MID AIR NAVIGATION PLAN

VOLUME II

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MID AIR NAVIGATION PLAN

VOLUME II

TABLE OF CONTENTS

PART 0 — Introduction ....

PART I — General Planning Aspects (GEN) ....

Table GEN II-1 — Homogeneous areas and major traffic flows identified in the Region

PART II — Aerodromes / Aerodrome Operations (AOP) ....

General Regional Requirements

Table AOP II-1 — Requirements and capacity assessment in international aerodromes in the Region

Specific Regional Requirements

PART III — Communications, Navigation and Surveillance (CNS) ....

General Regional Requirements

Table CNS II-1 — AFTN Plan

Table CNS II-2 — Required ATN Infrastructure Routing Plan

Table CNS II-3 — ATS Direct Speech Circuits Plan

Table CNS II-4 — HF Network designators applicable for the Region

Specific Regional Requirements

PART IV — Air Traffic Management (ATM) ....

General Regional Requirements

Specific Regional Requirements

PART V — Meteorology (MET) ....

General Regional Requirements

Table MET II-1 — Meteorological watch offices

Table MET II-2 — Aerodrome meteorological offices

Table MET II-3 — VHF VOLMET broadcast

Specific Regional Requirements ....

PART VI — Search and Rescue Services (SAR) ....

General Regional Requirements

Table SAR II-1 — Rescue Coordination Centres (RCCs) and Rescue Sub-centres (RSCs) in the Region

Chart SAR II-1 — Rescue Coordination Centres (RCCs) and Rescue Sub-Centres (RSCs) for the MID Region

Specific Regional Requirements

PART VII — Aeronautical Information Management (AIM) ....

General Regional Requirements

Table AIM II-1 - Responsibility for the provision of AIS/AIM Facilities and Services in the Region

Table AIM II-2 - Production responsibility for sheets of the World Aeronautical Chart — ICAO 1: 1 000 000

Specific Regional Requirements

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						
OBBI	BAHRAIN/Bahrain Intl	10	4E	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					
HEAX ALEXANDRIA/ Alexandria Intl	7	4C	04	NPA	
			22	NPA	
RS					
			18	NPA	
			36	NPA	
HEBA ALEXANDRIA / Borg El -Arab Intl	8	4E	14	PA1	
			32	PA	
RS					
HESN ASWAN/Aswan Intl	9	4E	17	NPA	
			35	PA1	
RS					
HEAT ASYUT/Asyut Intl	7	4C	13	PA2	
RS			31	PA	
HEAZ CAIRO/Almaza Intl	4	3C	18	PA1	
ANS			36	PA	
			05	NINST	
			23	NINST	
HECA CAIRO/Cairo Intl	9	4E	05L	PA2	
RS			23R	PA2	
		4F	05C	PA2	
		4E	23C	PA2	
			05R	PA2	
			23L	PA2	
		4D	16	NINST	
			34	NINST	
HEAR EL-ARISH/El-Arish Intl	7	4C	16	NPA	
AS			34	NPA	
HEGN HURGADA/Hurghada Intl	9	4E	16	NPA	
			34	PA2	
RS					

City/Aerodrome/Designation	RFF category	Physical characteristics			Remarks
		RC	RWY No.	RWY type	
1	2	3	4	5	6
HELX LUXOR/Luxor Intl	9	4E	02	NPA	
RS			20	PA1	
HEMA MARSA ALAM/ Marsa Alam Intl	7	4C	15	NPA	
			33	NPA	
RNS					
HEPS PORT-SAID/ Port-Said Intl	6	4C	10	NPA	
			28	NPA	
AS					
HEOW SHARK EL OWEINAT/ Shark El Oweinat Intl	5	4C	01	NPA	
			19	NINST	
AS					
	9	4E	04L	PA1	
HESH SHARM EL-SHEIKH/ Sharm El Sheikh Intl			22R	NPA	
			04R	NPA	
RS			22L	NPA	
HESC ST. CATHERINE/St. Catherine Intl	7	3C	17	NPA	
			35	NINST	
AS					
HETB TABA/Taba Intl	7	4E	04	PA2	
AS			22	NINST	
IRAN, ISLAMIC REPUBLIC OF					
OIKB BANDAR ABBAS/Bandar Abbas Intl	8	4D	03R	NPA	
			21L	PA1	
RS			03L	NINST	
			21R	NINST	
OIFM ESFAHAN/Shahid Beheshti Intl	9	4E	08L	NPA	
			26R	PA1	
RS			08R	NPA	
			26L	NPA	

City/Aerodrome/Designation		RFF category	Physical characteristics			Remarks
			RC	RWY No.	RWY type	
1		2	3	4	5	6
OIMM	MASHHAD/Shahid Hashemi Nejad Intl RS	9	4D	13L 31R 13R 31L	NPA PA1 NPA NPA	
OISS	SHIRAZ/Shiraz Intl RS	9	4D	11R 29L 11L 29R	NINST PA1 NINST NPA	
OITT	TABRIZ/Tabriz Intl RNS	9	4D	12L 30R 12R 30L	NPA PA1 NINST NINST	
OIIE	TEHRAN/Imam Khomaini Intl RS	9	4E	11L 29R	NPA PA2	
OIII	TEHRAN/Mehrabad Intl RS	9	4E	11R 29L 11L 29R	NPA PA1 NPA NPA	
OIZH	ZAHEDAN/ Zahedan Intl RS	8	4D	17 35	NINST PA1	
IRAQ						
ORBI	BAGHDAD/Baghdad Intl RS	8	4E	15R 33L 15L 33R	PAI PA2 NINST PA1 PA1 NINST PA1/ NINST	
ORMM	BASRAH/Basrah Intl RS	8	4E	14 32	NINST NINST PA2	
ORER	ERBIL/Erbil Intl RS	7	4C	15 33	PA1 NINST	

City/Aerodrome/Designation	RFF category	Physical characteristics			Remarks
		RC	RWY No.	RWY type	
1	2	3	4	5	6
ORSU SULYMANIYAH/ Sulaymaniyah Intl RS	9	4E	31 13	PA1 PA1	
ORNI Al Najaf/Al Najaf Intl RNS	8	4D	28 10	NP1	
JORDAN					
OJAM AMMAN/Marka Intl ANS	8	4C	06 24	NPA PA1	
OJAI AMMAN/Queen Alia Intl RS	9	4E	08R 26L 08L 26R	NPA PA2 PA 2 PA 2	
OJAQ AQABA/ King Hussein Intl RS	9	4E	01 19	PA1 NPA PA1	
KUWAIT					
OKBK KUWAIT/Kuwait Intl RS	9	4E	15R 33L 15L 33R	PA2 PA2 PA2 PA2	
LEBANON					
OLBA BEIRUT/R. B. H - Beirut Intl RS	9	4E	03 21 16 34 17 35	PA1 PA1 PA1 NINST PA1 NINST	
LIBYA					
HLLB BENGHAZI/Benina RS	8	4D 4C	15L 33R 15R 33L	PA1 NPA NPA PA1	

City/Aerodrome/Designation		RFF category	Physical characteristics			Remarks
			RC	RWY No.	RWY type	
1		2	3	4	5	6
HLLS	SEBHA/Sebha RS	7	4C	13 31 06 24	PA1 NPA	
HLLT	TRIPOLI/Tripoli Intl RS	8	4E	09 27 18 36	PA1 PA2	
OMAN						
OOMS	MUSCAT/Muscat Intl RS	9	4E	08 26	PAI PA1	
OOSA	SALALAH/Salalah	9	4E	07 25	NPA PA1	
QATAR						
OTBD	DOHA/Doha Intl RS	9	4E	16 34	NPA PA1	
OTHH	DOHA/Hamad Intl RS	(No available Data)				
SAUDI ARABIA						
OEDF	DAMMAM/Kind Fahid Intl RS	9	4E	16L 34R 16R 34L	PA2 PA2 PA2 PA2 PA2	
OEJN	JEDDAH/King Abdulaziz Intl RS	9	4E	16R 34L 16C 34C 16L 34R	PA2 PA2 PA2 PA2 PA1 PA1	
OEMA	MADINAH/Prince Mohammad Bin Abdulaziz Intl RS	8	3D 4E	17 35 18 36	PA1 PA1 NPA PA1	

City/Aerodrome/Designation	RFF category	Physical characteristics			Remarks
		RC	RWY No.	RWY type	
1	2	3	4	5	6
OERK RIYADH/King Khalid Intl RS	9	4E	15L 33R 15R 33L	PA1 PA1 PA1 PA1	
SOUTH SUDAN					
HSSJ JUBA/Juba RS	6	4C	13 31	PA1 NINST	
SUDAN					
HSKA KASSALA/Kassala AS	7	4D	02 20	NINST NINST	
HSSS KHARTOUM/Khartoum RS	8	4D	18 33	PA1 NPA	
HSPN PORT SUDAN/Port Sudan Intl RS	6	4C	18 36	NPA PA1	
SYRIAN ARAB REPUBLIC					
OSAP ALEPPO/Aleppo Intl RS	7	4D	09 27	PA2 PA2	
OSLK LATTAKIA /Bassel AL-Assad Intl RS	5	4D	17 35	NPA NPA	
OSDI DAMASCUS/ Damascus Intl RS	8	4E	05L 23R 05R 23L	PA2 PA2 PA2 PA2	
UNITED ARAB EMIRATES					
OMAA ABU DHABI/Abu Dhabi Intl RS	10 10	4E (will be upgraded to 4F 2010)	13 R 31 L 13 L 31 R	PA1 PA3 PA 3 PA 3	
OMAL AL AIN/Al Ain Intl RS	9	4E	01 19	PA1 NPA	

City/Aerodrome/Designation	RFF category	Physical characteristics			Remarks
		RC	RWY No.	RWY type	
1	2	3	4	5	6
OMDB DUBAI/Dubai Intl RS	10	4F	12L 30R 12R 30L	PA3 PA3 PA1 PA1	
OMFJ FUJAIRAH/Fujairah Intl RS	9	4E	11 29	NPA PA1	
OMRK RAS AL KHAIMAH /Ras Al Khaimah Intl RS	9	4E	16 34	NPA PA1	
OMSJ SHARJAH/Sharjah Intl RS	9	4E	12 30	PA1 PA2	
OMDW DUBAI/Al Maktoum Int'l RS *(Future 2009 - 2012)*	10 10	4F	12L 30R 12R 30L	PA3 PA3 PA3 PA3	
YEMEN					
OYAA ADEN/Aden Intl RS	9	4E	08 26	NPA PA1	
OYHD HODEIDAH/ Hodeidah Intl RS	9	4E	03 21	NPA NPA	
OYRN MUKALLA/Riyan Intl RS	9	4E	06 24	NPA NPA	
OYSN SANA'A/Sana'a Intl RS	9	4E	18 36	PA1 NPA	
OYTZ TAIZ/ Taiz Intl RS	9	4E	01 19	NPA NPA	

MID ANP, VOLUME II

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.cfmu.eurocontrol.int/mica/Index.action should be used for the Mode S SSR IC allocation and coordination.

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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 Baudot 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	
BEIRUT	M		9.6Kbps	CIDIN	IA-5	
DOHA	T		64 – 9.6Kbps	None	IA-5	
JEDDAH	M		64 – 9.6Kbps		IA-5	
~~KABUL~~	~~T~~		--	~~None~~		
KUWAIT	M		64 – 9.6Kbps	None	IA-5	
MUSCAT	M		64 – 9.6Kbps	None	IA-5	
SINGAPORE	M		9.6Kbps	None	IA-5	
TEHRAN	M		64 – 9.6Kbps		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	None	IA-5	
ATHENS	T		64 – 9.6Kbps	CIDIN	IA-5	
BEN GURION	M		64 – 9.6Kbps	None	IA-5	
BEIRUT	M		9.6Kbps	CIDIN	IA-5	
JEDDAH	T		128–9.6Kbps	CIDIN	IA-5	
KHARTOUM	M		9.6Kbps	None	IA-5	
NAIROBI	M		9.6Kbps	None	IA-5	
TUNIS	M		64 – 9.6Kbps	None	IA-5	
TRIPOLI	M		64–19.2Kbps	None	IA-5	
TRIPOLI	M		9.6Kbps	None	IA-5	
DAMASCUS			64 – 9.6Kbps	None	IA-5	
IRAN						
TEHRAN	T					
BAHRAIN	M		64 Kbps	None	IA-5	
KABUL	T		-			
KUWAIT	M		64 Kbps	None	IA-5	
ABU-DHABI						
IRAQ						
BAGHDAD	T					
AMMAN	T		-	None	IA-5	
BEIRUT			-	None	IA-5	
KUWAIT						
ANKARA						
JORDAN						
AMMAN	T					
BAGHDAD	M		-	-	-	
~~BEIRUT~~	~~T~~		-	-	-	
BEN GURION	M		9.6 Kbps	None	IA-5	
CAIRO	T		64 – 9.6Kbps	None	IA-5	
DAMASCUS	S		64 – 9.6Kbps	None	IA-5	
JEDDAH	T		64–19.2Kbps	None		

State/Station	Category	Requirement				Remarks
		Type	Signalling Speed	Protocol	Code	
1	2	3	4	5	6	
KUWAIT						
KUWAIT						
BAHRAIN	M	LDD/d	64 – 9.6Kbps	None	I A-5	
~~DAMASCUS~~	~~T~~	~~LDD/a~~	~~50 BD~~	~~None~~	~~ITA-2~~	
~~BEIRUT~~	~~M~~	~~LDD/a~~	~~100 BD~~	~~None~~	~~ITA-2~~	
DOHA	M	LDD/a	64 – 9.6Kbps	None	IA- 5	
(EUR)	-					
KARACHI	M	LDD/d	64 Kbps	None	IA-5	
TEHRAN	M	LDD/d	64 – 9.6Kbps	None	IA-5	
BAGHDAD	T	SAT/ad	9.6Kbps	None	IA- 5	
LEBANON						
BEIRUT	M					
~~AMMAN~~	~~T~~		-	-	-	
BAGHDAD	M		-	None	-	
BAHRAIN	M		9.6Kbps	CIDIN	IA-5	
CAIRO	T		9.6Kbps	CIDIN	IA-5	
DAMASCUS	M		2 x 50 BD	None	ITA-2	
JEDDAH	M		9.6Kbps ~~100~~	CIDIN		
~~KUWAIT~~	~~M~~		~~BD~~	~~None~~	~~ITA-2~~	
NICOSIA			9.6Kbps	CIDIN	IA-5	
LIBYA						
TRIPOLI	T					
MALTA	T					
TUNIS	M					
BENGHAZI	T					
CAIRO	M		64 – 9.6Kbps	None	IA-5	
CAIRO	M		64 – 9.6Kbps	None	IA-5	
KHARTOUM	T					
OMAN						
MUSCAT						
ABU DHABI	T		9.6Kbps	AMHS		
BAHRAIN	M		300 BD	None	IA-5	
MUMBAI	M		9.6Kbps	None	ITA-2	
JEDDAH	M		300 BD	None	ITA-2	
SANA'A	T		100 BD	None	ITA-2	
QATAR						
DOHA						
BAHRAIN	M		9.6Kbps	None	IA-5	
KUWAIT	M		100 BD	None	ITA-2	
ABU DHABI	T		9.6Kbps	AMHS		

State/Station	Category	Requirement				Remarks
		Type	Signalling Speed	Protocol	Code	
1	2	3	4	5	6	
SAUDI ARABIA						
JEDDAH						
ADDIS-ABABA	M		9.6Kbps	None	IA-5	
BAHRAIN	M		64 – 9.6Kbps	CIDIN	IA-5	
BEIRUT	M		9.6Kbps	CIDIN	IA-5	
CAIRO	M		128–9.6Kbps	CIDIN	IA-5	
MUSCAT	M		~~300BD~~64Kbps	None	ITA-2	
SANA'A	T		9.6Kbps	None	IA-5	
AMMAN						
SUDAN						
KHARTOUM	M					
CAIRO	M		9.6Kbps	None	IA-5	
JEDDAH	M					
TRIPOLI	T					
NDJAMENA	M					
KIGALI	M					
SYRIA						
DAMASCUS						
ATHENS	M		2 X 50 BD	None	ITA-2	
AMMAN	T		64 – 9.6Kbps	None		
BEIRUT	M		2 X 50 BD	None	ITA-2	
CAIRO	M		50 BD	None	ITA-2	
KUWAIT	M		50 BD	None	ITA-2	
TEHRAN	T		50 BD	None	ITA-2	
UAE						
ABU DHABI						
BAHRAIN	M		64 – 9.6Kbps	CIDIN	IA-5	
AMMAN	T		2 Mbps	AMHS		
MUSCAT	M				IA-5	
QATAR			9.6Kbps	None		
TEHRAN	M					
			64 – 9.6Kbps	None	IA-5	
YEMEN						
SANA'A						
JEDDAH	M		9.6Kbps	None	IA-5	
MUSCAT	M		9.6Kbps	None	IA-5	

TABLE CNS II-2 - REQUIRED ATN INFRASTRUCTURE ROUTING PLAN

Chapter 1 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		ASIA/PAC Oman, Saudi Arabia Kuwait, Lebanon Iran, Afghanistan Qatar, UAE	TBD			
EGYPT, Cairo	BIS		AFI, EUR Israel, Jordan, Lebanon, Athena Saudi Arabia				
IRAN, Tehran	BIS		Kuwait, Bahrain Afganistan				
IRAQ, Baghdad	IS		Jordan, Lebanon				
JORDAN, Amman	BIS		Egypt,Israel Lebanon,Iraq,Syria				
KUWAIT,Kuwait	BIS		EUR, Pakistan, Iran,Qatar,Bahrain, Lebanon				
LEBANON, Beirut	BIS		EUR Jordan,Syria Iraq,Kuwait,Bahrain Saudi Arabia,Egypt				
LIBYA	IS						
OMAN, Muscat	BIS		ASIA/PAC Yemen, Bahrain, UAE, Saudi Arabia				
QATAR, Doha	IS		Kuwait, Bahrain				
SAUDI ARABIA, Jeddah	BIS		AFI Egypt, Lebanon Bahrain,Oman Yemen				
SUDAN	IS						
SYRIA, Damascus	IS		Jordan, Lebanon				
U.A.E, Abu Dhabi	BIS		Bahrain, Oman Qatar				
YEMEN, Sana'a	IS		Oman, Saudi Arabia				

TABLE CNS II-3 - ATS DIRECT SPEECH CIRCUITS PLAN
EXPLANATION OF THE TABLE

Column

1 and 2 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

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.

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.

6 Location of switching centre(s). Alternate routing location, if available, is indicated in brackets.

7 Remarks

ATS REQUIREMENTS FOR SPEECH COMMUNICATIONS			CIRCUIT			
TERMINAL I	TERMINAL II	TYPE	SERVICE	DIR/SW	TO BE SWITCHED VIA	REMARKS
1	2	3	4	5	6	7
BAHRAIN						
Bahrain	Emirates ACC	A	LTF	DIR		2 LINES
	Dammam	A	LTF	DIR		
	Doha	A	LTF	DIR		2 LINES
	Jeddah	A	LTF	DIR		2 LINES
	Kuwait	A	LTF	DIR		
	Muscat	A	LTF	DIR		
	Riyadh	A	LTF	DIR		
	Shiraz	A	LTF			
	Tehran	A	LTF	DIR		
EGYPT						
Cairo	Amman	A	LTF	DIR		
	Athens	A	LTF	DIR		
	Jeddah	A	LTF	DIR		
	Khartoum	A	LTF			
	Nicosia	A	LTF	DIR		
	Tel Aviv	A	LTF	DIR		
	Tripoli	A	LTF	DIR		
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	A	LTF	DIR		
	Bahrain	A	LTF	DIR		
	Basrah	A	LTF			
	Doha	A	LTF	DIR		
	Karachi	A	LTF	DIR		
	Kuwait	A	LTF	DIR		
	Tehran	A	LTF	DIR		
Tehran	Emirates ACC	A	LTF	DIR		1I
	Ankara	A	LTF	DIR		
	Ashgabat	A	LTF	DIR		
	Baghdad	A	LTF			
	Bahrain	A	LTF	DIR		
	Baku	A	LTF	DIR		
	Basrah	A	LTF			
	Doha	A	LTF	DIR		
	Kabul	A	LTF			
	Karachi	A	LTF	DIR		
	Kuwait	A	LTF	DIR		
	Muscat	A	LTF	DIR		
	Shiraz	A	LTF	DIR		
	Yerevan/Zvartnots	A	LTF	DIR		
IRAQ						
Baghdad	Amman	A	LTF			
	Ankara	A	SAT			
	Basrah	A	LTF			
	Damascus	A	LTF			
	Jeddah	A	LTF			
	Kuwait	A	LTF			
	Mosul	A	LTF			
	Tehran	A				
Basrah	Abadan	A	LTF			
	Baghdad	A	LTF			
	Kuwait	A	LTF			
	Shiraz	A	LTF			
	Tehran	A	LTF			
Mosul	Baghdad	A	LTF			
JORDAN						
Amman	Baghdad	A	LTF			
	Cairo	A	LTF			
	Damascus	A	LTF			
	Jeddah	A	LTF			
	Tel Aviv	A	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						
	Baghdad	A	LTF			
Kuwait	Bahrain	A	LTF	DIR		
	Basrah	A	LTF			
	Jeddah	A	LTF	DIR		
	Shiraz	A	LTF	DIR		
	Tehran	A	LTF	DIR		
LEBANON						
Beirut	Ankara	A	LTF	DIR		
	Damascus	A	LTF	DIR		
	Nicosia	A	LTF	DIR		
LIBYA						
Tripoli	Cairo					
	Malta					
	Khartoum					
OMAN						
Muscat	Emirates ACC	A	LTF	DIR		
	Bahrain	A	LTF	DIR		
	Mumbai	A	LTF	DIR		
	Jeddah	A	LTF	DIR		
	Karachi	A	LTF	DIR		
	Salalah	A	LTF	DIR		
	Sana'a	A	LTF	DIR		
	Tehran	A	LTF	DIR		
Salalah	Muscat	A	LTF			
QATAR						
Doha	Emirates ACC	A	LTF	DIR		1I + 1
	Bahrain	A	LTF	DIR		
	Shiraz	A	LTF	DIR		
	Tehran	A	LTF	DIR		
SAUDI ARABIA						
Dammam	Bahrain	A	LTF	DIR		
	Jeddah	A	LTF	DIR		
	Riyadh	A	LTF	DIR		
Jeddah	Addis Ababa	A	LTF			
	Amman	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**
	Asmara	A	LTF			
	Baghdad	A	LTF			
	Bahrain	A	LTF	DIR		
	Cairo	A	LTF	DIR		
	Dammam	A	LTF	DIR		
	Khartoum	A	LTF			
	Kuwait	A	LTF	DIR		
	Muscat	A	LTF	DIR		
	Riyadh	A	LTF	DIR		
	Sana'a	A	LTF	SW	Via Bahrain	
Riyadh	Bahrain	A	LTF	DIR		
	Jeddah	A	LTF	DIR		
	Dammam	A	LTF	DIR		
SUDAN						
Khartoum	Cairo	A	LTF			
	Jeddah	A	LTF			
SYRIAN ARAB REPUBLIC						
Damascus	Amman	A	LTF			
	Ankara	A	LTF			
	Baghdad	A	LTF			
	Beirut	A	LTF	DIR		
	Nicosia	A	LTF			
UNITED ARAB EMIRATES						
Emirates ACC	Abu Dhabi	A	LTF	DIR		21
	Al Ain	A	LTF	SW		
	Bahrain	A	LTF	DIR		
	Doha	A	LTF	DIR		
	Dubai	A	LTF	DIR		
	Muscat	A	LTF	DIR		
	Tehran	A	LTF	DIR		
Abu Dhabi	Emirates ACC	A	LTF	SW		21
	Al Ain	A	LTF	DIR		21
	Dubai	A	LTF	SW		21
Al Ain	Emirates ACC	A	LTF	SW		21
	Abu Dhabi	A	LTF	DIR		21
	Dubai	A	LTF	SW		21
Dubai	Emirates ACC	A	LTF	DIR		2I + 1

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**
	Abu Dhabi	A	LTF	DIR		2I
	Al Ain	A	LTF	SW		1I
	Fujairah	A	LTF	DIR		1I
	Ras Al KhaimahSharjah	A	LTF	DIR		1I 3I
	Sharjah					
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		31
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		Via	
	Mogadishu	A	LTF	DIR	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
Bahrain	MID-1, MID-2
Jeddah	AFI-3
Khartoum	
Riyan	MID-1, AFI-3
Sanaa	MID-1, AFI-3
Shiraz	MID-1, MID-2
Tehran	MID-1, MID-2
Tripoli	

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		
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			
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 Allocation Plan approved by MIDANPIRG. The SSR Codes Allocation 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.

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 navaids 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*

Whenever reference to name States is made in Table ATM II-XX in connection with the above notes, the following abbreviations, based on those indicated in Location Indicators (Doc 7910), are used:

OB	Bahrain	OK	Kuwait	OE	Saudi Arabia
HE	Egypt	OL	Lebanon	HS	Sudan
OI	Iran	HL	Libya	OS	Syria
OR	Iraq	OO	Oman	OM	UAE
OJ	Jordan	OT	Qatar	OY	Yemen

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **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)	UA418	KUMUN 254000N 0551515E PAPAR 2640N 05427E * Note 7 Segment KUMUN-PAPAR (OI and OM)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	SHIRAZ (SYZ)		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)
A453	PIRAN 2934.1N 06128.1E ZAHEDAN (ZDN) BANDAR ABBAS (BND) GHESHM (KHM) BANDAR LENGEH (LEN) KISH MIDSI 2641.7N05152.5E TOBLI 262134N0512301E OTATA 261843N0510052E BAHRAIN * Note 7 (OB, OI) PEBOS 262722N0503043E RULEX 264529N0501745E ALVUN 271028N0494455E SOLEM 275229N0491136E KUMBO 281705N0495526E AWADI 2834.5N 04843.9E DEBTI 2844.1N 04829.4E KUA 2913.1N 04759.1E	UA453	PIRAN 2934.1N 06128.1E ZAHEDAN (ZDN) BANDAR ABBAS (BND) GHESHM (KHM) BANDAR LENGEH (LEN) KISH MIDSI 2641.7N05152.5E TOBLI 262134N0512301E OTATA 261843N0510052E BAHRAIN * Note 7 (OB, OI) PEBOS 262722N0503043E RULEX 264529N0501745E ALVUN 271028N0494455E SOLEM 275229N0491136E KUMBO 281705N0495526E AWADI 2834.5N 04843.9E DEBTI 2844.1N 04829.4E KUA 2913.1N 04759.1E
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	UA727	(PAXIS 3357.1N 02720.0E OTIKO 3134.3N 02936.6E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	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)		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 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)	UB121	RUDESHUR (RUS) RASHT (RST)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	**Significant Points**	**Designator**	**Significant Points**
1	**2**	**1**	**2**
	MAGRI 385408N 0462300E		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	ROVAR 292438N0345711E AL SHIGAR (ASH) 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)	UB411	ROVAR 292438N0345711E AL SHIGAR (ASH) 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)	UB412	HALAIFA (HLF)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	RABIGH (RBG) [KING ABDULAZIZ] (JDW		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 (DOH) *Note 8 (DOH-BUNDU) AFNAN 2508.9N 05155.9E BUNDU 2500.4N 05229.4E *Note 7 (BUNDU-ADV) GADVO 2441.4N 05343.0E KUNGU 2437.9N 05356.4E ABU DHABI ADV 2425.1N 05440.4E	UB415	DOHA (DOH) *Note 8 (DOH-BUNDU) AFNAN 2508.9N 05155.9E BUNDU 2500.4N 05229.4E *Note 7 (BUNDU-ADV) GADVO 2441.4N 05343.0E KUNGU 2437.9N 05356.4E ABU DHABI ADV 2425.1N 05440.4E
B416	KUWAIT (KUA) AMBIK 283222N 0492025E *Note 8 (AMBIK-KUVER) TESSO 282852N0492723E GEVAL 283625N0492722E GOGMA 281421N 0495612E KUVER 280924N0500600E IMDAT 2741.0N 05111.0E ORSAR 2604.5N 05357.5E PEBAT 2551.9N 05423.9E DESDI 2536.0N 05442.5E	UB416	KUWAIT (KUA) AMBIK 283222N 0492025E *Note 8 (AMBIK-KUVER) TESSO 282852N0492723E GEVAL 283625N0492722E GOGMA 281421N 0495612E KUVER 280924N0500600E IMDAT 2741.0N 05111.0E ORSAR 2604.5N 05357.5E PEBAT 2551.9N 05423.9E DESDI 2536.0N 05442.5E
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 * Note 8 (DHA-RAMSI) KING FAHD (KFA) * Note 7 (KFA-RAMSI)	UB419	(DHA) 261538N 0500824E * Note 8 (DHA-RAMSI) KING FAHD (KFA) * Note 7 (KFA-RAMSI)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	**Significant Points**	**Designator**	**Significant Points**
1	**2**	**1**	**2**
	ASTOM 265552N 0500408E RAMSI 270249N 0500714E		ASTOM 265552N 0500408E 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	BAHRAIN (BAH) * Note7 ELOSA 2548.8N 05142.6E	UB457	BAHRAIN (BAH) * Note7 ELOSA 2548.8N 05142.6E
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

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
B540	GERAR 240600N 0573616 PASOV 243841N 0565037E KUPMA 245148N 0562648E BUBIN 245742N 0560642E		
B544	(GAZIANTEP) GAZ ALEPPO (ALE) TANF (TAN) NAMBO 331826N0383939E SODAR 315532N0384317E TURAIF (TRF) AL SHIGAR (ASH) HALAIFA (HLF) MADINAH (PMA) RABIGH (RBG) KING ABDULAZIZ (JDW) QUNFIDAH (QUN) ABHA (ABH) NOBSU KRA	UB544	(GAZIANTEP) GAZ ALEPPO (ALE) TANF (TAN) 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	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

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	ILAM (ILM) KHORAM ABAD (KRD) ESFAHAN (ISN) NODLA BIRJAND (BJD) (KAMAR 3239.0N 06044.0E)		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 SODEB 234747N 0593023E DORAB 235033N 0594746E ALPOR 240441N 0612000E LATEM (KC)	UG216	LAKLU 232235N 0570401E *Note 7 (OO/OP) Muscat (MCT) ITILA 234055N 0584817E 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	UG652	ADEN (KRA) IMPOS 183136N 0511848E DUDRI 190000N 0520000E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	*Note 8 (DUDRI-TOKRA) TOKRA 220925N 0553350E TAPDO 2424N 06120 E		*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 2640.4N 04757.7E *Note 7 (KIA-KFA) GIBUS 255724N 0472829E *Note 8 (GIBUS-ALSER) KING FAHD (KFA) ALSER 2710.8 05049.5E SHIRAZ (SYZ) YAZD (YZD) NODLA 3253.3N 05458.8E TABAS (TBS) MASHAD (MSD)	UG663	KING KHALID (KIA) SILNO 2640.4N 04757.7E *Note 7 (KIA-KFA) GIBUS 255724N 0472829E *Note 8 (GIBUS-ALSER) KING FAHD (KFA) ALSER 2710.8 05049.5E SHIRAZ (SYZ) YAZD (YZD) NODLA 3253.3N 05458.8E TABAS (TBS) 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	UG667	PUTMA 3748.0N 05157.6E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	**Significant Points**	**Designator**	**Significant Points**
1	**2**	**1**	**2**
	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) NEJRAN (NEJ) SANA'A (SAA) PARIM 123142.7N 0432712E DJIBOUTI (DTI)		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) NEJRAN (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) GASSIM (GAS) 2617.9N 04346.8E BOPAN (BPN)	UG674	MADINAH (PMA) GASSIM (GAS) 2617.9N 04346.8E BOPAN (BPN)
G775	(ASHGHABAT) (ASB) ORPAB 3742N 05834.5E MASHHAD (MSD) [BIRJAND] (BJD)	UG775	(ASHGHABAT) (ASB) ORPAB 3742N 05834.5E MASHHAD (MSD) [BIRJAND] (BJD)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	* Note 1 ZAHEDAN (ZDN)		* 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

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
			(PANJGUR) PG
		UL125	DULAV 3857N 04537.9E TABRIZ (TBZ) ZANJAN (ZAJ) PAROT 360940N 0495756E TEHRAN (TRN) 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	***AMM*** ***AN*** 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	***AMMA*** ***N*** 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	UL300	LUXOR (LXR) MEMPO 252518N 0335457E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	GIBAL2437.2N03634.7E YENBO (YEN) 2408.8N 03803.9E		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 (DOH) *Note 7 (DOH-ITITA) *Note 8 (DOH-ASTOG) ASTOG 252822N 0525025E ITITA 2544.2N 05418.7E	UL305	DOHA (DOH) *Note 7 (DOH-ITITA) *Note 8 (DOH-ASTOG) ASTOG 252822N 0525025E ITITA 2544.2N 05418.7E
L306	TOKRA 220925N 0553350E * Note- 7 (OO) DEMKI 224941N 0562308E LAKLU 232235N 0570401E	UL306	TOKRA 220925N 0553350E * Note- 7 (OO) DEMKI 224941N 0562308E 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	UL310	BOXAK 244536N 0540032E *Note 7 & 8 to LALDO SIGBO 2455.4N 05456.9E NALTA 2502.7N 05539.8E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	AVAMI 2505.9N 05556.8E LALDO 251806N 0563600E		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
L321	KATAB 292501N 0290506E ***KUN*** ***KI*** ***29072*** ***6N*** ***02919*** ***49E*** KUNAK 2527.7N 03041.2E LUGAV 224205N 0313722E SML 222118N 0313719E	UL321	KATAB 292501N 0290506E ***KUNKI*** ***290726*** ***N*** ***029194*** ***9E*** 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
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

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
			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
L440	KANIP 2410.7N 05520.7E *Note 7 RETAS 235754N 0553423E	UL440	KANIP 2410.7N 05520.7E *Note 7 RETAS 235754N 0553423E
L444	KIPOL 230410N 0612903E *Note 7 (OO) VUSIN 225940N 0605510E MIBSA 225400N 0601338E KAXEM 225103N 0595243E IMDEK 224647N 0592217E TOLDA 224008N 0583624E	UL444	KIPOL 230410N 0612903E *Note 7 (OO) VUSIN 225940N 0605510E MIBSA 225400N 0601338E 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

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
			BOSID ***2842.4N*** ***04652.6*** ***E*** 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) TABA (TBA) EL ARISH (ARH) PASOS (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 (DOH) *Note 8 (DOH-PURDA) NAJMA 250346N 0513908E BATHA (BAT) 241257N 0512707E MIGMA 225035N 0512749E PURDA 210805N 0510329N ASTIN 200410N 0495320E SHARURAH (SHA) ATBOT 171418N 0464706E RAGNI 163454N 0454815E LOPAD 161651N 0453738E ITOLI 152825N 0450927E OBNAM 144541N 0444448E	UL564	DOHA (DOH) *Note 8 (DOH-PURDA) NAJMA 250346N 0513908E MIGMA 225035N 0512749E PURDA 210805N 0510329N ASTIN 200410N 0495320E SHARURAH (SHA) ATBOT 171418N 0464706E RAGNI 163454N 0454815E LOPAD 161651N 0453738E ITOLI 152825N 0450927E OBNAM 144541N 0444448E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	GEVEL 141229N 0442547E NOPVO 135436N 0441536E TAZ 134149.53N 0440818.98E PARIM 123142N 0432712E		GEVEL 141229N 0442547E NOPVO 135436N 0441536E TAZ 134149.53N 0440818.98E 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
		UL602	BAHRAIN (BAH) *Note 7 PEBOS 262722N0503043E RULEX 264529N 0501745E RAMSI 270249N 0500714E IVONI 275911N 0492131E DAVUS 282346N 0490622 DARVA 284814N 0484734E ALVIX 2919.3N04824.2E FALKA 292611N 0481819E TASMI 300120N 0475505E LOVEK322206N 0444000E DELMI331911N 0431731E ELEXI 344237N 0411054E DRZ 351724N 0401124E KUKSI 364508N 0374910E GAZ 365701N 0372824E
L604	PLH 3513.7N 02340.9E SALUN 340000N 0242700E *	UL604	PLH 3513.7N 02340.9E SALUN 340000N 0242700E *

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	**Significant Points**	**Designator**	**Significant Points**
1	**2**	**1**	**2**
	BRN 3134.5N 02600.3E KHG 2526.9N 03035.4E LUXOR (LXR) 254458 N 0324607E IMRAD 260500N 0354400E WEJH 2610.8N 03629.3E HLF 262600N 03916.1E GASSIM (GAS) 2617.9N 04346.8E *Note 7 (GAS-KFA) PUSLA 261758N 0461706E *Note 8 to TOSNA MGA 2617.3N 04712.4E ALMAL 2615.9N 04821.1E KING FAHD (KFA) 2621.9N 04949.2E BAHRAIN (BAH) ASNIX 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514207E KAPAX 254218N 0515118E ORSIS 252801N 0521636E ENANO 252348N 0522559E TOSNA 251612N 0524116E		BRN 3134.5N 02600.3E KHG 2526.9N 03035.4E LUXOR (LXR) 254458 N 0324607E IMRAD 260500N 0354400E WEJH 2610.8N 03629.3E HLF 262600N 03916.1E GASSIM (GAS) 2617.9N 04346.8E *Note 7 (GAS-KFA) PUSLA 261758N 0461706E *Note 8 to TOSNA MGA 2617.3N 04712.4E ALMAL 2615.9N 04821.1E KING FAHD (KFA) 2621.9N 04949.2E BAHRAIN (BAH) ASNIX 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 IVOMA 223408N 0605430E * Note 7 (OO) MIBSA 225400N 0601338E	UL631	TOTOX 215030N0622230E IVOMA 223408N 0605430E * Note 7 (OO) MIBSA 225400N 0601338E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	AMBOS 230324N 0595405E ELIGO 232458N 0590848E KARAR 233042N 0585438E MCT 233528.01N 0581536.47		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 RAMKI 261138N 0515625E RABLA 261506N 0514834E SOLOB 262241N 0513132E MEDMA 263421N 0505454E TOTLA 263806N 0504301E COPPI 2750.6N 04744.0E	UL768	ALPOB 254218N 0530055E * Note 7 to FIRAS * Note 8 (ALPOB-COPPI) ROTAG 255353N 0523621E SOLEG 260159N 0521756E RAMKI 261138N 0515625E RABLA 261506N 0514834E SOLOB 262241N 0513132E MEDMA 263421N 0505454E TOTLA 263806N 0504301E COPPI 2750.6N 04744.0E HFR

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
			VATIM 2851.6N 04444.7E RAFHA (RAF) ARAR (AAR) OVANO3148.0N 03909.9E OTILA 3201.5N 03901.9E MODAD 3235.7N 03841.6E SOKAN 3308.1N 03822.1E RAFIF 3312.8N 03819.3E SULAF 3327.3N 03810.4E FIRAS 3352.3N 03755.2E
		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

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	**Significant Points**	**Designator**	**Significant Points**
1	**2**	**1**	**2**
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	DARAX 260942N 0555300E *Note 8 (DARAX-MUXIT) SERSA 251945N 0553118E MIADA 245112N 0545736E ABU DHABI (ADV) 242508N 0544023E ATUDO 241708N 0543532E MUSEN 241429N 0543336E GOLGU 231151N 0523109E MUXIT 230230N 0523024E KITAP 224928N 0522923E PURDA 210805N 0510329E SHARURAH (SHA)	UM318	DARAX 260942N 0555300E *Note 8 (DARAX-MUXIT) SERSA 251945N 0553118E MIADA 245112N 0545736E ABU DHABI (ADV) 242508N 0544023E ATUDO 241708N 0543532E MUSEN 241429N 0543336E GOLGU 231151N 0523109E MUXIT 230230N 0523024E KITAP 224928N 0522923E PURDA 210805N 0510329E SHARURAH (SHA)
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

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
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) KOBOX 250716N 0475046E KIREN 251447.0N 0490724.0E *Note 8 (KIREN-TOSNA) HAS 2516.7N 04929.0E LAGNO 251613N 0511518E DOHA (DOH) *Note 7 (DOH-KISAG) TOSNA 251612N 0524116E KISAG 251834N 0541408E	UM430	*Note 5 (KIA-DOH) KING KHALID (KIA) KOBOX 250716N 0475046E KIREN 251447.0N 0490724.0E *Note 8 (KIREN-TOSNA) HAS 2516.7N 04929.0E LAGNO 251613N 0511518E DOHA (DOH) *Note 7 (DOH-KISAG) TOSNA 251612N 0524116E KISAG 251834N 0541408E
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
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	UM557	ATBOR 251007N 0551947E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	**Significant Points**	**Designator**	**Significant Points**
1	**2**	**1**	**2**
	*Note7 & 8 to MIDSI NADIL 252252N 0544717E NABOP 252607N 0540405E EMAGO 253456N 0535751E VUVOK 254408N 0533024E TUMAK 255031N 0531108E ALTOM 262230N 0515639E TOXEL 263020N 0515553E MIDSI 264142N 0515442E		*Note7 & 8 to MIDSI NADIL 252252N 0544717E NABOP 252607N 0540405E EMAGO 253456N 0535751E VUVOK 254408N 0533024E TUMAK 255031N 0531108E ALTOM 262230N 0515639E TOXEL 263020N 0515553E MIDSI 264142N 0515442E
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
		UM574	MALE) (MLE) (POPET) 0713.7N06813.6E NABIL 1222.0E0600.0E RIGAM 143932N 0530414E NOBSU 171554N 0431318E
M600	RANBI 251908N 0544500E KISAG 251834N 0541408E SINGU 253706N 052570E NOBLA 255111N 0522740E TOBLI 262134N 0512301E RULEX 264529N 0501745E	UM600	RANBI 251908N 0544500E KISAG 251834N 0541408E SINGU 253706N 052570E NOBLA 255111N 0522740E TOBLI 262134N 0512301E RULEX 264529N 0501745E
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

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
			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 2908.0N 04854.9E RABAP 283625N 0492722E GEVAL 282101N 0494300E UMAMA 265831N 0504648E	UM677	SESRA 2908.0N 04854.9E RABAP 283625N 0492722E GEVAL 282101N 0494300E UMAMA 265831N 0504648E
M681	TARBO 244351N 0574637E *Note 7/8 (OO) DAMUM 243236N 0591307E	UM681	TARBO 244351N 0574637E *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	ZELAF 325656N 0371121E ORNAL 324755N0375153E DESLI 314921N 0365909E ELOXI 313359N 0364536E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
			KULDI 311847 0363214E MAZAR 3048N 3610E ROVAR 292438N0345711E
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 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	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 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*** ***04109.0*** ***E*** DIER-ZZOR (DRZ) ALEPPO (ALE) ***NISAP*** ***364724*** ***N*** ***036383*** ***0E***
M863	KING ABDUL AZIZ (JDW	UM863	KING ABDUL AZIZ (JDW

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	**Significant Points**	**Designator**	**Significant Points**
1	**2**	**1**	**2**
	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		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-SEMRU) SEMRU 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-SEMRU) SEMRU 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	DOH 2514.0N 05134.6E *Note 7 & 8 to TONVO NAMLA 2505.5N 05233.3E	UN300	DOH 2514.0N 05134.6E *Note 7 & 8 to TONVO NAMLA 2505.5N 05233.3E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	BOXAK 244536N 0540032E MIADA 245112N 0545736E TONVO 250500N 0563200E		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 3129.6N 3700.9E GURIAT (GRY) ORKAS 3047.4N 03846.3 E NEVOL 3024.7N 03938.6E VELAL2946.0N 04038.4E TAMRO 2838.6N 04240.8E * Note7 (OE, OB, OM, OO) MOGON 2738.8N 04445.9E TAGSO 272744N 0454510E *Note 8 (OB, OO) EGNOV 270301N 0474713E KUSAR 264741N 0490218E ASPAN 263255N 0494903E DEDAS 263011N 0501427E	UN318	QAA 314423N 0360926E ALNOR 313955N 0362507E KINUR 313626N 0363714E ELOXI 313359N 0364536E GENEX 3129.6N 3700.9E GURIAT (GRY) ORKAS 3047.4N 03846.3 E NEVOL 3024.7N 03938.6E VELAL2946.0N 04038.4E TAMRO 2838.6N 04240.8E * Note7 (OE, OB, OM, OO) MOGON 2738.8N 04445.9E TAGSO 272744N 0454510E *Note 8 (OB, OO) EGNOV 270301N 0474713E KUSAR 264741N 0490218E ASPAN 263255N 0494903E DEDAS 263011N 0501427E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	ASTAD 261812N 0505646E VUTAN 255016N 0515218E RESAR 253707N 0522328E UMABA 252703N 0524322E OVONA 252443N 0524739E (segment LOXAT - REXOD KATIK 2517.1N 05315.2E KANIP 2410.7N 05520.7E LABRI 240344N 0553842E EGROK 235253N 0560126E LAKLU 232235N 0570401E GEVED 230105N 0575111E TOLDA 223720N 0583503E REXOD211230N 0613830E		ASTAD 261812N 0505646E VUTAN 255016N 0515218E RESAR 253707N 0522328E UMABA 252703N 0524322E OVONA 252443N 0524739E (segment LOXAT-REXOD) KATIK 2517.1N 05315.2E KANIP 2410.7N 05520.7E 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)	UN563	(BANGALORE) BBG *Note 8 (OB, OM)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	**Significant Points**	**Designator**	**Significant Points**
1	**2**	**1**	**2**
	*Note 7 (OB, OO, OM)		REXOD 211230N 0613830E
	EMURU 221357N 0585338E		*Note 7 (OB, OO,OM)
	TULBU 230005N 0571827E		EMURU 221357N 0585338E
	MEKNA 223309N 0560815E		TULBU 230005N 0571827E
	SODEX 234954N 0553202E		MEKNA 223309N 0560815E
	NOBTO 235525N 0551840E		SODEX 234954N 0553202E
	ADV		NOBTO 235525N 0551840E
	MEMBI 243705N 0542631E		MEMBI 243705N 0542631E
	ATBEX 250739N 0535019E		ATBEX 250739N 0535019E
	ITROK 253557N 0532751E		ITROK 253557N 0532751E
	ALPOB 254218N 0530055E		ALPOB 254218N 0530055E
	ROTAG 255353N 0523621E		ROTAG 255353N 0523621E
	SOLEG 260159N 0521756E		SOLEG 260159N 0521756E
	SOLOB 262241N 0513132E		SOLOB 262241N 0513132E
	MEDMA 263412N 0505454E		MEDMA 263412N 0505454E
	TOTLA 263806N 0504301E		TOTLA 263806N 0504301E
	RULEX 264529N 0501745E		RULEX 264529N 0501745E
	SILNO 264026N 0475745E		SILNO 264026N 0475745E
	GIBUS 255724N 0472829E		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	UN571	(GUNIP 0429.9N 09931.8E)
	*Note 7 & 8 (OB, OM, OO)		(VAMPI 0610.9N 09735.1E)
	KIPOL 230410N 0612903E		(MEKAR 0630.2N 06929.5E)
	RAGMA 230600N 0610539E		(SUGID- 1933.1 N 06921.0E)
	SODEB 234747N 0593023E		PARAR 2226.5 N 06307E
	VUSET 235540N 0590812E		*Note 7 & 8 (OB, OM, OO)
	KIROP 243000N 0574700E		KIPOL 230410N 0612903E
	MENSA 245750N 0563249E		RAGMA 230600N 0610539E
	AVAMI 250554N 0555647E		SODEB 234747N 0593023E
	ATBOR 251007N 0551947E		VUSET 235540N 0590812E
	MUVLA 251716N 0544500E		KIROP 243000N 0574700E
	SENTO 251908N 0544500E		MENSA 245750N 0563249E
	ELUKU 252910N 0535610E		AVAMI 250554N 0555647E
	ITROK 253557N 0532751E		ATBOR 251007N 0551947E
	ALPOB 254218N 0530055E		MUVLA 251716N 0544500E
	SOLOB 262241N 0513132E		SENTO 251908N 0544500E
	MEDMA 263412N 0505454E		ELUKU 252910N 0535610E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	TOTLA 263806N 0504301E RULEX 264529N 0501745E SILNO 264026N 0475745E KUTEM 264359N 0473521E BOPAN (BPN) 270314N 0452642E		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) BAHRAIN (BAH) 261551N 0503856E ASNIX 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514207E *Note 7 to LAKLU KAPAX 254218N 0515118E ORSIS 252801N 0521636E TOSNA 251612N 0524116E TOPSI 250910N 0531200E BOXAK 244536N 0540032E ADV 242508N 0544024 RETAS 235754N 0553423E *Note 8 (OO) PUTSO 232037N 0565322E LAKLU 232235N 0570401E	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) BAHRAIN (BAH) 261551N 0503856E ASNIX 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514207E *Note 7 to LAKLU KAPAX 254218N 0515118E ORSIS 252801N 0521636E 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)	UN687	KING KHALID (KIA)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	KINIB 254108N 0482317E *Note 5 & 7 & 8 KING FAHAD (KFA) MUTAR 263611N 0500627E MEMKO 264611N 0504427E DAVRI 264936N 0505732E TORBO 265223N 0511024E		KINIB 254108N 0482317E *Note 5 & 7 & 8 KING FAHAD (KFA) MUTAR 263611N 0500627E MEMKO 264611N 0504427E 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 2947.0N 03152.1E SISIK 2936.0N 03241.E NUWEIBAA * Note 7 (NWB-KITOT below FL350) KITOT 2902.1N 03450.8E SOBAS 2756.0N 03904.9E HAIL (HIL) *Note 7 (HIL–KFA) BPN 2703.2N 04526.7E *Note 8 (BPN-TORBO) KING FAHD (KFA) BAHRAIN (BAH) *Note 7 TORBO 265223N 0511024E	UN687	MENLI 2947.0N 03152.1E SISIK 2936.0N 03241.E NUWEIBAA * Note 7 (NWB-KITOT below FL350) KITOT 2902.1N 03450.8E SOBAS 2756.0N 03904.9E HAIL (HIL) *Note 7 (HIL–KFA) BPN 2703.2N 04526.7E *Note 8 (BPN-TORBO) KING FAHD (KFA) BAHRAIN (BAH) *Note 7 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) ATBED 230352N 0603752E ELIGO 232458N 0590848	UN767	PARAR 222630N 0630700E VUSIN 225940N 0605510E * Note 7 (OO) 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)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
			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

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
P312	MUKALLA (RIN) PAKER 1155.0N0463500E (HARGEISA) HARGA	UP312	MUKALLA (RIN) PAKER 1155.0N0463500E (HARGEISA) HARGA
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) ALSER 271100N 0504900E	UP425	DAHRAN (DHA) *Note 8 to ALSER BAHRAIN (BAH) ALSER 271100N 0504900E
P430	DOHA (DOH) *Note 8 to MIDSI BAYAN 252926N 0514849E *Note 7 to MIDSI KAPAX 254218N 0515118E VUTAN 255016N 0515218E BONAN 260201N 0515505E RAMKI 261138N 0515625E ALTOM 262230N 0515639E TOXEL 263020N 0515553E MIDSI 264142N 05155442E	UP430	DOHA (DOH) *Note 8 to MIDSI BAYAN 252926N 0514849E *Note 7 to MIDSI KAPAX 254218N 0515118E VUTAN 255016N 0515218E BONAN 260201N 0515505E RAMKI 261138N 0515625E ALTOM 262230N 0515639E TOXEL 263020N 0515553E MIDSI 264142N 05155442E
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

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
			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	TURAIF (TRF) *Note 7 to DESDI KAVID 3035.9N 04011.8E TOKLU 2942.1N 04202.4E RASMO 2857.2N 04331.3E KMC ULOVO 274830N 0455420E *Note 8 (ULOVO-NAPLO) MUSKO 2726.7N 04737.1E KEDAT 2721.8N 04759.0E JUBAIL (JBL) GASSI 2702.9N 05022.5E SODAK 264634N 0510530E ASPAK 262115N 0522257E TOMSO 260611N 0530214E NALPO 255602N 0532945E RAPSA 253700N 0541700E DESDI 253603N 0544230E	UP559	TURAIF (TRF) *Note 7 to DESDI KAVID 3035.9N 04011.8E TOKLU 2942.1N 04202.4E RASMO 2857.2N 04331.3E KMC ULOVO 274830N 0455420E *Note 8 (ULOVO-NAPLO) MUSKO 2726.7N 04737.1E KEDAT 2721.8N 04759.0E JUBAIL (JBL) GASSI 2702.9N 05022.5E SODAK 264634N 0510530E ASPAK 262115N 0522257E TOMSO 260611N 0530214E NALPO 255602N 0532945E RAPSA 253700N 0541700E DESDI 253603N 0544230E
		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 **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **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) SOGAT 262029N 0511443E ASTAD 261812N 0505646E BAHRAIN (BAH) 261551N 0503856E 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) SOGAT 262029N 0511443E ASTAD 261812N 0505646E BAHRAIN (BAH) 261551N 0503856E 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	UP891	MAGALA (MGA) *Note 7 to KUA KUTEM 264359N 0473521E EGNOV EMILU

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	KUNRU 283220N 0481050E KUWAIT (KUA)		KUNRU 283220N 0481050E KUWAIT (KUA)
P899	MIXAM 234139N 0575523E *Note 7 to KUPSA PAXIM 240245N 05617631E ITRAX 241248N 0554749E AL AIN (ALN) ABU DHABI DASLA N2437.8 E05332.8 VEBAT N2448.5 E05251.0 MEKMA N245430 E0522506 *Note 8 (OB) KUPSA N250445 E0521151	UP899	MIXAM 234139N 0575523E *Note 7 to KUPSA PAXIM 240245N 05617631E ITRAX 241248N 0554749E AL AIN (ALN) ABU DHABI DASLA N2437.8 E05332.8 VEBAT N2448.5 E05251.0 MEKMA N245430 E0522506 *Note 8 (OB) KUPSA N250445 E0521151
P975	NOLDO 324932N 0452129E *Note7 KATUT 323737N 0453439E DENKI 322228N 0455122E ILMAP 312133N 0465702E PEBAD 305023N 0472958E SIDAD 295231N 0482944E LOVAR 2924.4N 04846.1E SESRA 2908000N 004854.9E DANAL 2851.5N 04904.8E IMDOX 2834.9N 04914.6E LONOS 283027N 0491713E DETKO 280550N 0493130E TOLMO 2655.1N 05029.4E TORNA 2633.6N 05042.2E MEMBO 262425N 0504737E	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 KATUT 323737N 0453439E DENKI 322228N 0455122E ILMAP 312133N 0465702E PEBAD 305023N 0472958E SIDAD 295231N 0482944E LOVAR 2924.4N 04846.1E SESRA 2908000N 004854.9E DANAL 2851.5N 04904.8E IMDOX 2834.9N 04914.6E LONOS 283027N 0491713E DETKO 280550N 0493130E TOLMO 2655.1N 05029.4E TORNA 2633.6N 05042.2E MEMBO 262425N 0504737E
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)

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
R401	AMPEX 08 10.0N 055 00.0E SUHIL 1200.0N 05500.0E DAPAP 151115N 0552354E KIVEL 165306N 0553633E ERDAX 175903N 0554458E HAIMA (HAI) DEMKI 224941N 0562308E MUSAP 241754N 0555245E GIDIS 243600N 0555600E RAS AL KHAIMAH (RAK) DARAX GHESHM (KHM)	UR401	AMPEX 08 10.0N 055 00.0E SUHIL 1200.0N 05500.0E DAPAP 151115N 0552354E KIVEL 165306N 0553633E ERDAX 175903N 0554458E HAIMA (HAI) DEMKI 224941N 0562308E MUSAP 241754N 0555245E GIDIS 243600N 0555600E RAS AL KHAIMAH (RAK) DARAX GHESHM (KHM)
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	ROVAR 292438N0345711E QATRANEH (QTR) GURIAT (GRY) *Note 7(OE) TURAIF (TRF) OVANO 3148.0N 03909.8E DAXAN 320512N 0393719E GIBUX 330500N 0411100E RAPLU 332300N 0414530E GEPAP 334906N 0422851E MUTAG 343003N 0433834E IVANO 351724N 0451235E	UR652	ROVAR 292438N0345711E QATRANEH (QTR) GURIAT (GRY) *Note 7(OE) TURAIF (TRF) OVANO 3148.0N 03909.8E
R654	ZANJAN (ZAJ) SAVEH (SAV) ESFAHAN (ISN) YAZD (YZD) KERMAN (KER) NABOD 2816.1N 05825.3E CHAH BAHAR (CBH)	UR654	MAGRI 385408N 0462300E ZANJAN (ZAJ) SAVEH (SAV) ESFAHAN (ISN) YAZD (YZD) KERMAN (KER) NABOD 2816.1N 05825.3E

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
	EGPIC 2508.6N 06029.5E		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 254626N 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 254626N 0514207E DOHA (DOH)
R660	(ERZURUM) (ERZ) DASIS 38 54.5N 044 12.5E TABRIZ (TBZ) RASHT (RST) TEHRAN (TRN)	UR660	(ERZURUM) (ERZ) 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

LOWER AIRSPACE		UPPER AIRSPACE	
Designator **1**	**Significant Points** **2**	**Designator** **1**	**Significant Points** **2**
			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

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, 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 SSR CMP, available on the ICAO MID website, under eDocuments (https://portal.icao.int/RO_MID/Pages/eDocs.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-2 – MID SSR Code Allocation List

Code	AMMAN	BAGHDAD	BAHRAIN	BEIRUT	CAIRO	DAMASCUS	EMIRATES	JEDDAH	KHARTOUM	KUWAIT	MUSCAT	SANA'A	TEHRAN	TRIPOLI
0001-0077[2]														
0101-0177[1]								D	T					
0200-0277								D						
0300-0377[2]														
0400-0477[2]	D						D							
0500-0577[1]							T							
0600-0677[1]					D					D				
0700-0777[1]	T													
1000-1077[1]		T												
1101-1177[1]	D												D	
1200-1277[1]			D						D					
1300-1377[1]		D												D
1400-1477[1]					D					T				
1500-1577[1]													D	
1600-1677[1]					T									
1700-1777[1]							T							
2001-2077[3]														
2100-2177[1]			D											
2200-2277[1]			T											
2300-2377														
2400-2477[1]	D													
2500-2577[1]				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														
4000-4077[1]											T			T
4100-4177[1]								D					D	
4200-4277								T						
4300-4377[1]				T										
4400-4477[1]			T											
4500-4577[1]								T						
4600-4677[1]											D			
4700-4777[1]											T			

Code	AMMAN	BAGHDAD	BAHRAIN	BEIRUT	CAIRO	DAMASCUS	EMIRATES	JEDDAH	KHARTOUM	KUWAIT	MUSCAT	SANA'A	TEHRAN	TRIPOLI
5000-5077								D						
5100-5177														
5200-5277[1]								T	D					
5300-5377[3]									D					
5400-5477[1]													T	
5500-5577[3]														
5600-5677[1]													D	
5700-5777[1]						T								
6000-6077[1]							D							
6100-6177														
6200-6277[1]							T							
6300-6377[1]													D	
6400-6477[3]														
6500-6577[1]											D			
6600-6677[1]											D			
6700-6777[2]														
7001-7077														
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 aerodromes[1], 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		
IRAN (ISLAMIC REPUBLIC OF)	TEHRAN FIR	OIIX	TEHRAN/MEHRABAD INTL	OIII	Y	Y	Y	
IRAQ	BAGHDAD FIR	ORBB	BAGHDAD INTL AIRPORT	ORBI	Y	Y		
JORDAN	AMMAN FIR	OJAC	AMMAN/QUEEN ALIA	OJAI	Y	Y		
KUWAIT	KUWAIT FIR	OKAC	KUWAIT INTL AIRPORT	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		Y	X		F
EGYPT	AL ALAMAIN INTL	HEAL	AS	CAIRO INTL	HECA				*		P
	ALEXANDRIA INTL	HEAX	RS	CAIRO INTL	HECA	Y		Y	X		F
	ASWAN INTL	HESN	RS	CAIRO INTL	HECA	Y		Y	X		F
	ASYUT INTL	HEAT	AS	CAIRO INTL	HECA	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			X		F
	SHARK EL OWEINAT	HEOW	AS	CAIRO INTL	HECA	Y			X		F
	SHARM EL SHEIKH INTL	HESH	RS	CAIRO INTL	HECA	Y			X		F
	SOHAG INTL	HESG	AS	CAIRO INTL	HECA				*		P
	ST.CATHERINE INTL	HESC	AS	CAIRO INTL	HECA	Y			X		F
	TABA INTL	HETB	RS	CAIRO INTL	HECA	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
	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
	JERUSALEM/ JERUSALEM	OJJR	RS	AMMAN/ MARKA	OJAM				N
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	DAMMAM/ KING	OEDF	RS			Y		X	F

ARABIA	FAHD INTL								
	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			~~N~~ F
SUDAN	KASSALA	HSKA	AS	KHARTOUM	HSSS	Y			F
	KHARTOUM	HSSS	RS	KHARTOUM	HSSS	Y	Y	X	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	OYTZ	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.

(Libya & Sudan ?)

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	
	BAMAKO	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	BAMAKO	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 JEDDAH-KHARTOUM)		X

MID ANP, VOLUME II

PART VI - SEARCH AND RESCUE (SAR)

4. 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.

5. 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 - SEARCH AND RESCUE COORDINAION CENTRES AND RESCUE SUB CENTRES 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			
	BAHRAIN RCC	RCC ATC Bahrain	
	RSC		
	Doha	RCC ATC	
EGYPT			
	CAIRO RCC	SAR Centre	
	RSC		
	Alexandria		
	Luxor		
	Hurghada		
	M. Matruh		
	EL-Minya		
	El Tor		
	Habata		
	New Valley		
	Ras-Banas		
	Siwa		
IRAN			
	TEHRAN RCC	RCC Tehran	
	RSC		
	Bandar Abbass		
	Busherhr		
	Esfahan		
	Kerman		
	Kermanshah		
	Mashhad		
	Tabriz		
	Zahedan		
IRAQ			
	BAGHDAD RCC	CENTAF-AUAB CAOC JSRC	
	RSC		
	Kirkuk		
	Shaibah		
	Basrah		

RCC and Rescue Units		SPOC	Remarks
1	2	3	4
JORDAN			
	AMMAN RCC	RCC ATC Amman	
KUWAIT			
	KUWAIT RCC	RCC ATC Kuwait	
LEBANON			
	BEIRUT RCC	RCC Beirut	
	RSC		
	Tripoli		
LIBYA			
	TRIPOLI RCC	CAA	
	RSC		
	Marsa Brega		
	Sirte		
	Tobruk		
OMAN			
	MUSCAT RCC	RCC Muscat Air Force	
	RSC		
	Salalah		
SAUDI ARABIA			
	JEDDAH RCC	SAMCC	
	RSC		
	Dammam		
SUDAN			
	KHARTOUM RCC	ACC Khartoum	
	RSC		
	El Obeid		
	Juba		
	Port Sudan		
SYRIA			
	DAMASCUS RCC	RCC ATC	
	Damascus		
	Latakia		
UAE			
	ABU DHABI RCC	AEMCC	
	Abu Dhabi		
	Dubai		
	Fujairah		
YEMEN			
	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	OIIIZRZX	TRMCC Turkey	14-Jan-2013	
Iraq	CENTAF-AUAB CAOC JSRC			(974) 4503452 4364193	(974) 4327382		TRMCC Turkey	29-Sep-2009	
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
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	

[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
Qatar	RCC ATC			(974) 44616332 44651001 44616429	(974) 44622078 44678512	OTBDZTZX	SAMCC Saudi Arabia	16-Apr-2013	
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	OEJNJSAR	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

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

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
BAHARAIN	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	BAHRAIN	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	ABU DHABI	UNITED ARAB EMIRATES	UNITED ARAB EMIRATES	UNITED ARAB EMIRATES	UNITED ARAB EMIRATES	
YEMEN	SANA'A	YEMEN	YEMEN	YEMEN	YEMEN	

TABLE AIM II-2 - PRODUCTION RESPONSIBILITY FOR SHEETS OF THE WORLD AERONAUTICAL CHART - ICAO 1:1 000 000 OR AERONAUTICAL CHART — ICAO 1: 500 000

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
BAHARAIN	2547	
EGYPT	2447, 2448, 2543, 2544	
IRAN, ISLAMIC REPUBLIC OF	2338, 2339, 2428, 2429, 2443, 2444, 2548	
IRAQ	2427, 2445	
JORDAN	2426, 2446, 2447	*Note: Jordan to cover its own territory within Amman FIR*
KUWAIT	2445	*Note: Kuwait to cover its own territory within Kuwait FIR*
LEBANON	2426	*Note: Lebanon to cover its own territory within Beirut FIR*
LIBYA	2449, 2450, 2541, 2542, 2569, 2424	
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	*Note: Syria to cover its own territory within Damascus FIR*
UNITED ARAB EMIRATES		
YEMEN	2686, 2687	