate ATC Units.

2. LOW FLYING - An aircraft shall not fly below 1500' above the highest obstacle within 2000' of the aircraft.

(SPEC/ENR 1.2-1)

INSTRUMENT FLIGHT RULES

FM IMMUNITY - Standard except the operation of State aircraft with regards to FM immunity are:

1. Enroute Operations - State aircraft with non-FM interference immune equipment may operate within the Malta FIR/UIR provided they meet RNAV RNP5 standards without the use of VOR.

2. TCA Operations - At Luqa (LMML) Airport, the requirements are the same as stated for Enroute Operations.

(TFMWG-E/USA03-0318)

3. Transponder Operations

a. All aircraft operating within controlled airspace are required to operate with transponder having mode A4096 code capability and mode C altitude reporting capability.

b. Aircraft not having serviceable transponder equipment are to inform Malta ACC at least 15 minutes before entering such airspace for the required procedural separation to be applied.

c. Aircraft entering Malta FIR/UIR and having received specific transponder settings from ATC shall maintain that setting unless otherwise instructed. If specific instructions have not been received from ATC, set transponder code A2000 before entry and maintain that code setting until otherwise instructed.

(SPEC/ENR 1.6)

RVSM RULES - Standard.

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. FLIGHT PLAN ADDRESSEES

   a. FIR/UIR:

      (1) IFR/LMMMZQZX

      (2) VFR/LMMMZFZX

   b. Flow Control: LMMMZDZO

   c. Destination:

      (1) . . . . ZPZX

      (2) . . . . ZTZX

   d. Subsequent Legs: . . . . ZPZX

(USAFE-DO/AFFSA)

FLIGHT HAZARDS

1. Light Detection and Ranging System (LIDAR) on the Island of Lampedusa Caution - A LIDAR source (N35°31'06' E12°37'50"- radius 10 NM) emitting a laser beam directly vertical from the ground to FL 240. The beam diameter is ¼ inch at ground level to 33 feet wide at FL 240. The emissions are green in the visible range and invisible in the ultraviolet range. The laser beam causes no damage to aircraft but pilots should avoid looking directly at the laser source to avoid eye damage.

2. Balloon Launch Activity Caution - Meteorological balloons equipped with standard sensors for radio sounding and an ozone meter will be launched every Tuesday, Wednesday, Thursday or Friday at 0900 and 1100 (local time). The total length of the system is about 2 feet with a maximum weight, excluding the balloon itself, of 4.4 pounds. The balloon has a climb rate of 1000 feet per minute and can reach a maximum altitude of 98,425 feet. Radio sounding is expected to take up to 3 hours.

(SPEC/ENR 5.3-1)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. AIRWAYS/ROUTES

   a. All routes are RNAV routes.

   b. LOW ALTITUDE AIRWAYS - Listed by alphanumeric designation.

L731 - Not available for traffic with destination Mitiga (HLLM) or Tripoli International (HLLT).

M622 - Segment Mabox CRP to Gozo VOR/DME (GZO) is available southbound on a tactical basis only when M742 is closed due to activation of LIR106 (Licata) SUA.

M726 - Segment Londi CRP to Mabox CRP is available southbound on a tactical basis only when M742 is closed due to activation of LIR106 (Licata) SUA.

M727 - Not available for traffic with destination Mitiga (HLLM) or Tripoli International (HLLT).

M732 - Segment between Gozo VOR/DME and Sudik CRP not available for traffic departing Luqa (LMML). This traffic should file via Sudik SID.

M740 - Segment Lampedusa VOR/DME (LPD) to Sarki CRP is not available for arrivals to Sebha (HLLS) or traffic overflying Tripoli FIR (HLLL) via Pantelleria VOR/DME (PAN), Asbol CRP, or Robim CRP, and is compulsory for traffic with destination (HLLT) or (HLLM), via LPD.

M742 - When M742 is not available due to activation of LIR106 (Licata) SUA, alternative northbound routing will be Gozo VOR/DME (GZO) - M622 - Mabox - M726 - Palermo VOR/DME (PAL) on a tactical basis only. Segment from GZO to Maron CRP is compulsory for traffic departing Luqa (LMML) via Luron CRP or with destination Palermo (LICJ). Segment from Maron to GZO is compulsory for traffic arriving Luqa (LMML) via Giano CRP.

M978 - Segment between Gozo VOR/DME (GZO) and Agari CRP not available for Luqa (LMML) departures. This traffic should file the Agari SID. Segment between Agari CRP and Evira CRP not available for Luqa (LMML) departures routing via Arlos CRP.

P624 - Segment Gozo VOR/DME (GZO) to Obita CRP not available for Luqa (LMML) departures. This traffic should file via Obita SID. Segment Gozo VOR/DME (GZO) to Lored CRP not available for Luqa (LMML) departures. This traffic should file via Lored SID.

Q727 - Available only for arrivals to Lampedusa (LICD).

T299 - Segment Sudik CRP to Varig CRP is compulsory for and limited to traffic arriving Tripoli International (HLLT) or Mitiga (HLLM), via Sudik.

T726 - From Lampedusa VOR/DME (LPD) to Deduk CRP compulsory for Lampedusa (LICD) departures routing via Palermo VOR/DME (PAL) or Giano CRP and Lampedusa (LICD) departures with destination Palermo (LICJ).

(SPEC/ENR 3.2-1 thru 3.2-19)

   c. HIGH ALTITUDE AIRWAYS - Listed by alphanumeric designation.

UL731 - Not available for traffic with destination Mitiga (HLLM) or Tripoli International (HLLT).

UL874 - Segment Deduk CRP to Kutos CRP compulsory for traffic overflying Malta UIR (LMMM) via segments Basmo CRP to Arlos CRP or Sonak CRP to Arlos CRP. Segment Kutos CRP to Deduk CRP compulsory for traffic overflying Malta UIR (LMMM) via segments Arlos CRP to Basmo CRP or Arlos CRP to Sonak CRP.

UM600 - Segment Sudik CRP to Sarki CRP is not available for arrivals to Luqa (LMML).

UM622 - Segment Mabox CRP to Gozo VOR/DME (GZO) is available southbound on a tactical basis only when UM742 is closed due to activation of LIR106 (Licata) SUA. When UM622 is not available in the Rome UIR (LIRR) due to military activity, aircraft will be rerouted on a tactical basis only via Gozo VOR/DME (GZO) - UM732 - Carbonara VOR/DME (CAR).

UM726 - Segment Palermo VOR/DME (PAL) to Mabox CRP usable southbound on a tactical basis only in case of

unavailability of ATS route UM742 and UP623. From Mabox CRP to Londi CRP not available for traffic above FL 245 via Giano departing Luqa (LMML) or Lampedusa (LICD) and for traffic overflying Malta UIR (LMMM). This traffic shall file Mabox-Adexi-Giano.

UM727 - Segment Lampedusa VOR/DME (LPD) to Abram CRP is not available for arrivals to Mitiga (HLLM) or Tripoli International (HLLT).

UM732 - Segment between Gozo VOR-DME and Sudik CRP not available for traffic departing Luqa (LMML). This traffic should file via Sudik SID.

UM740 - Segment Lampedusa VOR/DME (LPD) to Sarki CRP is not available for arrivals to Sebha (HLLS) or traffic overflying Tripoli FIR (HLLL) via Pantelleria VOR/DME (PAN), Asbol CRP, or Robim CRP, and is compulsory for traffic with destination (HLLT) or (HLLM), via LPD.

UM742 - When UM742 is not available due to activation of LIR106 (Licata) SUA, alternative northbound routing will be via UM622 - Mabox CRP - Palermo VOR/DME (PAL) on a tactical basis only. In contingency operations, traffic can also be re-routed by Malta ACC (LMMM) via Gozo VOR/DME (GZO) - UN982 - Libro CRP. Segment from GZO to Maron CRP is compulsory for traffic departing Luqa (LMML) via Luron CRP or with destination Palermo (LICJ). Segment from Maron to GZO is compulsory for traffic arriving Luqa (LMML) via Giano CRP. Segment GZO to Maron CRP not available for traffic above FL 245 departing LMML or overflying Malta UIR (LMMM) via Giano. This traffic shall file GZO - Adexi CRP - Giano.

UM871 - Segment Binko CRP to Arlos CRP is not available for departures from Luqa (LMML). Segment Arlos CRP to Binko CRP is not available for arrivals to Luqa (LMML).

UM978 - Segment between Gozo VOR/DME (GZO) and Agari CRP not available for Luqa (LMML) departures. This traffic should file the Agari SID. Segment between Agari CRP and Evira CRP not available for Luqa (LMML) departures routing via Arlos CRP.

UN982 - Segment NELDA CRP to GZO VOR/DME is not available for departures within Greece (LG**) or overflights of Hellas UIR. Segment GZO to NELDA not available for destinations within Greece (LG**) or overflights of Hellas UIR.

UP623 - Segment between Lampedusa VOR/DME (LPD) and Adexi CRP not available for traffic departing Lampedusa (LICD) or Luqa (LMML).

UP624 - Segment Gozo VOR/DME (GZO) to Obita CRP not available for Luqa (LMML) departures. This traffic should file via Obita SID. Segment Gozo VOR/DME (GZO) to Lored CRP not available for Luqa (LMML) departures. This traffic should file via Lored SID.

UT299 - Segment Sudik CRP to Varig CRP is compulsory for and limited to traffic arriving Tripoli International (HLLT) or Mitiga (HLLM), via Sudik.

(SPEC/ENR 3.3-1 thru 3.3-25)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

MALTA HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
St. Paul's Shipwreck	10 Feb
St. Joseph	19 Mar
Freedom Day	31 Mar
Good Friday	Fri before Easter
Workers' Day	1 May
Sette Giugno	7 Jun
St. Peter and St. Paul	29 Jun
The Assumption	15 Aug
Our Lady of Victories	8 Sep
Independence Day	21 Sep
Immaculate Conception	8 Dec
Republic Day	13 Dec
Christmas Day	25 Dec

(SPEC/GEN 2.1-2)

MAURITANIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes the DAKAR FIR. See Bissau.

MOROCCO

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes the CASABLANCA FIR, MOROCCO and adjacent international waters.

DIMENSIONAL UNITS - ICAO Table except:

1. Relatively short distances and altitudes, elevations and heights may be given in meters or feet.

2. Wind direction for landing and takeoff is given in degrees true.

3. Cloud altitudes and heights may be given in meters, feet, or hundreds of feet.

(SPEC/GEN 1-3)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard.

(SPEC/RAC 1-5)

MINIMUM HEIGHTS FOR VFR

OPERATIONS - Overflight of towns, populated areas and crowds prohibited below 1640' by day and 3280' by night.

INSTRUMENT FLIGHT RULES

Standard except:

FM IMMUNITY - From 1 Jan 2001, state aircraft may continue to operate within the Kingdom of Morocco as follows:

1. ENROUTE - Aircraft equipped with navigation equipment meeting RNP/5 capabilities without the use of VOR.

2. TERMINAL - The following airports may be used by state aircraft not equipped with VHF receivers complying with immunity specifications concerning FM interference until Dec 2006: Rabat Sale (GMME) and Marrakech-Menara (GMMX).
(SPEC/TFMWG-E/USA 05-0043)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. AIRWAYS/ROUTES R/UR72 - Portion between AMSEL NCRP and AKEMA CRP is available subject to GMD25 activity.
(SPEC/RAC 3.2.37 and 3.2.38)

2. AIRWAYS/ROUTES A/UA621 - Portion between TETOUAN (TTN) VOR/DME and AL HOCEIMA (ALM) VOR/DME is only available on Sat, Sun, hol and between 0000-0700Z and 2300-2400Z Mon through Fri.
(SPEC/RAC 3-2-5a and 3-2-5b)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			MOROCCO				
H104F	Al Hoceima VOR/DME	264 083	Ixoda CRP (N34°58' W05°33')	85		FL 245 FL 135	ODD EVEN
	Ixoda CRP	263 083	Baris CRP (N34°54' W05°56')	19			
	CONTROL: Casablanca INFO. REMARKS: Sat, Sun, holidays; 0000-0700Z Mon-Fri.						
UH104F	Al Hoceima VOR/DME	264 083	Ixoda CRP (N34°58' W05°33')	85		FL 295 FL 245	ODD EVEN
	Ixoda CRP	263 083	Baris CRP (N34°54' W05°56')	19			
	CONTROL: Casablanca INFO. REMARKS: Sat, Sun, holidays; 0000-0700Z Mon-Fri.						
H119F	Errachidia VOR/DME	304 123	Bedux CRP (N32°39' W05°50')	87		FL 245 FL 175	EVEN ODD
	Bedux CRP	303 123	Erlam CRP (N32°55' W06°23')	33			
	Erlam CRP	303 122	Govas CRP (N33°12' W06°59')	34			
	Govas CRP		Casablanca VOR/DME	40			
	CONTROL: Casablanca INFO. REMARKS: Sat, Sun, holidays; PPR Mon-Fri whenever GMR10 is active.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UH119F	Errachidia VOR/DME	304 123	Bedux CRP (N32°39′ W05°50′)	87		FL 295 FL 245	EVEN ODD
	Bedux CRP	303 123	Erlam CRP (N32°55′ W06°23′)	33			
	Erlam CRP	303 122	Govas CRP (N33°12′ W06°59′)	34			
	Govas CRP		Casablanca VOR/DME	40			
	CONTROL: Casablanca INFO. REMARKS: Sat, Sun, holidays; PPR Mon-Fri whenever GMR10 is active.						
H600F	Oujda VOR/DME	240 060	Ketib CRP (N34°35′ W02°20′)	22		FL 245 FL 105	EVEN ODD
	Ketib CRP	200 020	Gulti CRP (N34°08′ W02°30′)	28		FL 245 FL 155	
	Gulti CRP	218 038	Errachidia VOR/DME	162			
	CONTROL: Casablanca INFO. REMARKS: Sat, Sun, holidays; SS-SR Mon-Fri.						
V203F	Quarzazate VOR/DME	031 212	Bedux CRP (N32°39′ W05°50′)	116		FL 245 FL 185	EVEN ODD
	Bedux CRP	031 211	Fes VOR/DME	87			
	CONTROL: Casablanca INFO. REMARKS: Sat, Sun, holidays; SS-SR Mon-Fri.						
UV203F	Quarzazate VOR/DME	031 212	Bedux CRP (N32°39′ W05°50′)	116		FL 460 FL 245	EVEN ODD
	Bedux CRP	031 211	Fes VOR/DME	87			
	CONTROL: Casablanca INFO. REMARKS: Sat, Sun, holidays; SS-SR Mon-Fri.						
W240F	Tanger VOR/DME	163 343	Madov CRP (N35°25′ W05°45′)	20		FL 245 FL 145	ODD EVEN
	Madov CRP		Ixoda CRP (N34°58′ W05°33′)	29			
	Ixoda CRP	160 340	Fes VOR/DME	67			
	Fes VOR/DME	167 348	Errachidia VOR/DME	125		FL 245 FL 175	
	CONTROL: Casablanca INFO REMARKS: Sat, Sun, holidays; SS-SR Mon-Fri.						
UW240F	Tanger VOR/DME	163 343	Ixoda CRP (N34°58′ W05°33′)	49		FL 295 FL 245	ODD EVEN
	Ixoda CRP	160 340	Fes VOR/DME	67		FL 460	
	Fes VOR/DME	167 348	Errachidia VOR/DME	125		FL 245	
	CONTROL: Casablanca INFO. REMARKS: Sat, Sun, holidays; SS-SR Mon-Fri.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
W900F	Quarzazate VOR/DME	351 171	Tadox CRP (N32°53′ W07°27′)	120		FL 245 FL 175	EVEN ODD

CONTROL: Casablanca INFO.
REMARKS: Sat, Sun, holidays; SS-SR Mon-Fri.

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

MOROCCAN HOLIDAYS

NAME	DATE
New Year's Day	01 Jan 06
Manifesto of Independence	11 Jan 06
Aid Al Adha	*11/12 Jan 06
Moharram 1st	*01 Feb 06
Aid Al Mawlid	*09/10 Apr 06
Labor Day	01 May 06
Feast of the Throne	30 Jul 06
Allegiance of Oued Eddahab	14 Aug 06
King's and People's Revolution	20 Aug 06
Youth Day	21 Aug 06
Aid Al Fitr	*22/23 Oct 06
Anniversary of the Green March	06 Nov 06
Independence Day	18 Nov 06
Aid Al Adha	*30/31 Dec 06

NOTE: Holidays preceded by an asterisk (*) are based on the lunar month and may fall a little before or after the date indicated.

(SPEC/AIC A11/05)

MOZAMBIQUE

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - Mozambique services and constitutes the major part of BEIRA FIR.

DIMENSIONAL UNITS - Blue Table, except altimeter settings in hectopascals.

(SPEC/AIP GEN 1-5)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

1. Same as Regional Procedures except VFR flights shall not takeoff or land at an airport within a control zone or enter the airport traffic zone or traffic pattern when the ceiling is less than 1500 feet (450 meters) or the visability is less than 3 miles (5 kilometers).

2. VFR flights shall not be operated:

   a. between sunset and sunrise

   b. above FL 145

   c. at transonic and supersonic speeds.

(SPEC/RAC 1-1)

INSTRUMENT FLIGHT RULES

Same as Regional Procedures.

NAMIBIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - NAMIBIA services and constitutes the major part of the WINDHOEK FIR.

DIMENSIONAL UNITS - Blue Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Namibia has implemented the ICAO Annex airspace classification.

(SPEC/ENR 1.2)

INSTRUMENT FLIGHT RULES

Namibia has implemented the ICAO Annex airspace classification.

(SPEC/ENR 1.3)

NETHERLANDS

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes AMSTERDAM FIR.

DIMENSIONAL UNITS - Blue table except:

1. Military:

   a. Relatively short distance - Feet

   b. Altimeter setting - Hectopascals (inches of mercury O/R)

   (SPEC/MIL GEN 2.1-1)

2. Civil:

   (CIV AIP GEN 2-1-1)

   a. Altimeter setting - Hectopascals (millibars)

   b. Weight - Kilograms

   (SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard.

POSITION REPORTING - Standard.

VERTICAL SEPARATION - Semicircular.

VISUAL FLIGHT RULES

Standard except:

1. Airspace Class B and E visibility below 10,000' increased to 8 km (4.32 NM).

(SPEC/ENR 1-2-1)

2. In control zones ATC may authorize special VFR flights clear of clouds and in continuous sight of ground or water as follows:

a. FIXED WING - Minimum flight visibility 3 km (1.6 NM) and minimum ceiling 600'.

NOTE: At Eelde and Maastricht (EHBK) special VFR flights may be authorized for flights in the airport traffic pattern. Authorization is limited to a maximum of two aircraft at the same time and a minimum visibility of 1500m (.8 NM).

b. HELICOPTERS - A clearance for special VFR flight may be granted when:

(1) The flight visibility is not less than;

(a) 1500m (.8 NM) when entering or leaving a control zone via an established route.

(b) 3 km (1.6 NM) if item (a) is not applicable.

(2) The clouds (rags included) are not lower than 200'.

(3) The VFR flight can be executed clear of clouds and in continuous sight of ground or water.

(SPEC/ENR 1-2-1)

3. All VFR flights conducted within the Eelde (EHGG) CTLZ, shall be executed at or below 1500' MSL.

(SPEC/AD2-1-22.8)

INSTRUMENT FLIGHT RULES

FM IMMUNITY -

1. From 1 Jan 2001, state aircraft not equipped with FM Immunized VHF receivers are allowed to operate in the Amsterdam FIR after 1 Jan 2001 provided that:

a. ENROUTE - State aircraft are equipped and certified according to RNP/5 requirements without the use of VOR.

b. TERMINAL - Prior permission is required for the use of civil aerodromes handling within the civil TCA, including final approaches, by means of radar vectors. At first contact with ATC report, "Aircraft NOT FM IMMUNE", the use of Schiphol aerodrome is prohibited.

NOTE: Prior permission is required through Amsterdam ACC using AFTN address EHAAZRZX.

(TFMWG-E/USA 02-0045)

2. For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS will operate in the standard TCAS II mode and will not use the enhanced mode when flying in Dutch airspace.

(USAFE-DOV/USAF FIL 01-62)

OPERATIONAL AIR TRAFFIC

GENERAL/COUNTRY - OAT shall refrain from filing flight plans along the trajectories of the published civil ATS routes in upper airspace (above FL 195) or through civil controlled airspace in the lower airspace.

(SPEC/MIL ENR 1.1-1)

IFR/VFR -

1. VFR OAT flights are not permitted:

   a. Outside the Uniform Daylight Period for VFR flights.

   b. In Class A airspace.

   c. In the Maastricht TMA above 2500 ft, unless with prior permission from Beek TWR/APP.

   d. In any civil or mil CTR and Soesterberg TMA unless with prior permission from the local ATC unit.

   e. In the area with a radius of 10 NM around the Schiphol ARP (except the part of Valkenburg CTR) up to 1500 ft, unless executing an approach/departure procedure for Schiphol.

   f. Exceeding the speed or sound.

   (SPEC/MIL ENR 1-2-1)

FLIGHT PLANNING

1. FLIGHT LEVEL ALLOCATIONS

a. Unless authorization is obtained from ATC, controlled flights below FL 100 shall not be operated in level cruising flights at an indicated airspeed exceeding 250 kt.

b. It is generally recommended not to select flight levels above FL 240 for flights up to a distance of 300 NM.

(SPEC/ENR 1-10-4)

2. MINIMUM AIRCRAFT RADIO EQUIPMENT REQUIRED

a. As required by ICAO SUPPS Doc 7030/4 and further to the delay decision agreed at EUROCONTROL AGG/sp (23 July 1998), the carriage and operation of 8.33 kHz channel spacing radio equipment is mandatory throughout the ICAO EUR Region as of 7th October 1999 for flights above FL 245 generally and above FL 195 in UIR France.

b. Exemptions from mandatory carriage of 8.33 equipment are described in section ENR 1.9.

c. Non-equipped flights which are flight planned to enter any FIR/UIR below FL 245 in the EUR Region where no exemption for non state aircraft has been published throughout the entire EUR Region.

(SPEC/GEN 1-5-1)

3. TRANSPONDER PROCEDURES - Uncontrolled flights operating above 1500' MSL in the Amsterdam FIR shall activate their transponder on mode 3/A and C and select code 7000, unless a different code is assigned by ATC.

(SPEC/ENR 1-6-1)

4. FLOW CONTROL - BENELUX AIR TRAFFIC FLOW MANAGEMENT UNIT (Also see - Chapter 3, EUR REGION, FLIGHT PLANNING, EUR AIR TRAFFIC FLOW MANAGEMENT).

(SPEC/CIV ENR 1-9-1-4)

a. Within the European Air Traffic Flow Management (ATFM) structure the Benelux Air Traffic Flow Management Unit (BNL ATFMU) is responsible for the provision of ATFM service in the Benelux Region comprising the Amsterdam FIR and the Brussels FIR/UIR. The BNL ATFMU is responsible for the following:

(1) Issuance of Flow Management messages.

(2) Flow regulation.

(3) Time-slot procurement.

(4) Coordination with associated ATFM positions and contiguous AFTMU's.

b. The BNL ATFMU is located at the Maastricht (EHBK) Upper Area Control Center:
Postal Address:Luchthaven Maastricht (EHBK)
Horsterweg 11
6191 RX BEEK (L)
The Netherlands (EH)
AFTN Address:EDDYZDZX
Public telephone:(NL)043-661256 or 661234

c. The hours of operation are 0430-2030Z++. Outside these hours the functions of the BNL AFTMU are assumed by the Maastricht (EHBK) Upper Area Control watch supervisor.

d. Non-repetitive (ICAO) flight plans to or via flowrestricted areas for flights departing from airports in the Netherlands (EH) shall be submitted to the appropriate ATS Reporting Office (ARO) at least 3 hours before estimated time of departure. Changes of more than 20 minutes and/or cancellation of both repetitive and non-repetitive flight plans shall be reported immediately to the appropriate ARO or, when departing from Schiphol (EHAM) Airport to the Flight Data Section, telephone NR (020)-6022194.

(1) A slot request shall be made to the ATFM position Amsterdam ACC telephone number (020)-6022195 or, when departing from Maastricht Airport, to Beek Tower telephone number (04402)-662723.

(2) A slot request shall be made not earlier that 2 hours but not later that 30 minutes prior to estimated time of departure. Operators shall ensure that (departure) time slots can be met. If it becomes apparent, that an assigned slot is no longer required or cannot be met, the operator shall inform the slot allocating position immediately. A new time slot, if needed, shall be allocated in such a way that assigned slots are not affected.

(3) In case the slot allocated for the planned route results in considerable delay, it may be possible to select an alternative route to the same destination. information can be obtained from the slot allocating position.
Amsterdam ATFM position.
Postal Address:Rijksluchtvaartdienst
LVB-centrum Amsterdam
Postbus 7601
1118ZJ Schiphol
Centrum
AFTN Address:EHAAZDZX
Public telephone:(020)-6022195

5. FLIGHT PLAN ADDRESSEES

a. Amsterdam UIR

(1) GAT

(a) IFR - EHAAZQZX

(2) OAT

(a) IFR - EHMCZQZX

b. Amsterdam FIR

(1) GAT

(a) IFR

1 EBBDZMFP

2 LFPYZMFP

(b) VFR

1 EHAAZFZX

2 EHMCAFZX

(2) OAT

(a) IFR - EHMCZQZX

(b) VFR - EHMCZFZX

c. Destination/Subsequent legs

(1) Civil

(a) . . . . ZPZX

(b) . . . . ZTZX

(2) Military - . . . . ZPZX

d. Additional information

(1) IFR off airways below FL 245 - EHMCZQZX

(2) Night flights - EHMCYOYX

(3) Flights within

(a) Maastricht (EHBK) TMA - EHBKZTZX

(b) Eelde (EHGG) TMA - EHGGZTZX

(4) Helicopters flights offshore - EHAAZTZX
(SPEC/ENR 1-11-1, MIL ENR 1-11-1 and 1-2)

FLIGHT HAZARDS

1. GLIDER LAUNCHING - Launching of gliders may take place daily from several airports and other sites as listed below. Glider and/or towing aircraft may carry the launching or towing cable, which forms an almost invisible obstacle, up to a height of 2300' before releasing it.

NAME OF SITE	GEOGRAPHIC POSITION
Axel	N51°15' E03°53'
Biddinghuizen	N52°26' E05°40'
Castricum	N52°32' E04°38'
De Voorst	N52°42' E05°55'
Haamstede	N51°43' E03°43'
Langeveld	N52°18' E04°31'
Lemelerveld	N52°28' E06°20'
Malden	N51°47' E05°53'
Nistelrode	N51°41' E05°33'
Schinveld	N50°59' E06°00'
Veendam	N53°05' E06°49'
Venlo	N51°22' E06°13'
Wieringermeer	N52°49' E04°56'
AERODROMES	
Ameland	N53°27' E05°41'
Teuge	N52°15' E06°03'
Hilversum	N52°12' E05°09'
Seppe	N51°33' E04°33'
Hoogeveen	N52°44' E06°31'
Midden Zeeland	N51°31' E03°44'
Terlet	N52°03' E05°55'
Texel	N53°07' E04°50'
Budel	N51°15' E05°36'
MIL AERODROMES	
Deelen	N52°04' E05°52'
Woensdrecht	N51°27' E04°21'
Gilze-Rijen	N51°34' E04°56'
De Kooy	N52°55' E04°47'
Eindhoven	N51°27' E05°22'
Twenthe	N52°17' E06°53'
Leeuwarden	N53°14' E05°45'
Valkenburg	N52°10' E04°25'
Volkel	N51°39' E05°42'
Soesterberg	N52°08' E05°17'
De Peel	N51°31' E05°51'

2. TARGET TOWING AREA - Intensive flying by tow-aircraft may take place between Leeuwarden (EHLW) AB and the restricted area EHD42. These aircraft are towing targets by means of an unmarked cable 3300' long.
(SPEC/MIL ENR 5.3-1)

3. OVERFLYING OF NUCLEAR REACTORS AND INDUSTRIAL PLANTS OF HIGH DANGER CATEGORIES - Avoid low altitude (minimum safe height of 1500' AGL) overflying of the following nuclear reactor or industrial plants.
(SPEC/MIL ENR 5.3-2)

NAME OF SITE	GEOGRAPHIC POSITION
Borssele	N51°25'54" E03°43'00"
Dodewaard	N51°54'00" E05°41'11"
Petten	N52°47'18" E04°40'38"

4. OVERFLYING OF GAS COMPRESSOR STATIONS - Avoid low altitutde (minimum safe height of 1500' AGL) overflying of the following gas compressor stations.

NAME OF SITE	GEOGRAPHIC POSITION
Alphen	N51°30'45" E004°58'04"
Anna Paulowna	N52°52'34" E004°46'27"
Beverwijk	N52°29'15" E004°41'58"
Maasvlakte	N51°56'36" E004°03'54"
Oldeboorn	N53°03'27" E005°53'50"
Ommen	N52°29'45" E006°21'42"
Puth-Schinnen	N50°56'33" E005°51'36"
Ravenstein	N51°47'02" E005°39'48"
Spijk	N53°24'46" E006°52'05"
Wieringermeer	N52°45'34" E005°02'46"
Zweekhorst	N51°57'51" E006°04'57"

(SPEC/ENR 5.3-1)

5. RADIO SONDE BALLOON ASCENTS - Meteorological radio sonde balloon ascents are made several times a day from the following locations.

NAME OF SITE	GEOGRAPHIC POSITION
De Bilt (EHDB)	N52°06' E05°11'
De Kooy (EHKD)	N52°55' E04°47'

(SPEC/MIL ENR 5.3-2)

ENROUTE

ROUTE AND AREA RESTRICTIONS -

1. LOW ALTITUDE OPERATIONS

a. NATO MIL ACFT - Except during take off and landing inside Amsterdam Fir NATO aircraft are not to be flown below 1000 ft above ground or water (within 1 NM of the coastline), including the "Waddenzee" or 1000 ft above the highest obstacle within 2000 ft distance of built-up and industrial areas, crowds of people and populated beaches. Flights mentioned in ENR 3.2 (LR10 and 10A) are exempted.

(1) Above sea, except the "Waddenzee", at least 1 NM from the coastline minimum altitude is 100 ft AMSL while avoiding obstacles.

(2) During nightflying minimum altitude is 1000 ft above ground or water in the entire FIR Amsterdam.

(3) USE AFTERBURNER - Except for take off and climb afterburner is not to be used below 10,000 ft AGL.

NOTE: Except during national or international exercises training flights for jet acft are not allowed below 3000 ft on Sat, Sun, and Hol and outside Uniform Daylight Period (except for flights executing nightflying exercises between SS/2259Z++.

b. NATO MIL HEL - Except during take off and landing the following minima apply for NATO MIL HEL inside FIR Amsterdam:

(1) 700 ft above highest obstacle within 2000 ft distance of built-up and industrial areas, crowds of people and populated beaches if operational necessary.

(2) 150ft above ground or water outside areas mentioned above.

c. AIRSPEED RESTRICTIONS - Below 3000 ft AGL or in controlled airspace flights shall be carried out with an IAS less than 350 kts unless the flight characteristics of the acft type concerned or the type of mission to be executed, require higher speeds in which case a maximum IAS of 450 kt shall not be exceeded.

d. BENE NIGHT ROUTES - The use of Bene Routes 1 to 4 will be according to the MIL AIP ENR 3.4-8/14. Bene routes 5 and 6 are reserved for RNLAF AND BAF and will be used according to bilateral arrangements.

(SPEC/MIL ENR 1.1-5)

e. AWX ROUTES - Reserved for national training flights only.

(SPEC/MIL ENR 3.4-1)

f. MILITARY LOW FLYING AREAS AND ROUTES FOR HELICOPTERS AND PROPELLER DRIVEN TRAINING AIRCRAFT - The military low flying areas and routes are solely for national use. They are used by helicopters and propeller driven training aircraft for exercises under VFR.

(SPEC/MIL ENR 3.3-1)

g. HELICOPTER ROUTES WEST FRISIAN ISLANDS - Helicopters traffic between the mainland and the Frisian/Groningen Islands, with the exception of rescue and/or emergency operations, shall use the following route to avoid the established bird sanctuaries and low flying routes.

(1) Route Terschelling: Oosterbierum (N53°15′ E05°30′) to West Terschelling lighthouse (N53°21′42" E05°12′54").

(2) Route Vlieland: Oosterbierum to West Terschelling lighthouse to East Vlieland lighthouse (N53°17′48" E05°03′36").

(3) Route Ameland: Nieuwe Bildtdijk (N53°18′ E05°36′) to West Ameland lighthouse (N53°27′01" E05°39′35").

(4) Route Schiermonnikoog: East Lauwersoog (N53°24′30" E06°12′30") Schiermonnikoog lighthouse (N53°09′12" E06°09′).

(5) Inter-island traffic: North coast of respective islands.

(SPEC/MIL ENR 3.3-3)

h. NORTH SEA OPERATIONS - To safeguard military and civil air traffic operating below FL 55 over the North Sea within the Amsterdam FIR and in the airspace up to and including 3000′ MSL over The Netherlands Concession Area within the London and Scottish FIR, the following measures have been taken.

(1) ATS routes and protected airspace have been established for helicopters, operating in support of the off- shore oil and gas industry.

(2) The Netherlands (EH) provide flight information services and alerting service over the North Sea within the Amsterdam (EH) FIR. In addition the same services are provided to all aircraft at or below 3000′ MSL in the airspace over The Netherlands (EH) Concession Area.

(SPEC/ENR 1.15)

i. LOW FLYING AREAS AND LOW FLYING ROUTES - The low flying areas and routes established over The Netherlands (EH) are solely assigned to certain military and/or civilian parties concerned, which are authorized to operate below the minimum altitude in 1.a.

(1) Built up areas, populous beaches, crowds, royal residences, hospitals, health resorts, etc. shall be avoided.

(2) If an aircraft gets outside the low flying area or gets off the low flying route, climb to an altitude designated by ATC and continue the exercise only when in the area or on the route again.

(3) Low flying in the civil low flying areas Gouda, Deventer and Flevopolder is only permitted to single engined aircraft for practice low approaches under supervision of an instructor.

(4) Listing of a low flying area or route does not imply any right to a pilot to use that low flying area or route.

(5) Outside the low flying areas and routes, low flying may take place below 500′ GND/MSL by aircraft of the state police and by military aircraft in connection with exercises of the Netherlands Forces and by helicopters over water areas.

(SPEC/ENR 5-1-2/3)

2. SUPERSONIC FLIGHTS - Flights exceeding speed of sound must be under radar control or military ATCC, and may take place as follows:

a. More than 35 NM seaward from the mainland and Wadden Isles. If less than 35 NM, altitude must be above 35,000′ and flight path toward the sea.

b. Overland, north of CTA East and CTA West on a northern course between 0700 and 1900 local time above 35,000′ in level or climbing flight.

c. For supersonic test flights of the RNLAF exclusively between N51°54′ E05°26′ and N51°36′ E04°22′ above 40,000′ in level or climbing flight.

3. Aerobatic flight in controlled airspace is prohibited.

4. NETHERLANDS (EH) AERIAL COMBAT TRAINING - Air combat training maneuvers are prohibited outside designated TRAs (Temporary Reserved Airspace).

(SPEC/MIL ENR 1.1-3)

AIRWAYS/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. GENERAL RESTRICTIONS:

a. All airways minimum cruising altitude.

(1) Overflight of Amsterdam FIR by pressurized aircraft - FL 150/160.

(2) Overflight of Schiphol TCA - FL 100.

(3) Inbound to Schiphol - FL 70 by the TCA boundary.

2. LOW AND HIGH ALTITUDE - Listed by alphanumeric designation.

A/UA5 - FL 250 not available as cruising level.

A/UA7 - Eastbound traffic with final altitude above FL 205 must be routed via BEDUM CRP (UR12) to JUIST NCRP. FL 250 not available.

B/UB1 - DIDAM-ARKON only available for flights destination EDDL. FL 250 not available.

G/UG9 - Westbound traffic proceed Rekken VOR/DME FLEVO(B5). ARNEM-Rekken VOR/DME not available. FL 250 not available.

G/UG10 - EEL-SPY westbound only and for flights direction U/UL602. FL 250 not available.

J904 - MAS-ERIGO Only for traffic departing EDLN.

J/UJ906 - Only for traffic departing Dusseldorf FIR.

L745 - COA-TULIP only available and compulsory for traffic departing EBBR TCA and EBOS via RAVLO-MIMVAGODOS-KOLAG.

P20 - Only available for flights with destination EGSS, EGGW, EGSC, EGUL, EGUN OR EGSH. Departures from EHSB, EHRD, EHEH, or EHBD shall route via L980-P49.

R1 - EEL-PAM not available for traffic via ARNEM.

R12 - SPY-GRONY not available for traffic via RKN.

R57 - Only available for flights between Schiphol/Rotterdam/Valkenburg-Eindhoven and Maastricht Aachen.

Y/UY283 - Only for departing EDDL, EDLN requesting FL 100 or above. Flights requesting above FL 210 have to be able to cross MODRU at FL 210 or above.

Z/UZ310 - exclusively and mandatory for traffic destination Brussels FIR, LFQI, LFQO, LFQT, LFAV. Except traffic destination EBOS,ELLX.

3. HIGH ALTITUDE - Listed by alphanumeric designation.

UB5 - FL 250 not available.

UG105 - FL 250 not available.

UL74 - FL 250 not available.

UL745 - Exclusively for flights departing from Brussels and intending to leave the Amsterdam FIR via RAVLO, KOLAG, MIMVA OR GODOS.

UN873 - SPY-BEDUM not available for traffic via RKN.

UP603 - FL 250 not available. Traffic from SPY on UR12 should start turn at SPY 75 DME.

UR1 - FL 250 not available. EEL-PAM not available for traffic via ARNEM.

UR12 - FL 250 not available. Eastbound traffic intercepting UP603, start turn at EEL R-326. SPY-GRONY not available for traffic via RKN.

UR125 - FL 250 not available. Eastbound max cruise level FL 240.

UY70 - Not available for departing EHAA FIR.

UZ28 - Only available for departing EDDF, EDDL, EDLN, and EDDK.

4. HIGH ALTITUDE RNAV- Listed by alphanumeric designation.

UA24 - FL 250 not available.

UB31 - FL 250 not available.

UB315 - FL 250 not available.

UG9 - FL 250 not available.

UG10 - FL 250 not available.

UL179 - FL250 not available. Not available for traffic destination EGKK, EGHH or EGHI. This traffic shall route via UL610.

UL603 - BASNO-TEBRO not available for traffic destination EHAA FIR, EDLL FIR. Traffic proceeding via UZ738 will have to cross TEBRO at FL 210 and 12 NM after TEBRO at FL 250 or above. FL 250 not available.

UL608 - Not available for traffic destination EGKK, EGHH or EGHI. This traffic shall route via UL610.

UL620 - Traffic planning to leave EHAA FIR via TEBRO has to proceed BASNO-UL603-TEBRO.

(SPEC/AIP ENR 3-2-1 thru 3-3-2.)

UM624 - Only available for traffic departing or destination Paris TCA or ELLX.

UN852 - FL 250 not available. Not available for traffic originating from EDDF.

UP20 - Only available for flights with destination EGSS, EGGW, EGSC, EGUL, EGUN or EGSH, departures from EHSB, EHRD, EHEH or EHBD excluded. These flights shall route via UL980 - P49.

UP155 - FL 250 not available.

UR7 - FL 250 not available. Not available for traffic originating from EDDF.

UR105 - FL 250 not available.

UV282 - Only available for traffic destination EDDL and EDLN.

UY283 - Only available for traffic departure EDDL and EDLN.

UZ310 - Exclusively and mandatory for traffic destination in Brussels FIR (destination EBOS and ELLX excluded) or destination LFQI, LFQO, LFQQ, LFQT, LFAV. At BATAK connected to Z311 for destination in Brussels TCA.

5. NIGHT FLYING

a. Night flying for training purposes may only take place in lower airspace, Mon through Thu and not later than 2300 local time. This does not apply to flights in or outbound to foreign airfield adjacent to the Netherlands, however, such flights are not allowed below 3000 AGL.

(SPEC/MIL ENR 1.1-5)

6. FORMATION FLIGHTS ALONG ATS ROUTES - Formation flights along ATS routes within the Amsterdam FIR, will be accepted, provided that:

a. Aircraft are not carrying passengers for compensation or for hire.

b. Prior arrangements have been made between the pilots concerned.

c. Prior to the execution of such formation flight, pilots have ascertained themselves that the formation flight will be accepted by all ATC facilities concerned.

d. The formation will conform to the standard formation criteria.

e. The formation leader shall squawk the assigned transponder code.

f. A proper ICAO flight plan has been sent.

(SPEC/ENR 1.3-1)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
NETHERLANDS							
CONDITIONAL ROUTES (CDRs) EFFECTIVE TIMES: CDR1 - 1700Z++ Fri to 0700Z++ Mon; CDR2 - 0700Z++ Mon to 1700Z++ Fri.							
L179	Sorat NCRP (N51°12′ E05°36′)	089 269	Romin CRP (N51°13′ E05°57′)	13		FL 175 FL 075	ODD EVEN
	CONTROL: Brussels ACC. NOTE: CDR1 1700Z-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR2 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri. Tempo closed on ACC instructions due to MIL requirements. Cruising levels above below FL 110 are normally not available eastbound. Not available for traffic with destination EGKK, EGHH or EGHI.						
R7/UR7	Spijkerboor VOR/DME	165 345	Zanda NCRP (N52°23′ E04°55′)	9		FL 195 FL 065	ODD
	Zanda NCRP		SPY24 NCRP (N52°09′ E05°02′)	15			
	SPY24 NCRP		Lopik NCRP (N51°56′ E05°08′)	14			
	Lopik NCRP		Lutom NCRP (N51°16′ E05°25′)	41			
	CONTROL: Amsterdam ACC. REMARKS: ① FL 150/160 for pressurized aircraft overflying Amsterdam FIR. ② FL 100 for flights crossing Schiphol TCA. NOTE: CDR1 1700-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR2 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri. CDR3 at ATC discretion only.						
UL7	Pampus VOR/DME	147	Spijkerboor VOR/DME	15		FL 660 FL 245	ODD
	Spijkerboor VOR/DME	339 159	Lonam CRP (N53°50′ E03°57′)	85			
	CONTROL: Maastricht UAC NOTE: CDR1 1700-0700Z++ Fri-Mon. CDR2 0700-1700Z++ Mon-Fri. CDR3 at ATC discretion only.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL480	Rekken VOR/DME	265	Rendi NCRP (N52°04′ E05°41′)	40		FL 660 FL 300	EVEN
	Rendi NCRP		Refso CRP (N51°49′ E02°40′)	113		FL 660 FL 250	
	CONTROL: Maastricht UAC NOTE: CDR1 1600-0800Z++ Fri-Mon; 2200-0700Z++ Mon-Fri. CDR3 at ATC discretion only.						
UM624	Monil CRP (N52°49′ E03°45′)	172 352	Tulip NCRP (N52°22′ E03°51′)	24		FL 660 FL 245	ODD EVEN
	Tulip NCRP		Tolen NCRP (N51°32′ E04°05′)	51			
	CONTROL: Maastricht UAC REMARKS: H24. Route only available for traffic departing or destination Paris TCA or ELLX. NOTE: CDR1.						
UN852 /UR7①	Spijkerboor VOR/DME	165/345	Zanda NCRP (N52°23′ E04°55′)	9		FL 660 FL 195②	ODD (SE)
	Zanda NCRP	166/347	Lopik NCRP (N51°56′ E05°08′)	29			
	Lopik NCRP	166/347	LUTOM (N51°16′ E05°25′)	41			
	CONTROL: Maastricht UAC at or above FL 245, Amsterdam ACC below FL 245. REMARKS: UN852 is an RNAV route. FL 250 not available.② FL 250 not available. NOTE: CDR1 1700-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR2 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri. CDR3 at ATC discretion only.						
UN872	Eelde VOR/DME	221	Woody CRP (N51°24′ E04°22′)	135		FL 660 FL 300	EVEN
	CONTROL: Maastricht UAC. NOTE: CDR1 H24. ALTN ROUTE: UR1, UB31.						
UP603	Eelde VOR/DME	166 346	Bedum CRP (N53°21′ E06°35′)	11		FL 660 FL 245	ODD EVEN
	Bedum CRP		Mokum NCRP (N54°29′ E06°06′)	70			
	Mokum NCRP		Limbi NCRP (N54°33′ E06°04′)	4			
	Limbi NCRP		Grefi CRP (N55°00′ E05°52′)	28			
	CONTROL: Maastricht UAC NOTE: CDR1 1700-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR2 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri. CDR3 at ATC discretion only.						
UV282	Arnem NCRP (N52°06′ E06°05′)	131	Foxto CRP (N51°52′ E06°30′)	21		FL 660 FL 195	EVEN
	CONTROL: Brussels ACC. NOTE: CDR1 1700-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. Only AVBL for destn EDDL and EDLN.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UY282	Napsi CRP (N51°51′ E06°01′)	316	Rendi NCRP (N52°03′ E05°41′)	18		FL 250 FL 195	ODD
	CONTROL: Brussels ACC. NOTE: CDR1. Only available for destn EDDL and EDLN.						
UY873	Denut NCRP (N51°14′ E03°39′) Belob NCRP	029 209 031 211	Belob NCRP (N53°21′ E06°35′) Lumil NCRP (N50°25′ E02°58′)	36 20		FL 660 FL 195	EVEN
	CONTROL: Maastricht UAC at or above FL 245, Brussels ACC below FL 245. NOTE: CDR1 1700-0700Z++ Fri-Mon; 2300-0600Z++ Mon-Thu.						
UZ29	Tinik NCRP (N51°09′ E06°10′) THN NDB	280	THN NDB Evosa NCRP (N51°11′ E05°46′)	10 2		FL 660 FL 245	EVEN
	CONTROL: Maastricht UAC. NOTE: CDR1 H24. ALTN route UZ291. Only usable for departures EDDF.						
UZ291	Tinik NCRP (N51°09′ E06°10′) Thorn NDB Breda NCRP Haamstede VOR	285 303 287 279	Thorn NDB Breda NCRP (N51°33′ E04°51′) Haamstede VOR Refso	10 43 38 45		FL 660 FL 245	EVEN
	CONTROL: Maastricht UAC. NOTE: CDR3 at ATC discretion only. Usable for departures EDDF when UZ29 not available.						
UZ700	Tulip NCRP (N52°22′ E03°51′) Bedum NCRP	061 065	Bedum NCRP (N53°21′ E06°35′) Lekmo NCRP (N53°27′ E06°55′)	116 13		FL 660 FL 245	ODD
	CONTROL: Maastricht UAC. NOTE: CDR1 1700-0600Z++ Fri-Mon. CDR2 0600-1700Z++ Mon-Fri. CDR3 at ATC discretion only.						
UZ701	Lugum NCRP (N53°18′ E07°04′E) Eelde VOR/DME Spijkerboor VOR/DME	241 242 244	Eelde VOR/DME Spijkerboor VOR/DME Refso NCRP (N51°49′ E02°40′)	17 76 92		FL 660 FL 245	EVEN
	CONTROL: Maastricht UAC. NOTE: CDR1 1700Z-0600Z++ Fri-Mon. CDR2 0600Z-1700Z++ Mon-Fri. CDR3 at ATC discretion only.						
UZ702	Helen NCRP (N51°14′ E03°52′)	042	Sopix NCRP (N53°19′ E07°02′)	169		FL 660 FL 245	EVEN
	CONTROL: Maastricht UAC. NOTE: CDR1 1700Z-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR2 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri. CDR3 at ATC discretion only.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ703	Sipsa NCRP (N53°04′ E07°12′)	222	Babix NCRP (N51°25′ E04°54′)	130		FL 660 FL 245	EVEN
	CONTROL: Maastricht UAC. NOTE: CDR1 1700Z-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR2 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri. CDR3 at ATC discretion only.						
UZ704	Spijkerboor VOR/DME Limbi NCRP	021	Limbi NCRP (N54°33′ E06°04′) Amada NCRP (N55°00′ E06°21′)	128 29		FL 660 FL 245	ODD
	CONTROL: Maastricht UAC NOTE: CDR1 1700-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR2 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri. CDR3 at ATC discretion only.						
UZ705	Amada NCRP (N55°00′ E06°21′)	198	Pampus VOR/DME	166		FL 660 FL 245	EVEN
	CONTROL: Maastricht UAC. NOTE: CDR1 1700Z-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR2 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri. CDR3 at ATC discretion only.						
UZ707	Akuxo (N50°52′ E06°04′)	223	Ulpen (N50°45′ E05°56′)	10		FL 660 FL 245	EVEN
	CONTROL: Maastricht UAC. NOTE: CDR1 1700Z-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR2 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri. CDR3 at ATC discretion only.						
UZ708	Helen NCRP (N51°14′ E03°52′)	034	Agisu (N53°53′ E06°30′)	186		FL 660 FL 245	ODD
	CONTROL: Maastricht UAC. NOTE: CDR1 1700Z-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR2 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri. CDR3 at ATC discretion only.						
UZ709	Kuvek NCRP (N53°44′ E06°31′)	211	Rupin NCRP (51°28′N 04°32′E)	155		FL 660 FL 245	EVEN
	CONTROL: Maastricht UAC. NOTE: CDR1 1700Z-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR2 0600-2300Z++ Mon-Thu; 0600-1700Z++ Fri. CDR3 at ATC discretion only.						
V282	Arnem NCRP (N52°06′ E06°05′)	131	Foxto CRP (N51°52′ E06°30′)	21		FL 195 FL 100	EVEN
	CONTROL: Brussels ACC. NOTE: CDR1 1600Z-0800Z++ Fri-Mon; 2200-0700Z++ Mon-Thu. Only available for destn EDDL and EDLN.						
Y282	Napsi CRP (N51°51′ E06°01′)	314	Rendi NCRP (N52°03′ E05°41′)	18		FL 195 FL 100	ODD
	CONTROL: Brussels ACC. NOTE: CDR1 1600Z-0800Z++ Fri-Mon; 2200-0700Z++ Mon-Thu. Only available for destn EDDL and EDLN.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Z311	Batak NCRP (N51°34′ E04°47′) Bekem CRP	224	Bekem CRP (N51°26′ E04°35′) NIK VOR/DME/NDB	22		FL 195 FL 095	EVEN

CONTROL: Amsterdam ACC.
NOTE: CDR1 1700Z-0600Z++ Fri-Mon; 2300-0600Z++ Mon-Thu. CDR3 at ATC discretion only. Only available for destn in Brussels TMA (EBAW exlcluded).

AERIAL REFUELING

AERIAL REFUELING TRACKS/ANCHOR AREAS - See Chapter 2, Section B, AERIAL REFUELING TRACKS/ANCHOR AREAS for Chart.

NETHERLANDS

PROCEDURES:
1. Tanker primarily responsible for navigation; if WTM and/or LWD is inop, DUTCH MIL will provide RADAR vectors.
2. Tanker entry - Via TACAN routes or from ATS routes via BLUFA, SPY, or EEL. Exit - Must have clearance prior to leaving tracks.
3. Receiver entry - Use OAT procedures. Preferred routing via TACAN routes to LWD. DUTCH MIL will provide rendezvous RADAR vectors.

CAROL (Track)	EAST WTM R-270/045 DME (N53°32′ E06°28′) WEST LWD R-273/069 DME (N53°13′ E03°50′)	WTM R-270/127 DME (N53°28′ E04°10′) LWD TACAN (N53°13′ E05°45′)	363.32	FL260/290	DUTCH MIL

NAVIGATION CHECK POINTS: NOT DEFINED
TRACK AREA: N53°13′ E06°01′ to N53°32′ E06°01′ to N53°28′ E03°57′ to N53°13′ E03°58′ to beginning.
SPECIAL INSTRUCTIONS: CAROL TRACK is a single line track based on the WITTMUND TACAN (WTM) R-270. The eastern limit of the track is WTM 61 DME, the western limit is WTM 135 DME. LEFT HAND procedural turns will be flown at both ends of the track. NIGHT - Left hand racetrack, based on the WITTMUND (WTM) TACAN R270, between 61 and 135 DME.

POLLY (Track)	EAST LWD R-334/016 DME (N53°27′ E05°32′) WEST LWD R-245/030 DME (N53°00′ E05°01′)	LWD R-272/034 DME (N53°13′ E04°48′) LWD TACAB (N53°13′ E05°45′)	363.32	FL260/290	DUTCH MIL

NAVIGATION CHECK POINTS: NOT DEFINED
TRACK AREA: N52°56′ E04°49′; to N53°17′ E05°57′; to N53°31′ E05°35′; to N53°10′ E04°37′; to beginning.
SPECIAL INSTRUCTIONS: POLLY TRACK is a left hand racetrack based on the WITTMUND TACAN (WTM) TACAN R-270, between 61 and 135 DME. NIGHT track is flown as during daylight operations.

TELEPHONE CONTACTS

THE APPROPRIATE OFFICES SHOULD BE CONTACTED BY USAF MILITARY USERS TO RESERVE AIR REFUELING TRACKS OR ANCHOR AREAS IN THE FOLLOWING COUNTRIES:

NETHERLANDS: Dutch Mil Supervisor (Nieuw Milligen) - Commercial: (31) 577-456-366.

NOTE: DOD Users - to reserve Air refueling corridors in Italy and Greece, contact the European Central Altitude Reservation Facility (EUCARF) via: E-mail: eucarf@ramstein.af.mil, Military message: EUCARF RAMSTEIN AB GE, ICAO Aeronautical Fixed Telecommunications Network (AFTN): EDDFYXYR, DSN: 480-7346/7839 Fax: 9855 Commercial: (49) 6371-47-7346/7839 Fax: 9855.

NOTE: For information concerning Altitudes Reservations, contact: EUCARF.

NOTE: In areas designated as permanently available for Air-to-Air Refueling (AARA), the amount of warning concerning refueling operations can be so minimal as to preclude notification by normal methods. However, the units listed under ATC control column will be able to advise pilots on activity status in appropriate (AARAs).

Where Air-to-Air Refueling Areas conflict with Airways, Advisory Routes or Upper Air Routes, civil/military coordination procedures are applied to minimize disruption to the plan flight profiles or the aircraft concerned.

(AFFSA/XOIA FIL 96-99)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for Charts.

NETHERLANDS - The information shown represents a composite of the concentration areas for the entire year. The average altitude flown by day is approximately 1200' MSL and by night approximately 2000' MSL while 10% of the birds fly even higher than 6000' MSL. The main day- migration periods are mid-September until mid-November and early March until May. Heavy night migration may occur early in autumn (from mid-August onwards) and later in spring (till the end of May). During the winter months, sudden fallen snow and frost may stimulate very large numbers of water and open land birds (geese, ducks, waders, starlings, thrushes and larks) to move to the south. The bird strike risk resulting from these winter flights (during a period of sudden thaw, in opposite direction) is particularly high in the western part of the country.

ADDITIONAL INFORMATION

1. ATC PROCEDURES UNDER LIMITED VISUAL CONDITIONS FOR SCHIPHOL.

a. ATC will apply safeguards and procedures for ILS/MLS operations that will become effective in relation to weather conditions as specified below.

(1) When the TDZ RVR is less than 1500m and/or the cloud base is less than or = to 300 ft, ATC will arrange for an ILS/MLS interception at least 9 NM from touchdown.

(2) When the TDZ RVR is less than or = to 550m and/or cloud base is less than or = to 200 ft, ATC will ensure that the ILS/MLS protection area is clear of (known) traffic before issuing the landing clearance (normally not later than at 2 NM final.)

(3) In addition, ATC will arrange that the minimum separation between an aircraft carrying out an ILS/MLS approach and any other preceding aircraft will not be less than:

(a) 4 NM when the TDZ RVR is less than 1500m but greater than 550m and/or the cloud base is less than or = to 300 ft but greater than 200 ft.

(b) 6 NM when the TDZ RVR is less than or = to 550m but greater than 350m and/or the cloud base is less than or = to 200 ft.

(c) 8 NM when the TDZ RVR is less than or = to 350m.

(d) 9 NM when the TDZ RVR is less then 200m.

NOTE: For MLS and mixed ILS/MLS operations, ATC will maintain the same minimum separation.

(SPEC/MIL AD EHAM 2-1-22.6)

2. LANDING FEES - Aircrews landing at civil airports in the Netherlands will be required to pay landing fees. U.S. Army aircrews will use standard Form 44 and Air Force aircrews will use Air Force Form 15, or other appropriate receipt/delivery form. Aircrews will not pay cash fees to airport officials.

(USAASD-E/USA 02-0050)

NATIONAL HOLIDAYS -

NETHERLANDS HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
Easter Sunday	16 Apr
Easter Monday	17 Apr
Queen's Birthday	30 Apr
Commemorations Day	4 May after 1600 (Military only)
Liberation Day	5 May
Ascension Day	25 May
Whit Sunday	4 Jun
Whit Monday	5 Jun
Christmas Eve	24 Dec, if a Monday (Military only)
Christmas Day	25 Dec
Boxing Day	26 Dec

(SPEC/MIL GEN 2-2)

NIGER

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the N'DJAMENA FIR and the NIAMEY FIR. See Cameroon for information related to N'DJAMENA FIR and see Benin for information related to the NIAMEY FIR.

NIGERIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes KANO FIR and LAGOS SUB/FIR.

DIMENSIONAL UNITS - Blue Table.

(SPEC/GEN 1-2)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Same as Regional Procedures.

(SPEC/RAC 1-1-1)

AIR TRAFFIC AT A CONTROLLED AERODROME - Lagos SUB/FIR - Aircraft traffic from Lagos/Murtala Muhammed airport normally departs to the South. All aircraft approaching Lagos from the south should avoid the airport departure area defined by a boundary beginning at Lagos VOR/DME (LG) between R-170 to R-230 extending to 45 DME. Aircraft landing at Lagos/Murtala Muhammed airport from a south routing should file, Kevsa CRP

(N04°20′ E02°08′) direct Polto CRP (N06°29′ E02°45′) A609 LG. Do not overfly the Republic of Benin unless diplomatic clearance has been granted. Prior to contacting Lagos APP CON, aircraft may contact Lagos INFO at Kevsa CRP for traffic advisory. Deviations for weather that require an aircraft to enter the airport departure area defined above, will be done using extreme caution and must be cleared by Lagos APP CON.

(USDAO LAGOS/AFFSA)

VISUAL FLIGHT RULES

Standard.

INSTRUMENT FLIGHT RULES

Nigeria has implemented the ICAO Annex 11 airspace classifications.

1. Flights shall be conducted in accordance with the instrument Flight Rules in the following circumstances, even when not operating in instrument meterological conditions:

a. When operating in controlled airspace or in advisory areas or along advisory routes above flight level 150, except when operating on Controlled VFR (CVFR) Clearance in designated "Controlled Airspace Instrument/Visual".

2. All IFR Flights shall comply with the procedures for air traffic advisory service when operating along or across:

a. Advisory Routes.

b. ATS Routes in the Kano FIR.

(SPEC/RAC 1-1.2)

NORWAY

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

This entry includes the NORWAY FIR/UIR and the BODO OCEANIC FIR (Bodo OFIR) including Svalbard.

DIMENSIONAL UNITS -

Units ICAO Table except that the altimeter setting will be provided in hectopascals in the NORWAY FIR/UIR (HPa).

(SPEC/GEN 2.1-1)

AIRSPACE STRUCTURE -

1. Within the Norwegian FIR/UIR, the airspace is further divided into 5 classifications A, C, D, E, and G, which comply with ICAO Annex 11 standards except for the following differences:

a. Class A - Class A airspace changes character when authorizations to operate VFR flights above FL 195 affect Class A airspace.

b. Class D and E

(1) Class D and E airspace changes character in the period between the end of evening civil twilight and the beginning of morning civil twilight as flights, authorized to operate in accordance VFR during that period in Class D and E airspace, are separated from IFR flights.

(2) The services provided to VFR flights in Class D airspace are stated to be "Air traffic control service and traffic information about IFR and VFR flights". "Traffic avoidance advice" is, however, not provided to IFR or VFR flights.

c. Class G - IFR flights in Class G airspace are not required to establish two-way radio communication with ATS except that communication shall be established with the appropriate AFIS unit when operating within a traffic information zone (TIZ) or a traffic information area (TIA). VFR flights operating within TIZ or TIA are required to establish two-way radio communication with the appropriate AFIS unit.

d. Control Areas - Norway does not comply with the provision in Annex 11 stating that the lower limit of a control area shall be established at a height above the ground or water of not less than 700′. Due to topography surrounding airports, compliance with the mentioned provision would result in difficulties designing procedures protecting IFR traffic to and from controlled airports.

(SPEC/GEN 1.7-11,12)

ALTIMETER SETTING PROCEDURES -

Standard.

VERTICAL SEPARATION -

1. When flying within Bodo OFIR north of N70°, the Grid Track of the aircraft shall determine the selection of cruising levels, whereas magnetic track shall determine the cruising level to be chosen when flying within Norway FIR, including that part of the FIR north of N70°.

(SPEC/ENR 1.7-2)

2. Semi-circular within Bodo OFIR and Norway FIR/UIR.

(SPEC/ENR 3.0-2)

POSITION REPORTING -

Standard.

SECONDARY SURVEILLANCE RADAR -

1. When flying in formation, only the formation leader shall operate the transponder, unless otherwise directed by ATS.

2. In the absence of ATS directions, select the codes as follows:

a. IFR Flights - code 2000

b. VFR Flights - code 7000

c. Helicopter Ambulance Flights - code 5200

(SPEC/ENR 1.6-4)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. During the period between the end of evening civil twilight and the beginning of morning civil twilight, all flights within controlled airspace shall be conducted in accordance with the instrument flight rules. Special authorization to operate in accordance with the visual flight rules may, however, be obtained from the Civil Aviation Authority or from the appropriate air traffic control unit.

(SPEC/GEN 1.7-1)

2. VFR flights in Class G airspace at and below 1000' above the terrain and at speeds not exceeding 140 KIAS, may operate with a flight visibility of not less than 3km or not less than 1.5km when the flight is conducted in an aerodrome traffic circuit and the pilot has the aerodrome in sight.

a. Helicopters may, in the same airspace, operate with a flight visibility of not less and 800m, provided the speed will allow other aircraft or obstructions to be observed and collision avoided.

3. Special VFR - a clearance to operate as a special VFR flight when the ground visibility or flight visibility is less than 3km may not be obtained except as follows:

a. Airplanes at speeds not exceeding 140 KIAS which intend to conduct the whole flight within the control zone or to enter the control zone and land at the airport within the control zone, may be cleared to operate as special VFR provided the ground visibility and flight visibility is not less than 1.5km.

b. Helicopters at speeds that will allow the pilot to observe obstructions and avoid collision, may be cleared to operate as a special VFR flight provided the ground and flight visibility is not less than 800m.

(SPEC/GEN 1.7-5)

4. In general, the level above which flights are not allowed to operate in accordance with visual flight rules is FL 195.

(SPEC/GEN 1.7-5)

5. VFR flights shall not be authorized within the Norway UIR above FL 290.

(SPEC/ENR 1.2-1)

MAXIMUM AIRSPEEDS - A limit of 250 KIAS on VFR flight below FL 100 in class C, D, E, and G airspace has been imposed unless exemptions have been made by the Civil Aviation Authority or in isolated cases by the appropriate ATC unit for flights operating in a CTR/TMA.

(SPEC/GEN 1.7-4)

INSTRUMENT FLIGHT RULES

Flights operating within Norway UIR at or above FL 290, shall be conducted in accordance with Instrument Flight Rules.

(SPEC/ENR 1.3-1)

FM IMMUNITY - FM Immunity - FM immunity requirements within Norwegian Airspace after 1 Jan 2001 and until 31 Dec 2008 are as follows:

1. ENROUTE - Aircraft equipped with radios providing RNP/5 capabilities without the use of VOR.

2. TERMINAL - The following airports can accept use of non-FM immune VOR/ILS navigation equipment: Andoya (ENAN), Banak (ENNA), Bardufoss (ENDU), Bergen Flesland (ENBR), Bodo (ENBO), Evenes (ENEV), Orland (ENOL), Oslo Gardermoen (ENGM), Rygge (ENRY), Stavanger Sola (ENZV), and Trondheim Vaernes (ENVA).

(USAASD-E/05-0303)

ALTIMETER SETTINGS AND CRUISING LEVELS ON IFR FLIGHTS - In Norwegian TMA's, the responsibility for temperature corrections of minimum altitudes and the responsibility for obstacle clearance when an IFR flight is given a direct routing of an ATS route when in the enroute phase of flight lies with the radar controller.

FORMATION FLIGHTS - Subject to operational requirements, the maximum lateral and horizontal distances to be kept by a formation (1km/100') may be increased, provided a clearance has been obtained from the appropriate ATS unit. In such cases, the required separation minimum with respect to other traffic will be increased accordingly.

(SPEC/GEN 1.7-3)

ESTABLISHED MAXIMUM AIRSPEEDS - A limit of 250 KIAS on IFR flight below FL 100 in class C, D, E, and G airspace has been imposed unless exemptions have been made by the Civil Aviation Authority or in isolated cases by the appropriate ATC unit for flights operating in a CTR/TMA.

(SPEC/GEN 1.7-4)

RVSM RULES - The airspace within Norway UIR west of SDA VOR, between FL 290-FL 410 inclusive, is EUR RVSM airspace. Airspace within Norway UIR east of SDA VOR, between FL 290-FL 410 inclusive, is EUR RVSM transition airspace.

(SPEC/ENR 1.8-1)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC - For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS version 7.0 may use the enhanced mode when flying in Norwegian airspace.

(HQ USAFE-DOV/USAF FIL 01-62)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. 1. Flight plans shall be submitted directly to AIS/ARO/NOF office. The FPL may be submitted by phone, fax or personal visit. If fax is used, a phone contact must be established to confirm reception of the FPL.

(SPEC/ENR 1.10-1)

2. Unless otherwise prescribed by Avinor, a flight plan shall be submitted not later than 60 minutes before EBOT.

(SPEC/ENR 1.10-1)

3. ADDRESSING, Flight plans and associated messages shall be addressed as specified in procedures in ICAO Doc 4444/PANS-ATM, and in CFMU Handbook-IFPS Users Manual.

(SPEC/ENR 1.10-2)

4. Time limits set for the submission of flight plan information to obtain a clearance is not applicable to VFR flights intending to operate a minor part of the flight within class D airspace. The information shall, however, be submitted in "due time".

(SPEC/GEN 1.7-3)

5. RANDOM ROUTES - The following requirements apply for flight planning along random routes concerning information to be stated in the flight plan, Item 15 (Route):

a. Turbojets in Bodo OCA should specify speed in Mach number while all other aircraft in Bodo OFIR/OCA should specify speed in terms of TAS. In both cases, the speed shall be indicated at the Bodo OFIR/OCA ENTRY point.

b. Specify flight level, at Bodo OFIR/OCA ENTRY point.

c. Secify route of flight, as relevant, according to the following.

(1) Last domestic reporting point prior to Bodo OFIR/OCA/ENTRY point.

(2) Bodo OFIR/OCA/ENTRY point.

(3) Significant points in accordance with procedures described in Doc 7030-NAT Region.

(4) Bodo OFIR/OCA/EXIT point.

(5) First domestic reporting point after Bodo OFIR/OCA/EXIT point.

NOTE: Each point at which a change in speed or level is requested must be specified, and followed in each case by the next route segment expressed as geographical coordinates in latitude and logitude. Estimated time over relevant reporting points and repoting points stated in Para c.(3), shall be in Item 18 of the flight plan.

(SPEC/ENR 3.0-2)

6. RNAV ROUTES - The following principles apply concerning information to be stated in the flight plan, Item 15 (Route).

a. Specify the speed in terms of Mach number at Bodo OCA ENTRY point.

b. Specify flight level at Bodo OCA ENTRY point.

c. If, and only if, the flight is to be planned to operate along the whole RNAV route, specify the route designator.

(1) Flights wisihing to join or leave an RNAV route at some intermediate point are considered random route aircraft and full track details must be specified in the flight plan. An RNAV route designator must not be used to abbreviate any portion of the route in the circumstances.

NOTE: Each point at which a change in speed or level is requested must be specified, and followed in each case by the next route segment expressed as geographical coordinates in latitude and longitude. Estimated times over compulsory reporting points as stated in RNAV route descriptions, shall be specified in Item 18 of the flight plan (remarks).

(SPEC/ENR 3.0-3)

CLEARANCE INFORMATION -

1. OCEANIC CLEARANCES - Aircraft entering Bodo OCA are required to obtain an oceanic clearance using one of the methods indicated in para 2. (below). The clearance becomes effective only at the Bodo OCA boundary. It is the responsibility of the pilot in command to obtain from the appropriate ATS unit, any necessary clearance to comply with the oceanic clearance.

(SPEC/ENR 3.0-3)

2. REQUEST FOR OCEANIC CLEARANCE – An oceanic clearance may be obtained by using one of the following methods.

a. by establishing communication with Bodo Oceanic Control on 127.725 Mhz not later than 10 minutes before estimated time for entering Bodo OCA (if coverage permits).

b. by establishing communication with Bodo Radio (NAT D frequency family) not later than 30 minutes before estimated time for entering Bodo OCA (if coverage permits).

c. via other ATS units.

(SPEC/ENR 3.0-4)

LOW LEVEL FLYING -

1. All military aircraft planning to conduct low flying activity over the country of Norway must accomplish mandatory procedures in accordance with Norwegian military regulation BFL 70-1, titled Military Flight Operations.

a. Diplomatic Aircraft Clearance: Refer to DoD Foreign Clearance Guide before entering the country of Norway.

b. Minimum altitudes for foreign aircraft: Refer to BFL 70-1, chapter 8 (Fighter aircraft), chapter 9 (Multi-engine aircraft), (for helicopter operations, special rules apply: Refer to chapter 10):

(1) "With the exception of take-off and landing or for exercise approach to landing according to approved procedures, foreign aircraft are in general terms not allowed to fly below 1000 feet above the terrain (for fighter aircraft: minimum 3000 feet over towns apply)".

(2) "Minimum altitudes under 1000 feet could be authorized by COMAIRSONOR/-NON IAW special circumstances shown in chapter 8 and 9."

(3) "Minimum altitudes of under 1000 feet can be authorized only during flight after take-off from Norwegian bases. COMAIRSONOR/-NON could however approve altitudes under 1000 feet for flying after take-off from non- Norwegian bases provided this is of special importance to the exercise. In such cases, an experienced Norwegian pilot will give a "face-toface" briefing at the take-off location."

c. “Authorization of low flying missions/sorties will only be authorized after receiving a face-to-face briefing on Norwegian airspace structure and low flying in general terms by an experienced designated Norwegian pilot.”

d. Use of Norwegian produced Low Flying Charts is mandatory and available at each Base Operations.

(TFMWG-E/USA 02-0055)

SUPPLEMENTARY AIRPORT INFORMATION -

Aro (ENML)

1. NOISE ABATEMENT

a. GENERAL - Aircraft making a visual approach to or a visual climbout from airport, shall, to the extent possible, avoid flying over densely populated areas.

b. DEPARTURE/CLIMBOUT

(1) After departing Runway 07, a right turn is to be performed as soon as possible. Westbound and northbound flights to proceed via OM/ML before turning on course.

(2) Aircraft departing Runway 25, northbound flights must climb straight ahead until passed OM/ML before turning on course.

(SPEC/AD2 ENML 1-6)

Flesland (ENBR)

1. NOISE ABATEMENT - Unless instructed by ATC or if deviations are required in the interest of safety, the following procedures are mandatory for jet and multi-engine aircraft.

a. DEPARTURE/CLIMBOUT

(1) Aircraft with max takeoff weight of 15,400 lbs or more: Climb straight ahead. Turn to the west can be started at 700′ AMSL. Turn to the east can be started at 2000′ AMSL.

(2) Aircraft with max takeoff weight of 15,400 lbs or less and all helicopters shall climb straight ahead to a minimum of 700′ AMSL before commencing turn.

b. APPROACH/LANDING - Aircraft with max takeoff weight of 15,400lbs or more making a visual approach on the east side of the airport and extended center lines:

(1) Enter final approach at 1500′ AMSL or higher. Descent below PAPI glidepath not allowed.

(2) Jet aircraft shall not conduct visual approach between 2100-0600 hrs.

(3) Jet aircraft shall be established on final approach to Runway 17 not closer to the threshold than Byfjorden (approximately DME 4 FLS).

(4) Jet aircraft shall be established on final approach to Runway 35 not closer to the threshold than Fanafjorden (approximately DME 5 FLS).

(5) Fighter aircraft visual approaches shall be made along a line approximately 10 degrees west of extended centerline. Initial point for Runway 17 at Hakonshella. Initial point for Runway 35 at Bjelkaroy. Enter both initial points at 1500′ AMSL. Circling to be made west of airport and runway extended centerline.

(SPEC/AD2 ENBR 1-7)

Gardermoen (ENGM)

1. NOISE ABATEMENT PROCEDURES

a. USE OF RUNWAYS - Runway 01R and 19R are preferential runways for landings and Runways 01L and 19L are preferential runways for takeoffs.

b. DEPARTURE/CLIMBOUT - Climbout instructions of the prescribed SID shall be followed at least until reaching the noise critical altitude of 5000′ for jet aircraft. For propeller and helicopters heavier than 12,500 lbs, noise critical altitude is 1700′AMSL. Noise critical altitude between 2200-0530 is 7000′ for jet aircraft and 3000′ AMSL for all other aircraft.

c. APPROACH/LANDING

(1) IFR aircraft greater than 12,500 lbs shall be established on the extended centerline no lower than 2500′ AMSL before continuing descent to land.

(2) Aircraft greater than 12,500 lbs on a visual approach shall maintain an approach path at or above the ILS glide path from 2500′ to landing. Each aircraft must also be established on the extended centerline no later than 7.6 NM from the runway threshold to the south and no later than 7 NM from the threshold to the north.

(3) Between 2200-0530, all approaches shall be established on the extended centerline no later than 10.8 NM from the runway threshold.

d. FIGHTER AIRCRAFT OPERATIONS - Fighter aircraft operations at Oslo Gardermoen Airport may be executed according to established procedures.

(SPEC/AD2 ENGM 1-10-12)

Kjevik (ENCN)

1. NOISE ABATEMENT - Unless instructed by ATC or if deviations are required in the interest of safety, the following procedures are mandatory for jet and multi-engine aircraft:

a. GENERAL - Aircraft making visual approach to, or visual climbout from the airport shall not fly below the ILS or VASI glidepath.

b. DEPARTURE/CLIMBOUT

(1) After takeoff from Runway 04, aircraft shall climb straight ahead to 1000′ before initiating a turn to the desired/cleared track.

(2) After take from Runway 22, aircraft shall climb straight ahead to 700′. From this altitude continue climb on 200° until reaching 3000′ before initiating a turn to the desired/cleared track.

c. APPROACH/LANDING - Aircraft making visual approach to Runway 04, when below 1500′, shall not fly below the ILS or VASI glidepath.

(SPEC/AD2 ENCN 1-7)

Orland (ENOL)

1. NOISE ABATEMENT PROCEDURES - Unless otherwise instructed by ATC or if deviations are required for reasons of safety, the following noise abatement procedures are mandatory:

a. GENERAL - Aircraft making visual approach to or visual climbout from the airport shall to the extent possible, avoid overflying the populated areas of Brekstad and Uthaug.

b. DEPARTURE/CLIMBOUT

(1) After takeoff from Runway 15, all aircraft shall climb straight ahead until reaching 500′. Turns shall not be started until passing the shoreline, DME 2.5 OL or DME .3 ORL.

(2) After takeoff from Runway 33, all aircraft shall climb straight ahead until reaching 500′. Right turn shall not be started until passing the shoreline or UTH NDB.

(SPEC/AD2 ENOL 1-6)

Roros (ENRO)

1. NOISE ABATEMENT PROCEDURES - Provided ATC has given no other instruction due to traffic regulation, departing aircraft shall climb to 2800′ AMSL before initiating any turns. Down wind leg to be flown at 3100′ AMSL. When cleared for right turn after takeoff from Runway 21, right turn can be commenced at a lower altitude.

(SPEC/AD2 ENRO 1-5)

Sola (ENZV)

1. NOISE ABATEMENT PROCEDURES - Unless otherwise instructed by ATC or if deviations are required for reasons of safety, the following noise abatement procedures are mandatory:

a. DEPARTURE/CLIMBOUT

(1) All jet and multi-engine aircraft greater than 12,566 lbs shall climb straight ahead until 3000' AMSL before commencing any turn.

(2) Multi-engine aircraft less than 12,566 lbs shall climb straight ahead until reaching 2000' AMSL before commencing any turns.

(3) Single engine aircraft shall climb straight ahead until reaching 500' AMSL before commencing any turns.

b. APPROACH/LANDING

(1) Aircraft making a visual approach are encouraged to make a direct approach and a straight in landing on the runway to be used.

(2) All aircraft shall, to the greatest extent possible, avoid overflying densely populated areas.

(3) During approach to Runway 11, 18, and 36, the PAPI glideslope shall be followed from 1000' when compatible with the approach procedure used.

(4) Fighter aircraft making VFR approaches to the airport shall make the approach direct from the initial point to the beginning of the appropriate runway while maintaining an altitude of 1500'. Circling is to be made east of Runway 18-36 and south of Runway 11-29. Relevant initial points are:

(a) Runway 18: Tanager - 2.5NM from threshold, 10° west of extended centerline

(b) Runway 36: Orrevann - 8 NM from threshold, 25° west of extended centerline

(c) Runway 11: Rott - 3.5 NM from threshold, 30° north of extended centerline

(d) Runway 29: Gauseholmen - 3.5 NM from threshold, 45° north of extended centerline

(SPEC/AD2 ENZV 1-8)

2. HELICOPTER PROCEDURES - COPTER LLZ+DME-108° will only be given under certain criteria, regulated in Local Operating Procedures for Sola Tower. Continued approach after the missed approach point (DME 2.0 ZL) shall follow PAPI Runway 11. Landing shall be executed west of Taxiway H. A missed approach after having passed the missed approach point shall be executed with visual reference to the terrain, West of the Runway 11 threshold, and in accordance with clearances issued by Sola Tower.

FLIGHT HAZARDS

VFR flights operating in Norwegian airspace are specifically warned against obstructions to air navigation. Most objects exceeding an elevation of 200' are marked and lighted in accordance with applicable standards. However, many old obstructions exceeding an elevation of 200' are not marked or lighted, as well as numerous objects such as transmission lines, overhead wires and aerial ropeways less than 200' AGL are not marked or lighted. As a consequence, extreme caution should be exercised when flying in fjords and valleys, as well as in the vicinity of islands along the coast.

(SPEC/ENR 5.4-1)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. AIRWAYS/ROUTES

G3 - Segment VALDI-FLS width is 20 NM.

P615 - Segment TOR-ATOR not for departures from ENGM.

UP65 - FL 310, 350, 390 not planable E of SDA VOR/DME.

UP615 - Segment TOR-ATOR not for departures from ENGM.

NOTE: The ATS routes through Bodo OCA are all defined as upper ATS route. These routes may be used by flights to/from Minimum Navigation Performance Specification Airspace (MNPSA).

(SPEC/ENR 3.0-2)

2. CONDITIONAL ROUTE INFORMATION

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
NORWAY							
L727	FLO VOR/DME	122	Sopen CRP (N60°51' E07°30')	84		FL 245 FL 120	ODD EVEN
	Sopen CRP	123	Ekdal NCRP (N60°15' E09°19')	65			

NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
L996	RBU NDB	177	Tombo CRP (N62°00′ E11°34′)	31		FL 245 FL 120	ODD EVEN
	Tombo CRP	177	Gotur CRP	126			
	NOTE: CDR1 - RPU-Tombo; Mon-Fri H24, public holidays excluded. CDR1 -Tombo-Gotur; 0700-2200Z++. Sat, Sun and public holidays excluded.						
M604	TRM VOR/DME	194	Tobit CRP (N62°00′ E09°56′)	96		FL 245 FL 140	ODD EVEN
	Tobit CRP	195	Osvig CRP (N61°04′ E09°24′)	58			
	Osvig CRP	195	SVA VOR/DME	186		FL 245 FL 120	
	NOTE: CDR1 - TRM-Tobit; Mon-Fri H24, public holidays excluded. CDR1 - Tobit-SVA; 0700-2200Z++. Sat, Sun and public holidays excluded.						
M609	Andor NCRP (N68°54′ E17°24′)	205	EVD VOR/DME	31		FL 245 8000	ODD EVEN
	NOTE: CDR1 - 1210-1340Z++ Sat, Sun and public holidays excluded.						
	EVD VOR/DME	212	Ulvak NCRP (N68°07′ E15°59′)	26		FL 245 8000	ODD EVEN
	Ulvak NCRP		Misba NCRP (N67°34′E14°56′)	41			
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
	Pisux NCRP (N66°54′ E13°48′)	206	STO VOR/DME	65			
	STO VOR/DME	190	BNN VOR/DME	31			
	NOTE: CDR1 - Below FL 115: Mon-Fri 1630-1730Z++. Available FL 115: Mon-Fri H24, public holidays excluded.						
	SVA VOR/DME	176	RORAM NCRP (N58°05′ E07°59′)	26		FL 245 FL 100	ODD EVEN
	Roram NCRP		RASVI CRP (N57°17′ E08°25′)	22			
	NOTE: CDR1 - Mon-Fri 2300-0600Z++ and Fri 1700-Mon 0600Z++. Public holidays excluded. Alternate Route L261.						
P601	Nirod CRP (N58°05′ E09°37′)	016	TOR VOR/DME	69		FL 245 FL 100	ODD
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
P602	SKI VOR/DME	190	Lavko CRP (N57°48′ E09°03′)	85		FL 245 FL 100	EVEN
	NOTE: CDR1 2300-0600 and Fri 1700-Mon 0600Z++. Public holidays included. Alternate Route T600.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
P607	Somag CRP (N61°04′ E07°30′)	117	GRM VOR/DME	118		FL 245 FL 120	ODD EVEN
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
P608	VIG VOR/DME	112	Totko CRP (N62°00′ E08°56′)	88		FL 245 FL 140	ODD EVEN
	Totko CRP	114	Suvar CRP (N61°09′ E12°43′)	120			
	NOTE: CDR2						
P614	ZOL VOR/DME	150	Solru CRP (N57°35′ E07°03′)	89		FL 245 FL 100	ODD EVEN
	Solru CRP	151	Ramud CRP	37			
	NOTE: Mon-Fri 2300-0600 and Fri 1700-Mon 0600Z++. Public holidays excluded.						
P615	Osvig CRP (N61°04′ E09°24′)	159	TRF NDB	74		FL 245 FL 100	ODD EVEN
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
P621	Soglo CRP (N59°31′ E07°30′)	150	Nerdo CRP (N57°53′ E09°14′)	112		FL 245 FL 100	ODD EVEN
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
P622	VIG52 NCRP (N61°45′ E06°43′)	160	Sogra CRP (N60°45′ E07°30′)	64		FL 245 FL 120	ODD EVEN
	Sogra CRP	159	Banad NCRP (N58°53′ E08°51′)	119			
	Banad	161	Retka CRP (N57°59′ E09°26′)	57			
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
P992	ZOL VOR/DME	156	Soves CRP (N57°28′ E06°50′)	93		FL 245 FL 100	ODD EVEN
	Soves CRP	157	Linvi CRP (N57°00′ E07°13′)	31			
	NOTE: Mon-Fri 2300-0600 and Fri 1700-Mon 0600Z++. Public holidays excluded. Alternate Route ZOL-RIRUT-SOSER-P619.						
T551	SKI VOR/DME	173	Binro CRP (N58°10′ E09°47′)	62		FL 245 FL 100	EVEN
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
Z11	Gevli NCRP (N63°06′ E10°01′)	221	Roxet CRP (N61°35′ E07°17′)	119		FL 245 FL 140	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Z12	Tondi CRP (N62°00′ E08°42′)	133	MES VOR/DME	78		FL 245 FL 140	ODD
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
Z13	Tuvig CRP (N61°45′ E07°56′)	115	MES VOR/DME	87		FL 245 FL 140	ODD
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
Z14	Somes CRP (N61°24′ E07°30′)	101	MES VOR/DME	93		FL 245 FL 140	ODD
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
Z17	ZOL VOR/DME Sosol CRP	81 81	Sosol CRP (N59°02′ E07°30′) SKI VOR/DME	59 65		FL 245 FL 100	ODD EVEN
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
Z19	Danko CRP (N57°00′ E06°42′)	41	TOR VOR/DME	173		FL 245 FL 100	ODD
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
Z101	EVD VOR/DME Giran CRP	200 198	Giran CRP (N65°45′ E13°42′) Nutko NCRP (N63°52′ E12°00′)	177 121		FL 245 FL 120	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
Z108	Nutko NCRP (N63°52′ E12°00′)	49	Sovil CRP (N64°30′ E13°56′)	64		FL 245 FL 200	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Z200	Atkid NCRP (N68°48′ E16°05′)	236	SKG VOR/DME	27		FL 245 8000	ODD EVEN
	SKG VOR/DME	188	Ardux NCRP (67°37′ E14°32′)	59			
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
	BDO VOR/DME	190	STM NDB	61			
	STM NDB	214	BNN VOR/DME	63			
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
	Larmo NCRP (63°28′ E09°38′)	175	Tobit CRP (N62°00′ E09°56′)	89		FL 245 FL 140	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
Z201	BDF VOR/DME	223	Lavna NCRP (N68°49′ E17°43′)	22		FL 245 8000	ODD EVEN
	NOTE: CDR1 - Blw FL 145: 1210-1340Z++, Sat, Sun and public holidays excluded.						
	Lavna NCRP	222	EVD VOR/DME	31			
	NOTE: CDR1 - 1210-1340Z++, Sat, Sun and public holidays excluded.						
	EVD VOR/DME	202	Evabo NCRP (N68°05′ E16°11′)	25			
	Evabo NCRP	201	Rosvi NCRP (N67°31′ E15°28′)	38			
	NOTE: Mon-Fri H24, public holidays excluded.						
	Balak NCRP (N66°51′ E14°33′)	205	STM NDB	39			
	NOTE: Below FL 115: Mon-Fri 0910-1040. Above FL 115: Mon-Fri H24, public holidays excluded.						
Z202	Lebdo NCRP	198	STT NDB	47		FL 245 8000	ODD EVEN
	STT NDB	198	STO VOR/DME	63			
	STO VOR/DME	208	Bulin NCRP (N65°19′ E11°35′)	44		FL 245 7000	
	NOTE: CDR1 - Below FL 115 1630-1730Z++. Above FL 115 0700-2200Z++. Fri after 1400Z++. Sat, Sun, and public holidays excluded.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Z203	SDA VOR/DME	278	SDA59 NCRP (N70°32′ E25°18′)	59		FL 245 8000	ODD EVEN
	SDA59 NCRP	278	SDA66 (N70°35′ E24°59′)	7			
	SDA66 NCRP	278	HMF VOR/DME	27			
	HMF VOR/DME	231	Bareg NCRP (N69°56′ E20°00′)	88			
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
	TRO VOR/DME	244	AND VOR/DME	65		FL 245 8000	ODD EVEN
	AND VOR/DME	205	AND32 NCRP (N68°49′ E15°24′)	32			
	AND32 NCRP	205	SKG VOR/DME	17			
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
Z300	Sorox CRP (N59°50′ E07°30′)	120	SKI VOR/DME	74		FL 245 FL 120	ODD EVEN
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UL727	FLO VOR/DME	122	Sopen CRP (N60°51′ E07°30′)	84		FL 660 FL 245	ODD EVEN
	Sopen CRP	123	TRF NDB	99			
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UL996	RBU NDB	177	Tombo CRP (N62°00′ E11°34′)	31		FL 660 FL 245	ODD EVEN
	Tombo CRP	177	Gotur CRP (N59°54′ E11°35′)	126			
	NOTE: CDR1 - RBU-Tombo; Mon-Fri H24, public holidays excluded. CDR1 - Tombo-Gotur; 0700-2200Z++. Sat, Sun and public holidays excluded.						
UM89	Aloti CRP (N57°54′ E03°36′)	49	ZOL VOR/DME	87		FL 660 FL 245	ODD EVEN
	NOTE: CDR1						
UM604	TRM VOR/DME	194	Tobit CRP (N62°00′ E09°56′)	96		FL 660 FL 245	ODD EVEN
	Tobit CRP	195	Osvig CRP (N61°04′ E09°24′)	58			
	Osvig CRP	195	SVA VOR/DME	186			
	NOTE: CDR1 - TRM-Tobit; Mon-Fri H24, public holidays excluded. CDR1 - Tobit-SVA; 0700-2200Z++. Sat, Sun and public holidays excluded.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM609	SJA NDB	206	EVD VOR/DME	49		FL 660	ODD
	EVD VOR/DME	212	BDO VOR/DME	90		FL 245	EVEN
	BDO VOR/DME	207	STO VOR/DME	91			
	STO VOR/DME	190	BNN VOR/DME	31			
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
	SVA VOR/DME	176	RASVI CRP (N57°17′ E08°25′)	48		FL 660 FL 245	ODD EVEN
	NOTE: Mon-Fri 2300-0600Z++ and Fri 1700-Mon 0600Z++. Public holidays excluded. Alternate Route UL621.						
UM857	Batsi CRP (N71°00′ E29°59′)	190	Rovan CRP (N69°48′ E28°32′)	78		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
UN150	Aneti CRP (N71°20′ E27°36′)	217	ATA VOR/DME	117		FL 660 FL 245	ODD EVEN
	ATA VOR/DME	207	GAPRO CRP (N69°10′ E21°48′)	59			
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
UP65	SDA VOR/DME	303	Barux NCRP (N71°17′ E24°38′)	94		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
UP80	Magir CRP (N71°20′ E26°21′)	223	HTK NDB	136		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
UP190	Varid CRP (N70°16′ E31°33′)	297	Toplo CRP (N71°20′ E27°21′)	105		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - FL 310, FL 350, FL 390 not planable E of Toplo. Mon-Fri H24, public holidays excluded.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UP600	Sovil CRP (N64°30′ E13°56′)	196	Beslo CRP (N64°04′E13°36′)	28		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
	Rigna CRP (N62°08′ E12°16′)	194	Torga NCRP (N62°00′ E12°10′)	9			
	NOTE: CDR1						
	Torga NCRP	194	GRM VOR/DME	113			
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UP601	Nirod CRP (N58°05′ E09°37′)	16	TOR VOR/DME	69		FL 660 FL 245	ODD
	NOTE: CDR1 - 1 Apr-30 Apr: 0800-1400Z++ and 1800-2200Z++. 1 May-31 Aug: 0800-1400Z++, 1 Sep-30 Sep: 0800-1400Z++ and 1800-2200Z++, 1 Oct-31 Mar: 0800-2200Z++. Sat, Sun and public holidays excluded.						
UP602	SKI VOR/DME	190	Lavko CRP (N57°48′ E09°03′)	85		FL 660 FL 245	EVEN
	NOTE: CDR1 2300-0600 and Fri 1700-Mon 0600Z++. Public holidays included. Alternate Route UT600.						
UP607	Somag CRP (N61°04′ E07°30′)	117	GRM VOR/DME	118		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UP608	VIG VOR/DME	112	Totko CRP (N62°00′ E08°56′)	88		FL 660 FL 245	ODD EVEN
	Totko CRP	114	Suvar CRP (N61°09′ E12°43′)	120			
UP614	ZOL VOR/DME	150	Solru CRP (N57°35′ E07°03′)	89		FL 660 FL 245	ODD EVEN
	Solru CRP	151	Ramud CRP (N57°03′ E07°36′)	37			
	NOTE: Mon-Fri 2300-0600 and Fri 1700-Mon 0600Z++. Public holidays excluded.						
UP615	Osvig CRP (N61°04′ E09°24′)	159	TRF NDB	74		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UP621	Soglo CRP (N59°31′ E07°30′)	150	Nerdo CRP (N57°53′ E09°14′)	112		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UP622	Solro CRP (N62°00′ E06°30′)	160	Sogra CRP (N60°45′ E07°30′)	80		FL 660 FL 245	ODD EVEN
	Sogra CRP	159	Retka CRP (N57°59′ E09°26′)	177			
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UP854	Norva CRP (N68°06′ E10°58′)	120	BDO VOR/DME	93		FL 660 FL 245	ODD EVEN
	BDO VOR/DME	136	Penax CRP (N66°38′ E15°41′)	49			
	NOTE: CDR1 - 0700-2200Z++. Fri after 1400Z++. Sat, Sun and public holidays excluded.						
UP855	Abada CRP (N64°16′ E05°18′)	106	TRM VOR/DME	155		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
UP990	Orvik CRP (N59°38′ E00°40)	117	Sorvi CRP (N57°53′ E07°30′)	238		FL 660 FL 245	ODD EVEN
	Sorvi CRP	120	Kovik CRP (N57°33′ E08°34′)	40			
	NOTE: Mon-Fri 2300-0600Z++ and Fri 1700-Mon 0600Z++. Public holidays excluded.						
UP992	ZOL VOR/DME	156	Soves CRP (N57°28′ E06°50′)	93		FL 660 FL 245	ODD EVEN
	Soves CRP	157	Linvi CRP (N57°00′ E07°13′)	31			
	NOTE: Mon-Fri 2300-0600 and Fri 1700-Mon 0600Z++. Public holidays excluded. Alternate Route ZOL-RIRUT-UP619.						
UT551	SKI VOR/DME	175	Binro CRP (N58°10′ E09°47′)	62		FL 660 FL 245	EVEN
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UZ11	TRM VOR/DME	220	Roxet CRP (N61°35′ E07°17′)	154		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
UZ12	Tondi CRP (N62°00′ E08°42′)	133	MES VOR/DME	78		FL 660 FL 245	ODD
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UZ13	Tuvig CRP (61°45′ E07°56′)	115	MES VOR/DME	87		FL 660 FL 245	ODD
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UZ14	Somes CRP (N61°24′ E07°30′)	101	MES VOR/DME	93		FL 660 FL 245	ODD
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ17	ZOL VOR/DME	81	Sosol CRP (N59°02′ E07°30′)	59		FL 660 FL 245	ODD EVEN
	Sosol CRP	81	SKI VOR/DME	65			
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UZ19	Danko CRP (N57°00′ E06°42′)	41	TOR VOR/DME	173		FL 660 FL 245	ODD
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UZ101	EVD VOR/DME	200	Giran CRP (N65°45′ E13°42′)	177		FL 660 FL 245	ODD EVEN
	Giran CRP	198	Nutko NCRP (N63°52′ E12°00′)	121			
	NOTE: Mon-Fri H24, public holidays excluded.						
UZ105	STO VOR/DME	220	VIG VOR/DME	265		FL 660 FL 245	ODD EVEN
	NOTE: Mon-Fri H24, public holidays excluded.						
UZ107	STO VOR/DME	215	KVB VOR/DME	209		FL 660 FL 245	ODD EVEN
	NOTE: Mon-Fri H24, public holidays excluded.						
UZ108	Nutko NCRP (N63°52′ E12°00′)	49	Sovil CRP (N64°30′ E13°56′)	64		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
UZ110	BDO VOR/DME	210	Xetso NCRP (N61°50′ E06°48′)	308		FL 660 FL 245	ODD EVEN
	NOTE: Mon-Fri H24, public holidays excluded.						
UZ112	BDO VOR/DME	205	Nidad NCRP (N61°54′ E08°10′)	360		FL 660 FL 245	ODD EVEN
	Nidad NCRP	204	Kesak NCRP (N61°09′ E07°30′)	48			
	Kesak NCRP	204	ZOL VOR/DME	148			
	NOTE: BDO-Nidad: Mon-Fri H24, public holidays excluded. Nidad-ZOL: 0700-2200Z++. Sat, Sun, public holidays excluded.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ200	SJA NDB	236	SKG VOR/DME	70		FL 660	ODD
	SKG VOR/DME	188	BDO VOR/DME	80		FL 245	EVEN
	BDO VOR/DME	190	STM NDB	61			
	STM NDB	214	BNN VOR/DME	63			
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
	UTH NDB	173	Tobit CRP (N62°00′ E09°56′)	104			
	NOTE: CDR1 - Mon-Fri H24. Sat, Sun and public holidays excluded.						
UZ201	BDF VOR/DME	223	EVD VOR/DME	54		FL 660	ODD
	EVD VOR/DME	202	FSK NDB	80		FL 245	EVEN
	FSK NDB	206	STM NDB	67			
	NOTE: CDR1 - BDF-EVD 1210-1340Z++ Sat, Sun and public holidays excluded. CDR1 - EVD-STM Mon-Fri H24, public holidays excluded.						
UZ202	Lebdo NCRP	198	STT NDB	47		FL 660 FL 245	ODD EVEN
	STT NDB		STO VOR/DME	63			
	STO VOR/DME	208	UTH NDB	154			
	NOTE: CDR1 - 0700-2200Z++. Fri after 1400Z++. Sat, Sun, and public holidays excluded.						
UZ203	SDA VOR/DME	278	HMF VOR/DME	93		FL 660	ODD
	HMF VOR/DME	231	TRO VOR/DME	113		FL 245	EVEN
	TRO VOR/DME	244	AND VOR/DME	65			
	AND VOR/DME	205	SKG VOR/DME	49			
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
UZ300	Sorox CRP (N59°50′ E07°30′)	121	SKI VOR/DME	74		FL 660 FL 245	ODD EVEN
	NOTE: CDR1 - 0700-2200Z++. Sat, Sun and public holidays excluded.						
UZ704	Kopin CRP (N57°15′ E07°59′)	32	TOR VOR/DME	136		FL 660 FL 245	ODD
	NOTE: 2300-0600Z++, Fri 1700-Mon 0600Z++. Public holidays included. Alternate route NIROD-UP601-TOR.						
UZ705	SKI VOR/DME	203	Kopin CRP (N57°15′ E07°59′)	127		FL 660 FL 245	EVEN
	NOTE: 2300-0600Z++, Fri 1700-Mon 0600Z++. Public holidays included. Alternate route SKI-UT600-TUGSU.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
TB1	MOS TACAN	214	ORL TACAN	153		UNL FL 195	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
	LST TACAN	161	Sotek CRP (N57°33′ E06°59′)	35		UNL FL 195	ODD EVEN
	Sotek CRP		Tekvo CRP (N57°00′ E07°20′)	35			
	NOTE: Mon-Fri 2300-0600 and Fri 1700-Mon 0600Z++. Public holidays excluded.						
TB1E	ORL TACAN	213	38ORL CRP (N61°45′ E06°58′)	137		UNL FL 195	ODD EVEN
	NOTE: CDR1 - Mon-Fri H24, public holidays excluded.						
TR10	BAR TACAN EVS TACAN BOO TACAN MOS TACAN	227 212 193 206	EVS TACAN BOO TACAN MOS TACAN Nemda CRP (N64°11′ E11°10′)	53 91 87 116		UNL FL 195	ODD EVEN
	NOTE: CDR1 - BAR-EVS 1210-1340Z++. Sat, Sun and public holidays excluded. CDR1 -EVS-Nemda Mon-Fri H24, public holidays excluded.						

TERMINAL

TERMINAL AREA PROCEDURES -

1. BARDUFOSS (ENDU) - On the LOC/DME to Runway 10 the approach lead-in lighting, which is approximately 2000′ in length, runs up and over a low ridgeline which crosses the final approach course. At MDA more than 5 miles from the runway threshold the innermost 1000′ (the lights between the ridgeline and runway threshold) may be obscured. In whiteout conditions this illusion may look like a low lying fog layer. A second illusion occurs at approximately 1/2 mile from the threshold. The rapid drop-off of the ridgeline towards the runway threshold gives the illusion that the runway is too short and that the aircraft is high on final.
(USAFE-DO/AFFSA)

2. GARDERMOEN (ENGM) - HELICOPTER LIMITATIONS - Parking, ground maneuvering, hovering, and hover taxiing with helicopters is permitted west of Runway 01L-19R only.
(SPEC/AD2 ENGM 1-10-12)

3. Stavenger Sola (ENZV) - Standard Instrument Arrivals (STARS) into Sola are based on P-RNAV. Aircraft/crew not equipped with P-RNAV in TMA, will be radar vectored to final. If no radar service is available, expect clearance to DVOR/DME ZOL to start approach from this facility.
(SPEC/AD2 ENZV 1-9)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

NORWEGIAN HOLIDAYS FOR 2006

NAME	DATE
New Years Day	01 Jan
Maundy Thursday	13 Apr
Good Friday	14 Apr
Easter Monday	17 Apr
Public Holiday	01 May
Constitution Day	17 May
Ascension Day	25 May
Whit Monday	05 Jun
Christmas Day	25 Dec
Boxing Day	26 Dec

OMAN

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes MUSCAT FIR.

DIMENSIONAL UNITS - Blue Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Same as Regional Procedures except AIREPS are required at the following ATS/MET reporting point: Marmul VOR (N18°09′ E55°11′).

(SPEC/GEN 3.5-1)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Oman has implemented ICAO Annex 11 airspace classification with the following exceptions:

1. Classifications B, D, E and G not yet implemented.

(SPEC/3-1.5)

INSTRUMENT FLIGHT RULES

1. Oman has implemented ICAO Annex 11 airspace classifications with the following exceptions:

a. Classifications B, D, E and G not yet implemented.

2. Required Navigation Performance (RNP5) in the Muscat FIR.

a. Aircraft planning to operate under FIR airspace at or above FL 290 are required to meet RNP5.

(SPEC/ENR 2.2-1)

b. If RNAV failure occurs within RNAV designated airspace, the pilot shall immediately inform ATC utilizing the phrase "Negative RNAV".

c. If as a result of failure of the RNAV system or its degradation below RNP5, an aircraft is prohibited from either entering the Muscat FIR airspace or continue operations. A revised clearance shall, whenever possible be obtained by the pilot.

(SPEC/GEN 1.5-1)

3. Requirement to carry Airborne Collision Avoidance System (ACAS II).

a. All turbine powered aircraft having a certified take off mass in excess of 33,069 lb or a maximum seating configuration of more than 30 are required to be equipped with a serviceable Airborne Collision Avoidance System (ACAS) in the Muscat FIR after 1 June 2001.

b. Additionally, all turbine powered aircraft having a maximum take off mass in excess of 12,566 lb but not more than 33,069 or a maximum approved seating configuration of more than 19 but not more than 30 are to be similarly equipped after 1 Jan 2005.

(SPEC/GEN 1.5-1)

RVSM RULES - The airspace within the Muscat FIR within controlled airspace between FL 290 and FL 410 inclusive, is RVSM airspace.

(SPEC/ENR 1-8)

FLIGHT PLANNING

SUPPLEMENTARY AIRPORT INFORMATION -

Seeb Intl (OOMS)

1. NOISE ABATEMENT

a. All aircraft departing Runway 26 and cleared via Airway B416 shall remain west of the MCT VOR Radial 295 until 15 DME, then direct SADIR CRP unless otherwise cleared by ATC.

(SPEC/NOTAM A0005-96)

2. RADIO FAILURE

a. Aircraft not equipped with a transponder: The RADAR controller will establish whether the aircraft radio receiver is working by instructing the pilot to perform a turn, maintain the new heading for a period of time (specified) and then resume normal navigation. The magnitude of the turn will be such as to enable the identification to be achieved should the aircraft not previously been identified. The direction of the turn will be determined by the operational requirements.

b. Aircraft equipped with a transponder: The RADAR controller will establish whether the aircraft radio receiver is working by instructing the pilot to perform one or more of the following:

(1) change transponder mode,

(2) change transponder code,

(3) change the SFI feature.

The method used will be as such to enable the identification to be achieved should the aircraft not previously have been identified.

c. Action by RADAR control:

(1) If subsequent movement of the RADAR echo or subsequent RADAR responses indicate the aircraft receiver is working, the RADAR controller will assume or resume RADAR control, as the case may be, and continue to pass instructions as for normal RADAR service.

(2) If subsequence of the RADAR echo or subsequence RADAR responses that the aircraft receiver is not working, the RADAR controller will take action according to the circumstance prevailing, as detailed in c) and d) below as appropriate.

(3) If, prior to the communication failure, the radio failure aircraft was identified, the RADAR controller will ensure all known traffic is provided with a minimum of 5 NM horizontal RADAR separation from the radio failure aircraft, performing identification as necessary, until such time the radio failure leaves RADAR coverage or lands.

(4) If, prior to the communication failure the radio failure aircraft was not identified or its position is not known, the RADAR controller will continue to provide RADAR service to the identified aircraft only, provided that primary RADAR coverage is sufficient or him to ensure a minimum of 5NM horizontal RADAR separation from all unknown traffic, until such time the radio failure aircraft is known to have left the area or landed.

d. Action by aircraft:

(1) Aircraft able to receive transmissions from RADAR control will comply with such instructions as are issued, acknowledging as indicated by the RADAR controller, as detailed in 2.3 a) above.

(2) Aircraft not able to receive transmissions will comply with the ICAO radio communication failure procedures as prescribed in the DOD Flight Information Handbook.

(NAVFIG/ENR 1.6-1)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. AIRWAY ROUTES

a. LOW ALTITUDE

A775 - Only available for traffic overflying into the Tehran FIR. Traffic not using the Tehran FIR shall route via SODEX-AUH.

A777 - Only for traffic departing northern UAE airports.

A791 - Eastbound only below FL 255.

B400 - Traffic landing OOMS shall use P316 from BOSEG.

B457 - Eastbound traffic over flying Emirates FIR and intending to exit the MUSCAT FIR at positions Denda, Alpor, Raski and Parar shall enter the MUSCAT FIR via TONVO P307.

B524 - Only for traffic departing Northern UAE airports.

B525 - Only for traffic departing Northern UAE airports.

B457 - Eastbound traffic over flying Emirates FIR and intending to exit the Muscat FIR at Denda, Alpor, Raski and Parar shall enter the Muscat FIR via Tonvo P307.

B540 - Route between TOTOX and KUPMA is for traffic landing at northern UAE airports and also for over flying aircraft below FL 265. This over flying traffic shall route via B540 - (Totox/Pasov/Kupma) to enter the UAE FIR. ATC may re-route traffic to TAPRA (M762) to facilitate the efficient flow of traffic into Northern UAE airports.

G652 - Raski not available for traffic exiting Muscat FIR via Etuko. Traffic intending to route to Etuko shall route via Parar UM628, Musru L306, Tulbu G652 Etuko. FL 280 available for traffic planned to Sana'a (OYSN via Etuko in the Muscat FIR on airways G652, UN569 and L883 then routing via UL675 and UA419 and FL 350 and FL 390 available for other traffic.

G787W - For traffic landing at Northern UAE airports or overflying the Northern UAE below FL 265. ATC may reroute traffic to TAPRA (M762) to facilitate the efficient flow of traffic into Northern UAE airports.

L301 - ATS routes Parar P899 AUH and Raski L301/P899 AUH only available for traffic over flying the MUSCAT FIR and landing at southern UAE airports, and Doha International Airport. All other traffic intending to over fly the Muscat FIR via Parar and Raski and entering the UAE FIR shall route via Parar N571 Mensa Avami, or Raski L301 Ragma N571 Mensa Avami. Westbound over flying traffic in the Muscat FIR via entry fixes Raski on L301 and Parar on N571 and intending to enter Tehran FIR via the Emirates FIR shall join P574/UP574 via Mensa Avami direct to Kumun.

L306 - Raski not available for traffic exiting Muscat FIR via Etuko. Traffic intending to route to Etuko shall route via Parar UM628 Musru L306 Tulbu G652 Etuko.

L764 - Route between MCT and Paxim for departing traffic from SEEB (OOMS) to Itrax.

M762 - For traffic landing at Northern UAE airports or overflying the Northern UAE below FL 265. ATC may re-route traffic to PASOV (B540) to facilitate the efficient flow of traffic into Northern UAE airports. Traffic will be required to cross fix TAPRA at FL 270 or below.

N563 - Traffic routing via Kital and Lotav for destinations in the southern UAE, Gulf destinations or to Europe and not entering Tehran FIR shall route via Emuru N563 Sodex.

N571 - Westbound over flying traffic in the Muscat FIR via entry fixes Raski on L301 and Parar on N571 and intending to enter Tehran FIR via the Emirates FIR shall join P574/UP574 via Mensa Avami direct to Kumun.

N629 - For traffic inbound from Northern UAE airports or from overhead SHJ VOR and landing SEEB only.

N767 - For traffic inbound to OOMS only.

P307 - Eastbound traffic over flying Emirates FIR and intending to exit the MUSCAT FIR at positions Denda, Alpor, Raski and Parar shall enter the MUSCAT FIR via TONVO P307.

P316 - Only for traffic landing OOMS.

P513 - Only for OMRK and OMFJ departures landing at OOMS or overflying via MIBSI.

P570 - Traffic intending to land or overfly Northern UAE airports below FL 265 shall use route M762 (ITURA/TAPRA/ VAXAS) to enter the UAE FIR.

P899 - ATS routes Parar P899 AUH and Raski L301/P899 AUH only available for traffic over flying the MUSCAT FIR and landing at southern UAE airports, and Doha International Airport. All other traffic intending to over fly the Muscat FIR via Parar and Raski and entering the UAE FIR shall route via Parar N571 Mensa Avami, or Raski L301 Ragma N571 Mensa Avami.

R219 - Btn Enada and SHJ available for westbound traffic from FL 255 to unlimited. Westbound traffic routing N571 to join A418/UP574 FIR shall FPL R219 SHT direct to Kumun.

R401 - Traffic landing OOMS shall use P316 from BOSEG.

R402 - Traffic landing OOMS shall use P316 from BOSEG.

T500 - Only for departing and arriving traffic OOMS.

T501 - Only for traffic departing OOMS.

T502 - Only for traffic departing OOMS.

T503 - Only for traffic departing OOMS.

T504 - Only for traffic departing OOMS.

T505 - Only for departing and arriving traffic OOMS.

T506 - Only for traffic departing OOMS.

T507 - Route between DAPOK and TAPRA is for traffic departing OOMS and landing at Northern UAE airports only. ATC may re-route traffic to PASOV (B540) to facilitate the efficient flow of traffic into Northern UAE airports.

T508 - Route between MCT DVOR and SOLUD is only for traffic departing Seeb Intl airport, over flying the Northern UAE and entering the Tehran FIR. Such traffic will be required to cross SOLUD at FL 280 and above. Departing traffic not over flying via the Tehran FIR is required to route via L764. Traffic departing OOMS and landing at Northern UAE airports shall route via T507 or T509 after DAPOK.

T509 - Route between DAPOK and PASOV is for traffic departing OOMS and landing at Northern UAE airports only. ATC may re-route traffic to TAPRA (M762) to facilitate the efficient flow of traffic into Northern UAE airports.

b. HIGH ALTITUDE

L883 - FL 280 available for traffic planned to Sana'a (OYSN) via Etuko in the Muscat FIR on airways G652, UN569 and L883 then routing via UL675 and UA419 and FL 350 and FL 390 available for other traffic.

UB424 - Aircraft intending to land OOMS shall use P316 from Boseg.

UB535 - Aircraft intending to land OOMS shall use route P316.

UB628 - Raski not available for traffic exiting Muscat FIR via Etuko. Traffic intending to route to Etuko shall route via Parar UM628 Musru L306 Tulbu G652 Etuko.

UN315 - Traffic landing OOMS shall use P316 from BOSEG. Within Muscat FIR at INDAM FL 320, FL 360, FL 400 available for westbound traffic.

UM628 - Traffic intending to route to Etuko shall route via Parar UM628, Musru L306, Tulbu G652.

UN315 - Not available in the Muscat FIR for traffic destinations OEJN or OEMA. FL 310 only available on UN315 between Haima and Imdam.

UN569 - FL 280 available for traffic planned to Sana'a (OYSN via Etuko in the Muscat FIR on airways G652, UN569 and L883 then routing via UL675 and UA419 and FL 350 and FL 390 available for other traffic. Within Muscat FIR at Etuko FL 300, FL 340, FL 380, FL 430 available for westbound traffic.

UP574 - Only available for traffic overflying into the Tehran FIR. Traffic not using the Tehran FIR shall route via Sodex to AUH. Traffic landing Northern UAE Airports shall use B540 only.

(SPEC/ENR 3.1-1 to 3.3-19)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS -

1. GENERAL - Large scale movements and concentration of birds occur during various months. Specific details available to date are as follows:

a. OMAN

(1) Large solitary predatory birds (eagles, vultures, etc) present a hazard to air navigation at all times on the coastal plain in the vicinity of Salalah and Seeb airport. Pilots are therefore advised to exercise extreme caution when approaching or departing Salalah or Seeb, particularly below 3000'. ATC will endeavour to keep pilots advised of bird concentrations, but single birds circling at any height are very difficult to observe from ATC.

(2) Pilot reports of the positions of bird concentrations are requested. These reports are very useful in planning a program to attempt a reduction of bird strike hazard. The presence of seasonal migratory bird concentrations will be reported by Class I NOTAM.

POLAND

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes WARSZAWA Flight Information Region which follows the country boundary of Poland.

(SPEC/ENR 2.1-1)

DIMENSIONAL UNITS - In accordance with ICAO Annex 5. Local Mean Time (LMT) shall be used in domestic air traffic other than controlled.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard except that the QNH altimeter setting is obligatory for flights at or below 6500' AMSL within uncontrolled airspace. Pressure is given in hPa and, on request, mm Hg.

(SPEC/ENR 1.7-1)

1. Transition level within uncontrolled airspace is FL 075.

a. If QNH is 978 hPa or less, then transition level within uncontrolled airspace will change to FL 080.

b. The actual value of QNH and the current transition level are given either in ATS instructions or in ATIS broadcasts.

c. For all Control Zones (CTLZ) and Terminal Control Areas (TMA) with Warszawa FIR, the transition altitude is 5000' (1500m) and transition level if FL 060.

NOTE: If QNH is 978 hPa or less, then transition level for all airports will be FL 070.

(SPEC/ENR 1.7-2)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

SECONDARY SURVEILLANCE RADAR - Unless the appropriate ATC unit cleared otherwise within control area of Warszawa FIR including Warszawa CTLZ, Gdansk CTLZ, and Krakow CTLZ, an aircraft is required to be equipped with SSR transponder operating in mode A and C.

NOTE: Not applicable within Szczzecin and Wroclaw TMA.

(SPEC/ENR 1.6-4)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Poland has implemented ICAO Annex 11 airspace classification.

MAXIMUM AIRSPEEDS - VFR flights between sunset and sunrise shall be operated with true airspeed not greater than 300 km/h.

(SPEC/ENR 1.2-2)

MINIMUM HEIGHTS FOR VFR OPERATIONS -

1. Except when necessary for takeoff and landing, or when an aircraft receives special permission from the civil aviation authority, a VFR flight shall not be flown:

a. Over the congested areas of cities, towns or settlements or over an open air assembly of persons at a height of less than 1000' above the highest obstacle within a radius of 2000' from the aircraft

b. elsewhere than as specified in a., at a height less than 500' above the ground or water

c. over the congested area of the capitol city of Warsaw below FL 070

d. over the areas of cities with a number of inhabitants between 25,000 and 100,000 at a height less than 1700' for helicopters and piston airplanes and 3300' for airplanes equipped with other engines

e. over the areas of cities with more than 100,000 inhabitants at a height of less than 5000'

f. over the National Parks of areas more than 2NM wide at a height of less than 3300' and of areas less than 2NM wide at a height less than 1000'

g. over other designated objects at a height less than 1000' for helicopters and piston engine airplanes and 3300' for airplanes equipped with other engines.

(SPEC/ENR 1.2-2)

INSTRUMENT FLIGHT RULES

FM IMMUNITY -

1. FM Immunity - With effect 1 January 2001 frequencies will not be protected against FM interference which are eliminated by filters complying with requirements of ICAO Annex 10. All consequences of interference suppressing radio equipment which do not comply with ICAO requirements will be the responsibility of their users. Operations of aircraft whose airborne receivers do not comply with FMI requirements, in particular state aircraft and aircraft not registered in Polish Civil aircraft state register, are to be conducted with conditions as follows:

a. Aircraft users are obliged to mark each VHF, ILS-LOC and VOR receiver not immune against interference in clear and visible way for crews.

b. VFR - Usage of radio equipment which do not comply with FMI requirements is allowed until further notice only aboard aircraft conducting VFR flights within uncontrolled airspace of FIR Warszawa.

c. ENROUTE - Operations for non-FMI state aircraft are allowed assuming the aircraft complies with RNP-5 requirements.

d. TERMINAL - Be aware of potential FMI hazards, especially when planning/choosing type of approach for landing procedure. Approach operations to the destination within FIR Warszawa are allowed without, repeat without using ILS and VOR facilities.

e. Aircrews are obliged to report to ATS units all cases of interference of VHF, ILS-LOC, and VOR radio equipment using the Post Flight Report published in AIP, Poland, Vol. 1, Chapter RAC 1-8-13 and is available at all ATS Reporting offices in Poland.

(TFMWGE/AIC 03/02)

RVSM RULES - Standard except: In addition to military operations, operators of customs or police aircraft shall insert the letter M in Item 8 of the ICAO Flight Plan Form.

(SPEC/ENR 1.3-1)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC -

For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Prior coordination must be obtained on a case-by-case basis for an aircraft equipped with E-TCAS to use the enhanced mode while flying in Polish airspace.

(HQ USAFE-DOV/USAF FIL 01-62)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. Entry and Exit points to/from Warszawa FIR - Planned route of an aircraft has to contain entry and exit points to/from Warszawa FIR. The following points are considered as valid entry/exit points:

a. ATC transfer points located on the boundary of Warszawa FIR, established either over radio beacons and/or reporting points (REP).

b. The airport of arrival or departure in case of intended landing/takeoff within Warszawa FIR.

(SPEC/ENR 1.3-1)

2. The planned route should be described in accordance with Doc 4444 (PANS ATM), Appendix 2, point 2.2 except in the following case:

a. Flights outside designated routes can be described as the sequence of segments defined by points, provided that:

(1) the distance between adjacent point does no exceed 50 NM

(2) the FIR boundary crossing point is defined as one of the REP points.

(SPEC/ENR 1.3-1)

3. VFR Flight Planning within Air Defense Identification Zone (ADIZ) - The pilot in command of an aircraft intending to operate domestic flight within the ADIZ is obliged to submit the flight plan in accordance with the provisions of ICAO Annex 2. The submitted flight plan shall contain RMK/ADIZ indicator in point 18 (Remarks).

NOTE: In case of VFR flight in Class G airspace, it is required to notify the appropriate FIS/SNRL center or the Air Operations Center just prior to takeoff via fone, C+48-22-688-8766.
(SPEC/ENR 1.10-4)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. Airways/Routes:

L619 - Westbound only, except for flights via MALBE.

M866 - Between JED and ARDAG available eastbound only for traffic.

a. arriving EPWA

b. via RUDKA

M984 - Closed from FL 245 eastbound.

M985 - Westbound available only for flights destined for LHCC FIR.

UL619 - Westbound only, except for flights via MALBE.

UM866 - Between JED and ARDAG available eastbound only for traffic.

a. arriving EPWA

b. via RUDKA

UM985 - Westbound available only for flights destined for LHCC FIR.

UP193 - FL285-FL365 not available between 0500Z-2000Z++.

2. Conditional Route Information

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			POLAND				
L29	Aluka CRP (N52°54′ E14°18′) Tadak NCRP	73	Tadak NCRP (N53°17′ E16°54′) GRU VOR/DME	97 69		FL 285 FL 195	ODD EVEN
	NOTE: CDR 1,2,3 at FL 195-FL 245						
L619	Ergon NCRP (N52°54′ E14°09′) Aluka CRP	92	Aluka CRP (N52°54′ E14°18′) DRE VOR/DME	5 56		FL 285 FL 95	ODD EVEN
	NOTE: CDR 1,2,3 at FL 95-FL 145						
L623	CZE VOR/DME Kuret NCRP Besto NCRP Barex NCRP	131	Kuret NCRP (N52°02′ E16°54′) Besto NCRP (N51°44′ E17°24′) Barex NCRP (N50°54′ E18°44′) Mysko NCRP (N50°32′ E19°17′)	9 26 71 30		FL 285 FL 95	ODD EVEN
	NOTE: CDR 1,2,3						
L730	Binka CRP (N53°46′ E14°17′)	112	Irget CRP (N53°40′ E14°37′)	13		FL 285 FL 95	ODD EVEN
	NOTE: CDR 1,2,3 at FL 95-FL 145						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
L980	SUI VOR/DME	98	Barep NCRP (N52°16′ E15°34′)	37		FL 285 / FL 95	ODD / EVEN
	Barep NCRP		Kelod NCRP (N52°14′ E15°53′)	12			
	NOTE: CDR 1,2,3 at FL 95-FL 135						
L981	CZE VOR/DME	120	Badno NCRP (N51°45′ E17°41′)	42		FL 285 / FL 195	ODD / EVEN
	Badno NCRP		Makov CRP (N51°09′ E19°07′)	65			
	Makov CRP		Rogal NCRP (N50°59′ E19°29′)	17			
	Rogal NCRP		Badex NCRP	29			
	Badex NCRP		JED VOR/DME	6			
	NOTE: CDR 1,2,3						
L999	Supak CRP (N49°18′ E19°48′)	37	Adoki NCRP (N49°58′ E20°39′)	50		FL 285 / FL 195	ODD
	Adoki NCRP		Xemol NCRP (N50°00′ E20°44′)	5			
	Xemol NCRP		Rilab CRP (N50°56′ E21°48′)	61			
	Rilab CRP		Tospo CRP (N52°01′ E23°40′)	103			
	NOTE: CDR 1,2,3 at FL 195-FL 245						
M857	Podan CRP (N49°25′ E21°26′)	06	Rilab CRP (N50°46′ E21°48′)	83		FL 285 / FL 195	ODD / EVEN
	Rilab CRP		SIE VOR/DME	85			
	NOTE: CDR 1,2,3 at FL 195-FL 245						
M977	Ebima NCRP (N53°18′ E22°56′)	174	Balba NCRP (N50°52′ E23°01′)	146		FL 285 / FL 195	ODD / EVEN
	Balba NCRP		Dibed CRP (N49°53′ E23°04′)	58			
	NOTE: CDR 1,2,3 to FL 195-FL 245						
M984	JED VOR/DME	50	Letki CRP (N52°11′ E23°24′)	150		FL 285 / FL 195	EVEN
	NOTE: CDR 1,2,3 at FL 195-FL 245						
N869	Mixat NCRP (N51°29′ E18°00′)	250	Gulpo NCRP (N51°42′ E19°08′)	44		FL 285 / FL 95	EVEN
	NOTE: CDR 1,2,3 at FL 95-FL 135						
N871	Ulpar NCRP (N52°33′ E21°01′)	32	SUW VOR/DME	113		FL 285 / FL 95	ODD / EVEN
	NOTE: CDR 1,2,3 at FL 95-FL 195						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
N983	Redfi CRP (N54°55′ E15°08′)	135	Elpol CRP (N54°36′ E15°38′)	25		FL 285 FL 195	ODD EVEN
	Elpol CRP		Mapex CRP (N53°42′ E17°00′)	72			
	Mapex CRP		Amuto NCRP (N52°20′ E18°57′)	109			
	Amuto NCRP		LDZ VOR/DME	42			
	LDZ VOR/DME	127	Dibed CRP (N49°53′ E23°04′)	173			
	NOTE: CDR 1,2,3 at FL 195-FL 245						
P150	Dodek CRP (N52°23′ E19°40′)	78	Amuto NCRP (N52°20′ E18°57′)	27		FL 285 FL 105	EVEN
	Amuto NCRP		Oboku NCRP (N52°15′ E18°00′)	35			
	Oboku NCRP		Dorem NCRP (N52°12′ E17°26′)	21			
	Dorem NCRP		CZE VOR/DME	26			
	NOTE: CDR 1,2,3 at FL 105-FL 165						
P851	Dodek NCRP (N52°23′ E19°40′)	96	Molil NCRP (N52°35′ E18°00′)	63		FL 285 FL 95	EVEN
	Molil NCRP		Idexu NCRP (N52°42′ E17°02′)	36			
	Idexu NCRP		DRE VOR/DME	44			
	NOTE: CDR 1,2,3 at FL 95-FL 245						
T708	Goven CRP (N52°04′ E14°45′)	295	Dimex NCRP (N51°38′ E16°08′)	57		FL 285 FL 95	EVEN
	Dimex NCRP		Sovam NCRP (N51°26′ E16°08′)	25			
	Sovam NCRP		TRZ VOR/DME	17			
	NOTE: CDR 1,2,3 at FL 95-FL 245						
	TRZ VOR/DME	108	Gomor NCRP (N51°11′ E17°37′)	21			ODD EVEN
	Gomor NCRP		Barex NCRP (N50°54′ E18°44′)	46			
	NOTE: CDR 1,2,3						
T710	SUI VOR/DME	122	Kuluv NCRP (N51°39′ E16°21′)	78		FL 285 FL 95	ODD EVEN
	Kuluv NCRP		Velab NCRP (N51°26′ E16°45′)	19			
	Velab NCRP		Budir NCRP (N51°23′ E16°57′)	9			
	Budir NCRP		TRZ VOR/DME	8			
	NOTE: CDR 1,2,3 at FL 95-FL 245						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
T711	Bulep NCRP (N52°46′ E22°25′) Veker CRP	242	Veker CRP (N52°25′ E21°12′) WAR VOR/DME	50 22		FL 285 FL 95	ODD EVEN
	NOTE: CDR1,2,3 at FL 95-FL 195						
	Subax NCRP (N51°52′ E19°08′)	244	Agara NCRP (N51°25′ E17°28′)	69			
	NOTE: CDR 1,2,3 at FL 95-FL 135						
Z95	GRU VOR/DME Bebal CRP	223	Bebal CRP (N53°16′ E18°20′) SL NDB	22 14		FL 245 FL 95	ODD EVEN
	NOTE: CDR 1,2,3 at FL 125-FL 245						
Z96	Somor NCRP (N53°14′ E19°21′) Lisku NCRP Bibka NCRP Nerek NCRP SL NDB Napad NCRP	258 268	Lisku NCRP (N53°13′ E19°12′) Bibka NCRP (N53°11′ E18°57′) Nerek NCRP (N53°09′ E18°28′) SL NDB Napad NCRP (N53°07′ E17°32′) Dekut NCRP (N53°07′ E17°02′)	5 9 18 15 19 18		FL 195 FL 95	ODD EVEN
	NOTE: CDR 1,2,3 at FL 125-FL 195						
Z491	Poken CRP (N54°49′ E14°34′)	145	Tilav NCRP (N54°25′ E15°00′)	29		FL 285 FL 95	ODD EVEN
	NOTE: CDR 1,2,3 at FL 95-FL 245						
UL23	GRU VOR/DME	091	Gorat NCRP (N53°10′ E23°53′)	185		FL 460 FL 295	ODD EVEN
	NOTE: CDR 1 from 0000-0600Z++.						
UL979	Kelod CRP (N52°14′ E15°53′)	068	Enobi CRP (N53°35′ E23°37′)	293		FL 460 FL 285	ODD
	NOTE: CDR 1						

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

POLAND HOLIDAYS
OFFICIAL HOLIDAYS (Names of holidays are not specified)

DATE
January 1
April 16, 17
May 1, 3
June 15
August 15
November 1, 11
December 25, 26

All Saturdays are additional off-work days for aviation personnel in Poland.

(SPEC/GEN 2.1-3)

PORTUGAL

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes LISBOA FIR/UIR, SANTA MARIA OCEANIC FIR, MADEIRA ISLAND, the AZORES, and RVSM AIRSPACE.

DIMENSIONAL UNITS - ICAO Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

1. USAF aircraft flying in the Santa Maria OCA between W20° and W30° (jets) and in addition W15°, W25° and W35° (non-jets) will report to Santa Maria Radio using abbreviated AIREP format. USAF aircraft flying between locations in North America and the Santa Maria TCA will report position crossing each five degrees longitude between W40° or N45° and Santa Maria TCA (non-jets) or each ten degrees longitude between W40° or N45° and Santa Maria TCA (jets). Aircraft flying between the Santa Maria TCA and locations in Europe and Africa will report at the TCA boundary, W20°, W15°, crossing N45° or any other boundary (flights to Africa). High performance aircraft do not need to request permission to report each ten degrees longitude, however, intervals between position must not exceed one hour. Recommend that all inbound aircraft list Santa Maria OCA as an addressee on last position prior to crossing the Santa Maria OCA boundary at W40°, N45°, or any position before entering Santa Maria FIR to insure altitude clearance approval.

2. Position reporting to Santa Maria ACC at OCA boundary is mandatory for all aircraft entering or leaving Santa Maria OCA.

(SPEC/ATCLO SPAIN/USAF FIL 02-101)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. Portugal and Santa Maria Oceanic FIR has implemented the ICAO Annex 11 airspace classification with the following exceptions:

   a. Classes B, D, E and F not yet implemented.

(SPEC/RAC 1-1-6)

INSTRUMENT FLIGHT RULES

FM IMMUNITY - All operators are informed that in the airspace controlled by the Portuguese authorities the need to comply with the FM interference immunity requirements for VHF communications and VHF radio navigation receivers (ILS and VOR) as stated in ICAO Annex 10 has become effective from 01 March 2002 onward. The only exemption from this rule is State aircraft for which the new deadline for compliance with these immunity requirements is set on 31 December 2005.

(SPEC/TFMWG-E/USA 05-0047)

RVSM RULES - The airspace within the Lisboa FIR/UIR between FL 290 and FL 410 inclusive is EUR RVSM airspace.

(SPEC/CIV AIP ENR 1.1-1)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC - For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS will operate in the standard TCAS II mode and will not use the enhanced mode when flying in Portuguese airspace.

(HQ USAFE-DOV/USAF FIL 01-62)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. Flight plans for IFR/GAT flights departing an airport within Lisboa and Santa Maria FIR should be submitted directly to the IFPS by the aircraft operators. If unable to submit flight messages directly to IFPS, aircraft operators should submit the flight plans to the ATS Reporting Office (ARO) of the departure airport.

   a. If no ARO exists at the departure airport, flight plans should be submitted to any existing ARO as follows:

      (1) Within the Lisboa FIR to Lisboa (LPPT), Porto (LPPR), Faro (LPFR) or Madeira (LPMA) ARO.

      (2) Within the Santa Maria FIR to Ponta Delgada ARO (LPPDZPZX) during operating hours. After operating hours, flight plans concerning Santa Maria FIR should be addressed to Lisboa (LPPT) ARO (LPPTZPZX).

2. Intermediate flight plans departing any airport within Lisboa and Santa Maria FIR should be addressed only IFPS by recipient ARO.

(SPEC/RAC 1-1-5)

3. All aircraft intending to fly according to VFR within Lisboa FIR controlled airspace shall submit a flight plan prior to departure, in person or by telephone or FAX to ARO at the departure airport. If no ARO exists at the departure airport, the flight plan should be submitted by telephone, FAX or teletypewriter to any existing ARO. The submission of a flight plan in flight shall be transmitted over the General Purpose frequency 127.9 MHz. Intermediate flight plans departing any aerodrome within Lisboa FIR should be readdressed to the appropriate ATS units by recipient ARO.

(SPEC/RAC 1-1-6)

4. All flight data concerning military aircraft flying from, to, or overflying Portugal (Mainland) must be addressed to LPAMYWYD, MIL INFO Center and also to LPPTYWYA and LPAMYWYA.

(SPEC/RAC 1-1-5)

5. All operators intending to enter or overfly Lisboa FIR/UIR are requested to indicate on flight plan the accumulated elapsed time to LPPC boundary.

(SPEC/RAC 1-1-2)

6. In order for any flight to cross LISBOA/SANTA MARIA or LISBOA/MADRID affected boundaries in any direction, one of the new five letter name codes shall be included in the flight plan. Flights with routes out or between the new points are not allowed.

a. New five letter name codes along the LISBOA/SANTA MARIA boundary:

(1) ARMED (N42°30′ W14°00′)

(2) BANAL (N42°00′ W15°00′)

(3) DETOX (N41°00′ W15°00)

(4) ERPES (N40°00′ W15°00′)

(5) GUNTI (N39°00′ W15°00)

(6) KOMUT (N38°00′ W15°00′)

(7) LUTAK (N37°00′ W15°00′)

(8) MANOX (N36°12′ W15°23′)

(9) NAVIX (N35°31′ W16°14′)

(10) IRKID (N33°55′ W18°04′)

(11) ODAXO (N32°10′ W18°00′)

b. New five letter name codes along the LISBOA/MADRID boundary:

(1) RIPEL (N42°17′ W10°49′)

(2) XERES (N42°01′ W10°04′)

c. New five letter name code for turn point south of SAGRES:

(1) SONAP (N36°30′ W10°00′)

(SPEC/RAC 3-1-1)

7. For east or westbound flights to cross LISBOA FIR/UIR boundary south of SAGRES, the SONAP turning point shall additionally be included in the flight plan.

8. For north or southbound flights along 10°W via ORTOP, must also include in their flight plan the SONAP turning point as well as XERES as ENTERING/EXIT point.

(SPEC/RAC 3-2-2.1)

ROUTE AND AREA RESTRICTIONS -

1. SSR REQUIREMENTS IN THE LISBOA FIR/UIR

a. Aircraft flying IFR in the Lisboa UIR must be equipped with a transponder capable of transmitting 4096 codes-Modes A and C.

b. Aircraft flying IFR in the Lisboa FIR must be equipped with a transponder capable of transmitting 4096 codes-Mode A.

c. Aircraft not equipped with a transponder or with only 64 codes must fly VFR.

d. Aircraft that are transponder equipped shall squawk 7000 when flying VFR outside controlled airspace and within SSR coverage.

e. Aircraft about to enter Lisboa FIR/UIR that have not received code settings from ATC shall maintain the last assigned code or, if coming from an area without SSR coverage, Mode A, code 2000.

(SPEC/RAC 1-2-3)

SUPPLEMENTARY AIRPORT INFORMATION -

Lajes (LPLA)

1. CAUTION -

a. BIRD ALERT – Numerous birds on and in vicinity of airfield throughout the year. Expect increased activity during Phases II (31 March-1 August). Gulls, pigeons and doves account for over 90% of bird strikes. Sparrows, starlings, and terns are also on and around the airfield. Bird Watch Condition Codes are:

(1) LOW - Normal bird activity on and above the airfield with a low probability of hazard.

(2) MODERATE - Concentrations of birds observable in locations, which represent a probable hazard to safe flying operations. This advisory requires all agencies to exercise increased vigilance and aircrews to exercise extreme caution.

(3) SEVERE - Heavy concentration of birds on or immediately above the active runway or other specific locations that represent an immediate hazard to safe flying operations. Aircrews must thoroughly evaluate mission need before operating in areas under condition SEVERE.

b. The following direction is provided to aircrew operating in the Lajes terminal area based on existing bird watch condition code:

(1) LOW: Continue with normal operation procedure.

(2) MODERATE: Consider limited touch and go landing and low approach to the minimum number required for training.

(3) SEVERE: Consider only full stop landing, delayed takeoff and landing, prohibited formation takeoff, and/or diverting aircraft.

c. CATTLE - Cattle grazing northeast of the airfield. Grassy areas surrounding taxiway India east of Juliet intersection are identified cow grazing areas.

d. BALING - Expect increased grass height during summer months (1 June-1 September) due to host nation baling operations.

(SPEC/USAF FIL NR 05)

2. RUNWAY SKIDDING/HYDROPLANING -

a. The Runway 15/33 surface combined with a light rubber accumulation produces a low friction pavement surface. The potential for skidding/hydroplaning exists when the runway is wet, flooded, damp, or when water patches are present. The potential is increased at the Runway 33 touchdown area.

b. Runway friction levels fall below maintenance planning guidelines for the runway surface.

c. Runway may pond or hold excess water during periods of moderate to heavy rainfall. Therefore, pilots should exercise extreme caution when landing. Maintain adequate tire tread depth to minimize possible skidding/hydroplaning.

(SPEC/USAF FIL 06-257)

Lisboa (LPPT)

1. AIRCRAFT AND HELICOPTERS INBOUND TO MILITARY RAMP OF LISBOA AIRPORT (FIGO MADURO-TRANSIT AD NR 1)

a. All aircraft authorized to use the military ramp (apron CHARLIE in Lisboa Airport) must contact military Base Operations (24 Hours), at least twenty minutes in advance to land, in order to:

(1) Provide ETA and intentions.

(2) Receive, when applicable, parking information.

b. The contact will be done on VHF 141.0 MHz or UHF 370.0 MHz frequencies, call sign Alpha Tango One.

c. All parking on Apron "C" must follow military signalmen instructions.

d. After parking, the pilot must proceed to Base Operations, building identified with a "C", for further instructions.

e. When so requested, NOTAM services and weather briefing will be available by at least one hour prior to ETD.

f. Base Transportation and accommodations not available.

g. Flight Plans

(1) Due to IFPS system, flight plans will be submitted to Base Operations at least three hours prior to ETD.

(2) Flight plans submitted via radio are not authorized.

(3) Due to heavy flow of air traffic outbound Portugal and possible slots, it is strongly recommended that inbound and outbound flight plans, for the same date, be submitted at Departure Airport/Base.

(4) All flight plans must include as an additional address "LPPTYXYA".

(5) Flight plan and slot status must be checked prior to engine start in the event of ten minutes (or more) delay for a given slot or ETD, a reviewed slot should be requested via Base Operations.

(SPEC/PO AIC 06-99)

Monte Real (LPMR)

1. NOISE ABATEMENT:

a. Periods: Sat, Sun, hol and daily SS-SR.

b. Procedures: Arrivals (VFR and IFR): Straight-in or instrument apch for full stop landing. Training instrument apch: Max two apch by acft and/or formation.

(SPEC/MIL AGA 2-10-4)

ENROUTE

ROUTE AND AREA RESTRICTIONS - Santa Maria Oceanic FIR

Unless otherwise directed by ATC, aircraft in the NAT FIR shall operate SSR transponders on mode A code 2000 except that last assigned code shall be used for 30 minutes after entering NAT airspace.

(SPEC/RAC 1-1-4B)

PREFERRED ROUTES - Santa Maria Oceanic FIR

1. Overflights of Santa Maria TCA will be in accordance with the following:

a. Flights above FL 155 shall follow

(1) A Great Circle course between the points W20 and W30, or:

(2) A Great Circle course between the points W20 and FRS VOR/DME, or;

(3) A Great Circle course between points W20 and W30 and one of the following NAVAIDS: VMG VORTAC, VFL VORTAC or VSM VOR/DME.

b. Flights below FL 155 shall flight plan in accordance with ATS routes.

(SPEC/ENR 2.2-6)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			PORTUGAL				
A44	Busen CRP (38°33'N 10°00'W)	105 286	Espichel DVORTAC	39		FL 195 FL 105	ODD EVEN
	Espichel DVORTAC	111 292	Gaios NCRP (N38°17' W08°33')	32			
	Gaios NCRP	112 292	Beja VORTAC	30			
	Beja VORTAC	104 284	Alagu NCRP (N38°05' W07°37')	15			
	Alagu NCRP	104 285	Rosal CRP (N38°01' W07°06')	25			
	REMARKS: Gaios NCRP/Rosal CRP segment alternate route on ATC instructions. Route maximum extend 4 NM. NOTE: CDR1						
B47	Rivro CRP (N40°37' W06°43')	281 101	Viseu DVOR/DME	53		FL 195 FL 105	ODD EVEN
	Viseu DVOR/DME	281 100	Dirma CRP (N40°51' W09°30')	74			
	REMARKS: Alternate: (NVS/ZMR)Adoro/Canar/PRT/Dirma NOTE: CDR1						
G41	Canar NCRP (N41°23' W07°28')	210 030	Viseu DVOR/DME	44		FL 195 FL 095	ODD EVEN
	Viseu DVOR/DME	209 029	Fatima DVOR/DME	69			
	REMARKS: Canar NCRP/Viseu DVOR/DME segment alternate route on ATC instructions. Route maximum extend 2 NM. NOTE: CDR1						
R72	Narbo CRP (N42°08' W08°14')	174 354	Viseu DVOR/DME	86		FL 195 FL 105	ODD EVEN
	Viseu DVOR/DME	186 005	Nisa DVORTAC	69			
	Nisa DVORTAC	187 007	Olgar NCRP (N39°11' W07°56')	23			
	Olgar NCRP	181 001	Tagux NCRP (N38°57' W07°55')	14			
	Tagux NCRP	185 005	Evura NCRP (N38°40' W07°55')	17			
	Evura NCRP		Beja VORTAC	32			
	Beja VORTAC	186 006	Elduk NCRP (N37°49' W07°56')	19			
	Elduk NCRP		Xapas NCRP (N37°36'N W07°57')	13			
	Xapas NCRP		Faro DVOR/DME	35			
	Faro DVOR/DME	180 360	Amsel CRP (N35°58' W07°53')	63			
	REMARKS: Tagux NCRP/Xapas NCRP segment alternate route on ATC instructions. Route maximum extend 10 NM. NOTE: CDR1						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
W7	Faro DVOR/DME	176	Sotex NCRP	78		FL 195	EVEN
		356	(N38°18′ W08°13′)			FL 105	ODD
	Sotex NCRP	175	Magum NCRP	53			
		355	(N39°10′ W08°24′)				
	Magum NCRP	176	Fatima DVOR/DME	30			
		355					
	REMARKS: Magum NCRP/Faro DVOR/DME segment alternate route on ATC instructions. Route maximum extend 3 NM. NOTE: CDR1						
W13	Alagu NCRP	199	Marim NCRP	42		FL 195	ODD
	(N38°05′ W07°37′)	019	(N37°25′ W07°50′)			FL 105	EVEN
	Marim NCRP		Faro DVOR/DME	25			
	Faro DVOR/DME	222	Akuda CRP	78			
		041	(N35°58′ W08°57′)				
	REMARKS: Marim NCRP/Alagu NCRP segment alternate route on ATC instructions. Route maximum extend 9 NM. NOTE: CDR1						
Z222	Alagu NCRP	184	Ertis NCRP	40		FL 195	ODD
	(N38°05′ W07°37′)		(N37°25′ W07°37′)			FL 105	
	REMARKS: Alternate route on ATC instructions. Route maximum extend 2 NM. NOTE: CDR1						
UM191	Rivro CRP	281	Viseu DVOR/DME	53		FL 245	ODD
	(N40°37′ W06°43′)	101				FL 195	EVEN
	Viseu DVOR/DME	281	Dirma CRP	74			
		100	(N40°51′ W09°30′)				
	REMARKS: Alternate: (NVS/ZMR)Adoro/Canar/PRT/Dirma. NOTE: CDR1						
UM744	Busen CRP	105	Espichel DVORTAC	39		FL 250	ODD
	(N38°33′ W10°00′)	286				FL 195	EVEN
	Espichel DVORTAC	111	Beja VORTAC	62			
		292					
	Beja VORTAC	104	Alagu NCRP	15			
		284	(N38°05′ W07°37′)				
	Alagu NCRP	104	Rosal CRP	25			
		285	(N38°01′ W07°06′)				
	REMARKS: ESP DVORTAC/Rosal CRP segment alternate route on ATC instructions. Route maximum extend 4 NM. NOTE: CDR1						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN726	Narbo CRP (N42°08′ W08°14′)	181	Pesul NCRP (N40°53′ W08°07′)	76		FL 250 FL 195	ODD
	Pesul NCRP	179	Abeto NCRP (N40°26′ W08°03′)	27			
	Abeto NCRP	180	Digal NCRP (N39°44′ W07°59′)	40			
	Digal NCRP	181	Tagux NCRP (N38°57′ W07°55′)	49			
	Tagux NCRP	185	Evura NCRP (N38°40′ W07°55′)	17			
	Evura NCRP	185 005	Beja VORTAC	32			ODD EVEN
	Beja VORTAC	186 006	Elduk NCRP (N37°49′ W07°56′)	19			
	Elduk NCRP		Faro DVOR/DME	48			
	Faro DVOR/DME	158 339	Ortop CRP (N36°01′ W07°00′)	66			
	REMARKS: Faro DVOR/DME-Evura NCRP segment alternate route on ATC instructions. Route maximum extend 4 NM. NOTE: CDR1						
UN728	Demos CRP (N41°56′ W09°22′)	216	Ibido NCRP (N40°53′ W10°11′)	73		UNLTD FL 195	ODD
	Ibido NCRP	215	Tunav NCRP (N39°19′ W11°22′)	109			
	Tunav NCRP	216	Vabem NCRP (N36°33′ W13°19′)	189			
	Vabem NCRP		Galpa NCRP (N34°24′ W14°44′)	146			
	Galpa NCRP	215	Ortis CRP (N31°24′ W16°33′)	201			
	REMARKS: Ibido NCRP/Tunav NCRP segment alternate route on ATC instructions. Route maximum extend 2 NM. NOTE: CDR1						
UN729	Bimbo CRP (N31°25′ W16°02′)	034	Nasas NCRP (N36°20′ W12°58′)	331		UNLTD FL 195	EVEN
	Nasas NCRP		Lamdi NCRP (N39°12′ W10°58′)	197			
	Lamdi NCRP	036	Agado CRP (N41°52′ W08°56′)	185			
	REMARKS: Lamdi NCRP/Agado CRP alternate route on ATC instructions. Route maximum extend 6 NM. NOTE: CDR1						
UN870	Busen CRP (N38°33′ W10°00′)	067	Lisboa DVOR	44		FL 245 FL 195	EVEN
	Lisboa DVOR	070	Magum NCRP (N39°10′ W08°24′)	40			
	Magum NCRP	067	Momas NCRP (N39°19′ W08°01′)	20			
	Momas NCRP	071	Porli CRP (N39°32′ W07°22′)	33			
	Porli CRP	070	Rodap CRP (N39°38′ W07°04′)	15			
	Rodap CRP		Rakod CRP (N39°47′ W06°38′)	22			
	REMARKS: Busen CRP/Magum NCRP segment alternate route on ATC instructions. Route maximum extend 3 NM. NOTE: CDR1						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN872	Ralus CRP	211	Canar NCRP	37		FL 245	ODD
	(N41°56′ W07°07′)		(N41°23′ W07°28′)			FL 195	
	Canar NCRP	210	Viseu DVOR/DME	44			
	Viseu DVOR/DME	209	Abeto NCRP	19			
			(N40°26′ W08°03′)				
	Abeto NCRP	208	Fatima DVOR/DME	50			
	Fatima DVOR/DME	209	Espichel DVORTAC	81			
	Espichel DVORTAC	222	Ligra NCRP	32			ODD
		042	(N38°00′ 11°27′)				EVEN
	Ligra NCRP	222	Bexal CRP	151			
		041	(N35°58′ W11°27′)				
	REMARKS: Canar NCRP-Viseu DVOR/DME segment alternate route on ATC instructions. Route maximum extend 5 NM. NOTE: CDR1						
UN873	Barok CRP	036	Sunes NCRP	94		FL 460	EVEN
	(N35°58′ W10°01′)	216	(N37°18′ W09°00′)			FL 195	ODD
	Sunes NCRP	036	Sotex NCRP	70			
		217	(N38°18′ W08°13′)				
	Sotex NCRP	037	Evura NCRP	26			
		217	(N38°40′ W07°55′)				
	Evura NCRP	040	Birba NCRP	33			
		220	(N39°06′ W07°31′)				
	Birba NCRP	040	Porta CRP	17			
			(N39°20′ W07°18′)				
	Porta CRP	035	Rodap CRP	21			EVEN
			(N39°38′ W07°04′)				
	Rodap CRP		Babov CRP	17			
			(N39°53′ W06°52′)				
	REMARKS: Segment Barok/Birba alternate route on ATC instructions. Route maximum extend 5 NM. NOTE: CDR1						
UN976	Ninos CRP	254	Babex NCRP	15		FL 245	ODD
	(N41°08′ W06°47′)		(N41°02′ W07°05′)			FL 195	
	Babex NCRP	247	Viseu DVOR/DME	41			
	REMARKS: Ninos CRP-Viseu DVOR/DME alternate route on ATC instructions. Route maximum extend 10 NM. NOTE: CDR1						
UN979	Alagu NCRP	019	Elvar CRP	70		FL 250	EVEN
	(N38°05′ W07°36′)	199	(N39°13′ W07°13′)			FL 195	ODD
	Elvar CRP	021	Rodap CRP	26			EVEN
			(N39°38′ W07°04′)				
	REMARKS: Alagu NCRP/Elvar CRP segment alternate route on ATC instructions. Route maximum extend 5 NM. NOTE: CDR1						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UP600	Amsel CRP	360	Faro DVOR/DME	63		FL 460	EVEN
	(N35°58′ W07°53′)	180				FL 195	ODD
	Faro DVOR/DME	356	Sotex NCRP	78			EVEN
			(N38°18′ W08°13′)				
	Sotex NCRP		Magum NCRP	53			
			(N39°10′ W08°24′)				
	Magum NCRP	355	Fatima DVOR/DME	30			
	Fatima DVOR/DME	360	Porto DVOR/DME	97			
		180					
	Porto DVOR/DME	012	Turon CRP	48			EVEN
		192	(N42°04′ W08°34′)				ODD
	REMARKS: Faro DVOR/DME-Magum NCRP segment alternate route on ATC instructions. Route maximum extend 6 NM. NOTE: CDR1						
UZ1	Digal NCRP	154	Birba NCRP	44		FL 250	ODD
	(N39°44′ W07°59′)		(N39°06′ W07°37′)			FL 195	
	Birba NCRP	189	Alagu NCRP	61			
			(N38°05′ W07°37′)				
	Alagu NCRP	199	Faro DVOR/DME	67			ODD
		019					EVEN
	Faro DVOR/DME	041	Akuda CRP	79			EVEN
			(N35°58′ W08°57′)				
	REMARKS: Birba NCRP-Faro DVOR/DME segment alternate route on ATC instructions. Route maximum extend 4 NM. NOTE: CDR1						
UZ4	Espichel DVORTAC	200	Nakos NCRP	26		UNLTD	ODD
		020	(N38°00′ W09°20′)			FL 195	EVEN
	Nakos NCRP		Barok CRP	126			
			(N35°58′ W10°01′)				
	REMARKS: Alternate route on ATC instructions. Route maximum extend 2 NM. NOTE: CDR1						
UZ6	Beja VORTAC	031	Elvar CRP	73		FL 250	EVEN
			(N39°13′ W07°13′)			FL 195	
	REMARKS: Alternate route on ATC instructions. Route maximum extend 4 NM. NOTE: CDR1						
UZ9	Ralus CRP	224	Orsos NCRP	226		FL 460	ODD
	(N41°56′ W07°07′)		(N39°00′ W10°13′)			FL 330	
	REMARKS: Monday-Friday 1730-0845Z++; Weekend and holidays H24. Ralus CRP/Orsos NCRP segment alternate route on ATC instructions. Route maximum extend 4 NM. NOTE: CDR 1						
UZ15	Babex NCRP	186	Pinox NCRP	44		FL 245	ODD
	(N41°02′ W07°05′)		(N40°17′ W07°07′)			FL 195	
	Pinox NCRP	199	Porli CRP	48			
			(N39°32′ W07°22′)				
	Porli CRP		Birba NCRP	26			
			(N39°06′ W07°31′)				
	Birba NCRP	203	Beja VORTAC	62			
	REMARKS: Babex NCRP/Pinox NCRP segment CDR1 FL 250/FL 195. Birba NCRP/Beja VORTAC segment alternate route on ATC instructions. Route maximum extend 9 NM. NOTE: CDR1						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UZ23	Dirma CRP (N40°51′ W09°30′) Vedel CRP Pigor CRP	255 073 253 072 249 069	Vedel CRP (N39°51′ W12°40′) Pigor CRP (N39°28′ W13°49′) Gunti CRP (N39°00′ W15°00′)	157 58 62		UNLTD FL 350	ODD EVEN
	REMARKS: Dirma CRP/Vedel CRP segment alternate route on ATC instructions. Route maximum extend 4 NM. NOTE: CDR1						
UZ25	Dirma CRP (N40°51′ W09°30′) Sopop NCRP	266 084 264 083	Sopop NCRP (N40°26′ W12°23′) Erpes CRP (N40°00′ W15°00′)	134 123		UNLTD FL 350	ODD EVEN
	REMARKS: Dirma CRP/Sopop NCRP segment alternate route on ATC instructions. Route maximum extend 4 NM. NOTE: CDR1						
UZ218	Mosen CRP (N41°47′ W06°34′) Babex NCRP Digal NCRP Magum NCRP Ateca NCRP	211 213 214 204 208	Babex NCRP (N41°02′ W07°05′) Digal NCRP (N39°44′ W07°59′) Magum NCRP (N39°10′ W08°24′) Ateca NCRP (N38°39′ W08°37′) Barok CRP (N35°58′ W10°01′)	51 88 39 32 175		FL 460 FL 195	ODD
	REMARKS: CDR1 FL 460/FL 195; Mosen CRP/Digal NCRP segment alternate route on ATC instructions. Route maximum extend 4 NM. CDR1 FL 500/FL 195; Ateca NCRP/Barok CRP segment alternate route on ATC instructions. Route maximum extend 5 NM. NOTE: CDR1						
UZ222	Alagu NCRP (N38°05′ W07°37′)	184	Ertis NCRP (N37°25′ W07°37′)	40		FL 250 FL 195	ODD
	REMARKS: Alternate route on ATC instructions. Route maximum extend 2 NM. NOTE: CDR1						
UZ223	Bexal CRP (N35°58′ W11°27′)	053 233	Sotex NCRP (N38°18′ W08°13′)	208		UNLTD FL 195	EVEN ODD
	REMARKS: Alternate route on ATC instructions. Route maximum extend 2 NM. NOTE: CDR1						

AERIAL REFUELING

AERIAL REFUELING TRACKS/ANCHOR AREAS - See Chapter 2, Section B, AERIAL REFUELING TRACKS/ANCHOR AREAS for Chart.

AREA	ARIP	ARCP/ ANCHOR	AR FREQ	AR BLOCK	AR ALT	ATC CONTROL
PORTUGAL						
AR95	NOT DEFINED	Eastbound: N44°00′ W20°00′ Westbound: N44°00′ W15°00′	As Assigned	As Requested Below FL 270	As Requested Within AR Block	SANTA MARIA

TRACK AREA: N44°00′ W22°00′, N44°00′ W20°00′, N44°00′ W15°00′, N44°00′ W13°00′
NOTE 1: The use of any air-refueling track within Santa Maria Oceanic's AOR must be approved by EUCARF in the form of an Altitude Reservation. Submit all requests 5 duty days in advance. To use this airspace for contingency operations, contact EUCARF for information.
NOTE 2: All missions, to include changes and delays, must be approved by EUCARF prior to aircraft departure.
(SPEC/EUCARF/SANTA MARIA LOA 6-1-99)

LPD47	MTR 243/52	MTR 310/35	339.85 284.575	150/230	200	MONTE REAL APP 140.0

TRACK AREA: LPD47 - N40°23′ W09°22′, N39°21′ W09°47′, N39°21′ W10°19′, N40°23′ W09°52′ to beginning.
(SPEC/MILAIP RAC 3-2-21)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

PORTUGUESE HOLIDAYS

NAME	DATE
New Year's Day	January 01
Good Friday	April 14
Easter	April 16
Liberation Day	April 25
Labor Day	May 01
National Day	June 10
Corpus Christi	June 15
Assumption	August 15
Day of Republic	October 05
All Saints Day	November 01
Day of the Independence Restoration	December 01
Immaculate Conception	December 08
Christmas Day	December 25

(SPEC/CIV AIP GEN 2.1-2)

QATAR

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -
This entry includes the BAHRAIN FIR. See Bahrain.

REPUBLIC OF YEMEN

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -
Includes the entire territory of the REPUBLIC OF YEMEN as well as the airspace over the high seas encompassed by the SANAA FIR.

DIMENSIONAL UNITS -
Blue Table except altimeter setting given in hectopascals.

ALTIMETER SETTING PROCEDURES -
Same as Regional Procedures.

VERTICAL SEPARATION -
Semicircular.

POSITION REPORTING -

1. Aircraft may overfly Yemeni territory, only along ATS routes. They shall contact SANAA FIR at least 10 minutes prior to entering the ACC/FIC. If unable, proceed as follows:

a. Aircraft entering the FIR from the East contact Riyan Tower.

b. Aircraft entering from the South contact Aden Approach.

c. Aircraft entering from the West contact Hodeidah Tower.

2. Regardless of point of entry into the SANAA FIR, aircraft must report:

a. Aircraft Ident

b. ETA at FIR boundary

c. Flight level and route

d. ETA at point of leaving SANAA FIR (or ETA if landing at a Yemeni airport).

3. Aircraft shall also report leaving SANAA FIR.

VISUAL FLIGHT RULES

Same as Regional Procedures.

INSTRUMENT FLIGHT RULES

Same as Regional Procedures.

RVSM RULES - The SANAA FIR transition area is that airspace between FL 290 and FL 410 inclusive.

(SPEC/AIR SUP S05/04)

ROMANIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

This entry includes BUCURESTI Flight Information Region which follows the country boundary of Romania.

(SPEC/ENR 2.1-1)

DIMENSIONAL UNITS - Primary SI Unit or Non-SI Alternative Unit.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

(SPEC/GEN 1.7-1)

POSITION REPORTING - Standard.

(SPEC/GEN 1.7-2)

VISUAL FLIGHT RULES

Standard.

(SPEC/ENR 1.2-1)

INSTRUMENT FLIGHT RULES

Standard except:

(SPEC/ENR 1.3-1)

FM IMMUNITY -

1. Romania grants the US a permanent FM immunity waiver for non-FM immune state aircraft as follows:

a. ENROUTE - aircraft will operate using RNP-5 IAW ICAO standards.

b. TERMINAL - The terminal airfield approaches LRCK and LROP will permit US State aircraft to use non-ILS terminal navigation systems, that do not suffer from FM interference (NDB, PAR), without prior notification.

(TFMWG-E/USA 05-0199)

RVSM RULES - Standard.

(SPEC/ENR 1.3-1)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

1. Public holidays:

New Year's Day	1, 2 January
National Day	1 December

(SPEC/GEN 2.1-2)

2. Some administrative services may not be available, and banks and other institutions may not be open on the following days:

Orthodox Easter	March, April, or early May (date varies)
Labor Day	1 May
Christmas	25, 26 December

3. Dates of Orthodox Easter public holidays:

2005 May 1, 2
2006 April 23, 24
2007 April 8, 9
2008 April 27, 28
2009 April 19, 20
2010 April 4, 5

(SPEC/RoNTO 2003)

RUSSIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

This entry includes the airspace of the KALININGRAD FIR.

DIMENSIONAL UNITS - Primary International System of Units (SI) except that the altimeter settings given in millibars and wind speed may be in meters per second.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES -

1. QFE used for takeoff, landing, and transition level. QFE is based on runway threshold.

2. A transition altitude is specified for each aerodrome - to set the scale of the altimeter to 760 mm Hg (29.92 inches) (1013.2 mbs), while reaching the assigned level.

(SPEC/ENR 1.7.1-1/3)

VERTICAL SEPARATION - See Cruising Flight Level Table in AP4, Chapter 2, Russia.

(SPEC/ENR 1.7.1-3)

1. Vertical separtion rules in Kaliningrad FIR/CTA. A reduced vertical separation minimum of 1000 ft between FL 290 and FL 410 inclusive has been implemented. The following rules of vertical separation are applied:

a. A metric system of measuring height and altimeter setting procedures adopted in the Russian Federation are used in take-off and landing areas of Kaliningrad/Khrabovo airports at heights below transition level (during landing) and below transition height (after take-off).

b. During flights along the international airways B65, B67, B73, B120, and R11G the ICAO feet vertical separation system (see table AP4 Chapter 2, Russia) shall be used for IFR flights within flight levels authorized for these airways.

(SPEC/ENR 1.8-1)

POSITION REPORTING - Standard.

MINIMUM NAVIGATION & COMMUNICATIONS EQUIPMENT - Only aircraft equipped with ILS and VOR on board equipment are permitted to operate in the airspace of the Russian Federation. The Russian Federation is not planning to implement a new 8.33 kHz channel spacing within the VHF spectrum.

(SPEC/GEN 3.4-4)

Effective 01 January 2005, when flying in Russian Federation airspace, aircraft must be equipped with COSPAS-SARSAT Automatic Emergency Locator (ELT).

RIGHT OF WAY - While in the flight on collision courses at the same altitude (flight level) the pilot, who has noticed another aircraft on his left, shall descend and the pilot who has noticed another aircraft on his right shall climb so that the difference in altitudes shall provide safe separation for the aircraft. If it is not possible to change the flight altitude (due to cloudiness, flight at lower or below lower levels or the presence of other restrictions), the pilot-in-command shall provide safe separation by turning away the aircraft. In case of unintentional opposite courses approach at the same altitude (flight level) the pilots-in-command shall turn away the aircraft to the right for passing on their port sides. While passing the pilot-in-command shall keep other aircraft in sight.

(SPEC/ENR 1.1-1)

VISUAL FLIGHT RULES

1. All CTA airspace over sovereign territory of the Russian Federation is class "A" airspace at altitudes from the lower safe flight level up to the upper allowed flight level along airways, except TCA (CTR). TCA (CTR) airspace is not classified. VFR flights shall be conducted in VMC in the day time and at night under maximum surveillance of the aircraft crew. The rules provide for maintaining the established intervals during the flight at altitudes below the lower flight level, also maintaining the absolute safe altitude through observing visually the terrain ahead. VFR are applied within the limits of the lower airspace for aircraft flying not more than 295 K/h TAS operating above the lower safe flight level and no more than 240 K/h operating below the lower safe flight level. The following minimums apply:

a. In approach and landing areas.

TERRAIN	KTAS	CEILING (feet)	VISIBILITY (NM)	VERTICAL CLOUD CLEARANCE (feet)
Plain	162 and below	492	1.1	164
	163-295	984	2.7	328
Hilly	162 and below	492	1.1	164
	163-295	984	2.7	328
Mountain	295 and below	984	2.7	328

b. In approach areas along airways, domestic airways, and established routes:

TERRAIN	KTAS	CEILING (feet)	VISIBILITY (NM)	VERTICAL CLOUD CLEARANCE (feet)
Plain	162 and below	492	1.1	164
	163-295	984	2.7	328
Hilly	162 and below	492	1.1	164
	163-295	984	2.7	328
Mountain (up to 6562')	295 and below	1312	2.7	328
Mountain (above 6562')	295 and below	2292	5.4	328

(SPEC/ENR 1.2-1 & 1.4-1)

c. Take-off must be made within one minute after ATC clearance or a new clearance must be requested.

INSTRUMENT FLIGHT RULES

ATC is effected along airways, in terminal areas, and in airport areas. The airspace of the Russian Federation is divided into the lower and upper airspace and is controlled. The limit between the lower and upper airspace is FL 265 which relates to the upper airspace.

(SPEC/ENR 1.1-5)

RVSM RULES - Standard EUR RVSM.

(SPEC/ENR 1.8-2.1)

FLIGHT PLANNING

1. The levels (in meters) at which a flight is to be conducted shall be specified in the flight plan. The flight level on a route section in which responsibility for air traffic service rests with Russia shall be expressed in the following terms:

a. In terms of meters (760 mm Hg), as S followed by 4 figures. E.G.: S0910 corresponds to the altitude (level) of 9100m.

b. The above mentioned procedures are applicable within the area of responsibility of the ATC units of Russia. Outside their area of responsibility, crews act in accordance with provisions of ICAO documents.

c. If a flight is operated in a TCA at an altitude below the transition level, the height of the flight shall be indicated with reference to this aerodrome elevation.

(SPEC/ENR 1.7.1-3)

ENROUTE

1. While entering CTA/FIR, the crew must: report to ATC controller the time and point of entry, flight level and receive the flight conditions; report to the controller, whose area the aircraft is leaving, the time of exit and flight level and get approval for termination of communication. While crossing compulsory reporting points the crew shall report crossing time, altitude, and information on dangerous meteorological conditions. While entering CTA/FIR in which the aerodrome of landing is located, the pilot-in-command shall inform the ATC controller about the chosen alternate.

(SPEC/ENR 1.3-2)

2. RULES AND PROCEDURES FOR CROSSING THE RUSSIA STATE BORDER

(SPEC/ENR 1.7.1-5)

a. Aircraft shall cross the state border of Russia through designated corridors.

b. The crew of an aircraft entering the airspace of Russia shall request permission from the appropriate ATS unit providing direct control over air traffic, to cross the border at least 10 minutes before crossing the state border of Russia. When there are direct communication channels between the ATS center of Russia and the ATS unit of adjacent state, the crews of aircraft can obtain permission for crossing the state border of Russia via the ATS unit providing direct control over them.

c. When there are differences between the flight level allocation systems applied in Russia and adjacent state, the change of flight levels shall be completed at 16 NM before the state border of Russia (FIR boundary over the high seas), unless otherwise stipulated by international agreements and conventions or directed by ATS unit.

TERMINAL

TERMINAL AREA PROCEDURES - After radio contact is established, tower communications will include clearance for descending and landing approach in accordance with the pattern chosen by the aircrew. Landing of the aircraft shall be cleared by the final controller; however, responsibility for the decision to land (includes separation) rests with the pilot-in-command.

(SPEC/ENR 1.5-2)

RWANDA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - The following rules and procedures apply to the territorial limits of Republic of Rwanda and the KIGALI SUB-FIR, from ground to FL 245. All other altitudes fall under the DAR ES SALAAM FIR for which you should see Burundi.

DIMENSIONAL UNITS - Blue Table, except altimeter settings in hectopascals.

(SPEC/AIP GEN 1-7)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Standard except:

1. No VFR flights allowed above FL 170.

2. No VFR flights allowed between sunset and sunrise.

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. Domestic flights, except to Kigali, will not takeoff unless the ETA is at least 30 minutes prior to sunset.

(SPEC/RAC 0-2)

2. Prior permission required for overflying Rwanda or landing at Kigali.

a. All aircraft, including United Nations and military aircraft intending to overfly Rwanda airspace or land at Kigali International Airport, must obtain prior permission from the following:

(1) Direction de l'Aeronautique
B. P. 898 Kigali - Rwanda
Tel: 76572
Fax: 72971

(2) Directeur General
Minitransco
B. P. 720 Kigali - Rwanda
Tel: 77800
Fax: 77474

(3) Director of Airports
B. P. 1122 Kigali - Rwanda
Tel: 85845
Fax: 82609
Aftn: HRYRYAYX

b. Request for flight clearances should be received at least 5 working days before intended date of flight.

c. Diplomatic clearances should be requested through the Ministry of Foreign Affairs.

d. The following items are required when applying for a permit to overfly or land at Kigali:

(1) Name of operator;

(2) Name of registered owner of aircraft;

(3) Type of aircraft;

(4) Radio call sign;

(5) Registration of aircraft;

(6) Route of flight including dates and times in UTC of entry/exit in Kigali FIR;

(7) Purpose of flight;

(8) Airport and ETD;

(9) Airport of destination and ETA;

(10) Name of captain in command;

(11) Billing address of the operator:

(12) Brief description of cargo and/or passenger(s);

(13) Name of local agent.

e. It is mandatory the clearance permit be carried on board the aircraft.

(AFFSA/AFFSA)

SAO TOME

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

This entry includes the BRAZAVILLE FIR and the ACCRA FIR. See Cameroon for information related to BRAZAVILLE FIR and see Benin for information related to the ACCRA FIR.

SAUDI ARABIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

The airspace of Saudi Arabia is divided among BAHRAIN FIR and JEDDAH FIR. For specific information regarding the BAHRAIN FIR, see Bahrain. Saudi Arabian rules and regulations apply to all aircraft operated in Saudi Arabia territory, whether or not in JEDDAH FIR unless stated otherwise.

(SPEC/ENR 1.1-1)

DIMENSIONAL UNITS -

Blue Table except altimeter setting is hectopascals.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES -

Standard except:

1. TRANSITION ALTITUDE - A single common Transition Altitude of 13,000 is established for the relevant airspace.

2. TRANSITION ALTITUDE - A single common transition level of FL 150 is established for the relevant airspace.

(SPEC/ENR 1.7-1)

VERTICAL SEPARATION -

Semicircular.

POSITION REPORTING -

Standard except Dafinah and Qunfidah VORTAC equipped with automatic status announcement capability. Codes are alpha-numeric, Alpha thru Foxtrot and one thru ten (Example: Alpha one). Code is broadcast every eight minutes following identification. Pilots may be requested to include current code in position report.

(SPEC/ENR 3.1-2)

VISUAL FLIGHT RULES

NIGHT VFR FLIGHTS -

1. VFR training exercises at night may be authorized by ATC at those aerodomes where aerodome control service is provided, under the following conditions:

a. The pilot in command holds a valid instrument flight rating and the aircraft is certified for Night/IFR flights.

b. The aerodome control tower is operating, a VFR flight plan for the exercise has been filed and received by the ATC unit.

c. VMC conditions prevail and the official reported ceiling is at least 1000 feet above the immediate approach (procedure turn) altitude for the runway to be used.

d. Reported visibility is 8 km or more.

e. Operations will normally be conducted within the control zone/aerodome traffic zone (except for certain portions of a local practice instrument approach, for example).

f. The aircraft will remain in direct communication with the control tower.

g. The aircraft will remain clear of clouds and within sight of the ground or water at all times.

h. Clearance has been received from the ATC unit concerned.

i. The flight will originate and terminate at the same aerodome.

2. VFR flights are required to carry a functioning mode C SSR 4096 code transponder when operating in class C or class B airspace.

(SPEC/ENR 1.2-1)

MINIMUM HEIGHTS FOR VFR OPERATIONS -

Aircraft operating on ATS routes above FL 460 or below altitude 11,500 feet will be outside controlled airspace and therefore, will be provided with flight information service only. Since VFR is not permitted above FL 150, the highest VFR level is altitude 12,500.

(SPEC/ENR 1.7-2)

INSTRUMENT FLIGHT RULES

1. IFR flights shall comply with the provisions of 3.6 of ICAO Annex 2.

(SPEC/AIP ENR 1.3-1)

2. Pilots of aircraft about to enter Jeddah FIR who have not received specific instructions from either the transferring ATC unit or a Saudi Arabian ATC unit concerning the transponder setting shall operate the transponder on the following appropriate Mode A/3 codes before entry:

a. controlled flights - 2000

b. uncontrolled flights - 7000

3. Mode C shall be selected at all times.

4. All flights departing airports or strips within Jeddah FIR, and do not have pre-allocated SSR Codes shall operate Mode A/3 Code 1100 prior to departure.

(SPEC/AIP ENR 1.6-3)

RVSM RULES - RVSM shall be applicable in that volume of airspace between FL 290 and FL 410 inclusive in the Jeddah FIR.

(SPEC/SUP 02/04 S08)

RNP REQUIREMENTS -

1. RNP 5 Routes

a. Saudi Arabia RNP 5 airspace is all that airspace within the Jeddah FIR above FL 200 up to and including FL 460, excluding that portion of the Jeddah FIR that is east of 047 degrees east and south of 21 50 degrees north, where the base of RNP 5 is established above FL 270. RNAV equipped aircraft that will operate within Saudi Arabia RNP 5 airspace are required to be certified for RNP 5 operations.

(SPEC/AIC 2.2-1)

b. Non-RNAV equipped aircraft and RNAV equipped aircraft that are not certified for RNP 5 operations may operate within Saudi Arabia RNP 5 airspace, provided they operate only on published ATS routes that are defined by VOR/DME navigation (non-RNAV routes).

(SPEC/ENR 1.3-3)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. All aircraft flight planning to or from Prince Sultan AB (OEPS) will file:

a. ARRIVALS: For flights arriving from the East, North, Northwest and West (DAMON, MGA, W23, G51, B58) route shall be JEBOL (N25°00 E47°36) at FL 170 direct SOBOK (N24°30 E48°20) direct PSAB cross JEBOL at FL 170. Flights arriving from the south (V34, V33, G782) will route to KIA then to JEBOL FL 170.

b. DEPARTURES: For flights departing East, North, Northwest (B48, W23, W22) climb within PSAB airspace cross SOBOK at FL 160 direct JEBOL then as directed by ATC according to the route of the approved flight plan. Crews departing Saudi Arabia must file a flight plan (DD Form 1801). For flights departing South, routing will be via JEBOL FL 160 to KIA then (V34, V33, G782).

(AFFSA/FIL 00-63)

SUPPLEMENTARY AIRPORT INFORMATION -

OPERATIONS AT UNCONTROLLED AIRPORTS - Aircraft intending to land should contact Fire Rescue Services (FRS) on 133.5 and report the type of aircraft and ETA 15 minutes prior to arrival. FRS units are prohibited from providing air traffic and weather information.

(SPEC/GEN 1.7-2)

King Abdulaziz Intl (OEJN)

Flocks of to large birds fly across the aerodrome vicinity during the months of March to May and September to November. Wing span of some species exceed one meter. Pilots are requested to exercise extreme caution, particularly below 4500 feet AGL.

(SPEC/AD 2.17-12)

Prince Mohammad Bin Abdulaziz (OEMA)

1. Exercise caution due to bird concentration in the vicinity of the airport.

2. Pilots experiencing wind shear are requested to report the time and altitude in their post flight report to ATS.

(SPEC/AD 2.21-7)

Prince Sultan Airbase (OEPS)

1. Exercise caution when approach and departing the airport. Remain alert for suspicious activity, such as vehicles, lights, and flares.

2. Aircrews are to immediately report to Air Traffic Control any unsusual events witnessed in the vicinity of the airport.

(SPEC/FIL NR 05)

Taif (OETF)

1. Overflight of the town of Taif is prohibited.

(SPEC/AD 2.38-1)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. All aircraft operating in the enroute air navigation system, whether controlled or not, are assumed to navigate centerline of published route segment. Flight outside published lateral limits of ATS routes permitted only when authorized by Presidency of Civil Aviation, when cleared by ATC for a specified portion or when an emergency exists. Inadvertent deviation from specified route must be reported immediately to appropriate ATS unit and corrective action initiated to return to track not farther ahead than four times distance of deviation or minimum centerline intercept of 15° whichever will regain track sooner. Action shall not be delayed in requesting reclearance.

(SPEC/GEN 1.7-6)

2. ATS ROUTES

a. JEDDAH TCA

(1) Flights to/from Taif will normally be routed on V40 outbound and V42 inbound depending on runway in use.

(SPEC/ENR 1.5-5)

b. CONTINGENCY ROUTES FOR RNAV/INS EQUIPPED AIRCRAFT - ACTIVATED BY NOTAM

(1) UL573 - DFN VOR/DME (N23°17.0′ E41°43.2′) to RIGOG (N23°39.4′ E41°08.0′) to PMA VOR/DME (N24°32.9′ E39°42.3′) to WEJ VORTAC (N26°10.7′ E36°29.3′)

(SPEC/ENR 3.3-4)

c. ROUTE RESTRICTIONS:

A411 - Qunfidah VOR/DME to JAZAN VORTAC not available when OER93 active. Btn Qunfidah VOR/DME and NABAN Avbl btn 1300-0500.

A415 - OPR 1500-0400Z. Restricted to FL 190 btn 0300-2100Z for overflights btn King Khaled DVORTAC and KOBOX. When OED 48 is active, MEA is FL 210 btn GOLNO and KIREN.

A419 - FL 300 and FL 330 available only.

R652 - Traffic landing Jordan, cross GRY VORTAC FL 290 or below.

V31 - When OED96A active, BISHA to Wadi Al Dawasir VORTAC closed. Maximum authorized altitude is FL 210 unless activated by higher level authority.

V39 - KUNSO to WDR VORTAC available 1500-0300Z.

V331 - Used only when OED96A is active. Maximum authorized altitude is FL 270 Eastbound and FL 180 Westbound.

V48 - Not Avbl when OED92 is active.

V164 - Available 19000-0300Z.

W334 - Available Sat-Wed 1500-0300Z. Available H24 other days.

UA791 - Daily 1500-0300Z.

UL573 - Activated by NOTAM.

UL768 - Used when OED400 is active above 13,000 ft.

UM309 - Available Sat-Wed 1500-0300Z. Available H24 other days.

UN303 - Activated by NOTAM.

UN316 - Daily 1500-0300Z.

UP559 - RASMO - KMC VORTAC not available when OED400 active above 13,000 ft. Use alternate route UT514.

UV331 - Available Sat-Wed 1500-0300Z. Available H24 other days.

(SPEC/ENR 3.1-5 thru 3.3-8)

3. Aircraft departing from or destined to airfield in Israel will not be allowed to overfly or land at any airfield within the territory of Saudi Arabia nor will aircraft be cleared from any airfield in Saudi Arabia to any airfield in Israel.

(SPEC/GEN 1.2-1)

4. UNCOORDINATED FLIGHTS OVER THE RED SEA Uncoordinated flights operating over the Red Sea shall comply with the following procedures:

a. Squawk SSR Code Mode A 2000 if no code was issued by the transfering authority and the aircraft will keep that code.

b. RVSM compliant aircraft shall be in level flight and maintaining FL 290 southbound and FL 300 northbound.

c. Non-RVSM compliant aircraft shall be in level flight and maintaining FL 250 southbound and FL 260 northbound.

d. Communicate all flight details on the appropriate ACC frequencies.

e. Flight details shall include:

(1) Call Sign

(2) Direction of Flight

(3) Flight Level

(4) Estimated times of crossing FIR boundaries and over or abeam reporting points along route of flight.

f. Flight details shall be broadcast 10 minutes prior to crossing FIR boundaries and 5 minutes prior to passing compulsory reporting points.

g. To reduce the risk of collision maintain a listening watch on appropriate ACC frequencies.

(SPEC/ENR 1.1-5)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS -

1. GENERAL - Large scale movements and concentration of birds occur during various months. Specific details available to date are as follows:

a. SAUDI ARABIA

(1) A main migration route exists along the western coastal plains of Saudi Arabia. A secondary route is from the north end of the Arabian Gulf through Central Saudi Arabia to the Southwest Arabian Peninsula/East Africa area. Migrating birds are geese, ducks and cranes during the months of March to May and September to November. Hawks in the mountainous areas and gulls in populated coastal areas are present year round.

(2) Pilots are requested to exercise extreme caution at King Abdulaziz International airport (Jeddah) and Prince Mohammad Bin Abdulaziz airport. Bird strike hazard exist at Sharurah airport during the period from 15 May to 31 August.

ADDITIONAL INFORMATION

1. TRAFFIC INFORMATION BROADCAST BY AIRCRAFT (TIBA) operating in class G airspace (uncontrolled airspace) - Where there is no ATS unit to provide the necessary flight information service to aircraft, all aircraft must follow the TIBA procedures and broadcast relevant collision avoidance information to each other. TIBA procedures are in force in all Classifications G airspace from the surface up to 11,500' MSL and in the ATZ of all uncontrolled airports in Saudi Arabia.

a. The TIBA procedures are as follows:
ALL PILOTS MUST USE THE PUBLISHED TIBA (CTAF) FREQUENCY 122.8 AND SHALL:

(1) Maintain a continuous listening watch and broadcast the aircraft's position and intended movements prior to maneuvering the aircraft, as applicable;

(2) Broadcast acknowledgement of any TIBA message received, and;

(3) Prior to departure maintain a listening watch for at least five (5) minutes and broadcast taxi movements prior to maneuvering the aircraft;

(4) Broadcast the aircraft position and intentions before crossing or entering a runway for takeoff and again before actually commencing the takeoff roll;

(5) Broadcast when the aircraft is airborne and when it leaves the traffic pattern and when it leaves the Airport Traffic Zone;

(6) Broadcast any other message considered necessary in the interests of safety.

(SPEC/GEN 1.7-11)

b. At those aerodromes in class G airspace having a control tower, aircraft when flying in the associated aerodrome traffic zone, will not be separated from each other by air traffic controllers but will receive only flight information services related to other known traffic and will receive only aerodrome control services when flying in the traffic circuit (i.e. within 5 NM of the aerodrome ARP) and while on the maneuvering area of the aerodrome.

(SPEC/GEN 1.7-12)

2. FIRE RESCUE SERVICES (FRS) AT UNCONTROLLED AERODROMES.

(AIP GEN 1.7-3)

a. FRS units at uncontrolled aerodromes may not be monitoring the published aerodromes TIBA frequency. Therefore pilots of aircraft in need of fire rescue services should call the aerodomes FRS unit on 133.5 MHZ and report the type of aircraft, ETA and, level of service required, at least ten minutes prior to arrival.

b. FRS units at uncontrolled aerodromes are authorized to provide aircraft with fire rescue services only and are prohibited from providing pilots with either air traffic, aerodrome or weather information.

SENEGAL

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the DAKAR FIR/UIR, DAKAR OCEANIC FIR and the ABIDJAN SUB-FIR/UIR.

DIMENSIONAL UNITS - ICAO Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

1. DAKAR FIR/UIR has implemented the ICAO Annex 11 airspace classification with the following exceptions;

a. Classes B, E not yet implemented.

INSTRUMENT FLIGHT RULES

1. Dakar FIR/UIR has implemented the ICAO Annex 11 airspace classification with the following exceptions;

a. Classes B, E not yet implemented.

(SPEC/ASECNA AIP 0 RAC 1-1-05)

RVSM RULES - The airspace within the DAKAR FIR/UIR between FL 290 and FL 410 inclusive is RVSM airspace.

(SPEC/ASECNA AIP 0 ENR 2-1-10)

ENROUTE

1. AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION - Longitudinal separation for UA32, UB602 and UR1 will be in accordance with ICAO Doc 4444 Rac/501.

(SPEC/CL I NOTAM A0297-98)

TERMINAL

1. Military exercises will take place inside the Bissau TMA each Tue and Thu from 0700-1300Z. Aircraft must contact Bissau Approach on 123.9 MHz and 124.3 MHz for oordination, ten (10) minutes before entering the TMA, verify flight level.

(SPEC/CL II NOTAM B3023-90)

SERBIA AND MONTENEGRO FIR/UIR

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes SERBIA, MONTENEGRO and BEOGRAD FIR associated territorial waters.

DIMENSIONAL UNITS - Non-SI alternative unit table. Altimeter settings in hectopascals.

(GEN 2-1)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Standard.

INSTRUMENT FLIGHT RULES

FM IMMUNITY - State aircraft, both Serbia and Montenegro's and foreign ones, the date of mandatory equipage with FM immunity airborne receivers had not been determined yet. US aircraft B-52, HH-60, MH-53 and P-3 may continue to operate within Serbia and Montenegro national airspace with existing equipment, without FM immunity airborne receivers.

(TFMWG-E/USA04-0131)

FLIGHTS - Standard.

RVSM RULES - The airspace within the Beograd UIR between FL 290 and FL 410 inclusive is EUR RVSM airspace.

(SPEC/ENR 1.8-1)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION

1. Foreign aircraft may operate only by prior permission, and flight must be carried out exclusively along the international airways, corridors and international airports.

(SPEC/RAC 1-1-8)

2. Flights below 10,000' (3000 meters) are limited to 250 kt IAS without permission of flight control service. In aircraft control zones, IAS must not exceed 160 kt for piston aircraft or 200 kt for jet aircraft. The limits do not apply if the minimum safe speed is above the prescribed speed.

(SPEC/RAC 1-1-9)

SIERRA LEONE

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the ROBERTS FIR. See Guinea.

SLOVAK REPUBLIC

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes BRATISLAVA Flight Information Region which approximates the country boundary of Slovakia.

(SPEC/ENR 2.1-1)

DIMENSIONAL UNITS - Primary SI Units except:

MEASUREMENT OF	UNITS
1. Distances used in navigation, position reporting, etc	Kilometers, Nautical miles and tenths
2. Altitudes, elevations and height	Feet and meters
3. Horizontal speed including wind speed	Kilometers per hour, knots and meters per second
4. Vertical speed	Feet per second
5. Visibility including runway visual range	Kilometers or meters
6. Height of cloud base	Feet

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES - Standard - ICAO.

(SPEC/ENR 1.7-1)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard.

(SPEC/ENR 1.2-1)

ROUTE AND AREA RESTRICTIONS - A Visual Flight Rule Identification Zone 2.7 NM horizontally exists within the perimeter of the entire border of Slovakia. Flight inside the zone requires prior permission which must be obtained by telephone from the appropriate local ATC unit. The service of a translator is necessary because the local ATC units use Slovak language only.

(SPEC/ENR 1.2-5)

INSTRUMENT FLIGHT RULES

FM IMMUNITY -

1. From 01 JAN 2004, the Slovak Republic restates, without time limit, that the following U.S. state aircraft (B-52, HH-60, MH-53 and P-3) may operate as follows:

a. ENROUTE - Aircraft are capable of meeting RNP5 without use of VOR.

b. TERMINAL - Use of instrument approach facilities not requiring the use of ILS/VOR facilities.

(USAASD-E/LTR 38/2245)

RVSM RULES - As specified in the ICAO EUR Regional Supplementary Procedures.

ENROUTE

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
SLOVAK REPUBLIC							
B45	Sliac VOR/DME	164 344	Balap CRP (N48°04′ E19°15′)	24	4600	FL 245 FL 70	ODD EVEN
	CONTROL: Bratislava ACC REMARKS: CDR3. Temporarily opened on ACC instructions. Normal routes A4, B7.						
P27	Makal CRP	278	Malbe CRP	168	4600	FL 245	EVEN
	CONTROL: Bratislava ACC REMARKS: CDR 1. Temporarily closed on ACC instructions. Alternate Route: MALBA A42 NIT A4 BEVA W35.						
UP27	Makal CRP	278	Malbe CRP	168	FL 245	FL 660	EVEN
	CONTROL: Bratislava ACC REMARKS: CDR 1. Temporarily closed on ACC instructions. Alternate Route: MALBA A42 NITR A4 BERVA W35.						
UP193	Kelel CRP (N49°19′ E20°11′)	134 314	Keked CRP (N48°31′ E21°17′)	65		FL 660 FL 245	ODD EVEN
	CONTROL: Bratislava ACC REMARKS: CDR1. Temporarily closed on ACC instructions. Alternate routes UN133, UL619.						
UZ200	Podan CRP	213	Demop CRP	92	FL 245	FL 660	EVEN
	CONTROL: Bratislava ACC REMARKS: CDR 1. Temporarily closed on ACC instructions. Alternate Route: UM857.						

BIRD HAZARD

SLOVAK REPUBLIC: Migrating and local bird flocks present some hazard year around to low flying aircraft. Bird activity that may result in increased hazards at airports is reported by NOTAM. The following airports have bird hazards of the type and intensity indicated:

AIRPORT	SPRING	FALL	BIRDS
M. R. Stefanik (LZIB)	Feb-May	Aug-Oct	Pigeon, Gull, Rook, Buzzard, Lapwing, Pheasant, Dove, Magpie
Kosice (LZKZ)	Mar-May	Sep-Nov	Pigeon, Rook, Buzzard, Birds of prey, Stork, Magpie and Swallows
Piestany (LZPP)	Feb-May	Aug-Oct	Rook, Lapwing, Water fowl, Daw
Sliac (LZSL)	Mar-May	Aug-Oct	Rook, Stork
Tatry (LZTT)	Mar-May	Aug-Oct	Types not listed

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

SLOVAK REPUBLIC HOLIDAYS:
OFFICIAL HOLIDAYS

January 1, 6
Good Friday
Easter Monday
May 1, 8
July 5
August 29
September 1, 15
November 1, 17
December 24, 25, 26
and ALL SUNDAYS are public holidays.

(SPEC/GEN 2.1.5)

SLOVENIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes LJUBLJANA FIR. The Civil Aviation Authority of the Republic of Slovenia has delegated the provision to air traffic services to ACC Wien within the airspace covering B9/UB9, R49/UR49, T23, ATS TRUNK ROUTES UL604 and UM725, and RNAV Routes UT23, M859. UM859, within lateral limits territory of the Republic of Slovenia east of the line N46°39.5′ E15°25.0′ and N46°13.5′ E15°46.9′ between FL 125/FL 460.

(SPEC/GEN 3.3.2.1)

DIMENSIONAL UNITS - Non-SI Alternative Unit. Altimeter settings in hectopascals.

(SPEC/GEN 2.1)

AIRSPACE STRUCTURE - Within the FIR, Ljubljana is divided into four Classes C,D, E, and G, which equate broadly with those recommended by ICAO.

(SPEC/ENR 1.4.2)

ALTIMETER SETTING PROCEDURES - Standard.

(SPEC/ENR 1.7)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

DAY VFR FLIGHTS - All pilots must be able to fly according to Controlled Visual Flight Rules (CVFR). Normally aircraft flying VFR will not be cleared above FL 125 Helicopters are permitted to operate in less than 1.5 km flight visibility if maneuvered at a speed that will give adequate opportunity to observe other traffic or any obstacle in time to avoid collision.

a. VFR PROCEDURES FOR LJUBLJANA

b. PROCEDURES FOR VFR FLIGHTS ENTERING TCA LJUBLJANA 1, LJUBLJANA 2 - VFR flights shall as soon as practicable establish radio contact with LJUBLJANA APPROACH before entering TCA LJUBLJANA 1, TCA LJUBLJANA 2. VFR flights shall not enter TCA LJUBLJANA 2 along Slovenian/Austrian border. To avoid TCA LJUBLJANA 1, TCA LJUBLJANA 2 "Recommended VFR route" be used.

c. PROCEDURES FOR VFR FLIGHTS ENTERING LJUBLJANA CONTROL ZONE

(1) Two-way radio communication required. Contact TOWER 5 minutes before reaching first reporting point.

(2) VFR flight shall enter LJUBLJANA Control Zone as follows:

REPORTING POINT		LOCATION
From Northeast	NE	N46°13.5′ E14°37.0′
From South	S1	N46°02.5′ E14°27.2′
	S2	N46°06.0′ E14°28.0′
	S3	N46°08.7′ E14°25.2′
From West	W1	N46°19.0′ E14°15.0′
	W2	N46°17.7′ E14°21.0′

If communication failure occurs when outside of airspaces Class C and D, entry shall not be made, even if an entry clearance has already been received. If communication failure occurs when the aircraft is already within the airspace, the flight shall be continued in accordance with the clearance received. Code A 7600 shall be selected when practicable. For flights within CTRs and TMAs as published in AD 2, AD 3, AD 4 the respective regulations of these procedures apply. A VFR flight requesting to enter a CTR and experiencing communication failure, shall divert to an uncontrolled aerodrome, if no serious reasons make this unfeasible. If a diversion is not possible, the pilot-in-command shall observe the procedures in AD 2, AD 3, AD 4.

(SPEC/ICAO ANNEX 2)

2. NIGHT VFR FLIGHTS - When conducting night VFR flights outside the traffic circuit of airports, a SSR transponder capable to respond MODE A interrogations with 4096 codes and Mode C interrogations with automatic pressure altitude reporting shall be carried.

(SPEC/ENR 1.10)

MINIMUM HEIGHTS FOR VFR OPERATIONS -

1. The following criteria applies for Class G airspace: At or below 900m AMSL or 300m GND (whichever is higher)

a. 1.5 km Visibility

b. Clear of clouds & in sight of ground or water.

c. Change of Flight Rules from VFR to IFR

INSTRUMENT FLIGHT RULES

FM IMMUNITY - From 1 Jan 2001, US aircraft may continue to operate within Slovenia airspace without FM immunity equipment installed.

(TFMWG-E/USA 02-0046)

RVSM RULES - The airspace within the FIR Ljubljana between FL 290 and FL 410 inclusive is EUR RVSM airspace.

(SPEC/ENR 1.8-1)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC -

When conducting IFR flights, an operative distance measuring equipment (DME), and when conducting IFR flights or night VFR flights outside the traffic circuit of airports, a SSR transponder capable to respond MODE A interrogations with 4096 codes and Mode C interrogations with automatic pressure altitude reporting shall be carried.

(SPEC/ENR 1.10)

FLIGHT PLANNING

GENERAL AIR TRAFFIC -

1. Permission is required for all aircraft entering Slovenian airspace except that the following only require a flight plan

submitted one hour prior to estimated off block time to LJLJZPZX and destination:

a. Aircraft in transit.

b. Emergency landing.

c. Med-evac.

d. Search and Rescue.

Application for permission should be submitted to:
Postal Address:
MINISTRY OF TRANSPORT AND COMMUNICATIONS
CIVIL AVIATION DEPARTMENT
LANGUSOVA 4
1000 LJUBLJANA
SLOVENIA
Telephone: 386 1 4788 000
Telefax: 386 1 4788 147.

(SPEC/GEN 2.1.2)

FILING FLIGHT PLANS (DAY/NIGHT) -

EUROCONTROL's Integrated Initial Flight Processing System (IFPS) and Centralized Air Traffic Flow Management is in operational service in Slovenia.

(SPEC/AIC A4-96)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. Position reports over all compulsory reporting points within ATS routes are mandatory.

a. A15/UA15 - Routing via DIMLO - T23/UT23 - GRZ - A15/UA15 - DOL prohibited for all traffic. Routing T23/UT23 - DILMO - M859/UM859 - DOL shall be used instead.

b. B1/UB1

(1) One-way procedure for inbound FLT; via TELSI TO LJLJ.

(2) Flights with destination LDZA entering FIR LJLA from RTT NDB and MUN VOR/DME (B1/UB1) shall proceed via TELSI-B1/UB1-DOL VOR/DME-B1/UB1-MEL NDB.

(3) Portion DOL-TELSI shall not be used for departure from LJLJ and LDZA.

c. B5/UB5

(1) Flights with origin LDZA, intending to exit FIR LJLJ via KFT VOR/DME or VIW VOR/DME shall proceed via PODET-B5/UB5-KLAGY-B5/UB5-KFT VOR/DME.

(2) Portion KLAGY-ARLON shall not be used for destination LJLJ and LDZA.

(3) UB5 portion Podet-Klagy westbound available only for traffic dep. LATI, LJ/LD/LQ/LW destn. EDDS/DM, EDM, LO.

d. T23/UT23 - Routing via DILMO-T23/UT23-GRZ-A15/UA15-DOL prohibited for all traffic. Routing T23/UT23-DILMO- A21/UM859-DOL shall be used instead.

e. UM859 - Portion DOL-DIMLO eastbound available only for traffic dep LJ and LIPQ.

f. RNAV L607/UL607 - Flights using the route segment ARNOS-BISTRICA shall address their flightplan messages (FPL) additionally to LIPWYWYX.

g. UR45 - Portion ISTRI-ILB southbound available only for traffic destn LDRI/PL/ZD/LJPZ.

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

SLOVENIA HOLIDAYS

NAME	DATE
New Years Day	1-2 Jan
Slovene Cultural Day	8 Feb
Easter Monday	28 Mar
Day of Uprising Against the Occupier	5 Apr
Labor Day	1-2 May
Statehood Day	25 Jun
Assumption Day	15 Aug
Reformation Day	31 Oct
Remembrance Day	1 Nov
Christmas	25 Dec
Independence Day	26 Dec

(SPEC/GEN 2.1-5)

SOMALIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the MOGADISHU FIR/UIR including the territory of Somalia.

DIMENSIONAL UNITS - Blue Table.

ALTIMETER SETTING PROCEDURES - Same as Regional Procedures.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Same as Regional Procedures except:

1. Contact Mogadishu FIC on 11300 kHz primary or 13288 kHz secondary (days) and 5517 kHz primary or 11300 kHz secondary (nights) 10 minutes prior to estimated time of entry to Mogadishu FIR.

(SPEC/NOTAM A0048/05)

2. Aircraft unable to make position reports direct to Mogadishu FIC should request ground stations or other aircraft to relay the information.

(SPEC/NOTAM A0048/05)

3. Mogadishu FIR/UIR is an IATA in-flight broadcast area. Refer to the Flight Information Handbook for procedures.

(AIP SUP 5/99)

4. Due to conflict between Ethiopia and Eritrea, southbound traffic entering Somalia is required to contact Mogadishu FIC 30 minutes prior to entry of FIR/UIR with forward estimate and revert to appropriate ATS frequency.

(SPEC/NOTAM A0044-03)

5. Aircraft landing at airfields without AFIS are to pass position reports to Mogadishu FIC prior to changing to unmanned aerodrome frequency 132.5 MHz and transmitting blind position reports before landing.

(SPEC/NOTAM A0048-05)

VISUAL FLIGHT RULES

Same as Regional Procedures.

INSTRUMENT FLIGHT RULES

Somalia proposes to implement RVSM airspace in the Mogadishu FIR effective 28 September 06 in accordance with the following: the airspace within Mogadishu FIR between FL 410/290 inclusive, is RVSM airspace. Only RVSM compliant aircraft will be cleared to operate in the Mogadishu FIR between FL 410/290 inclusive. Aircraft that are not RVSM compliant will only be cleared to operate in the Mogadishu FIR between FL 410/290 inclusive after prior coordination with the appropriate center. 2000 ft vertical separation will be applied to such aircraft.

(SPEC/NOTAM A0007/06)

RVSM RULES - The airspace within Mogadishu FIR between FL 410/290 inclusive, is RVSM airspace. Only RVSM compliant aircraft will be cleared to operate in the Mogadishu FIR between FL 410/290 inclusive. Aircraft that are not RVSM compliant will only be cleared to operate in the Mogadishu FIR between FL 410/290 inclusive after prior coordination with the appropriate center. 2000 ft vertical separation will be applied to such aircraft.

(SPEC/NOTAM A0010/05)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. All flights operating to and from airfields in Somalia where AFIS is not provided are required to transmit blind their position on 132.5 MHZ before takeoff and landing.

(SPEC/NOTAM A0033/03)

2. All operators intending to operate to any airfield in Somalia are advised to verify the status of the airfield to which they intend to operate from ICAO office telephone 254-20-622774/5 or 622785/6/9 H24 daily.

(SPEC/NOTAM A0038/03)

3. Mogadishu airfield is closed to all operations due to potential armed conflict. Safety of aircraft, personnel, and cargo cannot be assured.

(SPEC/A0007-96)

4. Overflight requests to be addressed to Civil Aviation Caretaker Authority Somalia through fax 254-20-7122340 and will be replied as follows: Mon-Thu between 0530-1330, Fri 0530-1100.

(SPEC/NOTAM A0018/05)

FLIGHT HAZARDS

1. There is no operational Rescue Coordination Center within Mogadishu FIR. Aircraft in need of SAR or under emergency should notify ATS units of the nearest adjacent FIR.

(SPEC/SUP 5/99)

2. Unauthorized stations operating on aviation frequencies in all bands in Somalia. ICAO authorized stations operating on approved frequencies in Somalia are: Berbera, Boroma, Bosaso, Hargeisa and Kalabeyed.

(SPEC/NOTAM A0057/03)

ENROUTE

UN303G

1. Eastbound traffic restricted to FL 330 only. Westbound traffic restricted to FL 310 only.

2. All southbound TFC are required to call Mogadishu FIC 30 minutes before LUBAR or entering the Mogadishu FIR.

(SPEC/NOTAM A0044/03)

SOUTH AFRICA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry applies to all of South Africa served FIR (Cape Town and Johannesburg). In addition to South Africa, these FIR include LESOTHO and SWAZILAND.

DIMENSIONAL UNITS - Blue Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

AIR TRAFFIC AT A CONTROLLED AERODROME -

1. All aircraft being provided with ATC at Johannesburg Intl (FSJS), Durban Intl (FADN), Port Elizabeth (FAPE) and Capt Town Intl (FACT) are subject to speed restriction of maximum 250 kts (IAS).

2. Speed restriction will be in force regardless of the cancellation of STAR. If 250 kts (IAS) is below minimum operating speed, the minimum operating speed shall be flown and ATC advised.

3. Unless for emergency, pilots are not to request cancellation of speed restrictions.

4. Speed restrictiona will apply to all aircraft bound for airports within 40 NM DME, Johannesburg Intl (FAJS), and 30 NM DME of Durban Intl (FADN), Port Elizabeth (FAPE) and Cape Town Intl (FACT).

(SPEC/AIP ENR 1-5)

VISUAL FLIGHT RULES

South Africa, Lesotho and Swaziland have implemented the ICAO Annex 11 airspace classifications.

(SPEC/ENR 1-2)

INSTRUMENT FLIGHT RULES

South Africa, Lesotho and Swaziland have mplemented the ICAO Annex 11 airspace classifications.

(SPEC/ENR 1-3)

FLIGHT PLANNING

1. Maximum indicated air speed:

(SPEC/ENR 1-10)

a. Outside controlled airspace between 1000 feet AGL and FL 100 - 250 kt for all aircraft.

b. Within a control zone, airport traffic zone or airport traffic area:

(1) Reciprocating engine aircraft - 160 kt.

(2) Turbine powered aircraft - 200 kt.

c. Above maximum IAS will apply unless otherwise authorized or required by the responsible ATS Unit or if the minimum safe IAS for a particular flight is greater than that in paragraph a. and b. above.

2. CLOSING OF FLIGHT PLAN - At airfields served by ATS units, the ATS unit automatically closes the flight plan on arrival of the aircraft.

(SPEC/ENR 1-10.9)

TERMINAL

NOISE ABATEMENT PROCEDURES - Noise abatement procedures are in effect for the following airports, Bloemfontein (FABL), Cape Town Intl (FACT), Durban Intl (FADN), East London (FAEL), George (FAGG), Johannesburg Intl (FAJS), Port Elizabeth (FAPE) Wonderboom (FAWB) and Lanseria (FALA) Procedures apply to jet and turbo-jet aircraft.

1. Take-off to 1500 feet AGL

a. Take-off power, Take-off flaps

b. Climb at V2 + 10 to 20 kts or as limited by body angle.

2. At 1500 feet AGL, Reduce thrust to not less than climb power/thrust.

NOTE: Dependent on aircraft type, takeoff power/thrust may be reduced at a lower altitude.

3. 1500 feet AGL to 3000 feet AGL, Continue climb at V2 + 10 to 20 kts.

4. At 3000 feet AGL, Accelerate smoothly to enroute climb speed with flap retractionon schedule.

5. No jet aircraft are to use intersection takeoffs at any airport within South Africa between 2000 and 0400Z.

(SPEC/AIP ENR 1-5)

SPAIN

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes BARCELONA FIR/UIR and MADRID FIR/UIR. The following rules and procedures also apply to ANDORRA.

DIMENSIONAL UNITS - ICAO Table.

AIRSPACE STRUCTURE - Airspace classification in Spain is:

1. Controlled Airspace within Madrid and Barcelona FIR/UIR:

a. From FL 195 to FL 460, Class C.

b. From FL 150 to FL 195, Class E.

2. Terminal Control areas (TCA):

a. Madrid and Palma.

(1) From FL 195 up to upper limit, Class C.

(2) From lower limit up to FL 195, Class A.

b. Almeria, Asturias, Bilbao and Santander, Class D.

c. Galicia, Class E.

d. Barcelona, Sevilla, Zaragoza and Valencia:

(1) From FL 195 to upper limit, Class C.

(2) From lower limit to FL 195, Class D/E.

e. Canarias:

(1) From FL 145 to upper limit, Class A.

(2) From lower limit to FL 145, Class D/E.

3. Control Areas (CTA) are Class C above FL 195 and Class D below FL 195 except:

a. San Sebastian is Class E.

4. Control Zones (CTLZ) are Class D except:

a. Gran Canaria and Tenerife Sur are Class C.

(SPEC/ENR 1.4-5)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

MINIMUM NAVIGATION & COMMUNICATIONS EQUIPMENT -

1. Unless otherwise authorized by the Civil Aviation Authority, all aircraft operating at or above FL 200 in the Madrid, Barcelona,

or Canarias FIR/UIR or at any altitude within the Madrid, Sevilla, Barcelona, Palma De Mallorca, Valencia, or Canarias TCA must have an operational transponder with Mode A/3 4096 codes.

2. If a transponder fails, an ATC clearance is required for flight in the areas defined in paragraph a.

3. Pilots will operate their transponder in accordance with ATC instructions. If instructions have not been received prior to entering the Madrid, Barcelona or Canarias FIR/UIR, set the transponder as follows:

a. Controlled flights: Mode A/3 code 2000 and, if available, Mode C special position identification feature.

b. Non-controlled flights: Mode A/3 code 7000 and, if available, Mode C special position identification feature.

(SPEC/ENR 1.6-11)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. VFR flight shall not operate:

a. In Barcelona and Madrid FIR/UIR above FL 200.

b. In Canarias FIR/UIR above FL 150.

c. At transonic and supersonic speeds.

(SPEC/ENR 1.2-3)

2. Foreign State aircraft cannot fly VFR in Spanish airspace without prior authorization. Likewise, Foreign State aircraft cannot change their flight plan from IFR to VFR.

(USAFE ATCLO MORON/USAF FIL 01-85)

NIGHT VFR FLIGHTS - Military Operative Visual Flight Rules (OVFR), between sunset and sunrise, could be carried out in visual flight conditions, when:

1. In the departure and arrival aerodromes, and in the vicinities of them, the cloud ceiling is higher than 450 m (1500 ft) and the ground visibility is greater than 5 km, and;

2. In the route and operation area the meteorological conditions will be CAVOK.

(SPEC/ENR 1.2-2)

INSTRUMENT FLIGHT RULES

Spain has implemented the ICAO Annex 11 airspace classification. General Area classifications are identified under Visual Flight Rules.

FM IMMUNITY -

1. Effective 1 Jan 2001, State aircraft affected by not being equipped with FM immune receivers are exempt from compliance until 1 Jan 2007, period of time during which the Generic Method published in AIC 8/99 will remain in force. Requirements for operations are as follows:

a. It is the responsibility of aircraft operating with receivers unprotected from interferences in FM shall be reported in the corresponding flight plan that the aircraft is not equipped with protected receivers.

b. ENROUTE: Foreign state aircraft operating as GAT following IFR rules, unprotected from interferences in FM, both enroute and TCA, is required to assure RNP-5 without the use of VOR as a primary navigation system. If unable to fulfill these requirements, aircraft must fly by OAT regulations.

c. TERMINAL: State aircraft performing a VOR, ILS, or VOR/ILS approach in IMC conditions without protection equipment from interferences in FM requires, in any case, radar surveillance appropriate to the sort of approach.

2. Reports of interference should be forwarded to: EMA/DCIS/SECOM and EMA/DOP/SESPA, C/Romero Robledo 8, 28071 Madrid.

(TFMWG-E/USA 05-0048)

RVSM RULES -

1. The airspace in Spain between FL 290 and FL 410 inclusive is EUR RVSM airspace. Lateral limits:

a. Madrid UIR: All airspace.

b. Barcelona UIR: All airspace.

c. Canarias UIR: All airspace delimitated by the following coordinates and geographical limits: N31°30'14" W17°01'44" following the Lisboa UIR boundary, following the Casablanca FIR boundary and following the Dakar UIR boundary to N25°00'00" W12°26'07" to N25°00'00" W20°00'00" to N27°00'00" W20°00'00" to the beginning.

2. RVSM Transition Airspace: Between FL 290 and FL 410 inclusive.

a. Barcelona UIR: N39°37'22" E04°40'00" to N39°00'00" E04°40'00" to N38°20'00" E03°45'00" to N36°27'13" W01°01'25" to N36°46'38" W01°51'50" to N37°34'15" W01°40'04" to beginning.

b. Madrid UIR: N45°00'00" W13°00'00" to N45°00'00" W08°00'00" to N44°53'01" W07°13'49" to N43°15'00" W09°15'00" to N42°00'00" W10°00'00" to N43°00'00" W13°00'00" to beginning.

c. Madrid UIR: N36°45'30" W02°03'40" to N36°46'38" W01°51'52" to N36°27'14" W01°01'25" to N36°15'08" W01°29'42" to N35°50'00" W02°06'00" to N35°50'00" W02°58'35" to beginning.

d. Canarias UIR: N27°00'00" W20°00'00" to N27°00'00" W11°32'22" to N25°00'00" W12°26'07" to N25°00'00" W20°00'00" to beginning.

e. The RVSM airspace in that part of Canarias UIR that belongs to the EUR/SAM Corridor is defined as follows: Between FL 290 and FL 410 inclusive. From N31°30'14" W17°01'44", follow Lisboa UIR boundary to NELSO to N31°39'00" W17°25'00" TENKO to N30°00'00" W20°00'00" to N30°00'00" W25°00'00" to N24°00'00" W25°00'00" to EDUMO to TENPA to IPERA to GUNET to N19°00'00" W19°00'00" to N25°00'00" W16°00'00" to BIPET to LIMAL to APASO to N25°00'00" W20°00'00" to N27°00'00" W20°00'00" to beginning.

(SPEC/ENR 2.1-21)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC -

For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS may use the

enhanced mode only on a non-interfering basis when flying in Spanish airspace.

(HQ USAFE-DOV/USAF FIL 01-62)

OPERATIONAL AIR TRAFFIC

GENERAL/COUNTRY -

1. Operational Air Traffic (CAO) are military traffic which, due to their mission, do not operate according to the Reglamento de Circulación Aérea (RCA), but according to the Reglamento de la Circulación Aérea Operativa (RCAO).

Air traffic of CAO are:

- Military aircraft traffic, independent of type or nationality

a. From/to Spanish aerodromes, aircraft carrier boats or ships with air force capability to a working area, or between different working areas, fire zones, restricted and dangerous areas, exercise zones, etc., or between military aerodromes or Air Bases.

b. From/to Spanish aerodromes, aircraft carrier boats or ships with air force capability to an operation area which is in tenseness, crisis or war situations.

- Spanish military air traffic:

a. In air police missions or air defense exercises, during a peace period.

b. In air defense active missions, during a peace period and in tenseness, crisis or war situations.

c. Exceptionally, non-military aircraft traffic which carry out certain actions related to the National Defense and due to confidentiality reasons, do no operate in accordance with the RCA.

(SPEC/ENR 1.1-1)

FLIGHT PLANNING

GENERAL AIR TRAFFIC - The following portions of FIR/UIR are designated as controlled airspace between FL 150 and FL 460:

1. MADRID FIR/UIR - The entire FIR/UIR.

(SPEC/ENR 2.1-5)

2. BARCELONA FIR/UIR - Beginning at N42°26′ E03°10′ to N42°00′ E04°40′ to N39°43′ E04°40′ to N38°26′ E01°28′ to N38°37′ E01°07′ to N38°37′ E00°41′ to N38°30′ E00°29′ to N38°00′ E00°10′ to N38°00′ W00°20′ to N38°07′ W00°28′ to N38°07′ W00°52′ to N38°50′ W01°20′ to N39°55′ W01°02′ to N42°42′ W00°04′ then along Spanish-French border to beginning.

(SPEC/ENR 2.1-1)

CLEARANCE INFORMATION - FLOW CONTROL - See Chapter 3, EUROPEAN REGION, FLIGHT PLANNING, FLOW CONTROL.

(SPEC/ENR 1.9-1)

FLIGHT HAZARDS

HIGH MIDAIR COLLISION POTENTIAL AREA -

1. TORREJON (LETO) - CAUTION due to the close proximity of Barajas Intl Airport (LEMD). Most critical are Runway 23 departure routing and Runway 5 arrivals. Aircraft circling to Runway 5 are required to turn a base leg that remains within 1.5 NM of the threshold. The circling technical standard for Category D aircraft is 2.3 NM from threshold. Aircraft unable to meet the 1.5 NM base leg turn must advise Approach Control/GCA on initial contact. Follow-up your request with the Control Tower and expect Approval/disapproval based on Barajas Intl Airport (LEMD) Runway 33 final approach traffic. Follow ATC departure and routing instructions explicitly.

2. ADVERSE WEATHER CONDITIONS - Weather conditions, especially during winter months and in thunderstorm areas, are unpredictable. Environmental conditions are such that unforecasted and unexpected weather phenomena can close any of the bases in a matter of minutes. Torrejon (LETO) and Zaragoza (LEZG) are suitable alternate airports for each other as are Rota (LERT) and Morón (LEMO) during published airfield hours of operation. Refer to FLIP Enroute Supplement for operational times and telephone numbers.

3. UHF air to ground communication is limited in some areas and aircrews cannot expect to always receive pertinent weather and airport information in a timely manner. The communication problem also affects ATC information. Changes to the ETA are sometimes not received. This, coupled with deteriorating weather conditions, may result in ATC delays.

(USAFE ATCLO MORON/USAF FIL 01-85)

ENROUTE

The Spanish government does not allow aircraft with armaments and nuclear material to overfly Spanish territory.

(SPEC/GEN 1.2-2)

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION - All Upper ATS routes redesignated basic fixed RNAV routes.

(SPEC/ENR 3.3-1)

1. LOWER ATS ROUTES - Listed by alphanumeric designation.

A5 - Segment between Ortop CRP and Bamba CRP liable to LED122 activity.

A6 - Segment between Surib NCRP and Labro CRP liable to LED26 activity.

A27 - Segment between Kanig CRP and Bagur VOR/DME not available above FL 185. Segment between Kanig CRP and Parax NCRP liable to LED134 activity. Segment between Kanig CRP and Parax NCRP MEA FL135 except with ATC authorization.

A31 - Segment between Castejon VOR/DME and Astro CRP liable LED131 and LED132 activity. Segment between Nargo NCRP and Alicante VOR/DME liable to LED66 activity. Segment between Rafol NCRP and Labro CRP liable to LED26 activity.

A33 - Segment between Indeg CRP and Castejon VOR/DME only useable with prior ATC clearance.

A34 - Segment between VLC VOR/DME and Graus NCRP not available above FL 205.

A44 - Segment between Rosal CRP and Santa NCRP liable to LED123 activity.

A857 - Segment between Sevilla VOR/DME and Korno CRP liable to LED122, LED128 and LED129 activity.

A869 - Segment between Zaragoza TVOR/DME and Kotex NCRP only available with prior civil-military coordination, it must not be filed in flight plans. Segment between Aduxo NCRP and Nasos NCRP only available under radar surveillance.

A873 - Liable to GCD79 activity.

B11 - Segment between Villatobas VOR/DME and Robledillo VOR/DME FL 210 or below with prior ATC clearance. Segment between Villatobas VOR/DME and Moral CRP liable to LED52 activity.

B16 - Segment between Menorca VOR/DME and Peces CRP Southbound only available at or below FL 120 with prior request.

B31 - Segment between Palma de Mallorca VOR/DME and Osgal NCRP liable to LED103 activity.

B42 - Segment between Crisa CRP and Vulpe NCRP MEA FL 190 when LED1 is activated.

B47 - Only available with prior Madrid ACC - Salamanca APP/TWR coordination. It must not be filed in flight plans. Liable to LER71 A/B/C activity.

B58 - Segment between Barahona VOR/DME and Larda NCRP only available with prior ATC clearance. It must not be filed in flight plans.

B112 - Segment between Gador NCRP and Almeria VOR/DME liable to LED36 activity. Segment between AMR VOR/DME and ALT VOR/DME only usable for traffic with destination Murcia/San Javier (LELC). Liable to LER63, LED97B, and LED22 activity.

B623 - Liable to GCD79 activity.

B700 - Liable to LER63 to LED98 activity. Segment between Kalab NCRP and Almeria VOR/DME liable to LED36 activity.

G5 - Segment between Brito NCRP and Larda NCRP only available with prior ATC clearance. It must not be filed in flight plans.

G7 - Segment between Bagur (BGR) VOR/DME and Barcelona (BCN) VOR/DME not available below FL 195.

G25 - Segment between Barcelona (BCN) VOR/DME and Agena NCRP not available below FL 195.

G850 - Liable to LER63 and LED19 activity.

N866 - Liable to GCD79 activity.

R10 - Segment between Hinojosa VOR/DME and Castejon VOR/DME FL 80 will be only available outside of LED52 activity hours.

R29 - Segment between Calamocha VOR/DME and Mandy CRP not available when LED42 and LED104 are activated.

R47 - Segment between Bailen VOR/DME and Yeste VOR/DME liable to LED98 activity.

R72 - Southbound is only available with prior ATC clearance. It must not be filed in flight plans.

R870 - Segment between Pinar NCRP and Serox NCRP below FL 145 only available with prior ATC clearance. It must not be filed in flight plans. Segment between Barcelona (BCN) VOR/DME and Dalin NCRP not available below FL 195.

T100 - Segment between Ortop CRP and Tutis NCRP liable to LED122 activity. Segment between Givra CRP and Golfo CRP liable to LED19 activity. Segment between Mimdi NCRP and Pimad NCRP liable to LED26 activity.

T84 - Route not available below FL 195.

T102 - Liable to LED118 activity.

W100 - Segment between Zaragoza TVOR/DME and KONKE CRP, only available with prior civil/military coordination.

W103 - Only available with prior Madrid ACC/Salamanca APP coordination.

W770 - Liable to GCD79 activity.

W800 - Segment between Ponen CRP and Caspe NCRP below FL 145, only available with prior ATC clearance. It must not be filed in flight plan.

W810 - Liable to LER63 activity.

W820 - Liable to LER63 and LER77 activity.

W850 - Liable to LED131 and LED132 activity.

(SPEC/ENR 3.1-1)

2. BASIC FIXED RNAV ROUTES - Listed by alphanumeric designation.

UL184 - Only available with prior ATC clearance, it must not be filed in flight plan. Segment between Barahona VOR/DME and Larda NCRP liable to LED47A/B activity from FL 370.

UM440 - Liable to LED39 activity.

UM450 - Liable to LED39 activity.

UM601 - UM601-Segment between Graus NCRP and Pamplona VOR/DME liable to LED47A/B activity from FL 370.

UN10 - Segment between Barahona VOR/DME and Pamplona VOR/DME only available with prior ATC clearance. It must not be filed in flight plans.

UN725 - Segment between Domingo VOR/DME and Barcelona VOR/DME liable to LED47A/B activity from FL 370. Segment between Domingo VOR/DME and Kuman CRP not available above FL 320 for traffic originating in LE and LP and destination Barcelona TCA.

UN726 - Segment between Ortop CRP and Bamba CRP liable to LED122 activity.

UN747 - Segment between Onuba NCRP and Vulpe NCRP liable to LED89D activity.

UN858 - Odd levels will be available when LED122, LED128, and LED129 are not activated except FL 330, 350, 370, 390 (Casablanca ACC request). Odd flight levels will be available from FL 300 within the Madrid UIR. Traffic with destination Madrid

TCA may descend below FL 250 from Solax NCRP with prior civil-military coordination.

UN862 - Segment between Perdu CRP and Maella VOR/DME liable to LED47 A/B from FL 370.

UN865 - Segment Villatobas VOR/DME to Somosierra VOR/DME only available with prior ATC clearance. It must not be filed in flight plan.

UN869 - Segment between Sovar CRP and Kotex NCRP liable to LED47A/B, LED95C/D activity from FL 370 and above. Segment between Aduxo NCRP and Nasos NCRP only under radar surveillance.

UN870 - Segment between Robledillo VOR/DME and Barcelona VOR/DME liable to LED47A activity. Traffic with origin Madrid TCA overflying Ponen CRP above FL 240 must cross Brito NCRP at or above FL 200 and Kotex NCRP at or above FL 240. Traffic with origin Madrid TCA at requested FL 240 or above overflying Segre NCRP and Latek CRP must cross Segre NCRP at or above FL 240. If it is not possible notify Madrid ACC.

UN871 - Segment between Adubi CRP and Logro CRP odd flight levels will be available. Segment between Segre NCRP and Latek CRP liable to LED47A/B activity from FL 370 and above. Segment between Segre NCRP and Latek CRP not available for departures from Madrid TCA, except on weekends.

UN976 - Segment between Pamplona VOR/DME and Latek CRP liable to LED47A/B activity from FL 370 and above.

UP40 - Liable to LED39 activity.

UP46 - Liable to LED39 activity.

UP47 - Liable to LED39 activity.

UP48 - Liable to LED39 activity.

UP175 - Liable to LED39 activity.

UP178 - Liable to LED39 activity.

UP179 - Liable to LED39 activity.

UP180 - Liable to LED39 activity.

UT100 - Segment between Ortop CRP and Tutis NCRP liable to LED122 activity. Segment between Givra CRP and Golfo CRP liable to LED19 activity. Segment between Mimdi NCRP and Pimad NCRP liable to LED26 activity.

UW100 - Segment between Zaragoza TVOR/DME and Sedil NCRP liable to LED47A/B activity from FL 370.

UW990 - Segment between Parka CRP and Melon CRP liable to LED126 and LER86C activity. Segment between HIJ VOR/DME and ZMR VOR/DME only available with prior ATC clearance; it must not be filed in flight plan.

UZ218 - Segment between Teglu CRP and Ester NCRP liable to LED28 activity.

(SPEC/ENR 3.3-1)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			SPAIN				
G53	Castejon VOR/DME	178 358	Temir NCRP (N39°57′ W02°30′)	26		FL 245 FL 95	ODD EVEN
	Temir NCRP		Anana CRP (N39°00′ W02°25′)	57			
	Anana CRP		Yeste VOR/DME	38			
	Yeste VOR/DME	179 359	Tosga NCRP (N37°38′ W02°18′)	44			
	Tosga NCRP		Valve NCRP (N37°11′ W02°17′)	27			
	Valve NCRP		Ondal NCRP (N37°04′ W02°16′)	8		FL 245 FL 75	
	Ondal NCRP		Almeria VOR/DME	13		FL 245 5500	

CONTROL: Madrid ACC (Castejon VOR/DME-Anana CRP); Sevilla ACC (Anana CRP-Almeria VOR/DME).
REMARKS: Available weekends only. Subject to LED98, LED131, LED132, and LER63 activity.

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
H210	Vitoria VOR/DME	316 136	Roles NCRP (N43°06′ W03°23′)	32	FL 075	FL 245 FL 075	ODD EVEN
	Roles NCRP	316 136	Santander VOR/DME	31			
	CONTROL: Madrid ACC REMARKS: Not to be filed in flight plans. NOTE: Route considered CDR3.						
UB623	Gran Canaria VOR/DME	220 040	Lomas NCRP (N27°43′ W15°41′)	26		FL 280 FL 250	EVEN ODD
	Lomas NCRP		Limal CRP (N25°00′ W17°38′)	193			
	CONTROL: Canarias ACC REMARKS: Subject to GCD20 B and GCD79 activity. NOTE: CDR2.						
UB700	Bailen VOR/DME	140T 320T	Bazas NCRP (N37°44′ W03°11′)	33		FL 460 FL 250	ODD EVEN
	Bazas NCRP		Rolas NCRP (N37°25′ W02°51′)	25			
	Rolas NCRP	141T 321T	Almeria VOR/DME	45			
	CONTROL: Sevilla ACC REMARKS: Normal routing: BLN-VIBAS-AMR. Subject to LED97 A, LED98, and LER63 activity. NOTE: CDR2.						
UH80	Asturias VOR/DME	222T	Karol NCRP (N42°50′ W06°55′)	59		FL 300 FL 250	ODD
	Karol NCRP	221T	Finam NCRP (N42°25′ W07°23′)	32			
	CONTROL: Madrid ACC REMARKS: Alternate: VES-BARKO-MALIS. Subject to TSA28 activity. NOTE: CDR1 - H24.						
UH500	Almeria VOR/DME	248T 066T	Galto CRP (N35°50′ W05°09′)	152		FL 300 FL 250	ODD EVEN
	CONTROL: Sevilla ACC REMARKS: Alternate: UM985. Subject to LED19 activity. NOTE: CDR2.						
UL129	Palma De Mallorca VOR/DME	211T 031T	Mebut NCRP (N38°45′ E02°14′)	48 29		FL 460 FL 250	ODD EVEN
	Mebut NCRP		Surib NCRP (N38°21′ E01°55′)	74			
	Surib NCRP	211T 030T	Labro CRP (N37°16′ E01°07′)				
	CONTROL: Barcelona ACC REMARKS: Alternate: Northbound: HAMRA-RAFOL-MITOS-IZA-MJV; Southbound: MJV-IZA-SUMMO-MAGAL-HAMRA. Segment Surib-Labro subject to LED26 activity. NOTE: CDR2.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL150	Castejon VOR/DME	144T 324T	Villa NCRP (N40°14′ W02°25′)	10		FL 460 FL 250	ODD EVEN
	Villa NCRP	143T 324T	Nando CRP (N39°59′ W02°10′)	18			
	Nando CRP	144T 324T	Astro CRP (N39°01′ W01°16′)	72			
	CONTROL: Madrid ACC REMARKS: Alternate: CJN-CLS. Subject to LED132 activity. NOTE: CDR2.						
	Astro NCRP (N39°01′ W01°16′)	144T 324T	Nargo NCRP (N38°44′ W01°00′)	21		FL 460 FL 250	ODD EVEN
	Nargo NCRP		ALT VOR/DME	35			
	Alicante VOR/DME	126T 306T	Magal NCRP (N38°04′ W00°14′)	20			
	Magal NCRP		Rafol NCRP (N37°57′ W00°01′)	13			
	Rafol NCRP	126T 307T	Labro CRP (N37°16′ E01°07′)	68			
	CONTROL: Barcelona ACC REMARKS: Alternate: SADAF-SURIB-IZA-VLC-CLS-CJN. Segment Rafol-Labro subject to LED26 activity. NOTE: CDR2.						
UM143	Castejon VOR/DME	176T 356T	Temir NCRP (N39°57′ W02°30′)	26		FL 460 FL 245	ODD EVEN
	Temir NCRP		Anana CRP (N39°00′ W02°25′)	57			
	Anana CRP		Yeste VOR/DME	38			
	Yeste VOR/DME	177T 357T	Tosga NCRP (N37°38′ W02°18′)	44			
	Tosga NCRP		Almeria VOR/DME	48			
	CONTROL: Madrid ACC (Castejon VOR/DME-Anana CRP); Sevilla ACC (Anana CRP-Almeria VOR/DME) REMARKS: Available weekends only. Subject to LED98, LED132, and LER63 activity.						
UM176	Pamplona VOR/DME	171T 351T	Calamocha VOR/DME	113		FL 460 FL 355	ODD EVEN
	Calamocha VOR/DME	168T 349T	Calles VOR/DME	71			
	CONTROL: Madrid ACC REMARKS: Prior ATC clearance. Not to be filed in flight plans. Subject to LED47 A and B, LED95 D, LED104 activity. NOTE: CDR3 - Pamplona to Calamocha, 0600-1600Z++ Mon-Fri excld hol. Calamocha to Calles 0600-2400Z++ Mon-Fri excld hol.						
UM744	Rosal CRP (N38°01′ W07°06′)	119T 299T	Santa NCRP (N37°40′ W06°18′)	44		FL 460 FL 250	ODD EVEN
	Santa NCRP	119T 300T	Sevilla VOR/DME	29			
	CONTROL: Sevilla ACC REMARKS: Alternate: SVL-MINTA. Subject to LED89 C and D, LED124 activity. NOTE: CDR2.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN725	Santiago VOR/DME	095T 276T	Karol NCRP (N42°50′ W06°55′)	67		FL 300 FL 250	EVEN ODD
	Karol NCRP	096T 276T	Koret NCRP (N42°48′ W06°33′)	16			
	CONTROL: Madrid ACC REMARKS: Alternate: STG-AVS. Subject to TSA28 activity. NOTE: CDR1 - H24						
UN728	Tenerife VOR/DME	148T 328T	Lomas NCRP (N27°43′ W15°41′)	58	FL 250	FL 460 FL 250	ODD EVEN
	Lomas NCRP	149T 329T	Remgi CRP (N27°05′ W15°16′)	44			
	Remgi CRP		Caboj CRP (N26°08′ W14°39′)	66			
	CONTROL: Canarias ACC REMARKS: Subject to GCD79 activity. NOTE: CDR2.						
UN729	Gran Canaria VOR/DME	172T 352T	Remgi CRP (N27°05′ W15°16′)	60	FL 250	FL 460 FL 250	ODD EVEN
	Remgi CRP		Derev NCRP (N26°43′ W15°13′)	22			
	Derev NCRP		Cabel CRP (N25°00′ W14°56')	104			
	CONTROL: Canarias ACC REMARKS: Subject to GCD20B and GCD79 activity. NOTE: CDR2.						
UN747	Bailen VOR/DME	078T 259T	Yeste VOR/DME	61		FL 460 FL 250	EVEN ODD
	CONTROL: Sevilla ACC REMARKS: Subject to LED98 activity. NOTE: CDR2.						
UN851	Malaga VOR/DME	063T 244T	Rolas NCRP (N37°25′ W02°51′)	81		FL 460 FL 350	EVEN ODD
	Rolas NCRP	064T 244T	Tosga NCRP (N37°38′ W02°18′)	29			
	Tosga NCRP	064T 245T	Restu CRP (N37°54′ W01°33′)	40			
	Restu CRP	065T 246T	Alicante VOR/DME	52			
	CONTROL: Sevilla ACC (Malaga - Restu); Barcelona ACC (Restu - Alicante). REMARKS: Alternate: ALT-ASTRO-YES-VIBAS-MGA. Subject to LED97A activity. NOTE: CDR2.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN857	Sevilla VOR/DME	220T	Clana NCRP (N36°31′ W06°44′)	72		FL 460 FL 250	ODD
	Clana NCRP		Korno CRP (N35°50′ W07°25′)	53			
	CONTROL: Sevilla ACC REMARKS: Alternate: SVL-MINTA. Subject to LED89 C and D, LED122, LED128, LED129 activity. NOTE: CDR1 - H24						
	Lanzarote VOR/DME	212T 031T	Bipet CRP (N25°00′ W16°22′)	292		FL 460 FL 295	ODD EVEN
	CONTROL: Canarias ACC REMARKS: Subject to GCD79 activity. NOTE: CDR2.						
UN860	Valencia VOR/DME	208T 028T	Nargo NCRP (N38°44′ W01°00′)	51		FL 460 FL 350	ODD EVEN
	Nargo NCRP		Restu CRP (N37°54′ W01°33′)	56			
	Restu CRP	208T 027T	Almeria VOR/DME	73 27		FL 300 FL 250	
	Almeria VOR/DME	219T 038T	Bolka NCRP (N36°29′ W02°37′)	21			
	Bolka NCRP	218T 038T	Gonza NCRP (N36°12′ W02°53′)	28			
	Gonza NCRP		Berum CRP (N35°50′ W03°14′)				
	CONTROL: Barcelona ACC (Valencia - Restu); Sevilla ACC (Restu - Berum) REMARKS: Alternate: UM985. Subject to LED19, LED97 A activity. NOTE: CDR2.						
UN866	Gomer NCRP (N28°00′ W17°20′)	214T 033T	Apaso CRP (N25°00′ W19°30′)	214		FL 460 FL 250	ODD EVEN
	CONTROL: Canarias ACC REMARKS: Subject to GCD79 activity. NOTE: CDR2.						
UN871	Apaso CRP (N25°00′ W19°30′)	049T 230T	Vidri CRP (N26°54′ W17°02′)	175		FL 460 FL 250	EVEN ODD
	Vidri CRP	050T 231T	Gran Canaria VOR/DME	111			
	CONTROL: Canarias ACC REMARKS: Subject to GCD79 activity. NOTE: CDR2.						
UN873	Limal CRP (N25°00′ W17°38′)	032T 213T	GDV VOR/DME	219		FL 460 FL 295	EVEN ODD
	CONTROL: Canarias ACC REMARKS: Subject to GCD79 activity. NOTE: CDR2.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UW770	Tenerife South VOR/DME	196T 016T	Vidri CRP (N26°54′ W17°02′)	69		FL 460 FL 250	ODD EVEN
	Vidri CRP		Limal CRP (N25°00′ W17°38′)	118			
	CONTROL: Canarias ACC REMARKS: Subject to GCD79 activity. NOTE: CDR2.						

TERMINAL

TERMINAL AREA PROCEDURES - TCA RESTRICTIONS

1. BARCELONA TCA

a. Arrival flights to Barcelona Airport (LEBL) under radar control shall adjust their speeds to 250Kt at speed limiting point, 230Kt in holding patterns at or below FL 140, and 210Kt upon leaving the IAF.

(SPEC/AD 2-LEBL STAR 1.1)

b. VFR/SVFR helicopter flights are authorized.

(SPEC/AD 2-LEBL VFR-1)

2. MADRID TCA - Local tower may authorize VFR flight for local test or instructional flight with VFR flight plans and subject to previous authorization by aerodrome authority.

(SPEC/AD 2-LEMD 16)

3. PALMA TCA - VFR flights are authorized.

(SPEC/AD 2 - LEPA 12)

AERIAL REFUELING

AERIAL REFUELING TRACKS/ANCHOR AREAS - See Chapter 2, Section B, AERIAL REFUELING TRACKS/ANCHOR AREAS for Chart.

TELEPHONE CONTACTS

THE APPROPRIATE OFFICES SHOULD BE CONTACTED BY USAF MILITARY USERS TO RESERVE AIR REFUELING TRACKS OR ANCHOR AREAS IN THE FOLLOWING COUNTRIES:

SPAIN - All requests should be forwarded through ODC/CL at least 15 duty days in advance.
VIA MAIL: ODC/CL, PSC 61, Box 2000, APO AE 09642
MSG: ODC Madrid SP//IA/CL//
COMMERCIAL TELEPHONE: 34-1-543-2829
FAX: 34-1-549-7040

NOTE: DOD Users - to reserve Air refueling corridors in Italy and Greece, contact the European Central Altitude Reservation Facility (EUCARF) via: E-mail: eucarf@ramstein.af.mil, Military message: EUCARF RAMSTEIN AB GE, ICAO Aeronautical Fixed Telecommunications Network (AFTN): EDDFYXYR, DSN: 480-7346/7839 Fax: 9855 Commercial: (49) 6371-47-7346/7839 Fax: 9855.

NOTE: For information concerning Altitudes Reservations, contact: EUCARF.

NOTE: In areas designated as permanently available for Air-to-Air Refueling (AARA), the amount of warning concerning refueling operations can be so minimal as to preclude notification by normal methods. However, the units listed under ATC control column will be able to advise pilots on activity status in appropriate (AARAs).

Where Air-to-Air Refueling Areas conflict with Airways, Advisory Routes or Upper Air Routes, civil/military coordination procedures are applied to minimize disruption to the plan flight profiles or the aircraft concerned.

(AFFSA/XOIA FIL 96-99)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for Charts.

1. SPAIN/PORTUGAL

a. The bird concentrations seem to be centered in the deltas of the large rivers as well as some coastal areas where, induced by thermal effects, high flight levels may be reached up to 5000′ AGL. The greatest concentrations occur during winter time, because many Mid- European birds spend the winter in Spain and Portugal; only a few concentration areas exist throughout the year.

b. Bird migration occurs on a broad front right across the peninsula, but some concentration of migrants may occur along the coastline where high flight levels may be reached. Notable among the larger birds are the cranes which enter the country from France; many winter in the southeast of the peninsula. There is also a prominent movement across the Straits by day of storks and raptors, especially black kites and honey buzzards.

c. Generally the major migratory movements occur in good meteorological conditions with little cloud and with light or following winds, but long distance migrants may encounter unfavorable conditions in the course of a flight. In spring the sudden onset or resumption of cold weather may cause a temporary reversal of the general northward movements.

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

SPAIN HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
Epiphany	6 Jan
St. Joseph's Day	20 Mar
Good Friday	14 Apr
Labor Day	1 May
Ascension Day	15 Aug
Columbus Day	12 Oct
All Saints' Day	1 Nov
Constitution Day	6 Dec
Immaculate Conception	8 Dec
Christmas Day	25 Dec

(SPEC/GEN 2.1-3)

SUDAN

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

Sudan services constitutes the major portion of KHARTOUM FIR. A small part of eastern Sudan lies within and is serviced by ADDIS ABABA FIR/UIR and ASMARA FIR. For information regarding operations in the ADDIS ABABA FIR, see Djibouti. For information regarding ASMARA FIR, see Eritria.

DIMENSIONAL UNITS - Blue table, except altimeter settings in hectopascals.

(SPEC/GEN 1-6)

ALTIMETER SETTING PROCEDURES - Standard

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Same as Regional Procedures except, aircraft crossing ATS routes must request clearance from Khartoum FIC at least 20 minutes prior to estimated crossing with estimated crossing position, time and flight level. If unable to contact Khartoum FIC, cross all ATS routes at VFR flight levels.

(SPEC/RAC 3-1)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Same as Regional Procedures except:

(SPEC/RAC 1-1)

1. No aircraft shall fly over congested areas of cities, towns or settlements, an open air assembly of persons, or over national parks, game reserves or bird sanctuaries within the Republic of the Sudan at a height of less than 2000 feet above the ground except so far as may be necessary when taking off, landing or in an emergency.

2. Flight Plan required.

INSTRUMENT FLIGHT RULES

Same as Regional Procedures.

FLIGHT PLANNING

GENERAL AIR TRAFFIC -

1. At controlled airports, flight plan should be submitted in person to the ATS reporting office. Except for local or test flights, no flight plan will be accepted by telephone.

(SPEC/RAC 1-2)

2. Flight plans of originating from Khartoum Intl are to be submitted at least 12 hours prior to departure.

(SPEC/GEN 1-5)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. Khartoum Fir - Alt Restrictions For Aircraft Overflying Southern Sudan.

(SPEC/CL II NOTAM A034-91)

a. All piston engined aircraft maintain at or above FL 100.

b. All turboprop or jet aircraft maintain at or above FL 150.

2. Airways/Air Routes

(SPEC/CL II NOTAM A030-91)

a. UB527D - Southbound traffic to Kinshasa to route via UB527D to MLK NDB, to JU NDB to Aripa CRP.

b. Traffic entering Khartoum FIR from Kinshasa FIR proceed via Aripa CRP to JU NDB (report at JU NDB) then via UB527D. All flights contact Khartoum ACC/FIC 10 minutes prior to entering Khartoum FIR.

3. Local Areas

a. WAU - Traffic inbound to Wau shall maintain at or above 10,000 feet AGL until over Wau NDB.

(SPEC/CL II NOTAM B012-91)

b. Malakal - Traffic inbound to Malakal shall maintain at or above 10,000 feet AGL until over Malakal NDB.

(SPEC/CL II NOTAM B010-91)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - Flocks of large birds are likely to be encountered in vicinity of all airports in Sudan. Pilots are advised to exercise extreme caution during approach, landing and takeoff.

(SPEC/AGA 0-1)

SWEDEN

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes SWEDEN FIR/UIR excluding Bornholm Island and Ronne TCA which are controlled by Denmark.

(CIV AIP GEN 3.1.2)

DIMENSIONAL UNITS -

1. CIVIL - Units ICAO Table:

   a. Distance generally in excess of 4000m in NM and tenths.

   b. Altitudes, elevations and height in feet.

   c. Horizontal speed, including wind speed, in knots.

   d. Vertical speed in feet per minute.

   e. Time in a day of 24 hours beginning at midnight UTC.

   (SPEC/CIV AIP GEN 2.2.1)

2. MILITARY - Units ICAO Table:

   a. Time - Swedish Standard Time or Swedish Summer Time.

   (SPEC/MIL AIP GEN 3.1.1)

   b. Military ATS will use the UNITS in the CIVIL exceptions on request. When distances are based on radar observation, the distance used will be based upon the type radar equipment used.

   (SPEC/CIV AIP GEN 2.1.1)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

SECONDARY SURVEILLANCE RADAR -

1. Within Swedish UIR/FIR, power driven aircraft shall be equipped with a serviceable SSR transponder when operating within Class A, C and E airspaces.

2. The transponder shall be capable of responding to:

   a. Mode A, 4096 codes;

   b. Mode C, with automatic transmission of pressure altitude, when in Control Areas (IFR/VFR) and Class G airspace above 3000' AGL/5000' MSL (IFR).

3. Transponder is not required when operating within a designated controlled airspace that is permanently or temporarily reserved for special flight operations (soaring sectors).

4. When traffic permits, the ATC unit primarily concerned by the flight may exempt the transponder requirements. Exemption shall be obtained by the pilot before entering the airspace. Changes of EOBT, cruising level and/or routing may be necessary.

(SPEC/CIV AIP GEN 1.5.3)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. Clearance to fly maintaining own separation while in VMC will not be given.

(SPEC/CIV AIP GEN 2.1)

INSTRUMENT FLIGHT RULES

FM IMMUNITY - VOR and ILS-localizer receivers used for IFR flights in Swedish airspace to comply with FM-Immunity requirements from the first of November 2001. This requirement does not apply to state aircraft. State aircraft not complying will be treated separately (radar guided enroute if needed). VHF communication will have to fulfill the FM-Immunity requirements when 8.33kHz is required.

(TFMWG-E/USA 02-0086)

RVSM RULES - Standard.

ENROUTE

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			SWEDEN				
M/UM607	Penor NCRP (N55°38' E17°10')	003T 183T	Trosa VOR/DME (TRS)	199		FL 460 FL 95	ODD EVEN
	REMARKS: Alternate routing: Penor - VSB - TRS. NOTE: CDR1 - Available H24						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
M/UM611	Odaru NCRP (N55°06′ E12°46′)	067T 247T	Maliv NCRP (N55°10′ E13°02′)	10		FL 460 FL 95	ODD EVEN
	Maliv NCRP	067T 248T	Elvix NCRP (N55°02′ E14°06′)	39			
	Elvix NCRP	068T 250T	Kolja NCRP (N55°00′ E16°49′)	99			
	REMARKS: Alternate routing: CDA-ROE-Kolja. NOTE: CDR1 - Available H24						
N/UN850	Rekmo NCRP (N55°59′ E12°47′)	217T	Misbi NCRP (N55°54′ E12°40′)	7		FL 460 FL 95	ODD
	Misbi NCRP	217T	Golmi NCRP (N55°47′ E12°31′)	9			
	NOTE: CDR3 - H24 below FL 195						
N/UN851	Lebda NCRP (N55°22′ E12°38′)	028T	Mosin NCRP (N55°33′ E12°48′)	12		FL 460 FL 95	ODD
	Mosin NCRP	028T	Gorax NCRP (N55°48′ E13°02′)	17			ODD EVEN
	NOTE: CDR3 - H24 below FL 125						
N/UN872	Dunker VOR (DKR)	220T	Elpax NCRP (N58°06′ E15°16′)	86		FL 460 FL 95	EVEN
	Elpax NCRP	218T	Toksi NCRP (N57°09′ E13°55′)	72			
	Toksi NCRP	218T	Misma NCRP (N56°38′ E13°12′)	42			
	Misma NCRP	218T	Sveda VOR/DME (SVD)	31			
	Sveda VOR/DME	230T	Kopim NCRP (N56°08′ E12°30′)	3			
	Kopim NCRP	230T	Lasgi NCRP (N56°07′ E12°27′)	2			
	Lasgi NCRP	230T	Narol NCRP (N56°00′ E12°14′)	10			
	REMARKS: Alternate routing: DKR direct Tonsa NCRP (N58°37′ E16°31′), then via N/UN850 Rasmu-Misma. NOTE: CDR1 DKR-Misma H24 CDR3 SVD-Narol below FL 195						
P/UP609	Sipri NCRP (N60°51′ E18°45′)	032T 212T	Bakla NCRP (N61°22′ E19°25′)	40		FL 460 FL 95	ODD EVEN
	NOTE: CDR1 - Times other than CDR2						
P/UP855	Togmi NCRP (N61°46′ E19°32′)	111T 298T	Solka NCRP (N63°20′ E12°03′)	228		FL 460 FL 245	ODD EVEN
	REMARKS: Alternate routing: Togmi-OSS-Solka. NOTE: CDR1 - H24						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
T/UT317	Ornskoldsvik VOR/DME (OSK) Rasen NCRP Rekmi NCRP Rixan NCRP Vagas NCRP	007T 187T 007T 187T 007T 188T 007T 188T 007T 188T	Rasen NCRP (N63°49′ E19°06′) Rekmi NCRP (N65°11′ E19°28′) Rixan NCRP (N66°45′ E19°57′) Vagas NCRP (N67°21′ E20°09′) Kiruna VOR/DME (KIA)	25 95 95 37 28		FL 460 FL 95	ODD EVEN
	REMARKS: Alternate routing via radar vector. NOTE: CDR1 - H24						
U/UY440	Kelas NCRP (N60°28′ E19°11′)	244T	Hammar VOR/DME (HMR)	26		FL 460 FL 95	EVEN
	NOTE: CDR1 - Times other than CDR2.						
Z/UZ31	Detni NCRP (N54°55′ E14°21′)	058T 238T	Ronne VOR/DME (ROE)	17		FL 460 FL 95	ODD EVEN
	REMARKS: Available as published for Z31 and UZ31 by Germany this section. NOTE: CDR2						

ROUTE AND AREA RESTRICTIONS -

AIRWAYS/ROUTES - Listed alpha numeric designation.

L/UL870- Available only for traffic to ESSA. Traffic with destination ESSB shall flight plan NEBSI DCT ALOLA.

L/UL990 - Traffic with destination EKCH, EKVL, and EKRK shall flight plan Perry-P/UP605-ALM.

M/UM611 - SW bound traffic landing ESMS shall flight plan Kolja-M/UM864-ROE. CDA-Odaru-Maliv not available for traffic to ESMS. NE bound traffic landing ESMS shall flight plan CDA-L/UL983-Detus.

M/UM736 - Not available for traffic with destination EKCH, EKVL, and EKRK.

M/UM852 - BAK-Vadin one-way westbound below FL 240.

N/UN150 - VOR/DME coverage along this airway is not sufficient to meet the required system use accuracy (RNP 5)when using basic RNAV equipment exclusively based on VOR/DME. Such equipment may be used and radar service will be provided on request.

N/UN607 - N/UN607 - Traffic destined within Goteborg TCA shall cross Makur at or below FL 240.

N/UN623 - Neket-TEB not available for traffic landing ESSA. ESSA traffic shall flight plan via Y/UY39.

N/UN850 - Segment Oglob-Naxel, traffic below FL 245 shall flight plan via N872: Runga-Xilan-Naxel. Traffic overflying Copenhagen

area below FL 195 shall flight plan via N872-Misma-Z32.

N/UN851 - Traffic overflying Copenhagen area below FL 125 shall flight plan via P605-ALM-M736.

N/UN866 - Evlan-Bedla available only above FL 245. Traffic below FL 245 shall flight plan via N872: Runga-TEB-N623-Bedla.

N/UN872 - Traffic overflying Copenhagen area below FL 195 shall flight plan via Misma-Z32.

N/UN873 - Traffic destined within Goteborg TCA shall cross Lobbi at or below FL 240. Jet traffic destined to ESSA shall flight plan via ARS VOR and Y/UY36 to ELTOK.

P/UP605 - Kosmo-Mosat-Maliv-ALM not available to traffic landing ESMS. ESMS traffic shall flight plan via Kosmo-L/UL983-Detus.

P/UP607 - Nebsi-Tebby not available to traffic to ESSA. ESSA traffic shall flight plan via L870/UL870.

P/UP853 - To avoid ESR01, expect temp ATC routing via Abala-KIA-Pobel-TRO.

P/UP854 - Lapix-Penax available only above FL 245.

UP600 - VOR/DME coverage along this airway is not sufficient to meet the required system use accuracy (RNP 5) when using basic RNAV equipment exclusively based on VOR/DME. Such equipment may be used and radar service will be provided on request.

Y/UY39 - Available only for traffic to ESSA. Traffic with destination ESSB shall flight plan NEKET DCT ALOLA.

Y/UY42 - Available only for traffic to/from ESSB.

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

SWEDEN HOLIDAYS

DATE
1 Jan 05
6 Jan 05
25 Mar 05
28 Mar 05
1 May 05
5 May 05
16 May 05
25 Jun 05
5 Nov 05
25 Dec 05
26 Dec 05

(SPEC/CIV AIC Q 10/2003)

OTHER - Military air exercise hours, excluding Swedish holidays, are 0730-1500Z++ Mon-Thu, 0730-1100Z++ Fri. Additionally, 1500-2100Z++ Tue from 15 Sep to 1 Apr. Temporary change will be announced by NOTAM.

(SPEC/CIV ENR 3.0.4.1)

SWITZERLAND

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes SWITZERLAND FIR/UIR.

DIMENSIONAL UNITS - Primary SI Units, except:

1. Distance used in navigation, position reporting etc-generally in excess of 4000 Meters are given in Nautical Miles. (NM)

2. Altitudes, elevations and heights are given in Feet. (ft)

3. Horizontal speed including wind speed is given in Knots. (kt)

4. Vertical speed is given in Feet Per Minute. (ft/min)

(SPEC/GEN 2.1-1)

AIRSPACE STRUCTURE - Switzerland has implemented the ICAO Annex 11 airspace classification with the following exceptions:

1. Class A, B and F are not implemented.

2. Class C, D, and E are controlled airspace.

3. Class G is uncontrolled airspace and is from the ground up to 2,000 ft AGL when outside TCA's or CTR's. For TCA's and airways, lower limits are indicated on charts, or 1,000 ft AGL whichever is higher (except Les Eplatures and MOLLIS TCA). There are reduced visibility and distance to clouds in airspace class G. IFR flights are not permitted in Class G airspace.

(SPEC/ENR 1.2-1)

ALTIMETER SETTING PROCEDURES - Standard.

(SPEC/ENR 1.7-1)

VERTICAL SEPARATION - Semicircular.

(SPEC/ENR 1.7-4)

POSITION REPORTING - Standard.

(SPEC/ENR 1.6-2)

VISUAL FLIGHT RULES

NIGHT VFR FLIGHTS -

1. VFR flights at nights (NVFR) are only allowed at, from or to airports equipped for this purpose and agreed by the Federal Office for Civil Aviation (FOCA). In addition, it is further required that the local Operating Regulations be complied with, along with article 43 ORA/Rules of the air, for operation of NVFR flights.

(SPEC/ENR 1.2-1)

2. Night is defined as the period between the points of time, at which in the evening and in the morning the center of the sun's disc is 6 degrees below the horizon.

(SPEC/GEN 1.7-1)

INSTRUMENT FLIGHT RULES

FM IMMUNITY - Standard except:

1. FM Immunity - From 1 Jan 2001:

a. ENROUTE: US State aircraft which do not comply with ICAO FM immunity requirements and which are capable of meeting RNP5 without the use of VOR may operate in Swiss airspace until further notice. There is no objection against the use of TACAN, however there are no TACAN ground stations in Swiss territory. Users are responsible to make sure that the TACAN coverage of Swiss airspace is sufficient for navigational purposes.

b. TERMINAL OPERATIONS: Full implementation of FM immunity. The Swiss are not prepared to continue application of the Generic Method.

(TFMWG-E/USA 02-0058)

c. For IFR flights within Swiss Airspace aircraft shall be equipped with at least the following COM/NAV system:

(1) 2 VHF transmitters/receivers;

(2) 2 VOR/Localizer receivers and 1 DME;

(3) 1 ILS glide path receiver;

(4) 1 Automatic direction finder (ADF);

(5) 1 VHF marker receiver (75 MHz)

(6) SSR transponder with Mode 3/A with 4096 Codes and Mode C altitude reporting.

(SPEC/ENR 1.3-1)

RVSM RULES - Only RVSM approved aircraft and non RVSM approved State aircraft shall be permitted to operate within the RVSM airspace of the SWISS FIR. RVSM approved aircraft are those aircraft for which the operator has obtained an RVSM

approval, either from the state in which the operator is based, or from the state in which the aircraft is registered. RVSM airspace is between FL 290-FL 410 inclusive.

(SPEC/GEN 1.5-2)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) -

1. FLIGHT PLAN ADDRESSEES

   a. Geneva FIR/UIR -

      (1) IFR: LSAGZQZX.

      (2) VFR: LSAGZFZX.

   b. Zurich FIR/UIR -

      (1) IFR: LSAZZQZX.

      (2) VFR: LSAZZFZX.

   c. Flow Control: LSAFZDZX LSAZZDZX.

   d. Destination: . . . . ZPZX . . . . ZTZX

   e. Subsequent Legs: . . . . ZPZX.

   f. Additional Information -

      (1) Flight within Zurich FIR/UIR: LSAZYFYX.

      (2) Flight within Geneva FIR/UIR: LSAFYFYX.

(USAFE-DO/AAFFSA)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. For latest changes to Route Availability Document (RAD), see www.cfmu.eurocontrol.be. The use of an asterisk means to add the appropriate ICAO letter(s) of the alphabet.

a. LOW/HIGH ALTITUDES AIRWAYS - Listed by alphanumeric designation.

A1 - SPR - LISMO; Only available for traffic departing LSGG TCA, LSAG CTA, LSZB/ZG, Milano Area below FL 195. LISMO - DINOX; Not available for traffic destination LFHS/HV/LL/LM/LN/LO/LS/LY/MH Between FL 125-195 or Type Non-RNAV. This traffic shall use B37.

A9 - BARIG - CANNE; Only available for traffic Non-RNAV equipped. CANNE - BARIG; Only available for traffic Non-RNAV equipped.

B16 - PAS - BELUS; Only available for traffic departing LSGG TCA with destination LFLB/LP.

B37 - IBABA - PAS; Not available for traffic destination LFHS/HV/LL/LM/LN/LO/LS/LY/MH above FL 115. PAS - BANKO; Only available for traffic destination LIMW. PAS - IBABA; Not available for traffic departing LFLB/LP with destination EG**, EI**, Paris TCA, Deauville TCA, LFFF FIR.

UB37 - PAS - IBABA; Not available for traffic departing LFLB/LP. This traffic shall file via MOLUS-UN853.

G32 - PAS - TOP; Compulsory for traffic departing LFLB/LJ/LP Via TOP M730 GEN VOR-DME/ NDB.

G434 - LASUN - LUMEL; Only available for traffic departing LFSB/SM/SQ/GB, LSZH. Not available to traffic with departing LSZH with destination/overfly LFRR FIR Except via DJL-OKRIX-TELBO-AGOGO-RBT-LGL-KOKOS/SENLO/DIDAK/PEPON.

J32 - MABES - MOREG; Not available for traffic departing LFHS/HV/LL/LM/LN/LO/LY/MH Except Via SPR/MOLUS below FL 145.

UJ32 - MABES - MOREG; Not available for traffic departing LFHS/HV/LL/LM/LN/LO/LY/MH Except Via PENDU.

J41 - PAS - VANAS; Compulsory for traffic departing LFLB/LJ/LP Via UM730-TOP or Via UM623-MEDAM-UM730-TOP.

J50 - ROMIR - WIL; Compulsory for traffic Via LSZH TCA below FL 95. ZUE - ROMIR; Not available for traffic departing LSZH/MD above FL 095. WIL - ROMIR; Compulsory for traffic Via LSZH TCA below FL 95.

UL47 - MOREG - ARBOS Only available for traffic departing LFHS/HV/LL/LM/LN/LO/LY/MH below FL 285. PAS - PENDU; Not available for traffic destination LFGB/QA/QN/SA/SB/SM/SR. PAS - ARBOS Not available for traffic departing.

UL153 - SOSAL - ROMTA; Not available for traffic departing LFHN/LI, LSGL/GP, LSAG CTA above FL 245. PUNSA - SOSAL; Not available for traffic destination LSGG.

UL612 - MOU - MILPA; Not available for traffic above FL 250 or Type RJ1H, RJ70, RJ85, BA46 with departing Paris TCA with destination LI** or destination LFLB/LE/LI/LJ/LP/LU/LS, LS**, Except LSZA/ZL/ZS or Via MOLUS. MILPA - BIBAN Not available for traffic departing LSGG TCA, LSAG CTA, LFHS/HV/LB/LJ/LL/LM/LN/LO/LP/LY/MH. MILPA - PERAK; Not available for traffic above FL 250 or Type RJ1H, RJ70, RJ85, BA46 with departing Paris TCA with destination LIP* or departing LSGG TCA, LSAG CTA, Chambery TCA, Lyon TCA. PERAK - BIBAN; Not available for traffic destination LIEA/EO/PE/RA/RE/RF/RP/RQ/RU, Milano Area, LFMD/MN/TH/TZ, LFK*, LSZA or above FL 270 destination LIP* Except destination LIPY.

L613 - HOC - DITON; Not available for traffic departing LFSB.

UL613 - SUXAN - ELMUR; Not available for traffic destination LSAZ CTA, LSAG CTA, LFSB TCA. ELMUR - HOC; Not available for traffic Military General Air Traffic. HOC - LUL Not available for traffic departing LSGK/GS/MD/MP/ZH or destination LFST, Paris TCA.

L856 - ROMIR - HOC; Not available for traffic below FL 135 and Overfly LS** Except destination LFGA/GB/SB/SC, EDT*. Plan Airways J50-W110.

UM135 - MILPA - GVA; Only available for traffic destination LFMD/MN/TH/TZ, LIRP/RQ, LIP*, LIMM TCA, LIEA/EO, LFK*, LSZA/ZL/ZS. Not available for traffic departing LSGG TCA, LSAG CTA or above FL 250 or Type RJ1H, RJ70, RJ85, BA46 with departing Paris TCA with destination LI**. GVA - MOBLO; Not available for traffic departing LSGG TCA, LSAG CTA or above FL 250 Type RJ1H, RJ70, RJ85, BA46 with departing Paris TCA with destination LI**. MOBLO - VEROB; Not

available for traffic departing LSGG TCA, LSAG CTA or above FL 250 Type RJ1, RJ70, RJ85, BA46 with departing Paris TCA with destination LI**.

UM623 - VANAS - MEDAM; Not available for traffic destination Milano Area, LIPE/RP/RQ, LG** Except departing LFLB/LJ/LL/LP/LS/LU/LY, LSGG TCA, LSAG CTA, Military General Air Traffic avoiding Swiss territory. MEDAM - VEVAR; Not available for traffic departing LFLL/LS/LU/LY.

UM729 - MOLUS - TUROM; Not available for traffic departing LFHN/LI, LSGL/GP, LSAG CTA above FL 245. MOLUS - GALBI; Not available for traffic departing LIMC with destination NORTH ATLANTIC below FL 245.

UM730 - MILPA - MEDAM; Not available for traffic destination LG** Except departing LSAG CTA, Military General Air Traffic.(with Diplomat clearance) VANAS - MEDAM; Not available for traffic destination Milano Area, LIPE/RP/RQ, LG** Except departing LFLB/LJ/LL/LP/LS/LU/LY, LSGG TCA, LSAG CTA, Military General Air Traffic avoiding Swiss territory. MEDAM - TOP; Not available for traffic destination LFK*, LFMD/MN/ TH/TZ, LIEA/EO Except departing LSGG TCA, LSAG CTA or Via BALSI. This traffic shall file via BALSI-UY11-TOP.

UM975 - ATN - LIRKO; Only available for traffic destination LS**, LFLB/LE/LI/LJ/LP below FL 235. LIRKO - MOLUS; Only available for traffic destination LSAG CTA, LSZ*, LSM*, LSGL/GP, LFHN/LI/LJ below FL 235.

LFLB/LP/LS/LU or departing LFHN/LI, LSGL/GP, LSAG CTA above FL 245.

UM982 - GALBI - DERAK; Only available for traffic destination LFOB/PB/PC/PG/PT. Not available for traffic departing LFLB/LP/LU/LS, LSGG TCA.

UN176 - LASUN - LUMEL; Only available for traffic departing LFGB/SB/SM/SQ, LSZH. Not available for traffic with departing LSZH with destination/Overfly LFRR FIR Except via DJL-OKRIX-TELBO-AGOGO-RBT-LGL-KOKOS/SENLO/ DIDAK/PEPON.

N/UN850 - TRA - RIPUS Not available for traffic departing LFSB with destination LSZA/ZL/ZS, LFK*, LI**, LM**, DT**, H***. DEGAD - ODINA;Not available for traffic above FL 295 destination LIMF/MG/MJ/MP/PE/PO/PX/RP/RQ, LFK*, LIE*, Nice TCA or above FL 275 destination LIMC/ME/ML. NATOR - TRA; Not available for traffic destination LSZR above FL 245.

N/UN851 KUDES - ROMIR; Not available for traffic departing LSZH/MD.

UN851 - KUDES - LOHRE; Not available for traffic destination EDDE/DF/DN/DC/FM/QC/QD/QM/QT,ETOR/SI, EDMM FIR. DESIP - ABESI; Not available for traffic departing LIM*, LIP* above FL 285. ABESI - KUDES Not available for traffic destination LSZH/MD, EDTD departing LSZA.

UN852 -MILPA - BALSI; Not available for traffic destination LFLS This traffic shall use the MILPA STAR.

UN853 - IRMAR - MOLUS Not available for traffic destination LFLB/LL/LP/LY.MOLUS - VADEM; Not available for traffic via UL153 ROMTA. MOLUS - PENDU; Not available for traffic destination LFGB/QN/SA/SB/SM. This traffic shall proceed via UN871. Not available for traffic destination LFQA/SR. This traffic shall proceed via UM729. Not available for traffic Via DJL or Via REKLA or departing LFHS/HV/LL/LM/LN/LO/LY/MH or departing Lyon TCA, St. Yan TCA or Paris TCA, LFOB/QB or destination LFGI/GJ/SD or departing LFLB/LP with destination EG**, EI**, Paris TCA, Deauville TCA LFFF FIR. IRMAR - BLONA; Not available for traffic destination LI**, LSZA/ZL/ZS Via TOP or Via GIGUS.

N/UN869 - OLBEN - NEMOS; Compulsory for traffic destination LFLB/LP/LJ Via Y58. VEROX - MILPA; Not available for traffic destination LFLB/LJ/LP. This traffic shall file BENOT-UN869-NEMOS-Y58-SALEV. OLBEN - MILPA; Compulsory for traffic destination LFLG/LS/LU Via MILPA Except departing LFGA/SB, LSZB/ZG/ZH, EDNY. Not available for traffic departing LFSB/GA, EDNY, LSZH. MILPA - NINTU; Not available for traffic departing LI** This traffic shall file via TOP-UP860. Not available for traffic departing LSGG TCA. OLBEN - LUTIX; Not available for traffic destination LSGG above FL 275.

N871 - SOSAL - TELNO; Not available for traffic with departing LSGG TCA with destination LSZH, LFSB above FL 165. BERSU - KUDES; Not available for traffic Overfly LSAZ CTA below FL 140.

N/UN871 - DITON - KUDES; Not available for traffic departing LFSB. KUDES - ALGOI; Not available for traffic above FL 275 departing LSZB/ZG, LFGA/SB/ST or destination LOWI, EDDN. KUDES - BAMUR; Not available for traffic destination EDDM/MA/MO. This traffic shall file KUDES-T102. SOSAL TELNO; Not available for traffic departing LFLL/LY above FL 245 Between 05:00-20:00Z. SOPLO - MOLUS; Compulsory for traffic departing LFLS/LU Via PENDU/TELNO below FL 245.

UP860 - TOP - KINES; Not available for traffic - BALSI; Not available for traffic destination LFHS/HV/HY/LB/LL/ LM/LP/LS/LU/LY. This traffic shall file via GIGUS-UZ40-OSMAS. GIGUS - KINES; Not available for traffic Via TOP. This traffic shall file via BALSI-UY11-TOP.

R73 - HOC - WIL; Only available for traffic Type RNAV with departing LFSB Via J50/G5 below FL 095 or destination LSZB/ZG.

T/UT45 - RISOR - ASLEG; Only available and compulsory for traffic departing LFLL/LY above FL 155 Via FRI/TELNO. ASLEG - SOSAL; Only available and compulsory for traffic departing LFLL/LY below FL 245 Via FRI/TELNO.

T/UT47 - RISOR - VANAS; Only available and compulsory for traffic Via UM730-TOP departing LFLL/LS/LU/LY above FL 195.

T102 - KUDES - FUSSE; Not available for traffic destination EDDM/MA/MO, ETSF/SI above FL 275.

T163 - KUDES - NELLI; Not available for traffic below FL 245 or departing LSMD/ZH or destination EDDE/DF/FE/FZ/QC/ QD/QM/QT, ETOU/ID above FL 325.

V/UV25 - DIPIR - ARBOS; Not available for traffic departing LFLB/LP with destination EG**, EI**, Paris TCA, Deauville TCA, LFFF FIR.

W102 - LPS - BALIR; Only available for traffic departing LSGC or departing LSGG TCA with destination LFSB At FL 120/FL 140.

W103 - FLORY - LPS; Only available for traffic destination LSGC or departing LSGG TCA with destination LFSB At FL 120/FL 140. LPS - FLORY; Only available for traffic departing LSGC.

W104 - FRI - LPS; Only available for traffic destination LSGC. LPS - FRI Only available for traffic departing LSGC.

W105 - FRI - ALETO; Only available for traffic destination LSGS. ALETO - FRI; Only available for traffic departing LSGS.

W106 - SANET - VALOR; Only available for traffic departing LSGS. VALOR - SANET; Only available for traffic destination LSGS.

UY11 - BLONA - TOSMI; Not available for traffic Via VEVAR. BLONA - KODOK; Not available for traffic departing LSGG TCA. ROBEX - KODOK; Not available for traffic departing LFHS/HV/LB/LJ/LL/LM/LP/LS/LU/LY. BALSI - KUMIN; Not available for traffic departing LFLC/LV/LX/MH with destination LIMC/ME/MG/MJ/ML/MP, LSZA above FL 275 or departing LFLC/LV/LX/MH with destination LIMF/MW above FL 235.

Y52 - GOLEB - SALEV; Only available for traffic destination LFLB/LE/LJ/LP.

Y55 - LIRKO - DINIG; Only available for traffic destination LFLB/LE/LJ/LP. GVA - SALEV; Not available for traffic destination LFLB/LE/LJ/LP above FL 135.

Y56 - FRI - SALEV; Only available for traffic destination LFLB/LE/LJ/LP.

Y57 - ROTOS - BALIR; Compulsory for traffic departing LSMD/ZH with destination LFSB TCA Type RNAV.

Y58 - NEMOS - SALEV Only available for traffic destination LFLB/LE/LJ/LP. SPR - SALEV; Not available for traffic destination LFLB/LE/LJ/LP above FL 135.

Z2 - KUDES - NEBEL; Not available for traffic above FL 245 departing LSMD/ZH.

UZ32 - GIRKU - VANAS; Only available for traffic Military General Air Traffic avoiding Swiss Territory.

Z50 - GERSA - RESIA; Only available for traffic Type RNAV departing LSAZ CTA, EDTD, LFSB TCA.

Z51 - RESIA - KELIP; Only available for traffic Type RNAV destination LSAZ CTA, EDTD, LFSB TCA below FL 325.

Z55 - BASUD - ROTOS; Only available for traffic departing LFSB destination LSG*, LFL* below FL 195 Via Z669 or destination LSZA/ZL/ZS, LFK*, LI**, LM** UZ669, DT**, H*** Via N/UN850. ROTOS - GERSA; Only available for traffic departing LFSB destination LSZA/ZL/ZS, LFK*, LI**, LM**, DT**, H*** Via N/UN850.

Z59 - KONOL - LUMEL; Compulsory for traffic destination LFSB Via N/UN871.

Z60 - FRI - VADAR; Only available for traffic departing LSZB/ZG via Z/UZ669.

Z61 - SOSAL - FRI; Only available for traffic destination LSZB/ZG.

Z62 - DEREM - MOLUS; Only available for traffic departing LSGG TCA via N871.

Z63 - KONIL - SOSAL Only available for traffic departing LSGG TCA via N871.

Z64 - SPR - MOLUS; Only available for traffic Via GALBI/PENDU/TELNO or destination LS**.

Z65 - SPR - MILPA; Only available for traffic Via UN869/UN852/UM730/Z66 or destination LFHB/HS/HV/LH/LL/LM/LN/LO/LY/MH or destination LFLS/LU Type RNAV.

Z66 - MILPA - ARGIS; Only available for traffic Via G5 Between FL 085-190.

Z/UZ69 - TRA - OLBEN; Not available for traffic departing EDNY.

UZ124 - TUTAX - DETUN; Only available for traffic departing LSGG TCA At FL 240/260 with Destination LFPM/PN/PO/PV. TUTAX - OBURO; Only available for traffic above FL 235 departing LSGG TCA Via UH10 with destination EG**, EI**, LFRR FIR, North Atlantic.

Z/UZ651 - CANNE - KELIP; Only available for traffic destination LSMD/ZH, EDTD below FL 285 or departing LSZA.

Z669 - TRA - ROTOS; Not available for traffic Overfly LSAZ below FL 140. ROTOS - VADAR; Only available and compulsory for traffic departing LSMD/ZH, LFSB with destination LSGG below FL 155.

UZ669 - ROTOS - ULMES; Not available for traffic destination LSGC/GK/GL/GS/MP above FL 245. ULMES - MILPA; Not available for traffic departing LFSB. VADAR - MILPA; Not available for traffic destination LFLB/LE/LJ/LP. This traffic shall file via VADAR-Y58-SALEV.

UZ670 - TRA - BASGO; Only available for traffic destination LIMC.

Z/UZ710 - DEGAD - AKASU; Only available for traffic destination LIMC.

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			SWITZERLAND				
N851	Abesi CRP (N46°10′ E09°03′)	354	Elmur NCRP (N47°09′ E08°54′)	26	14,000	FL 195 13,000	EVEN
	Elmur NCRP		Takit NCRP (N47°26′ E08°52′)	17	9500	FL 195 9000	
	Takit NCRP		Kudes NCRP (N47°31′ E08°51′)	5			
	CONTROL: Zurich ACC NOTE: CDR1 - H24; By ATC. Alternative route; AWY Z651.						
N869	Nator NCRP	209	Olben NCRP (N47°18′ E07°41′)	59	FL 100	FL 195 FL 95	ODD
	Olben NCRP	232	Lutix NCRP (N47°10′ E07°22′)	14			
	Lutix NCRP		Benot NCRP (47°03′ E07°10′)	10			
	Benot NCRP		Nemos CRP (N46°55′ E06°54′)	14			
	Nemos CRP		Verox CRP (N46°44′ E06°34′)	18			
	Verox CRP		Milpa CRP (N46°18′ E05°53′)	38			
	CONTROL: Zurich ACC NOTE: CDR1 - H24; By ATC. Alternative route; AWY N850 to TRA to AWY Z669.						
W104	Fribourg VOR/DME	137 317	Les Eplatures NDB	25		FL 195 2000 AGL	
	CONTROL: Geneva ACC NOTE: CDR1 - Jan 01 to DEC 31, Sat, Sun. H24; OCT 01 to Mar 31, 2400-0700Z++, 1600-2400Z++ Mon, Wed, Fri. 2400-0700Z++, 2100-2400Z++, Tue, Thu. Apr 01-Sep 30, 2400-0700Z++, 1600-2400Z++. CDR3						
W105	Fribourg VOR/DME	177 357	Sanet (N46°20′ E07°17′)	27		FL 195 FL 165	
	Sanet NCRP	098 278	Montana VOR/DME	10			
	Montana VOR/DME	Radar Vector	Aleto NCRP N46°23′ E07°53′)	25		FL 195 FL 150	
	Aleto NCRP	068 248	Sion VOR/DME	27			
	CONTROL: Geneva ACC NOTE: CDR1 - Subject to ATFM Control.						
W106	Sanet NCRP (N46°20′ E07°16′)	177	Sion VOR/DME NCRP (N46°19′ E07°17′)	07	FL 150	FL 195 FL 150	ODD
	Sion VOR/DME NCRP	056		16	7000	FL 195 FL 150	
	CONTROL: Geneva ACC NOTE: CDR1 - Subject to ATFM Control.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
W107	Sion VOR/DME NCRP (N46°13′ E07°17′)	058	Montana VOR/DME NCRP (N46°13′ E07°17′)	11		FL 600 FL 150	ODD
	CONTROL: Geneva ACC. NOTE: CDR1 - Subject to ATFM Control.						
W112	Eseva NCRP	280	Fribourg VOR/DME	9		FL 195 FL 110	
	Fribourg VOR/DME	100 280	Telno NCRP (N46°46′ E07°16′)	2		FL 195 FL 160	
	Telno NCRP		Monin NCRP (N46°41′ E07°59′)	30			
	Monin NCRP		Soson NCRP (N46°36′ E08°36′)	27			
	Soson NCRP	280	Lukom NCRP (N46°35′ E08°46′)	5			
	CONTROL: Geneva ACC NOTE: CDR1 - Jan 01 to Dec 31, Sat, Sun. H24; Oct 01 to Mar 31, 2400-0700Z++, 1600-2400Z++ Mon, Wed, Fri. 2400-0700Z++, 2100-2400Z++, Tue, Thu. Apr 01-Sep 30, 2400-0700Z++, 1600-2400Z++. CDR3						
Z50	Soper NCRP (N46°53′ E08°57′) Pelad NCRP (N46°29′E10°03′)	118	PELAD NCRP (N46°36′ E09°44′) RESIA NCRP (N46°29′E10°03′)	36 15	16,000	FL 600 FL 195	ODD
	CONTROL: SWITZERLAND UAC above FL 285. Zurich Terminal Control below FL 285. NOTE: CDR1 - Jan 01 to Dec 31. Sat, Sun; H24. Oct to Mar 31. Mon, Wed, Fri; 0000-0600Z++, 1500-2400Z++; Tue, Thu; 0000-0600Z++, 2000-2400Z++; Apr 01 to Sep 30; Mon to Fri; 0000-0600Z++, 1500-2400Z++.						
Z51	Resia NCRP (N46°29′ E10°03′) Pelad NCRP	298	Pelad NCRP (N46°36′ E09°44′) Soper NCRP (N46°53′ E08°57′)	15 36	16,000	FL 600 15,500	EVEN
	CONTROL: SWITZERLAND UAC above FL 285. Zurich Terminal Control below FL 285. NOTE: CDR1; Jan 01 to Dec 31. Sat, Sun; H24. Oct to Mar 31. Mon, Wed, Fri; 0000-0600Z++, 1500-2400Z++; Tue, Thu; 0000-0600Z++, 2000-2400Z++; Apr 01 to Sep 30; Mon to Fri; 0000-0600Z++, 1500-2400Z++. CDR2						
Z55	Bersu NCRP (N47°08′ E07°56′)	103	Gersa NCRP (N47°02′ E08°32′)	25	11,000	FL 280 11,000	ODD
	CONTROL: Switzerland UAC above FL 285. Zurich ACC at and below FL 285. NOTE: CDR1 - Jan 01 to Dec 31. Sat, Sun; H24. Oct to Mar 31. Mon, Wed, Fri; 0000-0600Z++, 1500-2400Z++; Tue, Thu; 0000-0600Z++, 2000-2400Z++; Apr 01 to Sep 30; Mon to Fri; 0000-0600Z++, 1500-2400Z++.						
Z56	Sosal NCRP (N46°33′ E06°53′)	061	Gudax NCRP (N46°47′ E07°29′)	28	FL 110	FL 195 FL 100	EVEN
	CONTROL: Geneva ACC NOTE: CDR3						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
Z57	Lamur NCRP (N46°35′ E07°14′) Gudax	040 051	Gudax NCRP (N46°47′ E07°29′) Dopil NCRP (N46°29′ E10°03′)	16 27	FL 160 FL 110	FL 660 FL 150 FL 660 FL 100	ODD
	CONTROL: Switzerland UAC above FL 285. Geneva ACC at and below FL 285. NOTE: CDR3						
Z67	Omasi (N45°54′ E05°58′) SPR11 Lamur	53 53 25	SPR11 (N46°20′ E06°47′) Lamur (N46°35′ E07°14′) Kored (N46°51′ E07°25′)	43 24 18	FL 195 FL 160	FL 460 FL 195 FL 600 FL 195	EVEN
	CONTROL: Switzerland UAC above FL 285. Geneva ACC below FL 285. NOTE: CDR3 - By ATC only. For destination LFSB AND LSAZ.						
Z68	Molus (N46°27′ E06°41′) Sugor Morax	07 52 80	Sugor (N46°34′ E06°43′) Morax (N46°49′ E07°10′) Kored (N46°51′ E07°25′)	7 25	FL 100	FL 195 FL 100	ODD
	CONTROL: Geneva Terminal Control. NOTE: CDR3 - By ATC only. For traffic outbound LSGG planned on UN871.						
Z69	Trasadingen VOR/DME	235	Olben NCRP (N47°18′ E07°38′)	40	FL 140	FL 195 FL 135	ODD
	CONTROL: Zurich ACC NOTE: CDR1 - H24; By ATC.						
Z710	Degad NCRP (N46°26′ E08°37′)	212	Basgo NCRP (N46°16′ E08°28′)	12	FL 150	FL 195 13,000	ODD
	CONTROL: Zurich ACC NOTE: CDR1 - Jan 01 to Dec 31. Sat, Sun; H24. Oct to Mar 31. Mon, Wed, Fri; 0000-0600Z++, 1500-2400Z++; Tue, Thu; 0000-0600Z++, 2000-2400Z++; Apr 01 to Sep 30; Mon to Fri; 0000-0600Z++, 1500-2400Z++.						
UL18	Tolka NCRP (N53°11′ W05°30′) Nefyn NCRP	129 309	Nefyn NCRP (N52°51′ E04°41′) Radno NCRP (N52°14′ E03°13′)	35 65		460 250	ODD EVEN
	CONTROL: London ACC REMARKS: CDR1 Available Daily 1700-0800Z (winter) 1700-0700Z (summer). It is similiarly available from 1700Z++ Fri or on the day preceeding a Public Holiday to 0800Z++ on Mon or the day following a Public Holiday. At all other times this portion is CDR3.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL153	Punsa NCRP (N46°05′ E08°02′) Sosal NCRP	303	Sosal NCRP (N46°33′ E06°53′) Vadem NCRP (N46°43′ E06°29′)	56 19		FL 600 FL 195	EVEN
	CONTROL: Switzerland UAC above FL 285. Zurich ACC at and below FL 285. NOTE: CDR1 - Jan 01 to Dec 31. Sat, Sun; H24. Oct to Mar 31. Mon, Wed, Fri; 0000-0600Z++, 1500-2400Z++; Tue, Thu; 0000-0600Z++, 2000-2400Z++; Apr 01 to Sep 30; Mon to Fri; 0000-0600Z++, 1500-2400Z++ CDR2						
UL613	Ronak NCRP (N46°49′ E10°09′)	293	Elmur NCRP (47°09′ E08°54′)	55		FL 600 FL 195	EVEN
	CONTROL: Switzerland UAC above FL 285. Zurich ACC at and below FL 285. NOTE: CDR1 - Jan 01 to Dec 31. Sat, Sun; H24. Oct to Mar 31. Mon, Wed, Fri; 0000-0600Z++, 1500-2400Z++; Tue, Thu; 0000-0600Z++, 2000-2400Z++; Apr 01 to Sep 30; Mon to Fri; 0000-0600Z++, 1500-2400Z++.						
UM872	Ometo CRP (N45°44′ E08°03′) Cervi NCRP	309	Cervi NCRP (N45°58′ E07°33′) Molus CRP (N46°27′ E06°41′)	26 46		FL 600 FL 195	EVEN
	CONTROL: Switzerland UAC above FL 285. Zurich ACC at and below FL 285. NOTE: CDR1 - Jan 01 to Dec 31. Sat, Sun; H24. Oct to Mar 31. Mon, Wed, Fri; 0000-0600Z++, 1500-2400Z++; Tue, Thu; 0000-0600Z++, 2000-2400Z++; Apr 01 to Sep 30; Mon to Fri; 0000-0600Z++, 1500-2400Z++. CDR2						
UN851	Abesi NCRP (N46°10′ E09°02′) Elmur NCRP Takit NCRP	354 41	Elmur NCRP (N47°09′ E08°54′) Takit NCRP (N47°26′ E08°52′) Kudes NCRP (N47°31′ E08°51′)	60 17 5		FL 600 FL 195	EVEN
	CONTROL: Switzerland UAC above FL 285. Zurich ACC at and below FL 285. NOTE: CRD 1 -Jan 01 to Dec 31. Sat, Sun; H24. Oct to Mar 31. Mon, Wed, Fri; 0000-0600Z++, 1500-2400Z++; Tue, Thu; 0000-0600Z++, 2000-2400Z++; Apr 01 to Sep 30; Mon to Fri; 0000-0600Z++, 1500-2400Z++.						
UN869	Nator NCRP (N48°10′ E08°19′) Olben NCRP Lutix NCRP Benot NCRP Nemos NCRP Verox NCRP	209 232 229	Olben NCRP (N47°18′ E07°38′) Lutix NCRP (N47°10′ E07°22′) Benot NCRP (N47°03′ E07°10′) Nemos NCRP (N46°55′ E06°54′) Verox NCRP (N46°44′ E06°34′) Milpa NCRP (N46°44′ E06°34′)	59 14 10 14 18 38		FL 600 FL 195	ODD
	CONTROL: Switzerland UAC above FL 285. Zurich ACC at and below FL 285. AT Benot NCRP, Geneva ACC below FL 285. NOTE: CDR1 - Jan 01 to Dec 31. Sat, Sun; H24. Oct to Mar 31. Mon, Wed, Fri; 0000-0600Z++, 1500-2400Z++; Tue, Thu; 0000-0600Z++, 2000-2400Z++; Apr 01 to Sep 30; Mon to Fri; 0000-0600Z++, 1500-2400Z++						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UP131	Trasadingen VOR/DME	138	Resia CRP (N46°29′ E10°03′)	98		FL 600 FL 195	ODD
	CONTROL: Switzerland UAC above FL 285. Zurich ACC at and below FL 285. NOTE: CDR1 - Jan 01 to Dec 31. Sat, Sun; H24. Oct to Mar 31. Mon, Wed, Fri; 0000-0600Z++, 1500-2400Z++; Tue, Thu; 0000-0600Z++, 2000-2400Z++; Apr 01 to Sep 30; Mon to Fri; 0000-0600Z++, 1500-2400Z++. .CDR2						
UZ69	TRA DVOR/DME	235	OLBEN NCRP	40		FL 600 FL 195	ODD
	CONTROL: Switzerland UAC above FL 285. Zurich ACC at and below FL 285. NOTE: CDR1 - Jan 01 to Dec 31. Sat, Sun; H24. Oct to Mar 31. Mon, Wed, Fri; 0000-0600Z++, 1500-2400Z++; Tue, Thu; 0000-0600Z++, 2000-2400Z++; Apr 01 to Sep 30; Mon to Fri; 0000-0600Z++, 1500-2400Z++.						
UZ613	Ronak NCRP (N46°49′ E10°09′) Intex NCRP	332	Intex NCRP (N47°11′ E09°52′) Negra NCRP (N47°43′ E09°26′)	25 37	FL 300	FL 600 FL 195	EVEN
	CONTROL: Switzerland UAC above FL 285. Zurich Terminal Control below FL 285. NOTE: CDR3 - Alternative route for UL 613.						
UZ637	Banko NCRP (N45°49′ E07°03′)	300	Milpa NCRP (N46°18′ E05°53′)	57		FL 660 FL 195	EVEN
	CONTROL: Switzerland UAC above FL 285. Geneva ACC at and below FL 285. NOTE: CDR3						
UZ662	Moblo NCRP (N45°49′ E06°43′) Lamur NCRP	025	Lamur NCRP (N46°35′ E07°14′) Kored NCRP (N46°51′ E07°25′)	51 18		FL 600 FL 195	EVEN
	CONTROL: Switzerland UAC above FL 285. Geneva ACC at and below FL 285. NOTE: CDR3						
UZ670	Tra (DVOR/DME) NCRP (N47°41′ E08°26′) Diton NCRP	190 175	Diton NCRP (N47°18′ E08°20′) Basgo NCRP (N46°16′ E08°28′)	24 62		FL 600 FL 195	ODD
	CONTROL: Switzerland UAC above FL 285. Zurich ACC at and below FL 285. NOTE: By ATC only. (CDR 3). Route usable southbound for destination Milano/Malpensa (LIMC).						

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for Charts.

The information shown on the Bird Hazards Area graphic represents a composite of the migratory routes and concentration areas for the entire year. See chart legend for specific information. No other information is available.

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

SWISS HOLIDAYS - The following general public holidays apply in Switzerland.

NAME
New Year
Good Friday
Easter Monday
Ascension Day
Whit Monday

NAME
1st August
Christmas

(SPEC/GEN 2.1-3)

SYRIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -
This entry includes the DAMASCUS FIR.

DIMENSIONAL UNITS -
Blue Table, altimeter setting given in hectopascals.

(SPEC/GEN 2.1-1)

ALTIMETER SETTING PROCEDURES -
Standard.

(SPEC/GEN 1.7-1)

VERTICAL SEPARATION -
Semicircular.

POSITION REPORTING -
Aircraft entering Syrian territory shall operate along centerline of ATS routes and establish two-way radio communications with Damascus ACC (OSDI) five minutes prior to crossing the FIR boundary on 120.0 MHz. If contact is not established, pilots are requested to contact Lattakia Control on 129.6 MHz and maintain listening watch on 120.0 MHz.

1. In case failure to communicate with Damascus ACC (OSDI) is experienced on 120.0 MHz, aircraft bound to Damascus FIR (OSDI) via routes W10, R78, W17, and VB36 shall give position report to Lattakia Control (OSLK) on frequency 129.6 MHz five minutes prior to crossing the FIR boundary.

(SPEC/ENR 2.1-1)

2. Flights bound to Damascus Fir via CRP TUNLA or CRP TUSLA that experience comm failure with Damascus ACC shall report position to Aleppo Twr on 119.1MHz five minutes prior to crossing the FIR boundary.

(SPEC/GEN 1.7-2)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. Same as Regional Procedures to include the prohibition that VFR flight shall not be conducted SS-SR. Exceptions:

a. Aircraft shall not be flown over congested areas of cities, settlements, or an open air public gathering at a height less than 2300′ for single engine or 1650′ for multi-engined aircraft unless necessary for takeoff and landing.

b. VFR flights shall not be conducted above FL 150.

(SPEC/ENR 1.2-1)

INSTRUMENT FLIGHT RULES

Same as Regional Procedures.

(SPEC/RAC 1.3-1)

FLIGHT PLANNING

GENERAL AIR TRAFFIC -

1. The airspace outside controlled airspace, published airway and advisory routes over the Syrian Arab Republic is prohibited.

(SPEC/ENR 5.1-1)

a. Damascus Airport (OSDI) Traffic:

(1) Inbound aircraft from KTN VOR or CRP ZELAF shall be cleared to start descending so as to cross CRP ABBAS FL 240 or above and DAM VOR FL 100 or above, then according to the IAP.

(2) East arrivals - Via airway G202 shall be cleared to DAM VOR-DME at or above FL 100, then descend in accordance with IAP. When military traffic permits, east arrivals may be cleared to start descent 25 NM east of DAM VOR- DME to cross SOFIA CRP at 8000′ MSL, then descend in accordance with instrument approach procedures.

(SPEC/ENR 1.5-2)

FILING FLIGHT PLANS (DAY/NIGHT) -
Flight Plans required for all flights and must be submitted at least 30 minutes prior to ETD.

(SPEC/ENR 1.10-1-1)

CLEARANCE INFORMATION -
Engines of departing aircraft shall not be started until start up clearance has been received. Request start up clearance at least 5 minutes in advance, giving estimated time at which pilot expects to be ready for start up.

(SPEC/SUP ENR 1.5-3-01)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

SYRIA HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
Revolution Day	8 Mar
Mother Day	21 Mar
Evacuation Day	17 Apr
Labor Day	1 May
Martyrs Day	6 May
Christmas; XAMAS	25 Dec

(SPEC/GEN 2.1-2)

TANZANIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -
This entry includes the DAR EL SALLAAM FIR. See Burundi.

TOGO

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the ACCRA FIR. See Benin.

TUNISIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - TUNISIA - This entry includes TUNISIA and international waters.

DIMENSIONAL UNITS - ICAO Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

Standard.

INSTRUMENT FLIGHT RULES

Standard. Reduced Vertical Separation Minima (RVSM) See AP/2, P3-2 thru P3-4.

(SPEC/ENR 1.5-1)

1. BASIC RNAV (B-RNAV), IMPLEMENTATION - With effect from 22nd January 2004, the carriage of B-RNAV equipment approved for RNP5 operations will become mandatory on the entire ATS route network in the Tunisian airspace from the North parallel N31°00′ above FL 245. Below FL 245, the conventional routes defined by VOR/DME will remain. RNAV route will be gradually added.

a. STATE AIRCRAFT - Except state aircraft, operations within the B-RNAV airspace are restricted to B-RNAV approved aircraft.

b. OTHER AIRCRAFT - The foreign aircraft operated by Tunisian air companies should obtain the airworthiness approval from the registration state in order to operate in the B-RNAV airspace.

(SPEC/AIC 07-03)

RVSM RULES - The airspace within the Tunis FIR/UIR between FL 290 and FL 410 inclusive, as described in ENR 2.1, is RVSM airspace.

1. Within RVSM airspace, the vertical separation minimum shall be:

a. 300m (1000 feet) between RVSM approved aircraft

b. 600m (2000 feet) between:

2. Non RVSM approved aircraft and any other aircraft operating within the EUR RVSM airspace.

3. Formation flights of State aircraft and any other aircraft operating within the EUR RVSM airspace; and

4. An aircraft experiencing a communication failure in flight and any other aircraft when both aircraft are operating within the EUR RVSM airspace.

(SPEC/ENR 1.8-1)

SUPPLEMENTARY AIRPORT INFORMATION -

Carthage (DTTA)

1. NOISE ABATEMENT

a. Take-off Procedures.

(1) All aircraft will climb to 3000′ MSL as soon as possible.

(2) Jet aircraft will follow operating manual noise abatement procedures or the following:

(a) Fanjet aircraft will climb to 1500′ MSL using takeoff power at V2+10 kt with high lift devices in the takeoff position, then transition to the normal climb schedule.

(b) Turbojet aircraft will climb to 1000′ MSL using takeoff power at V2+10 kt with high lift devices in the takeoff position, then transition to the normal climb schedule.

b. Landing Procedure.

(1) Final approach must be flown on or above the ILS glide slope (2.5°) or the VASI glide slope.

(SPEC/RAC 4-7)

Habib Bourguiba Intl (DTMB)

1. NOISE ABATEMENT

a. Take-off procedures:

(1) All aircraft will climb to 3000′ MSL as soon as possible.

(2) Jet aircraft will follow operating manual noise abatement procedures or the following:

(a) Fanjet aircraft will climb to 1500′ MSL using takeoff power at V2+10 kt with high lift devices in the takeoff position, then transition to the normal climb schedule.

(b) Turbojet aircraft will climb to 1500′ MSL using takeoff power at V2+10 kt with high lift devices in the takeoff position, then transition to the normal climb schedule.

(3) The preferred runway for takeoff is Runway 26 and for landing is Runway 08. The maximum crosswind component for takeoff and landing will not exceed 15 kt, including gusts, for a dry runway and the maximum tailwind component will not exceed 5 kt including gusts.

b. Landing procedures.

(1) Visual patterns will be flown at 1000' MSL or above, weather permitting. Fly a right-hand pattern for Runway 08 and a lefthand pattern for Runway 26.

(2) Final Approach must be on or above either the ILS glide slope (2.75) or the VASI glide slope.

(SPEC/RAC 4-10)

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. LOW ALTITUDE AIRWAYS - Listed by alphanumeric designation.

A411 - At LOTUS CRP, only for aircraft below FL 105.

A725 - Segment OSMAR CRP/PIRIX CRP/CAR VOR/DME usable by traffic from DTTA only. Traffic to/from DTTJ/DTTZ shall proceed via: SARDI CRP/TBK VOR/DME/BAN VOR and vice versa unless otherwise instructed by ATC.

A743 - Usable southbound and by traffic to DTTA only.

A856 - At BABEL CRP, only for aircraft below FL 105.

A868 - Usable southbound only.

G727 - At LEMSA CRP, only for aircraft below FL 105.

G737 - Used by traffic to DTMB, DTTX, and DTTJ.

G868 - Serviceable for traffic from DTMB or DTTJ to MEGAN CRP.

L44 - Airway is a RNAV route. Usable southbound and by traffic to DTTA only.

M734 - Airway is a RNAV route. Usable northbound and by traffic from DTTA only.

P161 - Airway is a RNAV route. Usable southbound only.

R723 - Segment SARDI CRP/TABOT CRP is available with lower FL 220: From 1201Z++ Sat until 2400Z++ Sun. See all Italian national holidays as published yearly in Italian AIC between 0001-2400Z++.

W302 - Availability subject to Tunis ACC clearance.

(SPEC/ENR 3.1-2 thru 3.1-32 and ENR 3.3-1 thru 3.3-21)

c. HIGH ALTITUDE AIRWAYS - Listed by alphanumeric designation.

UA725 - Segment OSMAR CRP/PIRIX CRP/CAR VOR/DME usable by traffic from DTTA only. Traffic to/from DTTJ/DTTZ shall proceed via: SARDI CRP/TBK VOR/DME/BAN VOR and vice versa unless otherwise instructed by ATC.

UA743 - Usable southbound and by traffic to DTTA only.

UA868 - Usable southbound only.

UG729 - Available after coordination between Tunis ACC and Roma ACC.

UG737 - Used by traffic to DTMB, DTTX, and DTTJ.

UG868 - Serviceable for traffic from DTMB or DTTJ to MEGAN CRP.

UL44 - Airway is a RNAV route. Usable southbound and by traffic to DTTA only.

UM126 - Airway is a RNAV route. Available after coordination between Tunis ACC and Roma ACC.

UM734 - Airway is a RNAV route. Usable northbound and by traffic from DTTA only.

UM735 - Airway is a RNAV route. Usable northbound only and southbound on ATC discretion.

UM738 - Airway is a RNAV route. Usable by traffic to DTMB, DTTX, and DTTJ.

UM739 - Airway is a RNAV route. Traffic to DTTA shall proceed via SARDI CRP/TBK VOR/DME/KEMIR CRP/TUC VOR/DME unless otherwise instructed by ATC. Segment SARDI CRP/TABOT CRP is available from 1201Z++ Sat until 2400Z++ Sun. See all Italian national holidays as published yearly in Italian AIC between 0001-2400Z++. From 0001-1200Z++ Sat with lower limit FL 260. From 0001Z++ Mon to 2400Z++ Fri with lower limit FL 280 after special coordination between Tunis ACC and Roma ACC.

UP161 - Airway is a RNAV route. Usable southbound only.

UR723 - Segment SARDI CRP/TABOT CRP is available 0001Z++ until 2400Z++ Sun. See all Italian holidays as published yearly in Italian AIC between 0000-2400Z++. Outside these periods, this segment is available after special coordination between Tunis ACC and Roma ACC.

UW302 - Availability subject to Tunis ACC clearance.

(SPEC/ENR 3.2-3 thru 3.2-31 and ENR 3.3-2 thru 3.3-22)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

TUNISIA HOLIDAYS

NAME	DATE
New Year's Day	1 Jan
*Aid El Fitr	20 Mar
Independence Day	
Youth Day	21 Mar
Martyrs Day	9 Apr
*Aid El Idha	1 May
Labor Day	
*Hijri New Year's Day	25 Jul
Republic Day	
*Prophet's Birthday (Mouled)	13 Aug
Women's Day	
1987 Day	7 Nov

*NOTE: These holidays are based on the lunar month and cannot be stated in advance as unique dates from year to year.

(SPEC/GEN 2.1.5)

TURKEY

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes ANKARA and ISTANBUL FIRs.

DIMENSIONAL UNITS - Blue Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - Same as Regional Procedures except:

1. Special VFR Rules will be applied, based on the following circumstances and by special permission of the Base Commander:
(USADO ANKARA)

a. The cloud ceiling should not be less than 1000', with visibility on ground not less than one (1) mile, and in air not less than two (2) miles.

b. The aircraft horizontal clearance to the cloud mass should not be less than one (1) mile.

c. The aircraft should have a minimum of two frequencies (channels) active for communication with Flight Control Tower.

2. The Turkish Air Force does not employ radar procedures to handle arriving VFR aircraft (Stage I, II and III service).
(SPEC/USDAO ANKARA)

INSTRUMENT FLIGHT RULES

FM IMMUNITY

1. Turkey is continuing to apply the ICAO Generic Method of analyzing for potential FM radio interference with VOR/ILS receivers at all military/civil airports and Turkish airspace. Since 1 January 2001, non-FM immune all aircraft (Civil/State) may therefore continue using ILS/VOR approaches at all airports in Turkey and enroute navigation with VOR within Turkish airspace except for Istanbul/Ataturk airport (LTBA) Rwy 36 (ILS LLZ frequency 111.3 MHz), which is affected by FM radio broadcasting stations.
(TFMWG-E/ENR 1.13-1)

a. Same as Regional procedures. The Turkish Air Force does not provide IFR separation for aircraft requesting contact or visual approaches, whereas civil agencies do provide such service.
(USDAO ANKARA/AFFSA)

RVSM RULES - Aircraft entering Ankara FIR from Tehran FIR; see entry in Chap 4., IRAN, under INSTRUMENT FLIGHT RULES. The airspace within Istanbul FIR and Ankara FIR between FL 290 and FL 410 inclusive, as described in the Table of cruising levels given in section ENR 1.7, is RVSM airspace.
(SPEC/ENR 1.8.1)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TCAS, ACAS, ETC - For USAF Only: Enhanced Traffic Collision Avoidance System (E-TCAS) - Aircraft equipped with E-TCAS may use the enhanced mode only on a non-interfering basis when flying in Turkish airspace.
(HQ USAFE-DOV/USAF FIL 01-62)

FLIGHT PLANNING

GENERAL AIR TRAFFIC -

1. All flight plan, departure and arrival messages, IFR or VFR, to or from Turkish airspace should be addressed to relevant addresses and LTACYWYX.
(SPEC/ENR 1.10-2)

a. Transit flights conducted on Airways VR20, VG802, VR32, VR55 and VG80, VW81, VW89 and VW91 via Istanbul FIR to further south and east and vice versa are required to show the following addressees on their flight plan: LTBJZAZX, LTBJZPZX.
(SPEC/ENR 1.10-2)

b. Aircraft flying portions of Airway UG18 between LARKI and RODOS, an Airways R19 and UR19 between RODOS and KOPAR, shall submit their flight plans to the address LTBBOVFL.
(SPEC/AIP ENR 1.10-2)

c. FLIGHT PLANNING ADDRESSEES

(1) Ankara FIR/UIR

(a) IFR/LTAAZQZX

(b) VFR/LTAAZFZX

(2) Istanbul FIR/UIR

(a) IFR/LTBBZQZX

(b) VFR/LTBBZFZX

(3) Flow Control

(a) LTAAZDZX

(b) LTBBZDZX

(4) Destination/subsequent legs

(a) Incirlik/LTAGYXYX

(b) Cigli/LTBLYXYX

(c) All others/ ZPZX

2. CIGLI AIR BASE

a. Aircraft with hazardous cargo should not plan to RON unless safety of flight is involved.

3. AMCC/C2 requires all crews to FAX their TDY Orders to 628th AMCC NLT 0700Z, the day prior to arrival weekdays. If arriving on the weekend, orders must be received NLT 0600Z Thursday. If orders are not received within these time frames, you will have to take an instamped copy of your orders, gate pass paperwork, and IDs (for every crew member) to Turkish Pass and ID to receive your gate pass. This can take up to 30 minutes and

can not be accomplished until after 1630L. Please ensure orders are faxed for the entire crew, including crew chiefs if applicable. Not faxing orders prior to arrival will affect billeting arrangements, customs in processing serving as official customs documentation for arrival in country, gate pass issue, Force Protection and delay the AMC mission, 628th AMCC/C2 fax number is 676-3654.

(USDAO ANKARA/AFFSA)

CLEARANCE INFORMATION -

1. The term, "Request start-up clearance", is utilized by Turkish pilots to alert air traffic controllers to employ USAF "Ramp/Gate/Hold" procedures. If any delay is anticipated on issuance of an ATC clearance, the pilot will be informed prior to engine start.

(USDAO ANKARA/AFFSA)

2. START-UP PROCEDURES FOR TURBINE AIRCRAFT - Pilots of departing IFR turbine aircraft shall request authorization to start engines approximately 15 minutes prior to planned departure time. In no case shall a request to start up be made more than 30 minutes prior to planned departure time. When requesting start-up clearance the pilot should state planned departure time.

(SPEC/ENR 1.9-10)

FLIGHT HAZARDS

HIGH MIDAIR COLLISION POTENTIAL AREA -

1. ERHAC TRAINING AREA - Heavy jet training is conducted in the area within a 50 NM radius of Erhac TACAN south of VG8. IFR traffic on VW73 should obtain approval from Erhac Tower prior to traversing the area.

2. INCIRLIK AEROBATIC AREA - Intensive military training, consisting of basic flight maneuvers and aerobatics, is conducted between R-025 and R-090 of the Incirlik TACAN between 10 NM and 50 NM, conventional aircraft surface to 6000' AGL and jet aircraft 7000' AGL to FL 240, days, Mon-Fri, VMC. Contact Incirlik APP CON for traffic advisories.

(USDAO ANKARA/AFFSA)

3. INCIRLIK AB - ATC radar coverage normally only within 60 miles. Crews should be particularly vigilant and aware of collision hazards especially in vicinity of MUT VOR. Strict adherence to flight plan routing in the eastern Mediterranean area must be maintained. Flight progress must be closely monitored throughout the entire area. Special attention should be given to reporting required postions promptly. Do not mistake Sakirpasa Airport for Incirlik. Incirlik is 8 miles to the east of Sakirpasa. Due to multiple controlling agencies and limited airspace, aircraft are advised to use extreme caution when transiting between GAZ, TOROS, MUT to DAN.

(39 OSS AOB/AFFSA)

ENROUTE

1. ANKARA - Aircraft entering, operating within, or departing Ankara FIR will comply with the following:

(USDAO ANKARA/AFFSA)

a. Aircraft are positively required to contact Ankara CON when flying south of TOROS on VA285. No aircraft shall enter Ankara FIR from the south via the above airways unless in contact with Ankara ACC.

b. Flights from Ankara FIR contact Nicosia ACC at least 10 minutes prior to crossing FIR boundary.

(USDAO/ANKARA/AFFSA)

2. All flights entering Turkey from the Aegean or Mediterranean Seas over water from the south or west will be on IFR flight plans and will establish positive contact with the controlling agencies before entry. Aircraft will avoid overflying any ship in the vicinity of the Turkish coast, Cyprus or nearby Aegean islands.

a. For latest changes to Route Availability Document (RAD), see www.cfmu.eurocontrol.be.

3. Air refueling within Turkish airspace is permitted thru Turkish Armed Forces with minimum 15 working day PPR.

(SPEC/GEN 1.2-4)

4. G12 - Segment between EKI and YAA not available at or below FL 280. Instead of this segment, EKI - IST - YAA shall be used.

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. Airway W101 not available for southbound traffic at or above FL 310.

(SPEC/ENR 3.1-20)

2. Airway VW83 useable between sunset/sunrise, other times by request and approval from Ankara ACC. Not useable when LTD8 active.

(SPEC/ENR 3.1-14)

3. Airway UM853 not available for southbound traffic at or above FL 310.

(SPEC/ENR 3.3-7)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
			TURKEY				
Z713	Ulkan NCRP	159	Kuman NCRP	46	FL 130	FL 195	
	(N37°18′ E028°07′)	339	(N38°01′ E027°49)			FL 130	
	Kuman NCRP	159	Dugla NCRP	93	FL 130	FL 195	
		339	(N39°29′ E027°13′)			FL 130	

CONTROL: Menderes approach (inside Izmir TCA), Istanbul ACC South (outside Izmir TCA).
NOTE: CDR 1 -Apr 01 to Nov 01 1730-0230Z++; Nov 02 to Mar 31 1700-0430Z++; and weekends, by ATC.

TERMINAL

TERMINAL CONTROL AREAS -

1. All UHF or VHF equipped uncontrolled aircraft, VFR or IFR, entering a Civil or Military TCA shall establish radio contact with the MTCA controlling unit ten minutes prior to reaching the boundary and give point of entry, ETA, flight level, flight conditions, ETA or destination airport (if destination airport is within MTCA) and exit point of MTCA and route portion to be flown within TCA.

(SPEC/ENR 1.1-1)

2. Unless otherwise instruced by ATC, aircraft arriving the following TCA's will follow the speed adjustments below.

(SPEC/ENR 1.9-11)

a. MAX IAS 250 KTS at or below FL 100 within Istanbul TCA Arriving aircraft:

(1) MAX IAS 250 KT at 40 NM from IST VORTAC

(2) MAX IAS 210 KT at 15 NM from IST VORTAC

(3) MAX IAS 160 KT until 5 NM from Threshold

b. Within Ankara TCA MAX IAS 250 KTS.

c. Within Izmir TCA MAX IAS 250 KTS.

d. MAX IAS 250 KTS at or below FL 100 within Antalya TCA Arriving aircraft:

(1) MAX IAS 280 KT at 60 NM from AYT VOR/DME

(2) MAX IAS 240 KT at 30 NM from AYT VOR/DME

(3) MAX IAS 220 KT at 15 NM from AYT VOR/DME

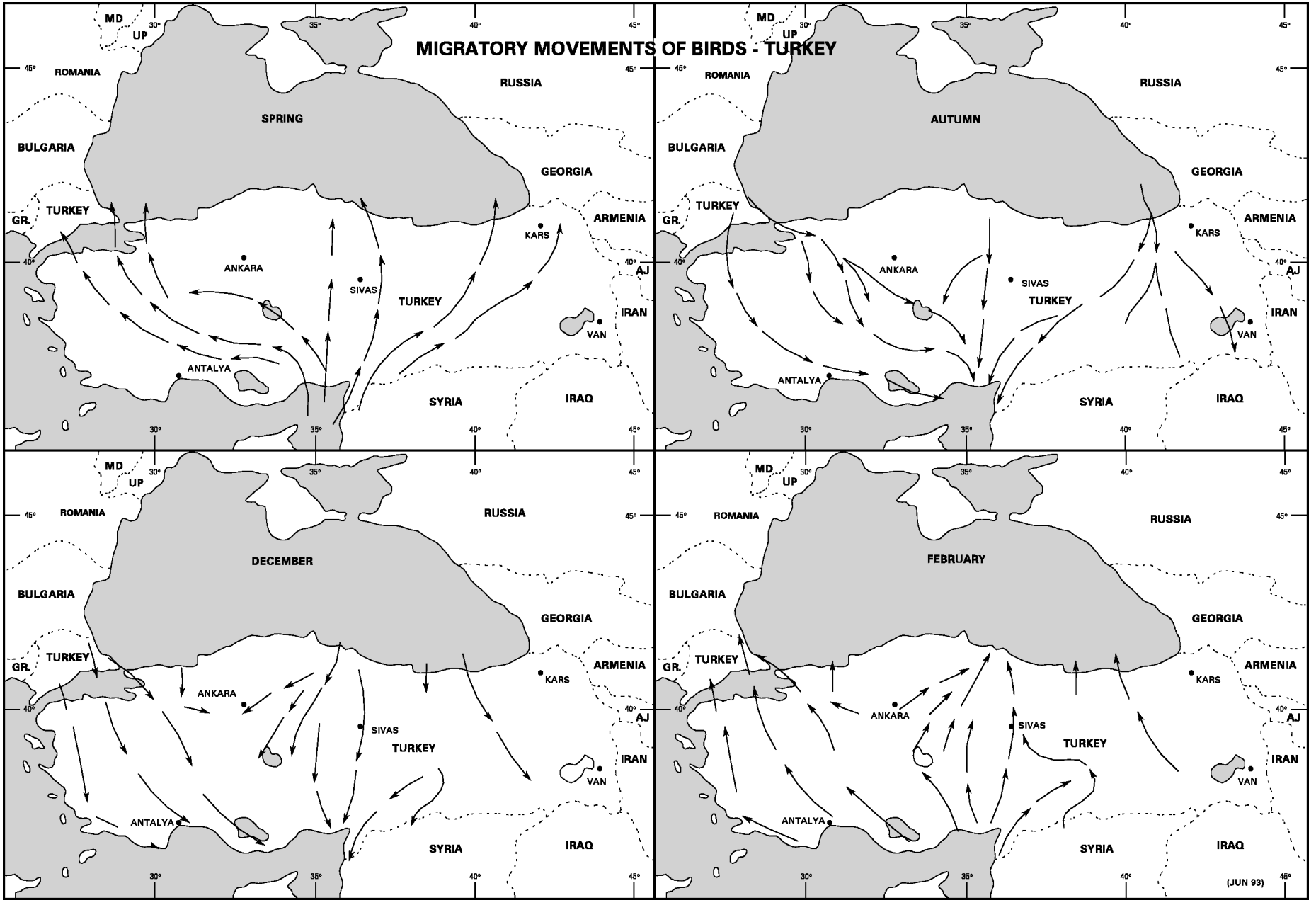
(4) Within Dalaman TCA MAX IAS 250 KTS and in the holding patterns MAX IAS 230 KTS.

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - See Chapter 2, Section B, BIRD HAZARDS for additional Charts.

1. MIGRATORY MOVEMENTS OF BIRDS IN TURKEY

a. The major migratory movements of birds in Turkey is in spring and autumn. Birds that winter in southern countries start to enter Turkey from the south border. Those that have wintered in Turkey begin to leave Turkey for countries to the north. This migration starts in March, continues to increase during April and is finished at the end of May. Migration during summer is very small. In the autumn, during the first week of October, they start moving from north to south and leave the southern borders of Turkey. The number of birds migrating in autumn is 2-3 times the birds migrating in spring. During the winter, there are migrations from north to south in December and from south to north in February. The migration heights differ according to species of birds. It is known that some of the singing birds reach an altitude of 23,000′.


MIGRATORY MOVEMENTS OF BIRDS - TURKEY
SPRING
AUTUMN
DECEMBER
FEBRUARY
MD
UP
ROMANIA
RUSSIA
BULGARIA
GEORGIA
GR.
TURKEY
ARMENIA
KARS
ANKARA
SIVAS
AJ
IRAN
VAN
ANTALYA
SYRIA
IRAQ
30°
35°
40°
45°
(JUN 93)

ADDITIONAL INFORMATION

1. All aircraft operating within or transiting through Turkish airspace must be equipped with transponder with Mode C capability.

2. Turkish Air Force GCA controllers furnish arriving aircraft with the height of obstacle clearance limitation (OCL) and request the pilot to compute his decision height (DH) for the approach, whereas USAF minimums for the approach include the OCL.

3. The USAF term, "Minimum fuel", is not used in the Turkish ATC system. Military and civil agencies recognize the term, "Critical fuel", as an emergency condition and provide aircraft priority handling.

4. Runway distance markers at some civil airports are painted on the runway.

5. Turkish air traffic controllers are not required to use increased separation between heavy jet aircraft.

(USDAO ANKARA/AFFSA)

NATIONAL HOLIDAYS -

TURKEY HOLIDAYS FOR 2006

NAME	DATE
New Year's Day	1 Jan
Feast of Sacrifice	10-13 Jan
National Sovereignty and Children's Day	23 Apr
Commemoration of Ataturk, Youth and Sports Day	19 May
Victory Day	30 Aug
Feast of Ramadan	23-25 Oct
Republic Day	29 Oct
Feast of Sacrifice	31 Dec

(SPEC/GEN 2.1-3)

UGANDA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes ENTEBBE FIR.

DIMENSIONAL UNITS - Blue Table.

AIRSPACE STRUCTURE - Airspace classification B, C, D, F have not yet been implemented.

(AIP RAC 1-15)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

The Entebbe FIR has implemented the ICAO Annex 11 airspace classification except:

(AIP RAC 1-15)

1. Application of semicircular rule begins at 300 meters (1000 feet).

2. Airspace classification B, C, D, F have not yet been implemented.

MINIMUM HEIGHTS FOR VFR OPERATIONS - No intentional low flying permitted over national parks and game reserves in uganda.

(SPEC/RAC 5-1)

INSTRUMENT FLIGHT RULES

The Entebbe FIR has implemented the ICAO Annex 11 airspace classification except:

(SPEC/RAC 1-15)

1. Flights within airways will be conducted in IFR.

2. Airspace Classifications B, C, D, F have not yet been implemented.

RVSM RULES - Standard.

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

UGANDA HOILDAYS

NAME	DATE
New Year's Day	1 January
NRM Anniversary Day	26 January
International Women's Day	8 March
Good Friday	Friday before Easter Sunday
Easter Monday	Monday after Easter Sunday
Idd El Fitri	Day following sighting of new moon at end of Ramadan
Idd Adhuha	Moveable
International Worker's Day	1 May
Matyr's Day	3 June
Hero's Day	9 June
Independence Day	9 October
Christmas Day	25 December
Boxing	26 December

(SPEC/GEN 2-2)

UNITED ARAB EMIRATES

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE - This entry includes the UNITED ARAB EMIRATES FIR.

DIMENSIONAL UNITS - Blue Table.

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

MINIMUM NAVIGATION & COMMUNICATIONS EQUIPMENT -

1. SSR TRANSPONDER REQUIREMENTS

a. All IFR flights: Mode A, 4096 codes, and mode C.

b. VFR flights in Class C airspace: Mode A, 4096 codes, and mode C.

c. VFR flights in Class D airspace: Mode A, 4096 codes.

d. VFR flights operating at night in Class G airspace: Mode A, 4096 codes.

e. VFR flights operating in OMR 58: Mode A, 4096 codes.
(SPEC/GEN 1-4)

2. Exemptions from meeting the above requirements for the carriage of SSR transponders may be granted by the aviation authority responsible for the provision of air traffic services.
(SPEC/GEN 3.3)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. Visual Flight Rules conform to ICAO Annex 2.

2. In addition VFR flights operating in Class G airspace are required to send position reports every half hour of flight.
(SPEC/ENR 1-1)

INSTRUMENT FLIGHT RULES

1. Emirates have implemented the ICAO Annex 11 airspace classification.
(SPEC/ENR 1-3)

2. Instrument Flight Rules conform to ICAO Annex 2.
(SPEC/ENR 1-1)

3. Carriage of Airborne Collision Avoidance System (ACAS II) - Effective 1 June 2002, turbine-engine aircraft with a maximum certified take-off weight in excess of 33,000 pounds or authorized to carry more than 30 passengers operated within the Emirates FIR shall carry serviceable airborne collision avoidance system (ACAS II). Effective 1 January 2005, turbine-engine aircraft with a maximum certified take-off weight in excess of 12,000 pounds or authorized to carry more than 19 passengers operated within the Emirates FIR shall carry ACAS II. Operators are advised that aircraft covered by this requirement shall carry ACAS II installation documentation on board aircraft and made available for inspection by GCAA officials.

4. Exemption - No exemption shall be given for failure to install ACAS II equipment by the effective date. Aircraft that are away from their maintenance base may be dispatched with an unserviceable ACAS II system for a period not to exceed 10 days. The exemption is only valid until the first time the aircraft returns to its maintenance base. Aircraft operating with unserviceable ACAS II under this exemption shall indicate the out of service condition in the flight plan, section 18 - Other information.
(SPEC/GEN 1.5 and ENR 1-9)

5. RNAV PROCEDURES - Airspace including ATS routes above 10,500 ft are designated RNP 5 which requires navigation by means of area navigation equipment. ATS routes share common alignment and significant positions with underlying routes within which RNP 5 is not required. Above 10,500 ft all ATS routes are RNAV routes which by definition have no width.
(SPEC/ENR 3-23 AND 3-1)

RVSM RULES - Flight between FL 290 to FL 410 is for exclusive use of RVSM approved aircraft. Non-RVSM certified aircraft, shall flight plan accordingly.

FLIGHT PLANNING

SUPPLEMENTARY AIRPORT INFORMATION -

Abu Dhabi Intl (OMAA)

(SPEC/OMAA AD 2-7)

1. Overflight of Abu Dhabi city and other built up areas below 2000 feet is prohibited.

2. Except for takeoff and landing at downtown helipads, helicopters are also restricted to 2000 foot minimum and must avoid the vicinity of the Beach Palace (N24°28'00" E54°24'50").

Al Ain Intl (OMAL)

(SPEC/OMAL AD 2-9)

Flying over city and other built up areas prohibited below 3000 feet except for take-off and landing.

AL DHAFRA (OMAM)

1. Al Dhafra is not available as a primary divert base, crew rest stop, remain over night or Staging location. Oeprations are limited due to host nation restrictions, ramp availability and political MOG issues. Diverts require coordination with host nation prior to landing.
(SPEC/FIL 06-151)

2. Command Post (DRACO OPS) VHF frequency 123.45 unmonitored until civil air carrier operations are anticipated. Non-frangible structure located 1600 ft from approach end of runway 31R, 300 ft northeast of pavement edge. Non-frangible runway supervisory units located approximately 1600 ft from each end of runway 13L/31R, 340 ft northeast of pavement edge.

Dubai Intl (OMDB)

1. Nose in parking is mandatory. Exemption is given only in special cases with specific authorization from ATC.
(SPEC/AIP OMDB AD 2-3)

2. Broken turn-on lines are for DC10 and L1011; solid turn-on lines are for B747 and all other aircraft.
(SPEC/AIP OMDB AD 2-3)

3. Aircraft will normally be expected to start-up during push-back. Aircraft wishing to start engines either before or after push-back should notify ATC. In the case of cargo apron operations ten minutes prior notice is required.

(SPEC/OMDB AD 2-4)

4. Turns of 180 are not permitted on the runway for aircraft larger than an EA320.

(SPEC/OMDB AD 2-7)

5. Visual patterns/approaches

a. Downwind leg will be made south of Dubai City, avoiding Zabil Palace, for both Runway 12 and 30.

b. Base leg for Runway 12 will be over the sea and aircraft will be established on final prior to crossing the coast inbound.

(SPEC/OMDB AD 2-13)

Fujairah Intl (OMFJ)

1. IFR departures authorized from Runway 11 only.

2. Runway 29 departures shall be in accordance with VFR until reaching assigned level or as cleared by ATC.

3. Military 360 overhead procedures available for Runway 29 - 2500 feet QNH, left turns.

(SPEC/OMFJ AD 2-9)

Sharjah Intl (OMSJ)

Flying over city and towns below 1500 feet AGL is prohibited.

ENROUTE

AIRWAY/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. MANDATORY ROUTINGS - Traffic routing between Abu Dhabi International and Al Ain International airport in either direction shall flight plan or AUH direct ALN at 13,000 feet or below.

(SPEC/ENR 1-11)

a. Traffic routing between UAE airports and OOMM FIR shall route as follows:

(1) Traffic departing northern Emirates shall enter OOMM FIR at LALDO, TONVO, or TARDI.

(2) Traffic arriving northern Emirates shall enter OMAE FIR at KUPMA or VAXAS. Traffic shall flight plan to cross PASOV/TAPRA FL 270 or below. Traffic arriving northern Emirates from southern OMMM FIR shall enter OMAE FIR at MUSAP and flight plan to cross MUSAP FL 270 or below.

(3) Traffic departing Abu Dhabi Emirate shall enter OOMM FIR via KANIP and then LABRI or SODEX.

(4) Traffic arriving Abu Dhabi Emirate shall enter OMAE FIR at SODEX or ITRAX at FL 260 or below.

b. Traffic routing between UAE airports and HAI (OOMM FIR) shall route as follows:

(1) From HAI to OMDB,OMRK or OMSJ - MUSAP - R401- SHJ.

(2) From HAI to OMAA, SODEX - G462 - AUH.

(3) From OMDB, OMRK or OMSJ to HAI - TARDI - L223 - R402.

(4) From OMAA or OMAL to HAI - B457 - KANIP - DEBOK - R401.

c. Westbound traffic from OOMS or overflying MCT or IZK transitting the Emirates FIR and entering the OBBB FIR at BALUS shall route via AUH and G462.

d. Eastbound traffic from Bahrain FIR transitting the Emirates FIR and landing at OOMS or exiting the OOMM FIR at RASKI, PARAR, TOTOX, REXOD, LOTAV or KITAL shall route via AUH and B457.

e. Eastbound traffic from Tehran FIR transiting the Emirates FIR and landing at OOMS or exiting the OOMM FIR at RASKI, PARAR, TOTOX, REXOD, LOTAV or KITAL shall route via TARDI and L223 (or N629 for traffic landing OOMS).

f. Traffic routing between Abu Dhabi International and Al Ain International airport in either direction shall flight plan or AUH direct ALN at 13,000 feet or below.

(SPEC/ENR 1-11)

A415-Traffic exiting OTBD landing in the Northern Emirates shall flight plan L305/A791

A419

(1) Southbound traffic contact Emirates ACC 10 minutes before DARAX and shall FPL to cross DARAX 12,000 feet or above.

(2) When holding is required traffic landing at Dubai/Sharjah can expect to hold at BUBIN.

(3) Traffic landing northern Emirates shall FPL to cross DARAX FL 265 or below.

A791 - East of SHJ VOR available for eastbound flights only below FL 255.

B415 - Westbound traffic for destinations beyond Doha route G462 after AUH.

B416

(1) Eastbound traffic is required to contact Emirates ACC 10 minutes before ORSAR.

(2) Between ORSAR and SHJ VOR only available to westbound traffic 12,000 feet and below or at FL 350.

(3) UAE departures from northern Emirates expect routing RANBI then ORSAR.

B457 - Not available for traffic originating to the west of Abu Dhabi and exiting Muscat FIR at ALPOR (G787) or DENDA (R462). These flights shall route via Sharjah.

B540 - Westbound traffic landing northern Emirates airports only.

G462 - Mandatory routing for traffic from AUH landing OEDR, OKBK, OBBI or proceeding west of BAH.

G666 - Eastbound traffic contact Emirates ACC 10 minutes before ORSAR.

L223 - Eastbound traffic contact Emirates ACC 10 minutes before SIR VOR.

L305 - Traffic exiting OTBD landing in the Northern Emirates shall flight plan L305/A791.

L519 - Available for traffic departing Abu Dhabi Emirate Only.

M762 - Westbound traffic landing northern Emirates airports only.

P634 - Westbound traffic only.

R401

(1) Southbound traffic contact Emirates ACC 10 minutes before DARAX.

(2) Not available for international departures from the northern Emirates.

(3) MUSAP - GIDIS northbound traffic only.

(4) Traffic landing in Dubai or Sharjah shall flight plan MUSAP direct to BUBIN.

T199 - SODEX - KANIP westbound available for traffic landing in Al Ain Only.

(SPEC/ENR 3-1 TO ENR 3-22)

FLIGHTS TO OR FROM ISRAEL - No aircraft built in, or departing from Israel will be allowed to land at any airport within the UAE FIR. No aircraft will be cleared from any airport within the UAE FIR to Israel.

(SPEC/AD 1-1)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

UNITED ARAB EMIRATES HOILDAYS

NAME	DATE
New Years Day	1 Jan
Eid Al Adha	9 Feb
Hijri New Years Day	4 Mar
Prophet Mohammed's Birthday	13 May
Accession Day	6 Aug
Al Isra Wal Miraj	23 Sep
Eid Al-Fitr	25 Nov
National Day	2 Dec

(SPEC/GEN 2-2)

UNITED KINGDOM

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes LONDON FIR, SCOTTISH FIR/UIR, and SHANWICK OCA/FIR.

DIMENSIONAL UNITS - Non SI Alternative Units.

AIRSPACE STRUCTURE - The UK uses ICAO Airspace Classification.

(SPEC/ENR 1-3-1)

1. SUB-DIVISIONS OF UK AIRSPACE

a. UPPER AIRSPACE

(1) MANDATORY RADAR SERVICE AREAS (MRSA). Selected areas within the Upper Airspace Structure (FL 245/660) have been designated as MRSAs. It is mandatory for all military aircraft to call the appropriate Air Traffic Control Radar Unit and fly under Radar Control or Procedural Service except when:

(a) Flying as GAT.

(b) Flying as OAT or Defense Air Traffic under the control of autonomous radar units duly authorized to provide such a service (ADGE unit, Naval vessel or AEW aircraft).

(c) Operating within the Lincolnshire Military Temporary Reserved Airspace (LMTRA) or North Wales Military Training Airspace (NWMTA) during the published hours of operations.

(d) Taking part in exercises under agreed procedures.

(SPEC/MIL ENR 1-6-8)

(2) LINCOLNSHIRE MTRA AND NORTH WALES MTA The Lincolnshire MTRA and North Wales MTA are established to permit freedom of operation for military aircraft carrying out exercises incompatible with normal ATC procedures.

(SPEC/ENR 1-1-1-7)

(a) Lincolnshire Military Temporary Reserved Airspace (LMTRA). Hours 0800-1700Z++.

1 AREA A: N53°22′ W00°25′ to N53°25′ W00°17′ to N53°20′ W00°17′ then along coastline to N53°07′ W00°21′ to N52°59′ W00°37′ to N52°22′ W00°29′ to beginning. Vertical limits FL 350/FL 245.

2 AREA B: N53°13′ W00°52′ to N53°22′ W00°25′ to N52°22′ W00°29′ to N53°08′ W00°11′ to beginning. Vertical limits FL 350/FL 245.

3 AREA C: N53°07′ W01°09′ to N53°13′ W00°52′ to N52°08′ W00°06′ to N52°08′ W00°11′ to beginning. Vertical limits FL 280/FL 245.

(b) NORTH WALES (NWMTA) Normal Hours 0800-1700Z++ Mon-Fri, by NOTAM Sat and Sun through SATCO VALLEY. N53°18′ W05°00′ to N53°19′ W03°38′ to N53°10′ W03°22′ to N53°06′ W03°18′ to N51°59′ W03°23′ to N52°15′ W05°00′ to beginning. Vertical limits FL 245/FL 450. Vertical limits

FL 245/FL 450.

(SPEC/ENR 5-2-1)

b. MIDDLE AIRSPACE SERVICE (MAS): From FL 100 to below FL 245, outside of controlled airspace, ATC Radar Units provided radar service within radar cover.

c. LOWER AIRSPACE: Below FL 95 Lower Airspace Radar Service is provided by selected RAF airports as depicted in Procedures DOD FLIP Enroute Supplement - ENAME (Theatre Flight Data).

(SPEC/MIL GEN 2-2-13)

d. HEBRIDES UPPER CTA (HUTA) By arrangement with the Irish Government and EUROCONTROL, the Scottish ATCC will be responsible for providing Air Traffic Services, between FL 460/FL 245, in that part of the Shannon UTA.

(SPEC/ENR 2-2-1-2,6-2-2-1-6)

e. LONDON JOINT AREA ORGANIZATION (LJAO) The purpose of the LJAO is to provide coordinated civil/military service through the complex airways structure from N54°30' southwards, through Manchester, to London and over the Southeast area of England from FL 50 to FL 660. Covering three geographically named sector control locations. (NORTHWEST, CENTRAL and SOUTHEAST). The LJAO is outlined on the Swanwick (MIL) LJAO Area of Responsibility Graphic. The military element in LJAO uses the callsign "LONDON MIL".

(SPEC/ENR 1-11-1)

ALTIMETER SETTING PROCEDURES - Standard with the following exceptions:

1. See Procedures "Transition Altitude/Transition Level in the UK", DOD FLIP Enroute Supplement, Section C.

(SPEC/ENR 1-7-1)

2. When an aircraft is descending from a flight level to an altitude, ATC will pass the appropriate QNH. At civil and host nation military airports, QFE will be used on radar final approach unless the pilot advised that he is using QNH.

(SPEC/ENR 1-7-2)

3. Transition Altitudes. The Transition Altitude (TA) in the UK is 3000' except in or beneath the airspace listed below:

Aberdeen CTR/CTA6000'
Belfast CTR/TMA6000'
Birmingham CTR/CTA4000'
Cardiff CTR/CTA4000'
East Midlands CTR/CTA4000'
Edinburgh CTR6000'
Glasgow CTR6000'
Leeds Bradford CTR/CTA5000'
London TMA6000'
Manchester TMA5000'
Scottish TMA6000'
Solent CTA4000'*
Sumburgh CTR/CTA6000'*
Teesside CTR/CTA6000'*

NOTE: *Outside the notified hours of operation the TA is 3000'.

(SPEC/ENR 1-7-1)

4. All aircraft flying in the Upper Airspace Control Area must use the standard altimeter setting of 1013.2 mb (29.92 in Hg).

(SPEC/ENR 1-1-1-5)

VERTICAL SEPARATION - Standard except:

1. Below FL 245 see ENROUTE LOW ALTITUDE-EUROPE, NORTH AFRICA AND MIDDLE EAST charts for quadrangle cruising levels.

(SPEC/ENR 1-7-3)

POSITION REPORTING - Standard except:

1. An IFR flight operating outside controlled airspace and required to both submit a flight plan and maintain listening watch or two-way communications as necessary make position reports.

2. Aircraft using ATS advisory service while IFR within specified advisory airspace are expected to comply with procedures for controlled flights but the flight plan and the changes thereto are not subject to clearance and two way communication will be maintained with ATS.

(SPEC/ENR 1-3-2)

WITHIN SHANWICK OCEANIC FIR

1. Flights operating in an East-West direction to make additional position reports at intermediate meridians spaced at intervals of 10 degrees of longitude between W005° and W30°.

2. Flights North-South may be required to make position reports at any intermediate parallel of latitude.

3. In requiring aircraft to report their position at intermediate intervals, Shanwick will be guided by the requirement to have position information at approximately hourly intervals and also by the need to cater to varying types of aircraft and for varying traffic and meteorological conditions.

(SPEC/ENR 2-2-4-12)

SECONDARY SURVEILLANCE RADAR PROCEDURES -

1. EQUIPMENT

a. The carriage and operation of SSR transponder equipment with Mode 3/A 4096 Codes and Mode C is mandatory for all flights within UK airspace at and above FL 100 and all flights within UK Controlled Airspace below FL 100 when operating under IFR.

b. Mode 3/A 4096 Codes. Mandatory for all flights within the whole of the Scottish TCA above 6000'.

2. Military aircraft operating as OAT are subject to the same requirements as above except where specific exemption has been granted by the appropriate ATS.

(SPEC/MIL GEN 1-5-2)

3. OPERATION OF TRANSPONDERS

a. With the exception of standard procedures, pilots are to operate transponders only on instructions of an ATS unit.

b. Mode C is to be selected with Mode 3/A. When reporting levels, pilots should state the altimeter reading to the nearest 100 feet to help in verification of the accuracy of Mode C data.

c. When operating within the UK FIR/UIR, pilots should transpond in Mode 3/A Code 7000 and Code C at all times except as follows:

(1) When operating as GAT or under an air defense unit which require operation of the transponder on a different Mode 3/A setting.

(2) When flying in controlled airspace.

(3) When remaining within an airport traffic pattern below 3000' AGL.

(4) When entering the UK FIR/UIR from a non- SSR environment. In this case International Mode 3/A Code 2000 should be used.

(5) When circumstances require the use of Mode 3/A Code 7700, 7600 or 7500.

(6) When required to select an alternative code in Mode 3/A in accordance with the military low flying procedures.

(7) When engaged in actual SAR operations, in this case use Mode 3/A Code 0023.

(8) When receiving radar service from ships, except when on actual SAR operation, in this case use Mode 3/A Code 0021 (fixed wing aircraft) or Mode 3/A Code 0022 (rotary wing aircraft).

(SPEC/ENR 1-6-2-1)

MINIMUM NAVIGATION & COMMUNICATIONS EQUIPMENT -

TYPE OF FLIGHT	COMM	NAVIGATION
Flights in Controlled Airspace	VHF See Note (i)	
IFR Flights in Controlled Airspace below FL 245	VHF See Note (i)	VOR, DME and ADF or (2) any of the following: *TACAN, *VOR/DME. See Notes (ii) and (iii)
Flights in Upper Airspace (except gliders)	VHF See Note (i)	VOR, DME and ADF or (2) any of the following: *TACAN, *VOR/DME. See Notes (ii) and (iii)
Shanwick Oceanic Control Area	HF	Suitable Long Range Nav Equipment (Must meet MNPS if operating between FL 285 and FL 420)
Flights on ATS route structure above FL 95 (except TMA airspace). See Note (iv)	VHF See Note (i)	Equipment which meets RNAV RNP5 requirements. See Note (v)

* Military Aircraft

Notes:

i. The carriage and operation of 8.33 kHz channel spacing radio equipment is mandatory throughout the ICAO EUR region for flights above FL 245, but its implementation in the UK will be delayed until the New En-Route Center (NERC) at Swanwick is operational.

ii. ILS may be required at certain aerodromes within Control Zones.

iii. Aircraft with Special VFR clearance are not required to carry the navigation equipment specified in table.

| TYPE OF FLIGHT | COMM | NAVIGATION |

iv. Certain ATS routes e.g. Airway N862, are not aligned with VOR and require area navigation equipment at all route levels. In this case the requirement for area navigation equipment is denoted by the use of the following route designators: L, M, N, P, Q, T, Y or Z.

v. Inbound aircraft from Oceanic airspace are permitted to navigate to MNPS airspace navigational accuracy requirements but are to be RNP5 compliant on reaching Landfall Fix.

NAVIGATIONAL EQUIPMENT REQUIREMENTS FOR FLIGHTS BY MILITARY AIRCRAFT.- Military aircraft fitted with a Decca fed navigation computer are considered capable of meeting the minimum navigation requirements for IFR flights in class D and E airspace. Military aircraft may also use INS or Doppler fed DR navigation systems for IFR transit through all controlled airspace provided the system is updated within 5 minutes prior to entry and at least every 30 minutes thereafter. Updates may be achieved by VOR/DME, TACAN or GPS fixing. Careful monitoring and cross checking of the fixing aids and DR systems is required to ensure they are operating satisfactorily.

B-RNAV. Within UK airspace, B-RNAV is applied at FL 100 and above. Aircraft other then State aircraft operating on ATX routes at or above FL 100 are to be equipped to meet RNP5 requirements. Special procedures apply to a non-compliant military aircraft, Bulldog T1, Hawk T1/T1A/T1W, Jetstream T1 and Tucano T1.

(SPEC/MIL ENR 1-5-1)

INTERCEPT PROCEDURES -

INTERCEPTION - The pilot-in-command of a civil aircraft, when intercepted, shall comply with the Standards in ICAO Appendix 2, interpreting and responding to visual signals as specified in Appendix 1.

In order to alleviate any possibility of an intercepted aircraft's airborne collision avoidance system (ACAS) perceiving the interceptor as a collision threat, the intercepting aircraft should switch off or suppress the transmission of pressure altitude information (Mode C) on his secondary surveillance radar (SSR). This should be done within 20nm of the intercept.

ACTION BY INTERCEPTED AIRCRAFT - An aircraft which is intercepted by another aircraft shall immediately;

1. Follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in ICAO Annex 2 Appendix 1;

2. Notify, if possible, the appropriate air traffic services unit.

3. Attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5 MHz, giving the identity of the intercepted aircraft and the nature of the flight; and if no contact has been established and if practicable, repeating this call on the emergency frequency 243.0 MHz.

4. If equipped with SSR transponder, select Mode A, Code 7700, unless otherwise instructed by the appropriate air traffic services unit.

If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while

continuing to comply with the Visual instructions given by the intercepting aircraft.

If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting traffic.

(SPEC/MIL ENR 1-12)

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS - The UK has implemented ICAO Annex 11 airspace classifications and other regulations with the following exceptions:

1. The UK uses ICAO Airspace Classifications and conforms to the ICAO table of VMC minima as follows:

a. In addition to normal Class C, D, and E provisions, VFR flight is allowed by aircraft other than helicopters at or below 3000' AMSL at a speed of 140 Kts. or less, which remain clear of clouds and in sight of the surface and in flight visibility of at least 5 km. Helicopters may fly VFR in this airspace provided they remain clear of clouds and in sight of the surface.

b. F and G Airspace - the VMC minima at and below FL 100 applies down to the surface (instead of down to 3000') with the minima at and below 3000' as an alternative.

c. The proviso or 300m above terrain whichever is the higher does not apply in the UK.

d. The UK does not permit VFR flight in certain Control Areas and Control Zones as notified in the AIP.

e. VFR flight is permitted above FL 200, except in certain CTA and Control Zones as notified in AIP where VFR flight is not permitted.

f. The relevant restrictions concerning minimum flying height over congested areas apply to all flights, whether under VFR or IFR and in all meteorological conditions.

g. The requirement applies to all flights, and is expressed as: not closer than 500' to any person, vessel, vehicle or structure. Exception is made for any captive balloon or kite or for any glider while it is hill-soaring.

h. CRUISING LEVEL FOR VFR FLIGHT - It is not mandatory in the UK for VFR flight to adopt any particular cruising level system. Such flights are advised to adopt the table of cruising levels for IFR flights.

i. SPECIAL VFR CLEARANCE - A special VFR clearance may be requested without submission of a filed flight plan. Brief details of the proposed flight should be passed to the appropriate ATC Unit. Request must be made at least 10 minutes prior to specific point of entry.

(SPEC/GEN 1-7-4)

2. SPECIAL VFR - (SVFR) are promulgated to facilitate flight within control zones by pilots unable to comply with IFR, in circumstances where VFR flight is not permitted. Details are published in the UK AIP and in the UK MIL Aeronautical Planning Document, section 1, UK.

a. Aircraft using the access lanes and local flying areas for Denham, White Waltham, and Fairoaks in the London Control Zone and any temporary Special Access Lanes which may be announced will be considered Special VFR flights. Separate requests should not be made nor will separate clearances be given. Separation between aircraft, which are using such airspace, cannot be given.

b. Aircraft must be clear of clouds and in sight of the surface.

c. Requests for Special VFR clearance to enter or transit a Control Zone may be made while airborne. All requests must specify the ETA for the selected entry point and must be made 5-10 minutes beforehand.

d. A Special VFR clearance within a Control Zone does not absolve the pilot from responsibility for avoiding an Aerodrome Traffic Zone nor from the need to comply with normal restrictions regarding overflying congested areas.

(SPEC/ENR 1-2-2)

3. MILITARY VISUAL FLIGHT - See the UK Military Low Flying Handbook.

(SPEC/MIL AIP, 2-1-2-13)

DAY VFR FLIGHTS -

VFR Flight						
Airspace Class	B		C, D, or E		F or G	
	FL 100 or above	Below FL 100	FL 100 or above	Below FL 100	FL 100 or above	Below FL 100
Distance from cloud	Clear of cloud	Clear of cloud	1500 m Horizontally and 100 ft Vertically	1500 m Horizontally and 100 ft Vertically (1)	1500 m Horizontally and 100 ft Vertically	1500 m Horizontally and 100 ft Vertically (3)
Flight visibility	8 km	8 km	8 km	8 km (2)	8 km	8 km (3)

(1) Or if at 3000 ft or below and flying at 140 kt or less: Clear of Cloud and in Sight of the Surface

(2) Or if a Helicopter and flying at 3000 ft or below: Clear of Cloud and in Sight of the Surface

(3) Or if at 3000 ft or below:

Either:	any aircraft flying at more than 140 kt:	Clear of Cloud and in Sight of the Surface in a Flight Visibility of 5 km.
Or:	any aircraft flying at 140 kt or less:	Clear of Cloud and in Sight of the Surface in a Flight Visibility of 1500 m.
Or:	helicopters flying at a reasonable speed for the actual visibility:	Clear of Cloud and in Sight of the Surface.

(SPEC/ENR 1-2)

NIGHT VFR FLIGHTS - Standard.

VFR FLIGHTS ABOVE CLOUD LAYERS - Aircraft must be clear of clouds and in sight of the surface.

MAXIMUM AIRSPEEDS - Supersonic flights may be conducted for operational and training purposes in conformance with the following requirements:

1. In the UK FIR, all medium and high level supersonic flights are to be made over the sea. Aircraft heading directly out to sea may accelerate to supersonic speed when at least 10 NM out to sea and along a line of flight at least 20 divergent from the mean line of the coast; the angle of dive is not to exceed the minimum necessary. Supersonic flights with the aircraft point towards the land, turning or flying parallel to the coast are to take place at least 35 NM from the nearest coastline.

2. Supersonic flying at low level over the sea within the UK FIR may take place provided that the rules in paragraph 5.a. above are followed and that, in addition, a radar/visual search is maintained to avoid the following by the margins stated:

a. Shipping and fixed or mobile oil and gas installations: 3 NM.

b. Civil or military transport aircraft: 6 NM.

c. Helicopters main routes and corridors: 6 NM.

3. Aircraft captains are to ensure that the positioning requirements of paragraph 5.a. and 5.b. above are met by whatever means are necessary (e.g., radar control, aircraft radar, and/or INS). Where more than one radar unit is controlling within the same supersonic runs take place.

4. With the exception of air defense (AD) missions, operating authorities are to notify the appropriate radar unit of all planned supersonic flights in advance, providing:

a. Aircraft type.

b. Time period during which supersonic flight conducted.

c. Heading and speed of aircraft (where known).

d. Position (area in the case of sustained supersonic flight).

e. Altitude and attitude (where known).

5. AD aircraft may routinely fly at supersonic speed during Practice intercept sorties or when taking part in AD exercises in approved operating areas.

6. If any pilot knows or suspects that his aircraft has inadvertently made a supersonic flight that breaks the conditions set in this paragraph, it is his responsibility to notify the appropriate radar unit within 30 minutes of aircraft landing.

(SPEC/ENR 1-1-5)

MINIMUM HEIGHTS FOR VFR OPERATIONS -

1. The minimum height for aircraft other than helicopters over congested areas shall be: either 1500' above the highest fixed object within 2000' of the aircraft, or, such height as would enable the aircraft to alight clear of the congested areas and without danger to persons or property in the event of failure of a power unit, whichever is the higher. A helicopter shall not fly below such a height as would enable it to alight without danger to persons or property in the event of the failure of a power unit.

2. Aircraft shall not fly over, or within 3000' of an open-air assembly of more than 1000 persons, without written permission, and then not below or at such a height as would enable the aircraft to land clear of the assembly in the event of the failure of a power plant.

(SPEC/GEN 1-7-3)

CHANGE OF FLIGHT RULES FROM VFR TO IFR -

IFPS is the only source for distribution of IFR/General Air Traffic (GAT) flight plans and associated messages to ATSUs within the participating European States - the IFPS Zone. Although IFPS handles IFR flight plans, it will not process the VFR portions of any mixed VFR/IFR flight plan. Therefore, in order to ensure that all relevant ATSUs are included in the flight plan message distribution, pilots or Aircraft Operators should make certain that whenever a flight plan contains portions of the flight operated under VFR, in addition to the IFR, the FPL must be addressed to:
IFPS (EGZYIFPS)
Aerodrome of departure
Aerodrome of destination
all FIRs that the flight will route through as VFR (in UK address to EGZYVFRP for Scottish/Oceanic FIRs and or EGZYVFRT for London FIR)
Any additional addresses specifically required by State or Aerodrome Authorities.

(SPEC/ENR 1-10)

INSTRUMENT FLIGHT RULES

FM IMMUNITY - From 1 Jan 2001:

1. CREW BRIEFING - All crews who may operate aircraft with non-compliant equipment are to be briefed on the potential hazards of FM interference and be made aware of the UK Ministry of Defense policy to be adopted when operating non-compliant equipment. Crews are encouraged to report instances of equipment deviation when observed. Crews are to be made aware of an aircraft's equipment status prior to flight.

2. ENROUTE - Crews operating non-compliant VOR equipment are not to use VOR information during flight. Crews operating as GAT must meet RNP5 navigation standards without the use of VOR and must use means other than VOR for airway centerline holding and position fixing.

3. TERMINAL Arrival/Departure - Crews are not to use SID/STAR procedures that require the use of VOR facilities.

4. TERMINAL IFR Final Approach at military airfields - Aircraft with non-compliant ILS receivers are only to make ILS approaches under RADAR monitoring. Where PAR is unavailable, the approach minima for the ASR are to be used. (Civil airfields are not to be used except in emergency).

(TFMWG-E USA 02-0047)

MINIMUM SAFE HEIGHTS -

1. ENROUTE OBSTRUCTION CLEARANCE CRITERIA (IFR) - US criteria normally established 1000' standard obstruction clearance and 2000' clearance in mountainous terrain along an airway or from a feeder fix to the approach facility. UK civil ATC rules provided on airways or advisory air routes 1500' obstruction clearance 15 NM either side of centerline. Off airways obstruction clearance provides 1500' above any fixed obstruction within 30 NM of aircraft.

2. DECISION HEIGHT (DH)/MINIMUM DESCENT ALTITUDE (MDA) - US aircrews use published DH and MDA. UK military pilots determine their own DH/Minimum Descent Height (MDH), based on instrument ratings. The UK military controller passes either the Obstruction Clearance Limit (OCL) or basic DH/MDH for the approach and request the pilot's DH or MDH. The DH/MDH is announced to the pilot when he reaches it; thereafter, he receives only advisory information. US pilots landing at UK airports, not under the control of USAF, should

ignore the Obstacle Clearance Limit (OCL) and provide the controller with the DoD published or MAJCOM established DH/MDA.

NOTE: See QFE Altimeter Setting Procedures, DOD Enroute Supplement; ENAME.

3. EMERGENCY SAFE ALTITUDE - US obstruction clearance criteria provides 1000' standard, 2000' mountainous terrain clearance within 100 NM of the facility. RAF obstruction clearance is computed by adding 10% to the highest obstruction within 100 NM of the facility plus 1500' and rounded to the next highest 100' increment.

ALTIMETER SETTING AND CRUISING LEVELS ON IFR FLIGHTS - Below FL 245 see ENROUTE LOW ALTITUDE-EUROPE, NORTH AFRICA AND MIDDLE EAST charts for quadrangle cruising levels.

(SPEC/ENR 1-7-3)

CHANGE OF IFR TO VFR -

1. An aircraft electing to change the conduct of its flight from compliance with the instrument flight rules to compliance with the visual flight rules shall, if a flight plan was submitted, notify the appropriate air traffic services unit that the IFR flight is cancelled and communicate thereto the changes to be made to its current flight plan.

2. When an aircraft operating under the instrument flight rules is flown in or encounters visual meteorological conditions it shall not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted visual meteorological conditions.

(SPEC/ENR 1-3)

IFR OPERATIONS IN CLASS F - Standard.

FORMATION FLIGHTS - See RVSM rules.

TRANSMISSION OF EXPECTED APPROACH TIMES - The pilot is responsible for ensuring that the airborne time of the flight is passed to the ATSU with whom the flight plan has been filed. The ATSU will ensure that the departure message, if required, is sent to the appropriate addresses. The pilot should try to arrange for a 'responsible person' on the ground to telephone the airborne time to the ATSU, as passing it over the RTF may, due to controller workload, lead to a delay in sending a departure message. Failure to pass the airborne time will result in the flight plan remaining inactive; consequently, this could result in the destination aerodrome not being aware that alerting action should be taken.

(SPEC/ENR 1-10-5)

REDUCED VERTICAL SEPARATION MINIMA (RVSM) RULES - RVSM is in effect in UK airspace, Non-compliant aircraft should plan flying FL 290 or below.

(3AF A33/USAF FIL 01-62)

1. Reduced Vertical Separation Minima (RVSM). The airspace in the London and Scottish UIRs between FL 290 and FL 410 inclusive is an element of EUR RVSM airspace. Furthermore, the airspace within the London and Scottish UIRs between FL 290 and FL 410 inclusive and is designated for the purpose of transitioning non-RVSM approved aircraft operating to/from the North Atlantic Region.

2. Within this airspace, the vertical separation minimum shall be:

a. 300 meters (1000 ft) between RVSM approved aircraft;

b. 600 meters (2000 ft) between:

(1) Non-RVSM approved aircraft and any other aircraft operating within the EUR RVSM airspace;

(2) Formation flights of State aircraft and any other aircraft operating within the EUR RVSM airspace;

(3) An aircraft experiencing a communications failure in flight and any other aircraft, when both aircraft are operating within the EUR RVSM airspace.

(SPEC/ENR 1-8-1)

ADDITIONAL RADIO EQUIPMENT REQUIREMENTS TO INCLUDE E-TACS, ACAS, ETC - Enhanced Traffic Collision Avoidance System (E-TCAS).

1. KC-135, KC-10 and HC-130N/P (Tanker) aircraft equipped with E-TCAS version 7.0 may use the enhanced mode when flying in United Kingdom (UK) airspace until 31 Mar 2006. Tanker aircraft will comply with the following restrictions when operating E-TCAS while flying in UK airspace:

a. Formations will consist of no more than six E-TCAS equipped aircraft.

b. When flying as a formation in UK airspace, only the lead and trail tanker aircraft are permitted to operate the TCAS broadcast function (i.e. select "BRDCST ON"). All other tanker aircraft in the formation will inhibit the TCAS broadcast function by selecting "BRDCST OFF".

c. When flying in formation, only the lead tanker aircraft will operate with ATC mode on, unless directed otherwise by the appropriate air traffic control agency.

2. Tanker aircraft equipped with E-TCAS version 7.0 are allowed to operate in the standard TCAS II mode while flying in UK airspace without restrictions on altitude or formation size.

(HQ USAFE-DOV/USAF FIL 01-62)

OPERATIONAL AIR TRAFFIC

1. These procedures are designed for military aircraft who file to fly as operational air traffic (OAT) over the UK and over the Continent. For flights originating in the UK, a flight plan will have been submitted for an OAT flight planned to over fly the Continent, or to land at an airport abroad. To enable the UK military Air Traffic Control Radar Unit (ATCRU) to arrange a coordinated transfer of control service to the appropriate continental ATC agency, pilots should inform the UK ATCRU controller of their intention to overfly FRANCE/BELGIUM/ DENMARK/NETHERLANDS as OAT as soon as possible after commencement of radar service, passing the following details:

a. The UIR boundary crossing point;

b. Flight level requested;

c. ETA UIR boundary.

2. These details are required a minimum of 5 minutes before the boundary ETA for flights to FRANCE/BELGIUM/

NETHERLANDS and at least 100 NM from the UIR boundary for flights to DENMARK.

(3AF/AFFSA)

FLIGHT PLANNING

GENERAL AIR TRAFFIC -

1. General Air Traffic (GAT) are flights which are conducted in accordance with the rules and regulations of the International Civil Aviation Organization (ICAO) and/or the National Civil Aviation Law.

2. Flight of general air traffic are normally performed on civil ATS routes/upper civil ATS routes and controlled by civil air traffic performance of ATC service.

3. UK Military Flying Regulations require advance notification and coordination of all unusual air activity. The National Air Traffic Services, Airspace Utilization Section, is the UK body charged with coordinating all such activity. They define unusual air activity as an airspace activity such as an air exercise, display or demonstration which, without prior coordination and notification, would be likely to affect the normal operations of other airspace users, and which possesses one or more of the following characteristics:

a. A concentration of aircraft in time and/or space that is significantly greater than that for a normal day.

b. ATC regulations cannot be observed.

c. Rules of the air cannot be observed.

d. Low level military flying on weekends or UK public holidays (42 days prior notification required for Ministry of Defense approval).

e. USAFE bases conducting local exercises (Operational Readiness Inspections, maximum flying days, etc.) in UK airspace, that involve any of the above.

4. The military authority (For 3AF, wing level; for others Numbered Air Force) sponsoring the air activity is responsible for submitting the details of the proposed activity to HQ 3AF at least 30 days in advance (See 3AFI 11-201), make submissions to: HQ 3AF RAF MILDENHALL UK//A3/A33//, or e-mail to 3af.a33@mildenhall.af.mil, or call DSN 238-2627/2125.

SHANWICK OCEANIC CONTROL AREA -

1. For flights conducted along one of the organized tracks from the entry point into the NAT Flight Information Regions to the exit point, the organized track shall be defined in the flight plan by the abbreviation "NAT" followed by the code letter assigned to the track. For flights wishing to join or leave an organized track at some point between entry and exit fixes, full track details should be specified in the flight plan, the track letter should not be used to abbreviate any portion of the route In these circumstances.

2. Flight planned wholly or partly outside the organized tracks shall be planned along great circle tracks joining successive significant points. The latitude and longitude of each designated reporting line (e.g. W10°, W20°, W30°, W40°, W50°, W60°, Fishpoint and landfall), should be entered in Item 15 of the flight plan.

(SPEC/UK AIP ENR 2-2-4-2)

3. Estimated Times -

a. For flights conducted wholly or partly outside the organized tracks in the NAT Region, accumulated estimated elapsed times over significant points enroute shall be specified in Item 18 of the flight plan.

b. For flights conducted along one of the organized tracks from the entry point into the NAT FIR to the exit point, the accumulated estimated elapsed time to the first Oceanic FIR Boundary should be specified in Item 18 of the fright plan.

c. For flights entering Shanwick OCA directly from the S0TA, the Estimated Elapsed Time (EET) for the Shanwick Boundary filed in Item 18 of the flight plan is to be the EET for the point of crossing the Shanwick/SOTA Boundary (SOMAX/BEDRA/ OMOKO or LASNO).

d. For flights entering Shanwick OCA directly from the BOTA, the EET for the Shanwick Boundary filed In Item 18 of the flight plan is to be the EET for the point of crossing the Shanwick/BOTA Boundary (ETKI/SEPAL or SIVIR).

e. For flights exiting Shanwick OCA directly to the SOTA, the EET for the Shannon Boundary filed In Item 18 of the flight plan is to be the EET for the point of crossing the Shanwick/SOTA Boundary (SOMAX/BEDRA/OMOKO or LASNO).

f. For flights exiting Shanwick OCA directly to the BOTA, the EET for the Brest Boundary filed in Item 18 of the flight plan is to be the EET for the point of crossing the Shanwick/BOTA Boundary (ETIKI/SEPAL or SIVIR).

4. Designated reporting lines within the Shanwick OCA:

a. For flights Europe-North America: Eastern Boundary of the OCA, and longitudes W20°00' and W30°00'.

b. For flights Europe-Iceland: W10°00' and latitude N61°00' (RATSU).

c. For flights Europe-Azores: W8°45' and latitude N45°00'.

5. MACH Numbers -

a. Jet aircraft intending to operate in The Shanwick OCA must indicate the MACH number planned to be used for any portion of the flight within the area in Item 15 of the flight plan.

b. Jet aircraft should indicate their proposed speeds in the following sequence:

(1) Cruising speed (TAS) in knots

(2) Oceanic Entry Point and cruising MACH number

(3) Landfall Fix and cruising speed (TAS) in knots

c. All other aircraft speed in terms of TAS in knots.

6. Flight Level Allocation Scheme -

a. The Flight Level Allocation Scheme (FLAS) should be used by operators for flight planning purposes.

b. In order to accommodate traffic, Oceanic Area Control Centers may, on a tactical basis, coordinate and assign flight levels which are exceptions to FLAS.

c. The flight level allocations under the FLAS are as follows:

(a) The following table applies during the Organized Track System (OTS) periods indicated:

DURING THE OTS

	Westbound OTS (1130-1800 UTC)	Eastbound OTS (0100-0800 UTC)
On the OTS	310, 320, 330, 340, 350, 360, 370, 380, 390	310, 320, 330, 340, 350, 360, 370, 380, 390
Random Westbound	280, 300, 310, 320, 330, 340, 360, 380, 390, 400	280, 300, 320, 340, 380, 400
Random Eastbound	290, 350, 370, 410	290, 310, 330, 350, 360(t), 370, 390, 410

(b) The following table applies outside the OTS periods indicated:

OUTSIDE THE OTS

	0801-1029 UTC	1030-1129 UTC	1801-2159 UTC	2200-0059 UTC
Random Westbound	280, 300, 320, 340, 360, 380, 400	280, 300, 310, 320, 330, 340, 380, 390, 400	280, 300, 310, 320, 340, 360, 380, 400	280, 300, 320, 340, 380, 400
Random Eastbound	290, 310, 330, 350, 370, 390, 410	290, 350, 370, 410	290, 330, 350, 370, 390, 410	290, 310, 330, 350 360(t), 370, 390, 410

NOTE 1: Times are UTC at 30°W

NOTE 2: FL 280 and FL 410 are non-RVSM flight levels

NOTE 3: During any period FL 430 may be planned for both east and westbound non-RVSM approved aircraft

NOTE 4: FL 360(t)
From 2200-0800 UTC
(i) north of the OTS is available as an east bound random flight level, and
(ii) south of the OTS is reserved for eastbound traffic transiting the Santa Maria to Shanwick Oceanic FIRs/CTAs

d. If a flight is expected to be level critical, operators should contact the Initial Oceanic Area Control Center prior to filing the flight plan to determine the likely availability of such level(s). Request for a suitable alternative flight level may be included In Item 18 of the flight plan.

7. Minimum Navigation Performance Specification (MNPS) -

a. If the flight is certified as being in compliance with Minimum Navigation Performance Specification (MINPS) and intends to operate in MNPS airspace, for any portion of the flight, the letter 'X' shall be inserted after the letter 'S' in item 10 of the flight plan to indicate that the flight has been approved for operations within the Minimum Navigation Performance Specification Airspace (MNPSA). It is the Pilot in Command's responsibility to ensure that specific approval has been given for such operations by the State of Registry of either the aircraft or of the operator.

b. Reduced Vertical Separation Minima (RVSM) -

c. If the flight is certified as being in compliance with the Minimum Aircraft System Performance Specification(MASPS) and intends to operate in RVSM Airspace for any portion of the flight, the letter 'W' shall be inserted after the letter(s) 'S' and 'X' (if applicable) in item 10 of the flight plan to indicate that the flight has been approved for operations within RVSM Airspace. It is the Pilot in Command's responsibility to ensure that specific approval has been given for such operations by the State of registry of either the aircraft or the operator.

(SPEC/UK AIP ENR 2-2-4-3)

FILING FLIGHT PLANS (DAY/NIGHT) -

1. A flight plan must be filed for the following GAT flights:

a. When all or part of the flight is to be made as GAT in Class A airspace.

b. When all or part of the flight is to be made as GAT in any controlled airspace in IMC or at night, excluding Special VFR (SVFR).

c. When all or part of the flight is to be made as GAT in VMC if the flight is to be conducted under IFR.

d. When the flight is to take place wholly or partly within Class B-D airspace Control Zones/Control Areas irrespective of flight conditions.

e. For the flight of a 12,567 pound or heavier aircraft from an aerodrome in the UK over 21 miles.

f. For all flights across the UK FIR.

g. For any flight from Class F airspace which will use Air Traffic Advisory Service.

(SPEC/ENR 1-10-1)

2. IFR/GAT FLIGHT PLANS

a. The UK is a participating State in the Integrated Initial Flight Plan Processing System (IFPS), which is an integral part of the Eurocontrol centralized Air Traffic Flow Management initiative. The IFPS is the sole source for distribution of IFR/GAT flight plan information to ATSUs within the participating European States, which collectively comprise the IFPS Zone. Additionally, IFPS provides accurate flight data to the Air Traffic Flow Management (AFTM) elements of the Central Flow Management Unit (CFMU) located at Haren, Brussels.

(SPEC/MIL ENR 1-10-2)

b. Submission of Flight Plans - Flight plans should be filed a minimum of 3 hours before Estimated Off Blocks Time (EOBT) for North Atlantic flights and those flights subject to AFTM measures, and a minimum of 60 minutes before EOBT for other flights.

(SPEC/MIL ENR 1-10-1)

c. Addressing of Flight Plans - For IFR/GAT flights overflying or wholly within the IFPS Zone, address flight plans and associated messages to the 2 IFPUs. To further simplify AFTN addressing a single collective address, EGZYIFPS, which covers both IFPUs has been established.

(SPEC/MIL ENR 1-11-1)

d. In addition to the IFPS addresses, flight plans and associated messages relevant to Shanwick airspace must be addressed to EGGXZOZX.

(SPEC/ENR 1-9-2)

e. The address EGZIFPS must also be used for flights that begin as OAT and revert to GAT within UK airspace.

(3AF A33/USAF FIL02-43)

f. Replacement Flight Plan. In Field 18 enter RFP/QI for the first replacement, RFPQ2 for the second, etc.

(SPEC/ENR 1-10-7)

3. GAT PROCEDURES

a. The flight is to be planned to join an upper ATS route before crossing the UK UIR boundary except when specified in the preferred reversion points listed below. Insert "/GAT" to indicate the point at which reversion to GAT is to take place; hence: " . . . LND/GAT UR8 . . ." will indicate to IPFS that everything prior to LND was OAT. However, notwithstanding filed GAT reversion points, for tactical ATC purposes, flights may be handed to the appropriate UK civil control authority at an earlier stage.

UK EXIT POINT	PREFERRED GAT REVERSION POINT
OLKER	OLDER
	STN or POL
RATSU (N61 W10)	POL
ATSIX (N60 W10)	POL
BALIX (N59 W10)	POL
ERAKA (N58 W10)	POL
GOMUP (N57 W10)	DENBY
NIMKU (N56 W10)	POL
NIBOG (N55 W10)	POL
LIFFY	DENBY
BAKUR, SLANY, BANBY MOPAT, LESLU	DIKAS
GAPLI	LND
ORTAC, SITET, XAMAB	LAM

(3AF A33/USAF FIL 02-43)

4. Where the flight time between airport of departure and the Upper ATS route joining point is 10 minutes or less, the airport of departure will obtain ATC joining clearance from the appropriate civil ATC authority BEFORE TAKEOFF.

5. Where the flight time between airport of departure and the Upper ATS route joining point is more than 10 minutes, it will normally be the responsibility of the aircraft pilot to obtain ATC clearance at least 10 minutes before ETA at the joining point by communicating on VHF R/T with the appropriate civil ATC authority. Where the Upper ATS route joining point is within the airspace of the London Joint Area Organization LJAO), ATC joining clearance will be issued on the in-use UHF R/T channel. In either case, pilots should inform the military RADAR controller on commencement of radar service of their intention to transfer to GAT, giving joining point, flight level and estimated joining time. London RADAR will obtain ATC joining clearances for all aircraft departing RAF Lakenheath and Mildenhall.

6. The military RADAR controller should be informed by the pilot when ATC clearance is obtained, confirming joining point, flight level and time.

7. The cleared joining flight level is to be reached at least 5 NM before the route joining point.

8. When military RADAR service on UHF is terminated, inform the civil ATC authority. It is emphasized that the military RADAR will have full control responsibility until radar service is terminated approximately 5 NM before the route joining point.

9. UHF/VHF equipped military aircraft inbound to the UK from the continent as GAT, must contact London ATCC on VHF. These aircraft may contact a military RADAR on UHF to advise their needs for service on leaving the ATS route, but may not deviate from the last clearance received until London ATCC has given approval.

10. If any change of heading or flight level is required to conform with the ATC clearance, obtain approval of the military ATC radar unit controller BEFORE making the change.

11. For aircraft which are required to operate as GAT over Europe, but are unable to communicate with London ATCC on VHF, UHF frequencies are available to make a coordinated entry into the European GAT route system. This service is extremely limited and is only available on certain sectors during periods when traffic density is light.

12. GAT/OAT UHF - Only aircraft inbound to the UK from Europe, on Upper ATS routes should flight plan to the selected exit point as GAT and will normally be cleared to this point. Item 18 of the flight plan must include UHF only GAT/OAT as well as the LJAO entry point, ETA and flight level.

(3AF/AFFSA)

OAT FLIGHT PLANS

Subject to the provisions of para a above, flight plans are not mandatory for OAT flights in UK airspace. However, an OAT flight plan should be filed at least 15 minutes before departure for flight requiring military en-route service using addressees as follows:

London Military EGWDZQZX
Scottish Military EGQQYCYX

(SPEC/MIL ENR 1-10-2,1-11-1)

FLIGHT PLAN ENTRIES - DD Form 1801.

a. Base operations will enter appropriate UK FLIGHT PLAN ADDRESSEES, enter the estimated elapsed time to the flow control point in item 18 based on proposed takeoff, obtain the flow regulation time when GAT via route subject to flow control regulation or the French acceptance message clearance number if OAT to France. When required, insure time/clearance number is obtained from Base Operations prior to departure.

b. For flights penetrating LJAO airspace:

(1) Aircraft which enter LJAO airspace as OAT and then become GAT (or vice versa inbound from the Continent) are to include this data in Item 18 of the flight plan either as OAT/GAT (VHF) and point of change or OAT/GAT (UHF) and point of change, e.g. OAT/GAT (VHF) DVR - OAT to Dover then becoming GAT on VHF.

(2) Aircraft which enter LJAO as OAT:

(a) Aircraft which enter LJAO as OAT are to include in Item 18 of the flight plan the category of flight with an estimated point and time of entry, the point to be expressed as a bearing and distance from the nearest airways designator; e.g. OAT EST LJAO CLC 350 10 1045 - Operational Air Traffic estimating Clacton 350 degrees 10 NM at 1045Z.

(b) Aircraft are to include turning points within and exit points from LJAO airspace as expressed in (1), above.

(3AF A33/USAF FIL 01-63)

ADDITIONAL FLIGHT PLAN ADDRESSEES

a. Flight plans to enter controlled airspace within London Military area of responsibility requiring service before joining or leaving controlled airspace - EGTTZQZX and EGWDZQZX.

(SPEC/MIL ENR 1-11-1)

b. Inbound to Guernsey (EGJB) and Alderney (EGJA) and overflying the Channel Islands up to FL 195-EGJJZRZK (Channel Islands Control Zone).

c. Flight Plans for flights departing from points within adjacent regions and entering the NAT Region, without intermediate stops, should be submitted at least 3 hours prior to departure. Flight Plans for flights through SOTA Airspace by aircraft not equipped with VHF RTF are to be annotated, in Item 18, COM/UHF only.

d. Flights which transit SOTA at FL 250 and above are to be flight planned to follow a route from the published SOTA route structure.

(SPEC/UK AIP ENR 2-2-4-4)

e. Addressing of Flight Plans and Messages:

(1) Within the Shanwick OCA and FIR: EGGXZOZX

(2) Flights which will transit the SOTA: EBBDZMPF and LFPYZMPF

(3) Flights which will transit the BOTA: LFRRZQZX

(SPEC/UK AIP ENR 1-11-1)

f. Pilots and operators are advised that because Shanwick is outside the IFPS area, they are to ensure that Shanwick's address (EGGXZOZX) is included as an additional address for all flights which will enter Shanwick OCA.

(SPEC/UK AIP ENR 2-2-4-4)

CLEARANCE INFORMATION -

1. Airway Crossing - Military aircraft crossing airways are to cross by one of the following methods:

a. UNDER THE CONTROL OF AN ATC RADAR UNIT - Initial calls for service requesting radar control through airways are to be made to the appropriate ATC Radar Unit at least 5 minutes before entry. In the event of R/T failure when crossing under radar control, the last assigned heading and flight level is to be maintained.

b. PROCEDURAL CROSSING UNDER POSITIVE ATC CLEARANCE - A flight plan should be filed and clearance to cross must be obtained at least 10 minutes before the intended crossing point. The request is to contain:

(1) Identification and type

(2) Position and heading

(3) Level and flight conditions

(4) Point of crossing

(5) Desired crossing level

(6) Estimated time of crossing

c. IN EMERGENCY - When neither a radar nor a procedural crossing can be obtained, an airway may be crossed at an intermediate 500 feet level, i.e. levels of whole thousands of feet plus 500 feet. Aircraft flying at quadrantal levels of whole thousands of feet are in all cases to climb 500 feet before entering the airway, after crossing quadrantal levels must be resumed. The circumstances of such a crossing must be reported to the parent ATCC on landing.

d. BASE FLIGHT LEVEL - Aircraft may without ATC clearance fly at 90° across the base of an airway where the lower limit is defined as a flight level.

(SPEC/MIL ENR 1-1-1)

e. SHANWICK OCA CLEARANCES

(1) Aircraft entering Shanwick OCA from domestic airspace are required to obtain an Oceanic Clearance from Shanwick using one of the methods indicated In paragraph 3.

(2) A clearance issued by Shanwick is effective at the Shanwick OCA Boundary. Pilots must ensure that they comply with this clearance, especially that the flight crosses the Shanwick OCA Boundary at the flight level contained in the clearance issued by Shanwick. For flights entering Shanwick OCA from domestic airspace, It is the responsibility of the pilot to obtain from the appropriate ATC authority any necessary clearance or re-clearance to enable him to comply with the Oceanic Clearance or, when necessary, remain clear of Oceanic Airspace while awaiting Oceanic Clearance.

(3) Aircraft entering Shanwick OCA from an adjacent OCA will normally be cleared to landfall by the authority controlling the adjacent.

(4) The ATC approved MACH number will be included in all Oceanic Clearances given to jet aircraft. After leaving Oceanic Airspace aircraft should maintain their assigned MACH number in domestic airspace unless the appropriate ATC unit authorizes a change.

(5) All clearances issued by Shanwick are based on the aircraft estimate for the Oceanic Boundary, so it is essential that this estimate is correct. If the estimate for the Oceanic Boundary last reported to ATC is found to be in error by 3 minutes or more, a revised estimate shall be transmitted to the ATC unit concerned, as soon as possible.

f. ABBREVIATED CLEARANCES

(1) An abbreviated clearance is only issued when clearing an aircraft to fly along the whole length of an organized track. In all other circumstances full details of the cleared route will be given.

(2) A pilot-in-command shall, if at any time in doubt, request a detailed description of the cleared route from ATS.

(SPEC/UK AIP ENR 2-2-4-5)

g. REQUESTS FOR OCEANIC CLEARANCE

(1) Westbound aircraft operating within the United Kingdom UIR/FIR and the northern part of the France UIR should request Oceanic Clearance from 'Shanwick Oceanic' on VHF RTF. VHF coverage is contained within an area joined by the following points: N48°00' W10°00' - RATSU (N61°00' W10°00') - N61°00' W05°00' - N52°00' E04°00' - N48°00' E04°00' - N48°00' W10°00'. United Kingdom departures are to request clearance as soon as possible after departure. Aircraft overflying the United Kingdom UIR/FIR and the northern part of the France UIR are to request clearance when they consider that they are within the area specified above. Aircraft other than jet should request clearance at least 40 minutes before the ETA for the OCA entry point.

(2) Aircraft unable to contact 'Shanwick Oceanic' on VHF should request clearance on a NARTEL HF frequency (North Atlantic en-route HF RTF Network) at least 40 minutes before the ETA for the Oceanic Boundary and thereafter maintain a SELCAL watch for receipt of the Oceanic Clearance.

(3) Aircraft Communication Addressing and Reporting System (ACARS) equipped aircraft may request and receive their Westbound Oceanic clearance via datalink, utilizing the Oceanic Route Clearance Authorization system (ORCA), for entry points on the Shanwick eastern boundary (from ATSIX to PASAS), without the requirement to contact Shanwick on RTF. Approval for the use of this system will be given by the Head of Oceanic Engineering at Shanwick Oceanic (Tel:+44(0)1292-692666). This system should not be used by aircraft within 30 minutes of the Shanwick boundary; VHF or HF RTF should be used.

(4) While in communication with Shanwick for Oceanic Clearance, aircraft must also maintain communication with the ATC authority for the airspace within which they are operating. Aircraft unable to contact Shanwick on VHF or on NARTEL HF should request the ATC authority for the airspace in which they are operating to relay their request for Oceanic Clearance to Shanwick.

(5) Aircraft entering Shanwick directly from the Madrid FIR/UIR should operate the procedures in above subparagraphs b and d at least 40 minutes before the ETA for N45°00'.

(6) Requests for Oceanic Clearance shall include:

(a) Callsign

(b) OCA entry point and ETA

(c) requested MACH number and flight level

(d) any change to flight plan affecting OCA

(e) the highest acceptable flight level which can be maintained at the OCA entry point

(7) All clearances other than abbreviated clearances must be read back in full.

NOTE: "Entry Points'' are the boundary position between Shanwick OCA and domestic airspace, i.e. for SOTA these are: N50°00' W15°00', N49°00' W15°00, OMOKO or LASNO, and for BOTA these are: ETIKI, SEPAL or SIVIR.

(SPEC/UK AIP ENR 2-2-4-6)

(8) All aircraft entering the Reykjavik OCA at or above FL 55 via N61°00' at or East of W10°00' from Scottish Domestic Airspace are required to obtain an Oceanic Clearance from Reykjavik OACC.

(SPEC/UK AIP ENR 2-2-4-7)

h. RADAR CORRIDORS

(SPEC/UK MIL P Sec 2)

(1) GAMSTON RADAR CORRIDOR

(a) London ATCC Mil is responsible for the provision of radar controlled airways crossing services through airways L603, L26 and Y70 by military aircraft at FL 210. London ATCC Mil is the only military unit authorized to use the Radar Corridor.

(b) The corridor is 10NM wide and the coordinates are N53°37' W00°46' - N53°32' W00°31' - N53°14' W00°46' - N53°17' W01°02' - N53°37' W00°46'.

(c) The Radar Corridor is defined as two parallel lines 10 NM apart and perpendicular to the centerline of AWY Y70, the coordinates N53°32' W00°50' - N53°28' W00°35'.

(2) DAVENTRY Radar Corridor

(a) Shanwick (Mil) LAJO is responsible for providing an airways crossing service through the Daventry CTA. The Daventry Radar Corridor (DTY RC) is the preferred method for OAT to cross. The coordinates are: N52°26' W00°32' to N52°01' W01°51' to N51°54' W01°44' to N52°19' W00°26' to beginning.

(b) Centered on the DTY VOR/DME and aligned on the 066°/246° radials, the DTY RC is 8 NM wide and available bi-directional at FL 100.

(c) Pilots wishing to use the DTY RC are to comply with LJAO prenotification procedures and state their intention to cross the DTY RC in item 18 of the flight plan.

(3) LICHFIELD Radar Corridors

(a) London Radar is responsible for the provision of radar controlled airways crossing services to aircraft using the Radar Corridors (RCs) established in the LICHFIELD area within the coordinates: N52°39' W02°32' to N52°59' W01°05' to N52°49' W00°55' to N52°29' W02°21' to beginning, to expedite passage through the wide belt of controlled airspace and thus avoid the delays that could otherwise be experienced with the more conventional types of radar or procedural crossings. The RCs operate at two levels, one at FL 110 and the other at FL 160, and may only be used under the radar control of London Radar.

(b) Crossings are available in both directions at either level. Pilots wishing to use the RCs and not already in contact with London Radar should call London Allocator (West) on the ICF c/s London MIL, at least 5 minutes in advance.

(4) TILNI RADAR CORRIDOR

(a) London ATCC Mil is responsible for the provision of radar controlled airways crossing services between 0800-1800Z++ Mon-Fri, Public Holidays excluded, and crossing airway P18 by military aircraft at FL 210.

(b) The coordinates are N54°44' W02°00'-N54°41' W01°36' - N54°32' W01°39' - N54°34' W02°03' - N54°44' W02°00'.

(c) The Radar Corridor is defined as two parallel lines 10 NM apart and perpendicular to the centerline of AWY Y70, the coordinates N53°32' W00°50' - N53°28' W00°35'. The parallel lines delineating the corridor pass through TILNI (N54°33' W01°51') and position N54°42'41" W001°48'11", both of which are on the airway centerline.

(5) SWINDON Radar Corridor.

(a) Shanwick (Mil) LJAO is responsible for providing an airways crossing through airway G1 and the Cotswold CTA from that boundary to the western edge of the Swindon Radar Corridor (SRC). Traffic intensity in this area can cause delays to OAT wishing to cross the airspace. The SRC RC has been created to provide an alternative means of crossing. The coordinates are: N51°44' W01°55' to N51°43' W01°51' to N51°40' W01°33' to N51°19' W02°04' to N51°20' W02°19' to N51°39' W01°53' to beginning.

(b) The SRC is established along a line Brize Norton TACAN to Yeovilton TACAN, 4 NM either side of the center line. It operates at FL 230 and FL 240 and may only be used under the radar control of Shanwick (Mil) LJAO.

(c) Pilots who require the use of the SRC are required to comply with existing LJAO prenotification procedures and to state their intention to cross the SRC in item 18 of the Flight Plan.

(6) WESTCOTT Radar Corridor

(a) Shanwick (Mil) "LJAO" is responsible for the provision of radar controlled airways crossing services to aircraft using the Westcott Radar Corridor (WCO RC). The WCO RC is established at FL 230 and FL 240 to ease pressure on intensive airspace demands in the wide belt of controlled airspace north of London. Therefore, OAT wishing to cross controlled airspace in this area should plan to utilize the WCO RC whenever practicable. The coordinates are: N52°28′ W00°04′ to N52°28′ W00°19′ to N51°41′ W01°34′ to N51°54′ W01°48′ to N51°53′ W01°29′ to beginning.

(b) Pilots are required to comply with existing LJAO pre-notification procedures and to state their intention to cross the WCO RC in item 18 of the flight plan.

(7) DEAN'S CROSS Radar Corridor

(a) Scottish Mil is responsible for the provision of radar controlled airways crossing services to aircraft using the Dean's Cross Radar Corridor through airways B1 and B4. The coordinates are: N54°49′ W03°51′ - N54°47′ W02°37′ - N54°37′ W02°31′ - N54°39′ W03°37′ to beginning. The Radar Corridor operates at FL 190. An alternative FL may be used if FL 190 is not available. The Radar corridor is established along a line DCS VOR to MARGO and 5 NM either side of the centerline.

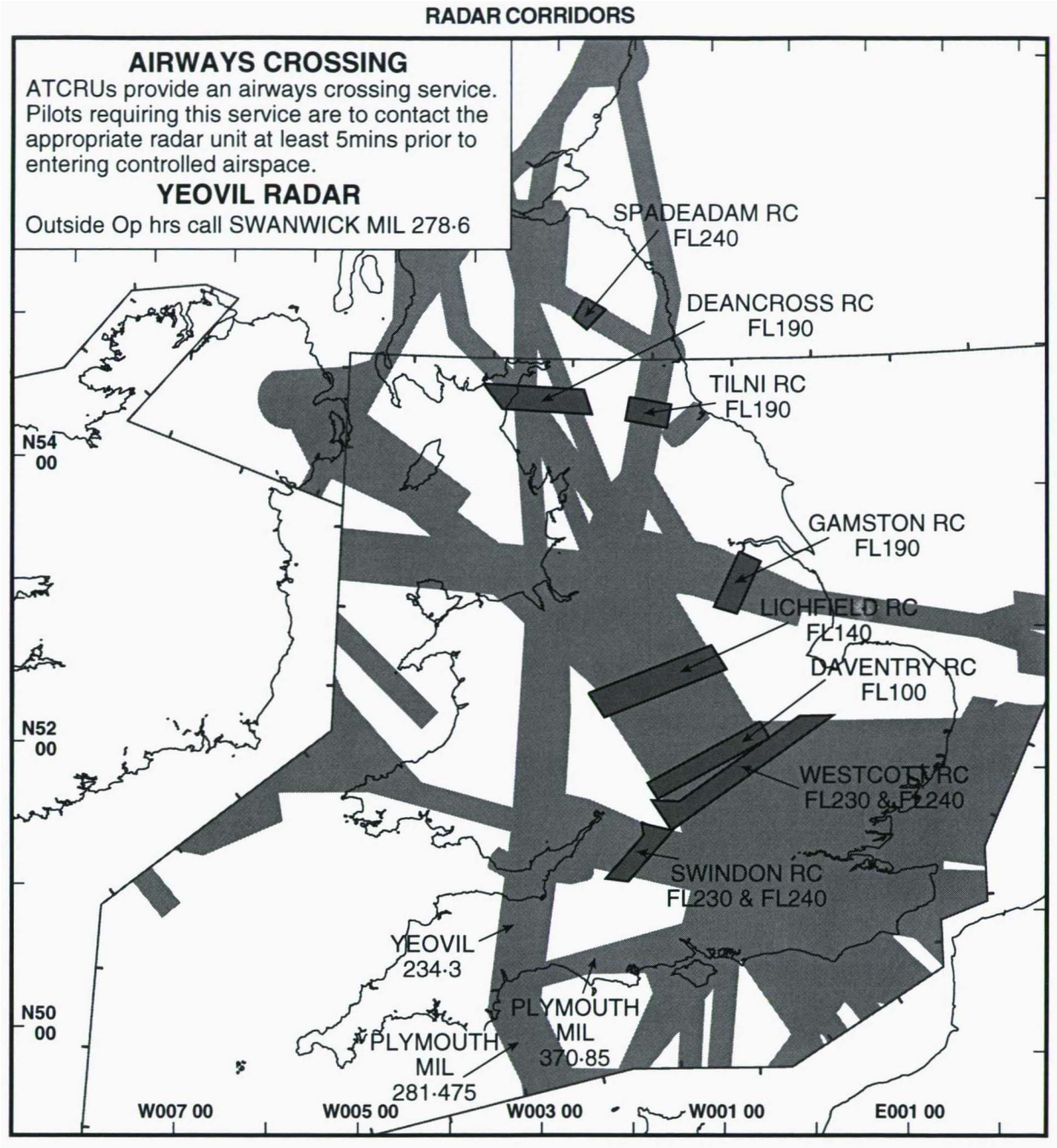
(SPEC/MIL ENR 5-2-10)

(8) SPADEADAM Radar Corridor

(a) A Radar Corridor has been established in that portion of L602 with a base of FL155; it has a single level of FL 240, is 10nm wide from OTBUN to a point 10nm northwest of OTBUN, to facilitate military aircraft routing into/out from Spadeadam under the control of Spadeadam or ScATCC (Mil). The coordinates are: N55°26′ W02°36′ to N55°21′ W02°23′ to N55°13′ W02°30′ to N55°17′ W02°46′ to origin.

(b) The corridor is available during the opening times of Spadeadam Range. Pilots wishing to use the Spadeadam Radar Corridor are to contact Spadeadam on 308.775 or ScATCC(Mil) on the ICF, at least 5mins in advance.

RADAR CORRIDORS



SUPERSONIC FLIGHTS - Supersonic flights may be conducted for operational and training purposes in conformance with the following requirements:

1. In the UK FIR, all medium and high level supersonic flights are to be made over the sea. Aircraft heading directly out to sea may accelerate to supersonic speed when at least 10 NM out to sea and along a line of flight at least 20 divergent from the mean line of the coast; the angle of dive is not to exceed the minimum necessary. Supersonic flights with the aircraft point towards the land, turning or flying parallel to the coast are to take place at least 35 NM from the nearest coastline.

2. Supersonic flying at low level over the sea within the UK FIR may take place provided that the rules in paragraph 5.a. above are followed and that, in addition, a radar/visual search is maintained to avoid the following by the margins stated:

a. Shipping and fixed or mobile oil and gas installations: 3 NM.

b. Civil or military transport aircraft: 6 NM.

c. Helicopters main routes and corridors: 6 NM.

3. Aircraft captains are to ensure that the positioning requirements of paragraph 5.a. and 5.b. above are met by whatever means are necessary (e.g., radar control, aircraft radar, and/or INS). Where more than one radar unit is controlling within the same supersonic runs take place.

4. With the exception of air defense (AD) missions, operating authorities are to notify the appropriate radar unit of all planned supersonic flights in advance, providing:

a. Aircraft type.

b. Time period during which supersonic flight conducted.

c. Heading and speed of aircraft (where known).

d. Position (area in the case of sustained supersonic flight).

e. Altitude and attitude (where known).

5. AD aircraft may routinely fly at supersonic speed during Practice intercept sorties or when taking part in AD exercises in approved operating areas.

6. If any pilot knows or suspects that his aircraft has inadvertently made a supersonic flight that breaks the conditions set in this paragraph, it is his responsibility to notify the appropriate radar unit within 30 minutes of aircraft landing.

(SPEC/ENR 1-1-5)

LOW LEVEL FLYING - UK Military Flying Regulations require advance notification and coordination of all unusual air activity.

1. UK LOW FLYING SYSTEMS (LFS). Use of the UK LFS is reserved exclusively for the use of UK based aircrews and NATO Squadrons on HQ AIRCENT approved exchange visits to the UK. With the exception of these, use of the LFS (surface to 2000' AGL/AMSL) by non UK based aircrews is strictly prohibited unless authorization is obtained in advance from the UK MOD. All requests by non UK based US aircrews requesting to operate in the UK LFS shall be forwarded to HQ 3AF/A33 at least 30 days in advance for coordination with the UK MOD. Contact A33 on DSN 238-2627/2125 or 3af.a33@mildenhall.af.mil.

a. To obtain a face-to-face briefing by a qualified UK forces pilot. This briefing will be set up for you by HQ 3AF/A33 after UK MOD approval is obtained.

b. To plan and fly missions using current UK Low Flying Charts (LFC), fulfill the booking requirements, and check for any late warnings before flight.

(AFFSA/FIL NR 75 00/09.28)

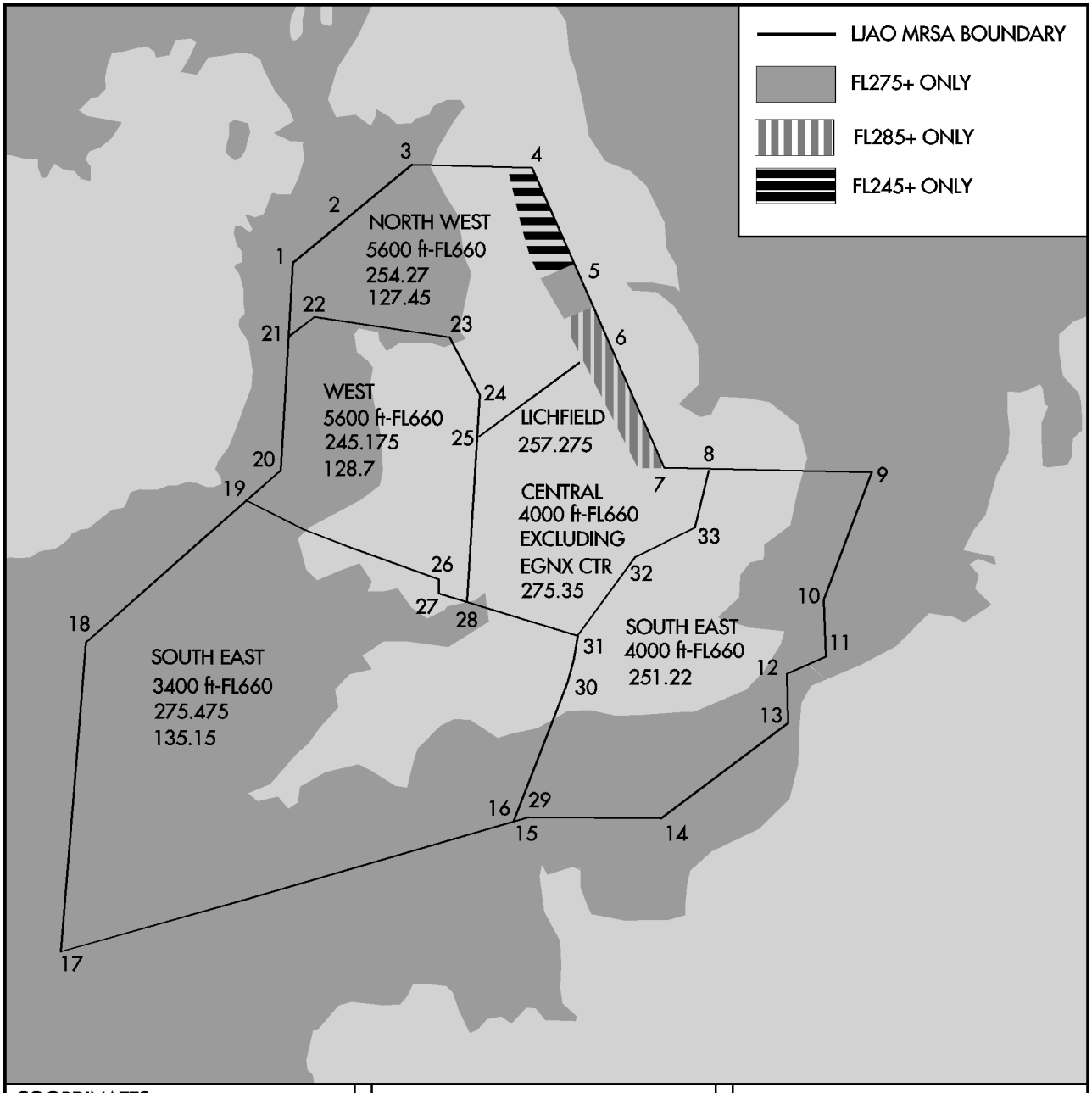
2. MILITARY LOW FLYING SYSTEM (LFS) PROCEDURES.

a. On passing 2000' Minimum Separation Distance (MSD) in descent, pilots are to select Mode 3/A Code 7001 and Mode C and retain this setting until climb out.

b. On climb out, if a radar service is required, retain Mode 3/A Code 7001 until receiving further instructions. If no radar service is required, change squawk to Mode 3/A Code 7000 and Mode C when the climb is safely established and as close to 2000' MSL as safety permits.

(SPEC MIL/ENR 1-6-6)

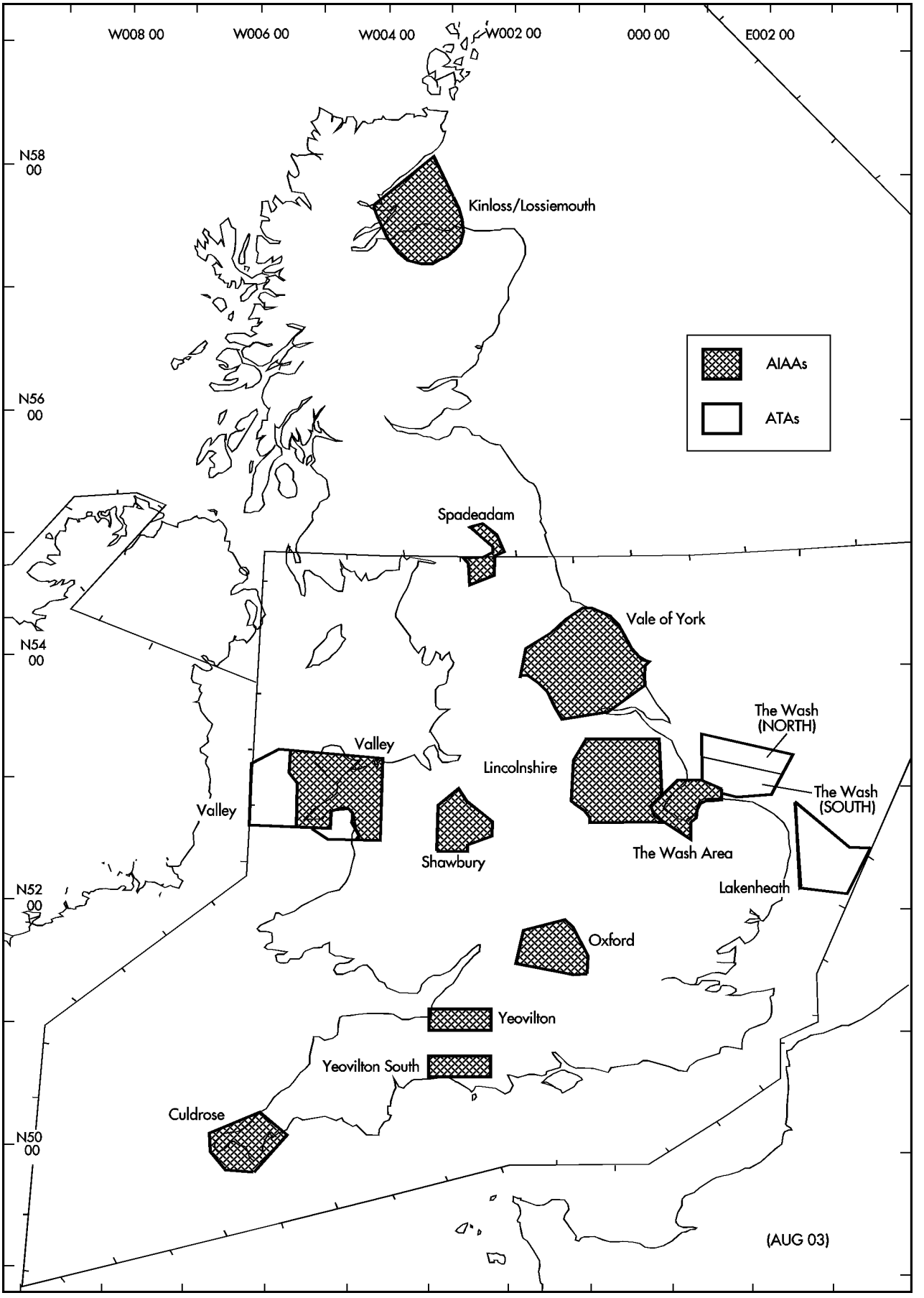
SWANWICK MIL LJAO AREA OF RESPONSIBILITY



COORDINATES

(1) 53 46 02N 005 30 00W
(2) 54 04 01N 004 45 49W
(3) 54 30 00N 003 49 55W
(4) 54 30 00N 002 05 45W
(5) 53 43 09N 001 16 16W
(6) 53 18 36N 000 57 24W
(7) 52 26 26N 000 10 12W
(8) 52 26 07N 000 27 03E
(9) 52 23 19N 002 42 37E
(10) 51 30 00N 002 00 00E
(11) 51 07 00N 002 00 00E
(12) 51 00 00N 001 28 00E
(13) 50 40 00N 001 28 00E
(14) 50 00 00N 000 15 00W
(15) 49 59 57N 002 00 18W
(16) 49 57 50N 002 12 59W
(17) 48 50 00N 008 00 00W
(18) 51 00 00N 008 00 00W
(19) 52 05 44N 005 57 51W
(20) 52 20 00N 005 30 00W
(21) 53 15 00N 005 30 00W
(22) 53 23 15N 005 10 17W
(23) 53 18 43N 003 12 40W
(24) 52 54 45N 002 45 32W
(25) 52 38 22N 002 46 58W
(26) 51 38 34N 003 16 40W
(27) 51 32 37N 003 17 44W
(28) 51 29 29N 002 54 07W
(29) 50 02 35N 002 06 59W
(30) 51 01 23N 001 27 11W
(31) 51 16 17N 001 20 57W
(32) 51 48 02N 000 38 28W
(33) 52 02 28N 000 15 24E

AREAS OF INTENSE AIR ACTIVITY & AERIAL TACTICS AREAS



SUPPLEMENTARY AIRPORT INFORMATION -

RAF Mildenhall (EGUN)

1. Airfield Restrictions:

a. First 500' Rwy 11 and Rwy 29 are concrete. Middle 8227' is asphalt. Aircraft larger than BE20/LR35 will not make 180 degree turns on asphalt portion of runway. Aircraft turning on/off runway at Twy Charlie or Delta must use appropriate taxi lines only in order to minimize the angle of turns on the asphalt portion of the runway.

b. Additional 600' of concrete underrun available for departures. Due to obstacles, overrun area will not be calculated as additional runway available for takeoff. If underrun use is required, advise tower at least 5 minutes prior to departure.

c. Rwy 29 vehicle traffic takeoff obstacles may be removed for IFR departures too heavy to clear. Contact tower 5 minutes prior to departure and request traffic light activation.

d. Runway is marked 150 feet wide but weight bearing width of runway available is 200'.

e. C130 assault zone marked on runway with yellow lines. Assault zone is 75 feet wide and 5000 feet long in middle of runway. Assault zone use restricted to base assigned aircraft only.

2. Taxiway Restrictions:

a. Twy Charlie North is 150 feet wide and marked as a tactical taxi-track ramp for fighter and tactical transport (C-130) aircraft. The taxi line on the northern portion of the taxiway is 25 feet from edge of pavement. When aircraft are parked on Charlie North, the taxiway is closed to aircraft larger than C-130, excluding C-135 aircraft. When aircraft are not present, any aircraft may taxi on Charlie North but aircraft requiring more than 50 feet wide taxiway will not use the taxi line 25 feet from edge.

b. Twy Bravo between Twy Delta South and Hardstand 31 is restricted to base assigned aircraft only due to proximity of perimeter road. Transient aircraft will not use this portion of the taxiway without Airfield Manager coordination and approval.

c. Twy Delta South is 50 feet wide and a tactical transport taxi-track. Use is restricted to AFSOC C-130 aircraft.

d. No aircraft taxi operations authorized in helo parking ramp, located north of Twy Alpha and west of Twy Delta North.

e. Twy Bravo between southeast hammerhead and Twy Charlie South taxiway restricted to aircraft with wing spans larger than 150 feet. C-5 taxi operations are prohibited. KC-10 and C-17 aircraft may taxi with wing walkers in place at obstruction located across from Hardstand 14. AMCC must prior coordinate taxi ops with Control Tower and advise when wing-walkers are in place.

3. Hardstand (HS) Parking Restrictions:

a. HS 1, 2, 9, 13, 38, and 52-56 are closed to aircraft operations.

b. HS 3. Left turns from Taxiway Alpha using the northwest throat are prohibited.

c. HS 5. Aircraft may only taxi on from the east and taxi off to the west. Operations from other directions require tow on/off. At not time will jet blast be direct towards parking lot.

d. HS 12. Aircraft may only taxi on from the west and taxi off to the east. Operations from other directions require tow on/off. At no time will jet blast be direct towards ILS GS antenna.

e. HS 24. Restricted to tow on/off only when aircraft are parked on HS 22 or 23.

f. HS 37. Aircraft larger than C-135 will not use to protect ILS critical area.

g. HS 31. Aircraft may only taxi on from the east and off to the west. Operations from other directions require tow on/off.

h. KC-10 Operations. When parking on HS 3-8, 10-12, or 14-18, KC-10s must taxi to ensure aircraft enter hardstands with left side towards main taxiway to provide MHE access to cargo door. Based on assigned parking, aircraft can expect increased taxi times to be positioned to enter parking correctly. CAUTION: KC-10 aircraft are prohibited from making 180 degree turns when exiting a hardstand due to taxiway and hardstand throat width.

4. CAUTION: Active bird control program. RAF Mildenhall is located in an area that sees low average annual rainfall with above average temperatures for the UK. The airfield comprises about 2000 acres of dry calcareous grassland and is surrounded by arable farmland, coniferous forest, and small villages. Birds use RAF Mildenhall to feed, roost, and rest. They also use the surrounding land to feed and roost. Common species include Gulls, Lapwings, Crows, Rooks, Pigeons, Doves, Starlings, Larks, Swifts, and Swallows. Rabbits are also common on airfield pavements. Phase I (normal) activates are normally March through July. Phase II (increased) activates are normally August through February. Bird Watch Condition (BWC) codes are:

a. LOW: Bird activity on and around the airfield representing low potential for strikes.

b. MODERATE: Bird activity near the active runway or other specific location representing increased potential for strikes. Initial takeoff and final landing are allowed only when departure and arrival routes will avoid bird activity. Multiple IFR/VFR traffic patterns are prohibited. BWC moderate requires increased vigilance by all. Airborne crews will be cautioned by the Tower and will be approved for one full stop landing. If multiple landings are required, the aircraft commander will use an alternate airfield or wait for BWC Low.

c. SEVERE: Bird activity on or immediately above the active runway or other specific location representing high potential for strikes. Supervisors and aircrews must thoroughly evaluate mission need before conducting operations in areas under condition SEVERE. There will be no takeoffs, landings or approaches during BWC SEVERE unless specifically approved by the aircraft owning Commander. Aircraft commanders shall advise the tower if an owning commander approves.

FLIGHT HAZARDS

ASCENTS OF CAPTIVE BALLOONS AND FREE FLYING SONDES -

1. Frequent launching of manned balloons take place at or near:

a. Ashton Court, Bristol, Avon N51°26’39” W002°38’25”

b. Bath, Avon (Several sites in or around Bath)

c. Marsh Benham, Newbury, Berks - N51°23'10" W001°38'52"

2. Flights by captive passenger carrying balloons will take place at the following locations:

a. Bournmouth Lower Gardens - N50°43'04" W001°52'36". Active daily 1000-2245 (Winter, one hour earlier during the Summer up to 450 ft agl.

b. Bristol High Point, Bristol - N51°27'23" W002°35'14". Active during daylight hours up to 500 ft AGL.

c. Tower Bridge, London - N51°30'18" W000°04'41". Active during daylight hours up to 400 ft AGL.

3. Radiosonde balloon ascents -

a. The Met Office releases helium or hydrogen filled balloons from a number of locations throughout the United Kingdom which are listed at ENR 5.3. These balloons carry a small radio transmitter which sends back atmospheric information about temperature, pressure and humidity; by way of a tracking system the balloons also provide data on wind speed and direction at various levels. Atypical installation consists of a balloon, diameter at launch approximately 1.5 meters, to which is attached a small parachute. The radiosonde is attached underneath the parachute on a suspension string of approximately 33 meters in length. The distance the balloons travel away from the launch site is dependent on the wind strength, but they can attain altitudes of over 80000 ft.

b. Balloon launches from all other sites by organizations and members of the public require written permission from the CAA in accordance with the Air Navigation Order before releasing meteorological balloons into notified airspace. Article 86 specifies the requirements for notification and permission for the launch of balloons; such permission may be conditional.

c. Radiosondes, minus the balloon, may also be air dropped; this activity will be promulgated by NOTAM.

4. Kites:

a. High flying kites may be hazardous to aircraft because of the possibility of collision with the towline. It is known that kites are flown higher than 200 ft (60 m) agl at:

(1) Graves Park, Sheffield, S Yorks - N53°19'58" W001°28'11". Up to 1200 ft AGL/1860 ft AMSL (Site elevation 660 ft AMSL).

5. Keevil Aerodrome:

a. In addition to its use as a glider site and free-fall parachuting drop zone, Keevil Aerodrome N51°18'50" W002°06'43", is used extensively as a military dropping zone by Hercules aircraft engaged in parachute heavy supply dropping. This activity may take place at any time, day or night and pilots are advised to avoid the aerodrome by 2 NM laterally or 2000 ft vertically whenever possible.

b. Details of temporary parachute training balloon sites outside the airport traffic zone of an active airport will be promulgated by NOTAM.

(SPEC/ENR 1-1-5)

HIGH INTENSITY RADIO TRANSMITTER AREAS -

Areas within which there is radio energy of an intensity which could cause interference with and, on rare occasions, cause damage to communications and navigation equipment such as radio Altimeter, VOR, ILS and Doppler are listed at ENR 5-3-1. The intensity may be sufficient to detonate electrically initiated explosive devices carried or fitted in aircraft. Only the most significant sources are listed and in some of these areas the intensity of the radio energy may be such that it would be injurious to remain for more than one minute in the immediate vicinity of the energy source. This is especially relevant to helicopters operations and the list contains appropriate warnings; however, it would be prudent for helicopter pilots to avoid lingering closer than 100m to any radar aerial. Pilots approaching oil production on which dish aerials can be observed should, wherever possible, approach from a direction out of the general line-of-shoot of such aerials.

1. AIRBORNE EARLY WARNING (AEW) aircraft operate within UK airspace and due to possible radiation hazards, all aircraft should maintain a minimum separation of 1000m lateral and 1000' vertical from such aircraft. AEW aircraft can be identified as follows:

a. RAF/NATO/USAF E3 - A Boeing 707 with a large rotodome mounted on the upper fuselage;

b. USN E2C - A medium size twin turboprop with a four-finned cantilever tail and a large rotodome mounted on the upper fuselage.

(SPEC/ENR 1-1-5-4)

2. HIGH INTENSITY RADIO TRANSMISSION AREAS

NOTE: Only those areas above 2000' or in the vicinity of a USAF base are listed.

NAME LOCATION	AREA OF INTERFERENCE (RADIUS)	ALTITUDE
Barford St. John N52°00' W01°21'	0.05 NM	850 feet
Boulmer N55°24' W01°37'	0.9 NM	1600 feet
Buchan N57°28' W01°47'	0.65 NM	4000 feet
Caldbeck N54°46' W03°05'	0.25 NM	3500 feet
Cowes N50°45' W01°18'	0.25 NM	920 feet
Croughton N51°59' W01°11'	2 NM	6400 feet
Defford N52°06' W02°09'	1.6 NM	10,000 feet
Emley Moor, Huddersfield N53°37' W01°40'	0.08 NM	1925 feet
Fareham N50°50' W01°11'	0.25 NM	1600 feet
*Fylingdales N54°22' W00°40'	5.0 NM	40,000 feet
Goonhilly Down N50°03' W05°11'	1.9 NM	11,800 feet
Malvern N52°06' W02°18'	0.75 NM	4000 feet
Mormond Hill N57°36' W02°03'	1.0 NM	1550 feet
Neatishead N52°43' E01°28'	0.9 NM	1550 feet

NAME LOCATION	AREA OF INTERFERENCE (RADIUS)	ALTITUDE
Oakhanger N51°07′ W00°54′	2.4 NM	10,500 feet
Oxenhope N53°47′ W01°59′	0.4 NM	2500 feet
Pershore N52°08′ W02°02′	1 NM	6000 feet
Portreath N50°16′ W05°16′	0.2 NM	1500 feet
Portsdown N50°51′ W01°05′	1 NM	6600 feet
Rampisham N50°49′ W02°39′	0.7 NM	2500 feet
Sandale, Cumberland N54°45′ W03°08′	0.25 NM	3500 feet
Skelton N54°44′ W02°53′	0.7 NM	2400 feet
Spadeadam N55°03′ W02°33′	0.2 NM	2000 feet
Staxton Wold N54°11′ W00°25′	0.9 NM	2000 feet
Swingate N51°08′ E01°20′	0.75 NM	1000 feet
Tacolneston N52°31′ E01°08′	0.5 NM	3300 feet
Woodham Ferrers N51°40′ E00°37′	0.25 NM	1250 feet
Wooferton N52°19′ W02°43′	0.7 NM	2100 feet

NOTE: *Aircraft should not remain for more than one minute within 1.5 NM radius up to altitude 8000′.

(SPEC/ENR 5-3-1)

HIGH MIDAIR COLLISION POTENTIAL AREA -

AREAS OF INTENSE AERIAL ACTIVITY (AIAA) (See graphic in this chapter).

1. KINLOSS/LOSSIEMOUTH

a. Intense military activity takes place within the area bounded by straight lines joining: N58°17′ W03°15′ to N57°51 W02°50′ via the arc of a circle radius 18.5 NM centered on Lossiemouth ARP (N57°42′ W03°20′) to N57°33′ W03°50′ to N57°45′ W04°03′ to N57°52′ W04°08′ to N58°03′ W03°44′ to N58°10′ W03°30′ to beginning with an entry/exit lane for Dornoch Airport (N57°52′ W04°02′) 2 NM wide up to 1000′ MSL centered on a line from N57°56′ W04°00′ via Embo (N57°55′ W04°00′) to the airport. Operating levels are from the surface to FL 150.

b. The area is permanently active with peak periods of activity during the period 0800-2359Z++ Mon-Thu, 0800-1800Z++ Fri.

c. Pilots are strongly recommended to avoid the area. If this is not possible, they should contact Lossiemouth Approach who may be able to provide ATC service.

2. SPADEADAM

a. Air activity, associated with the electronic warfare training range EG D510 by military aircraft involving high energy maneuvers, high speed runs and rapid rate turns take place within the area bounded by straight lines joining the following coordinates: N55°15′ W02°40′ to N55°16′ W02°26′ to N55°11′ W02°13′ to N55°03′ W02°07′ to N55°01′ W02°16′ to N54°51′ W02°15′ to N54°47′ W02°37′ to N54°57′ W02°38′ to N55°00′ W02°43′ to N55°00′ W02°28′ to N55°02′ W02°17′ to N55°04′ W02°17′ to N55°05′ W02°18′ to beginning. Operating levels are from the surface to 4500′ MSL.

b. Active 0900-1700Z++ Mon-Thu and 0900-1600Z++ Fri and as notified.

c. Pilots are strongly recommended to avoid the area. If this is not possible, they should utilize the Danger Area Cross Service (DACS) from Spadeadam or the Danger Area Activity Information Service (DAAIS) from Newcastle or Carlisle.

3. VALE OF YORK

a. Considerable military fixed wing and rotary wing flying training, including, in addition to airfield letdown procedures, exercises in stalling, spinning, steep turns and formation flying, takes place within the area bounded by lines joining the following coordinates: N54°16′ W01°44′ to N54°24′ W01°25′ to N54°33′ W01°08′ to N54°36′ W01°01′ then along the coast to N53°56′ W00°10′ to N53°44′ W00°40′ to N53°42′ W01°05′ to N53°43′ W01°17′ to N54°12′ W01°46′ to beginning. Operating levels are from the surface to FL 200.

b. Peak activity takes place 0700-2359Z++ Mon-Thu and 0700-1600Z++ Fri.

c. Pilots transiting the area are advised to maintain constant vigilance and a Lower Airspace Radar Service (LARS) is available from Leeming ATC and Linton ATC. Enroute airways are close to the western boundary of the area.

4. LINCOLNSHIRE

a. Considerable military flight training, including in addition to airfield letdown procedures, exercises in stalling, spinning, aerobatics, steep turns and formation flying, takes place within the area bounded by lines joining: N53°05′ E00°00′ to N53°02′ E00°00′ to N52°57′ W00°10′ to N52°52′ W00°06′ to N52°49′ E00°01′ to N52°49′ W00°58′ to N52°50′ W00°57′ to N52°51′ W00°57′ to N52°54′ W01°00′ to N52°59′ W01°09′ to N53°00′ W01°10′ to N53°19′ W01°10′ to beginning. Operating levels are between 2500′ MSL and FL 180.

b. Peak activity takes place 0700-1600Z++ Mon-Fri.

c. Pilots transiting the area are advised to maintain constant vigilance and a Lower Airspace Radar Service is available from Waddington, Cottesmore and Coningsby ATC.

5. THE WASH AREA

a. Because of the holding patterns associated with Danger Areas EGD207 and EGD308, special caution is advised in the Wash Area bounded by lines joining the following coordinates: N53°09′ E00°12′ to N53°09′ E00°33′ to N53°04′ E00°48′ to N52°59′ E00°48′ then along the coast to N52°47′ E00°22′ to N52°40′ E00°22′ to N52°52′ W00°06′ to N52°57′ W00°10′ to beginning. Operating levels are from the surface to FL 50.

b. The area is permanently active Mon-Fri.

c. Pilots are strongly recommended to avoid the area, if this is not possible, a Lower Airspace Radar Service is available from Marham, Coningsby, and Waddington ATC.

6. SHAWBURY

a. Intense instrument flying and general handling training by large numbers of helicopters (including initial helicopter pilot training) together with IFR fixed wing airfield approaches and departures by student pilots, takes place within the Shawbury area bounded by the following coordinates (but excluding Controlled Airspace): N53°06′ W02°44′ to N52°59′ W02°34′ to N52°50′ W02°15′ to N52°43′ W02°15′ to N52°40′ W02°34′ to N52°35′ W02°34′ to N52°35′ W03°00′ to N52°57′ W03°00′ to beginning. Operating levels are from the surface to FL 70.

b. Night operations may be conducted by aircraft using reduced navigation and/or anti-collision lights.

c. The area is permanently active from 0700-0130Z++ Mon-Thu and from 0700-1700Z++ Fri.

d. Pilots are strongly recommended to avoid this area; if this is not possible a Lower Airspace Radar Service is available from Shawbury ATC.

7. OXFORD

a. There is intense air activity associated with closely woven civil and military climb out and approach procedures for the many airfields in the vicinity. Pilots flying in this area are advised to keep a constant vigilance particularly during weekdays when military activity is at its peak, and especially in the area 8.5 NM/308°(T) and 6 NM/145°(T) from Oxford/Kidlington Airport where aircraft may be holding awaiting clearance to join airways. Operating levels are from the surface to 5000′ MSL. Within the area bounded by straight lines joining: N51°56′ W01°49′ to N52°02′ W01°18′ to N51°58′ W01°11′ to N51°43′ W01°00′ to N51°35′ W01°00′ to N51°34′ W01°12′ to N51°40′ W01°55′ to beginning.

b. The area is permanently active.

c. Radar services are available within this area from Brize Norton. The attention of pilots is also drawn to the Brize Norton CTLZ.

8. YEOVILTON NORTH

a. Intense helicopter activity takes place in the area bounded by coordinates: N51°17′ W03°03′ to N51°17′ W02°14′ to N51°07′ W02°14′ to N51°07′ W03°03′ to beginning. Operating levels are from 2000′ MSL to 5000′ MSL.

b. Night operations may be conducted by aircraft using reduced navigation and/or anti-collision lights.

c. Peak activity is from 0830-1700Z++ Mon-Thu and 0830-1600Z++ Fri.

d. A Lower Airspace Radar Service is available from Yeovilton ATC.

9. YEOVILTON SOUTH

a. Considerable helicopter activity, including instrument flying training takes place in the area bounded by coordinates: N50°54′ W03°03′ to N50°54′ W02°14′ to N50°44′ W02°14′ to N50°44′ W03°03′ to beginning. Operating levels are from the surface to 6000′ MSL.

b. Additionally, fast jet aircraft, regularly working with surface vessels, perform high energy maneuvers in the areas over the sea.

c. Night operations may be conducted using reduced navigation and/or anti-collision lights.

d. Peak activity is from 0830-1700Z++ Mon-Thu and 0830-1600Z++ Fri.

e. A Lower Airspace Radar Service is available from Yeovilton ATC. Foe aircraft in transient south of a line east to west through Dorchester, pilots should contact Plymouth Military Radar, but to avoid interference pilots should contact Plymouth Mil south of N51°10′.

10. CULDROSE

a. Considerable helicopter and fixed wing activity takes place within the area bounded by lines joining the following coordinates: N50°24′ W05°10′ to N50°12′ W05°47′ to N50°03′ W05°46′ to N49°54′ W05°33′ to N49°54′ W05°12′ to N50°13′ W04°48′ to beginning. Operating levels are from the surface to 5800′ MSL.

b. Night operations may be conducted using reduced navigation and/or anti-collision lights.

c. Peak activity takes place from 0830-1700Z++ Mon-Thu and 0830-1630Z++ Fri.

d. A Lower Airspace Radar Service is available from Culdrose Approach.

11. VALLEY

a. Considerable flying training, including in addition to airfield arrival and departure procedures, exercises in stalling, spinning, aerobatics, steep turns and formation flying, takes place within the area bounded by lines joining the following coordinates: N52°54′ W04°09′ then south along the coast to N52°49′ W04°09′ to N52°48′ W04°09′ to N52°42′ W04°02′ to N52°40′ W04°06′ to N52°40′ W03°45′ to N53°20′ W03°45′ to N53°23′ W05°00′ to N53°12′ W05°00′ to N53°07′ W04°53′ to N52°45′ W04°53′ to N53°45′ W04°25′ to N52°53′ W04°25′ then east along the coast to N52°54′ W04°09′ to origin. Operating levels are from 2000 ft to 6000 ft AMSL.

b. Peak activity takes place from 0800-1800Z++ Mon-Thu and 0800-1700Z++ Fri.

c. Pilots crossing the area are advised to maintain constant vigilance and to request a radar service from Valley ATC or London Radar, via London Flight Information if necessary.

(SPEC/MIL ENR 5-2-2,3,4)

AERIAL TACTICS AREAS (ATA) (See graphic in this chapter).

1. THE WASH AERIAL TACTICS AREA

a. Intense military air activity occurs in the area bounded by lines joining the following coordinates: WASH ATA NORTH - N53°31′ E00°33′ to N53°20′ E01°49′ to N53°11′ E01°41′ to N53°19′ E00°33′ to beginning. WASH ATA SOUTH-N52°55′ E01°50′ to N52°40′ E02°30′ to N53°00′ E01°30′ to N53°00′ E01°00′ to N53°05′ E00°33′ to beginning. Operating levels are from FL 50 to below FL 245. WASH Area North Operating levels are FL 50 to below FL 175.

b. Military flying is at its peak during the hours 0700-2300Z++ Mon-Thu and 0700-1700Z++ Fri.

c. Pilots are strongly advised to avoid the area; if this is not possible, they should contact London Flight Information

requesting service from London Mil, at least 15 NM range from the edge of the area.

2. LAKENHEATH AERIAL TACTICS AREA

a. Lakenheath ATA North - Intense military air activity occurs in the area bounded by lines joining the following coordinates: N52°55′ E01°50′ to N52°40′ E02°30′ to N52°37′ E02°54′ to N52°28′ E02°47′ to N52°29′ E02°34′ to N52°34′ E01°54′ to N52°33′ E01°50′to beginning. Operating levels are from FL 60 to below FL 245.

b. Lakenheath ATA South - Intense military air activity occurs in the area bounded by lines joining the following coordinates: N52°34′ E01°54′ to N52°29′ E02°34′ to N52°28′ E02°47′ to N52°17′ E02°37′ to N52°15′ E02°27′ to N52°13′ E01°53′ to N52°16′ E01°50′ to N52°33′ E01°50′to beginning. Operating levels are from FL 60 to below FL 195.

c. Military flying is at its peak during the hours 0700-2300Z++ Mon-Thu and 0700-1700Z++ Fri.

d. Pilots are strongly advised to avoid the area; if this is not possible, they should request a service from London Mil, via London Flight Information if necessary, at least 15 NM range from the edge of the area.

e. Live firing at flares in the sea regularly takes place below the vertical limits of the Aerial Tactics Area under "clear range" procedures. The activity will NOT be subject to NOTAM action.)

3. VALLEY AERIAL TACTICS AREA

a. Intense military air activity, including air combat training maneuvers and live air to air firing at towed targets over the sea takes place within the area bounded by lines joining the following coordinates: N53°15′ W05°30′ to N52°45′ W05°30′ to N52°45′ W04°41′ to N52°40′ W04°28′ to N52°40′ W03°45′ to N53°20′ W03°45′ to N53°23′ W05°00′ to N53°23′ W05°17′ to beginning. Operating levels are from 6000 ft AMSL to FL 245.

b. Military flying is at its peak from 0800-1800Z++ Mon to Thu and 0800-1700Z++ Fri.

c. Pilots are strongly recommended to avoid this area; if this is not possible they should request a service from RAF Valley ATC or London Radar, via London Flight Information if necessary, at least 15 NM range from the edge of the area. NOTE: Live air to air firing at towed target regularly takes place over the sea within the northern stub of EGD201. Live firing under "clear range procedures" but at least 20 NM out from the coastline may take place both within and below portions of the ATA. The activity will not be subject to NOTAM action but times can be obtained from RAF Valley Operations-Tel No 01407 762241 ext 7540.

(SPEC/MIL ENR 5-2-4)

ENROUTE

FLIGHTS IN BORDER AREAS -

1. For flights conducted along one of the organized tracks from the entry point into the NAT Flight Information Regions to the exit point, the organized track shall be defined in the flight plan by the abbreviation "NAT" followed by the code letter assigned to the track. For flights wishing to join or leave an organized track at some point between entry and exit fixes, full track details should be specified in the flight plan, the track letter should not be used to abbreviate any portion of the route In these circumstances.

2. Flight planned wholly or partly outside the organized tracks shall be planned along great circle tracks joining successive significant points. The latitude and longitude of each designated reporting line (e.g. W10°, W20°, W30°, W40°, W50°, W60°, Fishpoint and landfall), should be entered in Item 15 of the flight plan.

(SPEC/UK AIP ENR 2-2-4-2)

3. Estimated Times

a. For flights conducted wholly or partly outside the organized tracks in the NAT Region, accumulated estimated elapsed times over significant points enroute shall be specified in Item 18 of the flight plan.

b. For flights conducted along one of the organized tracks from the entry point into the NAT FIR to the exit point, the accumulated estimated elapsed time to the first Oceanic FIR Boundary should be specified in Item 18 of the fright plan.

c. For flights entering Shanwick OCA directly from the S0TA, the Estimated Elapsed Time (EET) for the Shanwick Boundary filed in Item 18 of the flight plan is to be the EET for the point of crossing the Shanwick/SOTA Boundary (SOMAX/BEDRA/OMOKO or LASNO).

d. For flights entering Shanwick OCA directly from the BOTA, the EET for the Shanwick Boundary filed In Item 18 of the flight plan.5-50 SHANWICK OCEANIC FIR is to be the EET for the point of crossing the Shanwick/BOTA Boundary (ETKI/SEPAL or SIVIR).

e. For flights exiting Shanwick OCA directly to the SOTA, the EET for the Shannon Boundary filed In Item 18 of the flight plan is to be the EET for the point of crossing the Shanwick/SOTA Boundary (SOMAX/BEDRA/OMOKO or LASNO).

f. For flights exiting Shanwick OCA directly to the BOTA, the EET for the Brest Boundary filed in Item 18 of the flight plan is to be the EET for the point of crossing the Shanwick/BOTA Boundary (ETIKI/SEPAL or SIVIR).

4. Designated reporting lines within the Shanwick OCA:

a. For flights Europe-North America: Eastern Boundary of the OCA, and longitudes W20°00′ and W30°00′.

b. For flights Europe-Iceland: W10°00′ and latitude N61°00′ (RATSU).

c. For flights Europe-Azores: W8°45′ and latitude N45°00′

5. MACH Numbers

a. Jet aircraft intending to operate in The Shanwick OCA must indicate the MACH number planned to be used for any portion of the flight within the area in Item 15 of the flight plan.

b. Jet aircraft should indicate their proposed speeds in the following sequence:

(1) Cruising speed (TAS) in knots

(2) Oceanic Entry Point and cruising MACH number

(3) Landfall Fix and cruising speed (TAS) in knots

c. All other aircraft speed in terms of TAS in knots.

6. Flight Level Allocation Scheme

a. The Flight Level Allocation Scheme (FLAS) should be used by operators for flight planning purposes.

b. In order to accommodate traffic, Oceanic Area Control Centers may, on a tactical basis, coordinate and assign flight levels which are exceptions to FLAS.

c. The flight level allocations under the FLAS are as follows:

DURING THE OTS

	Westbound OTS (1130-1800 UTC)	Eastbound OTS (0100-0800 UTC)
On the OTS	310, 320, 330, 340, 350, 360, 370, 380, 390	310, 320, 330, 340, 350, 360, 370, 380, 390
Random Westbound	280, 300, 310, 320, 330, 340, 360, 380, 390, 400	280, 300, 320, 340, 380, 400
Random Eastbound	290, 350, 370, 410	290, 310, 330, 350, 360(t), 370, 390, 410

(1) The following table applies during the Organized Track System(OTS) periods indicated:

(2) The following table applies outside the OTS periods indicated:

OUTSIDE THE OTS

	0801-1029 UTC	1030-1129 UTC	1801-2159 UTC	2200-0059 UTC
Random Westbound	280, 300, 320, 340, 360, 380, 400	280, 300, 310, 320, 330, 340, 380, 390, 400	280, 300, 310, 320, 340, 360, 380, 400	280, 300, 320, 340, 380, 400
Random Eastbound	290, 310, 330, 350, 370, 390, 410	290, 350, 370, 410	290, 330, 350, 370, 390, 410	290, 310, 330, 350, 360(t), 370, 390, 410

NOTE 1: Times are UTC at 30×W

NOTE 2: FL 280 and FL 410 are non-RVSM flight levels

NOTE 3: During any period FL 430 may be planned for both east and westbound non-RVSM approved aircraft

NOTE 4: FL360(t) From 2200-0800 UTC
(i) north of the OTS is available as an east bound random flight level, and
(ii) south of the OTS is reserved for eastbound traffic transiting the Santa Maria to Shanwick Oceanic FIRs/CTAs

d. If a flight is expected to be level critical, operators should contact the Initial Oceanic Area Control Center prior to filing the flight plan to determine the likely availability of such level(s). Request for a suitable alternative flight level may be included In Item 18 of the flight plan.

7. Minimum Navigation Performance Specification (MNPS)

a. If the flight is certified as being in compliance with Minimum Navigation Performance Specification (MINPS) and intends to operate in MNPS airspace, for any portion of the flight, the letter 'X' shall be inserted after the letter 'S' in item 10 of the flight plan to indicate that the flight has been approved for operations within the Minimum Navigation Performance Specification Airspace (MNPSA). It is the Pilot in Command's responsibility to ensure that specific approval has been given for such operations by the State of Registry of either the aircraft or of the operator.

8. Reduced Vertical Separation Minima (RVSM)

a. If the flight is certified as being in compliance with the Minimum Aircraft System Performance Specification(MASPS) and intends to operate in RVSM Airspace for any portion of the flight, the letter 'W' shall be inserted after the letter(s) 'S' and 'X' (if applicable) in item 10 of the flight plan to indicate that the flight has been approved for operations within RVSM Airspace. It is the Pilot in Command's responsibility to ensure that specific approval has been given for such operations by the State of registry of either the aircraft or the operator.

(SPEC/UK AIP ENR 2-2-4-3)

9. Flight Plans

a. Flight Plans for flights departing from points within adjacent regions and entering the NAT Region, without intermediate stops, should be submitted at least 3 hours prior to departure. Flight Plans for flights through SOTA Airspace by aircraft not equipped with VHF RTF are to be annotated, in Item 18, COM/UHF only.

b. Flights which transit SOTA at FL 250 and above are to be flight planned to follow a route from the published SOTA route structure.

(SPEC/UK AIP ENR 2-2-4-4)

c. Addressing of Flight Plans and Messages:

(1) Within the Shanwick OCA and FIR: EGGXZOZX

(2) Flights which will transit the SOTA: EBBDZMPF and LFPYZMPF

(3) Flights which will transit the BOTA: LFRRZQZX

(SPEC/UK AIP ENR 1-11-1)

d. Pilots and operators are advised that because Shanwick is outside the IFPS area, they are to ensure that Shanwick's address (EGGXZOZX) is included as an additional address for all flights which will enter Shanwick OCA.

(SPEC/UK AIP ENR 2-2-4-4)

AIRWAYS/ROUTES INCLUDING CONDITIONAL ROUTE INFORMATION -

1. LOW ALTITUDE AIRWAYS - Listed by alphanumeric designation.

B53 - For flight planning purposes the portion of Awy B53 between LIC and SAPCO is for westbound flights only which are unable to route on Awy N601.

L9 - Minimum cruising levels to be flight planned within London TCA.

L10 - During the notified hours of operation of the Isle of Man CTR/CTA, the lower limit of the section of this airway between SLYDA and CASEL will be FL 65. For flight planning purposes, levels below FL 90 are not available between HON and STAFA. Minimum cruising levels are to be flight planned within

London TCA. Aircraft flying within the London TCA, at or below FL 160 and routing between BPK and DVR, whether eastbound or westbound, are to route via DET unless instructed by ATC to route direct.

L26 - For flight planning purposes, cruising levels below FL 190 are not available.

L60 - Aircraft must be able to reach FL 250 by SOPEK as there is no coincident awy beneath UL60 after this point.

L70 - Aircraft east of BAGSO between FL 75 and FL 95 are required to be B-RNAV equipped.

L602 - FL 250 and below may not be available due to activity within either EGD512 or EGD512A. Aircraft must be able to reach FL 250 by EMLON as there is no coincident Awy beneath UL602 after this position.

L603 - Aircraft between DESIG and MAMUL below FL 95 are required to be B-RNAV equipped. Aircraft must be able to reach FL 250 by AMVEL as there is no coincident Awy beneath UL603 after this position.

L608 - Above FL 110 is for westbound flights only.

L975 - Minimum cruising levels are to be flight planned within Manchester TCA.

L980 - Available for use by Non-RNAV equipped aircraft below FL 95.

M140 - Available for flight planned use daily from 0500-0930Z++ and from 1800Z++ on Fri (or the day preceding a holiday) to 0930Z++ on Mon (or the day following a holiday).

M150 - Aircraft below FL 95 are to be B-RNAV equipped.

M185 - Available for use by Non-RNAV equipped aircraft below FL 95. Minimum cruising levels to be flight planned within London TCA.

M189 - Available for use by Non-RNAV equipped aircraft below FL 95.

M868 - For flight planning purposes, cruising levels below FL 190 are not available. Aircraft between TIPIL and ADELU below FL 95 are to be B-RNAV equipped.

N57 - Portion between DCS and POL at FL 100 and above is for eastbound traffic only. Westbound traffic at FL 100 and above should plan to use Awy B4-POL-TLA. Minimum cruising level to be flight planned within London TCA and Manchester TCA. Available for use by Non-RNAV equipped aircraft below FL 95.

N601 - Available for use by Non-RNAV equipped aircraft below FL 95. Minimum cruising levels to be flight planned within London TCA.

N615 - Available for use by Non-RNAV equipped aircraft below FL 95.

N859 - Minimum cruising level to be flight planned within London TCA is FL 90.

N864 - Between DCS and WAL N864 is only available from 1800Z Fri or day preceding Public Holiday to 0800Z Mon or day following public holiday. From Mon thru Fri, excluding public holidays between the hours of 0800Z and 1800 the portion from 5 NM south of NITON to 5 NM north of NITON at FL 160 will be dedicated to London Military Radar for use as a military crossing slot, during this period the airspace within the slot will not be allocated by London ACC. FL 270 is max plannable level for entire flight originating from within UK FIRs inbound to EGGD, EGTG and EGFF.

N862 - N862 is not available for flight planning purposes, except for Manchester airport departures that can maintain a climb performance that enables them to comply with the NOKIN SIDs and to remain above the stepped base levels of N862. Aircraft that are unable to maintain the required climb performance to ELGAR must file via N864/UN864.

P1 - Aircraft must be able to reach FL 250 by TINDI as there is no coincident awy beneath UP1 after this position.

P6 - Aircraft east of BAGSO between FL 75 and FL 95 are required to be B-RNAV equipped.

R803 - Minimum cruising levels are to be flight planned within London TCA.

Y70 - Aircraft between POL47 and GOLES below FL 95 are required to be B-RNAV equiped.

(SPEC/ENR 3-1-1-1 thru 3-1-1-85)

2. HIGH ALTITUDE AIRWAYS - Listed by alphanumeric designation.

UL179 - Not available for eastbound flights between LAM and GILTI. Not available for westbound flights between CPT and INLAK.

UL603 - For aircraft between IOM and DESIG, FL 250 and FL 270 are not available for cruising traffic.

UM17 - When EGD117 active, minimum altitude between STU and SWANY FL 280.

UN615 - Manchester TCA departures that flight plan a cruising level at FL 310 or above, will be required to achieve FL 310 50 NM before MID. Flights unable to achieve this should flight plan a max cruising level of FL 290 while within the london UIR.

UA34 - All traffic climbing to FL 290 or above should cross ETRAT NCRP at or above FL 285.

UB40 - Initial track at LESLU 079° true; DIKAS 248° true.

UL186 - Manchester TCA departures that flight plan a cruising level at FL310, or above, will be required to achieve FL 310 50 NM before BIG. Flights unable to achieve this should flight plan a max cruising level of FL 290 while in the London UIR.

UL8 - Departures routing via UP6 that are unable to achieve FL 245 by ASNIP will be routed via PENIL (AWY L28) and vectored on to UP6 by radar.

UL613 - The minimum level for GAT between STOAT and TLA will be FL 290, except when specific coordination has taken place between London ACC, Scottish OACC and the appropriate military authorities. Levels below FL 290 may be used weekends and public holidays.

UM14 - The minimum level for GAT between STOAT and TLA will be FL 290, except when specific coordination has taken place between London ACC, Scottish OACC and the appropriate military authorities. Levels below FL 290 may be used weekends and public holidays.

UM16 - For flight planning purposes, levels below FL 330 are not available.

UN590 - In accordance with procedures agreed by Area Control Operations, the minimum level for use by GAT between HALIF and APPLE is FL 280. Levels below FL 280 may be used weekends and public holidays.

UN614 - Intended for use by aircraft on Polar trajectories which have long range navigational capabilities.

UN859 - Manchester TCA departures that flight plan a cruising level at FL 310, or above, will be required to achieve FL 310 level KIDLI. Flights unable to achieve this should flight plan a max cruising level of FL 290 while within the London UIR.

UP1 - When AARA 7 is active, FL260 to FL280 may not be available.

UP6 - During the period Mon-Fri 0800-1700Z++ the min cruising level between RODOL and MIMKU is FL 280.

UP44 - Aircraft unable to reach FL 245 or above by SOMVA can expect to be radar vectored towards REDFA before rejoining UP155.

UP58 - When AARA 7 is active, FL 250 to FL 290 may not be available.

UR24 - Southbound route only.

(SPEC/ENR 3-2-1-1 thru 3-2-1-121)

3. NORTHOLT

a. RAF Northolt lies within the London CTR, adjacent to London (Heathrow) Airport. Special procedures apply. Pilots are to be conversant with relevant entries in UK Enoute Supplement (ERS) (BINA), SIDs, STARs and IAPs.

b. Except when flying in accordance with SVFR clearance, pilots must have a current instrument rating and the aircraft must be equipped for instrument flight.

c. If Northolt search radar is not available, all approaches are to be via airways, unless the cloudbase is 2000' or better and the visibility is 3 NM or better, when approaches to the visual circuit may be made under the control of London radar or under SVFR clearance.

d. When Runway 23 at Heathrow is in use for approaches, or Runway 05 at Heathrow is in use for departures, non-airways arrivals requiring an instrument approach to Runway 25 at Northolt are not permitted. If the cloudbase is 1200' or better and the visibility is 3 NM or better, radar monitored visual approach to Runway 25 may be made from the north and west, with the agreement of Heathrow APC, provided the following conditions are observed:

(1) The pilot must be familiar with Northolt airport.

(2) The aircraft must remain within 1.5 NM of the Northolt Airport boundary.

(3) The circuit must not be flown above 1000' (QNH).

e. Runway selection at Northolt is related to that at Heathrow. It may be necessary to operate with a tail wind component.

f. Denham Airport is 4 NM NW of Northolt, circuit altitude 1000'. SVFR departures from Northolt runway remain clear of the Denham ATZ.

g. Moderate turbulence and wind shear may be experienced on the approach to Runway 25 when there is a strong northwesterly wind.

h. High traffic density in the local area may mean pilots using non-airways arrival/departure procedures are given a limited radar service in which standard separation may not be achieved.

(SPEC/AD2-EGWU-1-3)

GENERAL CDR INFORMATION - SEE CHAPTER 2 SECTION B SEE PAGE 2-8.

WEEKEND/SEASONAL/CONDITIONAL (CDR) ROUTES

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UNITED KINGDOM							
L179	Gilti NCRP (N51°34' E02°03')	096/276	Ering NCRP (N51°35' E01°37')	17		FL 245 / FL 95	EVEN
	Ering NCRP		Tobix NCRP (N51°38' E00°45')	12			
	Tobix NCRP		Terko NCRP (N51°38' E00°39')	20			
	Terko NCRP		Sirgo NCRP (N51°38' E00°39')	4			
	Sirgo NCRP		Lambourne VOR (N51°39' E00°09')	19			
	CONTROL: London ACC NOTE: CDR1 available for flight plan use H24.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
L610	Rapix NCRP (N51°27′ E02°00′)	102/282	Tebra NCRP (N51°29′ E01°37′)	15		FL 245 FL 105	EVEN
	Tebra NCRP		Kopul NCRP (N51°33′ E01°08′)	18			
	Kopul NCRP		Nilon NCRP (N51°36′ E00°38′)	19			
	Nilon NCRP		Gilda NCRP (N51°36′ E00°35′)	2			
	Gilda NCRP		Lambourne VOR (N51°39′ E00°09′)	16			
	CONTROL: London ACC NOTE: CDR1 available for flight plan use H24.						
M981	Godos NCRP (N53°15′ E03°26′)	304	Roxat NCRP (N53°25′ E03°00′)	18		FL 245 FL 125	ODD
	CONTROL: Amsterdam ACC REMARKS: CDR1 normally available from 1801-0700Z++ Mon-Thu and 1801Z++ Fri (or day preceding a holiday) to 0700Z++ Mon (or day following a holiday). When the airspace is required for essential military activity, the closure of M981 will be notified through the AUP/CRAM issued by the AMC/CADF and by NOTAM. CDR3 at all other times. Acft must be able to reach FL 250 by ROXAT as there is no coincident airway beneath UM981 after this position.						
N90	Lamat NCRP (N51°18′ W03°01′)	010/190	Notro NCRP (N50°26′ W03°10′)	52		FL 245 FL 105	ODD
	Notro NCRP	175/355	Skeso NCRP (N49°49′ W03°02′)	37			
	CONTROL: CONTROL: London ACC NOTE: CDR1, CDR3 1600-0800++ Fri-Mon.						
N160	Ledgo NCRP (N51°14′ W07°34′)	142/322	Bogmi NCRP (N51°00′ W07°12′)	20		FL 245 FL 175	ODD EVEN
	CONTROL: London ACC NOTE: CDR1, CDR3 2000-0900++ Mon-Thu, 1800-0900++ Fri-Mon. CDR2, CDR 3 all other times.						
N160D	Ledgo NCRP (N51°14′ W07°34′)	142/322	Bogmi NCRP (N51°00′ W07°12′)	20		FL175 FL 145	ODD EVEN
	Bogmi NCRP		Insun NCRP (N50°56′ W05°54′)	49		FL 235 FL 145	ODD EVEN
	Insun NCRP	125/305	Lands End VOR (N50°08′ W05°38′)	31			
	Lands End VOR	127/307	Lands End VOR (N50°08′ W05°38′)	60			
	CONTROL: London ACC NOTE: CDR1, CDR3 2000-0900++ Mon-Thu, 1800-0900++ Fri-Mon. CDR2, CDR 3 all other times.						
N861	Kotem NCRP (N51°14′ W07°34′)	008	Avant NCRP (N51°00′ W07°12′)	50		FL 245 FL 125	ODD
	CONTROL: London ACC NOTE: CDR1 above FL 195, flight planable H24. CDR3 below FL 195.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
N862	Ernok NCRP (N51°42′ W02°57′) Lamat NCRP	010/190	Lamat NCRP (N51°18′ W03°01′) Berry Head (N50°24′ W03°30′)	24 57		FL 245 FL 105	ODD
	CONTROL: London ACC NOTE: CDR1, CDR3 1600-0800++ Fri-Mon.						
N867	Garmi NCRP (N50°00′ W01°23′) Kathy NCRP Elder NCRP	006 002	Kathy NCRP (N50°32′ W01°20′) Elder NCRP (N50°40′ W01°20′) Southampton VOR (N50°57′ W01°21′)	31 8 18		FL 245 FL 125	ODD
	CONTROL: London ACC REMARKS: CDR1 above FL 195 (Flight plannable H24). CDR3 below FL 195 (Not flight plannable).						
P18	Aberdeen VOR (N57°19′ W02°16′) ADN24 NCRP AND30 NCRP AND40 NCRP Balid NCRP Nexus NCRP Madad NCRP Alaso NCRP NEW05 NCRP	172/352 194/014	ADN24 NCRP (N56°56′ W02°07′) AND30 NCRP (N56°49′ W02°05′) AND40 NCRP (N56°40′W02°01′) Balid NCRP (N56°30′ W01°57′) Nexus NCRP (N56°13′ W01°51′) Madad NCRP (N55°55′ W01°44′) Alaso NCRP (N55°27′ W01°34′) NEW05 NCRP (N55°07′ W01°40′) Newcastle VOR (N55°02′ W01°42′)	24 6 10 10 18 18 29 20 5		FL 130 FL 120 FL 50 FL 60 FL 90 FL 80 FL 130 FL 120 FL 150 FL 140 FL 170 FL 160 FL 90 FL 80	ODD EVEN
	NOTE: CDR1 normally available from 0530-0900++ Mon-Fri; 1700-0900Z++ Fri-Mon.						
Y91	Tinan NCRP (N50°40′ W03°27′) Lumek NCRP	153	Lumek NCRP (N50°26′ W03°14′) Bulki NCRP (N50°00′ W02°53′)	17 15		FL 245 FL 110 FL 245 FL 115	ODD
	CONTROL: London ACC REMARKS: CDR1. Available Fri 1700Z++ until Mon 0800Z++.						
UH51	Pompi NCRP (N50°46′ W00°57′) Begto NCRP Bewli NCRP	092/272	Begto NCRP (N50°46′ W01°14′) Bewli NCRP (N50°46′ W01°49′) Gibso NCRP (N51°36′ W00°38′)	11 22 27		FL 460 FL 245	ODD
	CONTROL: London ACC NOTE: CDR1, CDR3 0000-0900++ Mon-Fri. Also available 0000 on Sat or the day preceding a public holiday to Mon or the day following a public holiday.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL3	Leslu NCRP (N51°00′ W08°00′) Pavlo NCRP Didel NCRP	099/279	Pavlo NCRP (N50°56′ W05°54′) Didel NCRP (N50°51′ W04°00′) Gibso NCRP (N50°45′ W02°31′)	80 72 57		FL 460 FL 245	ODD
	CONTROL: London ACC NOTE: CDR1, CDR3 0000-0900++ Mon-Fri. Also available 0000 on Sat or the day preceding a public holiday to Mon or the day following a public holiday.						
UL7	Venas NCRP (N54°18′ E03°39′)	161 341	Lonam NCRP (N53°50′ E03°57′)	30		FL 460 FL 250	ODD EVEN
	CONTROL: London ACC REMARKS: Between Venas NCRP and Lonam NCRP, route is considered CDR1. Weekends only from 1700Z Fri to 0700Z Mon. Routings between SUM and 6100N should be detailed in flight plans according to the desired Polar Oceanic Track.						
UL18	Tolka NCRP (N53°11′ W05°30′) Nefyn NCRP	129/309	Nefyn NCRP (N52°51′ W04°41′) Radno NCRP (N52°42′ W03°13′)	35 65		FL 250 FL 260	ODD EVEN
	NOTE: CDR1 normally available daily from 1700-0800++; 1700-0800Z++ Fri(or day preceding a holiday)-Mon. CDR3 all other times.						
UL149	Bakur NCRP (N52°15′ W05°41′) Gisok NCRP	160/340	Gisok NCRP (N50°56′ W05°54′) Merly NCRP (N50°51′ W04°00′)	49 11		FL 460 FL 245	ODD ODD EVEN
	CONTROL: London ACC NOTE: CDR1, CDR3 0000-0900++ Mon-Fri. Also available 0000 on Sat or the day preceding a public holiday to Mon or the day following a public holiday.						
UL179	Gitli NCRP (N51°34′ E02°03′) Ering NCRP Tobix NCRP Sirgo NCRP Ferit NCRP	160/340	Ering NCRP (N51°35′ E01°37′) Tobix NCRP (N51°36′ E01°17′) Sirgo NCRP (N51°38′ E00°39′) Ferit NCRP (N51°38′ E03°22′) Lambourne VOR (N51°39′ E00°09′)	17 12 24 4 15		FL 460 FL 245	EVEN
	CONTROL: London ACC NOTE: CDR1 available for flight plan use H24.						
UL180	Leslu NCRP (N51°14′ W07°34′)	085/265	Merly NCRP (N51°00′ W07°12′)	115		FL 460 FL 245	ODD EVEN
	CONTROL: London ACC NOTE: CDR1, CDR3 2000-0900++ Mon-Thu, 1800-0900++ Fri-Mon. CDR2, CDR 3 all other times.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UL610	Rapix NCRP (N51°27′ E02°00′)	102/282	Tebra NCRP (N51°29′ E01°37′)	15		FL 245 FL 105	EVEN
	Tebra NCRP		Kopul NCRP (N51°33′ E01°08′)	18			
	Kopul NCRP		Gilda NCRP (N51°36′ E00°35′)	21			
	Gilda NCRP		Lambourne VOR (N51°39′ E00°09′)	16			
	CONTROL: London ACC NOTE: CDR1 available for flight plan use H24.						
UL722	Berry Head VOR (N50°24′ W03°30′)	207 027	Annet NCRP (N49°39′ W04°00′)	49		FL 460 FL 245	ODD EVEN
	CONTROL: London ACC REMARKS: CDR1 active 1700Z Fri and the day preceding holidays to 0700Z Mon and the day following holidays.						
UL975	Lesra NCRP (N55°23′ E05°00′)	249	Input NCRP (N55°18′ E04°39′)	13		FL 460 FL 260	EVEN
	Input NCRP	249	Ropal NCRP (N55°08′ E03°57′)	26			
	Ropal NCRP	249	Askam NCRP (N54°58′ E03°14′)	27			
	Askam NCRP	265	Nigol NCRP (N54°54′ E02°30′)	26			
	Nigol NCRP	229	Ogdin NCRP (N53°51′ E00°35′)	93			
	Ogdin NCRP	225	Lisbo NCRP (N53°31′ E00°06′)	26			
	CONTROL: Scottish ACC REMARKS: CDR1 and 3 route only between Lesra and Lisbo. Acft to expect to reach FL 260 by 10 NM before Ogdin NCRP. EIDW departures requesting to cruise at FL 290 or above will be expected to achieve FL 250 by Rolex.						
UM79	Newcastle VOR (55°02′ W01°42′)	315	Tendo NCRP (N54°02′ E01°45′)	91		FL 460 FL 260	EVEN
	Tendo NCRP		Ogdin NCRP (N53°51′ E00°35′)	16			
	Ogdin NCRP		Legro NCRP (N53°20′ E01°31′)	46			
	CONTROL: Scottish ACC REMARKS: CDR1 and CDR3 route. CDR1 normally available for flight plan use H24. Closure by NOTAM predicated on EGD323 status.						
UM82	Nivun NCRP (N57°34′ E04°08′)	060 240	Rivot NCRP (N56°24′ E00°47′)	131		FL 460 FL 250	ODD EVEN
	Rivot NCRP	050 230	Robem NCRP (N55°28′ E01°01′)	83			
	Robem NCRP	031	Tipta NCRP (N54°48′ E01°37′)	44		FL 460 FL 250	ODD
	CONTROL: Scottish ACC REMARKS: CDR1 and 3 route. CDR1 normally available for flight plan use H24.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM83	Etsom NCRP (N57°53′ W09°30′)	109 289	Rugid NCRP (N57°22′ E04°54′)	152		FL 460 FL 250	ODD EVEN
	Rugid NCRP	111 291	Rivot NCRP (N56°24′ E00°47′)	196			
	Rivot NCRP	101 281	Rekna NCRP (N56°10′ E03°30′)	92			
	Rekna NCRP	107 287	Petil NCRP (N55°56′ E05°00′)	52			
	CONTROL: Scottish ACC and Copenhagen ACC REMARKS: CDR1 and 3 route. CDR1 available for flight plan use H24. For EGPD arrivals/departures to Copenhagen FIR/CTA, when EGD613A, B or C inactive. Direct routing below FL 245 may be available on request from Scottish Military.						
UM84	Aberdeen VOR (N57°19′ W02°16′)	123 303	Rivot NCRP (N56°24′ E00°47′)	114		FL 460 FL 250	ODD EVEN
	Rivot NCRP		Cutel NCRP (N55°53′ E02°22′)	62			
	CONTROL: Scottish ACC REMARKS: CDR1 and 3 route. CDR1 available for flight plan use H24. For EGPD arrivals/departures to EHAM, when EGD613A, B or C inactive. Direct routing below FL 245 may be available on request from Scottish Military.						
UM85	Akivo NCRP (N59°58′ W09°30′)	129 309	Denog NCRP (N57°26′ W01°45′)	286		FL 460 FL 250	ODD EVEN
	Denog NCRP		Rivot NCRP (N56°24′ E00°47′)	104			
	CONTROL: Scottish ACC REMARKS: CDR1 and 3 route. CDR1 available for flight plan use H24.						
UM86	Akivo NCRP (N59°58′ W09°30′)	117 297	Soxon NCRP (N58°58′ W03°52′)	182		FL 460 FL 250	ODD EVEN
	Soxon NCRP		Forty NCRP (N57°57′ E00°35′)	154			
	CONTROL: Scottish ACC REMARKS: CDR1 and 3 route. CDR1 available for flight plan use H24.						
UM87	Gonut NCRP (N61°00′ W04°35′)	175 345	Bambra NCRP (N59°26′ W03°57′)	96		FL 460 FL 250	ODD EVEN
	Bambra NCRP	181 001	Soxon NCRP (N58°58′ W03°52′)	28			
	Soxon NCRP		Pipem NCRP (N58°09′ W03°44′)	49			
	Pipem NCRP		Vadno NCRP (N57°27′ W03°38′)	42			
	Vadno NCRP		Vadno NCRP (N56°22′ W03°28′)	65			
	CONTROL: Scottish ACC REMARKS: CDR1 and 3 route. CDR1 available for flight plan use H24.						
UM89	Aloti NCRP (N57°54′ E03°36′)	048 248	Rivot NCRP (N56°24′ E00°47′)	129		FL 460 FL 250	ODD EVEN
	Rivot NCRP	077 257	St Abbs Head VOR (N55°54′ W02°12′)	105			
	CONTROL: Scottish ACC REMARKS: CDR1 and 3 route. CDR1 available for flight plan use H24.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UM90	Nexus NCRP (N56°13′ W01°51′) Givem NCRP Rolum NCRP Sotun NCRP	126 306 152 332	Givem NCRP (N55°28′ E00°15′) Rolum NCRP (N54°18′ E03°19′) Sotun NCRP (N54°11′ E03°38′) Lonam NCRP (N53°50′ E03°57′)	84 127 14 23		FL 460 FL 260	EVEN
	CONTROL: Scottish ACC REMARKS: CDR1 and CDR3 route. CDR1 normally available for flight plan use H24. Closure by NOTAM predicated on EGD323 status.						
UM91	Stornoway VOR (N58°12′ W06°11′) Pipem NCRP	099 279	Pipem NCRP (N58°09′ W03°44′) Forty NCRP (N57°57′ E00°36′)	78 139		FL 460 FL 250	ODD EVEN
	CONTROL: Scottish ACC REMARKS: CDR1 and CDR3 route. CDR1 available for flight plan use H24.						
UM142	Leslu NCRP (N52°15′ W05°41′) Insun NCRP	125/305	Insun NCRP (N50°56′ W05°54′) Lands End VOR (N50°08′ W05°38′)	74 31		FL 460 FL 245	ODD EVEN
	CONTROL: London ACC NOTE: CDR1, CDR3 2000-0900++ Mon-Thu, 1800-0900++ Fri-Mon. CDR2, CDR3 all other times.						
UM981	Newcastle VOR (N55°02′ W01°42′) Roxat NCRP	304	Roxat NCRP (N53°25′ E03°00′) Godos NCRP (N53°15′ E03°26′)	192 18		FL 460 FL 260	EVEN
	CONTROL: Scottish ACC REMARKS: CDR1 and CDR3 route. CDR1 normally available for flight plan use H24. Closure by NOTAM predicated on EGD323 status.						
UM982	Findo NCRP (N56°22′ W03°28′) Robem NCRP Erlot NCRP	308	Robem NCRP (N55°28′ W01°01′) Erlot NCRP (N55°17′ W00°35′) Rokan NCRP (N53°40′ E03°11′)	99 18 164		FL 460 FL 260	EVEN
	CONTROL: Scottish ACC REMARKS: CDR1 and CDR3 route. CDR1 normally available for flight plan use H24. Closure by NOTAM predicated on EGD323 status.						
UN14	Bakur NCRP (N52°15′ W05°41′) Pemob NCRP Abapo NCRP	112/292 106/286 106/286	Pemob NCRP (N52°09′ W05°10′) Abapo NCRP (N50°08′ W05°38′) Medog NCRP (N51°57′ W03°33′)	10 14 47		FL 460 FL 245	ODD EVEN
	CONTROL: London ACC NOTE: CDR1, CDR3 available for flight plan use H24.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN16	Annet NCRP (N49°39′ W04°00′)	013/193	Babax NCRP (N50°25′ W03°48′)	47		FL 460 FL 280	EVEN
	CONTROL: London ACC NOTE: CDR1, CDR3 1600-0800++ Fri-Mon.						
UN18	Pemob NCRP (N52°09′ W005°10′)	002/182	Gisok NCRP (N51°30′ W05°07′)	39		FL 460 FL 245	ODD EVEN
	Gisok NCRP	125/305	Insun NCRP (N50°56′ W05°54′)	74			
	Insun NCRP		Lands End (N50°08′ W05°38′)	31			
	CONTROL: London ACC NOTE: CDR1, CDR3 1600-0800++ Fri-Mon.						
UN22	Salco NCRP (N49°44′ W003°32′)	169/349	Babax NCRP (N50°25′ W03°48′)	42		FL 460 FL 280	EVEN
	Babax NCRP	010/190	Devom NCRP (N50°43′ W03°45′)	18			
	Devom NCRP		Kesup NCRP (N51°20′ W03°39′)	37			
	CONTROL: London ACC NOTE: CDR1, CDR3 1600-0800++ Fri-Mon.						
UN24	Pemob NCRP (N52°09′ W05°10′)	097/277	Slany NCRP (N52°10′ W05°51′)	25		FL 460 FL 245	EVEN
	CONTROL: London ACC NOTE: CDR1, CDR3 available for flight planning H24.						
UN28	Banba NCRP (N51°57′ W06°14′)	025/205	Stu61 NCRP (N51°31′ W06°30′)	28		FL 460 FL 245	ODD
	Stu61 NCRP		Gatra NCRP (N51°18′ W06°38′)	14			
	CONTROL: London ACC NOTE: CDR2, CDR3 by NOTAM.						
UN30	Pemob NCRP (N52°09′ W05°10′)	079/259	Stu05 NCRP (N51°59′ W06°07′)	37		FL 460 FL 245	EVEN
	Stu05 NCRP		Banba NCRP (N51°57′ W06°14′)	5			
	CONTROL: London ACC NOTE: CDR1, CDR3 available for flight planning H24.						
UN32	Notro NCRP (N50°26′ W03°10′)	039/218	Annet NCRP (N49°39′ W04°00′)	57		FL 460 FL 245	ODD
	CONTROL: London ACC NOTE: CDR1, CDR3 1600-0800++ Fri-Mon, also available 1600 day before public holiday to 0800 day after.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UN38	Kesup NCRP (N51°20′ W03°39′)	010/190	Unbig NCRP (N51°44′ W03°35′)	25		FL 460 FL 280	EVEN
	Unbig NCRP	007/187	Berul NCRP (N52°40′ W03°31′)	56			
	Berul NCRP	047/227	Monty NCRP (N52°54′ W03°10′)	18			
	Monty NCRP		Nokin NCRP (N53°05′ W02°53′)	15			
	CONTROL: London ACC NOTE: CDR1, CDR3 1700-0800++ Fri-Mon, also available 1700 day before a public holiday to 0700 day after.						
UN90	Lamat NCRP (N51°20′ W03°39′)	010/190	Notro NCRP (N50°26′ W03°10′)	52		FL 460 FL 245	ODD
	Notro NCRP	175/355	Skeso NCRP (N49°49′ W03°02′)	37			
	CONTROL: London ACC NOTE: CDR1, CDR3 1600-0800++ Fri-Mon.						
UN160	Ledgo NCRP (N51°14′ W07°34′)	142/322	Bogmi NCRP (N51°00′ W07°12′)	20		FL 460 FL 245	ODD EVEN
	Bogmi NCRP		Insun NCRP (N50°56′ W05°54′)	49			
	Insun NCRP	125/305	Lands End VOR (N50°08′ W05°38′)	31			
	Lands End VOR	127/307	Nakid NCRP (N49°43′ W04°37′)	47			
	Nakid NCRP		Lizad NCRP (N49°35′ E04°20′)	49			
	CONTROL: London ACC NOTE: CDR1, CDR3 2000-0900++ Mon-Thu, 1800-0900++ Fri-Mon. CDR2, CDR 3 all other times.						
UN581	Aberdeen VOR (N57°19′ W02°16′)	104/285	Odmix NCRP (N56°58′ E01°28′)	124		FL 460 FL 245	ODD EVEN
	Odmix NCRP		Gibsu NCRP (N56°46′ E03°16′)	61			
	Gibsu NCRP		Elsan NCRP (N56°42′ E03°44′)	16			
	Elsan NCRP		Vaxit NCRP (N56°32′ E05°00′)	43			
	CONTROL: Scottish ACC NOTE: CDR1, CDR3 availble for flight planning H24.						
UN867	Garmi NCRP (N50°00′ W01°23′)	006	Kathy NCRP (N50°31′ W01°20′)	31		FL 460 FL 245	ODD
	Kathy NCRP	002	Elder NCRP (N50°40′ W01°20′)	8			
	Elder NCRP		Southampton VOR (N50°57′ W01°21′)	18			
	CONTROL: London ACC REMARKS: CDR1. Flight plannable H24.						

ROUTE IDENT	FROM	MAG TRACK	TO	DIST NM	MFA	VERT LIMITS	CRUISE LEVEL
UW501	Gapli NCRP (N50°00′ E08°00′)	076	Redfa NCRP (N52°07′ E02°29′)	416		FL 460 FL 245	ODD
	CONTROL: London ACC REMARKS: CDR1 normally available 0000-0930Z Mon-Fri. Also normally available from 0000Z Sat to 2359Z Sun and from 0000-2359Z during holidays. CDR3 all other times. Minimum cruising level will normally be FL 290.						
UY91	Dawly NCRP (N50°34′ W03°28′) Notro NCRP	130/310 156/336	Notro NCRP (N50°26′ W03°10′) Bigno NCRP (N50°00′ W02°50′)	14 30		FL 460 FL 245	ODD
	CONTROL: London ACC NOTE: CDR1, CDR3 1600-0800++ Fri-Mon.						

TERMINAL

NOISE ABATEMENT PROCEDURES -

QUIET HOURS - Aircrews must, to the maximum extent possible, plan airfield operations that permit compliance with these quiet hours.

1. These quiet hours are applicable to RAF Mildenhall and RAF Lakenheath.

a. Standard quiet hours are:

(1) Weeknights: Monday through Thursday, 2300Z++ each evening to 0600Z++ the following morning.

(2) Weekends: Friday from 1800Z++ until Monday at 0600Z++.

(3) UK Bank Holidays (UKBH) quiet hours:

(a) Singular Monday UKBH extends weekend quiet hours until Tuesday at 0600Z++.

(b) Good Friday and Easter Monday UKBH extend weekend quiet hours starting Thursday at 2300Z++ through the following Tuesday at 0600Z++.

b. Other Bank and National Holidays quiet hours: From 2300Z++ the evening before until 0600Z++ the day after the holiday.

2. These quiet hours are applicable to RAF Fairford:

a. Standard quiet hours are:

(1) Weeknights: Monday through Thursday, 2200Z++ each evening to 0700Z++ the following morning.

(2) Weekends: Friday from 1800Z++ until Monday at 0700Z++.

(3) UK Bank Holidays (UKBH) quiet hours:

(a) Singular Monday UKBH extends weekend quiet hours until Tuesday 0700Z++ hours.

(b) Good Friday and Easter Monday UKBH extend weekend quiet hours starting Thursday at 2200Z++ through the following Tuesday at 0700Z++.

b. Other Bank and National Holidays quiet hours: From 2200Z++ the evening before until 0700Z++ the day after the holiday.

(AFFSA/FIL Nr 15/00/02.25)

3. Movement of B1, B2, B52, and F117 aircraft into the UK. All deployments of B1, B2, B52, and/or F117 aircraft to the UK require the prior permission of the UK government which requires coordination a minimum of 30 days in advance of the event. Units planning to deploy any of these types of aircraft into the UK for any reason will contact HQ 3AF A33, DSN 238 2627/2125, C00 44 1638 542627/542125 or e-mail 3af.a33@mildenhall.af.mil to coordinated approval. Failure to obtain permission from the UK government will result in denial of the request.

(AFFSA/FIL Nr 59 00/08.01)

AERIAL REFUELING

AERIAL REFUELING TRACKS/ANCHOR AREAS -

See Chapter 2, Section B, AERIAL REFUELING TRACKS/ANCHOR AREAS for Chart.

UNITED KINGDOM

NOTE 1: TACAN Channels Receiver/Tanker are the last entry under the AR FREQ column.
NOTE 2: In areas designated as permanently available for Air to Air Refueling Areas (AARA), the amount of warning concerning refueling operations can be so minimal as to preclude notification by normal methods. However, the relevant coordinating ATCRU in the case of Areas 2, 3, 4, 5, 6 and 7, if contacted by the methods listed for the Military Middle Airspace Radar Advisory service, will be able to advise pilots of activity status. In the case of Area 9, a similar service can be obtained from ATCUR LONDON RADAR. Where AARA,s conflict with Airways, Advisory Routes or Upper Air Routes, civil/military coordination procedures are applied to minimize disruption to the planned flight profiles of the aircraft concerned.
NOTE 3: (P)=Primary, (S)=Secondary, (T)=Tertiary.

ARA 1 (Anchor)	LUK 334/134 N56°58′ W03°25′	LUK 334/134 N58°15′ W05°02′	264.125 (P) 264.925 (S) 362.100 (T) 6761 1-2-1 55/118	FL 180/FL 280	270 240	SCOTTISH (MIL)

TRACK AREA: N56°52′ W03°10′, N58°25′ W05°05′, N58°18′ W05°39′, N56°42′ W03°35′ to beginning.
NOTE: Active when notified.

ARA 2 (Anchor)	N58°20′ E01°00′	N59°17′ E00°05′	264.125 (P) 264.925 (S) 362.100 (T) 56/119	FL 100/FL 290	200/240	SCOTTISH (MIL)

TRACK AREA: N59°19′ W00°31′, N59°28′ E00°04′, N58°13′ E01°15′, N58°04′ E00°41′ to beginning.
NOTE: Permanently available, occasional notification by NOTAM to FL 350.

ARA3 (Anchor)	N56°32′ E02°32′	N57°50′ E01°26′	264.125 (P) 264.925 (S) 362.100 (T) 57/120	FL 100/FL 290	200/250	SCOTTISH (MIL)

TRACK AREA: 57°53′N 00°50′E, 58°01′N 01°24′E, 56°25′N 02°46′E, 56°17′N 02°13′E to beginning.
NOTE: Permanently available, occasional notification by NOTAM to FL 350.

ARA 4 (Anchor)	N57°43′ W01°12′	N57°58′ W00°04′	264.125 (P) 264.925 (S) 362.100 (T) 61/124	FL 70/FL 240	230	SCOTTISH (MIL)

TRACK AREA: N58°16′ E00°01′, N57°58′ E00°15′, N57°35′ W01°29′, N57°53′ W01°43′ to beginning.
NOTE: Permanently available, occasional notification by NOTAM to FL 350.

ARA 5 (Anchor)	N55°47′ E00°03′	N55°46′ E01°21′	264.125 (P) 264.925 (S) 362.100 (T) 58/121	FL 70/FL 240		SCOTTISH (MIL)

TRACK AREA: N56°03′ W00°15′, N56°02′ E01°40′, N55°42′ E01°39′, N55°43′ W00°16′, to beginning.
NOTE: Permanently available, occasional notification by NOTAM to FL 350.

ARA 6 (Anchor)	N54°32′ W00°25′	N54°58′ E00°22′	264.125 (P) 264.925 (S) 362.100 (T) 60/123	FL 100/FL 240	120 200 280	LONDON RADAR

TRACK AREA: N55°16′ E00°11′, N54°41′ E00°53′, N54°24′ W00°25′, N55°00′ E00°37′, to beginning.
NOTE: Permanently available, occasional notification by NOTAM to FL 350.

ARA 7 (Anchor)	N55°08′ E01°19′	N54°49′ E02°31′	264.125 (P) 264.925 (S) 362.100 (T) 6761 1-2-1 59/122	FL 70/FL 240	170	LONDON RADAR

TRACK AREA: N55°26′ E01°16′, N55°00′ E02°59′, N54°42′ W02°45′, N55°08′ E01°02′, to beginning.
NOTE: Permanently available.

ARA 8 (Anchor)	N53°18′ E00°56′	N53°12′ E02°08′	264.125 (P) 264.925 (S) 362.100 (T) 55/118	FL 070/FL 240	170 240	LONDON RADAR

TRACK AREA: N53°36′E00°43′, N53°27′E02°30′, N53°07′E02°26, N53°16′E00°39′ to beginning.
NOTE: Permanently available, occasional notification by NOTAM to FL 350

ARA 9 (ONLY HC-130/ HH-53 (Anchor)	N52°26′ E02°40′	N52°26′ E01°55′	264.125 (P) 264.925 (S) 362.100 (T)	ALT 2000′/ FL 50		LONDON RADAR

TRACK AREA: N52°40′ E01°50′, N52°21′ E01°50′, N52°21′ E02°40′,N 52°40′ E02°56′ to beginning.
NOTE: This area is used solely by DoD C-130 and H53/H-60 aircraft in VMC only and does not involve any ATCRV/SOC service. When ARA 9 and Lakenheath Aerial Tactics Area (ATA) are simultaneously active, ATA traffic will remain clear of the refueling area. Permanently available.

ARA 10 (East) (Anchor)	N50°38′ W04°25′	N49°57′ W06°40′	264.125 (P) 264.925 (S) 362.100 (T) 57/120	FL 80/FL 260	180 220	LONDON RADAR

TRACK AREA: N51°17′ W02°23′, N51°00′ W02°05′, N50°28′ W03°59′, N50°52′ W03°53′, to beginning.
NOTE: Active when notified.

ARA 10 (West) (Anchor)	N51°09′ W02°34′	N50°52′ W03°40′	264.125 (P) 264.925 (S) 362.100 (T) 57/120	FL 80/FL 260	180 220	LONDON RADAR

TRACK AREA: N50°52′ W03°53′, N50°29′ W03°59′, N49°37′ W06°44′, N49°56′ W06°57′, to beginning.
NOTE: Active when notified.

ARA 11 (KC-135/A-10) (Anchor)	SMG 170/59 N50°47′ W05°26′	SMG 170/59 N51°23′ W05°26′	264.125 (P) 264.925 (S) 362.100 (T) 58/121	FL 80/FL 235	190	LONDON RADAR

TRACK AREA: N51°33′ W05°49′, N51°33′ W05°23′, N50°37′ W05°23′, N50°37′ W05°49′ to beginning.
NOTE: Active when notified.

ARA 12 (Anchor)	SMG 277/99 N51°00′ W05°09′	SMG 277/99 N50°28′ W07°38′	264.125 (P) 264.925 (S) 362.100 (T) 6761 55/118 1-2-1	FL 70/FL 280		LONDON RADAR

TRACK AREA: N50°29′ W07°55′, N50°59′ W05°35′, N51°07′ W04°55′, N50°48′ W04°46′, N50°40′ W05°25′, N50°10′ W07°45′ to beginning.
NOTE: Active when notified.

ARA 13		N54°04′ W03°48′	IOM 044/39 N54°35′ W04°05′	264.125 (P) 264.925 (S) 362.100 (T) 56/119	FL 150/FL 240	LONDON RADAR

TRACK AREA: N53°59′ E03°43′, N54°42′ W04°07′, N54°38′ E04°24′, N53°56′ E03°59′ to beginning.
NOTE: Active when notified.

ARA 14		N56°37′ W04°56′	N57°22′ W04°27′	264.125 (P) 264.925 (S) 362.100 (T) 60/123	FL 80/FL 240	SCOTTISH (MIL)

TRACK AREA: N57°37′ W04°50′, N57°30′ W04°15′, N56°26′ W04°55′, N56°33′ W05°31′, to beginning.
NOTE: Active when notified.

BAWDSEY	WEST	N51°59′ E01°40′	N51°59′ E01°50′	SFC/3000′	LONDON RADAR
	EAST	N51°59′ E02°30′	N51°59′ E02°20′	SFC/3000′	LONDON RADAR

NOTE: This area is utilized solely by USAF helicopters and turboprop tankers in VMC only and does not involve any ATCR/SOC service. Permanently available.

DANDI (Track)	N54°00′ W01°00′	N54°32′ E00°50′	FL 250/FL 270	LONDON RADAR (Frequency to be assigned.)

TRACK AREA: Between N54°00′ W01°00′, N54°32′ E00°50′ and N55°06′ E03°00′.
SPECIAL INSTRUCTIONS: On completion of refueling the tanker will climb to FL 270 and the receiver will descend to FL 250 before the formation splits.

FLAMBORO EAST-WEST TRACK AL1	WEST N54°12′ E00°47′	N57°00′ W06°00′	FL 250/FL 270	LONDON RADAR
	EAST N57°00′ W06°00′	N54°12′ E00°46′	FL 250/FL 270	LONDON RADAR

TURNING POINT: N55°45′ W00°00′
NAVIGATION CHECK POINTS: N56°14′ W03°00′
TRACK AREA (WEST): N54°12′ E00°47′ N55°18′ E00°14′ N55°45′ E00°00′ N56°14′ W03°00′ N57°00′ W06°00′.
TRACK AREA (EAST): N57°00′ W06°00′ N56°30′ W04°00′ N56°14′ W03°00′ N55°45′ E00°00′ N54°12′ E00°46′.
SPECIAL INSTRUCTIONS: On completion of refueling the tanker will climb to FL 270 and the receiver will descend to FL 250 before the formation splits.

(SPEC/LON MIL SOP-3A-A33)

HUMBER	NORTH	N54°00′ E00°07′	N53°54′ E00°12′	SFC/3000′	LONDON RADAR
	SOUTH	N53°23′ E00°42′	N53°28′ E00°37′	SFC/3000′	LONDON RADAR

NOTE: This area is utilized solely by USAF helicopters and turboprop tankers in VMC only and does not involve any ATCR/SOC service. Permanently available.

VALLEY	WEST	N53°28′ W04°52′	N53°28′ W04°42′	SFC/3000′	LONDON RADAR
	EAST	N53°28′ W03°45′	N53°28′ W03°55′	SFC/3000′	LONDON RADAR

NOTE 1: This area is utilized solely by USAF helicopters and turboprop tankers in VMC only and does not involve any ATCR/SOC service. Permanently available.
NOTE 2: These tracks are over open water, outside of the United Kingdom (UK) Night Low Flying System, and all UK Special Use Airspace.

WASH	WEST	N53°10′ E00°50′	N53°10′ E01°00′	SFC/3000′	LONDON RADAR
	EAST	N53°10′ E01°40′	N53°10′ E01°30′	SFC/3000′	LONDON RADAR

NOTE: This area is utilized solely by USAF helicopters and turboprop tankers in VMC only and does not involve any ATCR/SOC service. Permanently available.

BIRD HAZARD DATA

BIRD CONCENTRATION AREAS/ ROUTES - See Chapter 2, Section B, BIRD HAZARDS for Charts.

1. General - Large-scale movements of migrating birds occur during various months in the European-Mediterranean and UK areas. There are also large concentrations of nesting, breeding, and wintering birds, often numbering in the millions, that may create a hazard to flight. The number & types of birds, areas of concentration, and height of flight vary from month to month and

country to country; the associated charts are generalized depictions of areas of bird concentrations and migrating routes and should be used in conjunction with the following specific details, by country.

a. United Kingdom

(1) There are no well defined heavily used bird migratory routes within UK airspace at any time of the year. Bird migration to and from the UK occurs largely in the autumn and winter on broad fronts in streams running East- West and North-South. The density of bird movements is greatest in southeast England where these two fronts cross. Most migrating birds fly below 5000'.

(2) As elsewhere in the world, offshore islands, headlands, cliffs, inland waters and shallow estuaries attract flocks of birds for breeding, roosting and feeding at various times of the year. Within 20 NM or so of such locations, concentrations of birds flying mostly below 1500' may be encountered (see RAC 5-0-3 and 5-0-4).

(3) In order to lessen the risk of bird strikes, pilots of low flying aircraft should, whenever possible, avoid flying at less than 1500' above surface level over areas where birds are likely to concentrate. Where it is necessary to fly lower than this, pilots should bear in mind that the risk of a bird strike increases with speed (it is a fact that birds rarely hit an object moving slower than 80 kt). Apart from endangering aircraft by flying close to bird colonies, the breeding of the birds may be upset and the practice should be avoided on conservation grounds. It should also be appreciated that, especially in the case of sea bird colonies, concentrations of birds may be soaring on lee waves downwind of the areas where they breed.

(4) Pilots are specifically requested to avoid the Bird Sanctuaries listed at RAC 5-14 especially during any stated breeding season.

(5) The information shown represents a composite of the concentration areas for the entire year. See chart legend for specific information.

ADDITIONAL INFORMATION

RADAR ASSISTED FLIGHT INFORMATION SERVICES -

1. Air traffic services provided will be one of the following types depending on the status of the airspace within which the participating aircraft is flying:

a. RADAR CONTROL - Applied in controlled airspace and the Mandatory Radar Service Area. Pilots are given mandatory instructions to enable the prescribed separation minima from other traffic to be maintained, together with essential details of conflicting traffic. No change of heading or flight level is to be made without the prior approval of the radar controller.

b. RADAR ADVISORY - Applied in uncontrolled airspace and Radar Service Areas. Pilots are informed of the bearing and distance, and if available, the flight level of conflicting traffic with advisory instructions on the action to be taken to enable the prescribed separation minima from other traffic to be maintained. If the pilot elects to ignore the advice given, he is to tell the radar controller and is then responsible for initiating any avoiding action that should subsequently be necessary. In exceptional circumstances, the controller may pass advisory avoiding instructions before indicating the position of the conflicting traffic. In all cases the controller will continue to pass information on the conflicting traffic until the situation is resolved. Pilots are to advise the controller prior to making any heading or altitude change. Flight conditions need only be passed on request.

NOTE: Under Radar Advisory Service, pilots remain responsible for terrain clearance, although Air Traffic Control Units providing a Radar Advisory Service will set a level or levels below which the service will be refused or terminated.

c. RADAR INFORMATION SERVICE (RIS) - RIS is an air traffic radar service in which the controller will inform the pilot of the bearing, distance and, if known, the level of the conflicting traffic. No avoiding action will be offered. The pilot is responsible for maintaining separation from other aircraft whether or not the controller has passed traffic information. Under RIS, the following conditions apply:

(1) A pilot may request the service under any flight rules or weather conditions.

(2) For flights involving frequent changes of heading or level, the controller with reference to cardinal points will pass information on conflicting traffic. The pilot must indicate the level band within which he wishes to operate and is responsible for selecting the maneuvering area, but may request the controller's assistance in finding a suitable location. The controller may suggest repositioning, but the pilot is not bound to comply.

(3) The controller will only update details of conflicting traffic (after initial warning) at the pilot's request, or if the controller considers that the conflicting traffic continues to constitute a hazard.

(4) The pilot is to advise the controller before changing heading or level or, when the aircraft is maneuvering horizontally or vertically, before changing maneuvering area or level band.

(5) RIS may be offered when the provision of Radar Advisory Service (RAS) is impracticable.

(6) A pilot's request for RIS to be upgraded to RAS will be accepted subject to the controller's workload; if needed, separation will be applied as soon as practicable. If RAS cannot be provided, the controller will continue to provide RIS.

(7) Under Radar Information Service, pilots remain responsible for terrain clearance.

d. PROCEDURES SERVICE - An air traffic service provided by MATO controllers, in which the prescribed minimum separation between participating aircraft is based on reported flight levels and position. This service may be provided where aircraft cannot be given a radar service in the following circumstances.

(1) In Mandatory Radar Service Areas (MRSA's). Immediately following a ground radar failure until a unit's contingency plan can be implemented, or, in radar overhead dark areas, permanent echoes or clutter.

(2) Holding patterns - For the separation of aircraft operating in holding patterns below FL 245 where individual aircraft identification cannot be maintained by a controller.

2. LIMITATIONS ON RADAR SERVICE - On occasions, outside controlled airspace, either of the two types of radar service may be limited when the aircraft is near the lateral or vertical limits of radar cover, close to areas of permanent echoes or weather returns, or areas of high traffic density or when radar

performance is suspect. In these circumstances the pilot will be warned of the reason for the limitation.

a. FIS - Is a non-radar service provided, either separately or in conjunction with other services, for the purpose of supplying information useful for the safe and efficient conduct of flight.

(1) Provision of the service includes information about weather, changes of service changes of serviceability of facilities, conditions at aerodromes and any other information pertinent to safety.

b. The controller may attempt to identify the flight for monitoring and coordination purposes only. This does not imply that a radar service is being provided or that the controller will continuously monitor the flight.

c. Controllers are not responsible for separating or sequencing aircraft.

(SPEC/MIL ENR 1-6-2)

3. REQUEST FOR RADAR SERVICES - Contact the appropriate ATC radar unit on its initial contact frequency stating the type of service required. After initial contact, communication will be transferred to a radar controller and the information requested by DOD FLIP Enroute Supplement, radar assistance data, passed. Do not attempt to contact the ATC Radar unit on any other frequency unless instructed by another ATC unit or air defense agency.

4. SURVEILLANCE RADAR APPROACH - RAF ASR controllers issue recommended altitude on final for nonprecision RADAR approaches. If recommended altitudes are not followed during the descent to MDA, the pilot must inform the controlling agency. Rate of descent should not exceed 1200 fpm (zero wind at 180 KIAS).

NATIONAL HOLIDAYS -

UNITED KINGDOM HOLIDAYS

(SPEC/GEN 2-1-2)

NAME	DATE
New Years Day	2 Jan
Good Friday	14 Apr
Easter Monday	17 Apr
Early May	2 May
Spring Bank Holiday	30 May
Summer Bank Holiday	29 Aug
Christmas Day	25 Dec
Boxing Day	26 Dec

(SPEC/GEN 2-1-2)

RAF STANDARD WEATHER MESSAGE -

1. RAF ATC units will issue abbreviated or "short weather" to arriving aircraft upon request. The "short weather" includes the airport "color state" in lieu of ceiling and visibility.

2. "Short weather" format include:

a. Airport and letter code

b. Runway in use

c. Surface wind and velocity

d. Color state

e. Altimeter setting

f. Unserviceable aids/facilities (when relevant to type of approach requested)

(RAF/RAF FIH)

3. AIRPORT AVAILABILITY/WEATHER STATE-COLOR CODES. (See DOD Enroute Supplement, ENAME, Weather/NOTAM Procedures).

APPROACH AND DEPARTURE CONTROL SERVICE -

USAF bases in the UK are situated in uncontrolled airspace. There is no legal requirement for pilots flying outside controlled airspace or an Airport Traffic Zone to file a flight plan or notify ATC of their presence. Consequently, positive separation from unreported aircraft cannot be guaranteed, and all departure and approach services should be regarded as advisory only. USAF radar controllers will provide unsolicited radar advisory service (see paragraph 4. below) to all aircraft under their control regardless of weather conditions. Avoidance vectors will be provided based on availability of maneuvering airspace and controller/equipment availability at the time. RAF controllers provide a radar advisory service during climb-out and recovery phases.

(3AF A33/USAF FIL 01-63)

NORTHERN RADAR ADVISORY SERVICE AREA (NRASA) -

(See Graphic).

ATC PROCEDURES UK/US -

A review of RAF ATC procedures was conducted in comparison with FAA handbooks on terminal and enroute ATC procedures to identify differences in the two ATC systems that would be of significant interest to the US military pilot operating in UK airspace. They are as follows:

1. ENROUTE OBSTRUCTION CLEARANCE CRITERIA (IFR) - US criteria normally established 1000' standard obstruction clearance and 2000' clearance in mountainous terrain along an airway or from a feeder fix to the approach facility. UK civil ATC rules provided on airways or advisory air routes 1500' obstruction clearance 15 NM either side of centerline. Off airways obstruction clearance provides 1500' above any fixed obstruction within 30 NM of aircraft.

2. DECISION HEIGHT (DH)/MINIMUM DESCENT ALTITUDE (MDA) - US aircrews use published DH and MDA. UK military pilots determine their own DH/Minimum Descent Height (MDH), based on instrument ratings. The UK military controller passes either the Obstruction Clearance Limit (OCL) or basic DH/MDH for the approach and request the pilot's DH or MDH. The DH/MDH is announced to the pilot when he reaches it; thereafter, he receives only advisory information. US pilots landing at UK airports, not under the control of USAF, should ignore the Obstacle Clearance Limit (OCL) and provide the controller with the DoD published or MAJCOM established DH/MDA.

NOTE: See QFE Altimeter Setting Procedures, DOD Enroute Supplement; ENAME.

3. EMERGENCY SAFE ALTITUDE - US obstruction clearance criteria provides 1000' standard, 2000' mountainous terrain clearance within 100 NM of the facility. RAF obstruction clearance is computed by adding 10% to the highest obstruction within 100 NM of the facility plus 1500' and rounded to the next highest 100' increment.

4. PRECISION GLIDE PATH ANGLE - All USAF glide paths are preset. RAF PAR glide paths may permit either 3 (standard) or 2½° for certain types of fighter aircraft, e.g., Lighting.

5. NO-GYRO PROCEDURES - The RAF uses standard rate turns throughout entire recovery. USAF changes to ½ standard rate turns in final approach.

6. MINIMUM FUEL - The RAF does not use the term "minimum fuel" as a fuel state. At RAF airports, pilots must state fuel endurance in minutes and request priority recovery or declare a PAN as the situation warrants.

7. PHRASEOLOGY - A comparison of RAF and US pilot/controller phraseology identifies several cases where different terms are used for the same intended purpose. Although this list is not all inclusive, it identifies the more common terms.

BRITISH	US
IDENTIFIED	RADAR CONTACT
AVOIDING ACTION	TRAFFIC ALERT
FREE CALL (ATC agency)	CONTACT (ATC agency)
READ BACK QNH SET	SAY ALTIMETER SETTING
CLEAR ROLL	CLEARED FOR TOUCH AND GO
CLEAR OVERSHOOT	CLEARED FOR LOW APPROACH
CIRCUIT	TRAFFIC PATTERN
TALKDOWN	RADAR APPROACH (PAR/ASR)
PRACTICE DIVERSIONS	PRACTICE APPROACHES

(3AF A33/USAF FIL 01-63)

8. Assistance and information regarding RAF ATC procedures for pilots intending to fly into RAF airfield is available from the RAF Liaison Officer at RAF Mildenhall, DSN 238-2125/2627.
(3AF A33/USAF FIL 01-63).

TELEPHONE CONTACTS -

THE APPROPRIATE OFFICES SHOULD BE CONTACTED BY USAF MILITARY USERS TO RESERVE AIR REFUELING TRACKS OR ANCHOR AREAS IN THE FOLLOWING COUNTRIES:

UNITED KINGDOM-PRIMARY CONTACT: AIRSPACE UTILIZATION SECTION (AUS) CAA HOUSE
LONDON
DSN: 235 2988
COMMERCIAL: 011 44 207 453 6586
FAX: COMMERCIAL: 011 44 207 453 6593
E-MAIL: ausops@dap.caa.co.uk
IF UNABLE TO CONTACT AUS AT CAA HOUSE, OR FOR FURTHER INFORMATION ON AIR TO AIR REFUELING IN THE UK, CONTACT: HQ 3AF AT RAF MILDENHALL. VIA MAIL: 3AF/A33, APO AE 09459
MILITARY TELETYPE: 3AF RAF MILDENHALL UK//A33//
DSN: 238 2627
FAX: 238 3389
COMMERCIAL: 44 1638 542627
COMMERCIAL FAX: 441638 543389.

WESTERN SAHARA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes the DAKAR FIR. See Bissau.

THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR

COVERAGE - This entry includes the SKOPJE FIR/UIR. Airspace classification B, C and F in accordance with ICAO are not used in the Republic of Macedonia.
(SPEC/ENR 1.4.1)

DIMENSIONAL UNITS - Units ICAO Table. Altimeter settings in hectopascals.
(SPEC/GEN 2.1.1)

ALTIMETER SETTING PROCEDURES -

1. General

a. All altimeter settings passed from ground stations to aircraft will be given in hectopascals (HPa) rounded down to the nearest whole hectopascals.

2. BASIC ALTIMETER SETTING PROCEDURES

a. For all aircraft operation within the Macedonian FIR, transition altitude is established at 11,000 ft (3350 m). The local QNH altimeter setting of Skopje Airport will be used through Skopje FIR with the exception of operations within the Ohrid CTR when the local QNH altimeter setting shall be used.

b. The QFE altimeter setting will be given on request only.
(SPEC/ENR 1.7-1)

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.
(SPEC/ENR 1.1.13.3)

SECONDARY SURVEILLANCE RADAR -

1. EQUIPMENT OF AIRCRAFT

a. Aircraft operating within the FIR Skopje in accordance with IFR and VFR flights operating in A, C and D classes of airspace must be equipped with at least one operative SSR - transponder.

b. Exemptions of mandatory operation of transponder will be granted in particular cases only. Such request shall be directed via teletype or telephone to ACC Skopje (LWSSZQZX LWSKZPZX).
(SPEC/ENR 1.6.2.2)

VISUAL FLIGHT RULES

DAY VFR FLIGHTS - A VFR flight operating within or into Macedonian airspace for which flight planning is required, shall maintain continuous listening watch on the appropriate radio frequency of, and report its position as necessary to, the air traffic services unit providing air traffic control service.
(SPEC/ENR 1.2.2.7)

INSTRUMENT FLIGHT RULES

FM IMMUNITY - Aircraft non-equipped with FM-protected ILS/VOR receivers are allowed to operate in FIR Skopje. Possible future limitations will be handled with NOTAM and using Generic method.

(SPEC/AIC A2-01)

RVSM RULES - The airspace within the Skopje FIR between FL 290 and FL 410 inclusive is EUR RVSM airspace.

(SPEC/ENR 1.8-11)

ADDITIONAL INFORMATION

NATIONAL HOLIDAYS -

NAME	DATE
New Year	1 and 2 Jan
Labor Day	1 and 2 May
National Holiday	2 Aug
Independence Day	8 Sep
Easter Monday	Movable

(SPEC/GEN 2.1.5)

ZAMBIA

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

Zambia services and constitutes the major part of LUSAKA FIR. Small portions of MALAWI airspace above FL 245 and MOZAMBIQUE airspace above FL 145 are also serviced by LUSAKA FIR.

(SPEC/RAC 3-1.1)

DIMENSIONAL UNITS - Blue Table.

AIRSPACE STRUCTURE - Zambia has implemented the ICAO Annex 11 airspace classification except classes B, D, E not yet implemented.

(SPEC/CL II NOTAM A08-91)

ALTIMETER SETTING PROCEDURES - Standard.

VERTICAL SEPARATION - Semicircular.

POSITION REPORTING - Standard.

VISUAL FLIGHT RULES

AIRSPACE EXCEPTIONS -

1. In ATS airspace class G at and below 3000 feet (900 meters) AMSL or 1000 feet (300 meters) GND whichever is higher.

a. Except in airport traffic circuit with airport in sight: 1 mile (1.5 kilometers).

b. Helicopters may operate in lower flight visibility if maneuvered at at speed that will give adequate opportunity to observe.

c. Before conducting VFR flights between sunset and sunrise, holders of night ratings shall obtain special authorization from the appropriate ATC unit.

d. Unless authorized by the appropriate ATC unit, VFR flights shall not be operated within Zimbabwean territory at or above FL 150.

(SPEC/ENR 1-7-1)

FLIGHT PLANNING

FILING FLIGHT PLANS (DAY/NIGHT) - From airports with no air traffic control, flight plans may be submitted after takeoff to FIC Lusaka or appropriate AFIS for relay.

(SPEC/RAC 1-1)

BIRD HAZARD DATA

BIRD CONCENTRATIONS/AREAS - Migratory bird activity may be expected at most airports from approximately September through May.

(SPEC/AGA 0-2.2)

ZIMBABWE

NATIONAL PROCEDURES

GENERAL INFORMATION/FIR/UIR COVERAGE -

Zimbabwe services and constitutes the HARARE FIR.

DIMENSIONAL UNITS - Blue Table, except altimeter setting is in hectopascals.

(SPEC/GEN 2-1-1)

ALTIMETER SETTING PROCEDURES - Standard.

(SPEC/ENR 1-7-1)

VERTICAL SEPARATION -

1. Semicircular except:

a. Between Harare/Charles Prince (FVCP) and Buffalo Range (FVCZ), the southbound track will be deemed 182° and the northbound track will be deemed 002°.

b. Between VMV-LP and VMV-VMA and vice versa at all levels, southbound traffic shall proceed on an even flight level and northbound traffic on an odd flight level.

c. Between Victoria Falls (FVFA) and Johannesburg (FAJS), direct southbound traffic shall proceed on an even flight level and northbound traffic on an odd flight level.

d. Between Victoria Falls (FVFA) and Francistown (FBFT), direct traffic shall proceed on an odd flight level and vice versa.

(SPEC/ENR 1-7-4)

e. Between Victoria Falls (FVFA) and AXIKO above FL 245, direct southbound traffic proceed on an even flight level, and northbound traffic on an odd flight level.

(SPEC/ENR 1-7-4)

POSITION REPORTING - Standard except pilots are required to broadcast their positions and intentions on 118.7 MHZ, when operating at unmanned aerodromes.

(SPEC/AD 1-1-1)

VISUAL FLIGHT RULES

Same as regional procedures, except VFR flights shall not be operated within Zimbabwean territory at or above flight level 150.

(SPEC/GEN 1-7-1)

INSTRUMENT FLIGHT RULES

Same as Regional Procedures.

FLIGHT PLANNING

GENERAL AIR TRAFFIC - No foreign military aircraft shall fly over or land in Zimbabwe except on the express invitation or with the express permission of the Ministry of Defence and having satisfied all the requirements of the Civil Aviation Authority of Zimbabwe.

(SPEC/GEN 1-2-3)

FILING FLIGHT PLANS (DAY/NIGHT) - A flight plan shall be submitted prior to operating any flight in Zimbabwean territory.

(SPEC/GEN 1-7-1)

SUPPLEMENTARY AIRPORT INFORMATION - To obviate complaints due to aircraft noise, pilots of jet aircraft are requested, whenever possible, to avoid routing over built-up areas at altitudes of less than 2500' GND. Further, all outbound jet aircraft taking off on Rwy 05 for left-hand-turnout must attain 2500' GND or 10 NM DME before commencing their turn.

(SPEC/FVHA AD 2-20-1)

BIRD HAZARD DATA

Flocks of migratory birds on the ground and indigenous birds in the pattern may be expected at most airports from approximately September through May.

(SPEC/ENR 5-6-1)

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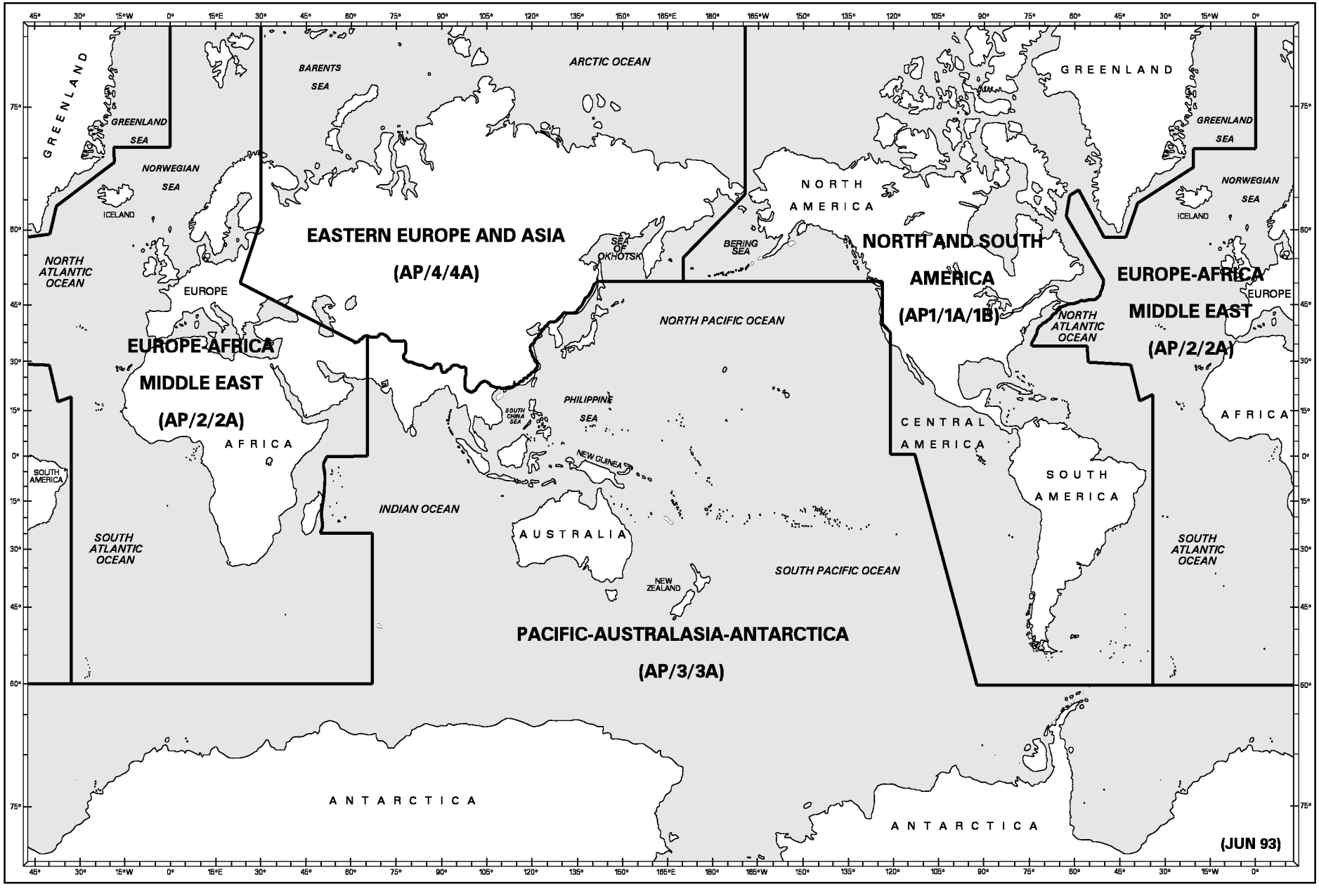
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