

MID AIR NAVIGATION PLAN

VOLUME II

MID AIR NAVIGATION PLAN

VOLUME II

RECORD OF AMENDMENTS

This version of the ICAO MID Air Navigation Plan (Doc 9708), MID eANP - Volume II includes the following approved amendment(s):

PfA Serial No.	Originator	Brief description	Date Approved	Date Entered
MID-II-16/01-ATM	Egypt and Jordan	Amendment of Table ATM II-MID-1	11 Oct 2016	28 Aug 2017
MID-II 17/01-AOP-CNS	Egypt, Jordan, Sudan, UAE and the CNS SG	Amendment of Tables AOP II-1 and CNS II-1	28 Aug 2017	28 Aug 2017

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MID ANP, VOLUME II

PART 0 – INTRODUCTION

1. GENERAL

1.1 The background to the publication of ANPs in three volumes is explained in the Introduction in Volume I. The procedure for amendment of Volume II is also described in Volume I.

1.2 Volume II contains dynamic plan elements related to:

- a) the assignment of responsibilities to States for the provision of aerodrome and air navigation facilities and services; and
- b) the mandatory requirements related to aerodrome and air navigation facilities and services to be implemented by States in accordance with regional air navigation agreements.

1.3 Volume II does not list all facilities in the region but only those required for international civil aviation operations in accordance with regional air navigation agreements. A regional air navigation agreement indicates a commitment on the part of the State(s) concerned to implement the requirement(s) specified. Documents from the Integrated Aeronautical Information Package and other publications should be consulted for information on additional facilities and for operational information in general. Detailed guidance material or concepts, complementary to the material in Volumes I, II and III are contained in documents that are referenced as MID Documents.

2. MANAGEMENT OF REGIONAL AIR NAVIGATION PLANS

2.1 The elements in Volume II are reviewed by the MIDANPIRG in accordance with its schedule of meetings, in consultation with provider and user States, and with the assistance of the ICAO MID Regional Office.

2.2 The information on States' facilities and services included in Volume II, should be updated following the process of regional air navigation agreements.

2.3 The development and maintenance of region-specific documents that provide detailed guidance material or concepts that are complementary to the material in Volumes I, II and III is the responsibility of the MIDANPIRG.

MID ANP, VOLUME II

PART I – GENERAL PLANNING ASPECTS (GEN)

1. INTRODUCTION

1.1. The material in this part of Volume II of ANP is applicable to one or more parts of the ANP. It should be taken into consideration in the overall planning process for the MID Region.

2. GENERAL REGIONAL REQUIREMENTS

2.1. To facilitate air navigation systems planning and implementation, homogenous ATM areas and/or major traffic flows/routing areas have been defined for the Region. While these areas of routing do not encompass all movements in the Region, they include the major routes. This includes the domestic flights in that particular area of routing.

Homogeneous ATM area

2.2. A homogeneous ATM area is an airspace with a common ATM interest, based on similar characteristics of traffic density, complexity, air navigation system infrastructure requirements or other specified considerations. In such an ATM area a common detailed plan will foster the implementation of interoperable ATM systems. Homogeneous ATM areas may extend over States, specific portions of States, or groupings of States. They may also extend over large oceanic and continental areas. They are considered areas of shared interest and requirements.

2.3. The method of identifying homogeneous ATM areas involves consideration of the varying degrees of complexity and diversity of the worldwide air navigation infrastructure. Based on these considerations, planning could best be achieved at the global level if it was organized based on ATM areas of common requirements and interest, taking into account traffic density and the level of sophistication required.

Major traffic flows/routing areas

2.4. A major traffic flow refers to a concentration of significant volumes of air traffic on the same or proximate flight trajectories. Major traffic flows may cross several homogeneous ATM areas with different characteristics.

2.5. A routing area encompasses one or more major traffic flows, defined for the purpose of developing a detailed plan for the implementation of ATM systems and procedures. A routing area may cross several homogeneous ATM areas with different characteristics. A routing area specifies common interests and requirements of underlying homogeneous areas, for which a detailed plan for the implementation of ATM systems and procedures either for airspace or aircraft will be specified.

2.6. The homogeneous ATM areas and major traffic flows/routing areas identified are given in **Table GEN II-1**.

TABLE GEN II-1 - HOMOGENEOUS ATM AREAS AND/OR MAJOR TRAFFIC FLOWS IDENTIFIED IN THE MID REGION

EXPLANATION OF TABLE

Column

1	Area of routing (AR)	Sequential number of area of routing
2	Homogeneous Areas and/or Traffic flows/routing areas	Brief description and/or name
3	FIRs involved	List of FIRs concerned
4	Type of area covered	Brief description of type of area, examples: Oceanic or Continental High or low density Oceanic en-route or Continental en-route
5	Remarks	Homogeneous ATM Area and/or Major Traffic Flow and Region(s) concerned

Area of routing (AR)	Homogeneous Areas and/or Traffic flows/routing areas	FIRs involved	Type of area covered	Remarks
1	2	3	4	5
AR1	Asia and Europe, Asia and the Middle East, Europe and the Middle East, via the northern Arabian Peninsula and Eastern Mediterranean	Amman, Bahrain, Beirut, Damascus, Emirates, Jeddah, Kuwait, Muscat	Continental high density	Mainly intraregional and MID to/from ASIA and EUR. Some overflying EUR/ASIA traffic
AR2	Libya, Egypt and the southern Arabian Peninsula to/from Europe, Africa, Asia and North Africa	Bahrain, Cairo, Emirates, Jeddah, Muscat, Sana'a, Tripoli	Remote continental and oceanic low density (but seasonally high density)	Major traffic flow mainly landing and departing the MID region. Some EUR/AFI traffic and North Africa
AR3	Asia and Europe, Asia and the Middle East, Europe and the Middle East, north of the Gulf	Emirates, Teheran	Continental high density	Major traffic flow ASIA/EUR
AR4	Gulf, Asia (Indian subcontinent) to/from North of Europe	Baghdad, Bahrain, Emirates, Kuwait, Muscat	Continental high density	MID to/from Asia and EUR
AR5	Gulf Area to/from Eastern, Central and West Africa	Bahrain, Emirates, Jeddah, Khartoum, Muscat	Continental low density (Seasonal high density)	Traffic flow Intraregional. Seasonal pilgrim flights to/from, East, Central, and West AFI

MID ANP, VOLUME II

PART II – AERODROMES / AERODROME OPERATIONS (AOP)

1. INTRODUCTION

1.1 This part of the MID ANP, Volume II, complements the provisions in ICAO SARPs and PANS related to aerodrome design and operations (AOP). It contains dynamic plan elements related to the assignment of responsibilities to States for the provision of AOP facilities and services within a specified area in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300); and mandatory requirements related to AOP facilities and services to be implemented by States in accordance with regional air navigation agreements. Such agreement indicates a commitment on the part of the State(s) concerned to implement the requirement(s) specified.

2. GENERAL REGIONAL REQUIREMENTS

2.1 **Table AOP II-1** contains the list of facilities and services to be provided by the State concerned at each aerodrome that is listed in **Table AOP I-1** in Volume I. Table AOP II-1 shows the operational requirements at each aerodrome to be considered in planning the facilities and services for safe and efficient aircraft operations.

Visual aids for low visibility aerodrome operations

2.2 At aerodromes where there is a requirement to conduct low visibility operations, the appropriate visual and non-visual aids should be provided.

Non-precision approach aids

2.3 Where required by the topographic and/or environmental situation of an aerodrome, improved track guidance during departure and/or approach by specific non-visual and/or visual aids should be provided even if such aids would not normally be required in accordance with the SARPs.

Reduced runway declared distances for take-off

Note. — In the following operational requirements the term “intersection” is used to cover both intersection and junction concepts.

2.4 The reduced runway declared distances for take-off, as for those used for full runway declared distances, should consist of take-off run available (TORA), take-off distance available (TODA) and accelerate-stop distance available (ASDA).

2.5 The datum-line from which the reduced runway declared distances for take-off should be determined is defined by the intersection of the downwind edge of the specific taxiway with the runway edge. The loss, if any, of runway length due to alignment of the aircraft prior to take-off should be taken into account by the operators for the calculation of the aircraft’s take-off weight.

2.6 Intersections used as intermediate take-off positions should be identified by the “taxiway designator” to which the datum-line of the associated reduced runway declared distance for take-off refers.

2.7 At each international aerodrome, specific minima visibility for take-off should be established, regulating the use of intersection take-off positions. These minima should permit the appropriate ATC unit to maintain a permanent surveillance of the ground movement operations, and the flight crews to constantly secure their position on the manoeuvring area, so as to exclude any potential risk of confusion as

to the identification of the aircraft and intersections used for take-off. The minima should be consistent with the surface movement guidance and control system (SMGCS) provided at the aerodrome concerned.

2.8 The provision of marking and lighting aids together with signs should ensure the safe control and guidance of aircraft towards and at take-off intersections appropriate to the minima visibility criteria retained. At the runway holding position of the associated intersection take-off position, such signs should indicate the runway heading and the remaining TORA in metres.

2.9 At aerodromes regularly used by international commercial air transport, take-offs from runway/taxiway intersections may be justified for the following reasons:

- a) runway capacity improvement;
- b) taxi routes distances reduction;
- c) noise alleviation; and
- d) air pollution reduction.

2.10 The appropriate authorities should, upon prior consultation with aircraft operators, agree on the selection of suitable intermediate intersection take-off positions along the runway(s). Accordingly, authorities should determine the reduced runway declared distances for take-off associated with each selected intersection take-off position and establish the specific ATC rules and operational procedures/limitations. Such provisions should be published in the State aeronautical information publications (AIP).

Aerodrome capacity management

2.11 As an integral part of the air navigation system, the aerodrome should provide the needed ground infrastructure including, *inter alia*, lighting; taxiways; runway, including exits; aprons and precise surface guidance to improve safety and to maximize aerodrome capacity in all weather conditions. An efficient aerodrome capacity planning and management should include:

- a) reduction of runway occupancy time;
- b) the capability to safely manoeuvre in all weather conditions whilst maintaining capacity;
- c) precise surface guidance to and from a runway required in all conditions; and
- d) availability of information on the position (to an appropriate level of accuracy) and intent of all vehicles and aircraft operating on the movement area for the appropriate ATM community members.

2.12 States should ensure that adequate consultation and, where appropriate, cooperation between airport authorities and users/other involved parties are implemented at all international aerodromes to satisfy the provisions of aerodrome capacity assessment and requirement.

2.13 When international aerodromes are reaching designed operational capacity, a better and more efficient utilization of existing runways, taxiways and aprons is required. Runway selection procedures and standard taxi routes at aerodromes should ensure an optimum flow of air traffic with a minimum of delay and a maximum use of available capacity. They should also, if possible, take account of the need to keep taxiing times for arriving and departing aircraft as well as apron occupancy time to a minimum. The airport collaborative decision making (A-CDM) concept should be implemented to improve airport capacity as early as possible.

Aerodrome capacity assessment and requirement

2.14 The declared capacity/demand condition at aerodromes should be periodically reviewed in terms of a qualitative analysis for each system component and, when applicable, the result of the qualitative assessment upon mutual agreement be used for information.

2.15 The future capacity/demand, based on a forecast for the next five years, should be agreed upon after close cooperation between aerodrome authorities and affected users.

2.16 Operators should consult with aerodrome authorities when future plans indicate a significant increased requirement for capacity resulting in one of the elements reaching a limiting condition.

2.17 Aerodrome capacity should be assessed by aerodrome authorities in consultation with the parties involved for each component (terminal/apron/aircraft operations) using agreed methods and criteria for level of delays.

2.18 Where restrictions in aerodrome capacity are identified, a full range of options for their reduction or removal should be evaluated by the aerodrome authority, in close cooperation with the operators and other involved parties. Such options should include technical/operational/procedural and environmental improvements and facility expansion.

2.19 At many aerodromes, airspace capacity has influence on the aerodrome capacity. If the declared capacity of a specified airspace has influence on aerodrome operations, this should be indicated and action undertaken to reach a capacity in this airspace corresponding to the aerodrome capacity.

2.20 The possibility of overcoming capacity limitations should also take the use of other aerodromes in the vicinity into consideration.

Closure of regular aerodromes

2.21 When a regular aerodrome is to be closed, States should ensure that sufficient alternate aerodromes remain open to provide for the safety and efficiency of aircraft approaching the regular aerodrome that may be required to divert to an alternate.

Scheduling aerodrome maintenance

2.22 States, when planning major aerodrome maintenance work that would affect the regularity of international aircraft operations, should consider the need to notify aircraft operators sufficiently in advance prior to undertaking the scheduled work.

3. SPECIFIC REGIONAL REQUIREMENTS

None.

Table AOP II-1 –REQUIREMENTS AND CAPACITY ASSESSMENT

EXPLANATION OF THE TABLE

Note: Columns 3 to 5 for physical characteristics relate to runways and taxiways. The physical characteristics of taxiways and aprons should be compatible with the aerodrome reference code (Column 3) and appropriate for the runways with which they are related.

Column

- 1 Name of the city and aerodrome, preceded by the location indicator.
Note 1— When the aerodrome is located on an island and no particular city or town is served by the aerodrome, the name of the island is included instead of a city.
Designation of the aerodrome as:
RS — international scheduled air transport, regular use;
RNS — international non-scheduled air transport, regular use;
AS — international scheduled air transport, alternate use; and
ANS — international non-scheduled air transport, alternate use.
- 2 Required rescue and firefighting service (RFF). The required level of protection expressed by means of an aerodrome RFF category number, in accordance with Annex 14, Volume I, 9.2.
- 3 Aerodrome reference code (RC). The aerodrome reference code for aerodrome characteristics expressed in accordance with Annex 14, Volume I, chapter 1. The code letter or number within an element selected for design purposes is related to the critical aeroplane characteristics for which the facilities are provided.
- 4 Runway Designation numbers
- 5 Type of each of the runways to be provided. The types of runways, as defined in Annex 14, Volume I, Chapter 1, are:
NINST — non-instrument runway;
NPA — non-precision approach runway;
PA1 — precision approach runway, Category I;
PA2 — precision approach runway, Category II;
PA3 — precision approach runway, Category III.
- 6 Remarks. Additional information including critical design aircraft selected for determining RC, critical aircraft selected for determining the RFF category and critical aircraft for pavement strength. Only one critical aircraft type is shown if it is used to determine all the above three elements: otherwise different critical aircraft types need to be shown for different elements.

City/Aerodrome/Designation	RFF category	Physical characteristics			Remarks
		RC	RWY No.	RWY type	
1	2	3	4	5	6
BAHRAIN					
BAHRAIN/Bahrain Intl (OBBI)	10	4F	12 R 30 L	NPA NPA	
RS			12 L 30 R	PA 1 PA 1	

City/Aerodrome/Designation	RFF category	Physical characteristics			Remarks
		RC	RWY No.	RWY type	
1	2	3	4	5	6
EGYPT					
ALEXANDRIA/Borg El –Arab Intl (HEBA) RS	8	4E	14 32	NPA PA1	
ASWAN/Aswan Intl (HESN) RS	9	4E	17 35	NPA PA1	
CAIRO/Cairo Intl (HECA) RS	9	4E	05L 23R	PA1 PA1	
		4F	05C 23C	PA2 PA2	
		4E	05R 23L	PA2 PA2	
		4D	16 34	NINST NINST	
HURGADA/Hurghada Intl (HEGN) RS	9	4E	16L 34R	NPA PA1	
		4E	16R 34L	NPA NPA	
LUXOR/Luxor Intl (HELX) RS	9	4E	02 20	PA1 PA1	
MARSA ALAM/Marsa Alam Intl (HEMA) RNS	7	4D	15 33	NPA NPA	
SHARM EL-SHEIKH/Sharm El Sheikh Intl (HESH) RS	9	4E	04L 22R	PA1 NPA	
			04R 22L	NPA NPA	
IRAN, ISLAMIC REPUBLIC OF					
BANDAR ABBAS/Bandar Abbas Intl (OIKB) RS	8	4D	03R 21L	NPA PA1	
			03L 21R	NINST NINST	

City/Aerodrome/Designation	RFF category	Physical characteristics			Remarks
		RC	RWY No.	RWY type	
1	2	3	4	5	6
ESFAHAN/Shahid Beheshti Intl (OIFM) RS	9	4E	08L 26R	NPA PA1	
			08R 26L	NPA NPA	
MASHHAD/Shahid Hashemi Nejad Intl (OIMM) RS	9	4D	13L 31R	NPA PA1	
			13R 31L	NPA NPA	
SHIRAZ/Shiraz Intl (OISS) RS	9	4D	11R 29L	NINST PA1	
			11L 29R	NINST NPA	
TABRIZ/Tabriz Intl (OITT) RNS	9	4D	12L 30R	NPA PA1	
			12R 30L	NINST NINST	
TEHRAN/Imam Khomeini Intl (OIIE) RS	9	4E	11L 29R	NPA PA2	
TEHRAN/Mehrabad Intl (OIII) RS	9	4E	11R 29L	NPA PA1	
			11L 29R	NPA NPA	
YAZD/ Shahid Sadooghi Intl (OIYY) RS	8	4E	13 31	NPA PA1	
ZAHEDAN/ Zahedan Intl (OIZH) RS	8	4D	17 35	NINST PA1	
IRAQ					
Al Najaf/Al Najaf Intl (ORNI) RNS	8	4D	28 10	NP1	
BAGHDAD/Baghdad Intl (ORBI) RS	8	4E	15R 33L	PA1 PA2	
BASRAH/Basrah Intl (ORMM) RS	8	4E	14 32	NINST PA2	
ERBIL/Erbil Intl (ORER) RS	7	4C	15 33	PA1 NINST	
MOUSL/Mousl Intl (ORBM) RS	7	4C	15 33	NINST NINST	

City/Aerodrome/Designation	RFF category	Physical characteristics			Remarks
		RC	RWY No.	RWY type	
1	2	3	4	5	6
SULYMANIYAH/Sulaymaniyah Intl (ORSU) RS	9	4E	31 13	PA1 PA1	
JORDAN					
AMMAN/Marka Intl (OJAM) ANS	8	4C	06 24	NPA PA1	
AMMAN/Queen Alia Intl (OJAI) RS	10	4E	08R 26L 08L 26R	NPA PA2 PA 2 PA 2	
AQABA/ King Hussein Intl (OJAQ) RS	9	4E	01 19	PA1 PA1	
KUWAIT					
KUWAIT/Kuwait Intl (OKBK) RS	9	4E	15R 33L 15L 33R	PA2 PA2 PA2 PA2	
LEBANON					
BEIRUT/ Rafic Hariri Intl (OLBA) RS	9	4E	03 21 16 34 17 35	PA1 PA1 PA1 NINST PA1 NINST	
LIBYA					
BENGAZI/Benina (HLLB) RS	8	4D	15L 33R	PA1 NPA	
SEBHA/Sebha (HLLS) RS	7	4C	15R 33L 13 31 06 24	NPA PA1 PA1 NPA	

City/Aerodrome/Designation	RFF category	Physical characteristics			Remarks
		RC	RWY No.	RWY type	
1	2	3	4	5	6
TRIPOLI/Tripoli Intl (HLLT) RS	8	4E	09 27 18 36	PA1 PA2	
OMAN					
MUSCAT/Muscat Intl (OOMS) RS	9	4E	08 26	PA1 PA1	
SALALAH/Salalah (OOSA) AS	9	4E	07 25	NPA PA1	
QATAR					
DOHA/Doha Intl (OTBD) RS	9	4E	15 33	PA1 PA3	
DOHA/Hamad Intl (OTHH) RS	10	4F	16L 34R 16R 34L	PA3 PA3 PA3 PA3	
SAUDI ARABIA					
DAMMAM/Kind Fahid Intl (OEDF) RS	9	4E	16L 34R 16R 34L	PA2 PA2 PA2 PA2	
JEDDAH/King Abdulaziz Intl (OEJN) RS	9	4E	16R 34L 16C 34C 16L 34R	PA2 PA2 PA2 PA2 PA1 PA1	
MADINAH/Prince Mohammad Bin Abdulaziz Intl (OEMA) RS	8	3D 4E	17 35 18 36	PA1 PA1 NPA PA1	
RIYADH/King Khalid Intl (OERK) RS	9	4E	15L 33R 15R 33L	PA1 PA1 PA1 PA1	

City/Aerodrome/Designation	RFF category	Physical characteristics			Remarks
		RC	RWY No.	RWY type	
1	2	3	4	5	6
SOUTH SUDAN					
JUBA/Juba (HSSJ) RS	6	4C	13 31	PA1 NINST	
SUDAN					
EL OBEID/EI Obeid (HSOB) AS	7	4D	01 19	NPA NPA	
KHARTOUM/Khartoum (HSSS) RS	9	4E	18 36	PA1 NPA	
NYALA/Nyala (HSNN) AS	7	4D	04 22	NPA NPA	
PORT SUDAN/Port Sudan Intl (HSPN) RS	8	4D	17 35	NPA PA1	
SYRIAN ARAB REPUBLIC					
ALEPPO/Aleppo Intl (OSAP) RS	7	4D	09 27	PA2 PA2	
DAMASCUS/ Damascus Intl (OSDI) RS	8	4E	05L 23R 05R 23L	PA2 PA2 PA2 PA2	
LATTAKIA /Bassel AL-Assad Intl (OSLK) RS	5	4D	17 35	NPA NPA	
UNITED ARAB EMIRATES					
ABU DHABI/Abu Dhabi Intl (OMAA) RS	10	4F	13 R 31 L	PA1 PA3	
	10	4F	13 L 31 R	PA3 PA3	
ABU DHABI /Al Bateen Exclusive (OMAD) RS	7	4C	13 31	NPA PA1	
AL AIN/Al Ain Intl (OMAL) RS	9	4E	01 19	PA1 NPA	
DUBAI/Al Maktoum Intl (OMDW) RS	10	4F	12 30	PA3 PA3	

City/Aerodrome/Designation	RFF category	Physical characteristics			Remarks
		RC	RWY No.	RWY type	
1	2	3	4	5	6
DUBAI/Dubai Intl (OMDB) RS	10	4F	12L 30R	PA3 PA3	
FUJAIRAH/Fujairah Intl (OMFJ) RS	9	4E	12R 30L	PA3 PA3	
RAS AL KHAIMAH /Ras Al Khaimah Intl (OMRK) RS	7	4E	11 29	NPA PA1	
SHARJAH/Sharjah Intl (OMSJ) RS	9	4F	16 34	NPA PA1	
			12 30	PA2 PA2	
YEMEN					
ADEN/Aden Intl (OYAA) RS	9	4E	08 26	NPA PA1	
HODEIDAH/ Hodeidah Intl (OYHD) RS	9	4E	03 21	NPA NPA	
MUKALLA/Riyan Intl (OYRN) RS	9	4E	06 24	NPA NPA	
SANA'A/Sana'a Intl (OYSN) RS	9	4E	18 36	PA1 NPA	
TAIZ/ Taiz Intl (OYTZ) RS	9	4E	01 19	NPA NPA	

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PART III – COMMUNICATIONS, NAVIGATION AND SURVEILLANCE (CNS)

1. INTRODUCTION

1.1 This part of the MID ANP, Volume II, complements the provisions in ICAO SARPs and PANS related to communication, navigation and surveillance (CNS). It contains dynamic plan elements related to the assignment of responsibilities to States for the provision of CNS facilities and services within a specified area in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300); and mandatory requirements related to CNS facilities and services to be implemented by States in accordance with regional air navigation agreements. Such agreement indicates a commitment on the part of the State(s) concerned to implement the requirement(s) specified.

2. GENERAL REGIONAL REQUIREMENTS

Communications

Aeronautical Fixed Service (AFS)

2.1 The aeronautical fixed service should comprise the following systems and applications that are used for ground-ground (i.e. point-to-point and/or point-to-multipoint) communications in the international aeronautical telecommunication service:

- a) ATS direct speech circuits and networks;
- b) meteorological operational circuits, networks and broadcast systems, including World Area Forecast System – Internet File Service (WIFS) and/or Satellite Distribution System for Information Relating to Air Navigation (SADIS);
- c) the aeronautical fixed telecommunications network (AFTN);
- d) the common ICAO data interchange network (CIDIN);
- e) the air traffic services (ATS) message handling services (AMHS); and
- f) the inter-centre communications (ICC).

2.2 To meet the data communication requirements, a uniform high-grade aeronautical network should be provided, based on the aeronautical telecommunication network (ATN), taking into account the existence and continuation of current networks.

2.3 Contingency procedures should be in place to ensure that, in case of a communication centre breakdown, all the parties concerned are promptly informed of the prevailing situation. All possible arrangements should be made to ensure that, in case of breakdown of a communications centre or circuit, at least high-priority traffic continues to be handled by appropriate means.

2.4 AFS planning should permit flexibility in detailed development and implementation. The required AFTN Stations and Centres are listed in the AFTN Plan in **Table CNS II-1**.

The Aeronautical Telecommunication Network (ATN)

2.5 The ATN should be able to:

- a) support applications carried by the existing networks;
- b) support gateways enabling inter-operation with existing networks; and
- c) support ground-ground communications traffic associated with air-ground data link applications.

2.6 The ATN should make optimum use of dedicated bilateral/multilateral aeronautical links and other communication means commensurate with the operational Quality of Service (QoS) requirements.

2.7 The implementation of the ATN should take into account the need for cost-effective evolution in terms of network capacity, requirements and time-frame and allow for a progressive transition from existing communication networks and services to a uniform, harmonised and integrated communications infrastructure, capable of supporting the implementation of future aeronautical services such as Flight and Flow Information in a Collaborative Environment (F-FICE), System-Wide Information Management (SWIM) applications, etc.

2.8 In case means other than dedicated bilateral links are used by the ATN, States should ensure that service level agreements (SLA) are met in terms of implementation priority, high availability, priority in restoration of service and appropriate levels of security.

2.9 The ATN should provide for interregional connections to support data exchange and mobile routing within the global ATN.

2.10 In planning the ATN, provisions should be made, where required, for interfacing with other international networks. The Required ATN Infrastructure Routing Plan is described under **Table CNS II-2**.

Network services

2.11 The Internet Society (ISOC) communications standards for the Internet Protocol Suite (IPS) should be used for the implementation of AMHS.

2.12 The migration from legacy bit-oriented protocols such as X.25 Protocol suite to IPS should be planned.

2.13 The migration of international or sub-regional ground networks to the ATN based on Internet Protocol (IP) to support AFS communication requirements, while reducing costs, should be planned.

2.14 States should ensure that the solutions provided for the implementation of the ATN meet the air traffic management and aeronautical fixed service requirements. Such requirements should consist of:

- a) Performance requirements: availability, continuity, integrity, monitoring and alerting criteria per data flow. In the case where a required communication performance (RCP) is globally prescribed, requirements derived from RCP should be stated;
- b) Interoperability requirements;
- c) Safety and security requirements, duly derived after the identification of operational hazards and threats, and allocation of objectives; and
- d) Implementation process requirements (creation, test, migration, upgrades, priority in restoration of service, termination).

Network management

2.15 An ICAO centralised off-line network management service is provided to participating AFTN/ AMHS centres in the MID Region under the ATS Messaging Centre (AMC).

2.16 In the case of integrated communications services procured and shared by several States, organizational provisions should allow for the planning and performing of the management of technical performance, network configuration, fault, security, cost division/allocation, contract, orders and payment.

Specific air traffic management (ATM) requirements

2.17 Where ATS speech and data communication links between any two points are provided, the engineering arrangements should be such as to avoid the simultaneous loss of both circuits. The required ATS direct speech circuits plan is detailed under **Table CNS II-3**.

2.18 Special provisions should be made to ensure a rapid restoration of ATS speech circuits in case of outage, as derived from the performance and safety requirements.

2.19 Data circuits between ATS systems should provide for both high capacity and message integrity.

2.20 The Inter-Centre Communication (ICC), consisting of ATS Inter-facility Data Communication (AIDC) application and the Online Data Interchange (OLDI) application, should be used for automated exchange of flight data between ATS units to enhance the overall safety of the ATM operation and increase airspace capacity.

2.21 Where Voice over IP is planned or implemented between ATS units for voice communications, it should meet the ATS requirements. When data and voice are multiplexed, particular attention should be paid to the achievement of the ATM performance and safety requirements.

Specific meteorological (MET) requirements

2.22 The increasing use of the GRIB (Gridded Binary or General Regularly-distributed Information in Binary form) and BUFR (Binary Universal Form for the Representation of meteorological data) code forms for the dissemination of the upper wind and temperature and significant weather forecasts and the planned transition to digital form using extensible markup language (XML)/geography markup language (GML) for the dissemination of OPMET data should be taken into account in the planning process of the ATN.

2.23 In planning the ATN, account should be taken of changes in the current pattern of distribution of meteorological information resulting from the increasing number of long-range direct flights and the trend towards centralized flight planning.

Specific aeronautical information management (AIM) requirements

2.24 The aeronautical fixed service should meet the requirements to support efficient provision of aeronautical information services through appropriate connections to area control centres (ACCs), flight information centres (FICs), aerodromes and heliports at which an information service is established.

Aeronautical Mobile Service (AMS)

2.25 To meet the air-ground data communication requirements, a high-grade aeronautical network should be provided based on the ATN, recognising that other technologies may be used as part of the transition. The network needs to integrate the various data links in a seamless fashion and provide for end-to-end communications between airborne and ground-based facilities.

2.26 Whenever required, use of suitable techniques on VHF or higher frequencies should be made. The required HF network designators applicable for the MID Region are listed in **Table CNS II-4**.

2.27 Aerodromes having a significant volume of International General Aviation (IGA) traffic should also be provided with appropriate air-ground communication channels.

Air-Ground Data Link Communications

2.28 A Strategy for the harmonised implementation of the data link communications in the MID Region should be developed based on the Global Operational Data Link Document (GOLD) adopted by ICAO Regions and the Aviation System Block Upgrade (ASBU) methodology.

2.29 Where applicable, controller-pilot data link communications (CPDLC), based on ATN VDL data link Mode 2 (VDL2) and/or FANS-1/A, should be implemented for air-ground data link communications.

2.30 Partial or divergent aircraft data link evolutions that result in excluding messages from aircraft systems should not be pursued. Interim steps or phases toward full implementation of the common technical definition in ground systems should only be pursued on a regional basis, after coordination between all States concerned.

2.31 Harmonization of operational procedures for implementation of the above packages is essential. States, Planning and Implementation Regional Groups (PIRGs) and air navigation services

providers should adopt common procedures to support seamless ATS provision across FIR boundaries, rather than each State or Region developing and promulgating unique procedures for common functions.

Required Communication Performance (RCP)

2.32 The Required Communication Performance (RCP) concept characterizing the performance required for communication capabilities that support ATM functions without reference to any specific technology should be applied wherever possible.

2.33 States should determine, prescribe and monitor the implementation of the RCP in line with the provisions laid down in the *ICAO Manual on Required Communication Performance* (Doc 9869).

Navigation

Navigation Infrastructure

2.34 The navigation infrastructure should meet the requirements for all phases of flight from take-off to final approach and landing.

Note: Annex 10 to the Convention on International Civil Aviation—Aeronautical Telecommunications, Volume I — Radio Navigation Aids, Attachment B, provides the strategy for introduction and application of non-visual aids to approach and landing.

2.35 The *MID Region PBN Implementation Plan* provides guidance to air navigation service providers, airspace operators and users, regulators, and international organizations, on the expected evolution of the regional air navigation system in order to allow planning of airspace changes, enabling ATM systems and aircraft equipage. It takes due account of the operational environment of the MID Region.

PBN Transition Strategy

2.36 During transition to performance-based navigation (PBN), sufficient ground infrastructure for conventional navigation systems should remain available. Before existing ground infrastructure is considered for removal, users should be given reasonable transition time to allow them to equip appropriately to attain a performance level equivalent to PBN. States should approach removal of existing ground infrastructure with caution to ensure that safety is not compromised. This should be guaranteed by conducting safety assessments and consultations with the users.

Use of specific navigation aids

2.37 Where, within a given airspace, specific groups of users have been authorized by the competent authorities to use special aids for navigation. The respective ground facilities should be located and aligned so as to provide for full compatibility of navigational guidance with that derived from the SARPs.

2.38 States should ensure and oversee that service providers take appropriate corrective measures promptly whenever required by a significant degradation in the accuracy of navigation aids (either space based or ground based or both) is detected.

Surveillance

2.40 An important element of modern air navigation infrastructure required to manage safely increasing levels and complexity of air traffic is aeronautical surveillance systems.

2.41 When operating Mode S radars, States should coordinate with their respective ICAO Regional Office the assignment of their corresponding interrogator identifier (II) codes and surveillance identifier (SI) codes, particularly where areas of overlapping coverage will occur.

Frequency Management

Aeronautical Mobile Service (AMS)

2.42 Frequencies should be assigned to all VHF aeronautical mobile service (AMS) facilities in accordance with the principles laid out in Annex 10, Volume V and *ICAO Handbook on Radio Frequency Spectrum Requirements for Civil Aviation* (Doc 9718) Volumes I and II, and take into account:

- a) agreed geographical separation criteria based on 25 kHz or 8.33 kHz interleaving between channels;
- b) agreed geographical separation criteria for the implementation of VDL services;
- c) the need for maximum economy in frequency demands and in radio spectrum utilization; and
- d) a deployment of frequencies which ensures that international services are planned to be free of interference from other services using the same band.

2.43 The priority order to be followed in the assignment of frequencies to service is:

- a) ATS channels serving international services (ACC, APP, TWR, FIS);
- b) ATS channels serving national purposes;
- c) channels serving international VOLMET services;
- d) channels serving ATIS and PAR; and
- e) channels used for other than ATS purposes.

2.44 The criteria used for frequency assignment planning for VHF AMS facilities serving international requirements should, to the extent practicable, also be used to satisfy the need for national VHF AMS facilities.

2.45 Special provisions should be made, by agreement between the States concerned, for the sharing and the application of reduced protection of non-ATS frequencies in the national sub-bands, so as to obtain a more economical use of the available frequency spectrum consistent with operational requirements.

2.46 States should ensure that no air/ground frequency is utilized outside its designated operational coverage and that the stated operational requirements for coverage of a given frequency can be met for the transmission sites concerned, taking into account terrain configuration.

Radio navigation aids for Aeronautical Radio Navigation Services (ARNS)

2.47 Frequencies should be assigned to all radio navigation facilities taking into account agreed geographical separation criteria to ILS localizer, VOR and GBAS, X and Y channels to DME, in accordance with the principles laid out in Annex 10, Volume V and *ICAO Handbook on Radio Frequency Spectrum Requirements for Civil Aviation* (Doc 9718) Volumes I and II. Also, the need for maximum economy in frequency demands and in radio spectrum utilization and a deployment of frequencies which ensures that international services are planned to be free of interference from other services using the same band, need to be considered.

2.48 The principles used for frequency assignment planning for radio navigation aids serving international requirements should, to the extent possible, also be used to satisfy the needs for national radio aids to navigation.

Support to ICAO Positions for ITU World Radiocommunication Conferences (WRCs)

2.49 Considering the importance and continuous demand of the radio frequency spectrum and for the protection of the current aeronautical spectrum and the allocation of new spectrum for the new services and system to be implemented in civil air navigation, States and international organizations are to support ICAO's position at ITU World Radiocommunication Conferences (WRCs) and in regional and other international activities conducted in preparation for ITU WRCs.

Note: The Handbook on Radio Frequency Spectrum Requirements for Civil Aviation (Doc 9718) Volume I, contains ICAO policy statements relevant to the aviation requirements for radio frequency spectrum. The handbook is intended to assist States and ICAO in preparing for ITU WRCs.

3. SPECIFIC REGIONAL REQUIREMENTS

3.1 The MIDAMC application available at: <http://www.midamc.jo> should be used for all AMHS address coordination and other AMHS and Network related matters.

3.2 The EUROCONTROL MICA application available at: <https://extranet.eurocontrol.int/http://webprisme.cfm.eurocontrol.int/mica/Index.action> should be used for the Mode S SSR IC allocation and coordination.

TABLE CNS II-1 - AERONAUTICAL FIXED TELECOMMUNICATIONS NETWORK (AFTN) PLAN

EXPLANATION OF THE TABLE

Column

- 1 The AFTN Centres/Stations of each State are listed alphabetically. Each circuit appears twice in the table. The categories of these facilities are as follows:
M - Main AFTN COM Centre
T - Tributary AFTN COM Centre
S - AFTN Station
- 2 Category of circuit:
M - Main trunk circuit connecting Main AFTN communication centres.
T - Tributary circuit connecting Main AFTN communication centre and Tributary AFTN Communications Centre.
S - AFTN circuit connecting an AFTN Station to an AFTN Communication Centre.
- 3 Type of circuit provided:
LTT/a - Landline teletypewriter, analogue (e.g. cable, microwave)
LTT/d - Landline teletypewriter, digital (e.g. cable, microwave)
LDD/a - Landline data circuit, analogue (e.g. cable, microwave)
LDD/d - Landline data circuit, digital (e.g. cable, microwave)
SAT/a/d - Satellite link, with /a for analogue or /d for digital
- 4 Circuit signalling speed in bits/s.
- 5 Circuit protocols
- 6 Data transfer code (syntax):
ITA-2 - International Telegraph Alphabet No. 2 (5-unit code).
IA-5 - International Alphabet No. 5 (ICAO 7-unit code).
CBI - Code and Byte Independency (ATN compliant).
- 7 Remarks

State/Station	Category	Requirement				Remarks
		Type	Signalling Speed	Protocol	Code	
1	2	3	4	5	6	
BAHRAIN						
BAHRAIN						
ABU DHABI	M		64 – 9.6Kbps	CIDIN	IA-5	All: AMHS by 2017
ANKARA	M		64Kbps	AFTN	IA-5	
BEIRUT	M		64 – 9.6Kbps	AMHS	IA-5	
DOHA	T		64 – 9.6Kbps	AMHS	IA-5	
JEDDAH	M		64 – 9.6Kbps	AMHS	IA-5	
KUWAIT	M		64 – 9.6Kbps	CIDIN	IA-5	
MUSCAT	M		64 – 9.6Kbps	None	IA-5	
NICOSIA	M		9.6Kbps	CIDIN	IA-5	
SINGAPORE	M		64 – 9.6Kbps	None	IA-5	
TEHRAN	M		64 – 9.6Kbps	None	IA-5	

State/Station	Category	Requirement				Remarks
		Type	Signalling Speed	Protocol	Code	
1	2	3	4	5	6	
EGYPT						
CAIRO	M					
AMMAN	M		64-9.6Kbps	AMHS		
ATHENS	M		64-9.6Kbps	CIDIN	IA-5	
BEN GURION	M		64-9.6Kbps	None	IA-5	
BEIRUT	M		9.6 Kbps	CIDIN	IA-5	
JEDDAH	M		128-9.6Kbps	AMHS		
KHARTOUM	T		9.6Kbps	None	IA-5	
NAIROBI	M		9.6Kbps	None	IA-5	
TUNIS	M		64-9.6Kbps	AMHS	IA-5	
TRIPOLI	T		64-9.6Kbps	None	IA-5	
TRIPOLI	T		9.6Kbps	None	IA-5	STNDBY
DAMASCUS	T		64-9.6Kbps	None	IA-5	
ASMARA	T		9.6Kbps	None	IA-5	
IRAN						
TEHRAN	M					
BAHRAIN	M		64 Kbps	None	IA-5	
KUWAIT	M		64 Kbps	None	IA-5	
ABU-DHABI	M		9.6 Kbps	None	IA-5	
KARACHI	M		64Kbps	None	IA-5	
ANKARA	M		64Kbps	AFTN	IA-5	
MUSCAT	M		64Kbps	None	IA-5	
DAMASCUS	T		50 BD	None	ITA-2	
BAGHDAD	T		64Kbps	None	IA-5	Planned
IRAQ						
BAGHDAD	T		-			
AMMAN	T		2MBps	None	IA-5	VPN
BEIRUT	T		2MBps	None	IA-5	VPN Planed
KUWAIT	T	SAT	9.6Kbps	None	IA-5	
ANKARA	T					
JORDAN						
AMMAN						
ABU DHABI	T		2MBps	AMHS		VPN
ANKARA	M		64Kpbs	AFTN		Land Line
BAGHDAD	T		2MBps	AMHS	-	VPN Planed
BEIRUT	T		2MBps	AMHS	-	VPN Planed
BEN GURION	M		9.6 Kbps	None	IA-5	
CAIRO	T		64 – 9.6Kbps	AMHS		
DAMASCUS	T		64 – 9.6Kbps	None	IA-5	
JEDDAH	M		64Kbps	AMHS	X400	
NICOSIA	T		64Kbps	AFTN	IA-5	

State/Station	Category	Requirement				Remarks
		Type	Signalling Speed	Protocol	Code	
1	2	3	4	5	6	
KUWAIT KUWAIT BAHRAIN DAMASCUS BEIRUT DOHA Hamad-Airport KARACHI TEHRAN BAGHDAD	T M M T T M M T	LDD/d LDD/a LDD/a LDD/a LDD/d LDD/d SAT/ad	64 – 9.6Kbps 64- 9.6 Kbps 64-9.6 Kbps 64 – 9.6Kbps 256Kbps 64-9.6 Kbps 64 – 9.6Kbps 9.6Kbps	None None None None None None None None	IA-5 IA-5 IA-5 IA-5 IA-5 IA-5 IA-5 IA-5	Back-up
LEBANON BEIRUT AMMAN BAGHDAD BAHRAIN CAIRO DAMASCUS JEDDAH KUWAIT NICOSIA	M M T M M T M M M		2Mbps 2Mbps 64-9.6Kbps 9.6Kbps 64-9.6Kbps 64-9.6Kbps 64-9.6Kbps 9.6 Kbps	AMHS CIDIN CIDIN None None None None None CIDIN	IA-5 5IA-5 IA-5 IA-5 IA-5 IA-5	VPN in process VPN planed
LIBYA TRIPOLI MALTA TUNIS BENGHAZI CAIRO KHARTOUM	T T M T M T		9.6Kbps 64 – 9.6Kbps 9.6Kps	None None None	IA-5 IA-5	
OMAN MUSCAT ABU DHABI BAHRAIN MUMBAI JEDDAH SANA'A KARACHI TEHRAN	T M M M T M M		64Kbps 64Kbps 64Kbps 64Kbps 100 BD 64Kbps 64Kbps	AMHS None None None None None None	IA-5 IA-5 IA-5 IA-5 ITA-2 IA-5 IA-5	
QATAR DOHA BAHRAIN KUWAIT ABU DHABI	M M T		2Mbps 2Mbps 2Mbps	AFTN AMHS AMHS	IA-5 (TCP) X400(TCP) X400(TCP)	

State/Station	Category	Requirement				Remarks
		Type	Signalling Speed	Protocol	Code	
1	2	3	4	5	6	
SAUDI ARABIA JEDDAH ADDIS-ABABA BAHRAIN BEIRUT CAIRO MUSCAT SANA'A AMMAN KHARTOUM ABUDHABI NICOSIA	M M M M M M T M T T M	SAT SAT SAT	9.6Kbps 64 – 9.6Kbps 64-9.6Kbps 128–9.6Kbps 64 Kbps 9.6Kbps 64Kbps 64Kbps 64Kbps 64Kbps	None CIDIN None AMHS None None AMHS AMHS AMHS CIDIN	IA-5 IA-5 IA-5 X400 IA-5 IA-5 X400 X400 X400 IA-5	AMHS (2015) AMHS (2015) AMHS (2015) AMHS EUR/ MID OPMET
SUDAN KHARTOUM ADDIS ABABA ASMARA CAIRO JEDDAH TRIPOLI NDJAMENA	T M T M M T M		9.6Kbps 9.6Kbps 9.6Kbps 64Kbps 9.6Kbps 9.6Kbps	None None None AMHS None None	IA-5 IA-5 IA-5 IA-5 IA-5 IA-5	
SYRIA DAMASCUS ATHENS AMMAN BEIRUT CAIRO KUWAIT TEHRAN	M T M M M T		2 X 50 BD 64 – 9.6Kbps 64-9.6Kbps 9.6Kbps 64-9.6Kbps 50 BD	None None None None None None	ITA-2 IA-5 IA-5 IA-5 IA-5 ITA-2	
UAE ABU DHABI BAHRAIN AMMAN MUSCAT DOHA TEHRAN JEDDAH	M T M T M T	VPN SAT	9.6Kbps 2 Mbps 64Kbps 128Kbps 9.6Kbps 64Kbps	CIDIN AMHS AMHS AMHS None AMHS	IA-5 IA-5	VPN
YEMEN SANA'A JEDDAH MUSCAT	T T		9.6Kbps 100Kbps	None None	IA-5 IA-5	

TABLE CNS II-2 - REQUIRED ATN INFRASTRUCTURE ROUTING PLAN

EXPLANATION OF THE TABLE

Column

- 1 Name of the Administration and Location of the ATN Router
- 2 Type of Router (in end systems (ES) of the Administration shown in column 1)
- 3 Type of Interconnection:
Inter Regional: Connection between different Regions/ domains
Intra Regional: Connection within a Region/ domain.
- 4 Connected Router: List of the Administration and location of the ATN routers to be connected with the router shown in column 1.
- 5 Bandwidth: Link Speed expressed in bits per second (bps)
- 6 Network Protocol: If Internet Protocol Suite is used, indicate version of IP (IPv4 or IPv6)
- 7 Via: The media used to implement the interconnection of the routers. (in case of IP service bought from a service provider, indicate VPN)
- 8 Remarks

Administration and Location	Type of Router	Type of Interconnection	Connected Router	Bandwidth	Network Protocol	Via	Remarks
1	2	3	4	5	6	7	8
BAHRAIN, Bahrain	BIS	Inter-Regional Intra Regional	ASIA/PAC Oman, Saudi Arabia Kuwait, Lebanon Iran, Qatar, UAE		IPv4		
EGYPT, Cairo	BIS	Inter-Regional Intra Regional	AFI, EUR Israel, Jordan, Lebanon, Athena Saudi Arabia		IPv4		
IRAN, Tehran	BIS	Intra Regional	ASIA/PAC Kuwait, Bahrain Afganistan		IPv4		
IRAQ, Baghdad	IS	Intra Regional	Jordan, Lebanon		IPv4		
JORDAN, Amman	BIS	Intra Regional	Egypt, Israel Lebanon, Iraq, Syria		IPv4 VPN	JT	
KUWAIT, Kuwait	BIS	Inter-Regional Intra Regional	EUR, Pakistan, Iran, Qatar, Bahrain, Lebanon		IPv4		
LEBANON, Beirut	BIS	Inter-Regional Intra Regional	EUR Jordan, Syria Iraq, Kuwait, Bahrain Saudi Arabia, Egypt		IPv4		
LIBYA	IS	Intra Regional			IPv4		
OMAN, Muscat	BIS	Inter-Regional Intra Regional	ASIA/PAC Yemen, Bahrain, UAE, Saudi Arabia		IPv4 VPN	OT	
QATAR, Doha	IS	Intra Regional	Kuwait, Bahrain Abu Dhabi		IPv4		
SAUDI ARABIA, Jeddah	BIS	Inter-Regional Intra Regional	AFI Egypt, Lebanon Bahrain, Oman Yemen		IPv4		
SUDAN	IS	Intra Regional			IPv4		
SYRIA, Damascus	IS	Intra Regional	Jordan, Lebanon		IPv4 VPN		
U.A.E, Abu Dhabi	BIS	Intra Regional	Bahrain, Oman Qatar		IPv4 VPN		
YEMEN, Sana'a	IS	Intra Regional	Oman, Saudi Arabia		IPv4	YT	

TABLE CNS II-3 - ATS DIRECT SPEECH CIRCUITS PLAN

EXPLANATION OF THE TABLE

<p><i>Column</i> 1 and 2</p>	Circuit terminal stations are listed alphabetically by the Terminal I.
3	A — indicates ATS requirement for the establishment of voice communication within 15 seconds. D — indicates requirements for instantaneous communications.
4	Type of service specified: LTF — landline telephone (landline, cable, UHF, VHF, satellite). RTF — radiotelephone.
5	Type of circuits; Direct (DIR) or Switched (SW). D — indicates a direct circuit connecting Terminals I and II. S — indicates that a direct circuit does not exist and that the connection is established via switching at the switching centre(s) indicated in column 6. IDD — International direct dialling by public switch telephone network <i>Note 1.— Number of D and/or S circuits between Terminals I and II are indicated by numerical prefix, i.e. 2 D/S means 2 direct circuits and one switched circuit.</i> <i>Note 2.— Pending the implementation of proper ATS voice circuits, and provided that aeronautical operational requirements are met, IDD services may be used for the ATS voice communications in low traffic areas.</i>
6	Location of switching centre(s). Alternate routing location, if available, is indicated in brackets.
7	Remarks

ATS REQUIREMENTS FOR SPEECH COMMUNICATIONS			CIRCUIT			REMARKS
TERMINAL I	TERMINAL II	TYPE	SERVICE	DIR/SW	TO BE SWITCHED VIA	
1	2	3	4	5	6	7
BAHRAIN						
Bahrain	Emirates ACC	A	LTF	DIR		4 LINES
	Dammam	A	LTF	DIR		2 LINES
	Doha	A	LTF	DIR		4 LINES
	Jeddah	A	LTF	DIR		2 LINES
	Kuwait	A	LTF	DIR		1 LINES
	Riyadh	A	LTF	DIR		1 LINES
	Tehran	A	LTF	DIR		1 LINES
EGYPT						
Cairo	Amman	A	LTF	DIR		1LINE
	Athens	A	LTF	DIR		2LINES
	Jeddah	A	LTF	DIR		2LINES
	Khartoum	A	LTF			1LINE
	Nicosia	A	LTF	DIR		1LINE
	Tel Aviv	A	LTF	DIR		1LINE
	Tripoli	A	LTF	DIR		1LINE
IRAN (ISLAMIC REPUBLIC OF)						
Abadan	Basrah	A	LTF			
	Shiraz	A	LTF	DIR		

ATS REQUIREMENTS FOR SPEECH COMMUNICATIONS			CIRCUIT			REMARKS	
TERMINAL I	TERMINAL II	TYPE	SERVICE	DIR/SW	TO BE SWITCHED VIA		
1	2	3	4	5	6	7	
Shiraz	Abadan Basrah Doha Karachi Kuwait Tehran	A A A A A A	LTF LTF LTF LTF LTF LTF	DIR DIR DIR DIR DIR		II	
Tehran	Emirates ACC Ankara Ashgabat Baghdad Bahrain Baku Basrah Doha Kabul Karachi Kuwait Muscat Shiraz Yerevan/Zvartnots	A A A A A A A A A A A A A A	LTF LTF LTF LTF LTF LTF LTF LTF LTF LTF LTF LTF LTF LTF	DIR DIR DIR DIR DIR DIR DIR DIR DIR DIR DIR DIR			
IRAQ							
Baghdad	Amman Ankara Basrah Damascus Jeddah Kuwait Mosul Tehran	A A A A A A A A	LTF SAT LTF LTF LTF LTF LTF				
Basrah	Abadan Baghdad Kuwait Shiraz Tehran	A A A A A	LTF LTF LTF LTF LTF				
Mosul	Baghdad	A	LTF				
JORDAN							
Amman	Baghdad Cairo Damascus Jeddah Tel Aviv	A A A A A	LTF LTF LTF LTF LTF				

ATS REQUIREMENTS FOR SPEECH COMMUNICATIONS			CIRCUIT			REMARKS
TERMINAL I	TERMINAL II	TYPE	SERVICE	DIR/SW	TO BE SWITCHED VIA	
1	2	3	4	5	6	7
KUWAIT Kuwait	Baghdad Bahrain Basrah Jeddah Shiraz Tehran	A A A A A A	LTF LTF LTF LTF LTF LTF	 DIR DIR DIR DIR		
LEBANON Beirut	Ankara Damascus Nicosia	A A A	LTF LTF LTF	DIR DIR DIR		
LIBYA Tripoli	Cairo Malta Khartoum					
OMAN Muscat Salalah	Emirates ACC Mumbai Jeddah Karachi Salalah Sana'a Tehran Muscat	A A A A A A A A	LTF LTF LTF LTF LTF LTF LTF	DIR DIR DIR DIR DIR DIR DIR		
QATAR Doha	Emirates ACC Bahrain Jeddah Riyadh Dammam	A A A A A	LTF LTF LTF LTF	DIR DIR DIR DIR	Via Bahrain	II + 1
SAUDI ARABIA Dammam	Bahrain Jeddah Riyadh	A A A	LTF LTF LTF	DIR DIR DIR		

ATS REQUIREMENTS FOR SPEECH COMMUNICATIONS			CIRCUIT			REMARKS
TERMINAL I	TERMINAL II	TYPE	SERVICE	DIR/SW	TO BE SWITCHED VIA	
1	2	3	4	5	6	7
Jeddah	Addis Ababa Amman Asmara Baghdad Bahrain Cairo Dammam Khartoum Kuwait Muscat Riyadh Sana'a	A A A A A A A A A A A A A	LTF LTF LTF LTF LTF LTF LTF LTF LTF LTF LTF LTF LTF	DIR DIR DIR DIR DIR DIR DIR SW	Via Bahrain	
Riyadh	Bahrain Jeddah Dammam	A A A	LTF LTF LTF	DIR DIR DIR		
SUDAN Khartoum	Cairo Jeddah	A A	LTF LTF			
SYRIAN ARAB REPUBLIC Damascus	Amman Ankara Baghdad Beirut Nicosia	A A A A A	LTF LTF LTF LTF LTF	DIR		
UNITED ARAB EMIRATES Emirates ACC	Abu Dhabi Al Ain Bahrain Doha Dubai Muscat Tehran	A A A A A A A	LTF LTF LTF LTF LTF LTF LTF	DIR SW DIR DIR DIR DIR DIR		21
Abu Dhabi	Emirates ACC Al Ain Dubai	A A A	LTF LTF LTF	SW DIR SW		21 21 21
Al Ain	Emirates ACC Abu Dhabi Dubai	A A A	LTF LTF LTF	SW DIR SW		21 21 21

ATS REQUIREMENTS FOR SPEECH COMMUNICATIONS			CIRCUIT			REMARKS
TERMINAL I	TERMINAL II	TYPE	SERVICE	DIR/SW	TO BE SWITCHED VIA	
1	2	3	4	5	6	7
Dubai	Emirates ACC	A	LTF	DIR		2I + 1
	Abu Dhabi	A	LTF	DIR		2I
	Al Ain	A	LTF	SW		1I
	Fujairah	A	LTF	DIR		1I
	Ras Al Khaimah	A	LTF	DIR		1I
	Sharjah	A	LTF	DIR		3I
Fujairah	Ras Al Khaimah	A	LTF	DIR		1I
	Emirates ACC	A	LTF	DIR		1I
Ras Al Khaimah	Dubai	A	LTF	DIR		1I
Sharjah	Dubai	A	LTF	DIR		3I
YEMEN						
Aden	Djibouti	A	LTF			
	Sana'a	A	LTF			
Mukalla	Aden	A	LTF			
	Sana'a	A	LTF			
Sana'a	Aden	A	LTF			
	Addis Ababa	A	LTF			
	Asmara	A	LTF			
	Mumbai	A	LTF			
	Djibouti	A	LTF			
	Jeddah	A	LTF			
	Mogadishu	A	LTF	DIR	Via Bahrain	
	Muscat	A	LTF			
Riyan	A	LTF				

TABLE CNS II-4 - HF NETWORK DESIGNATORS
EXPLANATION OF THE TABLE

Column

- 1 Name of station, preceded by its location indicator.
- 2 Network designators assigned to the facility providing HF radiotelephony en-route communications (selected from the provisions of the allotment plan in Appendix S27 to the ITU Radio Regulations).

NOTES

The ICAO designators for HF MWARA and VOLMET networks in the MID region are derived from the ITU allotment area abbreviations as contained in Appendix S27 to the ITU Radio Regulations.

ITU allotment area:

Two- and three-letter alpha entries indicate major world air route areas (MWARA):

Four-letter alpha entries indicate VOLMET areas:

Location Indicator and Name of location	HF en-route family
1	2
Aden	MID-1, AFI-3
Cairo	AFI-3
Jeddah	AFI-3
Khartoum	AFI-3
Riyan	MID-1, AFI-3
Sanaa	MID-1, AFI-3
Shiraz	MID-1, MID-2
Tehran	MID-1, MID-2
Tripoli	AFI-3

**HF FREQUENCIES AND THEIR ICAO NETWORK DESIGNATORS BASED ON ITU
APPENDIX S27 ALLOTMENT AREAS**

Frequency (kHz)	ITU allotment area	AFI-3	MID-1	MID-2	MID-3	V MID	Remarks
1	2	3	4	5	6	7	8
2944	MID				X		
2956	V MID					X	
2992	MID		X				
3467	MID, AFI	X		X			
3473	MID (1)						
4669	MID				X		
5517	AFI	X					
5589	V MID					X	
5658	MID, AFI	X		X			
5667	MID		X				
6625	MID (1)						
6631	MID			X			
8918	MID		X				
8945	V MID					X	
8951	MID				X		
10018	MID			X			
11300	AFI	X					
11375	MID				X		
11393	V MID (2)					X	
13288	MID, AFI	X		X			
13312	MID		X				
17961	AFI, MID	X			X		

MID ANP, VOLUME II

PART IV - AIR TRAFFIC MANAGEMENT (ATM)

1. INTRODUCTION

1.1 This part of the MID ANP, Volume II, complements the provisions in ICAO SARPs and PANS related to Air Traffic Management (ATM). It contains dynamic plan elements related to the assignment of responsibilities to States for the provision of ATM facilities and services within a specified area in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300); and mandatory requirements related to ATM facilities and services to be implemented by States in accordance with regional air navigation agreements. Such agreement indicates a commitment on the part of the State(s) concerned to implement the requirement(s) specified.

2. GENERAL REGIONAL REQUIREMENTS

Optimization of traffic flows

2.1 The Planning and Implementation Regional Groups (PIRGs), through regional air navigation agreement, are responsible for the optimization of the traffic flows through the continuous improvement of the regional ATS route network and organized track systems and implementation of random routing areas and free route airspace in the Regions through the set-up of appropriate mechanisms for regional and inter-regional planning and coordination.

2.2 Whenever practicable, States should, in close coordination with operators, establish the most efficient routings.

2.3 The requirements for regional ATS route network, in particular, for ATS routes over the high seas and airspace of undetermined sovereignty, should be agreed upon through regional air navigation agreement.

Note: States' AIPs and other States publications should be consulted for information on the implemented ATS routes.

Aircraft Identification-SSR Code Management

2.4 Within the context of air traffic management (ATM) and the provision of air traffic services (ATS), SSR code management is a key element of ATM to ensure continuous, unambiguous aircraft identification. The number of secondary surveillance radar (SSR) codes is limited and poor management of the assignment of SSR codes results in capacity constraints and aircraft delays. States and air navigation service providers (ANSP) should apply the SSR Code Management Plan approved by MIDANPIRG. The SSR Codes Management Plan of the MID Region is addressed in the Specific Regional Requirements of Volume II.

3. SPECIFIC REGIONAL REQUIREMENTS

Working Principles for the Construction of Air Routes

3.1. The ATS routes agreed through regional air navigation agreement are listed in **Table ATM II-MID-1**. The routes should be developed based on the ICAO SARPS and PANS-OPS and PANS-ATM criteria and parameters, the following should be taking into consideration for the management of MID Region ATS route Network:

- a) Where possible, routes should be established to increase efficiency, reduce complexity and provide additional benefits to users;
- b) separation assurance principles should apply;
- c) routes should be established with sufficient separation to operate independently;
- d) where possible, routes in a radar environment should be procedurally (laterally) separated;
- e) segregated tracks should be established on medium/high density routes and be determined by set criteria;
- f) where required, routes should be constructed to support terminal area management procedures, e.g. SID s/STARs and flow management techniques, as applicable;
- g) holding patterns should be laterally separated from other tracks, and tolerances captured within a single sector;
- h) a maximum of two routes containing high traffic density should be blended at a single point. Inbound tracks should be blended at <90 degrees. Up to three low traffic density routes may be blended at a single point;
- i) multiple crossing points involving major traffic flows should be avoided.
- j) en-route crossings should be minimized. Where crossings are inevitable, they should, where possible, be established for cruise configuration. Such crossings should occur, wherever possible, within radar coverage;
- k) airspace sectorization should take account of the route structure, and workload considerations. If necessary, airspace should be re-sectorized to accommodate changes to air route configuration;
- l) routes should be constructed so as to reflect the optimum navigation capabilities of the principle users (e.g. RNAV or conventional);
- m) the prime determinant should not be the number of track miles. A small increase in track miles may optimize traffic flows, avoid unpredicted delays or avoid holding requirements. Consideration should also be given to the provision of a range of routes which will permit operators to choose cost-efficient routes over the range of expected seasonal wind patterns;
- n) due allowance should be given to existing and future flight data processing (FDP) and radar data processing (RDP) capability (i.e. notification of messages for auto hand-off etc.);
- o) periodic safety audit and review process of routes should be conducted to test demand against capacity criteria, and the principles. This should ideally be done in parallel with the annual sectorization review; and
- p) routes that can no longer be justified should be deleted.

Allocation and Assignment of Secondary Surveillance Radar (SSR) Codes in the MID Region

3.2. The Middle East SSR Code Management Plan (MID SSR CMP), endorsed by MIDANPIRG as MID Doc 005, provides States in the ICAO MID Region with means to coordinate the use of SSR codes based on the provisions of the ICAO Doc 4444 and the principles of the Originating Region Code Assignment Method (ORCAM).

3.3. Certain codes are reserved for special purposes on a world-wide scale. The remaining codes series for use in the Region are divided into two distinct categories: Transit codes (T) for international use and Domestic codes (D) for national use

3.4. The MID Code Allocation List (CAL) at **Table ATM II-MID-2** reflects the assignment of SSR codes to the MID States among the series of codes allocated to the MID Region, based on the number of aircraft to be handled simultaneously within a specified area and for a determined period of protection during traffic peaks.

3.5. The MID Doc 005-*MID SSR CMP*, is available on the ICAO MID website, under eDocuments (https://portal.icao.int/RO_MID/Pages/MIDDocs.aspx), should be managed and maintained up-to-date by the ICAO MID Regional Office.

3.6. States should inform the ICAO MID Regional Office promptly of any deviation from the Plan or proposed changes considered necessary with respect to their code allocations, relevant to ATS infrastructure developments and/or the guidance material provided in the MID SSR CMP.

Special purpose codes

Series 00 Code 0000 is available as a general purpose code for domestic use by any of the MID States.

Series 10 Code 1000 reserved for use as a conspicuity code for Mode S

Series 20 Code 2000 shall be used by flight crews in the absence of any Air Traffic Control (ATC) instructions or regional agreements unless the conditions for the use of codes: 7000, 7500, 7600 and 7700 apply.

Series 70 Code 7000 shall be used by flight crews not receiving ATS service in order to improve detection of suitably equipped aircraft in areas specified by States, unless otherwise instructed by ATS.

Series 75 Code 7500 is reserved for use in the event of unlawful interference.

Series 76 Code 7600 is reserved for use in the event of radio communications failure.

Series 77 Code 7700 is reserved for use in the event of emergencies and interception*. Code 7776 and Code 7777 are reserved for SSR ground transponder monitoring.

Codes 7601-7612 Are reserved for humanitarian flights.

TABLE ATM II-MID-1 MID REGION ATS ROUTE NETWORK

EXPLANATION OF THE TABLE

Column

- 1* *Designator of ATS route and Type (Conventional, RNAV5 or RNAV1 etc.)*
- 2* *Significant points defining the ATS routes. Only prominent locations have been listed. Additional points where facilities are provided to complete navigational guidance along a route, but not otherwise marking significant characteristics of the route (change of heading of centre line, intersection with other routes, etc.) have normally not been included. Locations shown in parentheses indicate significant points outside the Region.*
- Note 1.* *Not representing the operator's requirements. Operator's required route and/or nav aids are shown in square brackets ([]).*
- Note 2.* *Subject to further study. Including the associated navigation aid coverage.*
- Note 3* *Subject to military agreement.*
- Note 4.* *Not acceptable at present.*
- Note 5.* *At present, implementation possible only during specific periods (e.g. weekends, nights, etc., as published).*
- Note 6.* *At present, implementation of the RNAV route only possible above FL 300, or as published.*
- Note 7.* *Unidirectional use.*
- Note 8.* *For ATS route or part thereof is RNAV 1*

AS OF JUNE 2015

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
A1	METRU 340000N 0250900E SOKAL 323601N 0273706E KATEX 320701N 0282436E BOPED 312939N 0292655E ALEXANDRIA (NOZ) 311113N 0295701E MENKU 310531N 0301806E CAIRO (CVO) 300532N 0312318E	UA1	METRU 340000N 0250900E SOKAL 323601N 0273706E KATEX 320701N 0282436E BOPED 312939N 0292655E ALEXANDRIA (NOZ) 311113N 0295701E MENKU 310531N 0301806E CAIRO (CVO) 300532N 0312318E
A16	RASDA 330600N 0305700E MELDO 320201N 03104406E BALTIM (BLT) 313144N 0311035E DEGDI 311429N 0311035E CAIRO (CVO) 300532N 0312318E	UA16	RASDA 330600N 0305700E MELDO 320201N 03104406E BALTIM (BLT) 313144N 0311035E DEGDI 311429N 0311035E CAIRO (CVO) 300532N 0312318E
A408	(ADDIS ABABA) GWZ SALEH 140000N 0420000E ORNIS 1416.2N04236.9E HODEIDAH 1446.4N 04259.2E	UA408	(ADDIS ABABA) GWZ SALEH 140000N 0420000E ORNIS 1416.2N04236.9E HODEIDAH 1446.4N 04259.2E
A411	BNINA (BNA) 3207.28N 0201513E NASER 3151.2N 2355.3E LOSUL 314100N 250800E SIDI BARANI (BRN) 313532N 260020E	UA411	BNINA (BNA) 3207.28N 0201513E NASER 3151.2N 2355.3E LOSUL 314100N 250800E SIDI BARANI (BRN) 313532N 260020E
A412	TANF ZELAF 325656N 0371121E DAXEN 324444N 0374105E ASLON 321211N 0365111E NADEK 322728N 0371429E KUPRI 320825N 0364530E LUDAN 320256N 0363713E QAA 314423N 0360926E	UA412	TANF ZELAF 325656N 0371121E DAXEN 324444N 0374105E ASLON 321211N 0365111E NADEK 322728N 0371429E KUPRI 320825N 0364530E LUDAN 320256N 0363713E QAA 314423N 0360926E
A416	TABRIZ (TBZ) ARDABIL (ARB) RASHT (RST) RAMSAR (RSR) NOSHAHR (NSR) DASHTE NAZ (DNZ) SABZEVAR (SBZ) MASHHAD (MSD) SOKAM 331316N 0603754E	UA416	TABRIZ (TBZ) ARDABIL (ARB) RASHT (RST) RAMSAR (RSR) NOSHAHR (NSR) DASHTE NAZ (DNZ) SABZEVAR (SBZ) MASHHAD (MSD) SOKAM 331316N 0603754E
A418	KUMUN 254000N 0551515E PAPAR 2640N 05427E * Note 7 Segment KUMUN-PAPAR (OI and OM) SHIRAZ (SYZ)	UA418	KUMUN 254000N 0551515E PAPAR 2640N 05427E * Note 7 Segment KUMUN-PAPAR (OI and OM) SHIRAZ (SYZ)
A422	UROMIYEH (UMH) SETNA 3756.3N 04555.4E TABRIZ PARSABAD (PAD) PARSU 3937.8N 04804.8E KARAD 4014.3N 04929.5E (BAKU)	UA422	UROMIYEH (UMH) SETNA 3756.3N 04555.4E TABRIZ PARSABAD (PAD) PARSU 3937.8N 04804.8E KARAD 4014.3N 04929.5E (BAKU)
A424	LOVEK 322208N 04440 01E LOTAN 2959.7N 04338.8E RAFHA HAIL MADINAH (PMA) ASTOL 2255.0N 03935.2E KING ABDULAZIZ (JDW)	UA424	LOVEK 322208N 04440 01E LOTAN 2959.7N 04338.8E RAFHA HAIL MADINAH (PMA) ASTOL 2255.0N 03935.2E KING ABDULAZIZ (JDW)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
A453	PIRAN 293406N 0612806E ZAHEDAN (ZDN) BANDAR ABBAS (BND) GHESHM (KHM) BANDAR LENGEH (LEN) KISH MIDSI 2641.7N05152.5E BOTOB 263350N 0514505E ALMOK 262832N 0513840E SOLOB 262241N 0513132E TOBLI 262134N0512301E SOGAT 262029N 0511443E ASTAD 261811N 0505646E BAHRAIN * Note 7 (OB, OI) ELOS0 262409N 0503550E EGMOR 264210N 0502906E LOTOR 264854N 0502200E RAMSI 270249N 0500714E ORNAK 272853N 0493248E SOLEM 275229N 0491136E KUMBO 281705N 0495526E AWADI 283430N 0484354E DEBTI 284406N 0482924E KUA 291306N 0475906E	UA453	PIRAN 293406N 0612806E ZAHEDAN (ZDN) BANDAR ABBAS (BND) GHESHM (KHM) BANDAR LENGEH (LEN) KISH MIDSI 2641.7N05152.5E BOTOB 263350N 0514505E ALMOK 262832N 0513840E SOLOB 262241N 0513132E TOBLI 262134N0512301E SOGAT 262029N 0511443E ASTAD 261811N 0505646E BAHRAIN * Note 7 (OB, OI) ELOS0 262409N 0503550E EGMOR 264210N 0502906E LOTOR 264854N 0502200E RAMSI 270249N 0500714E ORNAK 272853N 0493248E SOLEM 275229N 0491136E KUMBO 281705N 0495526E AWADI 283430N 0484354E DEBTI 284406N 0482924E KUA 291306N 0475906E
A454	(KC) 2454.6N 06710.6E BEGIM 2443.0N 06700.0E * Note 7 (OO, OP) MELOM 2505.0N 06632.0E PUNEL 2520.0N 06523.0E PARET 2527.2N 06451.5E TAPDO 242400N 0612000E VUSET 235540N 0590812E PASOV 243841N 0565037E	UA454	(KC) 2454.6N 06710.6E BEGIM 2443.0N 06700.0E * Note 7 (OO, OP) MELOM 2505.0N 06632.0E PUNEL 2520.0N 06523.0E PARET 2527.2N 06451.5E TAPDO 242400N 0612000E VUSET 235540N 0590812E PASOV 243841N 0565037E
A727	(PAXIS 3357.1N 02720.0E OTIKO 3134.3N 02936.6E ALEXANDRIA (NOZ) MENKU 3105.5N 03018.1E CAIRO (CVO) LUXOR (LXR) ABU SIMBLE (SML) NUBAR 220000N 03118.1E MEROWE (MRW) KHARTOUM (KTM) KENANA (KNA) LODWAR (LOV) NAKURU (NAK) NAIROBI (NV) KILIMANJARO (KV)	UA727	(PAXIS 3357.1N 02720.0E OTIKO 3134.3N 02936.6E ALEXANDRIA (NOZ) MENKU 3105.5N 03018.1E CAIRO (CVO) LUXOR (LXR) ABU SIMBLE (SML) NUBAR 220000N 03118.1E MEROWE (MRW) KHARTOUM (KTM) KENANA (KNA) LODWAR (LOV) NAKURU (NAK) NAIROBI (NV) KILIMANJARO (KV)
		UA775	REXOD 211230N 0613830E TUMET 222307N 0595702E IMDEK 224647N 0592217E OBTIN 230216N 0585920E KUSRA 231726N 0585102E
A777	TONVO 250500N 0563200E BUBAS 245938N 05700 03E * Note 7 (OO) NADSO 244957N 0574926E MUNGA 242516N 0584533E		

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	MIXOL 240618N 0592739E VAXIM 231900N 0611100E		
A788	HALAIFAH HAIL HAFR AL BATIN (HFR) *Note 7 WAFRA 2837. 3N 04757. 5E PATIR 285606N 0492923E KHARK (KHG) SHIRAZ	UA788	HALAIFAH HAIL HAFR AL BATIN (HFR) *Note 7 WAFRA 2837. 3N 04757. 5E PATIR 285606N 0492923E KHARK (KHG) SHIRAZ
B12	TANSA 340000N 0264900E SOKAL 323601N 0273706E EL DABA (DBA) 310041N 0282801E KATAB 292501N 0290506E BOPOS 264318N 0300722E DEPNO 262438N 0301413E EL KHARGA (KHG) 252654N 0303527E ABU SIMBEL (SML) 222118N 0313719E	UB12	TANSA 340000N 0264900E SOKAL 323601N 0273706E EL DABA (DBA) 310041N 0282801E KATAB 292501N 0290506E BOPOS 264318N 0300722E DEPNO 262438N 0301413E EL KHARGA (KHG) 252654N 0303527E ABU SIMBEL (SML) 222118N 0313719E
B121	RUDESHUR (RUS) RASHT (RST) MAGRI 385408N 0462300E	UB121	RUDESHUR (RUS) RASHT (RST) MAGRI 385408N 0462300E
B400	MUSCAT (MCT) ITURA 232351N 0580720E IZKI (IZK) HAIMA (HAI) ASTUN 180832N0551040E DAXAM 171612N 0544715E MUTVA 165325N 0543201E IMKAD 155245N 0535147E NODMA 152603N 0533358E RIGAM 143932N 0530414E RAPDO 132317N 0521532E VEDET 120134N 0512410E (MOGADISHU)	UB400	MUSCAT (MCT) ITURA 232351N 0580720E IZKI (IZK) HAIMA (HAI) ASTUN 180832N0551040E DAXAM 171612N 0544715E MUTVA 165325N 0543201E IMKAD 155245N 0535147E NODMA 152603N 0533358E RIGAM 143932N 0530414E RAPDO 132317N 0521532E VEDET 120134N 0512410E (MOGADISHU)
		UB403	MANDERA BOMIX 121002N 0502757E ODBEN 123747N 0505648E KAVAN 133250N 0515431E RIGAM 143932N 0530414E
B404	HARGA (HARGEISA) DEMGO 120258N 0483040E PURKA 131208N 0503042E GESIX 134440N 0512823E RIGAM 143932N 0530414E	UB404	HARGA (HARGEISA) DEMGO 120258N 0483040E PURKA 131208N 0503042E GESIX 134440N 0512823E RIGAM 143932N 0530414E
B407	KING ABDULAZIZ (JDW) KAROX 205717N 0381547E MAHDI 2026.0N 03739.3E (PORT SUDAN) PSD	UB407	KING ABDULAZIZ (JDW) KAROX 205717N 0381547E MAHDI 2026.0N 03739.3E (PORT SUDAN) PSD
B411	TAKSU 293625N 0343623E *Note 7 TAKSU-ULINA KARIK 292733N 0344641E ULINA 292451N 0345817E ELETA 293201N 0352900E LORIK 293640N 0354840E DEESA 294509N 0364102E AL SHIGAR (ASH)	UB411	TAKSU 293625N 0343623E *Note 7 TAKSU-ULINA KARIK 292733N 0344641E ULINA 292451N 0345817E ELETA 293201N 0352900E LORIK 293640N 0354840E DEESA 294509N 0364102E AL SHIGAR (ASH)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ARAR (AAR) MURIB 311337N 0415136E LOVEK 3222.1N 04440.0E NOLDO 3249.5N 04521.5E PAXAT 332056N 0460519E ILAM (ILM) KERMANSHAH(KMS) SAVEH (SAV) [TEHRAN] (TRN) * Note 1 DEHNAMAK (DHN) SABZEVAR (SBZ) MASHHAD (MSD)		ARAR (AAR) MURIB 311337N 0415136E LOVEK 3222.1N 04440.0E NOLDO 3249.5N 04521.5E PAXAT 332056N 0460519E ILAM (ILM) KERMANSHAH(KMS) SAVEH (SAV) [TEHRAN] (TRN) * Note 1 DEHNAMAK (DHN) SABZEVAR (SBZ) MASHHAD (MSD)
B412	HALAIFA (HLF) RABIGH (RBG) [KING ABDULAZIZ] (JDW)	UB412	HALAIFA (HLF) RABIGH (RBG) [KING ABDULAZIZ] (JDW)
B413	LADEN 1853.7N 03805.1E DANAK 1608.0N 04129.0E HODEIDAH TAIZ ADEN ZIZAN 1151.6N 04539.2E AVIMO 0332.9N 05052.6E	UB413	LADEN 1853.7N 03805.1E DANAK 1608.0N 04129.0E HODEIDAH TAIZ ADEN ZIZAN 1151.6N 04539.2E AVIMO 0332.9N 05052.6E
B415	DOHA HAMAD INT (DOH) 251500N 0513635E *Note 8 (DOH-BUNDU) KUPSA 250445N 0521151E BUNDU 250024N 0522924E *Note 7 (BUNDU-ADV) LAGMI 245709N 0524148E GADVO 2441264N 0534300E KUNGU 243754N 05356.274E ABU DHABI ADV 242508N 0544024E	UB415	DOHA HAMAD INT (DOH) 251500N 0513635E *Note 8 (DOH-BUNDU) KUPSA 250445N 0521151E BUNDU 250024N 0522924E *Note 7 (BUNDU-ADV) LAGMI 245709N 0524148E GADVO 2441264N 0534300E KUNGU 243754N 05356.274E ABU DHABI ADV 242508N 0544024E
B416	KUWAIT (KUA) AMBIK 283222N 0492025E *Note 8 (AMBIK-KUVER) TESSO 282852N0492723E GEVAL 282101N 0494300E GOGMA 281421N 0495612E KUVER 280924N 0500600E IMDAT 274100N 0511100E ORSAR 260430N 0535730E PEBAT 255153N 0542357E DESDI 253603N 0544230E	UB416	KUWAIT (KUA) AMBIK 283222N 0492025E *Note 8 (AMBIK-KUVER) TESSO 282852N0492723E GEVAL 282101N 0494300E GOGMA 281421N 0495612E KUVER 280924N 0500600E IMDAT 274100N 0511100E ORSAR 260430N 0535730E PEBAT 255153N 0542357E DESDI 253603N 0544230E
B417	MAHSHAHR (MAH) TULAX 2938 53N 04903 01E DESLU 2928.0N 04901.8E ALVIX 2919.3N04824.2E KUWAIT (KUA) *See Note 3 HAFR AL BATIN (HFR) KMC GASSIM (GAS) BIR-DARB (BDB) TAGNA 231652N 0403851E KING ABDULAZIZ (JDW)	UB417	MAHSHAHR (MAH) TULAX 2938 53N 04903 01E DESLU 2928.0N 04901.8E ALVIX 2919.3N04824.2E KUWAIT (KUA) *See Note 3 HAFR AL BATIN (HFR) KMC GASSIM (GAS) BIR-DARB (BDB) TAGNA 231652N 0403851E KING ABDULAZIZ (JDW)
B419	(DHA) 261538N 0500824E	UB419	(DHA) 261538N 0500824E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	* Note 8 (DHA-RAMSI) KING FAHD (KFA) * Note 7 (KFA-RAMSI) METLA 265645N 0500432E RAMSI 270249N 0500714E		* Note 8 (DHA-RAMSI) KING FAHD (KFA) * Note 7 (KFA-RAMSI) METLA 265645N 0500432E RAMSI 270249N 0500714E
B424	ITOLI 152825N 0450927E SABEL 185200N 05203.7E OTISA 201000N 0554556E GISKA 213503N 0574014E	UB424	ITOLI 152825N 0450927E SABEL 185200N 05203.7E OTISA 201000N 0554556E GISKA 213503N 0574014E
B441	MASHHAD (MSD) OTRUZ 363108N 0610956E MARAD 3637.6N 06127.8E	UB441	MASHHAD (MSD) OTRUZ 363108N 0610956E MARAD 3637.6N 06127.8E
B451	DEHNAMAK (DHN) BOJNORD (BRD) DOLOS 375006N 0580200E (ASHGABAT) (ASB)	UB451	DEHNAMAK (DHN) BOJNORD (BRD) DOLOS 375006N 0580200E (ASHGABAT) (ASB)
B457	NARMI 261802N 0501939E BAH 261551N 0503855E DENVO 260452N 0510509E PATOM 255822N 0511836E EMISA 254658N 0514206E	UB457	NARMI 261802N 0501939E BAH 261551N 0503855E DENVO 260452N 0510509E PATOM 255822N 0511836E EMISA 254658N 0514206E
B505	LALDO 251806N 0563600E * Note 7/8 (OO) NADSO 244957N 0574926E ITLOB 244325N 0590701E EGTAL 2434 58N 06037 24E APELO 2434.9N 0612000E PASNI (PI) 2517.3N 06320.9E		
B524	NADSO 244957N 0574926E * Note 7 DAMUM 243236N 0591307E VEKAN 241235N 0604454E ALPOR 2404 42N 06120E		
B526	(ASMARA) ASM HODEIDAH (HDH) MUKALLA (RIN) RIGAM 143932N 0530414E	UB526	(ASMARA) ASM HODEIDAH (HDH) MUKALLA (RIN) RIGAM 143932N 0530414E
B535	(DJIBOUTI) DTI ADEN (KRA) MUKALLA (RIN) KAPET 1633 22N 0530614E SALALAH (SLL) ASTUN 180832N0551040E	UB535	(DJIBOUTI) DTI ADEN (KRA) MUKALLA (RIN) KAPET 1633 22N 0530614E SALALAH (SLL) ASTUN 180832N0551040E
B538	ALEPPO KARIATAIN	UB538	ALEPPO KARIATAIN
B540	GERAR 240600N 0573616 PASOV 243841N 0565037E KUPMA 245148N 0562648E BUBIN 245742N 0560642E		
B544	(GAZIANTEP) GAZ ALEPPO (ALE) TANF (TAN)	UB544	(GAZIANTEP) GAZ ALEPPO (ALE) TANF (TAN)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	NAMBO 331826N0383939E SODAR 315532N0384317E TURAIF (TRF) AL SHIGAR (ASH) HALAIFA (HLF) MADINAH (PMA) RABIGH (RBG) KING ABDULAZIZ (JDW) QUNFIDAH (QUN) ABHA (ABH) NOBSU KRA		NAMBO 331826N0383939E SODAR 315532N0384317E TURAIF (TRF) AL SHIGAR (ASH) HALAIFA (HLF) MADINAH (PMA) RABIGH (RBG) KING ABDULAZIZ (JDW) QUNFIDAH (QUN) ABHA (ABH) NOBSU KRA
B549	THAMUD 171700N 0495500E ITELI 171310N 0502605E GOGRI 170752N 0510857E TONRO 165850N 0522235E PUTRA 165432N 0525631E LADAR 165324N 0534655E MUTVA 165325N 0543201E KIVEL 165306N 0553633E	UB549	THAMUD 171700N 0495500E ITELI 171310N 0502605E GOGRI 170752N 0510857E TONRO 165850N 0522235E PUTRA 165432N 0525631E LADAR 165324N 0534655E MUTVA 165325N 0543201E KIVEL 165306N 0553633E
G183	(KAROL 3252.0N 03229.0E) PASOS EL ARISH (ARH) TABA (TBA)		
G202	(VELOX 3349.0N 03405.0E) SILKO 3347.9N 03435.0E KHALDEH (KAD) * Note 4 (OS) DAKWE 3338.9N 03555.0E DAMASCUS (DAM) TANF (TAN) MODIK 3328.1N 03901.0E RAPLU 3323.0N 04145.5E PUSTO 3321.0N 04245.0E DELMI 331918.31N 0431327.59E LAGLO 331538N 0441457E ITOVA 331950.91N 0444128.97E RAGET 3330.8N 04553.8E ILAM (ILM) KHORAM ABAD (KRD) ESFAHAN (ISN) NODLA BIRJAND (BJD) (KAMAR 3239.0N 06044.0E)	UG202	(VELOX 3349.0N 03405.0E) SILKO 3347.9N 03435.0E KHALDEH (KAD) * Note 4 (OS) DAKWE 3338.9N 03555.0E DAMASCUS (DAM) TANF (TAN) MODIK 3328.1N 03901.0E RAPLU 3323.0N 04145.5E PUSTO 3321.0N 04245.0E DELMI 331918.31N 0431327.59E LAGLO 331538N 0441457E ITOVA 331950.91N 0444128.97E RAGET 3330.8N 04553.8E ILAM (ILM) KHORAM ABAD (KRD) ESFAHAN (ISN) NODLA BIRJAND (BJD) (KAMAR 3239.0N 06044.0E)
G208	(PANJGUR) PG KEBUD 2735.9N 06250.4E ZAHEDAN (ZDN) DARBAND (DAR) NODLA 325330N 0545850E ANARAK (ANK) TEHRAN (TRN) ZANJAN (ZAJ) UROMIYEH (UMH) ALRAM 3743.0N 04437.0E (SIIRT)		
G216	LAKLU 232235N 0570401E *Note 7 (OO/OP) Muscat (MCT) ITILA 234055N 0584817E	UG216	LAKLU 232235N 0570401E *Note 7 (OO/OP) Muscat (MCT) ITILA 234055N 0584817E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	SODEB 234747N 0593023E DORAB 235033N 0594746E ALPOR 240441N 0612000E LATEM (KC)		SODEB 234747N 0593023E DORAB 235033N 0594746E ALPOR 240441N 0612000E LATEM (KC)
G452	SHIRAZ (SYZ) KERMAN (KER) ZAHEDAN (ZDN) DERBO 2925.7N 06117.0E (RAHIMYAR KHAN) RK	UG452	SHIRAZ (SYZ) KERMAN (KER) ZAHEDAN (ZDN) DERBO 2925.7N 06117.0E (RAHIMYAR KHAN) RK
G462	ROVOS 241825N 0552143E Note 7 to ITROK NIBAX 245748N 0541437E RAGTA 250850N 0535840E ALSOK 252607N 0533904E ITROK 253557N 0532751E TUMAK 255031N 0531108E	UG462	ROVOS 241825N 0552143E Note 7 to ITROK NIBAX 245748N 0541437E RAGTA 250850N 0535840E ALSOK 252607N 0533904E ITROK 253557N 0532751E TUMAK 255031N 0531108E
G650	KING ABDULAZIZ (JDW) RASKA 190732N 0390329E ASMARA (ASM)	UG650	KING ABDULAZIZ (JDW) RASKA 190732N 0390329E ASMARA (ASM)
G652	ADEN (KRA) IMPOS 183136N 0511848E DUDRI 190000N 0520000E *Note 8 (DUDRI-TOKRA) TOKRA 220925N 0553350E TAPDO 2424N 06120 E	UG652	ADEN (KRA) IMPOS 183136N 0511848E DUDRI 190000N 0520000E *Note 8 (DUDRI-TOKRA) TOKRA 220925N 0553350E TAPDO 2424N 06120 E
G660	(PORT SUDAN) PSD BOGUM 2006.6N 03803.0E MIPOL 203322N 0382145E KING ABDULAZIZ (JDW)	UG660	(PORT SUDAN) PSD BOGUM 2006.6N 03803.0E MIPOL 203322N 0382145E KING ABDULAZIZ (JDW)
G662	BUSRA 322000N 0363700E KUPRI 320825.87N 0364530.21E ALKOT 313254.22N 0371121.51E GRY 3124.8N 3717.2E AL SHIGAR (ASH) HAIL (HIL) GASSIM (GAS) KING KHALID (KIA)	UG662	BUSRA 322000N 0363700E KUPRI 320825.87N 0364530.21E ALKOT 313254.22N 0371121.51E GRY 3124.8N 3717.2E AL SHIGAR (ASH) HAIL (HIL) GASSIM (GAS) KING KHALID (KIA)
G663	KING KHALID (KIA) SILNO 264024N 0475742E *Note 7 (KIA-KFA) GIBUS 255724N 0472829E *Note 8 (GIBUS-ALSER) KING FAHD (KFA) ULADA 264526N 0501623E LOTOR 264854N 0502200E RAKAK 265221N 0502618E TOLMO 265504N 0502927E KOBOK 265839N 0503349E ITIXA 270141N 0503735E GETAL 270409N 0504039E VEDOR 270855N 0504630E ALSER 271100N 0504900E SHIRAZ (SYZ) YAZD (YZD) NODLA 325318N 0545848E TABAS (TBS)	UG663	KING KHALID (KIA) SILNO 264024N 0475742E *Note 7 (KIA-KFA) GIBUS 255724N 0472829E *Note 8 (GIBUS-ALSER) KING FAHD (KFA) ULADA 264526N 0501623E LOTOR 264854N 0502200E RAKAK 265221N 0502618E TOLMO 265504N 0502927E KOBOK 265839N 0503349E ITIXA 270141N 0503735E GETAL 270409N 0504039E VEDOR 270855N 0504630E ALSER 271100N 0504900E SHIRAZ (SYZ) YAZD (YZD) NODLA 325318N 0545848E TABAS (TBS)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	MASHAD (MSD)		MASHAD (MSD)
G665	ARAR (AAR) ABADAN (ABD) SHIRAZ (SYZ) * Note 5 (OI) NABOD 2816.1N 05825.8E LOXOL 2745.9N 06045.6E ASVIB 265724N 0631812E (PANJGUR) PG	UG665	ARAR (AAR) ABADAN (ABD) SHIRAZ (SYZ) * Note 5 (OI) NABOD 2816.1N 05825.8E LOXOL 2745.9N 06045.6E ASVIB 265724N 0631812E (PANJGUR) PG
G666	SHIRAZ (SYZ) LAMERD (LAM) LAVAN (LVA) * Note 7 (OI) ORSAR 2604 .5N 05357.5E ITITA 254410N 0541839E SINBI 250842N 0543741E ABU DHABI (ADV)	UG666	SHIRAZ (SYZ) LAMERD (LAM) LAVAN (LVA) * Note 7 (OI) ORSAR 2604 .5N 05357.5E ITITA 254410N 0541839E SINBI 250842N 0543741E ABU DHABI (ADV)
G667	PUTMA 3748.0N 05157.6E NOSHAHR (NSR) TEHRAN (TRN) SAVEH (SAV) MIS AHWAZ (AWZ) ABADAN (ABD) ALSAN 295707N 0481456E FALKA KUWAIT (KUA) WAFRA (KFR) *Note 7 (KFR-MGA) COPPI 275033N 0474359E *Note 8 (COPPI-AVOBO) EMENI 273232N 0473849E MUSKO 272640N 0473708E ALSAT 270611N 0473118E LUGAL 264533N 0472528E MAGALA (MGA) AVOBO 260334N 0470719E KING KHALID (KIA) WADI AL DAWASIR (WDR) NEJLAN (NEJ) SANA'A (SAA) PARIM 123142.7N 0432712E DJIBOUTI (DTI)	UG667	PUTMA 3748.0N 05157.6E NOSHAHR (NSR) TEHRAN (TRN) SAVEH (SAV) MIS AHWAZ (AWZ) ABADAN (ABD) ALSAN 295707N 0481456E FALKA KUWAIT (KUA) WAFRA (KFR) *Note 7 (KFR-MGA) COPPI 275033N 0474359E *Note 8 (COPPI-AVOBO) EMENI 273232N 0473849E MUSKO 272640N 0473708E ALSAT 270611N 0473118E LUGAL 264533N 0472528E MAGALA (MGA) AVOBO 260334N 0470719E KING KHALID (KIA) WADI AL DAWASIR (WDR) NEJLAN (NEJ) SANA'A (SAA) PARIM 123142.7N 0432712E DJIBOUTI (DTI)
G669	AL SHIGAR (ASH) AL JOU (AJF) RAFHA (RAF) NISER 2930.5N 04418.4E *Note 3 (OK) SOLAT 290942N 0463810E KUWAIT (KUA) SESRA 290803N 0485453E NANPI 290457N 0493157E KHARK(KHG) SHIRAZ (SYZ)	UG669	AL SHIGAR (ASH) AL JOU (AJF) RAFHA (RAF) NISER 2930.5N 04418.4E *Note 3 (OK) SOLAT 290942N 0463810E KUWAIT (KUA) SESRA 290803N 0485453E NANPI 290457N 0493157E KHARK(KHG) SHIRAZ (SYZ)
G670	RASHT (RST) LALDA 3817.1N 04943.0E (BAKU) GYD	UG670	RASHT (RST) LALDA 3817.1N 04943.0E (BAKU) GYD
G674	MADINAH (PMA)	UG674	MADINAH (PMA)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	GASSIM (GAS) 2617.9N 04346.8E BOPAN (BPN)		GASSIM (GAS) 2617.9N 04346.8E BOPAN (BPN)
G775	(ASHGHABAT) (ASB) ORPAB 3742N 05834.5E MASHHAD (MSD) [BIRJAND] (BJD) * Note 1 ZAHEDAN (ZDN)	UG775	(ASHGHABAT) (ASB) ORPAB 3742N 05834.5E MASHHAD (MSD) [BIRJAND] (BJD) * Note 1 ZAHEDAN (ZDN)
G781	(VAN) BONAM 3802.9N 04418.0E UROMIYEH (UMH) ROVON 3716 01N 0455322E ZANJAN (ZAJ) NOSHAHR(NSR)	UG781	(VAN) BONAM 3802.9N 04418.0E UROMIYEH (UMH) ROVON 3716 01N 0455322E ZANJAN (ZAJ) NOSHAHR(NSR)
G782	KING ABDULAZIZ (JDW) DAFINAH (DFN) RAGA\HBA (RGB) KING KHALID (KIA) MAGALA (MGA) *Note 7 (MGA-KFR) LUGAL 264533N 0472528E WAFRA (KFR) 283715N 0475729E KUWAIT (KUA)	UG782	KING ABDULAZIZ (JDW) DAFINAH (DFN) RAGA\HBA (RGB) KING KHALID (KIA) MAGALA (MGA) *Note 7 (MGA-KFR) LUGAL 264533N 0472528E WAFRA (KFR) 283715N 0475729E KUWAIT (KUA)
G783	PURDA 210805N 0510329E TANSU 224136N 0542828E RIGIL 230146N 0551430E ELUDA 235107N 0552905E ALN 241535N 0553623E GIDIS 243600N 055600E BUBIN 245742N 0560642E	UG783	PURDA 210805N 0510329E TANSU 224136N 0542828E RIGIL 230146N 0551430E ELUDA 235107N 0552905E ALN 241535N 0553623E GIDIS 243600N 055600E BUBIN 245742N 0560642E
G792	BODKA 3939.0N 05130.0E GIRUN 3806.2N 05620.3E BOJNORD (BRD) MASHAD (MSD)	UG792	BODKA 3939.0N 05130.0E GIRUN 3806.2N 05620.3E BOJNORD (BRD) MASHAD (MSD)
G795	FALKA 2926.2N 04818.3E TASMI 300120N 0475505E BSR 303132.4N 0472112E RAFHA (RAF)	UG795	FALKA 2926.2N 04818.3E TASMI 300120N 0475505E BSR 303132.4N 0472112E RAFHA (RAF)
G799	PMA DAFINAH (DFN)	UG799	PMA DAFINAH (DFN)
		UL124	(VAN) BONAM URUMIYEH (UMH) ZANJAN (ZAJ) SAVEH (SAV) DISEL 332904N 0510118E YAZD (YZD) (R654) KERMAN (KER) KEBUD 273558N 0625028E (PANJGUR) PG
		UL125	DULAV 3857N 04537.9E TABRIZ (TBZ) ZANJAN (ZAJ) PAROT 360940N 0495756E TEHRAN (TRN)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			ANARAK (ANK) DARBAND (DAR) ZAHEDAN (ZDN) DANIB 290706N 0611717E KEBUD 273558N 0625028E
L126	PUSTO 3321.0N 04245.0E SOGUM 3412.2N 04354.9E SIGNI 3400.1N 04442.2E MIGMI 3345.9N 04527.4E ILAM (ILM)	UL126	PUSTO 3321.0N 04245.0E SOGUM 3412.2N 04354.9E SIGNI 3400.1N 04442.2E MIGMI 3345.9N 04527.4E ILAM (ILM)
L200	LOXER 320256N 362500E LUDAN 320256N 0363713 E KUPRI 320825N 0364530 E ASLON 321211N 0365111E NADEK 322728N 0371429E DAXEN 324444N 0374105E ORNAL 324755N0375153E KAREM 325110N 0380324 E KUMLO 325811N 0382807 E DAPUK 330139N 0384026 E PASIP 330600N 0385600E GIBUX 330715N 0411625E SIGBI 330200N 0422000E SILBO 325900N 0432900E	UL200	LOXER 320256N 362500E LUDAN 320256N 0363713 E KUPRI 320825N 0364530 E ASLON 321211N 0365111E NADEK 322728N 0371429E DAXEN 324444N 0374105E ORNAL 324755N0375153E KAREM 325110N 0380324 E KUMLO 325811N 0382807 E DAPUK 330139N 0384026 E PASIP 330600N 0385600E GIBUX 330715N 0411625E SIGBI 330200N 0422000E SILBO 325900N 0432900E
L223	SIRRI (SIR) NALTA 250242N 0553955E * Note 7 (OI-OM-OO) TARDI 243418N 0560915E LAKLU 232235N 05704 01E	UL223	DASIS 385430N 0441230E UROMIYEH (UMH) SANANDAJ (SNJ) KHORAM ABAD (KRD) MESVI 312920N 0495701E LAMERD (LAM) SIRRI (SIR) * Note 7 (OI-OM-OO) NALTA 250242N 0553955E TARDI 243418N 0560915E LAKLU 232235N 05704 01E
L300	LUXOR (LXR) MEMPO 252518N 0335457E GIBAL2437.2N03634.7E YENBO (YEN) 2408.8N 03803.9E	UL300	LUXOR (LXR) MEMPO 252518N 0335457E GIBAL2437.2N03634.7E YENBO (YEN) 2408.8N 03803.9E
L301	RASKI 230330N 0635200E VAXIM 231900N 0611100E RAGMA 232301N 0603846E	UL301	AAU 5153N 07523 38.6E NOBAT 210902.5N 0880000.1E LADOT 220502N 0660001 RASKI 230330N 0635200E VAXIM 231900N 0611100E RAGMA 232301N 0603846E
L305	DOHA HAMAD INTL (DOH) 251500N 0513635E ORMAL 252304N 0522201E ENANO 252348N 0522559E ALSEM 252703N 0524322E ASTOG 252822N 0525025E *Note 7 (DOH-ITITA) *Note 8 (DOH-ASTOG) ITITA 254410N 0541839E	UL305	DOHA HAMAD INTL (DOH) 251500N 0513635E ORMAL 252304N 0522201E ENANO 252348N 0522559E ALSEM 252703N 0524322E ASTOG 252822N 0525025E *Note 7 (DOH-ITITA) *Note 8 (DOH-ASTOG) ITITA 254410N 0541839E
L306	TOKRA 220925N 0553350E * Note- 7 (OO) DEMKI 224941N 0562308E	UL306	TOKRA 220925N 0553350E * Note- 7 (OO) DEMKI 224941N 0562308E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	LAKLU 232235N 0570401E		LAKLU 232235N 0570401E
L308	EGNOV 270301N 0474713E *Note 7 (EGNOV- SERSA) *Note 8 (EGNOV- OBNET) (JBL) 270220N 0492427E RAMSI 270249N 0500714E GASSI 2702.9N 05022.5E TOSDA 270005N 0505629E TORBO 265223N 0511024E SOGAN 263915N 0515408E DEGSO 261054N 0531946E OBNET 260032N 0534514E ITITA 254410N 0541839E DESDI 253603N 0544230E RAGOL 252743N 0550739E SERSA 251945N 0553118E TUKLA 251936N 0554010E NADNI 251915N 0555658E LALDO 251806N 0563600E IMLOT 2517.1N 05708.1E KATUS 2515.9N 05747.0E DIVAB 2510.7N 05952.1E EGPIC 2508.6N 06029.5E (JIWANI) LATEM 2431.7N 06449.7E	UL308	EGNOV 270301N 0474713E *Note 7 (EGNOV- SERSA) *Note 8 (EGNOV- OBNET) (JBL) 270220N 0492427E RAMSI 270249N 0500714E GASSI 2702.9N 05022.5E TOSDA 270005N 0505629E TORBO 265223N 0511024E SOGAN 263915N 0515408E DEGSO 261054N 0531946E OBNET 260032N 0534514E ITITA 254410N 0541839E DESDI 253603N 0544230E RAGOL 252743N 0550739E SERSA 251945N 0553118E TUKLA 251936N 0554010E NADNI 251915N 0555658E LALDO 251806N 0563600E IMLOT 2517.1N 05708.1E KATUS 2515.9N 05747.0E DIVAB 2510.7N 05952.1E EGPIC 2508.6N 06029.5E (JIWANI) LATEM 2431.7N 06449.7E
L310	BOXAK 244536N 0540032E *Note 7 & 8 to LALDO SIGBO 2455.4N 05456.9E NALTA 2502.7N 05539.8E AVAMI 2505.9N 05556.8E LALDO 251806N 0563600E	UL310	BOXAK 244536N 0540032E *Note 7 & 8 to LALDO SIGBO 2455.4N 05456.9E NALTA 2502.7N 05539.8E AVAMI 2505.9N 05556.8E LALDO 251806N 0563600E
L314	NABAN 163124N 0430148E GOMRI 131816N 0443224E	UL314	NABAN 163124N 0430148E GOMRI 131816N 0443224E
L315	CAIRO(CVO) HURGHADA (HGD) GIBAL 2437.2N 03634.7E	UL315	CAIRO(CVO) HURGHADA (HGD) GIBAL 2437.2N 03634.7E
L319	BAH 261551N 0503855E DAVRI 264936N 0505731E OBTAR 265934N 0510309E	UL319	BAH 261551N 0503855E DAVRI 264936N 0505731E OBTAR 265934N 0510309E
L321	KATAB 292501N 0290506E KUNKI 290726N 0291949E KUNAK 2527.7N 03041.2E LUGAV 224205N 0313722E SML 222118N 0313719E	UL321	KATAB 292501N 0290506E KUNKI 290726N 0291949E KUNAK 2527.7N 03041.2E LUGAV 224205N 0313722E SML 222118N 0313719E
		UL322	MUMBAI (BBB) * Note 7&1 SUGID 1933.1N 06921.0E BOLIS 2033.5N 065 00.0E REXOD 2112.5N 06138.5E
		UL333	DASIS TABRIZ (TBZ) RASHT (RST) GIBAB 3537.0N 05430.9E ALRAS 3511.3N 05541.6E TASLU 342632N 0574234E SOKAM 331316N 0603752E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
L417	VUSEB 361637N 0434800E UMESA 351741N 0434307E MUTAG 343003N 0433834 E LAGLO 3515.6 04414.0E ELOSI 330800N 0441800E LOVEK 3222.1N 04440.0E ELIBA 320915N 0444645E NADOX 310505N 0451851E	UL417	VUSEB 361637N 0434800E UMESA 351741N 0434307E MUTAG 343003N 0433834 E LAGLO 3515.6 04414.0E ELOSI 330800N 0441800E LOVEK 3222.1N 04440.0E ELIBA 320915N 0444645E NADOX 310505N 0451851E
		UL425	KING ABDULAZIZ (JDW) TONBO 205502N 0394911E AL BAHA (BHA) BISHA (BSH) WADI AL DAWASIR (WDR) EGREN 202236N 0464422E ASTIN 200410N 0495320E DIRAS 195235N 0513704E GOBRO 193622N 0534741E NOVNO 193313N 0535858E ITUVO 190315N 0554328E DEDSO 185811N 0560041E BOVOS 182230N 0575844E ASPUX 174406N 0600006E (TRIVANDRUM)
L430	VAXIM 231900N 0611100E MESPO 244936N 0593411E MELMI 264625N 0572300E TAVNO 281112N 0563252E ASMET 284827N 0560806E SRJ 2933.4N 05539.6E	UL430	VAXIM 231900N 0611100E MESPO 244936N 0593411E MELMI 264625N 0572300E TAVNO 281112N 0563252E ASMET 284827N 0560806E SRJ 2933.4N 05539.6E
L438	LONOS 283027N 0491713E LOPOL 281849N 0492845E ATBAG 280842N 0493844E GODRI 280256N 0494307E RAKSO 275326N 0495032E GOGRA 274918N 0495344E OBNAX 272650N 0501103E DEKTA 271605N 0501946E VELOG 270215N 0503055E KOBOK 265839N 0503349E MOGAS 264759N 0503909E TOSTA 262746N 0504912E ASTAD 261811N 0505646E	UL438	LONOS 283027N 0491713E LOPOL 281849N 0492845E ATBAG 280842N 0493844E GODRI 280256N 0494307E RAKSO 275326N 0495032E GOGRA 274918N 0495344E OBNAX 272650N 0501103E DEKTA 271605N 0501946E VELOG 270215N 0503055E KOBOK 265839N 0503349E MOGAS 264759N 0503909E TOSTA 262746N 0504912E ASTAD 261811N 0505646E
L440	KANIP 2410.7N 05520.7E *Note 7 RETAS 235754N 0553423E	UL440	KANIP 2410.7N 05520.7E *Note 7 RETAS 235754N 0553423E
L443	RABAP 283625N 0492722 TESSO 282852N 0492723E LOPOL 281849N 0492845E ENAVI 275552N 0493151E GIRSI 274126N 0493310E ORDAN 271706N 0495442E RAMSI 270249N 0500714E GASSI 270257N 0502229E	UL443	RABAP 283625N 0492722 TESSO 282852N 0492723E LOPOL 281849N 0492845E ENAVI 275552N 0493151E GIRSI 274126N 0493310E ORDAN 271706N 0495442E RAMSI 270249N 0500714E GASSI 270257N 0502229E
L444	KIPOL 230410N 0612903E *Note 7 (OO) VUSIN 225940N 0605510E MIBSA 225400N 0601338E	UL444	KIPOL 230410N 0612903E *Note 7 (OO) VUSIN 225940N 0605510E MIBSA 225400N 0601338E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	KAXEM 225103N 0595243E IMDEK 224647N 0592217E TOLDA 224008N 0583624E		KAXEM 225103N 0595243E IMDEK 224647N 0592217E TOLDA 224008N 0583624E
L513	MURAK 3459.4N 03642.1E LEBOR 3415.9N 03635.0E DAMASCUS (DAM) * Note 3 (OS) BUSRA 3220.0 N 03637.0 E QUEEN ALIA (QAA) QATRANEH (QTR) MAZAR 3048.0N 03610.0E	UL513	MURAK 3459.4N 03642.1E LEBOR 3415.9N 03635.0E DAMASCUS (DAM) * Note 3 (OS) BUSRA 3220.0 N 03637.0 E QUEEN ALIA (QAA) QATRANEH (QTR) MAZAR 3048.0N 03610.0E
		UL516	KITAL 2003.0N 06018.0E ELKEL 0149.0N 06911.0E DIEGO GARCIA (NDG)
L519	ABU DHABI (ADV) *Note 7 (OM) NAMSI 2437.5N 05456.8E EMERU 244829N 0550303 LUDER 2457.5N 05505.2E	UL519	ABU DHABI (ADV) *Note 7 (OM) NAMSI 2437.5N 05456.8E EMERU 244829N 0550303 LUDER 2457.5N 05505.2E
		UL550	WAFRA (KFR) NIDAP 283850N 0473656E BOSID 2842.4N 04652.6E VATIM 2851.6N 04444.7E RASMO 2857.2N 04331.3E ORSAL2902.8N 04210.8E NIMAR 2906.6N 03954.4E KITOT 2902.1N 03450.8E NUWEIBAA (NWB) KARIK 292733N 0344641E TAKSU 293625N 0343623E DATOK 293624N 0341400E SERMA 312200N 0330834E PASOS 321300N 0330600E (KAROL 3252.0N 03229.0E)
L551	ANTAR 334800N 0281600E EL DABA (DBA) 310041N 0282801E	UL551	ANTAR 334800N 0281600E EL DABA (DBA) 310041N 0282801E
L555	TOTOX 215030N 0622230E TUMET 222307N 0595702E TOLDA 224008N 0583624E	UL555	TOTOX 215030N 0622230E TUMET 222307N 0595702E TOLDA 224008N 0583624E
		UL556	EGREN 202236N 0464422E NONGA 205048N 0492014E PURDA 210805N 0510329E Note:- 7 (OO, OB) IMDAM 202416N 0550801E OTISA 201000N 0554556E HAIMA (HAI) 195813N 0561651E GIVNO 195011N 0563059E KUTVI 184306N 0582642E
		UL560	ARDABIL (ARB) 3819.9N 04824.9E * Note 3&4 (OI) SEVAN (SVN) 4032.0N 04456.9E
L564	DOHA/HAMAD INTL (DOH) 251500N 0513635E LADEM 245545N 0513714E	UL564	DOHA/HAMAD INTL (DOH) 251500N 0513635E LADEM 245545N 0513714E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	DATRI 244239N 0513407E		DATRI 244239N 0513407E
	DENSI 242519N 0512959E		DENSI 242519N 0512959E
	*Note 8 (DOH-PURDA)		*Note 8 (DOH-PURDA)
	BATHA (BAT) 241257N 0512707E		BATHA (BAT) 241257N 0512707E
	MIGMA 225035N 0512749E		MIGMA 225035N 0512749E
	LOTOS 220000N 0503912E		LOTOS 220000N 0503912E
	ALNUG 213009N 0500453E		ALNUG 213009N 0500453E
	NONGA 205048N 0492012E		NONGA 205048N 0492012E
	DENKU 201123N 0484331E		DENKU 201123N 0484331E
	GERUG 185530N 0473402E		GERUG 185530N 0473402E
	ASKET 181905N 0470113E		ASKET 181905N 0470113E
	PATOG 180241N 0464631E		PATOG 180241N 0464631E
	VUVOD 173941N 0463200E		VUVOD 173941N 0463200E
	TULIS 173033N 0462616E		TULIS 173033N 0462616E
	ULBON 171425N 0461515E		ULBON 171425N 0461515E
	RAGNI 163454N 0454815E		RAGNI 163454N 0454815E
	LOPAD 161651N 0453738E		LOPAD 161651N 0453738E
	ITOLI 152825N 0450927E		ITOLI 152825N 0450927E
	OBNAM 144541N 0444448E		OBNAM 144541N 0444448E
	GEVEL 141229N 0442547E		GEVEL 141229N 0442547E
	NOPVO 135436N 0441536E		NOPVO 135436N 0441536E
	TAZ 134150N 0440819E		TAZ 134150N 0440819E
	PARIM 123142N 0432712E		PARIM 123142N 0432712E
		UL566	ASMAK 162327N 0524634E
			UKNEN 160542N 0522012E
			PURUG 151204N 0510142E
			KUSOL 144009N 0501534E
			NOTBO 142609N 0495530E
			EMABI 141627N 0494139E
			SOKEM 134235N 0485329E
			DATEG 123549N 0471627E
		UL572	KAMISHLY (KML)
			LESRI 3704.3N 04113.8E
			HASSAKEH (HAS) 3629N 04045.3E
			DIER ZZOR (DRZ)
			TANF (TAN)
		UL573	DAFINAH (DFN) 231658N 0414310E
			PMA
			WEJH (WEJ) 261045N 0362917E
		UL601	BAGLUM (BAG) 04004.2 03248.6
			* Note 7
			ADANA 3656.4N 03512.6E (ADA)
			TUNLA 3553.0N 0360200E)
			KARIATAIN 3412.8N 03715.9E
L602	TUMAK 255031N 0531108E	UL602	TUMAK 255031N 0531108E
	VEDOM 260109N 0524456E		VEDOM 260109N 0524456E
	VELAK 261307N 0521821E		VELAK 261307N 0521821E
	LABOP 261907N 0520429E		LABOP 261907N 0520429E
	ALTOM 262230N 0515639E		ALTOM 262230N 0515639E
	DASOS 262429N 0515043E		DASOS 262429N 0515043E
	ALMOK 262832N 0513840E		ALMOK 262832N 0513840E
	VEDOS 264105N 0510044E		VEDOS 264105N 0510044E
	NABOS 264354N 0505145E		NABOS 264354N 0505145E
	MEMKO 264611N 0504427E		MEMKO 264611N 0504427E
	MOGAS 264759N 0503909E		MOGAS 264759N 0503909E
	TOLMO 265504N 0502927E		TOLMO 265504N 0502927E
	EGLIT 270255N 0502005E		EGLIT 270255N 0502005E
	TOKMA 270938N 0501159E		TOKMA 270938N 0501159E
	ORSOL 272135N 0500207E		ORSOL 272135N 0500207E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ITNAS 274643N 0493957E ENAVI 275552N 0493151E DAMUR 280137N 0492637E DAVUS 282346N 0490622E		ITNAS 274643N 0493957E ENAVI 275552N 0493151E DAMUR 280137N 0492637E DAVUS 282346N 0490622E DARVA 284814N 0484734E ALVIX 291918N0482412E FALKA 292611N 0481819E TASMI 300120N 0475505E LOVEK322206N 0444000E DELMI331911N 0431731E ELEXI 344237N 0411054E DRZ 351724N 0401124E KUKSI 364508N 0374910E GAZ 365701N 0372824E
L604	PLH 351339N 0234051E SALUN 340000N 0242700E BRN 313430N 0260018E KHG 252654N 0303524E LUXOR (LXR) 254458 N 0324607E IMRAD 260506N 0354444E WEJH(WEJ) 261048N 0362918E HLF 262600N 03916.06E GASSIM (GAS) 261754N 0434648E *Note 7 (GAS-KFA) PUSLA 261758N 0461706E *Note 8 to TOSNA MGA 261718N 0471224E ALMAL 261554N 0482106E KING FAHD (KFA) 262154N 0494912E NARMI 261802N 0501939E BAHRAIN (BAH) 261551N 0503855E DENVO 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514207E KAPAX 254218N 0515118E ORSIS 252801N 0521636E ENANO 252348N 0522559E TOSNA 251612N 0524116E	UL604	PLH 351339N 0234051E SALUN 340000N 0242700E BRN 313430N 0260018E KHG 252654N 0303524E LUXOR (LXR) 254458 N 0324607E IMRAD 260506N 0354444E WEJH(WEJ) 261048N 0362918E HLF 262600N 03916.06E GASSIM (GAS) 261754N 0434648E *Note 7 (GAS-KFA) PUSLA 261758N 0461706E *Note 8 to TOSNA MGA 261718N 0471224E ALMAL 261554N 0482106E KING FAHD (KFA) 262154N 0494912E NARMI 261802N 0501939E BAHRAIN (BAH) 261551N 0503855E DENVO 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514207E KAPAX 254218N 0515118E ORSIS 252801N 0521636E ENANO 252348N 0522559E TOSNA 251612N 0524116E
		UL607	SITIA (SIT) * Note 7 PAXIS 3357.1N02720.0E OTIKO 3134.4N 02936.6E ALEXANDRIA (NOZ)
L612	KUMBI 334250N 0284500E LABNA 321956N 0301612E BALTIM (BLT) 313144N 0310721E	UL612	KUMBI 334250N 0284500E LABNA 321956N 0301612E BALTIM (BLT) 313144N 0310721E
		UL613	EL – DABA (DBA) * Note 7 SOKAL 3236.0N 02720.0E TANSA 3400.0N 02649.0E
L617	ALEXANDRIA NOZ IMRUT 313259N 0293346E ASNIR 323849N 0282144E TANSA 340000N 0264900E	UL617	ALEXANDRIA NOZ IMRUT 313259N 0293346E ASNIR 323849N 0282144E TANSA 340000N 0264900E
L620	BALMA 342856N 0350302E KAD 334827N 0352910E	UL620	BALMA 342856N 0350302E KAD 334827N 0352910E
L631	TOTOX 215030N0622230E	UL631	TOTOX 215030N0622230E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	IVOMA 223408N 0605430E * Note 7 (OO) MIBSA 225400N 0601338E AMBOS 230324N 0595405E ELIGO 232458N 0590848E KARAR 233042N 0585438E MCT 233528.01N 0581536.47		IVOMA 223408N 0605430E * Note 7 (OO) MIBSA 225400N 0601338E AMBOS 230324N 0595405E ELIGO 232458N 0590848E KARAR 233042N 0585438E MCT 233528.01N 0581536.47
L677	(CAIRO) 3005.5N 03123.3E MENLI 2947.0N 03152.1E KAPIT 2917.0N 03236.1E SHARM EL SHEIKH PASAM 2730.8N 03455.7E *Note 7(OE) WEJH 2610.8N 03629.3E MUVAT 2537.9N 03654.8E YEN 2409.0N 03802.3E JDW 2140.7N 03910.0E QUN 1922.2N 04104.5E TALIB 1838.9N 04131.2E GIZ 1654.5N 04234.7E NABAN 1631.4N 04301.8E IMSIL 1557.6N 04313.2E SAA 1530.0N 04413.2E	UL677	(CAIRO) 3005.5N 03123.3E MENLI 2947.0N 03152.1E KAPIT 2917.0N 03236.1E SHARM EL SHEIKH PASAM 2730.8N 03455.7E *Note 7(OE) WEJH 2610.8N 03629.3E MUVAT 2537.9N 03654.8E YEN 2409.0N 03802.3E JDW 2140.7N 03910.0E QUN 1922.2N 04104.5E TALIB 1838.9N 04131.2E GIZ 1654.5N 04234.7E NABAN 1631.4N 04301.8E IMSIL 1557.6N 04313.2E SAA 1530.0N 04413.2E
L681	EGNOV 270301N 0474713E * Note 5 & 7 & 8 to SALWA GEPAK 2633.0N 04843.5E RADMA 2623.0N 04857.5E DELMU 2618.9N 04903.4E ROSEM 2607.7N 04919.0E SALWA 251538N 0503048E	UL681	EGNOV 270301N 0474713E * Note 5 & 7 & 8 to SALWA GEPAK 2633.0N 04843.5E RADMA 2623.0N 04857.5E DELMU 2618.9N 04903.4E ROSEM 2607.7N 04919.0E SALWA 251538N 0503048E
L695	PAROK 231030N 0590245E *Note 7 (OO) ITURA 232351N 0580720E	UL695	PAROK 231030N 0590245E *Note 7 (OO) ITURA 232351N 0580720E
L764	MUSCAT (MCT) ALMOG 233524N 0574940E IVETO 233520N 0570704E PAXIM 240245N 0561631E	UL764	MUSCAT (MCT) ALMOG 233524N 0574940E IVETO 233520N 0570704E PAXIM 240245N 0561631E
L768	ALPOB 254218N 0530055E * Note 7 to FIRAS * Note 8 (ALPOB-COPPI) ROTAG 255353N 0523621E SOLEG 260159N 0521756E MODOG 261012N 0515935E RAMKI 261138N 0515625E RABLA 261506N 0514834E SOLOB 262241N 0513132E MEDMA 263421N 0505454E TOTLA 263806N 0504301E EGMOR 264211N 0502907E ULADA 264527N 0501624E JBL 270222N 0492426E COPPI 275033N 0474359E	UL768	ALPOB 254218N 0530055E * Note 7 to FIRAS * Note 8 (ALPOB-COPPI) ROTAG 255353N 0523621E SOLEG 260159N 0521756E MODOG 261012N 0515935E RAMKI 261138N 0515625E RABLA 261506N 0514834E SOLOB 262241N 0513132E MEDMA 263421N 0505454E TOTLA 263806N 0504301E EGMOR 264211N 0502907E ULADA 264527N 0501624E JBL 270222N 0492426E COPPI 275033N 0474359E HFR 281950N 0460746E VATIM 285136N 0444442E RAFHA (RAF) 281950N 0460746E ARAR (AAR) 305429N 0410832E OVANO 314801N 0390951E OTILA 320131N 0390153E MODAD 323542N 0384136E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			SOKAN 330806N 0382206E RAFIF 331248N 0381918E SULAF 332718N 0381024E FIRAS 335218N 0375512E
		UL883	REXOD 211230N 0613830E GADMA 211439N 0600938E TAVKO 211519N 0593147E UMILA 211555N 0584738E MEVLI 211632N 0565606E KUROV 211627N 0561853E ALNUN 211625N 0561041E SITOL 211604N 0552514E PURDA 210805N 0510329E ALRIK 220631N 0482535E UMRAN 2315.1N 04520.4E TUKVU 2346.4N 04353.3E BIR DARB (BDB) PMA N243251N 0394219E
		UL894	KITAL 2003.0N 06018.0E (MALE (MLE)) (SUNAN 0028.7N 07800.0E) (DADAR 0200.0S 07927.1E) (PERTH (PH))
M203	PUSTO 3321.0N 04245.0E LOVEK 3222.1N 04440.0E ILMAP 312133N 0465702E	UM203	PUSTO 3321.0N 04245.0E LOVEK 3222.1N 04440.0E ILMAP 312133N 0465702E
M300	LOTAV 2037N 0605700E EMURU 221535N 0584950E	UM300	(CALICUT) CLC LOTAV 2037N 0605700E EMURU 221535N 0584950E
M301	PURAD 145500N 0415354E SANA'A (SAA) ITOLI 152825N 0450927E ASMAK162327N 0524634E	M301	PURAD 145500N 0415354E SANA'A (SAA) ITOLI 152825N 0450927E ASMAK162327N 0524634E
M303	MCT 233528.01N 0581536.47E *Note 7 (OO) SEVLA 233321N 0591122E KIPOL230410N 0612903E	UM303	MCT 233528.01N 0581536.47E *Note 7 (OO) SEVLA 233321N 0591122E KIPOL230410N 0612903E
M305	BRN 3134.5N 02600.3E ATMUL 200000N 2905.4E *Note 3	UM305	BRN 3134.5N 02600.3E ATMUL 200000N 2905.4E *Note 3
		UM309	KIND KHALED (KIA) RAGHBA (RGB) RABTO 221608N 0400326E
M312	DBA 3100.7N 02828.0E AMIBO 3456.7N 2136.4E *Note 3 (HE)	UM312	DBA 3100.7N 02828.0E AMIBO 3456.7N 2136.4E *Note 3 (HE)
M316	KANAS 251552N 0574700E GOKSO 265542N 0604012E	UM316	KANAS 251552N 0574700E GOKSO 265542N 0604012E
M318	GABKO 260404N 0554755E GITSA 254132N 0553926E *Note 7 (SERSA-GABKO) Eastbound SERSA 251945N 0553118E MIADA 245112N 0545736E	UM318	

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ABU DHABI (ADV) 242508N 0544024E ATUDO 241708N 0543532E MUSEN 241429N 0543336E GOLGU 231051N 0523109E MUXIT 230229N 0523024E KITAP 224928N 0522923E PURDA 210805N 0510329E SHARURAH (SHA) NADKI 171418N 0464706E SAA 153100N 0441311E HDH 144622N 0425911E		KITAP 224928N 0522923E PURDA 210805N 0510329E SHARURAH (SHA) NADKI 171418N 0464706E SAA 153100N 0441311E HDH 144622N 0425911E
M319	ULINA 292451N 0345817E SESMO 293458N 0351159E LOXUS 301301N 0352601E LOSIL 304951N 0354841E QATRANEH (QTR)	UM319	ULINA 292451N 0345817E SESMO 293458N 0351159E LOXUS 301301N 0352601E LOSIL 304951N 0354841E QATRANEH (QTR)
M320	KING FAHD (KFA) KODAG 2703.3N 04920.4E RAS ASVIR 283220N 0482220E KUWAIT (KUA)	UM320	KING FAHD (KFA) KODAG 2703.3N 04920.4E RAS ASVIR 283220N 0482220E KUWAIT (KUA)
M321	HALAIFA 262602N 0391609E (HLF) ROSUL 2539.7N 04215.3E OVEKU 2509.9 04457.0E KING KHALED (KIA) RESAL 240649N 0470427E AMBAG 230529N 0474611E ALRIK 220631N 0482525E NONGA 205048N 0492014E ASTIN 200410N 0495320E SILPA 184953N 0510158E IMPOS 183136N 0511848E LOTEL 180926N 0514103E PUTRA 165432N 0525631E	UM321	HALAIFA 262602N 0391609E (HLF) ROSUL 2539.7N 04215.3E OVEKU 2509.9 04457.0E KING KHALED (KIA) RESAL 240649N 0470427E AMBAG 230529N 0474611E ALRIK 220631N 0482525E NONGA 205048N 0492014E ASTIN 200410N 0495320E SILPA 184953N 0510158E IMPOS 183136N 0511848E LOTEL 180926N 0514103E PUTRA 165432N 0525631E
M425	SILKO 3347.9N 03435.0E CAK	UM425	SILKO 3347.9N 03435.0E CAK
M428	RIKET 251859N 0560200E *Note 7/8 (OO/OM) GOMTA 251115N 0563447E TARBO 244351N 0574637E MUNGA 242516N 0584533E	UM428	RIKET 251859N 0560200E *Note 7/8 (OO/OM) GOMTA 251115N 0563447E TARBO 244351N 0574637E MUNGA 242516N 0584533E
M430	*Note 5 (KIA-DOH) KING KHALID (KIA) 245310N 0464534E KOBEX 250716N 0475046E KIREN 251447N 0490724E *Note 8 (KIREN-TOSNA) HSA 251645N 0492903E SALWA 251538N 0503048E ULIKA 251545N 0503849E GINTO 251606N 0510416E LAGNO 251613N 0511518E DOHA HAMAD INTL (DOH) 251500N 0513635E BOVIP 251555N 0523135E TOSNA 251612N 0524116E *Note 7 (DOH-KISAG) KISAG 251834N 0541408E	UM430	*Note 5 (KIA-DOH) KING KHALID (KIA) 245310N 0464534E KOBEX 250716N 0475046E KIREN 251447N 0490724E *Note 8 (KIREN-TOSNA) HSA 251645N 0492903E SALWA 251538N 0503048E ULIKA 251545N 0503849E GINTO 251606N 0510416E LAGNO 251613N 0511518E DOHA HAMAD INTL (DOH) 251500N 0513635E BOVIP 251555N 0523135E TOSNA 251612N 0524116E *Note 7 (DOH-KISAG) KISAG 251834N 0541408E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
M434	UMESA 351741N 0434307E OTALO 351700N 0441900E IVANO 351724N 0451235E BOXIX 351724N 0460921E ALSAX 351607N 0463118E SANANDAJ (SNJ) HAMDAN(HAM) SAVEH(SAV)	UM434	UMESA 351741N 0434307E OTALO 351700N 0441900E IVANO 351724N 0451235E BOXIX 351724N 0460921E ALSAX 351607N 0463118E SANANDAJ (SNJ) HAMDAN(HAM) SAVEH(SAV)
		UM440	KING KHALED (KIA) OTAMA 235148N 0494707E KUTNA 231341N 0512730E KITAP 224928N 0522923E TOKRA 220925N 0553350E
M444	DOHA/HAMAD INTL (DOH) 251500N0513635E EMISA 254658N 0514207E PATOM 255821N 0511836E DENVO 260452N 0510509E BAHRAIN (BAH) 261551N 0503855E ELOS0 262409N 0503550E EGMOR 264210N 0502906E LOTOR 264854N 0502200E RAMSI 270249N 0500714E ORDAN 271706N 0495442E GIRSI 274126N 0493310E ENASO 275706N 0491911E DAVUS 282346N 0490622E	UM444	DOHA/HAMAD INTL (DOH) 251500N0513635E EMISA 254658N 0514207E PATOM 255821N 0511836E DENVO 260452N 0510509E BAHRAIN (BAH) 261551N 0503855E ELOS0 262409N 0503550E EGMOR 264210N 0502906E LOTOR 264854N 0502200E RAMSI 270249N 0500714E ORDAN 271706N 0495442E GIRSI 274126N 0493310E ENASO 275706N 0491911E DAVUS 282346N 0490622E
M449	BUSRA 322000N 0363700E MAZAR 3048.0N 03610.0E GIBET 2926.3N 03625.0E TABUK (TBK) WEJH (WEJ)	UM449	BUSRA 322000N 0363700E MAZAR 3048.0N 03610.0E GIBET 2926.3N 03625.0E TABUK (TBK) WEJH (WEJ)
M551	KIVEL 165306N 0553633E DAXAM 171612N 0544715E	UM551	DONSA1435.3N06344.0E ANGAL1614.1N 06000.1E OTOTO 164004N 0570435E KIVEL 165306N 0553633E DAXAM 171612N 0544715E
M557	ATBOR 251007N 0551947E *Note7 & 8 to MIDS NADIL 252252N 0544717E NABOP 252607N 0540405E EMAGO 253456N 0535751E VUVOK 254408N 0533024E	UM557	ATBOR 251007N 0551947E *Note7 & 8 to MIDS NADIL 252252N 0544717E NABOP 252607N 0540405E EMAGO 253456N 0535751E VUVOK 254408N 0533024E
M559	LABNI 165620N 0410921E NISMI 162415N 0421838E ITOLI 152825N 0450927E MUKALLA (RIN) VEDET 120134N 0512410E	UM559	LABNI 165620N 0410921E NISMI 162415N 0421838E ITOLI 152825N 0450927E MUKALLA (RIN) VEDET 120134N 0512410E
M561	KISH (KIS) MOBET 2645.3N 05609.8E ASVIB 265724N 0631812E PANJGUR (PG)	UM561	KISH (KIS) MOBET 2645.3N 05609.8E ASVIB 265724N 0631812E PANJGUR (PG)
		UM573	TEHERAN (TRN) TABRIZ (TBZ) 3808.3N 04613.9E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
		UM574	MALE) (MLE) (POPET) 0713.7N06813.6E NABIL 1222.0E0600.0E RIGAM 143932N 0530414E NOBSU 171554N 0431318E
M600	RANBI 251908N 0544500E KISAG 251834N 0541408E TUMAK 255031N 0531108E VEDOM 260109N 0524456E VELAK 261307N 0521821E LABOP 261907N 0520429E ALTOM 262230N 0515639E DASOS 262429N 0515043E ALMOK 262832N 0513840E VEDOS 264105N 0510044E NABOS 264354N 0505145E MOGAS 264759N 0503909E RAKAK 265221N 0502618E RAMSI 270249N 0500714E ORNAK 272853N 0493248E SOLEM 275229N 0491136E KUMBO 281705N 0485526E	UM600	RANBI 251908N 0544500E KISAG 251834N 0541408E TUMAK 255031N 0531108E VEDOM 260109N 0524456E VELAK 261307N 0521821E LABOP 261907N 0520429E ALTOM 262230N 0515639E DASOS 262429N 0515043E ALMOK 262832N 0513840E VEDOS 264105N 0510044E NABOS 264354N 0505145E MOGAS 264759N 0503909E RAKAK 265221N 0502618E RAMSI 270249N 0500714E ORNAK 272853N 0493248E SOLEM 275229N 0491136E KUMBO 281705N 0485526E
M628	LUDID 230227N 0551800E LABSA 230153N 0555505E EGVAN 230127N 0561907E TULBU 230005N 0571827E IZK 225318.60N 0574542.73E TOLDA 224008N 0583624E LOXOP 223722N 0594548E LADAP 223513N 0603238E IVOMA 223408N 0605430E PARAR 222630N 0630700E	UM628	DAFINAH (DFN) 231700N 0414312E KIPOM 225316N 0501518E MIGMA 225035N 0512749E KITAP 224928N 0522923E ALPEK 224648N 0535942E LUDID 230227N 0551800E LABSA 230153N 0555505E EGVAN 230127N 0561907E TULBU 230005N 0571827E IZK 225318.60N 0574542.73E TOLDA 224008N 0583624E LOXOP 223722N 0594548E LOSIM 223513N 0603238E IVOMA 223408N 0605430E PARAR 222630N 0630700E
M634	ANGAL 161406N 0600006E VEDET 120134N 0512410E DAROT 0911.4N 04721.2E	UM634	ANGAL 161406N 0600006E VEDET 120134N 0512410E DAROT 0911.4N 04721.2E
M651	ATBOT 171418N 0464706E ADEN (KRA) (HARGEISA) HARGA	UM651	ATBOT 171418N 0464706E ADEN (KRA) (HARGEISA) HARGA
M677	SESRA 290800N 0485454E RABAP 283625N 0492722E PASAK 282459N 0494846E GOGMA 281421N 0495612E IVIVI 273734N 0502437E VEDOR 270855N 0504630E TOSDA 270004N 0505629E TORBO 265222N 0511024E SOGAN 263915N 0515408E DEGSO 261054N 0531946E OBNET 260032N 0534514E ITITA 254410N 0541839E SERSA 251945N 0553118E LALDO 251806N 0563600E	UM677	SESRA 290800N 0485454E RABAP 283625N 0492722E PASAK 282459N 0494846E GOGMA 281421N 0495612E IVIVI 273734N 0502437E VEDOR 270855N 0504630E TOSDA 270004N 0505629E TORBO 265222N 0511024E SOGAN 263915N 0515408E DEGSO 261054N 0531946E OBNET 260032N 0534514E ITITA 254410N 0541839E SERSA 251945N 0553118E LALDO 251806N 0563600E
M681	TARBO 244351N 0574637E	UM681	TARBO 244351N 0574637E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	*Note 7/8 (OO) DAMUM 243236N 0591307E		*Note 7/8 (OO) DAMUM 243236N 0591307E
M686	LUXOR (LXR) MEMPO 252518N 0335457E GIBAL 243712N 0363442E KING ABDULAZIZ (JDW)	UM686	LUXOR (LXR) MEMPO 252518N 0335457E GIBAL 243712N 0363442E KING ABDULAZIZ (JDW)
		UM688	CRM GULRA ERN EVSAS BAYIR 383541N 0412414 E ULTED OTKEP NINVA 372100N 0431300E ROXOP 364917N 0433100E VUSEB 3616 37N E0434800E OTALO 351700N 0441900E RIDIP 343012N 0444027E UKMUG 334300N 0450329E VAXEN 3318 00N 0451500E PAPUS 325334N 0452706E KATUT 323737N 0453439E DENKI 322228.46N 0455121.58E ILMAP 31 21 33N 0465702E PEBAD 305023.09N 0472958.49E SIDAD 295231N 0482944E
		UM690	ZELAF325656N 0375959E ORNAL 324755N0375153E KODER 323300N 0373800E DESLI 314900N 03659091E ELOXI 313401N 036453E KULDI 311847N 0363214E MUNRA 304944N 0360835E LONOL 300801N 0353500E SESMO 293458N 0351159E ULINA 292451N 0345817E NWB 290256N 0344016E
M691	DEDAS 2630.2N 05014.4E KING FAHAD KUSAR 264741N 0490218E KEDAT 2721.8N 04759.0E ITIXI 275031N 0470435E	UM691	DEDAS 2630.2N 05014.4E KING FAHAD KUSAR 264741N 0490218E KEDAT 2721.8N 04759.0E ITIXI 275031N 0470435E
M762	REXOD 211230N 0613830E SUR 223159N 0592829E ITURA 232351N 0580720E ALMOG 233524N0574940E TAPRA 242607N 0563803E VAXAS 244308N 0561807E * Note 7 (OM, OO) BUBIN 245742N 0560642E		
M860	KUGOS 4246.8N 03405.3E SINOP (SIN) CARSAMBA (CRM) SRT 3754.6N 04152.9E KABAN N371456N 0423859E EMIDO 364411.33N 042 56 00E SEVKU 360548.02N 0431715.84E UMESA 351741.49N 0434306.89E	UM860	KUGOS 4246.8N 03405.3E SINOP (SIN) CARSAMBA (CRM) SRT 3754.6N 04152.9E KABAN N371456N 0423859E EMIDO 364411.33N 042 56 00E SEVKU 360548.02N 0431715.84E UMESA 351741.49N 0434306.89E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	TAGRU 342958.95N 0440816.67E PUTSI 333200N E044 3700E ITOVA 331950.91N 0444 28.97E SEPTU 331300N 0444400E LONOR 323838.63N 0450458.48E ULIMA 321500N 0451600E ITBIT 314735.20N 045 2916.57E RUGIR 303219.06N 046 0618.20E MOBIS 295108.84N 047 0457.39E		TAGRU 342958.95N 0440816.67E PUTSI 333200N E044 3700E ITOVA 331950.91N 0444 28.97E SEPTU 331300N 0444400E LONOR 323838.63N 0450458.48E ULIMA 321500N 0451600E ITBIT 314735.20N 045 2916.57E RUGIR 303219.06N 046 0618.20E MOBIS 295108.84N 047 0457.39E
		UM861	ELEXI 3441.5N 04109.0E DIER-ZZOR (DRZ) ALEPPO (ALE) NISAP 364724N 0363830E
M863	KING ABDUL AZIZ (JDW) 214237N 0390948E GIBAP 212218N 0380931E TOMRU 204411N 0361950E ASKOL 1548.9N 02400.1E KITOB 1521.7N 02258.8E IPONO 150621 N 0222436 E N'DJAMENA (FL) 1208.5N 01502.3E	UM863	KING ABDUL AZIZ (JDW) 214237N 0390948E GIBAP 212218N 0380931E TOMRU 204411N 0361950E ASKOL 1548.9N 02400.1E KITOB 1521.7N 02258.8E IPONO 150621 N 0222436 E N'DJAMENA (FL) 1208.5N 01502.3E
M872	PLH 3513.7N 02340.9E *Note 7 (PLH-DBA) METRU 340000N 0250900E KANAR 322727N 0265330E EL DABA (DBA) 310041N 0282801E FYM 2923.8N 03023.6E *Note 7 (FYM-SEMURU) SEMURU 280200N 0320306E HURGHADA (HGD) SILKA 263400N 0352900E WEJH (WEJ) 261046N 0362917E KODIN 2517.9N 03836.2E MADINAH (PMA) *Note 7 (PMA-MIDSI) BIR DARB (BDB) AL DAWADMI (DAW) KING KHALID (KIA) AKRAM 255036N 0475133E *Note 8 to MIDSI ALMAL 261553N 0482108E DAVRI 264936N 0505732E MIDSI 264142N0515442E	UM872	PLH 3513.7N 02340.9E *Note 7 (PLH-DBA) METRU 340000N 0250900E KANAR 322727N 0265330E EL DABA (DBA) 310041N 0282801E FYM 2923.8N 03023.6E *Note 7 (FYM-SEMURU) SEMURU 280200N 0320306E HURGHADA (HGD) SILKA 263400N 0352900E WEJH (WEJ) 261046N 0362917E KODIN 2517.9N 03836.2E MADINAH (PMA) *Note 7 (PMA-MIDSI) BIR DARB (BDB) AL DAWADMI (DAW) KING KHALID (KIA) AKRAM 255036N 0475133E *Note 8 to MIDSI ALMAL 261553N 0482108E DAVRI 264936N 0505732E MIDSI 264142N0515442E
		UM877	VUSET 235540N 0590812E ITILA 234015N 0584817E KUSRA 232426N 0582611E
M999	GS DITAR 265903N 0250000E KHG KUNAK (LUXOR) LXR DEDLI 2242 32N 03737 19E IMLER 221706N 0381653E KING ABDULAZIZ (JDW) TOKTO 194421N 00395945E DANAK 1608.0N 04129.0E (ASSAB) SB	UM999	GS DITAR 265903N 0250000E KHG KUNAK (LUXOR) LXR DEDLI 2242 32N 03737 19E IMLER 221706N 0381653E KING ABDULAZIZ (JDW) TOKTO 194421N 00395945E DANAK 1608.0N 04129.0E (ASSAB) SB
N300	DOHA/HAMAD INTL	UN300	DOH 2514.0N 05134.6E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	(DOH) 251500N0513635E *Note 7 & 8 to TONVO ELOBI 250753N 0521722E NAMLA 250532N 0523318E BOXAK 244536N 0540032E MIADA 245112N 0545736E TONVO 250500N 0563200E		(DOH) 251500N0513635E *Note 7 & 8 to TONVO ELOBI 250753N 0521722E NAMLA 250532N 0523318E BOXAK 244536N 0540032E MIADA 245112N 0545736E TONVO 250500N 0563200E
N302	SIDAD 295231N 0482944E ALVIX 291915N 0482944E	UN302	SIDAD 295231N 0482944E ALVIX 291915N 0482944E
N303	(HARGEISA) HARGA PARIM 1231.7N 04327.2E RIBOK1547N 04152.5E LABNI 1656.3N 04109.4E	UN303	(HARGEISA) HARGA PARIM 1231.7N 04327.2E RIBOK1547N 04152.5E LABNI 1656.3N 04109.4E
N307	MELDO 320201N 0310406E LAKTO 323800N 0320500E	UN307	MELDO 320201N 0310406E LAKTO 323800N 0320500E
N310	BALMA 342856N 0350302E CAK 341802N 0354200E LATEB 3401.9N 03624.1E BASEM 3333.6N 03739.1E	UN310	BALMA 342856N 0350302E CAK 341802N 0354200E LATEB 3401.9N 03624.1E BASEM 3333.6N 03739.1E
		UN315	ASPUX 174406N 0600006E KUTVI 184306N 0582642E Note:- 7 (OO/OB) SITOL 211604N 0552514E LOTOS 220000N 0503912E RAPMA 232256N 0482028E RESAL 240649N 0470427E KING KHALED (KIA)
		UN316	HALAIFA (HLF) 262603N 0391609E PASAM 273045N 0345542E
N318	QAA 314423N 0360926E ALNOR 313955N 0362507E KINUR 313626N 0363714E ELOXI 313359N 0364536E GENEX 312935N 370052E GURIAT (GRY) 312445N 0371712E ORKAS 3047254N 0384617 E NEVOL 302446N 0393841E VELAL 294602N 04038214E TAMRO 283838N 0424047E * Note7 (OE, OB, OM, OO) MOGON 273848N 0444554E TAGSO 272744N 0454510E *Note 8 (OB, OO) EGNOV 270301N 0474713E KUSAR 264741N 0490218E ASPAN 263255N 0494903E DEDAS 263011N 0501427E LADNA 262749N 0502245E ELOSO 262409N 0503551E DAVOV 262255N 0504013E GOLKO 262149N 0504404E ASTAD 261812N 0505646E TOTIS 261119N 0511027E RASDI 260425N 0512407E VELAM 255426N 0514347E VUTAN 255016N 0515218E RESAR 253707N 0522328E	UN318	QAA 314423N 0360926E ALNOR 313955N 0362507E KINUR 313626N 0363714E ELOXI 313359N 0364536E GENEX 312935N 370052E GURIAT (GRY) 312445N 0371712E ORKAS 3047254N 0384617 E NEVOL 302446N 0393841E VELAL 294602N 04038214E TAMRO 283838N 0424047E * Note7 (OE, OB, OM, OO) MOGON 273848N 0444554E TAGSO 272744N 0454510E *Note 8 (OB, OO) EGNOV 270301N 0474713E KUSAR 264741N 0490218E ASPAN 263255N 0494903E DEDAS 263011N 0501427E LADNA 262749N 0502245E ELOSO 262409N 0503551E DAVOV 262255N 0504013E GOLKO 262149N 0504404E ASTAD 261812N 0505646E TOTIS 261119N 0511027E RASDI 260425N 0512407E VELAM 255426N 0514347E VUTAN 255016N 0515218E RESAR 253707N 0522328E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ALSEM 252703N 0524322E OVONA 252443N 0524739E (LOXAT – REXOD) KATIK 251709N 0531515E KANIP 241042N 0552042E LABRI 240344N 0553842E EGROK 235253N 0560126E LAKLU 232235N 0570401E GEVED 230105N 0575111E TOLDA 223720N 0583503E REXOD211230N 0613830E		ALSEM 252703N 0524322E OVONA 252443N 0524739E (LOXAT-REXOD) KATIK 251709N 0531515E KANIP 241042N 0552042E LABRI 240344N 0553842E EGROK 235253N 0560126E LAKLU 232235N 0570401E GEVED 230105N 0575111E TOLDA 223720N 0583503E REXOD211230N 0613830E
		UN319	ZAHEDAN (ZDN) TABAS (TBS) DASHT-E-NAZ (DNZ) ULDUS- 3800.0N 05101.0E LUSAL 4035.0N 04757.0E ADEKI 4117.8N 04645.0E TBILIS (TBS) MUKHARANI (DF) ALI (BT) LOBIN 4210.9N 04306.4E IBERI 4209.6N 04143.3E
N324	PURDA 210805N 0510329E GOBRO 193622N 0534741E ASTUN 180832N 0551040E	UN324	PURDA 210805N 0510329E GOBRO 193622N 0534741E ASTUN 180832N 0551040E
N430	TARBO 244351N 0574637E *Note 7/8 (OO) ITLOB 244325N 0590701E	UN430	TARBO 244351N 0574637E *Note 7/8 (OO) ITLOB 244325N 0590701E
N438	LITAN 333456N 0343758E KAD 334827N 0352910E CAK 341802N 0354200E RA 343510N 0360010E	UN438	LITAN 333456N 0343758E KAD 334827N 0352910E CAK 341802N 0354200E RA 343510N 0360010E
N440	MOBON 274414N 0552513E DARAX 260916N 0555307E	UN440	MOBON 274414N 0552513E DARAX 260916N 0555307E
		UN555	BELGAUM (BBM) BISET 1823.4N 06918.1E KATBI 1931.6N 06500.0E LOTAV 2037.0N 06057.0E
N563	REXOD 211230N 0613830E *Note 8 (OB, OM) *Note 7 (OB, OO, OM) EMURU 221357N 0585338E TULBU 230005N 0571827E MEKNA 223309N 0560815E SODEX 234954N 0553202E NOBTO 235525N 0551840E ADV MEMBI 243705N 0542631E ATBEX 250739N 0535019E ITROK 253557N 0532751E ALPOB 254218N 0530055E ROTAG 255353N 0523621E SOLEG 260159N 0521756E SOLOB 262241N 0513132E MEDMA 263412N 0505454E TOTLA 263806N 0504301E RULEX 264529N 0501745E	UN563	(BANGALORE) BBG *Note 8 (OB, OM) REXOD 211230N 0613830E *Note 7 (OB, OO,OM) EMURU 221357N 0585338E TULBU 230005N 0571827E MEKNA 223309N 0560815E SODEX 234954N 0553202E NOBTO 235525N 0551840E MEMBI 243705N 0542631E ATBEX 250739N 0535019E ITROK 253557N 0532751E ALPOB 254218N 0530055E ROTAG 255353N 0523621E SOLEG 260159N 0521756E SOLOB 262241N 0513132E MEDMA 263412N 0505454E TOTLA 263806N 0504301E RULEX 264529N 0501745E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	SILNO 264026N 0475745E GIBUS 255724N 0472829E		SILNO 264026N 0475745E GIBUS 255724N 0472829E
		UN569	BONUM 221252N 0393805E RABTO 221608N 0400326E LOTOS *Note:- 7 (LOTOS-GOLNI) TOKRA 220925N 0553350E TOPSO 215653N 0562043E MOGOK 215057N 0564236E KEBAS 214330N 0570948E GISKA 213503N 0574014E UMILA 211555N 0584738E GOLNI 210014N 0594130E LOTAV 203700N 0605700E
N571	PARAR 2226.5 N 06307E *Note 7 & 8 (OB, OM, OO) KIPOL 230410N 0612903E RAGMA 230600N 0610539E SODEB 234747N 0593023E VUSET 235540N 0590812E KIROP 243000N 0574700E MENSA 245750N 0563249E AVAMI 250554N 0555647E ATBOR 251007N 0551947E MUVLA 251716N 0544500E SENTO 251908N 0544500E ELUKU 252910N 0535610E ITROK 253557N 0532751E ALPOB 254218N 0530055E SOLOB 262241N 0513132E MEDMA 263412N 0505454E TOTLA 263806N 0504301E RULEX 264529N 0501745E SILNO 264026N 0475745E KUTEM 264359N 0473521E BOPAN (BPN) 270314N 0452642E	UN571	(GUNIP 0429.9N 09931.8E) (VAMPI 0610.9N 09735.1E) (MEKAR 0630.2N 06929.5E) (SUGID- 1933.1 N 06921.0E) PARAR 2226.5 N 06307E *Note 7 & 8 (OB, OM, OO) KIPOL 230410N 0612903E RAGMA 230600N 0610539E SODEB 234747N 0593023E VUSET 235540N 0590812E KIROP 243000N 0574700E MENSA 245750N 0563249E AVAMI 250554N 0555647E ATBOR 251007N 0551947E MUVLA 251716N 0544500E SENTO 251908N 0544500E ELUKU 252910N 0535610E ITROK 253557N 0532751E ALPOB 254218N 0530055E SOLOB 262241N 0513132E MEDMA 263412N 0505454E TOTLA 263806N 0504301E RULEX 264529N 0501745E SILNO 264026N 0475745E KUTEM 264359N 0473521E BOPAN (BPN) 270314N 0452642E
N629	TARDI 243418N 0560915E *Note 7 (OO) NOSMI 241757N 0563002E MUSUK 234320N 0572148E GEPOT 231446N 0580053E GIDAN 230104N 0582232E TOTOX 215030N 0622230E	UN629	TARDI 243418N 0560915E *Note 7 (OO) NOSMI 241757N 0563002E MUSUK 234320N 0572148E GEPOT 231446N 0580053E GIDAN 230104N 0582232E TOTOX 215030N 0622230E
N638	KING KHALED (KIA) OVEKU 250955N 0445701E MADINAH (PMA)	UN638	KING KHALED (KIA) OVEKU 250955N 0445701E MADINAH (PMA)
N685	TAGSO 272744N 0454510E *Note 7 (TAGSO-KUSAR) *Note 8 (TAGSO-TOSNA) DEBOL 272116N 0461843E TORTA 271906N 0462911E ALSAT 270611N 0473118E EGNOV 270301N 0474713E KUSAR 264741N 0490218E KING FAHAD (KFA) 262153N 0494910E	UN685	TAGSO 272744N 0454510E *Note 7 (TAGSO-KUSAR) *Note 8 (TAGSO-TOSNA) DEBOL 272116N 0461843E TORTA 271906N 0462911E ALSAT 270611N 0473118E EGNOV 270301N 0474713E KUSAR 264741N 0490218E KING FAHAD (KFA) 262153N 0494910E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	NARMI 261802N 0501939E BAHRAIN (BAH) 261551N 0503856E DENVO 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514207E *Note 7 to LAKLU KAPAX 254218N 0515118E ORSIS 252801N 0521636E ENANO 252348N 0522559E TOSNA 251612N 0524116E TOPSI 250910N 0531200E BOXAK 244536N 0540032E ADV 242508N 0544024 RETAS 235754N 0553423E *Note 8 (OO) PUTSO 232037N 0565322E LAKLU 232235N 0570401E		NARMI 261802N 0501939E BAHRAIN (BAH) 261551N 0503856E DENVO 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514207E *Note 7 to LAKLU KAPAX 254218N 0515118E ORSIS 252801N 0521636E ENANO 252348N 0522559E TOSNA 251612N 0524116E TOPSI 250910N 0531200E BOXAK 244536N 0540032E ADV 242508N 0544024 RETAS 235754N 0553423E *Note 8 (OO) PUTSO 232037N 0565322E LAKLU 232235N 0570401E
N687	KING KHALID (KIA) 245310N 0464534E KINIB 254108N 0482317E *Note 5 & 7 & 8 KING FAHAD (KFA) 262153N 0494910E EMOLO 263559N 0500526E ROTEL 264015N 0502149E EGMOR 264210N 0502906E DAVRI 264936N 0505732E TORBO 265223N 0511024E	UN687	KING KHALID (KIA) 245310N 0464534E KINIB 254108N 0482317E *Note 5 & 7 & 8 KING FAHAD (KFA) 262153N 0494910E EMOLO 263559N 0500526E ROTEL 264015N 0502149E EGMOR 264210N 0502906E DAVRI 264936N 0505732E TORBO 265223N 0511024E
N694	KING KHALD (KIA) TORKI 261400N 0463103E SIBLI 265459N 0462334E AKODI 275012N 0461320E HAFR AL BATIN 281949N 0460746E (HFR)	UN694	KING KHALD (KIA) TORKI 261400N 0463103E SIBLI 265459N 0462334E AKODI 275012N 0461320E HAFR AL BATIN 281949N 0460746E (HFR)
N697	MENLI 294700N 0315206E SISIK 293600N 0324100E NUWEIBAA * Note 7 (NWB-KITOT above FL350) KITOT 290205N 0345050E SOBAS 275600N 0390454E HAIL (HIL) 272530N 0414058E *Note 7 (HIL-KFA) BPN 270312N 0452642E *Note 8 (BPN-TORBO) KING FAHD (KFA) 262153N 04949 NARMI 261802N 0501939E BAHRAIN (BAH) 261551N 0503855E *Note 7 GOLKO 262149N 0504404E TOSTA 262746N 0504912E MEDMA 263421N 0505454E VEDOS 264105N 0510044E SODAK 264634N 0510530E TORBO 265223N 0511024E	UN687	MENLI 294700N 0315206E SISIK 293600N 0324100E NUWEIBAA * Note 7 (NWB-KITOT above FL350) KITOT 290205N 0345050E SOBAS 275600N 0390454E HAIL (HIL) 272530N 0414058E *Note 7 (HIL-KFA) BPN 270312N 0452642E *Note 8 (BPN-TORBO) KING FAHD (KFA) 262153N 04949 NARMI 261802N 0501939E BAHRAIN (BAH) 261551N 0503855E *Note 7 GOLKO 262149N 0504404E TOSTA 262746N 0504912E MEDMA 263421N 0505454E VEDOS 264105N 0510044E SODAK 264634N 0510530E TORBO 265223N 0511024E
N764	NOBSU 171554N 0431318E MUKALLAH (RIN) 144015N 0492329E SOCOTRA (SOC) 123749N 0535429E SUHIL 120000N 0550000E NABAM 101112N 0581424E	UN764	NOBSU 171554N 0431318E MUKALLAH (RIN) 144015N 0492329E SOCOTRA (SOC) 123749N 0535429E SUHIL 120000N 0550000E NABAM 101112N 0581424E
N767	PARAR 222630N 0630700E VUSIN 225940N 0605510E * Note 7 (OO)	UN767	PARAR 222630N 0630700E VUSIN 225940N 0605510E * Note 7 (OO)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ATBED 230352N 0603752E ELIGO 232458N 0590848		ATBED 230352N 0603752E ELIGO 232458N 0590848
		UN881	RASKI 230330N 0635200E SETSI 230412N 0614410E KIPOL 230410N 0612903E ATBED 230352N 0603752E AMBOS 230324N 0595405 MUSRU 230256N 0592223E *Note 7 (OO) OBTIN 230216N 0585920E GIDAN 230104N 0582232E GEVED 230105N 0575111E TULBU 230005N 0571827E
N929	DASLO 254537N 0523029E *Note 7 & 8 to GIBUS NAGOG 255214N 0521615E BONAN 260201N 0515505E VEDED 260558N 0514628E SOGAT 262029N 0511443E TOSTA 262746N 0504913E DANAG 264438N 0494856E NADNA 264245N 0485309E SILNO 264026N 0475745E ASKOK 262623N 0474809E MUSRI 261647.0N 0474137.0E GIBUS 255724.0N 0472829.0E	UN929	DASLO 254537N 0523029E *Note 7 & 8 to GIBUS NAGOG 255214N 0521615E BONAN 260201N 0515505E VEDED 260558N 0514628E SOGAT 262029N 0511443E TOSTA 262746N 0504913E DANAG 264438N 0494856E NADNA 264245N 0485309E SILNO 264026N 0475745E ASKOK 262623N 0474809E MUSRI 261647.0N 0474137.0E GIBUS 255724.0N 0472829.0E
		UP146	RASHT (RST) AGINA 3919.4N 04405.2E (AGRI) (ARI) (YAVUZ 4002.7N 04226.0E) (TRABZON (TBN)
P300	KAD 334827N 0352910E LATEB 3401.9N 03624.1E	UP300	KAD 334827N 0352910E LATEB 3401.9N 03624.1E
P304	EGROK 235253N 0560126E *Note 7 (OO) MEKNA 233309N 0560815E EGVAN 230127N 0561907E DEMKI 224941N 0562308E NAMVA 223309N 0562223E TOPSO 215653N 0562043E KUROV 211627N 0561853E VELIK 203322N 0561656E	UP304	EGROK 235253N 0560126E *Note 7 (OO) MEKNA 233309N 0560815E EGVAN 230127N 0561907E DEMKI 224941N 0562308E NAMVA 223309N 0562223E TOPSO 215653N 0562043E KUROV 211627N 0561853E VELIK 203322N 0561656E
P307	(SHJ) 251944.9N 0553118.1E Note 7 (OM,OO) TONVO 250500N 0563200E PURNI 243804N 0574354E *Note 8 (OO) KUNUS 241927N 0583226E ALSAS 240054N 0591955E DERTO 235033N 0594746E VAXIM 231900N 0611100E SETSI 230412N 0614410E PARAR 222630N 0630700E	UP307	(SHJ) 251944.9N 0553118.1E Note 7 (OM,OO) TONVO 250500N 0563200E PURNI 243804N 0574354E *Note 8 (OO) KUNUS 241927N 0583226E ALSAS 240054N 0591955E DERTO 235033N 0594746E VAXIM 231900N 0611100E SETSI 230412N 0614410E PARAR 222630N 0630700E
P312	MUKALLA (RIN) PAKER 1155.0N0463500E (HARGEISA) HARGA	UP312	MUKALLA (RIN) PAKER 1155.0N0463500E (HARGEISA) HARGA

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
P316	SALALLAH (SLL) * Note 7 (OO) DAXAM 171612N 0544715E GAGLA 180505N 0552410E GIVNO 195011N 0563059E MOBAB 201032N 0564415E GISKA 213503N 0574014E RADAX 220809N 0580230E MUSCAT (MCT)	UP316	SALALLAH (SLL) * Note 7 (OO) DAXAM 171612N 0544715E GAGLA 180505N 0552410E GIVNO 195011N 0563059E MOBAB 201032N 0564415E GISKA 213503N 0574014E RADAX 220809N 0580230E MUSCAT (MCT)
		UP323	DONSA 1435.3N06511.6E GIDAS 142004N0600000E NODMA 1526.0N05334.0E THAMD 1717.0N 04955.0E WDR
P425	DAHRAN (DHA) *Note 8 to ALSER BAHRAIN (BAH) 261551N 0503855E DAVOV 262255N 0504012E DATGO 262957N 0504130E TOTLA 263806N 0504301E MEMKO 264611N 0504427E BOXOG 265403N 0504553E ALSER 271100N 0504900E	UP425	DAHRAN (DHA) *Note 8 to ALSER BAHRAIN (BAH) 261551N 0503855E DAVOV 262255N 0504012E DATGO 262957N 0504130E TOTLA 263806N 0504301E MEMKO 264611N 0504427E BOXOG 265403N 0504553E ALSER 271100N 0504900E
P430	DOHA/HAMAD INTL (DOH) 251500N 0513635E *Note 8 to MIDS BAYAN 252926N 0514849E *Note 7 to MIDS KAPAX 254218N 0515118E VUTAN 255016N 0515218E ALVEN 255418N 0515315E BONAN 260201N 0515505E RAMKI 261138N 0515625E ALTOM 262230N 0515639E	UP430	DOHA/HAMAD INTL (DOH) 251500N 0513635E *Note 8 to MIDS BAYAN 252926N 0514849E *Note 7 to MIDS KAPAX 254218N 0515118E VUTAN 255016N 0515218E ALVEN 255418N 0515315E BONAN 260201N 0515505E RAMKI 261138N 0515625E ALTOM 262230N 0515639E
P513	BUBAS 245938N 0570003E GERAR 240600N 0573616E MIXAM 234139N 0575523E * Note 7 (OO) MUSCAT (MCT)	UP517	WAFRA (KFR) GOVAL KMC
		UP552	DATEG 123549N 0471627E ULAXI 141524N 0482317E GINBO 160349N 0494017E IMPOS 183137N 0511848E
P557	NUBAR 220000N 0313806E *See Note 6&7 MISUK 290507N 0290621E KATAB 292501N0290506E	UP557	NUBAR 220000N 0313806E *See Note 6&7 MISUK 290507N 0290621E KATAB 292501N0290506E
P559	RASLI 315424N 0383648E TURAIF (TRF) 314136N 0384405E *Note 7 to DESDI KAVID 303552N 0401147E TOKLU 294213N 04202204E RASMO 285713N 0433119E	UP559	RASLI 315424N 0383648E TURAIF (TRF) 314136N 0384405E *Note 7 to DESDI KAVID 303552N 0401147E TOKLU 294213N 04202204E RASMO 285713N 0433119E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	KMC 275250N 0453321E ULOVO 274830N 0455420E *Note 8 (ULOVO-NAPLO) MUSKO 272640N 0473708E KEDAT 272149N 0475901E JUBAIL (JBL) 270222N 0492426E DAROR 270244N 0495815E RAMSI 270249N 0500714E GASSI 2702.9N 05022.5E KOBOK 265839N 0503349E BOXOG 265403N 0504553E DAVRI 264936N 0505731E SODAK 264634N 0510530E DANOB 263946N 0512640E BOTOB 263350N 0514505E ROSAN 263129N 0515220E KUMLA 262609N 0520822E ASPAK 262115N 0522257E TOMSO 260611N 0530214E NALPO 255602N 0532945E RAPSA 253700N 0541700E DESDI 253603N 0544230E		KMC 275250N 0453321E ULOVO 274830N 0455420E *Note 8 (ULOVO-NAPLO) MUSKO 272640N 0473708E KEDAT 272149N 0475901E JUBAIL (JBL) 270222N 0492426E DAROR 270244N 0495815E RAMSI 270249N 0500714E GASSI 2702.9N 05022.5E KOBOK 265839N 0503349E BOXOG 265403N 0504553E DAVRI 264936N 0505731E SODAK 264634N 0510530E DANOB 263946N 0512640E BOTOB 263350N 0514505E ROSAN 263129N 0515220E KUMLA 262609N 0520822E ASPAK 262115N 0522257E TOMSO 260611N 0530214E NALPO 255602N 0532945E RAPSA 253700N 0541700E DESDI 253603N 0544230E
P560	PORT SUDAN (PSD) 311743N 0321416E BOGUM 200736N 0380360E AL BAH (BHA) 201833N 0413845E KITAP 224928N 05229 PORT SUDAN (PSD) 311743N 0321416E	UP560	PORT SUDAN (PSD) 311743N 0321416E BOGUM 200736N 0380360E AL BAH (BHA) 201833N 0413845E KITAP 224928N 05229 PORT SUDAN (PSD) 311743N 0321416E
P561	BENINA (BNA) 320728N 0201513E KATAB 292501N 0290506E	UP561	BENINA (BNA) 320728N 0201513E KATAB 292501N 0290506E
P562	DEESA 294509N 0364102E ENABI 290739N 0385650E TAMRO 283938N 0424147E LOTOK 280857N 0450512E	UP562	DEESA 294509N 0364102E ENABI 290739N 0385650E TAMRO 283938N 0424147E LOTOK 280857N 0450512E
P563	HAIL (HIL) 272630N 0414158E PASAM 273145N 0345642E HURGHADA (HGD) 271140N 0334847E	UP563	HAIL (HIL) 272630N 0414158E PASAM 273145N 0345642E HURGHADA (HGD) 271140N 0334847E
		UP567	BIRJAND (BJD) ODKAT 3540.6N 05457.2E DASHT-E-NAZ (DNZ) 3638.7N 05311.4E (ULDUS -3800.0N 05101.0E) NETON 3945.7N 04811.7E BARUS 4154.2N 04250.5E
P570	KITAL 2003N 06018E MIXAM 234139N 0575523E	UP570	TRIVENDRUM (TVM) POMAN 1156.1N 07200.0E LATEB 1717.1N 06422.0E KITAL 2003N 06018E MIXAM 234139N 0575523E
		UP574	(BELGAUM) BBM (BISET- 1823.4N 06918.1E) TOTOX 215030N 0622230E * Note 7 (OM, OO) KUSRA 231726N 0585102E MIXAM 234138N 0575525E SOLUD 243223N 0564421E GISMO 244743N 0562236E BUBIN 245742N 0560642E TUKLA 2519.6N 05540.2E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			KUMUN 254000N 0551512E PAPAR 264000N 0542700E SHIRAZ SAVEH (SAV) ULDUS
		UP634	LALDO 251806N 0563600E *Note 7 ATBOR 251007N 0551947E
		UP693	AL AHSA (HSA) 251644N 0492902E *Note 8 to BUNDU BATHA (BAT) 241257N 0512707E BUNDU 250024N 0522924E
P699	ATBOR 251007N 0551947E *Note 7 (ATBOR-BAH) SITAT 251105N 0544500E KISAG 251834N 0541408E ITMUS 252322N 0535429E ALSOK 252607N 0533904E RUBAL 252957N 0531723E ORMID 253354N 0525434E *Note 8 (ORMID-KFA) DASLO 254537N 0523029E NAGOG 255214N 0521614E BONAN 260200N 0515505E VEDED 260558N 0514627E KUNDO 261631N 0512325E SOGAT 262029N 0511443E ASTAD 261812N 0505646E BAHRAIN (BAH) 261551N 0503856E NARMI 261802N 0501939E KING FHAD (KFA) 262153N 0494910E	UP699	ATBOR 251007N 0551947E *Note 7 (ATBOR-BAH) SITAT 251105N 0544500E KISAG 251834N 0541408E ITMUS 252322N 0535429E ALSOK 252607N 0533904E RUBAL 252957N 0531723E ORMID 253354N 0525434E *Note 8 (ORMID-KFA) DASLO 254537N 0523029E NAGOG 255214N 0521614E BONAN 260200N 0515505E VEDED 260558N 0514627E KUNDO 261631N 0512325E SOGAT 262029N 0511443E ASTAD 261812N 0505646E BAHRAIN (BAH) 261551N 0503856E NARMI 261802N 0501939E KING FHAD (KFA) 262153N 0494910E
P751	AMIBO 3456.7N 2136.4E BRN 3134.5N 02600.3E KATAB 2925.0N 2905.1E AST 2701.9N 03101.9E LUXOR (LXR) ALEBA 2200.0N 03527.0E PORT SUDAN [ASMARA] * Note 1 TOKAR 1304.0N 04238.8E PARIM 1231.7N 04327.2E ADEN (KRA) ANGAL 1614.0N 06000.0E MUMBAI (BBB)	UP751	AMIBO 3456.7N 2136.4E BRN 3134.5N 02600.3E KATAB 2925.0N 2905.1E AST 2701.9N 03101.9E LUXOR (LXR) ALEBA 2200.0N 03527.0E PORT SUDAN [ASMARA] * Note 1 TOKAR 1304.0N 04238.8E PARIM 1231.7N 04327.2E ADEN (KRA) ANGAL 1614.0N 06000.0E MUMBAI (BBB)
P891	MAGALA (MGA) *Note 7 to KUA KUTEM 264359N 0473521E EGNOV EMILU KUNRU 283220N 0481050E KUWAIT (KUA)	UP891	MAGALA (MGA) *Note 7 to KUA KUTEM 264359N 0473521E EGNOV EMILU KUNRU 283220N 0481050E KUWAIT (KUA)
P899	MIXAM 234139N 0575523E *Note 7 to KUPSA PAXIM 240245N 05617631E ITRAX 241248N 0554749E AL AIN (ALN)	UP899	MIXAM 234139N 0575523E *Note 7 to KUPSA PAXIM 240245N 05617631E ITRAX 241248N 0554749E AL AIN (ALN)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ABU DHABI DASLA N2437.8 E05332.8 VEBAT N2448.5 E05251.0 MEKMA N245430 E0522506 *Note 8 (OB) KUPSA N250445 E0521151		ABU DHABI DASLA N2437.8 E05332.8 VEBAT N2448.5 E05251.0 MEKMA N245430 E0522506 *Note 8 (OB) KUPSA N250445 E0521151
		UP975	(ELAZIG) EZS *Note7 (DYB) 384225N 0391328E LESRI 370420N 0411348E SIDNA 3634.0N 04141.0E TUBEN 351724N 0425434E MUTAG 343003N 0433834E SOGUM 341212N 0435454E SINKA 332137N 0444753E NOLDO 324932N 0452129E *Note 7
P975	NOLDO 324932N 0452129E *Note 7 KATUT 323737N 0453439E DENKI 322228N 0455122E ILMAP 312133N 0465702E PEBAD 305023N 0472958E SIDAD 295231N 0482944E LOVAR 292424N 0484606E SESRA 290800N 00485454E DANAL 285130N 0490448E IMDOX 283454N 0491436E LONOS 283027N 0491713E ORGEL 281312N 0494614E DATEN 273118N 0501832E REVAX 272026N 0502651E GETAL 270409N 0504039E LOSI 270118N 0504208E BOXOG 265403N 0504553E NABOS 264354N 0505145E TOTIS 261119N 0511026E		KATUT 323737N 0453439E DENKI 322228N 0455122E ILMAP 312133N 0465702E PEBAD 305023N 0472958E SIDAD 295231N 0482944E LOVAR 292424N 0484606E SESRA 290800N 00485454E DANAL 285130N 0490448E IMDOX 283454N 0491436E LONOS 283027N 0491713E ORGEL 281312N 0494614E DATEN 273118N 0501832E REVAX 272026N 0502651E GETAL 270409N 0504039E LOSI 270118N 0504208E BOXOG 265403N 0504553E NABOS 264354N 0505145E TOTIS 261119N 0511026E
R2	ATMUL 220000N 0290527E TULOP 252209N 0262226E DITAR 265903N 0250000E	UR2	ATMUL 220000N 0290527E TULOP 252209N 0262226E DITAR 265903N 0250000E
R205	ANARAK (ANK) BIRJAND (BJD)	UR205	ANARAK (ANK) BIRJAND (BJD)
R219	KUKLA 3414.6N 03444.8E KALDE (KAD)	UR219	KUKLA 3414.6N 03444.8E KALDE (KAD)
R401	AMPEX 08 1000N 055 0000E SUHIL 120000N 0550000E DAPAP 151115N 0552354E KIVEL 165306N 0553633E ERDAX 175903N 0554458E HAIMA (HAI) DEMKI 224941N 0562308E MUSAP 241754N 0555245E GIDIS 243600N 0555600E ANVIX 244655N 0555616E AVAMI 250554N 0555647E ULUSA 254925N 0555010E SOGUR 255221N 0554943E *Note7 Eastbound GABKO 260404N 0554755E GHESHM (KHM)	UR401	AMPEX 08 1000N 055 0000E SUHIL 120000N 0550000E DAPAP 151115N 0552354E KIVEL 165306N 0553633E ERDAX 175903N 0554458E HAIMA (HAI) DEMKI 224941N 0562308E MUSAP 241754N 0555245E GIDIS 243600N 0555600E ANVIX 244655N 0555616E AVAMI 250554N 0555647E ULUSA 254925N 0555010E SOGUR 255221N 0554943E *Note7 Eastbound GABKO 260404N 0554755E GHESHM (KHM)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
R402	LAKLU 232235N 0570401E *Note 7 (OO) HAIMA (HAI)	UR402	LAKLU 232235N 0570401E *Note 7 (OO) HAIMA (HAI)
R462	(JIWANI) JI DENDA 2442.5N 06054.8E VUSET 235540N 0590812E *Note 7 (OO) MIXAM 234139N 0575523E	UR462	(JIWANI) JI DENDA 2442.5N 06054.8E VUSET 235540N 0590812E *Note 7 (OO) MIXAM 234139N 0575523E
R650	ASRAB 2547.4N 03306.3E HURGHADA (HGD) SHARM EL SHEIKH (SHM) NUWEIBAA (NWB) NALSO 2932.0N 03453.0E	UR650	ASRAB 2547.4N 03306.3E HURGHADA (HGD) SHARM EL SHEIKH (SHM) NUWEIBAA (NWB) NALSO 2932.0N 03453.0E
R652	QATRANEH (QTR) KIPAS 312320N 0370641E GURIAT (GRY) *Note 7(OE) TURAIIF (TRF) OVANO 3148.0N 03909.8E DAXAN 320512N 0393719E GIBUX 330500N 0411100E RAPLU 332300N 0414530E GEPAP 334906N 0422851E MUTAG 343003N 0433834E DAVAS 351724N 0451235E		
R654	ZANJAN (ZAJ) SAVEH (SAV) ESFAHAN (ISN) YAZD (YZD) KERMAN (KER) NABOD 2816.1N 05825.3E CHAH BAHAR (CBH) EGPIC 2508.6N 06029.5E	UR654	MAGRI 385408N 0462300E ZANJAN (ZAJ) SAVEH (SAV) ESFAHAN (ISN) YAZD (YZD) KERMAN (KER) NABOD 2816.1N 05825.3E CHAH BAHAR (CBH) EGPIC 2508.6N 06029.5E
R655	(LARNACA) LCA CHEKA (CAK) KARIATAIN (KTN)	UR655	(LARNACA) CHEKA (CAK) KARIATAIN (KTN)
R659	TEHRAN(TRN) *Note 7 (ISN-TRN) BOXAM 343749N 0515147E DAPOG 333744N 0522331E *Note 3 (DAPOG-SYZ) SHIRAZ (SYZ) MIDSI 264142N 0515442E *Note 8 (MIDSI-DOH) *Note 7 (MIDSI-VELAM) SOGAN 263915N 0515408E ROSAN 263129N 0515220E DASOS 262430N 0515043E RABLA 261506N 0514834E VEDED 260558N 0514628E VELAM 255426N 0514347E EMISA 254658N 0514207E DOHA (DOH)	UR659	TEHRAN(TRN) *Note 7 (ISN-TRN) BOXAM 343749N 0515147E DAPOG 333744N 0522331E *Note 3 (DAPOG-SYZ) SHIRAZ (SYZ) MIDSI 264142N 0515442E *Note 8 (MIDSI-DOH) *Note 7 (MIDSI-VELAM) SOGAN 263915N 0515408E ROSAN 263129N 0515220E DASOS 262430N 0515043E RABLA 261506N 0514834E VEDED 260558N 0514628E VELAM 255426N 0514347E EMISA 254658N 0514207E DOHA (DOH)
R660	(ERZURUM) (ERZ)	UR660	(ERZURUM) (ERZ)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	DASIS 38 54.5N 044 12.5E TABRIZ (TBZ) RASHT (RST) TEHRAN (TRN)		RASHT (RST) TEHRAN (TRN)
R661	DULAV 3857.0N 04537.9E TABRIZ (TBZ) ZANJAN (ZAJ) RUDESHUR (RUS) VARAMIN (VR) DEHNAMAK (DHN)	UR661	DULAV 3857.0N 04537.9E TABRIZ (TBZ) ZANJAN (ZAJ) RUDESHUR (RUS) VARAMIN (VR) DEHNAMAK (DHN)
		UR674	SABEL 185158N 0520339E LOTEL 180926N 0514103E PASUL 180341N 0513803E GOGRI 170752N 0510857E OBTAS 164633N 0505756E RARBA 161021N 0503920E UKORA 152407N 0501547E NAKAD 150056N 0500402E DANAN 144010N 0495334E XABIL 142924N 0494809E EMABI 141627N 0494139E PAXED 135027N 0492759E DEMGO 120258N 0483040E
R777	DANAK 1608.0N 04129.0E SANA'A TAIZ ARABO 1238.8N 04404.0E TORBA 1210.6N 04402.1E	UR777	DANAK 1608.0N 04129.0E SANA'A TAIZ ARABO 1238.8N 04404.0E TORBA 1210.6N 04402.1E
R784	SHARJAH (SHJ) ORSAR 2604.5N 05357.5E *Note 8 (OM) DURSI 2712.3N 05201.7 E IMDAT 2740.0N 05113.0E ALNIN 2840.9N 05001.6E NANPI 290457N 0493157E SIDAD 295231N 0482944E	UR784	SHARJAH (SHJ) ORSAR 2604.5N 05357.5E *Note 8 (OM) DURSI 2712.3N 05201.7 E IMDAT 2740.0N 05113.0E ALNIN 2840.9N 05001.6E NANPI 290457N 0493157E SIDAD 295231N 0482944E
R785	TURAIF (TRF) ZELAF 3257.0N 03800.0E KARIATAIN (KTN) BANIAS (BAN) NIKAS 3511.6N 03543.0E	UR785	TURAIF (TRF) ZELAF 3257.0N 03800.0E KARIATAIN (KTN) BANIAS (BAN) NIKAS 3511.6N 03543.0E
R794	ULDUS 3810.0N 05020.0E NOSHahr (NSR) DEHNAMAK (DHN) TABAS (TBS) BIRJAND (BJD) * Note 5 (OI)	UR794	ULDUS 3810.0N 05020.0E NOSHahr (NSR) DEHNAMAK (DHN) TABAS (TBS) BIRJAND (BJD) * Note 5 (OI)
R799	IMPOS 183136N 0511848 E PASUL 180341N 0513803E TONRO 165850N 0522235E ASMAK 162327N 0524634E ENADO 153333N 0532015E	UR799	IMPOS 183136N 0511848 E PASUL 180341N 0513803E TONRO 165850N 0522235E ASMAK 162327N 0524634E ENADO 153333N 0532015E

TABLE ATM II-MID-2 – MID SSR CODE ALLOCATION LIST

Code	AMMAN	BAGHDAD	BAHRAIN	BEIRUT	CAIRO	DAMASCUS	EMIRATES	JEDDAH	KHARTOUM	KUWAIT	MUSCAT	SAN'A	TEHRAN	TRIPOLI
0001-0077 ²														
0101-0177 ¹									T					
0200-0277 ¹								D						
0300-0377 ²														
0400-0477 ²	D						D							
0500-0577 ¹							T							
0600-0677 ¹					D		D			D				
0700-0777 ¹	T													
1001-1077 ¹		T												
1101-1177 ¹	D						D						D	
1200-1277 ¹			D						D					
1300-1377 ¹		D					D							D
1400-1477 ¹										T				
1500-1577 ¹													D	
1600-1677 ¹					T									
1700-1777 ¹							T							
2001-2077 ³														T
2100-2177 ¹			D											
2200-2277 ¹			T											
2300-2377 ¹					D									
2400-2477 ¹	D													
2500-2577 ¹				D				D						
2600-2677 ¹			T											
2700-2777 ¹			D		D									
3000-3077 ¹						D		D						
3100-3177 ¹								T						
3200-3277 ¹			T											
3300-3377 ¹					T									
3400-3477 ¹							T							
3500-3577 ¹								D						
3600-3677 ¹													T	
3700-3777 ¹										D		D		
4000-4077 ¹											T			
4100-4177 ¹								D					D	
4200-4277 ¹								T						
4300-4377 ¹				T										
4400-4477 ¹			T											
4500-4577 ¹								T						
4600-4677 ¹									D		D			
4700-4777 ¹											T			

Code	AMMAN	BAGHDAD	BAHRAIN	BEIRUT	CAIRO	DAMASCUS	EMIRATES	JEDDAH	KHARTOUM	KUWAIT	MUSCAT	SANANA	TEHRAN	TRIPOLI
5000-5077 ¹								D						
5100-5177 ¹													T	
5200-5277 ¹								T						
5300-5377 ³														
5400-5477 ¹													T	
5500-5577 ³														
5600-5677 ¹								D					D	
5700-5777 ¹						T								
6000-6077 ¹							D		D					
6100-6177 ¹							D					D		
6200-6277 ¹							T							
6300-6377 ¹								D					D	
6400-6477 ³														
6500-6577 ¹											D			
6600-6677 ¹											D			
6700-6777 ²														
7001-7077 ¹													T	
7100-7177 ²														
7200-7277 ¹		T												
7300-7377 ¹					T									
7400-7477 ¹		D												
7501-7577 ²														
7613-7677 ²														
7701-7775 ²														

T: codes allocated for Transit use

D: codes allocated for Domestic use

¹ Series allocated to the MID Region and Assigned to MID States

² MID Region SSR Reserve List for Domestic use

³ MID Region SSR Reserve List for Transit use

MID ANP, VOLUME II
PART V – METEOROLOGY (MET)

1. INTRODUCTION

1.1 This part of the MID ANP, Volume II, complements the provisions in the ICAO SARPs and PANS related to aeronautical meteorology (MET). It contains dynamic plan elements related to the assignment of responsibilities to States for the provision of MET facilities and services within a specified area in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300); and mandatory requirements related to the MET facilities and services to be implemented by States in accordance with regional air navigation agreements. Such agreement indicates a commitment on the part of the States concerned to implement the requirements specified.

2. GENERAL REGIONAL REQUIREMENTS

Meteorological offices

2.1 In the MID Region, meteorological watch offices (MWO) have been designated to maintain continuous watch on meteorological conditions affecting flight operations within their area(s) of responsibility, as indicated at **Table MET II-1**.

Meteorological observations and reports

2.2 In the MID Region, routine observations, issued as a METAR, should be made throughout the 24 hours of each day at intervals of one hour or, for RS and AS designated aerodromes¹, at intervals of one half-hour at aerodromes as indicated in **Table MET II-2**. For aerodromes included on the VHF VOLMET broadcast as indicated in **Table MET II-3**, routine observations, issued as METAR, should be made throughout the 24 hours of each day.

2.3 At aerodromes that are not operational throughout 24 hours, METAR should be issued at least 3 hours prior to the aerodrome resuming operations in the MID Region.

Forecasts

2.4 In the MID Region, an aerodrome forecast, issued as a TAF, should be for the aerodromes indicated in **Table MET II-2**.

2.5 In the MID Region, the period of validity of a routine TAF should be of 9-, 24-, or 30-hours to meet the requirements indicated in **Table MET II-2**.

2.6 In the MID Region, the forecast maximum and minimum temperatures expected to occur during the period of validity, together with their corresponding day and time of occurrence, should be included in TAF at aerodromes indicated in **Table MET II-2**.

2.7 In the MID Region, landing forecasts (prepared in the form of a trend forecast) should be provided at aerodromes indicated in **Table MET II-2**.

¹ Refer to Table AOP II-1

Requirements for and use of communications

2.8 Operational meteorological information prepared as METAR, SPECI and TAF for aerodromes indicated in **Table MET II-2**, and SIGMET messages prepared for flight information regions or control areas indicated in **Table MET II-1**, should be disseminated to the international OPMET databanks designated for the MID Region (namely Jeddah and Bahrain (backup) Regional OPMET Centres) and to the centre designated for the operation of the aeronautical fixed service satellite distribution system (SADIS) and the Internet-based service (Secure SADIS FTP) and/or WIFS in the MID Region.

2.9 SIGMET messages should be disseminated to other meteorological offices in the MID Region.

2.10 Special air-reports that do not warrant the issuance of a SIGMET should be disseminated to other meteorological offices in the MID Region.

2.11 In the MID Region, meteorological information for use by aircraft in flight should be supplied through VOLMET broadcasts.

2.12 In the MID Region, the aerodromes for which METAR and SPECI are to be included in VOLMET broadcasts, the sequence in which they are to be transmitted and the broadcast time, is indicated in **Table MET II-3**.

3. SPECIFIC REGIONAL REQUIREMENTS

3.1 In the MID Region, operational meteorological information during the Pilgrimage Season should be issued as indicated in **Table II-MID-1**.

TABLE MET II-1 - METEOROLOGICAL WATCH OFFICES

EXPLANATION OF THE TABLE

Column

- 1 Name of the State where meteorological service is required
- 2 Name of the flight information region (FIR) or control area (CTA) where meteorological service is required
Note: The name is extracted from the ICAO Location Indicators (Doc 7910) updated quarterly. If a State wishes to change the name appearing in Doc 7910 and this table, ICAO should be notified officially.
- 3 ICAO location indicator of the FIR or CTA
- 4 Name of the meteorological watch office (MWO) responsible for the provision of meteorological service for the FIR or CTA
Note: The name is extracted from the ICAO Location Indicators (Doc 7910) updated quarterly. If a State wishes to change the name appearing in Doc 7910 and this table, ICAO should be notified officially.
- 5 ICAO location indicator of the responsible MWO
- 6 Requirement for SIGMET information (excluding for volcanic ash and for tropical cyclones) to be provided by the MWO for the FIR or CTA concerned, where:
 - Y – Yes, required
 - N – No, not required
- 7 Requirement for SIGMET information for volcanic ash to be provided by the MWO for the FIR or CTA concerned, where:
 - Y – Yes, required
 - N – No, not required
- 8 Requirement for SIGMET information for tropical cyclone to be provided by the MWO for the FIR or CTA concerned, where:
 - Y – Yes, required
 - N – No, not required
- 9 Requirement for AIRMET information to be provided by the MWO for the FIR or CTA concerned, where:
 - Y – Yes, required
 - N – No, not required

State	FIR or CTA Where Meteorological Service is Required		Responsible Meteorological Watch Office		Meteorological Service To Be Provided			
	Name	ICAO Location Indicator	Name	ICAO Location Indicator	SIGMET (WS)	SIGMET (WV)	SIGMET (WC)	AIRMET (WA)
1	2	3	4	5	6	7	8	9
BAHRAIN	BAHRAIN FIR	OBBB	BAHRAIN INTL	OBBI	Y	Y	Y	
EGYPT	CAIRO FIR	HECC	CAIRO INTL	HECA	Y	Y		Y
IRAN (ISLAMIC REPUBLIC OF)	TEHRAN FIR	OIIX	TEHRAN/ MEHRABAD INTL	OIII	Y	Y	Y	
IRAQ	BAGHDAD FIR	ORBB	BAGHDAD INTL	ORBI	Y	Y		
JORDAN	AMMAN FIR	OJAC	AMMAN/QUEEN ALIA	OJAI	Y	Y		
KUWAIT	KUWAIT FIR	OKAC	KUWAIT INTL	OKBK	Y	Y	Y	
LEBANON	BEIRUT FIR	OLBB	BEIRUT/BEIRUT INTL	OLBA	Y	Y		
LIBYA	TRIPOLI FIR	HLLL*	TRIPOLI/TRIPOLI INTL	HLLT	Y	Y		
OMAN	MUSCAT FIR	OOMM	MUSCAT/MUSCAT INTL	OOMS	Y	Y	Y	
SAUDI ARABIA	JEDDAH FIR	OEJD	JEDDAH/KING ABDULAZIZ INTL	OEJN	Y	Y	Y	
SUDAN	KHARTOUM FIR	HSSS	KHARTOUM	HSSS	Y	Y		
SYRAIN ARAB REPUBLIC	DAMASCUS FIR	OSDI	DAMASCUS INTL	OSDI	Y	Y		
UNITED ARAB EMIRATES	EMIRATES FIR	OMAE	ABU DHABI INTL	OMAA	Y	Y	Y	
YEMEN	SANAA' FIR	OYSN	SANAA' INTL	OYSN	Y	Y	Y	

TABLE MET II-2 - AERODROME METEOROLOGICAL OFFICES

EXPLANATION OF THE TABLE

Column

- 1 Name of the State where meteorological service is required
- 2 Name of the AOP aerodrome where meteorological service is required
Note: The name is extracted from the ICAO Location Indicators (Doc 7910) updated quarterly. If a State wishes to change the name appearing in Doc 7910 and this table, ICAO should be notified officially.
- 3 ICAO location indicator of the AOP aerodrome
- 4 Designation of AOP aerodrome:
 - RG - international general aviation, regular use
 - RS - international scheduled air transport, regular use
 - RNS - international non-scheduled air transport, regular use
 - AS - international scheduled air transport, alternate use
 - ANS - international non-scheduled air transport, alternate use
- 5 Name of the aerodrome meteorological office responsible for the provision of meteorological service
Note: The name is extracted from the ICAO Location Indicators (Doc 7910) updated quarterly. If a State wishes to change the name appearing in Doc 7910 and this table, ICAO should be notified officially.
- 6 ICAO location indicator of the responsible aerodrome meteorological office
- 7 Requirement for METAR/SPECI from the aerodrome concerned, where:
 - Y – Yes, required
 - N – No, not required
- 8 Requirement for information on the state of the runway provided by the appropriate airport authority to be included as supplementary information in METAR/SPECI from the aerodrome concerned, where:
 - Y – Yes, required
 - N – No, not required
- 9 Requirement for trend forecast to be appended to METAR/SPECI from the aerodrome concerned, where
 - Y – Yes, required
 - N – No, not required
- 10 Requirement for TAF from the aerodrome concerned, where
 - C - Requirement for 9-hour validity aerodrome forecasts in TAF code (9H)
 - T - Requirement for 18/24-hour validity aerodrome forecasts in TAF code (18/24H)
 - X - Requirement for 30-hour validity aerodrome forecasts in TAF code (30H)
 - N – No, not required
- 11 Requirement for maximum and minimum temperature (expected to occur during the period of validity of the TAF) to be included in TAF from the aerodrome concerned, where:
 - Y – Yes, required
 - N – No, not required
- 12 Availability of METAR/SPECI and TAF from the aerodrome concerned, where:
 - F – Full availability : OPMET information as listed issued for the aerodrome all through the 24-hour period
 - P – Partial availability: OPMET information as listed not issued for the aerodrome for the entire 24-hour period

State	AOP Aerodrome where meteorological service is to be provided			Responsible aerodrome meteorological office		Observations and forecasts to be provided					METAR/SPECI and TAF availability	
	Name	ICAO Location Indicator	Use	Name	ICAO Location Indicator	METAR/SPECI	State of the runway	Trend forecast	TAF	Temperature Tx/Tn		
1	2	3	4	5	6	7	8	9	10	11	12	
BAHRAIN	BAHRAIN INTL	OBBI	RS	BAHRAIN INT'L	OBBI	Y	N	Y	X	N	F	
EGYPT	ALEXANDRIA/B ORG EL-ARAB INTL	HEBA	RS	CAIRO INTL	HECA	Y		Y	X		F	
	ASWAN INTL	HESN	RS	CAIRO INTL	HECA	Y		Y	X		F	
	CAIRO INTL	HECA	RS	CAIRO INTL	HECA	Y		Y	X		F	
	HURGHADA INTL	HEGN	RS	CAIRO INTL	HECA	Y		Y	X		F	
	LUXOR INTL	HELX	RS	CAIRO INTL	HECA	Y		Y	X		F	
	MARSA ALAM INTL	HEMA	RS	CAIRO INTL	HECA	Y		Y	X		F	
	SHARM EL SHEIKH INTL	HESH	RS	CAIRO INTL	HECA	Y		Y	X		F	
IRAN (ISLAMIC REPUBLIC OF)	BANDAR ABBASS INTL	OIKB	RS	TEHRAN/ MEHRABAD INTL	OIII	Y			T		F	
	ESFAHAN / SHAHID BEHESHTI INTL	OIFM	RS	TEHRAN/ MEHRABAD INTL	OIII	Y			X		F	
	MASHHAD/ SHAHID HASHEMI NEJAD INTL	OIMM	RS	TEHRAN/ MEHRABAD INTL	OIII	Y			T		F	
	SHIRAZ/ SHAHID DASTGHAIB INTL	OISS	RS	SHIRAZ/ SHAHID DASTGHAIB INTL	OISS	Y		Y	X		F	
	TABRIZ INTL	OITT	RNS	TABRIZ/ INTL	OITT	Y			X		F	
	TEHRAN/ IMAM KHOMAINI INTL	OIIE	RS	TEHRAN/ MEHRABAD INTL	OIII	Y		Y	X		F	
	TEHRAN/ MEHRABAD INTL	OIII	RS	TEHRAN/ MEHRABAD INTL	OIII	Y		Y	T		F	
	YAZD/SHAHID SADOOGHI INTL*	OIYY	RS			Y						F

	ZAHEDAN INTL	OIZH	RS	TEHRAN/ MEHRABAD INTL	OIII	Y		T	F
IRAQ	AL NAJAF	ORNI	RNS			Y		T	F
	BAGHDAD INTL	ORBI	RS	BAGHDAD INTL	ORBI	Y	Y	T	F
	BASRAH INTL	ORMM	RS	BAGHDAD INTL	ORBI	Y	Y	T	F
	ERBIL INTL	ORER	RS			Y		T	F
	MOSUL INTL	ORBM	RS	BAGHDAD INTL	ORBI		Y	T	F
	SULAYMANIYAH INTL	ORSU	RS			Y		T	F
JORDAN	AMMAN/ MARKA	OJAM	AS	AMMAN/ MARKA	OJAM	Y	Y	T	F
	AMMAN/ QUEEN ALIA	OJAI	RS	AMMAN/ MARKA	OJAM	Y	Y	X	F
	AQABA/ KING HUSSEIN	OJAQ	RNS	AMMAN/ MARKA	OJAM	Y			F
KUWAIT	KUWAIT INTL	OKBK	RS	KUWAIT/ INTL	OKBK	Y	Y	X	F
LEBANON	BEIRUT/ BEIRUT INTL	OLBA	RS	BEIRUT/ BEIRUT INTL	OLBA	Y	Y	X	F
LIBYA	BENGHAZI / BENINA INTL	HLLB	RS	BENGHAZI / BENINA INTL	HLLB	Y	Y	T	F
	SEBHA / SEBHA INTL	HLLS	RS	BENGHAZI / BENINA INTL	HLLB	Y			F
	TRIPOLI / TRIPOLI INTL	HLLT	RS	TRIPOLI / TRIPOLI INTL	HLLT	Y	Y	T	F
OMAN	MUSCAT/ MUSCAT INTL.	OOMS	RS	MUSCAT/ MUSCAT INTL.	OOMS	Y	Y	X	F
	SALALAH	OOSA	AS	SALALAH	OOSA	Y		X	F
QATAR	DOHA INTL	OTBD	RS	DOHA INTL	OTBD	Y	Y	T	F
	HAMAD INTL	OTHH	RS	DOHA INTL	OTBD		Y	X	F
SAUDI ARABIA	DAMMAM/ KING FAHD INTL	OEDF	RS			Y		X	F
	JEDDAH/ KING ABDULAZIZ INTL	OEJN	RS	JEDDAH/ KING ABDULAZIZ INTL	OEJN	Y	Y	X	F
	MADINAH/ PRINCE MOHAMMAD BIN ABDULAZIZ INTL	OEMA	RS	JEDDAH/ KING ABDULAZIZ INTL	OEJN	Y	Y	T	F

	RIYADH/ KING KHALED INTL	OERK	RS	JEDDAH/ KING ABDULAZIZ INTL	OEJN	Y	Y	X	F
SOUTH SUDAN	JUBA	HSSJ	RS	KHARTOUM	HSSS	Y	Y		F
SUDAN	EL OBEID/EL OBEID	H SOB	AS			Y			F
	KHARTOUM	HSSS	RS	KHARTOUM	HSSS	Y	Y	X	F
	NYALA/NYALA	H SNN	AS			Y			F
	PORT SUDAN	HSPN	RS	WADI HALFA	HSSW	Y		X	F
SYRIAN ARAB REPUBLIC	ALEPPO INTL	OSAP	RS	DAMASCUS INTL	OSDI	Y		T	F
	BASSEL AL- ASSAD INTL LATTAKIA	OSLK	RS	DAMASCUS INTL	OSDI	Y		T	F
	DAMASCUS INTL	OSDI	RS	DAMASCUS INTL	OSDI	Y	Y	X	F
UNITED ARAB EMIRATES	ABU DHABI INTL	OMAA	RS	ABU DHABI INTL	OMAA	Y	Y	X	F
	AL AIN INTL	OMAL	RS	ABU DHABI INTL	OMAA	Y	Y	X	F
	ABU DHABI/ AL BATEEN EXECUTIVE	OMAD	RS	ABU DHABI INTL	OMAA	Y	Y	X	F
	DUBAI INTL	OMDB	RS	DUBAI INTL	OMDB	Y	Y	X	F
	DUBAI/ AL MAKTOUM INTL	OMDW	RS	DUBAI INTL	OMDB	Y	Y	X	F
	FUJAIRAH INTL	OMFJ	RS	DUBAI INTL	OMDB	Y		X	F
	RAS AL KHAIMAH INTL	OMRK	RS	DUBAI INTL	OMDB	Y		X	F
	SHARJAH INTL	OMSJ	RS	DUBAI INTL	OMDB	Y		X	F
YEMEN	ADEN INTL	OYAA	RS	SANAA/ INTL	OYSN	Y	Y	X	F
	HODEIDAH INTL	OYHD	RS	SANAA/ INTL	OYSN	Y		T	F
	MUKALLA INTL	OYRN	RS	SANAA/ INTL	OYSN	Y		T	F
	SANAA INTL	OYSN	RS	SANAA/ INTL	OYSN	Y		T	F
	TAIZ INTL	OY TZ	RS	SANAA/ INTL	OYSN	Y		T	F

TABLE MET II-3 – VOLMET BROADCASTS

EXPLANATION OF THE TABLE

The transmitting station appears at the top of each block.

Names in lower case letters indicate aerodromes for which reports (routine or selected special) are required.

Names in upper-case letters indicate aerodromes for which forecasts are required.

Istanbul 25B30 55B60	Shiraz 20B25 50B55	Tehran 15B20 45B50
Istanbul Ankara Athinai Thessaloniki Roma Tehran ISTANBUL	Tehran Shiraz Isfahan Kuwait Bandar Abbass Bahrain Muscat Dubai SHIRAZ	Tehran Shiraz Mashhad Karachi Ashgabat Baku Yerevan Tashkent TEHRAN

TABLE MET II-MID-1 - EXCHANGE OF OPERATIONAL METEOROLOGICAL INFORMATION DURING THE PILGRIMAGE SEASON

EXPLANATION OF THE TABLE

Column

- 1 Name of the State in which the operational meteorological information should be available.
- 2 Location from which, or related to which, the operational meteorological information refers.
- 3 TF – Aerodrome forecasts X: Seasonal requirement
- 4 RF – Route forecasts

To be available in	From or related to	Information required	
		TF	RF
1	2	3	4
LIBYA	DHAHRAN	X	
	MADINAH	X	
	RIYADH	X	
	ALGER (Route CASABLANCA-TRIPOLI)		X
	CAIRO (Route TRIPOLI-JEDDAH)		X
SAUDI ARABIA	ABIDJAN	X	
	ACCRA	X	
	AKTYUBINSK	X	
	ALGER (Route CASABLANCA-TRIPOLI)		X
	ALMATY	X	
	ASKHABAT	X	
	BAMA KO	X	
	BANGUI	X	
	BRAZZAVILLE		X
	CAIRO (Route TRIPOLI-JEDDAH)	X	
	CONAKRY	X	
	COTONOU	X	
	DAKAR	X	
	DOUALA	X	
	DUSHANBE		X
	KHARTOUM (Route KHARTOUM-GENEINA)	X	
	KYIV	X	
	NOUADHIBOU	X	
	OUAGADOUGOU	X	
	SAL ISLAND	X	
	SAMARKAND	X	
	TASHKENT		
SUDAN	BAMA KO	X	
	CONAKRY	X	

To be available in	From or related to	Information required	
		TF	RF
1	2	3	4
	DAKAR	X	
	NOUADHIBOU	X	
	OUAGADOUGOU	X	
	SAL ISLAND	X	
	JEDDAH (Route		X
	JEDDAH-		
	KHARTOUM)		

MID ANP, VOLUME II

PART VI - SEARCH AND RESCUE (SAR)

1. INTRODUCTION

1.1 This part of the MID ANP, Volume II, complements the provisions in ICAO SARPs and PANS related to search and rescue (SAR). It contains dynamic plan elements related to the assignment of responsibilities to States for the provision of SAR facilities and services within a specified area in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300); and mandatory requirements related to the SAR facilities and services to be implemented by States in accordance with regional air navigation agreements. Such agreement indicates a commitment on the part of the State(s) concerned to implement the requirement(s) specified.

2. GENERAL REGIONAL REQUIREMENTS

2.1 The Rescue Coordination Centres (RCCs) and Rescue Sub-Centres (RSCs) for the MID Region are listed in **Table SAR II-1** and depicted in **Chart SAR I-1**.

2.2 In cases where the minimum SAR facilities are temporarily unavailable, alternative suitable means should be made available.

2.3 In cases where a SAR alert is proximate to a Search and Rescue Region (SRR) boundary (e.g. 50 NM or less), or it is unclear if the alert corresponds to a position entirely contained within an SRR, the adjacent RCC or RSC should be notified of the alert immediately.

3. SPECIFIC REGIONAL REQUIREMENTS

3.1 The contact details for the SAR Point of Contact (SPOC) – COSPAS-SARSAT in the MID Region are at **Table SAR II-MID-1**

TABLE SAR II-1 - RESCUE COORDINATION CENTRES (RCCs) AND RESCUE SUB CENTRES (RSCs) IN THE MID REGION

EXPLANATION OF THE TABLE

Column

- 1 State
- 2 Name of the Rescue Coordination Centre (RCC) and Rescue Sub-centre (RSC).
- 3 SAR points of contact (SPOC). Name of the SPOC.
- 4 Remarks. Supplementary information such as the type of RCC (e.g. maritime or aviation or joint).

RCC and Rescue Units		SPOC	Remarks
1	2	3	4
BAHRAIN			
RCC	BAHRAIN RCC	RCC ATC Bahrain	
RSC	Qatar	DJRCC	
EGYPT			
RCC	CAIRO RCC	SAR Centre	
RSC	Alexandria		
	El Ariesh		
	Hurghada		
	Luxor		
	M. Matruh		
	Ras-Banas		
IRAN			
RCC	TEHRAN RCC	RCC Tehran	
RSC	Bandar Abbass		
	Busherhr		
	Esfahan		
	Kerman		
	Kermanshah		
	Mashhad		
	Tabriz		
	Zahedan		
IRAQ			
RCC	BAGHDAD RCC	CENTAF-AUAB CAOC JSRC	
RSC	Kirkuk		
	Shaibah		
	Basrah		
JORDAN			
RCC	AMMAN RCC	RCC ATC Amman	
RSC	-		

RCC and Rescue Units		SPOC	Remarks
1	2	3	4
KUWAIT			
RCC	KUWAIT RCC	RCC ATC Kuwait	
RSC	-		
LEBANON			
RCC	BEIRUT RCC	RCC Beirut	
RSC	Tripoli		
LIBYA			
RCC	TRIPOLI RCC	CAA	
RSC	Marsa Brega		
	Sirte		
	Tobruk		
OMAN			
RCC	MUSCAT RCC	RCC Muscat Air Force	
RSC	Salalah		
SAUDI ARABIA			
RCC	JEDDAH RCC	SAMCC	
RSC	Dammam		
SUDAN			
RCC	KHARTOUM RCC	ACC Khartoum	
RSC	El Obeid		
	Juba		
	Port Sudan		
SYRIA			
RCC	DAMASCUS RCC	RCC ATC	
RSC	Damascus		
	Latakia		
UAE			
RCC	ABU DHABI RCC	AEMCC	
RSC	Abu Dhabi		
	Dubai		
YEMEN			
RCC	SANA'A RCC	RCC Sanaa	
RSC	Aden		
	Hodeidah		
	Riyan		

TABLE SAR II-MID-1 - MID REGION SAR POINT OF CONTACT (SPOC) – COSPAS-SARSAT

STATE	SPOC NAME	ADDRESS	EMAIL	TEL	FAX	AFTN	ASS. MCC/ STATE ²	LAST REVISION	REMARK
Bahrain	RCC ATC Bahrain	Bahrain CAA, Air Navigation Directorate P.O. Box 586 Kingdom of Bahrain	Bahatc@caa.gov.bh	(973) 17321081 17321080	(973) 17321905	OBBISARX	SAMCC Saudi Arabia	16-April-2013	
Egypt	SAR Centre	SAR Centre Almaza Air Base Heliopolis, Cairo, Egypt	jrcc136@afmic.gov.eg mmc@saregypt.net nahedh@tra.gov.eg	(202) 24184537 24184531	(202) 24184537 24184531	HECCYCYX	ALMCC Algeria	22-OCT-2013	TELEX: (91) 21095 RCCC RUN
Iran	RCC Tehran	Civil Aviation Organization SAR Coordination Centre Mehrabad Airport Tehran, Iran	SAR@cao.ir IRAN-SAR@airport.ir rcc.IRAN@airport.ir	(9821) 44544107 44544116 44544060	(9821) 44544117 44544106	OIIZRZX	TRMCC Turkey	1-Jan-2013	
Iraq	RCC ATC Baghdad'	Baghdad ACC, Baghdad International Airport	atc_iraqcaa@yahoo.com	(964) 7901654653	(974) 15430764		TRMCC Turkey	18-Mar.-2015	
Jordan	RCC ATC Amman	RCC Civil Aviation Authority Amman Airport, Jordan		(9626) 4451672	(9626) 4451667	OJACZQZX	SAMCC Saudi Arabia	16-Apr-2013	
Kuwait	RCC ATC Kuwait	RCC DGCA Kuwait International Airport, P.O.Box 17, Kuwait		(965) 24760463 24762994	(965) 24346515 24346221	OKBKZQZX OKBKNSAR	SAMCC Saudi Arabia	16-Apr-2013	
Lebanon	RCC Beirut	RCC, DGCA Lebanon, Hariri Int'l Airport- Beirut, Lebanon		(961) 1628161	(961) 1628186 1629035	OLBIZQZX	SAMCC Saudi Arabia	16-Apr-2013	
Libya	CAA	CAA, Tripoli Int'l Airport, Libya	info@sar.caa.ly	(218.21) 5632332 4446799 3606868	(218.21) 563 0257 360 6868	HLLTYCYX	ALMCC Algeria	16-May-2013	TELEX (218.21) 5632332

² Associated COSPAS-SARSAT Mission Control Center / State where it is located

STATE	SPOC NAME	ADDRESS	EMAIL	TEL	FAX	AFTN	ASS. MCC/ STATE ²	LAST REVISION	REMARK
Oman	RCC Muscat Air Force	RCC, HQ RAFO P.O.Box 730 Central Post Office Muscat Int'l Airport, Oman		(968) 24519209 24519332	(968) 24334776 24338692	OOMSYAYX	SAMCC Saudi Arabia	16-Apr-2013	
Qatar	DJRCC	P.O. Box 37 Doha, Qatar	qatsar@yahoo.com	(974) 44980384		OTBDZTZX	SAMCC Saudi Arabia	02-Apr-2015	
Saudi Arabia*	SAMCC	KSA.GACA / Air Navigation services P.O.Box 929 Jeddah 21421 Saudi Arabia	samcc@gaca.gov.sa	(96612) 6150170 6855812 (96650) 4601445	(96612) 6150171 6402855	OEJNSAR	SAMCC Saudi Arabia	28-Jun-2013	TEL 3 & FAX 2 for Head of SAMCC
Sudan	ACC Khartoum	Khartoum Airport, Sudan		(249.183) 788192 784925	(249.183) 528323	HSSSYCYX	ITMCC Italy	16-Apr-2013	Thuraya +8821655524 296
Syria	RCC ATC	General Civil Aviation Authority		(963.11) 5400540	(963.11) 5400312	OSDIZQZX	SAMCC Saudi Arabia	16-Apr-2013	
UAE*	AEMCC	SAR Coordination Center P.O.Box 906 GHQ Armed Forces UAE	aemcc@uae-jrcc.ae	(971.2) 4056144 4496866	(971.2) 4496844	OMADYCYX	AEMCC UAE	23-Sep-2011	
Yemen	RCC Sanaa	RCC Department of Civil Aviation Sanaa, Yemen		(967) 1344673	(967) 1345916	OYSNYCYX	SAMCC Saudi Arabia	16-April-2013	

* Associated COSPAS-SARSAT Mission Control Centre/State where it is located

CHART SAR II-1
RESCUE COORDINATION CENTRES (RCCS) AND RESCUE SUB-CENTRES (RSCS) FOR THE MID REGION

TBD

MID ANP, VOLUME II

PART VII - AERONAUTICAL INFORMATION MANAGEMENT (AIM)

1. INTRODUCTION

1.1 This part of the MID ANP, Volume II, complements the provisions in ICAO SARPs and PANS related to AIS/ AIM and aeronautical charts (MAP). It contains dynamic plan elements related to the assignment of responsibilities to States for the provision of AIS/ AIM facilities and services within a specified area in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300); and mandatory requirements related to the AIS/ AIM facilities and services to be implemented by States in accordance with regional air navigation agreements. Such agreement indicates a commitment on the part of the State(s) concerned to implement the requirement(s) specified.

2. GENERAL REGIONAL REQUIREMENTS

2.1 The responsibility for the provision of AIS/ AIM facilities and services in the MID Region, is reflected in the **Table AIM II-1**, which shows the list of designated international NOTAM Office (NOF), designated State for AIP production, designated State for aeronautical charts (MAP) production, designated State for the provision of the authoritative Integrated Aeronautical Information Database (IAID) and designated State for the provision of the pre-flight information services.

2.2 States should designate and implement an authoritative Integrated Aeronautical Information Database (IAID) where data sets are integrated and used to produce current and future AIS/ AIM products and services, which is a fundamental step in the transition to AIM. The designation of authoritative databases should be clearly stated in the Aeronautical Information Package AIP.

2.3 The national plans for the transition from AIS to AIM identifying clearly the timelines for the implementation of the different elements of the ICAO Roadmap for the transition from AIS to AIM should be submitted by States to the ICAO MID Regional Office. States should also inform the ICAO MID Regional Office of any update.

2.4 States should take necessary measures to ensure that aeronautical information and data they provide meet the regulatory Aeronautical Data quality requirements.

2.5 The Quality Management System (QMS) in AIS/ AIM should define procedures to meet the safety and security objectives associated with the management of aeronautical data and information.

2.6 Recognizing the need to maintain or enhance existing safety levels of operations, States should ensure that any change to the existing systems or the introduction of new systems used for processing aeronautical data and/ or information are preceded by a safety assessment.

2.7 Technical services responsible for origination of the raw aeronautical information should be acquainted with the requirements for promulgation and advance notification of changes that are operationally significant as established in Annexes 11 and 14 and other relevant ICAO documentation. They should take due account of the time needed by AIS/ AIM for the preparation, production and issue of the relevant material, including the compliance with the AIRAC procedures.

2.8 AIS/ AIM personnel should be involved in the air navigation planning processes. This should ensure the timely preparation of appropriate AIS documentation and that the effective dates for changes to the air navigation system and procedures are satisfied.

2.9 States should produce relevant aeronautical charts required for civil air operations employing

visual air navigation independently or in support of other forms of air navigation. The production responsibility for sheets of the World Aeronautical Chart (WAC) — ICAO 1: 1 000 000 or Aeronautical Chart — ICAO 1: 500 000 (*as an alternative to the World Aeronautical Chart — ICAO 1:1 000 000*) is set out in **Table AIM II-2**.

3. SPECIFIC REGIONAL REQUIREMENTS

None.

TABLE AIM II-1 - RESPONSIBILITY FOR THE PROVISION OF AIS/ AIM FACILITIES AND SERVICES IN THE MID REGION

EXPLANATION OF THE TABLE

Column:

- 1 Name of the State or territory
- 2 Designated international NOTAM Office (NOF)
- 3 Designated State for AIP production
- 4 Designated State for aeronautical charts (MAP) production
- 5 Designated State for the provision of the authoritative Integrated Aeronautical Information Database (IAID)
- 6 Designated State for the provision of pre-flight information services
- 7 Remarks — additional information, as appropriate.

State	NOF	AIP	MAP	IAID	Pre-flight briefing	Remarks
1	2	3	4	5	6	7
BAHRAIN	BAHRAIN*	BAHRAIN	BAHRAIN	BAHRAIN	BAHRAIN	
EGYPT	CAIRO	EGYPT	EGYPT	EGYPT	EGYPT	
IRAN, ISLAMIC REPUBLIC OF	TEHRAN	IRAN	IRAN	IRAN	IRAN	
IRAQ	BAGHDAD	IRAQ	IRAQ	IRAQ	IRAQ	
JORDAN	AMMAN	JORDAN	JORDAN	JORDAN	JORDAN	
KUWAIT	KUWAIT	KUWAIT	KUWAIT	KUWAIT	KUWAIT	
LEBANON	BEIRUT	LEBANON	LEBANON	LEBANON	LEBANON	
LIBYA	TRIPOLI	LIBYA	LIBYA	LIBYA	LIBYA	
OMAN	MUSCAT	OMAN	OMAN	OMAN	OMAN	
QATAR	QATAR*	QATAR	QATAR	QATAR	QATAR	
SAUDI ARABIA	JEDDAH	SAUDI ARABIA	SAUDI ARABIA	SAUDI ARABIA	SAUDI ARABIA	
SUDAN	KHARTOUM	SUDAN	SUDAN	SUDAN	SUDAN	
SYRIAN ARAB REPUBLIC	DAMASCUS	SYRIAN ARAB REPUBLIC	SYRIAN ARAB REPUBLIC	SYRIAN ARAB REPUBLIC	SYRIAN ARAB REPUBLIC	
UNITED ARAB EMIRATES	UNITED ARAB EMIRATES	UNITED ARAB EMIRATES	UNITED ARAB EMIRATES	UNITED ARAB EMIRATES	UNITED ARAB EMIRATES	
YEMEN	SANA'A	YEMEN	YEMEN	YEMEN	YEMEN	

* Areas of responsibility of Bahrain and Qatar NOFs are defined in the Service Level Agreement between the two States.

**TABLE AIM II-2 - PRODUCTION RESPONSIBILITY FOR SHEETS OF THE WORLD
AERONAUTICAL CHART - ICAO 1:1 000 000**

EXPLANATION OF THE TABLE

Column:

- 1 Name of the State accepting production responsibility.
- 2 World Aeronautical Chart — ICAO 1:1 000 000 sheet number(s) for which production responsibility is accepted.
- 3 Remarks.

Note — In those instances where the production responsibility for certain sheets has been accepted by more than one State, these States by mutual agreement should define limits of responsibility for those sheets. This should be reflected in the Remarks column

State	Sheet number(s)	Remarks
1	2	3
BAHRAIN	2547	
EGYPT	2447, 2448, 2543, 2544	<i>Note: For sheet 2447, Egypt to cover its own territory within Cairo FIR</i>
IRAN, ISLAMIC REPUBLIC OF	2338, 2339, 2428, 2429, 2443, 2444, 2548	
IRAQ	2427, 2445	
JORDAN	2426, 2446, 2447	<i>Note: Jordan to cover its own territory within Amman FIR</i>
KUWAIT	2445	<i>Note: Kuwait to cover its own territory within Kuwait FIR</i>
LEBANON	2426	<i>Note: Lebanon to cover its own territory within Beirut FIR</i>
LIBYA	2424, 2449, 2450, 2541, 2542, 2569	
OMAN	2563, 2670	
QATAR	-	
SAUDI ARABIA	2446, 2545, 2546, 2564, 2565, 2566, 2668, 2669	
SUDAN	2567, 2568, 2665, 2666, 2667, 2689, 2690, 2787, 2811	
SYRIAN ARAB REPUBLIC	2426	<i>Note: Syria to cover its own territory within Damascus FIR</i>
UNITED ARAB EMIRATES	-	
YEMEN	2686, 2687	

- END -