INTERNATIONAL CIVIL AVIATION ORGANIZATION

REPORT OF THE FIFTH MEETING OF THE MIDANPIRG ATM SUB-GROUP

ATM SG/5

(Aqaba, Jordan, 1 – 4 December 2019)

The views expressed in this Report should be taken as those of the MIDANPIRG ATM Sub-Group and not of the Organization. This Report will, however, be submitted to the MIDANPIRG and any formal action taken will be published in due course as a Supplement to the Report.

Approved by the Meeting
and published by authority of the Secretary General

TABLE OF CONTENTS

Page

PART I - HISTORY OF THE MEETING

1. Place and Duration 1
2. Opening 1
3. Attendance 2
4. Officers and Secretariat 2
5. Language 2
6. Agenda 2
7. Conclusions and Decisions – Definition 3
8. List of Conclusions and Decisions 3

PART II - REPORT ON AGENDA ITEMS

Report on Agenda Item 1 1-1

Report on Agenda Item 2 2-1

Report on Agenda Item 3 3-1

Report on Agenda Item 4 ..... 4-1/4-5

Report on Agenda Item 5 ..... 5-1/5-2

Report on Agenda Item 6 ..... 6-1/6-2

Report on Agenda Item 7 ..... 7-1/7-2

Report on Agenda Item 8 8-1

Report on Agenda Item 9 9-1

Report on Agenda Item 10 10-1

APPENDICES

Appendix 2A

Appendices 4A – 4B

Appendices 5A – 5C

Appendix 6A

Appendices 7A – 7C

Appendices 8A – 8B

Appendix 9A

ATTACHMENT

List of Participants .....Attachment A

PART I - HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1 The Fifth meeting of the MIDANPIRG ATM Sub-Group (ATM SG/5) was kindly hosted by the Civil Aviation Regulatory Commission (CARC) - Jordan at Kempinski Hotel Aqaba Red Sea, Jordan from 1 to 4 December 2019.

2. OPENING

2.1 The meeting was opened by Mr. Diab Abu Zaid, Air Navigation Commissioner at Civil Aviation Regulatory Commission (CARC) – Jordan, who thanked ICAO for organizing this important meeting in Jordan and extended a warm welcome to all participants and wished them a pleasant stay in Aqaba. Mr. Abu Zaid highlighted that Jordan realizes the importance of these activities in support of traffic growth and continuous improvement of safety, security, efficiency and environmental footprint through collaborative effort and cooperation at national, regional and global levels.

2.2 Mr. Abu Zaid indicated that the air navigation operations in the MID Region have been affected by contingency measures since 2013, which imposed a massive economic impact on the aviation industry. With the prevailing situation in the Region, all operators were forced to utilize less than optimum ATS routes.

2.3 Mr. Abu Zaid wished the participants a fruitful meeting where collective efforts would come out with collaborative decisions and conclusions that best mitigate and reduce both operating costs and environmental impact while maintaining the acceptable level of safety.

2.4 In his opening address, Mr. Elie El Khoury, Regional Officer, Air Traffic Management/Search and Rescue (RO/ATM/SAR), ICAO Middle East Office, Cairo, welcomed all the participants to Aqaba. He expressed his gratitude and appreciation to His Excellency, Captain Haitham Misto, Chief Commissioner of CARC-Jordan for hosting the ATM SG/5 and the Coordination Meeting for the MID Flight Procedure Programme (MID FPP) in Aqaba. Mr. El Khoury extended special thanks to the air navigation team for the preparation and facilitation of these meetings and for the excellent hospitality extended to the ICAO staff and all participants. He highlighted that CARC's support to the ICAO MID Regional Office activities is an evidence of its active role and reflects Jordan's commitment to enhance the overall safety and efficiency of air navigation in the Region.

2.5 Mr. El Khoury provided the meeting with an overview of the subjects that will be addressed during the meeting and highlighted the main expected outcomes. He indicated that the Agenda of the meeting includes the inter-regional issues related to ATS routes and contingency planning. In this respect, he thanked United States of America for the active participation. Mr. El Khoury also thanked Mr. Sven Halle, Regional Officer/ANS (ATM) Implementation, ICAO Paris Office, for his attendance and support. Finally, Mr. El Khoury thanked ACAO, EUROCONTROL, IATA and MIDRMA for their contribution to the meetings with working papers and presentations.

2.6 In closing, Mr. El Khoury thanked all the participants for their presence and wished the meeting every success in its deliberations.

2.7 On the second day, the meeting received a visit from Excellences Minister of Transport-Jordan, Chief Commissioner of CARC, President of ICAO Council and the Regional Director of the ICAO Middle East Regional Office. They addressed the meeting with key notes recognizing the efforts carried out and the importance of the professional key role the ATM experts are playing to ensure the continued safe and efficient ATM operations across the MID Region despite all the challenges. ICAO commended Jordan's role in the Region in hosting major and important meetings/events in support of ICAO activities.

3. ATTENDANCE

3.1 The meeting was attended by a total of forty-seven (47) participants from ten (10) States (Bahrain, Cyprus, Egypt, Iraq, Jordan, Oman, Qatar, Saudi Arabia, UAE and United States of America) and four (4) Organizations (ACAO, EUROCONTROL, IATA and MIDRMA). The list of participants is at **Attachment A**.

4. OFFICERS AND SECRETARIAT

4.1 The meeting was chaired by Mr. Khaled Ahmed Arabiyat, ATM Director, Civil Aviation Regulatory Commission (CARC), Jordan, who was unanimously elected as Chairperson of the Air Traffic Management Sub-Group (ATM SG).

4.2 Mr. Elie El Khoury, RO/ATM/SAR, was the Secretary of the meeting supported by Mr. Sven Halle, Regional Officer RO/ANS (ATM), ICAO EUR/NAT Office.

5. LANGUAGE

5.1 Discussions were conducted in English and documentation was issued in English.

6. AGENDA

6.1 The following Agenda was adopted:

Agenda Item 1: Adoption of the Provisional Agenda and Election of Chairperson

Agenda Item 2: Follow-up on MIDANPIRG/17 Conclusions and Decisions

Agenda Item 3: Global and Regional Developments related to ATM

Agenda Item 4: MID Region ATS Route Network

Agenda Item 5: Airspace Management Issues

Agenda Item 6: ATM Safety Matters

Agenda Item 7: SAR Issues

Agenda Item 8: Review of Air Navigation Deficiencies in the ATM and SAR Fields

Agenda Item 9: Future Work Programme

Agenda Item 10: Any other Business

7. CONCLUSIONS AND DECISIONS – DEFINITION

7.1 The MIDANPIRG records its actions in the form of Conclusions and Decisions with the following significance:

a) **Conclusions** deal with matters that, according to the Group's terms of reference, merit directly the attention of States, or on which further action will be initiated by the Secretary in accordance with established procedures; and

b) **Decisions** relate solely to matters dealing with the internal working arrangements of the Group and its Sub-Groups.

8. LIST OF DRAFT CONCLUSIONS AND DECISIONS

DRAFT CONCLUSION 5/1:	*MID ANP TABLES RELATED TO ATM AND SAR*
DRAFT CONCLUSION 5/2:	*MID ANP TABLE II-MID-1*
DRAFT DECISION 5/3:	*ESTABLISHMENT OF ACTION GROUP FOR THE DEVELOPMENT OF GUIDANCE MATERIAL ON CIVIL/MILITARY COOPERATION AND IMPLEMENTATION OF FUA CONCEPT*
DRAFT CONCLUSION 5/4:	*PROVISIONS OF REQUIRED DATA AND REPORTING OF LHDS*

PART II: REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1: ADOPTION OF THE PROVISIONAL AGENDA AND ELECTION OF CHAIRPERSON

1.1 The meeting reviewed and adopted the Provisional Agenda as at paragraph 6 of the History of the Meeting.

1.2 The meeting recalled that in accordance with the MIDANPIRG Procedural Handbook (MID Doc 001), Part III, para. 6.1, Mr. Saleem Mohamed Hassan, Director Air Traffic Management, Civil Aviation Affairs, Bahrain, was unanimously re-elected as Chairperson of the ATM Sub-Group for three additional meetings. Mr. Ahmed Mohammed Al-Eshaq, Director Air Navigation, Civil Aviation Authority, Qatar, was unanimously elected as the Vice-Chairperson of the ATM Sub-Group by the ATM SG/3 meeting (Cairo, Egypt, 22 – 25 May 2017).

1.3 The meeting noted that Mr. Hassan, ATM SG Chairman, had retired form Bahrain Civil Aviation Affairs. Accordingly, his position was considered vacant.

1.4 The meeting thanked Mr. Saleem Hassan for his leadership and contribution to the work of the ATM SG and unanimously elected Mr. Khaled Ahmed Arabiyat, ATM Director, Civil Aviation Regulatory Commission (CARC), Jordan, as Chairperson of the Air Traffic Management Sub-Group (ATM SG).

REPORT ON AGENDA ITEM 2: FOLLOW-UP ON MIDANPIRG/17 CONCLUSIONS AND DECISIONS RELEVANT TO ATM AND SAR FIELDS

2.1 The meeting noted the status of the MIDANPIRG/17 Conclusions and Decisions and the follow-up actions taken by States, the Secretariat and other parties concerned as at **Appendix 2A**. The meeting agreed also to review the Conclusions and Decisions, which are still current, under the associated Agenda Items with a view to propose to the MSG/7 or MIDANPIRG/18 appropriate follow-up actions.

REPORT ON AGENDA ITEM 3: GLOBAL AND REGIONAL DEVELOPMENTS RELATED TO ATM AND SAR

Global and Regional Developments related to ATM and SAR

3.1 The subject was addressed in PPT/1 and PPT/2 presented by the Secretariat. The meeting was apprised of the ICAO global events relevant to ATM and SAR conducted in 2017-2019. The meeting was updated on the new ICAO Documents that had been published to support States in implementing ICAO's provisions, as well as on the provisions that will be applicable in 2020 related to ATM and SAR.

3.2 The meeting was provided with an overview of the main outcome of the 40th Session of the ICAO Assembly held in Montreal, Canada, from 24 September to 4 October 2019. In this respect, the meeting encouraged States to implement the Resolutions relevant to ATM and SAR.

3.3 The meeting was apprised of the outcome of the Fifth meeting of the Directors General of Civil Aviation – Middle East Region (DGCA-MID/5, Kuwait, 4-6 November 2019).

MID Air Navigation Plan

3.4 The subject was addressed in PPT/3 presented by the Secretariat. The meeting recalled that the Tables in the MID Air Navigation Plan (MID ANP) related to ATM and SAR need review and update. The meeting recalled MIDANPIRG Conclusion 17/12 related to the population of the Tables ATM I-1 *MID Region Flight Information Regions (FIRs)/ Upper Information Regions (UIRs)* and SAR I-1 *MID Region Search and Rescue Regions (SRRs)*. In this respect, the meeting encouraged States to review the relevant Tables in the MID ANP and provide ICAO MID Office with feedback by **15 February 2020**.

3.5 Based on the above, the meeting agreed to the following Draft Conclusion***:***

DRAFT CONCLUSION 5/1: MID ANP TABLES RELATED TO ATM AND SAR

That, States be urged to:

*a) review the Tables in the MID ANP related to ATM and SAR and provide the ICAO MID Office with the necessary inputs by **15 February 2020**; and*

b) designate focal points for effective follow-up and coordination, in particular for the population of Tables ATM I-1 MID Region Flight Information Regions (FIRs)/ Upper Information Regions (UIRs) and SAR I-1 MID Region Search and Rescue Regions (SRRs).

MID Air Navigation Strategy and Air Navigation Report

3.6 The subject was addressed in PPT/4 presented by the Secretariat. The meeting was apprised of the latest version of the MID Air Navigation Strategy (MID Doc 002) and MID Air Navigation Report. The meeting reviewed the parts related to ATM based on the discussions of B0-FRTO, B0-NOPS and B0-SNET. The meeting initiated the discussion on the future planning of ASBU implementation in the MID Region taking into consideration the Sixth Edition of the GANP and the new ASBU framework. In this respect, the meeting encouraged States and stakeholders to participate in the ACAO/ICAO ASBU Symposium that will be in held at the ICAO MID Office in Cairo, Egypt, 16-19 March 2020.

REPORT ON AGENDA ITEM 4: MID REGION ATS ROUTE NETWORK

Main Outcome of RDGE

4.1 The subject was addressed in WP/7 presented by the Secretariat. The meeting was apprised of the main results from the ICAO Route Development Group Eastern part of the ICAO EUR Region (RDGE) and the associated Special Coordination Meetings that were organised in the framework of the RDGE. The meeting also discussed the proximity check distance of homophonous five-letter name-codes (5LNC) and the ICARD 5LNC Database.

4.2 The meeting agreed that ICAO should take necessary actions to resolve the issue associated with homophonous five-letter name-codes (5LNC) and the ICARD 5LNC Database.

Flight Planning System Capabilities

4.3 The subject was addressed in PPT/7 presented by IATA. The meeting noted the flight planning issues in processing some of the published ATS routing schemes and/or ATM restrictions, which are used as ATFM measures. Accordingly, the meeting encouraged IATA to coordinate with the States concerned for visits to discuss and rectify the situation.

4.4 The meeting also agreed that the development of guidance for the harmonization and unifying of the publication of ATM measures and restrictions would support in rectifying the above reported issues. The meeting invited IATA and ICAO to address the subject to the ATFM Task Force and AIM SG.

ATS Route Network

4.5 The subject was addressed in PPT/5 presented by the Secretariat. The meeting commended States and stakeholders for the excellent cooperation and their commitment to improve the ATS route network in the MID Region.

4.6 The meeting urged Egypt, Iran, Saudi Arabia and Sudan to implement the Top 4 Routes relevant to their FIRs. The meeting invited ICAO to facilitate the coordination with Cyprus and Pakistan regarding TPR 4 and TPR 3, respectively.

4.7 It was highlighted that in respect to TPR/2, Egypt established the segment PASAM-HGD. The meeting requested feedback from Saudi Arabia with respect to the establishment of the segment HIL-PASAM including the envisaged implementation date. The meeting noted with appreciation that the segment NWB-DATOK is now available within Cairo FIR.

4.8 Egypt invited ICAO to follow-up with Sudan in order to continue the coordination on the improvement of the ATS route structure at the interface between Cairo and Khartoum FIRs, as a follow-up to the Special Coordination Meeting that was held at the ICAO MID Office, Cairo, Egypt, 29-30 March 2017, including the implementation of 30NM radar longitudinal separation to be further reduced to 20NM.

4.9 The following side meetings were held to discuss improvements to the ATS Route Network and airspace management and as follow-up to the Second Special Coordination Meeting on the implementation of ATM Contingency Arrangements (Muscat, Oman, 16-18 July 2019):

Side Meeting 1 on 2 December 2019 at 15:30
Egypt, Iraq, Jordan, Saudi Arabia, EUROCONTROL, IATA and ICAO

Side Meeting 2 on 2 December 2019 at 17:30
Jordan and Saudi Arabia

Side Meeting 3 on 4 December 2019 at 15:30
Cyprus, Egypt, Jordan, Saudi Arabia, EUROCONTROL, IATA and ICAO

Side Meeting 4 on 4 December 2019 at 17:30
Saudi Arabia and IATA

4.10 The following are the key points agreed upon by the side meetings. Accordingly, States were invited to implement the actions agreed upon and provide feedback in accordance with the agreed timelines:

	Action	Deliverables	Timeline	States	Status/RMK
1.	Implementation of 15NM radar longitudinal separation between Cairo and Jeddah FIR with three (3) months trial period	Implementation	1 Jan 2020	Egypt Saudi Arabia	Agreed
2.	Discuss the implementation of 15NM radar longitudinal separation between Amman and Cairo ACCs	Study	1 Feb 2020	Egypt Jordan	
3.	Egypt to confirm the possibility for the establishment of direct controller-to-controller communication between Cairo and Nicosia ACCs to facilitate the Implementation of 15NM between the two (2) States.	Feedback from Egypt	31 Dec 2019	Egypt	
4.	Address the implementation of 15NM radar longitudinal separation between Cyprus and Turkey to support the cross border implementation with MID Region	Feedback from Turkey	31 Dec 2019	Cyprus Turkey EUROCONTROL ICAO	
5.	Use of ULINA westbound with the allocation of FL300 and FL360 to be used by Amman ACC for the traffic entering from Jeddah FIR through point DEESA the other even FLs will be allocated to waypoint KITOT. As a start ULINA (Westbound) would be used for traffic exiting Cairo FIR via waypoints PASOS and LAKTO.	To study and provide feedback on the implementation date	15 Jan 2020	Egypt Jordan Saudi Arabia Cyprus	

6.	Connecting L550 to LAKTO	Implementation	26 Mar 2020	Cyprus Egypt	
7.	Implementation of 2 routes between Baghdad and Jeddah FIRs based on the proposal that will be provided by Iraq	Proposal from Iraq Study and feedback	15 Dec 2019 15 Jan 2020	Iraq Saudi Arabia	
8.	Improvement of the ATS Route Network at Amman/Jeddah interface to split the traffic flows through (GRY) on two parallel unidirectional routes	Implementation	AIRAC 8 Oct 2020	Jordan Saudi Arabia	
9.	Reopening of G669 (which might require re-positioning of waypoint SOLAT) and Implementation of ATS Route from SOLAT or a point North of SOLAT to the Iraqi borders with Jordan and Syria	Study	15 Jan 2020	Iraq Jordan Kuwait Syria Saudi Arabia	Feedback from Kuwait required first
10.	Opening of waypoint KABAN (interface Iraq/Turkey)	Implementation	5 Dec 2019	Iraq Turkey EURO-CONTROL	Completed by Iraq
11.	Establishment of the segment HIL-PASAM	Feedback	15 Jan 2020	Saudi Arabia	

4.11 The meeting noted that as follow-up to the RDGE meeting held in Paris in September 2019, Iraq re-established the ATS route connection within Baghdad FIR to waypoint KABAN (TASMI-UL602-ALPET-L718-KABAN). The meeting noted that the route was available for use effective 5 December 2019.

4.12 The meeting invited EUROCONTROL, IATA and ICAO to continue their follow-up with Cyprus, Egypt, Greece, Iraq, Iran, Jordan, Kuwait, Saudi Arabia and Turkey in order to improve the ATS route structure and airspace management at the interface between ICAO Europe and Middle East Regions.

Changes to the ATS route Network within Cairo FIR

4.13 The subject was addressed in WP/3 presented by Egypt. The meeting noted that a new Prohibited area was established within Cairo FIR over the Dabaa nuclear power plant by a radius of 12NM with vertical limit from ground to unlimited, which required the redesign of the ATS routes crossing that area. The changes would introduce some improvements to the current ATS route structure such as the reduction of complexity over crossing points and decreasing controller/pilot workload. The targeted implementation date is AIRAC 26 March 2020 after the processing of the Proposal for Amendment (PfA) to the MID Air Navigation Plan.

4.14 IATA proposed some amendments to the Egyptian proposal in order to ensure shortest routing is implemented and requested Egypt to clarify the use of DCTs within Cairo FIR. Egypt informed the meeting that all suggestions for improvements will be taken into consideration during the airspace redesign project that will be initiated soon. Therefore, IATA indicated their reservation to the proposal without objecting that the PfA be circulated and the new changes be implemented on the target date.

4.15 Based on the above, the meeting invited Egypt to involve the adjacent States to Cairo FIR, IATA and the airspace users in the redesign project to ensure effective cooperation and better results achievements.

Update from Saudi Arabia

4.16 The subject was addressed in PPT/11 presented by Saudi Arabia. The meeting noted the developments implemented and the ongoing projects aiming to improve the ATM operations within Jeddah FIR.

MID ANP TABLE II-MID-1

4.17 Taking into consideration the significant changes to the MID Region ATS Route Network, the meeting agreed that a comprehensive review of the Table II-MID-1 of the MID eANP should be carried out. Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 5/2: MID ANP TABLE II-MID-1

That,

a) States provide the ICAO MID Office with their inputs to the Table II-MID-1 at ***Appendix 4A*** *before* ***15 February 2020****; and*

b) the Secretariat consolidate the inputs and process a proposal for amendment to the MID ANP Volume II, by ***15 May 2020****.*

4.18 The meeting noted the IATA process for the ATS routes proposals that will provide a dynamic route catalogue that will ensure effective coordination between airspace users and concerned States on consensus basis.

4.19 Taking into consideration that several efforts are taking place to improve the ATS Route Network at national and cross-border levels, the meeting invited States to use the MID RDWG as a platform to facilitate coordination in line with MIDANPIRG Conclusion 17/18.

Free Route Airspace (FRA) Concept

4.20 The Subject was addressed in PPT/6 presented by EUROCONTROL, which provided information on the European FRA Design Procedures, focusing on the main principles of the FRA concept and requirements for Aeronautical Information Publication (AIP) publication.

4.21 The meeting thanked EUROCONTROL for sharing their experience and for their contribution. It was emphasized that the implementation of FRA in the MID Region would be a long-term objective. However, some States might initiate the planning for FRA concept; coordination with the ICAO MID Office would be required.

4.22 Saudi Arabia invited EUROCONTROL to present the FRA Concept and examples of implementation plans from Europe through a workshop that would be hosted by SANS in Jeddah that might include discussion on the possibilities and options for FRA implementation within the Jeddah

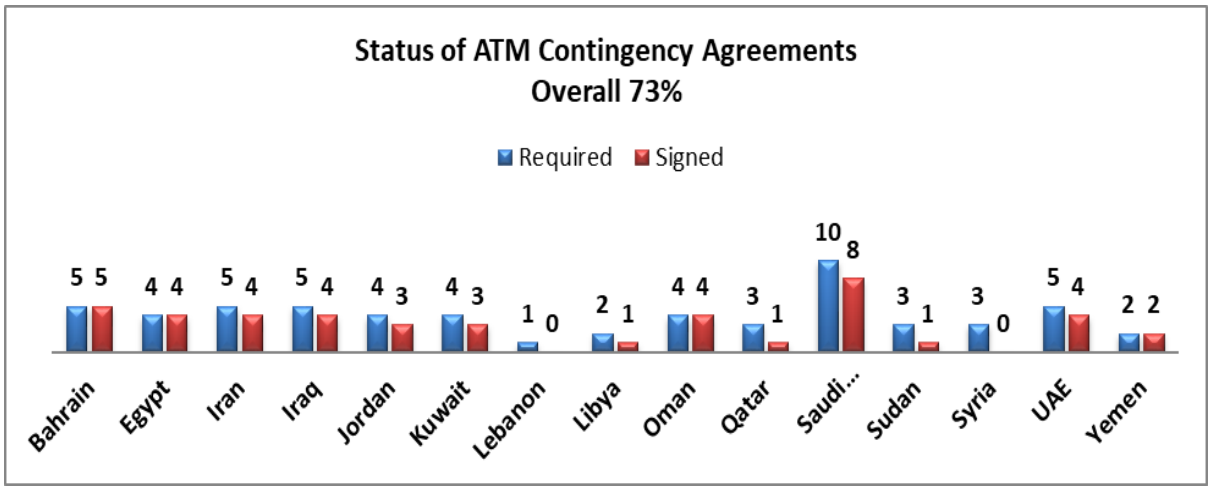
FIR. The exact dates will be determined between the State, EUROCONTROL and ICAO (EUR/NAT and MID Offices).

Contingency Planning

4.23 The subject was addressed in PPT/5 presented by the Secretariat. The meeting was apprised of the activities related to contingency planning in the MID Region and the status of the various Contingency Coordination Teams (CCTs). In this respect, the meeting commended States and Stakeholders for their commitment and excellent cooperation that ensured the success of the CCT framework according to the current regional possible scenarios and capabilities

4.24 The meeting recalled MIDANPIRG Conclusions 17/19 and 17/20 in particular the tasks associated to the ATM SG. Accordingly, the meeting agreed that the assigned tasks should be taken into consideration during the amendment process of the MID ATM Contingency Plan by the established Action Group for that purpose.

4.25 The meeting reviewed the status of signed contingency agreements between adjacent ACCs as at **Appendix 4B** and as reflected in the **Graph** below:



REPORT ON AGENDA ITEM 5: AIRSPACE MANAGEMENT ISSUES

5.1 The subject was addressed in PPT/8 presented by the Secretariat:

Civil/Military Cooperation and Flexible Use of Airspace

5.2 The meeting was apprised of the latest developments in the European Region related to civil/military cooperation and the implementation of the Flexible Use of Airspace (FUA) Concept. An overview was provided of the Baltic Sea Project Team and the ICAO EUR Doc 032 (Interim Guidance material on Civil/Military Cooperation in ATM) in particular the guidance related to FUA over the high seas and the example for State aircraft operations under Due-Regard.

5.3 The meeting recalled MIDANPIRG Conclusion 17/21 related to the development of MID Guidance Material related to Civil/Military cooperation and implementation of FUA Concept, including State aircraft operations under Due Regard in particular over the high seas, based on the EUR Doc 032. Accordingly, the meeting agreed to the following Draft Decision:

DRAFT DECISION 5/3: ESTABLISHMENT OF ACTION GROUP FOR THE DEVELOPMENT OF GUIDANCE MATERIAL ON CIVIL/MILITARY COOPERATION AND IMPLEMENTATION OF FUA CONCEPT

*That, the Action Group composed of experts from Bahrain, Egypt, Iraq, Jordan, Oman, Qatar, Saudi Arabia, UAE and ICAO be established to draft, by **30 April 2020**, guidance material related to Civil/Military Cooperation and implementation of FUA Concept, including State aircraft operations under Due Regard in particular over the high seas.*

AIDC/OLDI

5.4 The meeting reviewed and updated the Table of AIDC/OLDI priorities as at **Appendix 5A**.

Radar Longitudinal Separation Minima

5.5 The meeting reviewed and updated the status of implementation of the Radar Longitudinal Separation in the MID Region as at **Appendix 5B**.

High Level Airspace Concept

5.6 The meeting reviewed and prepared an initial draft of the MID Region High level Airspace Concept (MID Doc 004) that should be further reviewed by the ATM Focal Points taking into consideration the latest developments, in particular the outcome of MSG/6 and MIDANPIRG/16 and 17 meetings, for presentation to MIDANPIRG/18.

Air Traffic Flow Management

5.7 The subject was addressed in PPT/9 presented by the Chairman of the ATFM Task Force. The meeting was provided with an update on the work carried out by the ATFM Task Force. The meeting noted that MIDANPIRG/17 agreed that the Multi Nodal Scenario be implemented as initial start as an ATFM solution for the MID Region. The meeting reviewed the action plan for the implementation of ATFM solution and noted that some target dates had not been met.

5.8 The meeting encouraged States and Organizations to implement the Recommendations of the ATFM Workshop held in Casablanca, Morocco at **Appendix 5C**.

FIFA World Cup 2022 Task Force

5.9 The subject was addressed in PPT/10 presented by the Secretariat on behalf of the Chairman of the FWC2022 Task Force. The meeting recalled that MIDANPIRG/16 through Decision 16/18 established the World Cup 2022 Task Force to develop and follow-up the implementation of a collaborative action plan to accommodate the expected high increase in traffic, in a safe and efficient manner, taking into consideration similar experiences. The MIDANPIRG/16 meeting agreed that the Task Force would also address other major events such as the EXPO 2020.

5.10 After the discussions on ATFM and FWC2022, the meeting commended the work carried out till today by all the experts supporting the ATFM TF, the ATFM Core Team and FWC2022 TF.

5.11 The meeting urged States to take necessary measures to ensure the establishment of ATFM service at the national level, including the promulgation of the required regulations, organizational structure, human and financial resources, training, etc.

5.12 The meeting encouraged States and organizations to continue their collaboration and provide further support in order to prepare the MID Region to accommodate the significant increase of traffic due to the FIFA World Cup 2022 or any other major events in a safe and efficient manner.

5.13 The meeting encouraged States and organizations to participate in the ATFM TF/3 and FWC2022 TF/3 meeting that will be held in Amman, Jordan from 12 to 14 January 2020 back-to-back with the MIDRMA Board/16 meeting (14-16 January 2020).

REPORT ON AGENDA ITEM 6: ATM SAFETY MATTERS

Draft MID RVSM Safety Monitoring Report (SMR) 2018

6.1 The subject was addressed in WP/6 presented by the MIDRMA.

6.2 The meeting underlined that several FIRs with high volume of traffic continue to report NIL or very few LHDs, which have a negative effect on the computed Targets Level of Safety (i.e.: not representative/realistic). In this respect, the meeting urged States to take necessary measures to encourage the reporting of LHDs by air traffic controllers such as inclusion of the reporting of LHDs as part of their reporting system (SMS).

6.3 The meeting reiterated MIDANPIRG Conclusion 15/6, and encouraged States to develop a simplified LHD Template containing the minimum data necessary to trigger the process of reporting LHDs by the air traffic controllers.

6.4 The meeting urged States to verify their LHDs prior to submission through the online LHD Reporting Tool to avoid the efforts spent on the analysis of false reports by concerned ATS Units.

6.5 The meeting noted with concern the high level of LHDs reports at the interface between Muscat with Mumbai and Karachi. The meeting noted that a Safety Protocol has been opened for the case of Muscat/Mumbai and that the MIDRMA and ICAO MID Office are in close coordination with concerned States, MAAR and ICAO APAC Office to resolve the issue.

6.6 With a view to address the LHDs in an effective manner with the ATS Units concerned and to analyze the LHDs prior to presentation to the MIDRMA Board or ATM SG meetings for validation, the meeting agreed that the MIDRMA should conduct bilateral teleconferences with the adjacent ATS Units to analyze the relevant LHDs and present a consolidated report to the MIDRMA Board or the ATM SG meetings for validation in order to finalize the SMR for endorsement by MIDANPIRG.

6.7 The meeting reviewed initial draft of the MID RVSM SMR 2018 at **Appendix 6A**. The meeting noted that, according to the data and methods used, the key safety objectives 1 and 3 as set out by MIDANPIRG, through Conclusion 12/16, continue to be met. However, it was noted with concern that the MIDRMA was able not to assess the Objective 2 due to lack of required data including the reporting of LHDs. The meeting noted that Beirut, Damascus and Tripoli FIRs were excluded from the SMR 2018 due to non-provision of required data.

6.8 Based on the above the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 5/4: PROVISIONS OF REQUIRED DATA AND REPORTING OF LHDS

*That, States be urged to take necessary measures to provide the MIDRMA with the data required for the development of MID RVSM SMR 2018 and in particular the reported LHDs, not later than **20 December 2019** for presentation to MIDRMA Board/16 meeting (Amman, Jordan, 14-16 January 2020).*

6.9 The meeting encouraged States and Organizations to participate in the MIDRMA Board/16 meeting that will be held in Amman, Jordan from 14 to16 January 2020 back-to-back with the ATFM TF/3 and FWC2022 TF/3 meetings (12-14 January 2020).

Call Sign Similarity and Confusion

6.10 The subject was addressed in WP/8 presented by UAE. The meeting noted the current status of the usage of alphanumeric ATC call signs within Emirates FIR in compliance with MIDANPIRG15 Conclusion 15/2 - *Call Sign Similarity Provisions and Guidelines*. The meeting noted with appreciation that an important decrease in the number of incidents related to call sign similarity/conflict was observed in the Emirates FIR (around 40% decrease). The meeting noted that with the increased use of alphanumeric call signs, call sign conflicts/similarities would continue to exist and ANSPs should place increased emphasis on the detection/alerting of call sign conflicts before they occur. The meeting encouraged States/ANSPs to develop unified procedures if/when potential exists and to consider that their future ATM systems should provide a 'built-in' detection and alerting tool to Air Traffic Controllers.

6.11 Based on the above, the meeting encouraged States and airspace users to:

a) support the MID Region CSC initiatives ensuring effective implementation and cooperation;

b) take note of and support the work of the UAE; and

c) promote the reporting of callsign similarity events to the email addresses: MIDCSC@icao.int and MENACSSU@iata.org

---

REPORT ON AGENDA ITEM 7: SEARCH AND RESCUE ISSUES

7.1 The subject was addressed in PPT/12 presented by the Secretariat. The meeting noted that the main deficiencies and USOAP CMA SAR findings in the MID Region are related to:

- Implementation of the Regional SAR Plan;
- Lack of Comprehensive National SAR Plans;
- Local cooperation among stakeholders involved in SAR;
- SAR is more retro-active rather than pro-active approach;
- English Language Proficiency for RCC radio operators;
- Appropriate training programmes/plans of SAR experts;
- Lack of signature of SAR agreements;
- Lack of plans of operations for the conduct of SAR operations and SAR exercises;
- Lack of provision of required SAR services; and
- Non-compliance with the carriage of Emergency Locator Transmitter (ELT) requirements.

7.2 The meeting recalled that the DGCA-MID/5 meeting, taking into consideration that the main objective of SAR is saving lives and support in preventing future accidents through lessons learned, agreed that SAR should be given high priority through the allocation of adequate resources. Accordingly, the DGCA-MID/5 meeting urged States to ensure:

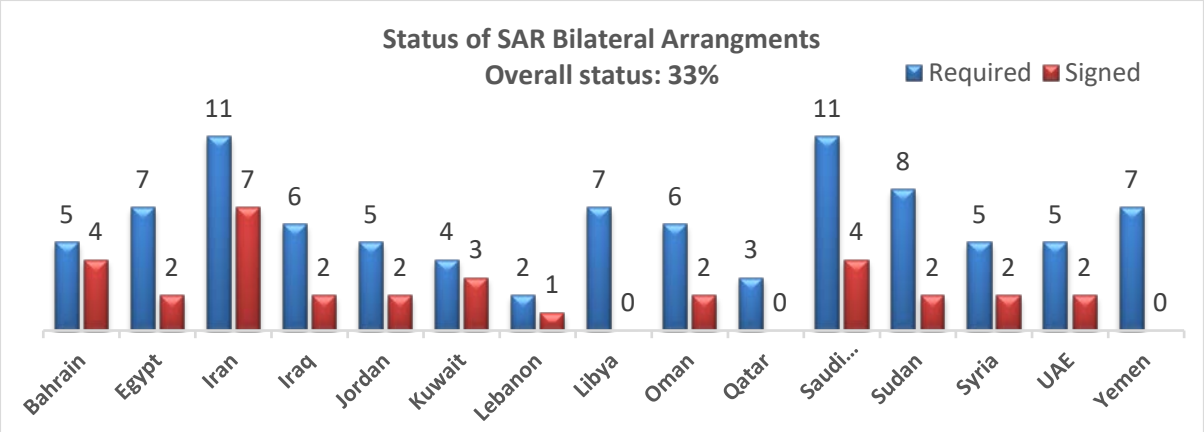
a) the allocation of adequate resources to SAR;

b) effective and efficient cooperation between all concerned authorities at national level (SAR Plan); and with their Adjacent and neighboring States;

c) that SAR services are provided by qualified and well trained SAR experts; and

d) cross-border collaboration for sharing of resources through bilateral or multilateral agreements.

7.3 The meeting reviewed and updated the status of SAR bilateral Arrangements as at **Appendix 7A**, and as reflected in **Graph** 1**.** The meeting noted with appreciation that the level of signed SAR bilateral arrangements is improving.



Graph 1

7.4 The meeting was apprised of the outcome of the AFI/APAC/MID Inter-regional SAR Workshop held in Salalah, Oman, 26-29 August 2019. Accordingly, the meeting encouraged States to implement the relevant recommendations at **Appendix 7B** emanating from the Workshop.

7.5 The meeting reviewed and updated the SAR Focal Points contact details as at **Appendix 7C**.

REPORT ON AGENDA ITEM 8: REVIEW OF AIR NAVIGATION DEFICIENCIES IN THE ATM AND SAR FIELDS

ATM and SAR Deficiencies

8.1 The subject was addressed in WP/4 presented by the Secretariat. The meeting noted with concern that the use of the MID Air Navigation Deficiency Database (MANDD) is still far below expectation. Accordingly, the meeting urged States to use the MANDD for the submission of requests for addition, update, and elimination of Air Navigation Deficiencies.

8.2 It was highlighted that in the ATM field, most of the deficiencies are related to the non-implementation of regional ATS Routes, uncompleted signature of contingency agreements and unsatisfactory reporting of Large Height Deviations (LHD) to the MIDRMA. In the SAR field, the deficiencies are related mainly to the lack of implementation of SAR provisions and non-compliance with the carriage of Emergency Locator Transmitter (ELT) requirements.

8.3 The meeting reviewed the list of deficiencies in the ATM and SAR fields as at **Appendices 8A** and **8B**; respectively, and urged States to take necessary measures to implement the provisions of the MIDANPIRG/15 Conclusion 15/35, in particular the submission of a specific Corrective Action Plan (CAP) for each deficiency.

REPORT ON AGENDA ITEM 9: FUTURE WORK PROGRAMME

9.1 The meeting reviewed and update the Terms of Reference (TOR) of the ATM Sub-Group as at **Appendix 9A** taking into consideration that ANSIG was dissolved.

9.2 Taking into consideration the planned ICAO MID Regional upcoming events which are of relevance to the activity of the ATM Sub-Group, in particular the MIDANPIRG/18, the meeting agreed that the ATM SG/6 meeting be held during the first quarter of 2021. The venue will be the ICAO MID Regional Office in Cairo, unless a State is willing to host the meeting.

REPORT ON AGENDA ITEM 10: ANY OTHER BUSINESS

10.1 The meeting provided an opportunity for the participants to attend the opening of the ICAO Air Services Negotiations Event (ICAN2019) held at Aqaba, Jordan from 2 to 6 December 2019, which included a remarkable Air Show celebrating the ICAO 75th Anniversary.

10.2 The meeting thanked Jordan for the generous hospitality provided and the excellent hosting arrangements. In this respect, the meeting appreciated that the third meeting of the ATFM Task Force and FIFA World Cup 2022 Task Force as well as the Sixteenth meeting of the Middle East Regional Monitoring Agency (MIDRMA) Board will be hosted by Jordan in Amman, from **12** to **16 January 2020**.

APPENDICES

FOLLOW-UP ACTION PLAN ON MIDANPIRG/17 CONCLUSIONS & DECISIONS

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
C. 17/2	**ANALYSIS OF LHDS** That, as part of the MIDRMA Scrutiny Group activities, the MIDRMA conduct bilateral teleconferences with the MIDRMA ATC focal points to analyze the relevant LHDs and present a consolidated report to the MIDRMA Board or the ATM SG meetings for validation in order to finalize the SMR for endorsement by MIDANPIRG.	To Facilitate the analysis and validation of LHDs	New means to analysis LHDs	MIDANPIRG/17	Apr. 2019	**Completed**
C.17/3	**PROCEDURE FOR THE FOLLOW-UP WITH STATES AND THE ISSUANCE OF WARNING RELATED TO RVSM APPROVED AIRCRAFT WITHOUT VALID HEIGHT-KEEPING PERFORMANCE MONITORING RESULTS** That, the Procedure at **Appendix 4C** for the follow-up with States and the issuance of warning related to RVSM approved aircraft without valid height-keeping performance monitoring results, is endorsed.	aircraft without valid height-keeping performance monitoring results	Procedure for follow-up on issuance of warning	MIDANPIRG/17	Apr. 2019	**Completed**
C. 17/4	**MID RVSM SAFETY MONITORING REPORT CYCLE** That, starting from 2018, the MID RVSM Safety Monitoring Report should be issued on annual basis (12 months) to facilitate tracking the risk trend of RVSM implementation in the MID Region.	Change the SMR Cycle	Change the SMR Cycle to one year	MIDANPIRG	Apr. 2019	**Completed**

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
C. 17/5	**MID RVSM SMR 2019** That, a) the FPL/traffic data for the period **1 – 31 August 2019** be used for the development of the MID RVSM Safety Monitoring Report (SMR 2019); b) only the appropriate Flight Data form available on the MIDRMA website (www.midrma.com) should be used for the provision of FPL/traffic data to the MIDRMA; and c) the final version of the MID RVSM SMR 2019 be ready for presentation to and endorsement by MIDANPIRG/18 or ATM SG/6 meetings.	To develop the MID SMR 2019	State Letter Traffic Data MID SMR 2019	ICAO States MIDRMA	Aug 2019 30 Sep. 2019 Feb 2021	**Actioned** SL AN 6/5.10.15A-19/230 dated 25 July 2019
C. 17/6	**RVSM MINIMUM MONITORING REQUIREMENTS AND CONDITIONS** That, the MIDRMA Member States be urged to: a) take necessary measures to ensure their aircraft operators fully comply with ICAO Annex 6 provisions related to long-term height monitoring requirements, based on the MMR Tables; b) comply with the MID RVSM MMR Conditions published in the MIDRMA website; and c) withdraw the RVSM Approvals of aircraft not complying with the State MMR before 1 July 2019.	States to comply with Anne 6 6 provisions related to long-term height monitoring requirements	State Letter	ICAO	Jul. 2019	**Actioned** SL AN 6/5.10.15A-19/199 dated 1 July 2019

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
C. 17/7	**MIDRMA BULLETIN OF NON-RVSM APPROVED AIRCRAFT** That, a) the MIDRMA post on the MIDRMA website and share with the MIDRMA Board Members and focal points the Bulletin of non-RVSM approved aircraft on monthly basis; and b) States be encouraged to: i. develop a mechanism to identify the non-RVSM approved aircraft operating in the RVSM Airspace without compliance with Annex 6 provisions; ii. submit their RVSM traffic data including aircraft registrations to be used for the RVSM risk analysis; and iii. coordinate with the MIDRMA in case they are able to provide their RVSM traffic data on a monthly basis.	To identify the non-RVSM approved aircraft operating in the RVSM Airspace without compliance with Annex 6 provisions and that the MIDRMA to share the Bulletin of non-RVSM approved aircraft on monthly basis	State Letter	ICAO	Jul 2019	**Actioned** SL AN 6/5.10.15A-19/199 dated 1 July 2019
C. 17/8	**MID RVSM SAFETY MONITORING REPORT (SMR) 2017** That, the MID RVSM Safety Monitoring Report (SMR) 2017 is endorsed.	MID SMR 2017	Endorsement of MID SMR 2017	MIDANPIRG	Apr. 2019	**Completed**
C. 17/9	**THIRD EDITION OF THE MID REGION AIR NAVIGATION REPORT (2018)** That, the Third Edition of the MID Region Air Navigation Report (2018) is endorsed and be posted by the ICAO MID Office on the website.	Third Edition of the MID Region Air Navigation Report	Endorsement of MID SMR 2017	MIDANPIRG	Apr. 2019	**Completed**

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
C. 17/10	**MID REGION AIR NAVIGATION REPORT (2019)** That, a) States be urged to provide the ICAO MID Office, with relevant data necessary for the development of the Fourth Edition of the MID Region Air Navigation Report (2019), by 1 December 2019; and b) the MID Region Air Navigation Report (2019) be presented to the MSG/7 for endorsement.	Monitoring and Reporting of ASBU implementation in the MID Region	State Letter Data for AN Report 2017 Air Navigation Report (2019)	ICAO States MSG/7	Dec. 2019 Apr. 2019	**Ongoing**
C. 17/11	**JOINT ACAO/ICAO ASBU SYMPOSIUM** That, a Joint ACAO/ICAO ASBU Symposium be organized beginning of 2020.	Raise awareness about the 6th Edition of the GANP and align the MID AN Strategy	Draft Revised MID AN Strategy	ICAO/ACAO	Mar. 2020	**Ongoing** 9-12 March 2020
C. 17/12	**PUBLICATION OF FIR BOUNDARY POINTS** That, States be urged to: a) take into consideration the Guidelines at **Appendix 6.2B** for the description of their FIR boundaries; b) review the Table ATM I-1 MID Region Flight Information Regions (FIRs)/Upper Information Regions (UIRs) at **Appendix 6.2C** and coordinate with neighboring States, as appropriate, the definition of common boundaries; and c) provide the ICAO MID Regional Office with their updates and comments before **15 August 2019.**	To populate the MID ANP Table ATM I-1	State Letter Feedback from States	ICAO States	Jul 2019 Aug 2019	**Actioned** SL AN 6/10-19/206 dated 2 July 2019
C. 17/13	**AMENDMENT TO THE MID eANP VOLUME III** That, the amendment to the MID eANP Volume III at **Appendix 6.2D** is approved.	To amend/update the MID eANP Vol III	Draft Revised MID AN Strategy	ICAO/ACAO	Mar. 2020	**Completed**

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
C. 17/18	**MID RDWG AND MID REGION ATS ROUTE CATALOGUE** That, States be urged to: a) use the MID Route Development Working Group (MID RDWG) as the main platform to facilitate bilateral and multilateral coordination related to the improvement of the ATS Route Network and airspace management in the MID Region; and b) review the MID Region ATS Route Catalogue and take actions related to the implementation of the ATS proposals relevant to their FIRs.	To use the RDWG as a platform for ATS route improvements	State Letter	ICAO	Jul 2019	**Actioned** SL AN 6/5.8-19/205 dated 2 July 2019
C. 17/19	**SAFETY ASSESSMENTS DUE TO CONTINGENCY WITH IMPACT ON ATS ROUTE NETWORK** That**,** a) Bahrain, Iran, Oman, Qatar and UAE be urged to provide the outcomes of their safety assessment of the contingency routes and/or changes to the ATS Routes Network to the ICAO MID Office by **15 June 2019**, as well as the relevant data for the analysis of the disruption and its impact to the network; b) the ATM SG/5, with the MIDRMA support, carry out analyses of the data/inputs received form States to identify the challenges and agree on necessary measures to mitigate any safety risk; and c) conduct a lessons-learned session during the ATM SG/5 meeting with the participation of affected stakeholders reviewing the impact of the disruption to the network, allowing all stakeholders to present their views and feedback.	To assess the impact on safety during contingency	State Letter	ICAO	Jul 2019	**Actioned** SL AN 6/1.2.1-19/200 dated 2 Jul 2019 Bullet b) and c) were not implemented due to non-provision of the safety assessment by all States as per bullet a).

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
17/20	**ENHANCED FRAMEWORK FOR THE MID CCT** That, a) States intending to restrict traffic or close all or part of their airspace be urged to consider adequate time before affecting the required change to minimize traffic disruption; b) States, under the framework of the CCT, in coordination with airspace users, agree on interim guidance with a progressive set of flow measures to address the current Air Traffic Flow disruption caused by the closure of Pakistan airspace; and c) the ATM SG/5: i. develop guidelines on how extended disruptions in the network are to be managed in a balanced manner; and ii. enhance the notification and coordination process of contingency operations in the frame of the MID CCT, particularly for: - consistency of interrelated contingency information promulgated by more than one State; and - agreement on recovery plan for each contingency situation.	To enhance the CCT framework	Interim guidance	ATM SG	Dec 2019	**Actioned** This will be part of the work of the MID ATM Contingency Plan Action Group that should prepare a draft for the ATM SG/6 meeting
C. 17/21	**MID REGION GUIDANCE MATERIAL ON CIVIL/MILITARY COOPERATION AND IMPLEMENTATION OF FUA CONCEPT** That, the ATM SG/5 develop draft guidance material related to Civil/Military Cooperation and implementation of FUA Concept, including State aircraft operations under Due Regard in particular over the high seas, to be coordinated with States before presentation to MIDANPIRG for endorsement.	Guidance material for CIV/MIL Cooperation, FUA and due regard over high seas	Guidance material	ATM SG/5	Dec 2019	**Actioned** An Action Group composed of experts from Bahrain, Egypt, Iraq, Jordan, Oman, Qatar, Saudi Arabia, UAE and ICAO was established by the ATM SG/5 meeting through Decision 5/3 to draft, by **30 April 2020**, the guidance material

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
C. 17/22	**MULTI-NODAL ATFM SOLUTION FOR THE MID REGION** That, a) the Multi-Nodal Concept be implemented in the MID Region, as a first phase, which would be evolved to a centralized ATFM system in the future; and b) the ATFM Task Force develop the ATFM Concept of Operations for MID Region, accordingly, including the minimum flight data that should be exchanged by ATFM Units.	ATFM Multi-Nodal Concept	ATFM Multi-Nodal Concept	MIDANPIRG	Apr. 2019	**Completed**
C. 17/23	**ACTION PLAN FOR THE IMPLEMENTATION OF ATFM IN THE MID REGION** That, a) the Action Plan for the implementation of ATFM in the MID Region at Appendix 6.2J is endorsed; and b) States and Stakeholders to support the work of the ATFM Task Force and implement the actions relevant to them	the Action Plan for the implementation of ATFM	Endorsement of the Action Plan for the implementation of ATFM	MIDANPIRG	Apr. 2019	**Completed**
C. 17/24	**ASSESSMENT OF THE MID REGION RVSM AIRSPACE STRUCTURE BASED ON THE EXPECTED TRAFFIC MOVEMENT FROM 1 NOVEMBER TO 31 DECEMBER 2022** That, the MIDRMA assess the MID Region RVSM airspace structure based on the expected traffic movement during FWC2022 to identify peak periods, Hotspots, Bottlenecks, etc. based on the FPL/traffic data provided by Qatar.	To assess the impact of the forecast increase of traffic due to FWC2022	Assessment	Qatar MIDRMA	May 2019 Aug 2019	**Actioned** This is part of the FWC2022 TF's Action Plan. MIDRMA Board/16 meeting agreed to Draft Conclusion 16/6 related to the software for the assessment of the airspace from FL150 to FL490

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
C. 17/25	**AMENDMENT OF THE MID REGION HIGH LEVEL AIRSPACE CONCEPT (MID DOC 004)** That, the ATM SG/5 review and prepare a revised version of the MID Region High level Airspace Concept (MID Doc 004) taking into consideration the latest developments, in particular the outcome of MSG/6 and MIDANPIRG/16 and 17 meetings, for presentation to MIDANPIRG/18.	Revised version of the MID Region High level Airspace Concept	Draft Revised version of the MID Region High level Airspace Concept	ATM SG/5	Dec 2019	**Actioned** A revised draft version was developed by the ATM SG/5 meeting that needs further improvements in coordination between ATM SG Secretariat and the States ATM Focal Point for presentation to ATM SG/6 or MIDANPIRG/18
C. 17/30	**UPDATE OF THE GUIDANCE FOR AIDC/OLDI IMPLEMENTATION IN THE MID REGION (MID DOC 006)** That, the ICAO MID Doc 006 - Guidance for AIDC/OLDI Implementation in the MID Region, Edition April 2019 is endorsed and be posted by the ICAO MID Office on the website.	Enhanced version of MID Doc 006	Endorsement of MID Doc 006 Edition April 2019	MIDANPIRG/17	Apr 2019	**Completed** Endorsed by the MIDANPIRG/17 & RASG-MID/7 meeting and posted on the ICAO MID website.
C. 17/43	**FAST TRACK/APPROVAL BY PASSING PROCEDURE** That, States be invited to provide the ICAO MID Office, not later than **15 August 2019**, with their views and proposals related to Fast Track/Approval by Passing Procedure, for presentation to the MSG/7 meeting, for appropriate action.	To facilitated and expected the approval process of some actions	State Letter Procedure for Fast Track	ICAO MSG/7	Sep 2019 Apr 2020	**Actioned** SL ME 3 – 19/273 dated 11 September 2019

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
D. 17/45	**CHAIRMANSHIP OF MIDANPIRG AND SUBSIDIARY BODIES** That, the MIDANPIRG Procedural Handbook be amended to reflect the following: "In case of absence of the Chairperson for two consecutive meetings, unless otherwise determined by special circumstances, the election of Chairperson should be included in the agenda of the second meeting for the election of a new Chairperson, unless otherwise decided by the meeting."	Amendment of MIDANPIRG Procedural Handbook	Endorsement of MIDANPIRG Procedural Handbook Edition April 2019	MIDANPIRG/17	Apr 2019	**Completed**
D. 17/46	**NEW EDITION OF THE MIDANPIRG PROCEDURAL HANDBOOK** That, the Secretariat consolidate a new Edition of the MIDANPIRG Procedural Handbook, for review by the MSG/7 meeting before the formal endorsement by the MIDANPIRG/18 meeting.	Amendment of MIDANPIRG Procedural Handbook	Endorsement of MIDANPIRG Procedural Handbook Edition April 2019	MIDANPIRG/17	Apr 2019	**Completed**

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

(20 January 2020 Incorporating all previous AMDT 15/04 and 16/01)

EXPLANATION OF THE TABLE

Column

1 — *Designator of ATS route and Type (Conventional, RNAV5 or RNAV1 etc.)*

2 — *MIGNMficant 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*

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
A1	METRU 340000N 0250900E	UA1	METRU 340000N 0250900E
	SOKAL 323601N 0273706E		SOKAL 323601N 0273706E
	KATEX 320701N 0282436E		KATEX 320701N 0282436E
	BOPED 312939N 0292655E		BOPED 312939N 0292655E
	ALEXANDRIA (NOZ) 311113N 0295701E		ALEXANDRIA (NOZ) 311113N 0295701E
	MENKU 310531N 0301806E		MENKU 310531N 0301806E
	CAIRO (CVO) 300532N 0312318E		CAIRO (CVO) 300532N 0312318E
A16	RASDA 330600N 0305700E	UA16	RASDA 330600N 0305700E
	MELDO 320201N 03104406E		MELDO 320201N 03104406E
	BALTIM (BLT) 313144N 0311035E		BALTIM (BLT) 313144N 0311035E
	DEGDI 311429N 0311035E		DEGDI 311429N 0311035E
	CAIRO (CVO) 300532N 0312318E		CAIRO (CVO) 300532N 0312318E
A408	(ADDIS ABABA) GWZ 090622N 0384612E	UA408	(ADDIS ABABA) GWZ 090622N 0384612E
	SALEH 140000N 0420000E		SALEH 140000N 0420000E
	ORNIS 1416.215N0423657.9E		ORNIS 1416.215N0423657.9E
	HODEIDAH (HDH)1446.4N 04259.2E 144622N 0425911E		HODEIDAH (HDH)1446.4N 04259.2E 144622N 0425911E
A411	BENINA (BNA) 3207.28N 0201513E	UA411	BENINA (BNA) 3207.28N 0201513E
	NASER 3151.12N 0235518.3E		NASER 3151.12N 0235518.3E
	LOSUL 314100N 250800E		LOSUL 314100N 250800E
	SIDI BARANI (BRN) 313432N 0260020E		SIDI BARANI (BRN) 313432N 0260020E
A412	TANF (TAN) 332857N 0383915E	UA412	TANF (TAN) 332857N 0383915E
	ZELAF 325656N 0371121E		ZELAF 325656N 0371121E
	DAXEN 324444N 0374105E		DAXEN 324444N 0374105E
	ASLON 321211N 0365111E		ASLON 321211N 0365111E
	NADEK 322728N 0371429E		NADEK 322728N 0371429E
	KUPRI 320825N 0364530E		KUPRI 320825N 0364530E
	LUDAN 320256N 0363713E		LUDAN 320256N 0363713E
	QUEEN ALIA (QAA) 314423N 0360926E		QUEEN ALIA (QAA) 314423N 0360926E
A416	TABRIZ (TBZ) 380853N 0461247E	UA416	TABRIZ (TBZ) 380853N 0461247E
	ARDABIL (ARB) 381856N 0482605E		ARDABIL (ARB) 381856N 0482605E
	RASHT (RST) 371935N 0493657E		RASHT (RST) 371935N 0493657E
	RAMSAR (RSR) 365412N 0504050E		RAMSAR (RSR) 365412N 0504050E
	NOSHAHR (NSR) 363935N 0512805E		NOSHAHR (NSR) 363935N 0512805E
	DASHTE NAZ (DNZ) 363855N 0531120E		DASHTE NAZ (DNZ) 363855N 0531120E
	SABZEVAR (SBZ) 361011N 0573415E		SABZEVAR (SBZ) 361011N 0573415E
	MASHHAD (MSD) 361352N 0593901E		MASHHAD (MSD) 361352N 0593901E
	SOKAM 331316N 0603754E		SOKAM 331316N 0603754E
A418	KUMUN 254000N 0551515E	UA418	KUMUN 254000N 0551515E
	PAPAR 264000N 0542700E		PAPAR 264000N 0542700E
	* Note 7 (OI and OM)		* Note 7 (OI and OM)
	Segment KUMUN-PAPAR		Segment KUMUN-PAPAR
	SHIRAZ (SYZ) 293224N 0523520E		SHIRAZ (SYZ) 293224N 0523520E
A422	UROMIYEH (UMH) 374001N 0450343E	UA422	UROMIYEH (UMH374001N 0450343E
	SETNA 375615.3N 0455522.4E		SETNA 375615.3N 0455522.4E
	TABRIZ (TBZ) 380853N 0461247E		TABRIZ (TBZ) 380853N 0461247E
	PARSABAD (PAD) 393443N 0475803E		PARSABAD (PAD) 393443N 0475803E

4A-3

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	PARSU 39374.8N 048044.8E		PARSU 39374.8N 048044.8E
	KARAD 40181814.3N 0500356 04929.5E		KARAD 40181814.3N 0500356 04929.5E
	(BAKU)		(BAKU)
A424	LOVEK 322208N 0444001E	UA424	LOVEK 322208N 0444001E
	LOTAN 295942.7N 04338.48E		LOTAN 295942.7N 04338.48E
	RAFHA (RAF) 293718N 0432953E		RAFHA (RAF) 293718N 0432953E
	HAIL (HIL) 272530N 0414058E		HAIL (HIL) 272530N 0414058E
	MADINAH (PMA) 243251N 0394219E		MADINAH (PMA) 243251N 0394219E
	ASTOL 2255.00N 03935.12E		ASTOL 2255.00N 03935.12E
	KING ABDULAZIZ (JDW) 214244N 0390723E		KING ABDULAZIZ (JDW) 214244N 0390723E
A453	PIRAN 2934076N 0612809 6E	UA453	PIRAN 2934076N 0612809 6E
	ZAHEDAN (ZDN) 292912N 0605406E		ZAHEDAN (ZDN) 292912N 0605406E
	BANDAR ABBAS (BND) 271149N 0562200E		BANDAR ABBAS (BND) 271149N 0562200E
	GHESHM (KHM) 264547N 0555428E		GHESHM (KHM) 264547N 0555428E
	*Note 7 (KHM, BAH)		*Note 7 (KHM, BAH)
	BANDAR LENGEH (LEN) 263210N 0545104E		BANDAR LENGEH (LEN) 263210N 0545104E
	KISH (KIS) 263131N 0535745E		KISH (KIS) 263131N 0535745E
	MIDSI 264142.7N0515442.5E		MIDSI 264142.7N0515442.5E
	BOTOB 263350N 0514505E		BOTOB 263350N 0514505E
	ALMOK 262832N 0513840E		ALMOK 262832N 0513840E
	SOLOB 262241N 0513132E		SOLOB 262241N 0513132E
	TOBLI 262134N0512301E		TOBLI 262134N0512301E
	SOGAT 262029N 0511443E		SOGAT 262029N 0511443E
	ASTAD 261811N 0505646E		ASTAD 261811N 0505646E
	BAHRAIN (BAH) 261551N 0503856E		BAHRAIN (BAH) 261551N 0503856E
	* Note 7 (OB, OI)		* Note 7 (OB, OI)
	ELOSO 262409N 0503550E		ELOSO 262409N 0503550E
	EGMOR 264210N 0502906E		EGMOR 264210N 0502906E
	LOTOR 264854N 0502200E		LOTOR 264854N 0502200E
	RAMSI 270249N 0500714E		RAMSI 270249N 0500714E
	ORNAK 272853N 0493248E		ORNAK 272853N 0493248E
	SOLEM 275229N 0491136E		SOLEM 275229N 0491136E
	KUMBO 281705N 0495526E		KUMBO 281705N 0495526E
	AWADI 283430N 0484354E		AWADI 283430N 0484354E
	DEBTI 284406N 0482924E		DEBTI 284406N 0482924E
	KUWAIT (KUA) 291306N 04759036E		KUWAIT (KUA) 291306N 04759036E
A454	KARACHI (KC) 245443.6N 0671054.6E	UA454	KARACHI (KC) 245443.6N 0671054.6E
	*Note 7 (KC-PASOV)		*Note 7 (KC-PASOV)
	BEGIM 2443.02N 06700.01E		BEGIM 2443.02N 06700.01E
	* Note 7 (OO, OP)		* Note 7 (OO, OP)
	MELOM 250334 5.0N 0663134 2.0E		MELOM 250334 5.0N 0663134 2.0E
	PUNEL 251835 20.0N 0652245 3.0E		PUNEL 251835 20.0N 0652245 3.0E
	PARET 252518 7.2N 0645102 .5E		PARET 252518 7.2N 0645102 .5E
	TAPDO 242400N 0612000E		TAPDO 242400N 0612000E
	VUSET 235540N 0590812E		VUSET 235540N 0590812E
	PASOV 243841N 0565037E		PASOV 243841N 0565037E
A727	(PAXIS 335706.1N 02720.00E	UA727	(PAXIS 335706.1N 02720.00E
	OTIKO 313421.3N 02936.36E		OTIKO 313421.3N 02936.36E
	ALEXANDRIA (NOZ) 311115N 0295703E		ALEXANDRIA (NOZ) 311115N 0295703E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	MENKU 310531.5N 0301806.1E		MENKU 310531.5N 0301806.1E
	CAIRO (CVO) 300532N 0312318E		CAIRO (CVO) 300532N 0312318E
	LUXOR (LXR) 254458N 0324607E		LUXOR (LXR) 254458N 0324607E
	ABU SIMBLE (SML) 222118N 0313719E		ABU SIMBLE (SML) 222118N 0313719E
	NUBAR 220000N 031+3806.1E		NUBAR 220000N 031+3806.1E
	MEROWE (MRW) 182659N 0314907E		MEROWE (MRW) 182659N 0314907E
	KHARTOUM (KTM) 153358N 0323312E		KHARTOUM (KTM) 153358N 0323312E
	KENANA (KNA) 130141N 0325423E		KENANA (KNA) 130141N 0325423E
	LODWAR (LOV) 030627N 0353646E		LODWAR (LOV) 030627N 0353646E
	NAKURU (NAK) 001817S 0360919E		NAKURU (NAK) 001817N 0360919E
	NAIROBI (NV) 011800S 0365715E		NAIROBI (NV) 011800S 0365715E
	KILIMANJARO (KV) 032540S 0370624E		KILIMANJARO (KV) 032540S 0370624E
		UA775	REXOD 211230N 0613830E
			TUMET 222307N 0595702E
			IMDEK 224647N 0592217E
			OBTIN 230216N 0585920E
			KUSRA 231726N 0585102E
A777	TONVO 250500N 0563200E		
	BUBAS 245938N 0570003E		
	* Note 7 (OO)		
	NADSO 244957N 0574926E		
	MUNGA 242516N 0584533E		
	MIXOL 240618N 0592739E		
	VAXIM 231900N 0611100E		
A788	HALAIFAH (HLF) 262603N 0391609E	UA788	HALAIFAH (HLF) 262603N 0391609E
	HAIL (HIL) 272530N 0414058E		HAIL (HIL) 272530N 0414058E
	HAFR AL BATIN (HFR) 281950N 0460746E		HAFR AL BATIN (HFR) 281950N 0460746E
	*Note 7 (HFR-PATIR)		*Note 7 (HFR-PATIR)
	WAFRA *(KFR) 283715. 3N 0475729. 5E		WAFRA (KFR) 283715. 3N 0475729. 5E
	PATIR 285606N 0492923E		PATIR 285606N 0492923E
	KHARK (KHG) 291550N 0501901E		KHARK (KHG) 291550N 0501901E
	SHIRAZ (SYZ) 293225N 0523520E		SHIRAZ (SYZ) 293225N 0523520E
B12	TANSA 340000N 0264900E	UB12	TANSA 340000N 0264900E
	SOKAL 323601N 0273706E		SOKAL 323601N 0273706E
	EL DABA (DBA) 310041N 0282801E		EL DABA (DBA) 310041N 0282801E
	KATAB 292501N 0290506E		KATAB 292501N 0290506E
	BOPOS 264318N 0300722E		BOPOS 264318N 0300722E
	DEPNO 262438N 0301413E		DEPNO 262438N 0301413E
	EL KHARGA (KHG) 252654N 0303527E		EL KHARGA (KHG) 252654N 0303527E
	ABU SIMBEL (SML) 222118N 0313719E		ABU SIMBEL (SML) 222118N 0313719E
B121	RUDESHUR (RUS) 352644N 0505419E	UB121	RUDESHUR (RUS) 352644N 0505419E
	RASHT (RST) 371935N 0493657E		RASHT (RST) 371935N 0493657E
	MAGRI 385408N 0462300E		MAGRI 385408N 0462300E
B400	MUSCAT (MCT) 233528N 0581536E	UB400	MUSCAT (MCT) 233528N 0581536E
	ITURA 232351N 0580720E		ITURA 232351N 0580720E
	IZKI (IZK) 225319N 0574543E		IZKI (IZK) 225319N 0574543E
	HAIMA (HAI) 195813N 0561651E		HAIMA (HAI) 195813N 0561651E
	ASTUN 180832N0551040E		ASTUN 180832N0551040E

4A-5

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	DAXAM 171612N 0544715E		DAXAM 171612N 0544715E
	MUTVA 165325N 0543201E		MUTVA 165325N 0543201E
	IMKAD 155245N 0535147E		IMKAD 155245N 0535147E
	NODMA 152603N 0533358E		NODMA 152603N 0533358E
	RIGAM 143932N 0530414E		RIGAM 143932N 0530414E
	RAPDO 132317N 0521532E		RAPDO 132317N 0521532E
	VEDET 120134N 0512410E		VEDET 120134N 0512410E
	~~(MOGADISHU)~~ MOGDU 020024N 0451736E		~~(MOGADISHU)~~ MOGDU 020024N 0451736E
		UB403	MANDERA (MAV) 035625N 0415151E
			BOMIX 121002N 0502757E
			ODBEN 123747N 0505648E
			KAVAN 133250N 0515431E
			RIGAM 143932N 0530414E
B404	HARGA ~~(HARGEISA)~~ 093112N 0440530E	UB404	HARGA ~~(HARGEISA)~~ 093112N 0440530E
	DEMGO 120258N 0483040E		DEMGO 120258N 0483040E
	PURKA 131208N 0503042E		PURKA 131208N 0503042E
	GESIX 134440N 0512823E		GESIX 134440N 0512823E
	RIGAM 143932N 0530414E		RIGAM 143932N 0530414E
B407	KING ABDULAZIZ (JDW) 214244N 0390723E	UB407	KING ABDULAZIZ (JDW) 214244N 0390723E
	KAROX 205717N 0381547E		KAROX 205717N 0381547E
	MAHDI 2026~~.~~00N 0373918~~.~~3E		MAHDI 2026~~.~~00N 0373918~~.~~3E
	~~(~~PORT SUDAN~~)~~ (PSD) 192404N 0371430E		~~(~~PORT SUDAN~~)~~ (PSD) 192404N 0371430E
B411	~~ROVAR 292438N0345711E~~	UB411	~~ROVAR 292438N0345711E~~
	TAKSU 293625N 0343623E		TAKSU 293625N 0343623E
	*Note 7 (TAKSU-ULINA)		*Note 7 (TAKSU-ULINA)
	KARIK 292733N 0344641E		KARIK 292733N 0344641E
	ULINA 292451N 0345817E		ULINA 292451N 0345817E
	ELETA 293201N 0352900E		ELETA 293201N 0352900E
	LORIK 293640N 0354840E		LORIK 293640N 0354840E
	DEESA 294509N 0364102E		DEESA 294509N 0364102E
	AL SHIGAR (ASH) 300722N 0384753E		AL SHIGAR (ASH) 300722N 0384753E
	ARAR (AAR) 305429N 0410832E		ARAR (AAR) 305429N 0410832E
	MURIB 311337N 0415136E		MURIB 311337N 0415136E
	LOVEK 322208~~.1~~N 0444001~~.0~~E		LOVEK 322208~~.1~~N 0444001~~.0~~E
	NOLDO 324932~~.5~~N 0452129~~.5~~E		NOLDO 324932~~.5~~N 0452129~~.5~~E
	PAXAT 332056N 0460519E		PAXAT 332056N 0460519E
	ILAM (ILM) 333442N 0462455E		ILAM (ILM) 333442N 0462455E
	KERMANSHAH (KMS) 342023N 0471009E		KERMANSHAH (KMS) 342023N 0471009E
	SAVEH (SAV) 350107N 0502217E		SAVEH (SAV) 350107N 0502217E
	[TEHRAN] (TRN) 354149N 0511702E		[TEHRAN] (TRN) 354149N 0511702E
	~~* Note 1~~		~~* Note 1~~
	DEHNAMAK (DHN) 351514N 0524313E		DEHNAMAK (DHN) 351514N 0524313E
	SABZEVAR (SBZ) 361011N 0573415E		SABZEVAR (SBZ) 361011N 0573415E
	MASHHAD (MSD) 361352N 0593902E		MASHHAD (MSD) 361352N 0593902E
B412	HALAIFA (HLF) 262603N 0391609E	UB412	HALAIFA (HLF) 262603N 0391609E
	RABIGH (RBG) 224731N 0390550E		RABIGH (RBG) 224731N 0390550E
	[KING ABDULAZIZ] (JDW) 214244N 0390723E		[KING ABDULAZIZ] (JDW) 214244N 0390723E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
B413	LADEN 185342.7N 0380506.1E	UB413	LADEN 185342.7N 0380506.1E
	DANAK 1608.00N 04129.00E		1608.00N 04129.00E
	HODEIDAH (HDH) 144622N 0425911E		HODEIDAH (HDH) 144622N 0425911E
	TAIZ (TAZ) 134150N 0440819E		TAIZ (TAZ) 134150N 0440819E
	ADEN (KRA) 124952N 0450125E		ADEN (KRA) 124952N 0450125E
	ZIZAN 1151.36N 04539.12E		ZIZAN 1151.36N 04539.12E
	AVIMO 033252.9N 0505239.6E		AVIMO 033252.9N 0505239.6E
B415	DOHA HAMAD INTL (DOH) 251459N 0513635E	UB415	DOHA HAMAD INTL (DOH) 251459N 0513635E
	*Note 8 (DOH-BUNDU)		*Note 8 (DOH-BUNDU)
	KUPSA 250445N 0521151E		KUPSA 250445N 0521151E
	BUNDU 250024N 0522924E		BUNDU 250024N 0522924E
	*Note 7 (BUNDU-ADV)		*Note 7 (BUNDU-ADV)
	LAGMI 245709N 0524148E		LAGMI 245709N 0524148E
	GADVO 244126N 0534300E		GADVO 2441264N 0534300E
	KUNGU 243754N 05356.274E		KUNGU 243754N 05356.274E
	ABU DHABI		ABU DHABI
	ADV 242508N 0544024E		ADV 242508N 0544024E
B416	KUWAIT (KUA) 291306N 0475803E	UB416	KUWAIT (KUA) 291306N 0475803E
	AMBIK 283222N 0492025E		AMBIK 283222N 0492025E
	*Note 8 (AMBIK-KUVER)		*Note 8 (AMBIK-KUVER)
	TESSO 282852N0492723E		TESSO 282852N0492723E
	GEVAL 282101N 0494300E		GEVAL 282101N 0494300E
	GOGMA 281421N 0495612E		GOGMA 281421N 0495612E
	KUVER 280924N 0500600E		KUVER 280924N 0500600E
	IMDAT 274100N 0511100E		IMDAT 274100N 0511100E
	ORSAR 260430N 0535730E		ORSAR 260430N 0535730E
	PEBAT 255153N 0542357E		PEBAT 255153N 0542357E
	DESDI 253603N 0544230E		DESDI 253603N 0544230E
B417	MAHSHAHR (MAH) 303323N 0490858E	UB417	MAHSHAHR (MAH) 303323N 0490858E
	TULAX 2938 53N 04903 01E		TULAX 2938 53N 04903 01E
	DESLU 2928.00N 0490150.8E		DESLU 2928.00N 0490150.8E
	ALVIX 2919.318N04824.12E		ALVIX 2919.318N04824.12E
	KUWAIT (KUA) 291306N 0475803E		KUWAIT (KUA) 291306N 0475803E
	*See Note 3		*See Note 3
	HAFR AL BATIN (HFR) 281950N 0460746E		HAFR AL BATIN (HFR) 281950N 0460746E
	KING SAUD AB (KMC) 275250N 0453320E		KING SAUD AB (KMC) 275250N 0453320E
	GASSIM (GAS) 261753N 0434647E		GASSIM (GAS) 261753N 0434647E
	BIR DARB (BDB) 241951N 0414928E		BIR DARB (BDB) 241951N 0414928E
	ASVIV 235458N 0412321E		ASVIV 235458N 0412321E
	~~TAGNA 231652N 0403851E~~		~~TAGNA 231652N 0403851E~~
	KING ABDULAZIZ (JDW) 214244N 0390723E		KING ABDULAZIZ (JDW) 214244N 0390723E
B419	DHAHRAN (DHA) 261538N 0500824E	UB419	DHAHRAN (DHA) 261538N 0500824E
	* Note 8 (DHA-RAMSI)		* Note 8 (DHA-RAMSI)
	KING FAHD (KFA) 262153N 0494910E		KING FAHD (KFA) 262153N 0494910E
	* Note 7 (KFA-RAMSI)		* Note 7 (KFA-RAMSI)
	METLA 265645N 0500432E		METLA 265645N 0500432E
	RAMSI 270249N 0500714E		RAMSI 270249N 0500714E
B424	ITOLI 152825N 0450927E	UB424	ITOLI 152825N 0450927E
	SABEL 185158~~200~~N 0520339.7E		SABEL 185158~~200~~N 0520339.7E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	OTISA 201000N 0554556E		OTISA 201000N 0554556E
	GISKA 213503N 0574014E		GISKA 213503N 0574014E
B441	MASHHAD (MSD) 361352N 0593901E	UB441	MASHHAD (MSD) 361352N 0593901E
	OTRUZ 363108N 0610956E		OTRUZ 363108N 0610956E
	MARAD 363730.6N 06127.48E		MARAD 363730.6N 06127.48E
B451	DEHNAMAK (DHN) 351514N 0524313E	UB451	DEHNAMAK (DHN) 351514N 0524313E
	BOJNORD (BRD) 372943N 0571923E		BOJNORD (BRD) 372943N 0571923E
	DOLOS 375006N 0580200E		DOLOS 375006N 0580200E
	(ASHGABAT) (ASB) 380011N 0582008E		(ASHGABAT) (ASB) 380011N 0582008E
B457	NARMI 261802N 0501939E	UB457	NARMI 261802N 0501939E
	BAHRAIN (BAH) 261551N 0503855E		BAHRAIN (BAH) 261551N 0503855E
	DENVO 260452N 0510509E		DENVO 260452N 0510509E
	PATOM 255822N 0511836E		PATOM 255822N 0511836E
	EMISA 254658N 0514206E		EMISA 254658N 0514206E
B505	LALDO 251806N 0563600E *		
	Note 7/8 (OO)		
	NADSO 244957N 0574926E		
	ITLOB 244325N 0590701E		
	EGTAL 2434 58N 06037 24E		
	APELO 243455.9N 0612000E		
	PASNI (PI) 251717.3N 0632055.9E		
B524	NADSO 244957N 0574926E		
	* Note 7		
	DAMUM 243236N 0591307E		
	VEKAN 241235N 0604454E		
	ALPOR 240442N 0612000E		
B526	(ASMARA) (ASM) 151704N 0385403E	UB526	(ASMARA) (ASM) 151704N 0385403E
	HODEIDAH (HDH) 144622N 0425911E		HODEIDAH (HDH) 144622N 0425911E
	MUKALLA (RIN) 144015N 0492329E		MUKALLA (RIN) 144015N 0492329E
	RIGAM 143932N 0530414E		RIGAM 143932N 0530414E
B535	(DJIBOUTI) (DTI) 113255N 0430537E	UB535	(DJIBOUTI) (DTI) 113255N 0430537E
	ADEN (KRA) 124952N 0450125E		ADEN (KRA) 124952N 0450125E
	MUKALLA (RIN) 144015N 0492329E		MUKALLA (RIN) 144015N 0492329E
	KAPET 1633 22N 0530614E		KAPET 1633 22N 0530614E
	SALALAH (SLL) 170259N 0540657E		SALALAH (SLL) 170259N 0540657E
	ASTUN 180832N0551040E		ASTUN 180832N0551040E
B538	ALEPPO (ALE) 361047N 0371234E	UB538	ALEPPO (ALE) 361047N 0371234E
	KARIATAIN (KTN) 341248N 0371551E		KARIATAIN (KTN) 341248N 0371551E
B540	GERAR 240600N 0573616		
	PASOV 243841N 0565037E		
	KUPMA 245148N 0562648E		
	BUBIN 245742N 0560642E		

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
B544	~~(~~GAZIANTEP~~)~~ (GAZ) 365705N 0372823E	UB544	~~(~~GAZIANTEP~~)~~ (GAZ) 365705N 0372823E
	ALEPPO (ALE) 361047N 0371234E		ALEPPO (ALE) 361047N 0371234E
	TANF (TAN) 332857N 0383915E		TANF (TAN) 332857N 0383915E
	NAMBO 331826N0383939E		NAMBO 331826N0383939E
	SODAR 315532N0384317E		SODAR 315532N0384317E
	TURAIF (TRF) 314136N 0384405E		TURAIF (TRF) 314136N 0384405E
	AL SHIGAR (ASH) 300722N 0384753E		AL SHIGAR (ASH) 300722N 0384753E
	HALAIFA (HLF) 262603N 0391609E		HALAIFA (HLF) 262603N 0391609E
	MADINAH (PMA) 243251N 0394219E		MADINAH (PMA) 243251N 0394219E
	RABIGH (RBG) 224731N 0390550E		RABIGH (RBG) 224731N 0390550E
	KING ABDULAZIZ (JDW) 214244N 0390723E		KING ABDULAZIZ (JDW) 214244N 0390723E
	QUNFIDAH (QUN) 192211N 0410429E		QUNFIDAH (QUN) 192211N 0410429E
	ABHA (ABH) 181431N 0423925E		ABHA (ABH) 181431N 0423925E
	NOBSU 171554N 0431318E		NOBSU 171554N 0431318E
	ADEN (KRA) 124952N 0450125E		ADEN (KRA) 124952N 0450125E
B549	THAMUD 171700N 0495500E	UB549	THAMUD 171700N 0495500E
	ITELI 171310N 0502605E		ITELI 171310N 0502605E
	GOGRI 170752N 0510857E		GOGRI 170752N 0510857E
	TONRO 165850N 0522235E		TONRO 165850N 0522235E
	PUTRA 165432N 0525631E		PUTRA 165432N 0525631E
	LADAR 165324N 0534655E		LADAR 165324N 0534655E
	MUTVA 165325N 0543201E		MUTVA 165325N 0543201E
	KIVEL 165306N 0553633E		KIVEL 165306N 0553633E
G183	~~(~~KAROL 3252~~.~~00N 03229~~.~~00E~~)~~		
	PASOS 311300N 0330600E		
	EL ARISH (ARH) 310423N 0334955E		
	TABA (TBA) 293624N 0344751E		
G202	~~(~~VELOX 3349~~.~~00N 03405~~.~~00E~~)~~	UG202	~~(~~VELOX 3349~~.~~00N 03405~~.~~00E~~)~~
	~~SILKO 3347.9N 03435.0E~~ ELIKA 334455N 0343500E		~~SILKO 3347.9N 03435.0E~~ ELIKA 334455N 0343500E
	K~~H~~ALDE~~H~~ (KAD) 334827N 0352910E		K~~H~~ALDE~~H~~ (KAD) 334827N 0352910E
	* Note 4 (OS)		* Note 4 (OS)
	DAKWE 3338~~.~~957N 0355459~~5.0E~~		DAKWE 3338~~.~~957N 0355459~~5.0E~~
	DAMASCUS (DAM) 332154N 0362807E		DAMASCUS (DAM) 332154N 0362807E
	TANF (TAN) 332857N 0383915E		TANF (TAN) 332857N 0383915E
	MODIK 33280~~6.1~~N 03901~~.~~00E		MODIK 33280~~6.1~~N 03901~~.~~00E
	RAPLU 3323~~.~~00N 041453~~0.5~~E		RAPLU 3323~~.~~00N 041453~~0.5~~E
	PUSTO 3321~~.~~00N 04245~~.~~00E		PUSTO 3321~~.~~00N 04245~~.~~00E
	DELMI 331918~~.31~~N 0431328~~7.59~~E		DELMI 331918~~.31~~N 0431328~~7.59~~E
	LAGLO 331538N 0441457E		LAGLO 331538N 0441457E
	ITOVA 33195~~0.9~~1N 044412~~8.97~~E		ITOVA 33195~~0.9~~1N 044412~~8.97~~E
	RAGET 3330~~.~~48N 04553~~.~~48E		RAGET 3330~~.~~48N 04553~~.~~48E
	ILAM (ILM) 333442N 0462455E		ILAM (ILM) 333442N 0462455E
	KHORAM ABAD (KRD) 332603N 0481731E		KHORAM ABAD (KRD) 332603N 0481731E
	ESFAHAN (ISN) 334449N 0514941E		ESFAHAN (ISN) 334449N 0514941E
	NODLA 325330N 0545850E		NODLA 325330N 0545850E
	BIRJAND (BJD) 325821N 0591200E		BIRJAND (BJD) 325821N 0591200E
	~~(~~KAMAR 3239~~.~~00N 06044~~.~~00E~~)~~		~~(~~KAMAR 3239~~.~~00N 06044~~.~~00E~~)~~

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
G208	~~(~~PANJGUR~~)~~ (PG) 265710N 0640813E		
	KEBUD 273552.9N 06250.24E		
	ZAHEDAN (ZDN) 292912N 0605406E		
	DARBAND (DAR) 314659N 0565940E		
	NODLA 325330N 0545850E		
	ANARAK (ANK) 333215N 0534347E		
	TEHRAN (TRN) 354149N 0511702E		
	ZANJAN (ZAJ) 364647N 0482112E		
	UROMIYEH (UMH) 374001N 0450343E		
	ALRAM 37423.0N 0443736.0E		
	~~(SIIRT)~~		
G216	LAKLU 232235N 0570401E	UG216	LAKLU 232235N 0570401E
	*Note 7 ~~(OO/OP)~~ (MCT-KC)		*Note 7 ~~(OO/OP)~~ (MCT-KC)
	MUSCAT (MCT) 233528N 0581536E		MUSCAT (MCT) 233528N 0581536E
	ITILA 234055N 0584817E		ITILA 234055N 0584817E
	SODEB 234747N 0593023E		SODEB 234747N 0593023E
	DORAB 235033N 0594746E		DORAB 235033N 0594746E
	ALPOR 240441N 0612000E		ALPOR 240441N 0612000E
	LATEM 243144N 0644944E		LATEM 243144N 0644944E
	KARACHI (KC) 245443N 0671054E		KARACHI (KC) 245443N 0671054E
G452	SHIRAZ (SYZ) 293224N 0523520E	UG452	SHIRAZ (SYZ) 293224N 0523520E
	KERMAN (KER) 301706N 0465637E		KERMAN (KER) 301706N 0465637E
	ZAHEDAN (ZDN) 292912N 0605406E		ZAHEDAN (ZDN) 292912N 0605406E
	DERBO 292542.7N 06117.01E		DERBO 292542.7N 06117.01E
	~~(~~RAHIM YAR KHAN~~)~~ (RK) 282156N 0701623E		~~(~~RAHIM YAR KHAN~~)~~ (RK) 282156N 0701623E
G462	ROVOS 241825N 0552143E	UG462	ROVOS 241825N 0552143E
	Note 7~~-to~~ (ROVOS-ITROK)		Note 7~~-to~~ (ROVOS-ITROK)
	NIBAX 245748N 0541437E		NIBAX 245748N 0541437E
	RAGTA 250850N 0535840E		RAGTA 250850N 0535840E
	ALSOK 252607N 0533904E		ALSOK 252607N 0533904E
	ITROK 253557N 0532751E		ITROK 253557N 0532751E
	TUMAK 255031N 0531108E		TUMAK 255031N 0531108E
G650	KING ABDULAZIZ (JDW) 214244N 0390723E	UG650	KING ABDULAZIZ (JDW) 214244N 0390723E
	RASKA 190732N 0390329E		RASKA 190732N 0390329E
	ASMARA (ASM) 151704N 0385403E		ASMARA (ASM) 151704N 0385403E
G652	ADEN (KRA) 124952N 0450125E	UG652	ADEN (KRA) 124952N 0450125E
	IMPOS 183136N 0511848E		IMPOS 183136N 0511848E
	DUDRI 190000N 0520000E		DUDRI 190000N 0520000E
	*Note 8 (DUDRI-TOKRA)		*Note 8 (DUDRI-TOKRA)
	TOKRA 220925N 0553350E		TOKRA 220925N 0553350E
	TAPDO 242400N 0612000E		TAPDO 242400N 0612000E
G660	~~(~~PORT SUDAN~~)~~ (PSD) 192404N 0371430E	UG660	~~(~~PORT SUDAN~~)~~ (PSD) 192404N 0371430E
	BOGUM 2006.36N 03803.00E		BOGUM 2006.36N 03803.00E
	MIPOL 203322N 0382145E		MIPOL 203322N 0382145E
	KING ABDULAZIZ (JDW) 214244N 0390723E		KING ABDULAZIZ (JDW) 214244N 0390723E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
G662	BUSRA 322000N 0363700E	UG662	BUSRA 322000N 0363700E
	KUPRI 320826~~5.87~~N 0364530~~.21~~E		KUPRI 320826~~5.87~~N 0364530~~.21~~E
	ALKOT 313254~~.22~~N 037112~~21.51~~E		ALKOT 313254~~.22~~N 037112~~21.51~~E
	GURIAT (GRY) 312445~~.8~~N 03717~~.~~12E		GRY 312445~~.8~~N 03717~~.~~12E
	AL SHIGAR (ASH) 300722N 0384753E		AL SHIGAR (ASH) 300722N 0384753E
	HAIL (HIL) 272530N 0414058E		HAIL (HIL) 272530N 0414058E
	GASSIM (GAS) 261753N 0434647E		GASSIM (GAS) 261753N 0434647E
	KING KHALID (KIA) 245310N 0464534E		KING KHALID (KIA) 245310N 0464534E
G663	KING KHALID (KIA) 245310N 0464534E	UG663	KING KHALID (KIA) 245310N 0464534E
	SILNO 264024N 0475742E		SILNO 264024N 0475742E
	*Note 7 (KIA-KFA)		*Note 7 (KIA-KFA)
	GIBUS 255724N 0472829E		GIBUS 255724N 0472829E
	*Note 8 (GIBUS-ALSER)		*Note 8 (GIBUS-ALSER)
	KING FAHD (KFA) 262153N 0494910E		KING FAHD (KFA) 262153N 0494910E
	ULADA 264526N 0501623E		ULADA 264526N 0501623E
	LOTOR 264854N 0502200E		LOTOR 264854N 0502200E
	RAKAK 265221N 0502618E		RAKAK 265221N 0502618E
	TOLMO 265504N 0502927E		TOLMO 265504N 0502927E
	KOBOK 265839N 0503349E		KOBOK 265839N 0503349E
	ITIXA 270141N 0503735E		ITIXA 270141N 0503735E
	GETAL 270409N 0504039E		GETAL 270409N 0504039E
	VEDOR 270855N 0504630E		VEDOR 270855N 0504630E
	ALSER 271100N 0504900E		ALSER 271100N 0504900E
	SHIRAZ (SYZ) 293224N 0523520E		SHIRAZ (SYZ) 293224N 0523520E
	YAZD (YZD) 315352N 0541658E		YAZD (YZD) 315352N 0541658E
	NODLA 325318N 0545848E		NODLA 325318N 0545848E
	TABAS (TBS) 334021N 0565331E		TABAS (TBS) 334021N 0565331E
	MASHAD (MSD) 361352N 0593901E		MASHAD (MSD) 361352N 0593901E
G665	ARAR (AAR) 305429N 0410832E	UG665	ARAR (AAR) 305429N 0410832E
	ABADAN (ABD) 302216N 0481342E		ABADAN (ABD) 302216N 0481342E
	SHIRAZ (SYZ) 293224N 0523520E		SHIRAZ (SYZ) 293224N 0523520E
	* Note 5 (OI)		* Note 5 (OI)
	NABOX~~D~~ 281630~~.1~~N 0582501~~.8~~E		NABOX~~D~~ 281630~~.1~~N 0582501~~.8~~E
	LOXOL 274556~~.9~~N 0604538~~.6~~E		LOXOL 274556~~.9~~N 0604538~~.6~~E
	ASVIB 265724N 0631812E		ASVIB 265724N 0631812E
	~~(~~PANJGUR~~)~~ (PG) 265710N 0640813E		~~(~~PANJGUR~~)~~ (PG) 265710N 0640813E
G666	SHIRAZ (SYZ) 293224N 0523520E	UG666	SHIRAZ (SYZ) 293224N 0523520E
	LAMERD (LAM) 272222N 0531102E		LAMERD (LAM) 272222N 0531102E
	LAVAN (LVA) 264843N 0532121E		LAVAN (LVA) 264843N 0532121E
	* Note 7 (OI)		* Note 7 (OI)
	ORSAR 260430~~.5~~N 0535730~~.5~~E		ORSAR 260430~~.5~~N 0535730~~.5~~E
	ITITA 254410N 0541839E		ITITA 254410N 0541839E
	SINBI 250842N 0543741E		SINBI 250842N 0543741E
	ABU DHABI (ADV) 242508N 0544024E		ABU DHABI (ADV) 242508N 0544024E
G667	PUTMA 3748~~.~~00N 05157~~.~~36E	UG667	PUTMA 3748~~.~~00N 05157~~.~~36E
	NOSHAHR (NSR) 363935N 0512805E		NOSHAHR (NSR) 363935N 0512805E
	TEHRAN (TRN) 354149N 0511702E		TEHRAN (TRN) 354149N 0511702E
	SAVEH (SAV) 350107N 0502217E		SAVEH (SAV) 350107N 0502217E
	~~MIS~~ ARAK (ARK) 340814N 0495114E		~~MIS~~ ARAK (ARK) 340814N 0495114E
	AHWAZ (AWZ) 312015N 0484552E		AHWAZ (AWZ) 312015N 0484552E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ABADAN (ABD) 302216N 0481342E		ABADAN (ABD) 302216N 0481342E
	ALSAN 295707N 0481456E		ALSAN 295707N 0481456E
	~~F~~RALKA 292611N 0481819E		~~F~~RALKA 292611N 0481819E
	KUWAIT (KUA) 291306N 0475803E		KUWAIT (KUA) 291306N 0475803E
	WAFRA (KFR) 283715N 0475729E		WAFRA (KFR) 283715N 0475729E
	*Note 7 (KFR-MGA)		*Note 7 (KFR-MGA)
	COPPI 275033N 0474359E		COPPI 275033N 0474359E
	*Note 8 (COPPI-AVOBO)		*Note 8 (COPPI-AVOBO)
	EMENI 273232N 0473849E		EMENI 273232N 0473849E
	MUSKO 272640N 0473708E		MUSKO 272640N 0473708E
	ALSAT 270611N 0473118E		ALSAT 270611N 0473118E
	LUGAL 264533N 0472528E		LUGAL 264533N 0472528E
	MAGALA (MGA) 261720N 0471225E		MAGALA (MGA) 261720N 0471225E
	AVOBO 260334N 0470719E		AVOBO 260334N 0470719E
	KING KHALID (KIA) 245310N 0464534E		KING KHALID (KIA) 245310N 0464534E
	WADI ALDAWASIR (WDR) 203019N 0451219E		WADI ALDAWASIR (WDR) 203019N 0451219E
	NEJRAN (NEJ) 173625N 0442456E		NEJRAN (NEJ) 173625N 0442456E
	SANA~~'~~A (SAA) 153000N 0441311E		SANA~~'~~A (SAA) 153000N 0441311E
	PARIM 123142~~.7~~N 0432712E		PARIM 123142~~.7~~N 0432712E
	DJIBOUTI (DTI) 113255N 0430537E		DJIBOUTI (DTI) 113255N 0430537E
G669	AL SHIGAR (ASH) 300722N 0384753E	UG669	AL SHIGAR (ASH) 300722N 0384753E
	AL JOU (AJF) 294722N 0400418E		AL JOU (AJF) 294722N 0400418E
	RAFHA (RAF) 293713N 0432953E		RAFHA (RAF) 293713N 0432953E
	NISER 293030~~.5~~N 0441825~~.4~~E		NISER 293030~~.5~~N 0441825~~.4~~E
	*Note 3 (OK)		*Note 3 (OK)
	SOLAT 290942N 0463810E		SOLAT 290942N 0463810E
	KUWAIT (KUA) 291306N 0475803E		KUWAIT (KUA) 291306N 0475803E
	SESRA 290803N 0485453E		SESRA 290803N 0485453E
	NANPI 290457N 0493157E		NANPI 290457N 0493157E
	KHARK(KHG) 291550N 0501901E		KHARK(KHG) 291550N 0501901E
	SHIRAZ (SYZ) 293224N 0523520E		SHIRAZ (SYZ) 293224N 0523520E
G670	RASHT (RST) 371935N 0493657E	UG670	RASHT (RST) 371935N 0493657E
	LALDA 381615~~7.1~~N 0494511~~3.0~~E		LALDA 3817.1N 04943.0E
	~~(BAKU) GYD~~		~~(BAKU) GYD~~
G674	MADINAH (PMA) 243251N 0394219E	UG674	MADINAH (PMA) 243251N 0394219E
	GASSIM (GAS) 261753~~.9~~N 0434647~~.8~~E		GASSIM (GAS) 261753~~.9~~N 0434647~~.8~~E
	BOPAN (BPN) 270314N 0452643E		BOPAN (BPN) 270314N 0452643E
G775	~~(~~ASHGHABAT~~)~~ (ASB) 380011N 0582008E	UG775	~~(~~ASHGHABAT~~)~~ (ASB) 380011N 0582008E
	ORPAB 374200N 0583430~~.5~~E		ORPAB 374200N 0583430~~.5~~E
	MASHHAD (MSD) 361352N 0593901E		MASHHAD (MSD) 361352N 0593901E
	[BIRJAND] (BJD) 325821N 0591200E		[BIRJAND] (BJD) 325821N 0591200E
	* Note 1		* Note 1
	ZAHEDAN (ZDN) 292912N 0605406E		ZAHEDAN (ZDN) 292912N 0605406E
G781	~~(VAN)~~	UG781	~~(VAN)~~
	BONAM 380256~~.9~~N 0441759~~8.0~~E		BONAM 380256~~.9~~N 0441759~~8.0~~E
	UROMIYEH (UMH) 374001N 0450343E		UROMIYEH (UMH) 374001N 0450343E
	ROVON 371601N 0455322E		ROVON 371601N 0455322E
	ZANJAN (ZAJ) 364647N 0482112E		ZANJAN (ZAJ) 364647N 0482112E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	NOSHAHR(NSR) 363935N 0512805E		NOSHAHR(NSR) 363935N 0512805E
G782	KING ABDULAZIZ (JDW) 214244N 0390723E	UG782	KING ABDULAZIZ (JDW) 214244N 0390723E
	DAFINAH (DFN) 231658N 0414310E		DAFINAH (DFN) 231658N 0414310E
	RAGA~~\~~HBA (RGB) 235533N 0443547E		RAGA~~\~~HBA (RGB) 235533N 0443547E
	KING KHALID (KIA) 245310N 0464534E		KING KHALID (KIA) 245310N 0464534E
	MAGALA (MGA) 261720N 0471225E		MAGALA (MGA) 261720N 0471225E
	*Note 7 (MGA-KFR)		*Note 7 (MGA-KFR)
	LUGAL 264533N 0472528E		LUGAL 264533N 0472528E
	WAFRA (KFR) 283715N 0475729E		WAFRA (KFR) 283715N 0475729E
	KUWAIT (KUA) 291306N 0475803E		KUWAIT (KUA) 291306N 0475803E
G783	PURDA 210805N 0510329E	UG783	PURDA 210805N 0510329E
	TANSU 224136N 0542828E		TANSU 224136N 0542828E
	RIGIL 230146N 0551430E		RIGIL 230146N 0551430E
	ELUDA 235107N 0552905E		ELUDA 235107N 0552905E
	ALN 241535N 0553623E		ALN 241535N 0553623E
	GIDIS 243600N 0555600E		GIDIS 243600N 0555600E
	BUBIN 245742N 0560642E		BUBIN 245742N 0560642E
G792	~~BODKA 3939.0N 05130.0E~~[KE1]	UG792	~~BODKA 3939.0N 05130.0E~~
	GIRUN 3806~~.~~12N 056201~~8.3~~E		GIRUN 3806~~.~~12N 056201~~8.3~~E
	BOJNORD (BRD) 372943N 0571923E		BOJNORD (BRD) 372943N 0571923E
	MASHAD (MSD) 361352N 0593901E		MASHAD (MSD) 361352N 0593901E
G795	~~F~~RALKA 292611N 0481819E	UG795	~~F~~RALKA 292611N 0481819E
	TASMI 300120N 0475505E		TASMI 300120N 0475505E
	BSR 303132~~.4~~N 0472112E		BSR 303132~~.4~~N 0472112E
	RAFHA (RAF) 293713N 0432953E		RAFHA (RAF) 293713N 0432953E
G799	MADINAH (PMA) 243251N 0394219E	UG799	MADINAH (PMA) 243251N 0394219E
	DAFINAH (DFN) 231658N 0414310E		DAFINAH (DFN) 231658N 0414310E
		UL124	~~(VAN)~~[KE2]
			BONAM 38025~~6.9~~N 04417598~~.0~~E
			URUMIYEH (UMH) 374001N 0450343E
			ZANJAN (ZAJ) 364647N 0482112E
			SAVEH (SAV) 350107N 0502217E
			DISEL 332904N 0510118E
			YAZD (YZD) ~~(R654)~~ 315352N 0541658E
			KERMAN (KER) 301706N 0465637E
			KEBUD 273558N 0625028E
			~~(~~PANJGUR~~)~~ (PG) 265710N 0640813E
		UL125	DULAV 385700N 045380~~07.9~~E
			TABRIZ (TBZ) 380853N 0461247E
			ZANJAN (ZAJ) 364647N 0482112E
			PAROT 360940N 0495756E
			TEHRAN (TRN) 354149N 0511702E
			ANARAK (ANK) 333215N 0534347E
			DARBAND (DAR) 314659N 0565940E
			ZAHEDAN (ZDN) 292912N 0605406E
			DANIB 290706N 0611717E
			KEBUD 273558N 0625028E

4A-13

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
L126	PUSTO 3321~~.~~00N 04245~~.~~00E	UL126	PUSTO 3321~~.~~00N 04245~~.~~00E
	SOGUM 3412~~.~~12N 0435454~~.~~9E		SOGUM 3412~~.~~12N 0435454~~.~~9E
	SIGNI 340006~~.~~1N 0444200~~.~~2E		SIGNI 340006~~.~~1N 0444200~~.~~2E
	MIGMI 334554~~.~~9N 0452724~~.~~4E[KE3]		MIGMI 334554~~.~~9N 0452724~~.~~4E
	ILAM (ILM) 333442N 0462455E		ILAM (ILM) 333442N 0462455E
L200	LOXER 320256N 362500E	UL200	LOXER 320256N 362500E
	LUDAN 320256N 0363713 E		LUDAN 320256N 0363713 E
	KUPRI 320825N 0364530 E		KUPRI 320825N 0364530 E
	ASLON 321211N 0365111E		ASLON 321211N 0365111E
	NADEK 322728N 0371429E		NADEK 322728N 0371429E
	DAXEN 324444N 0374105E		DAXEN 324444N 0374105E
	ORNAL 324755N0375153E		ORNAL 324755N0375153E
	KAREM 325110N 0380324 E		KAREM 325110N 0380324 E
	KUMLO 325811N 0382807 E		KUMLO 325811N 0382807 E
	DAPUK 330139N 0384026 E		DAPUK 330139N 0384026 E
	PASIP 330600N 0385600E		PASIP 330600N 0385600E
	GIBUX 330715N 0411625E		GIBUX 330715N 0411625E
	SIGBI 330200N 0422000E		SIGBI 330200N 0422000E
	SILBO 325900N 0432900E		SILBO 325900N 0432900E
L223	SIRRI (SIR) 255452N 0543206E	UL223	DASIS 3854310N 0441229~~30~~E
	* Note 7 (~~OI OM OO~~ SIR-LAKLU)		UROMIYEH (UMH) 374001N 0450343E
	NALTA 250242N 0553955E		SANANDAJ (SNJ) 351420N 0470028E
	TARDI 243418N 0560915E		KHORAM ABAD (KRD) 332603N 0481731E
	LAKLU 232235N 05704 01E		MESVI 312920N 0495701E
			LAMERD (LAM) 272222N 0531102E
			SIRRI (SIR) 255452N 0543206E
			* Note 7 (~~OI OM OO~~ SIR-LAKLU)
			NALTA 250242N 0553955E
			TARDI 243418N 0560915E
			LAKLU 232235N 05704 01E
L300	LUXOR (LXR) 254458N 0324607E	UL300	LUXOR (LXR) 254458N 0324607E
	MEMPO 252518N 0335457E		MEMPO 252518N 0335457E
	GIBAL 243713~~.~~2N0363443~~.~~7E		GIBAL 243713~~.~~2N0363443~~.~~7E
	YENBO (YEN) 2408~~.~~58N 0380219~~3.9~~E		YENBO (YEN) 2408~~.~~58N 0380219~~3.9~~E
L301	RASKI 230330N 0635200E	UL301	AURANGABAD (AAU) 19514053N 0752419~~338.6~~E
	VAXIM 231900N 0611100E		NOBAT 210903~~2.5~~N 0688~~0~~000~~.1~~E
	RAGMA 232301N 0603846E		LADOT 220502N 0660001
			RASKI 230330N 0635200E
			VAXIM 231900N 0611100E
			RAGMA 232301N 0603846E
L305	DOHA HAMAD INTL (DOH) 251459N 0513635E	UL305	DOHA HAMAD INTL (DOH) 251459N 0513635E
	*Note 7 (DOH-ITITA)		*Note 7 (DOH-ITITA)
	*Note 8 (DOH-ASTOG)		*Note 8 (DOH-ASTOG)
	ORMAL 252304N 0522201E		ORMAL 252304N 0522201E
	ENANO 252348N 0522559E		ENANO 252348N 0522559E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ALSEM 252703N 0524322E		ALSEM 252703N 0524322E
	ASTOG 252822N 0525025E		ASTOG 252822N 0525025E
	ITITA 54410N 0541839E		ITITA 254410N 0541839E
L306	TOKRA 220925N 0553350E	UL306	TOKRA 220925N 0553350E
	* Note- 7 (OO)		* Note- 7 (OO)
	DEMKI 224941N 0562308E		DEMKI 224941N 0562308E
	LAKLU 232235N 0570401E		LAKLU 232235N 0570401E
L308	EGNOV 270301N 0474713E	UL308	EGNOV 270301N 0474713E
	*Note 7 (EGNOV- SERSA)		*Note 7 (EGNOV- SERSA)
	*Note 8 (EGNOV- OBNET)		*Note 8 (EGNOV- OBNET)
	JUBAIL (JBL) 270220N 0492426~~7~~E		JUBAIL (JBL) 270220N 0492426~~7~~E
	RAMSI 270249N 0500714E		RAMSI 270249N 0500714E
	GASSI 270257~~.9~~N 0502229~~.5~~E		GASSI 270257~~.9~~N 0502229~~.5~~E
	TOSDA 270005N 0505629E		TOSDA 270005N 0505629E
	TORBO 265223N 0511024E		TORBO 265223N 0511024E
	SOGAN 263915N 0515408E		SOGAN 263915N 0515408E
	DEGSO 261054N 0531946E		DEGSO 261054N 0531946E
	OBNET 260032N 0534514E		OBNET 260032N 0534514E
	ITITA 254410N 0541839E		ITITA 254410N 0541839E
	DESDI 253603N 0544230E		DESDI 253603N 0544230E
	RAGOL 252743N 0550739E		RAGOL 252743N 0550739E
	SERSA 251945N 0553118E		SERSA 251945N 0553118E
	TUKLA 251936N 0554010E		TUKLA 251936N 0554010E
	NADNI 251915N 0555658E		NADNI 251915N 0555658E
	LALDO 251806N 0563600E		LALDO 251806N 0563600E
	IMLOT 251708~~.1~~N 0570804~~.1~~E		IMLOT 251708~~.1~~N 0570804~~.1~~E
	KATUS 2516005~~.9~~N 05747~~.~~00E		KATUS 2516005~~.9~~N 05747~~.~~00E
	~~DIVAB 2510.7N 05952.1E~~[KE4]		~~DIVAB 2510.7N 05952.1E~~
	~~EGPIC 2508.6N 06029.5E~~		~~EGPIC 2508.6N 06029.5E~~
	~~(~~JIWANI~~)~~ (JI) 250350N 0614744E		~~(~~JIWANI~~)~~ (JI) 250350N 0614744E
	LATEM 243144~~.7~~N 0644944~~.7~~E		LATEM 243144~~.7~~N 0644944~~.7~~E
L310	BOXAK 244536N 0540032E	UL310	BOXAK 244536N 0540032E
	*Note 7 & 8 to LALDO		*Note 7 & 8 to LALDO
	SIGBO 245526~~.4~~N 0545653~~.9~~E		SIGBO 245526~~.4~~N 0545653~~.9~~E
	NALTA 250242~~.7~~N 0553955~~.8~~E		NALTA 250242~~.7~~N 0553955~~.8~~E
	AVAMI 250554~~.9~~N 0555647~~.8~~E		AVAMI 250554~~.9~~N 0555647~~.8~~E
	LALDO 251806N 0563600E		LALDO 251806N 0563600E
L314	NABAN 163124N 0430148E	UL314	NABAN 163124N 0430148E
	GOMRI 131816N 0443224E		GOMRI 131816N 0443224E
L315	CAIRO(CVO) 300532N 0312318E	UL315	CAIRO(CVO) 300532N 0312318E
	HURGHADA (HGD) 271040N 0334747E		HURGHADA (HGD) 271040N 0334747E
	GIBAL 243713~~.2~~N0363443~~.7~~E		GIBAL 243713~~.2~~N0363443~~.7~~E
L319	BAHRAIN (BAH) 261551N 0503855E	UL319	BAHRAIN (BAH) 261551N 0503855E
	DAVRI 264936N 0505731E		DAVRI 264936N 0505731E
	OBTAR 265934N 0510309E		OBTAR 265934N 0510309E
L321	KATAB 292501N 0290506E	UL321	KATAB 292501N 0290506E
	KUNKI 290726N 0291949E		KUNKI 290726N 0291949E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	KUNAK 252745.7N 03041.12E		KUNAK 252745.7N 03041.12E
	LUGAV 224205N 0313722E		LUGAV 224205N 0313722E
	ABU SIMBEL (SML) 222118N 0313719E		ABU SIMBEL (SML) 222118N 0313719E
		~~UL322~~ ~~[KE5]~~	~~MUMBAI (BBB) 190511N 0725229E~~
			~~* Note 7&1~~
			~~SUGID 193303.1N 06921.00E~~
			~~BOLIS 203333.5N 06500.02E~~
			~~REXOD 211230.5N 0613830.5E~~
		UL333	DASIS 385431N 0441229E
			TABRIZ (TBZ) 380853N 0461247E
			RASHT (RST) 371935N 0493657E
			GIBAB 353213~~7.0~~N 0543656~~0.9~~E
			~~ALRAS~~ [KE6] ~~3511.3N 05541.6E~~
			TASLU 342632N 0574234E
			SOKAM 331316N 0603752E
L417	VUSEB 361637N 0434800E	UL417	VUSEB 361637N 0434800E
	UMESA 351741N 0434307E		UMESA 351741N 0434307E
	MUTAG 343003N 0433834 E		MUTAG 343003N 0433834 E
	LAGLO 335153~~8.6~~ 044145~~7.0~~E		LAGLO 335153~~8.6~~ 044145~~7.0~~E
	ELOSI 330800N 0441800E		ELOSI 330800N 0441800E
	LOVEK 32220~~8.1~~N 04440~~.0~~1E		LOVEK 32220~~8.1~~N 04440~~.0~~1E
	ELIBA 320915N 0444645E		ELIBA 320915N 0444645E
	NADOX 310505N 0451851E		NADOX 310505N 0451851E
		UL425	KING ABDULAZIZ (JDW) 214244N 0390723E
			TONBO 205502N 0394911E
			AL BAHA (BHA) 201733N 0413745E
			BISHA (BSH) 195840N 0423728E
			WADI ALDAWASIR (WDR) 203019N 0451219E
			EGREN 202236N 0464422E
			ASTIN 200410N 0495320E
			DIRAS 195235N 0513704E
			GOBRO 193622N 0534741E
			NOVNO 193313N 0535858E
			ITUVO 190315N 0554328E
			DEDSO 185811N 0560041E
			BOVOS 182230N 0575844E
			ASPUX 174406N 0600006E
			~~(~~TRIVANDRUM~~)~~ (TVM) 082831N 0765531E
L430	VAXIM 231900N 0611100E	UL430	VAXIM 231900N 0611100E
	MESPO 244936N 0593411E		MESPO 244936N 0593411E
	MELMI 264625N 0572300E		MELMI 264625N 0572300E
	TAVNO 281112N 0563252E		TAVNO 281112N 0563252E
	ASMET 284827N 0560806E		ASMET 284827N 0560806E
	SIRJAN (SRJ) 293323~~.4~~N 0553923~~.6~~E		SIRJAN (SRJ) 293323~~.4~~N 0553923~~.6~~E
L438	LONOS 283027N 0491713E	UL438	LONOS 283027N 0491713E
	LOPOL 281849N 0492845E		LOPOL 281849N 0492845E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ATBAG 280842N 0493844E		ATBAG 280842N 0493844E
	GODRI 280256N 0494307E		GODRI 280256N 0494307E
	RAKSO 275326N 0495032E		RAKSO 275326N 0495032E
	GOGRA 274918N 0495344E		GOGRA 274918N 0495344E
	OBNAX 272650N 0501103E		OBNAX 272650N 0501103E
	DEKTA 271605N 0501946E		DEKTA 271605N 0501946E
	VELOG 270215N 0503055E		VELOG 270215N 0503055E
	KOBOK 265839N 0503349E		KOBOK 265839N 0503349E
	MOGAS 264759N 0503909E		MOGAS 264759N 0503909E
	TOSTA 262746N 0504912E		TOSTA 262746N 0504912E
	ASTAD 261811N 0505646E		ASTAD 261811N 0505646E
L440	KANIP 241040.~~7~~N 05520.7E	UL440	KANIP 241040.~~7~~N 05520.7E
	*Note 7		*Note 7
	RETAS 235754N 0553423E		RETAS 235754N 0553423E
L443	RABAP 283625N 0492722	UL443	RABAP 283625N 0492722
	TESSO 282852N 0492723E		TESSO 282852N 0492723E
	LOPOL 281849N 0492845E		LOPOL 281849N 0492845E
	ENAVI 275552N 0493151E		ENAVI 275552N 0493151E
	GIRSI 274126N 0493310E		GIRSI 274126N 0493310E
	ORDAN 271706N 0495442E		ORDAN 271706N 0495442E
	RAMSI 270249N 0500714E		RAMSI 270249N 0500714E
	GASSI 270257N 0502229E		GASSI 270257N 0502229E
L444	KIPOL 230410N 0612903E	UL444	KIPOL 230410N 0612903E
	*Note 7 (OO)		*Note 7 (OO)
	VUSIN 225940N 0605510E		VUSIN 225940N 0605510E
	MIBSA 225400N 0601338E		MIBSA 225400N 0601338E
	KAXEM 225103N 0595243E		KAXEM 225103N 0595243E
	IMDEK 224647N 0592217E		IMDEK 224647N 0592217E
	TOLDA 224008N 0583624E		TOLDA 224008N 0583624E
L513	MURAK 345600~~9.4~~N 0364200.~~1~~E[KE7]	UL513	MURAK 345600~~9.4~~N 0364200.~~1~~E
	LEBOR 341556.~~9~~N 0363459~~5.0~~E		LEBOR 341556.~~9~~N 0363459~~5.0~~E
	DAMASCUS (DAM) 332154N 0362807E		DAMASCUS (DAM) 332154N 0362807E
	* Note 3 (OS)		* Note 3 (OS)
	BUSRA 3220.~~00~~ N 03637.~~00~~ E		BUSRA 3220.~~00~~ N 03637.~~00~~ E
	QUEEN ALIA (QAA) 314423N 0360926E		QUEEN ALIA (QAA) 314423N 0360926E
	QATRANEH (QTR) 311454N 0360334E		QATRANEH (QTR) 311454N 0360334E
	MUNRA [KE8]~~MAZAR~~ 304944~~8.0~~N 0360835~~10.0~~E		MUNRA [KE9]~~MAZAR~~ 304944~~8.0~~N 0360835~~10.0~~E
		UL516	KITAL 2003.~~00~~N 06018.~~00~~E
			ELKEL 0149.~~08~~N 06911.~~00~~E
			DIEGO GARCIA (~~NDG~~ NKW) 071900S 0722442E
L519	ABU DHABI (ADV)	UL519	ABU DHABI (ADV)
	*Note 7 (OM)		*Note 7 (OM)
	NAMSI 243731.~~5~~N 05456.~~4~~8E		NAMSI 243731.~~5~~N 05456.~~4~~8E
	EMERU 244829N 0550303		EMERU 244829N 0550303
	LUDER 245733.~~5~~N 0550511.~~2~~E		LUDER 245733.~~5~~N 0550511.~~2~~E
		UL550	WAFRA (KFR) 283715N 0475729E

4A-17

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			NIDAP 283850N 0473656E
			BOSID 284227~~.4~~N 0465401~~2.6~~E
			VATIM 2851~~.~~36N 0444443~~.7~~E
			RASMO 285713~~2~~N 0433119~~.3~~E
			ORSAL290235~~.8~~N 0421107~~0.8~~E
			NIMAR 290635~~.6~~N 0395425~~.4~~E
			KITOT 290205~~.1~~N 0345050~~.8~~E
			NUWEIBAA (NWB) 290156N 0344016E
			~~TABA (TBA)~~
			~~EL ARISH (ARH)~~
			KARIK 292733N 0344641E
			TAKSU 293625N 0343623E
			DATOK 293624N 0341400E
			SERMA 312200N 0330834E
			PASOS 321300N 0330600E
			~~(KAROL 3252.0N 03229.0E)~~
L551	ANTAR 334800N 0281600E	UL551	ANTAR 334800N 0281600E
	EL DABA (DBA) 310041N 0282801E		EL DABA (DBA) 310041N 0282801E
L555	TOTOX 215030N 0622230E	UL555	TOTOX 215030N 0622230E
	TUMET 222307N 0595702E		TUMET 222307N 0595702E
	TOLDA 224008N 0583624E		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) 381856~~9.9~~N 04826054~~.9~~E
			* Note 3&4 (OI)
			SEVAN ~~(SVN)~~ 4032~~.03~~N 0445717~~6.9~~E
L564	DOHA~~/~~ HAMAD INTL	UL564	DOHA~~/~~ HAMAD INTL
	(DOH) 251459N 0513635E		(DOH) 251459N 0513635E
	LADEM 245545N 0513714E		LADEM 245545N 0513714E
	DATRI 244239N 0513407E		DATRI 244239N 0513407E
	DENSI 242519N 0512959E		DENSI 242519N 0512959E
	*Note 8 (DOH-PURDA)		*Note 8 (DOH-PURDA)
	BATHA (BAT) 241257N 0512707E		BATHA (BAT) 241257N 0512707E
	MIGMA 225035N 0512749E		MIGMA 225035N 0512749E
	LOTOS 220000N 0503912E		LOTOS 220000N 0503912E
	ALNUG 213009N 0500453E		ALNUG 213009N 0500453E
	NONGA 205048N 0492012E		NONGA 205048N 0492012E
	DENKU 201123N 0484331E		DENKU 201123N 0484331E
	GERUG 185530N 0473402E		GERUG 185530N 0473402E
	ASKET 181905N 0470113E		ASKET 181905N 0470113E
	PATOG 180241N 0464631E		PATOG 180241N 0464631E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	VUVOD 173941N 0463200E		VUVOD 173941N 0463200E
	TULIS 173033N 0462616E		TULIS 173033N 0462616E
	ULBON 171425N 0461515E		ULBON 171425N 0461515E
	RAGNI 163454N 0454815E		RAGNI 163454N 0454815E
	LOPAD 161651N 0453738E		LOPAD 161651N 0453738E
	ITOLI 152825N 0450927E		ITOLI 152825N 0450927E
	OBNAM 144541N 0444448E		OBNAM 144541N 0444448E
	GEVEL 141229N 0442547E		GEVEL 141229N 0442547E
	NOPVO 135436N 0441536E		NOPVO 135436N 0441536E
	TAZ 134150N 0440819E		TAZ 134150N 0440819E
	PARIM 123142N 0432712E		PARIM 123142N 0432712E
		UL566	ASMAK 162327N 0524634E
			UKNEN 160542N 0522012E
			PURUG 151204N 0510142E
			KUSOL 144009N 0501534E
			NOTBO 142609N 0495530E
			EMABI 141627N 0494139E
			SOKEM 134235N 0485329E
			DATEG 123549N 0471627E
		UL572	~~KAMISHLY (KML)~~
			LESRI 370420.3N 0411349.8E
			KAMISHLY (KML) 370100N 0411106E
			HASSAKEH (HAS) 3629N 04045.3E
			DIER ZZOR (DRZ) 351731N 0400914E
			TANF (TAN) 332857N 0383915E
		UL573	DAFINAH (DFN) 231658N 0414310E
			MADINAH (PMA) 243251N 0394219E
			WEJH (WEJ) 261045N 0362917E
		UL601	BAGLUM (BAG) 04004.12 0324838.6)
			* Note 7 (BAG-KTN)
			ADANA (ADA) 365626.4N 0351237.6E ~~(ADA)~~
			TUNLA 3553.00N 0360200E~~)~~
			KARIATAIN 3412.48N 0371551.9E
L602	TUMAK 255031N 0531108E	UL602	TUMAK 255031N 0531108E
	VEDOM 260109N 0524456E		VEDOM 260109N 0524456E
	VELAK 261307N 0521821E		VELAK 261307N 0521821E
	LABOP 261907N 0520429E		LABOP 261907N 0520429E
	ALTOM 262230N 0515639E		ALTOM 262230N 0515639E
	DASOS 262429N 0515043E		DASOS 262429N 0515043E
	ALMOK 262832N 0513840E		ALMOK 262832N 0513840E
	VEDOS 264105N 0510044E		VEDOS 264105N 0510044E
	NABOS 264354N 0505145E		NABOS 264354N 0505145E
	MEMKO 264611N 0504427E		MEMKO 264611N 0504427E
	MOGAS 264759N 0503909E		MOGAS 264759N 0503909E
	TOLMO 265504N 0502927E		TOLMO 265504N 0502927E
	EGLIT 270255N 0502005E		EGLIT 270255N 0502005E
	TOKMA 270938N 0501159E		TOKMA 270938N 0501159E
	ORSOL 272135N 0500207E		ORSOL 272135N 0500207E
	ITNAS 274643N 0493957E		ITNAS 274643N 0493957E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ENAVI 275552N 0493151E		ENAVI 275552N 0493151E
	DAMUR 280137N 0492637E		DAMUR 280137N 0492637E
	DAVUS 282346N 0490622E		DAVUS 282346N 0490622E
			DARVA 284814N 0484734E
			ALVIX 291918N0482412E
			~~F~~RALKA 292611N 0481819E
			TASMI 300120N 0475505E
			LOVEK3222086N 04440010E
			DELMI331911N 0431731E
			ELEXI 344237N 0411054E
			DRZ 35173124N 040091411124E
			KUKSI 364508N 0374910E
			GAZIANTEP (GAZ) 365705~~1~~N 03728234E
L604	PLH 351339N 0234051E	UL604	PALEOCHORA (PLH) 351339N 0234051E
	SALUN 340000N 0242700E		SALUN 340000N 0242700E
	SIDI BARANI (BRN) 3134320N 026002018E		SIDI BARANI (BRN) 3134320N 026002018E
	EL KHARGA (KHG) 252654N 03035274E		EL KHARGA (KHG) 252654N 03035274E
	LUXOR (LXR) 254458 N 0324607E		LUXOR (LXR) 254458 N 0324607E
	IMRAD 260506N 0354444E		IMRAD 260506N 0354444E
	WEJH(WEJ) 261048N 0362918E		WEJH(WEJ) 261048N 0362918E
	HALAIFA (HLF) 2626030N 03916.096E		HALAIFA (HLF) 2626030N 03916.096E
	GASSIM (GAS) 261754N 0434648E		GASSIM (GAS) 261754N 0434648E
	*Note 7 (GAS-KFA)		*Note 7 (GAS-KFA)
	PUSLA 261758N 0461706E		PUSLA 261758N 0461706E
	*Note 8 to TOSNA		*Note 8 to TOSNA
	MAGALA (MGA) 2617201~~8~~N 0471225-4-E		MAGALA (MGA) 2617201~~8~~N 0471225-4-E
	ALMAL 261554N 0482106E		ALMAL 261554N 0482106E
	KING FAHD (KFA) 2621534N 0494910~~2~~E		KING FAHD (KFA) 2621534N 0494910~~2~~E
	NARMI 261802N 0501939E		NARMI 261802N 0501939E
	BAHRAIN (BAH) 261551N 0503855E		BAHRAIN (BAH) 261551N 0503855E
	DENVO 260452N 0510509E		DENVO 260452N 0510509E
	PATOM 255821N 0511836E		PATOM 255821N 0511836E
	EMISA 254658N 0514207E		EMISA 254658N 0514207E
	KAPAX 254218N 0515118E		KAPAX 254218N 0515118E
	ORSIS 252801N 0521636E		ORSIS 252801N 0521636E
	ENANO 252348N 0522559E		ENANO 252348N 0522559E
	TOSNA 251612N 0524116E		TOSNA 251612N 0524116E
		UL607	SITIA (SIT) 350406N 0261121E
			* Note 7
			PAXIS 335706.1N02720.00E
			OTIKO 313421.3N 02936.36E
			ALEXANDRIA (NOZ) 311113N 0295701E
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 3236.01N 02737062~~0.0~~E
			TANSA 3400.00N 02649.00E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
L617	ALEXANDRIA NOZ 311113N 0295701E	UL617	ALEXANDRIA NOZ 311113N 0295701E
	IMRUT 313259N 0293346E		IMRUT 313259N 0293346E
	ASNIR 323849N 0282144E		ASNIR 323849N 0282144E
	TANSA 340000N 0264900E		TANSA 340000N 0264900E
L620	BALMA 342856N 0350302E	UL620	BALMA 342856N 0350302E
	KALDE (KAD) 334827N 0352910E		KALDE (KAD) 334827N 0352910E
L631	TOTOX 215030N0622230E	UL631	TOTOX 215030N0622230E
	IVOMA 223408N 0605430E		IVOMA 223408N 0605430E
	* Note 7 (OO)		* Note 7 (OO)
	MIBSA 225400N 0601338E		MIBSA 225400N 0601338E
	AMBOS 230324N 0595405E		AMBOS 230324N 0595405E
	ELIGO 232458N 0590848E		ELIGO 232458N 0590848E
	KARAR 233042N 0585438E		KARAR 233042N 0585438E
	MUSCAT (MCT) 233528~~.01~~N 0581536E~~.47~~		MUSCAT (MCT) 233528~~.01~~N 0581536E~~.47~~
L677	CAIRO (CV~~AIR~~O) 300532~~.5~~N 0312318~~.3~~E MENLI 2947~~.~~00N 0315206~~.1~~E ~~KAPIT 2917.0N 03236.1E~~[KE10] SHARM EL SHEIKH (SHM) 275953N 0342448E PASAM 273045~~.8~~N 0345542~~.7~~E *Note 7(OE) WEJH (WEJ) 261046~~.8~~N 0362917~~.3~~E MUVAT 253755~~.9~~N 0365446~~.8~~E YENBO (YEN) 2408~~.~~58N 0380219~~3.9~~E KING ABDULAZIZ (JDW) 214244N 0390723E QUNFIDAH (QUN) 192211~~.2~~N 0410429~~.5~~E TALIB 183854~~.9~~N 0413114~~.2~~E JAZAN (GIZ) 165428~~.5~~N 0423439~~.7~~E NABAN 163124~~.4~~N 043014~~.8~~E IMSIL 1557.6N 04313.2E SANAA (SAA) 1530~~.~~00N 0441311~~.2~~E	UL677	CAIRO (CV~~AIR~~O) 300532~~.5~~N 0312318~~.3~~E MENLI 2947~~.~~00N 0315206~~.1~~E ~~KAPIT 2917.0N 03236.1E~~ SHARM EL SHEIKH (SHM) 275953N 0342448E PASAM 273045~~.8~~N 0345542~~.7~~E *Note 7(OE) WEJH (WEJ) 261046~~.8~~N 0362917~~.3~~E MUVAT 253755~~.9~~N 0365446~~.8~~E YENBO (YEN) 2408~~.~~58N 0380219~~3.9~~E KING ABDULAZIZ (JDW) 214244N 0390723E QUNFIDAH (QUN) 192211~~.2~~N 0410429~~.5~~E TALIB 183854~~.9~~N 0413114~~.2~~E JAZAN (GIZ) 165428~~.5~~N 0423439~~.7~~E NABAN 163124~~.4~~N 043014~~.8~~E IMSIL 155738~~.6~~N 04313~~.~~12E SANAA (SAA) 1530~~.~~00N 0441311~~.2~~E
L681	EGNOV 270301N 0474713E	UL681	EGNOV 270301N 0474713E
	* Note 5 & 7 & 8 ~~to~~ (EGNOV-SALWA)		* Note 5 & 7 & 8 ~~to~~ (EGNOV-SALWA)
	GEPAK 2633~~.~~00N 0484328~~.5~~E		GEPAK 2633~~.~~00N 0484328~~.5~~E
	~~RADMA 2623.0N 04857.5E~~[KE11]		~~RADMA 2623.0N 04857.5E~~
	~~DELMU 2618.9N 04903.4E~~		~~DELMU 2618.9N 04903.4E~~
	~~ROSEM 2607.7N 04919.0E~~		~~ROSEM 2607.7N 04919.0E~~
	SALWA 251538N 0503048E		SALWA 251538N 0503048E
L695	PAROK 231030N 0590245E	UL695	PAROK 231030N 0590245E
	*Note 7 (OO)		*Note 7 (OO)
	ITURA 232351N 0580720E		ITURA 232351N 0580720E
L764	MUSCAT (MCT) 233528N 0581536E	UL764	MUSCAT (MCT) 233528N 0581536E
	ALMOG 233524N 0574940E		ALMOG 233524N 0574940E
	IVETO 233520N 0570704E		IVETO 233520N 0570704E
	PAXIM 240245N 0561631E		PAXIM 240245N 0561631E
L768	ALPOB 254218N 0530055E	UL768	ALPOB 254218N 0530055E
	* Note 7 to FIRAS		* Note 7 to FIRAS
	* Note 8 (ALPOB-COPPI)		* Note 8 (ALPOB-COPPI)

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ROTAG 255353N 0523621E		ROTAG 255353N 0523621E
	SOLEG 260159N 0521756E		SOLEG 260159N 0521756E
	MODOG 261012N 0515935E		MODOG 261012N 0515935E
	RAMKI 261138N 0515625E		RAMKI 261138N 0515625E
	RABLA 261506N 0514834E		RABLA 261506N 0514834E
	SOLOB 262241N 0513132E		SOLOB 262241N 0513132E
	MEDMA 263421N 0505454E		MEDMA 263421N 0505454E
	TOTLA 263806N 0504301E		TOTLA 263806N 0504301E
	EGMOR 264211N 0502907E		EGMOR 264211N 0502907E
	ULADA 264527N 0501624E		ULADA 264527N 0501624E
	JUBAIL (JBL) 270222N 0492426E		JUBAIL (JBL) 270222N 0492426E
	COPPI 275033N 0474359E		COPPI 275033N 0474359E
			HFR 281950N 0460746E
			VATIM 285136N 0444432E
			RAFHA (RAF) 281950N 0460746E
			ARAR (AAR) 305429N 0410832E
			OVANO 314801N 0390951E
			OTILA 320131N 0390153E
			MODAD 323542N 0384136E
			SOKAN 330806N 0382206E
			RAFIF 331248N 0381918E
			SULAF 332718N 0381024E
			FIRAS 335218N 0375512E
		UL883	REXOD 211230N 0613830E
			GADMA 211439N 0600938E
			TAVKO 211519N 0593147E
			UMILA 211555N 0584738E
			MEVLI 211632N 0565606E
			KUROV 211627N 0561853E
			ALNUN 211625N 0561041E
			SITOL 211604N 0552514E
			PURDA 210805N 0510329E
			ALRIK 220631N 0482535E
			UMRAN 231508.1N 0452023.4E
			TUKVU 234626.4N 0435319.3E
			BIR DARB (BDB)
			MADINAH (PMA) 243251N 0394219E
		~~UL894~~	~~KITAL 2003.00N 060180.0E~~
			~~(MALE (MLE) 041223N 0733139E~~
			~~(SUNAN 0028.7N 07800.0E)~~
			~~(DADAR 0200.0S 07927.1E)~~
			~~(PERTH (PH)~~[KE12]
M203	PUSTO 3321.00N 04245.00E	UM203	PUSTO 3321.00N 04245.00E
	LOVEK 322208.1N 04440.01E		LOVEK 322208.1N 04440.01E
	ILMAP 312133N 0465702E		ILMAP 312133N 0465702E
M300	LOTAV 203700N 0605700E	UM300	(CALICUT) CLC 110806N 0755717E
	EMURU 221535N 0584950E		LOTAV 203700N 0605700E
			EMURU 221535N 0584950E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
M301	PURAD 145500N 0415354E	M301	PURAD 145500N 0415354E
	SANAA (SAA) 153000N 0441311E		SANAA (SAA) 153000N 0441311E
	ITOLI 152825N 0450927E		ITOLI 152825N 0450927E
	ASMAK162327N 0524634E		ASMAK162327N 0524634E
M303	MUSCAT (MCT) 233528~~.01~~N 0581536E~~.47~~	UM303	MUSCAT (MCT) 233528~~.01~~N 0581536E~~.47~~
	*Note 7 (OO)		*Note 7 (OO)
	SEVLA 233321N 0591122E		SEVLA 233321N 0591122E
	KIPOL230410N 0612903E		KIPOL230410N 0612903E
M305	SIDI BARANI (BRN) 313432~~.5~~N 0260020~~.3~~E	UM305	SIDI BARANI (BRN) 313432~~.5~~N 0260020~~.3~~E
	ATMUL 200000N 290527~~.4~~E		ATMUL 200000N 290527~~.4~~E
	*Note 3		*Note 3
		UM309	KING~~D~~ KHALED (KIA) 245310N 0464534E
			*Note 1 (KIA-VEMEM)
			RAGHBA (RGB) 235533N 0443547E
			VEMEM 221554N 0400118E
			~~RABTO 221608N 0400326E~~
M312	EL DABA (DBA) 310041~~.7~~N 0282801~~.0~~E	UM312	EL DABA (DBA) 310041~~.7~~N 0282801~~.0~~E
	AMIBO 345640~~.7~~N 213627~~.4~~E		AMIBO 345640~~.7~~N 213627~~.4~~E
	*Note 3 (HE)		*Note 3 (HE)
M316	KANAS 251552N 0574700E	UM316	KANAS 251552N 0574700E
	GOKSO 265542N 0604012E		GOKSO 265542N 0604012E
M318	GABKO 260404N 0554755E	UM318	
	GITSA 254132N 0553926E		
	*Note 7 (SERSA-GABKO) Eastbound		
	SERSA 251945N 0553118E		
	MIADA 245112N 0545736E		
	ABU DHABI (ADV) 242508N 0544024E		
	ATUDO 241708N 0543532E		
	MUSEN 241429N 0543336E		
	GOLGU 231051N 0523109E		
	MUXIT 230229N 0523024E		
	KITAP 224928N 0522923E		KITAP 224928N 0522923E
	PURDA 210805N 0510329E		PURDA 210805N 0510329E
	SHARURAH (SHA) 172813N 0470802E		SHARURAH (SHA) 172813N 0470802E
	NADKI 171418N 0464706E		NADKI 171418N 0464706E
	SANAA (SAA) 153100N 0441311E		SANAA (SAA) 153100N 0441311E
	HODEIDAH (HDH) 144622N 0425911E		HODEIDAH (HDH) 144622N 0425911E
M319	ULINA 292451N 0345817E	UM319	ULINA 292451N 0345817E
	SESMO 293458N 0351159E		SESMO 293458N 0351159E
	LOXUS 301301N 0352601E		LOXUS 301301N 0352601E
	LOSIL 304951N 0354841E		LOSIL 304951N 0354841E
	QATRANEH (QTR) 311454N 0360334E		QATRANEH (QTR) 311454N 0360334E
M320	KING FAHD (KFA) 262153N 0494910E	UM320	KING FAHD (KFA) 262153N 0494910E
	~~KODAG 2703.3N 04920.4E~~ JUBAIL (JBL) 270222N 0492426E		~~KODAG 2703.3N 04920.4E~~ JUBAIL (JBL) 270222N 0492426E
	RAS MISHAB (RAS) 280441N 0483653E		RAS MISHAB (RAS) 280441N 0483653E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ASVIR 283220N 0482220E		ASVIR 283220N 0482220E
	KUWAIT (KUA) 291306N 0475803E		KUWAIT (KUA) 291306N 0475803E
M321	HALAIFA (HLF) 262602N 0391609E ~~(HLF)~~	UM321	HALAIFA (HLF) 262602N 0391609E ~~(HLF)~~
	ROSUL 253945.~~7~~N 0421519.~~3~~E		ROSUL 253945.~~7~~N 0421519.~~3~~E
	OVEKU 250955.~~9~~ 04457.01E		OVEKU 250955.~~9~~ 04457.01E
	KING KHALED (KIA) 245310N 0464534E 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		KING KHALED (KIA) 245310N 0464534E RESAL 240649N 0470427E AMBAG 230529N 0474611E ALRIK 220631N 0482525E NONGA 205048N 0492014E ASTIN 200410N 0495320E SILPA 184953N 0510158E IMPOS 183136N 0511848E LOTEL 180926N 0514103E PUTRA 165432N 0525631E
M425	~~SILKO~~ ELIKA 334955~~7.9~~N 03435.00E	UM425	~~SILKO~~ ELIKA 334955~~7.9~~N 03435.00E
	CHEKA (CAK) 341802N 0354200E		CHEKA (CAK) 341802N 0354200E
M428	RIKET 251859N 0560200E	UM428	RIKET 251859N 0560200E
	*Note 7/8 (OO/OM)		*Note 7/8 (OO/OM)
	GOMTA 251115N 0563447E		GOMTA 251115N 0563447E
	TARBO 244351N 0574637E		TARBO 244351N 0574637E
	MUNGA 242516N 0584533E		MUNGA 242516N 0584533E
M430	*Note 5 (KIA-DOH)	UM430	*Note 5 (KIA-DOH)
	KING KHALID (KIA) 245310N 0464534E		KING KHALID (KIA) 245310N 0464534E
	KOBOX 250716N 0475046E		KOBOX 250716N 0475046E
	KIREN 251447N 0490724E		KIREN 251447N 0490724E
	*Note 8 (KIREN-TOSNA)		*Note 8 (KIREN-TOSNA)
	AL AHSA (HAS) 251645N 0492903E		AL AHSA (HAS) 251645N 0492903E
	SALWA 251538N 0503048E		SALWA 251538N 0503048E
	ULIKA 251545N 0503849E		ULIKA 251545N 0503849E
	GINTO 251606N 0510416E		GINTO 251606N 0510416E
	LAGNO 251613N 0511518E		LAGNO 251613N 0511518E
	DOHA HAMAD INTL (DOH) 251459N 0513635E		DOHA HAMAD INTL (DOH) 251459N 0513635E
	BOVIP 251555N 0523135E		BOVIP 251555N 0523135E
	TOSNA 251612N 0524116E		TOSNA 251612N 0524116E
	*Note 7 (DOH-KISAG)		*Note 7 (DOH-KISAG)
	KISAG 251834N 0541408E		KISAG 251834N 0541408E
M434	UMESA 351741N 0434307E OTALO 351700N 0441900E IVANO 351724N 0451235E BOXIX 351724N 0460921E ALSAX 351607N 0463118E SANANDAJ (SNJ) 351420N 0470028E HAMDAN(HAM) 345201N 0483301E SAVEH(SAV) 350107N 0502217E	UM434	UMESA 351741N 0434307E OTALO 351700N 0441900E IVANO 351724N 0451235E BOXIX 351724N 0460921E ALSAX 351607N 0463118E SANANDAJ (SNJ) 351420N 0470028E HAMDAN(HAM) 345201N 0483301E SAVEH(SAV) 350107N 0502217E
		UM440	KING KHALED (KIA) 245310N 0464534E
			OTAMA 235148N 0494707E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			KUTNA 231341N 0512730E
			KITAP 224928N 0522923E
			TOKRA 220925N 0553350E
M444	DOHA~~/~~ HAMAD INTL(DOH) 251459N 0513635E	UM444	DOHA~~/~~ HAMAD INTL (DOH) 251459N 0513635E
	EMISA 254658N 0514207E		EMISA 254658N 0514207E
	PATOM 255821N 0511836E		PATOM 255821N 0511836E
	DENVO 260452N 0510509E		DENVO 260452N 0510509E
	BAHRAIN (BAH) 261551N 0503855E		BAHRAIN (BAH) 261551N 0503855E
	ELOSO 262409N 0503550E		ELOSO 262409N 0503550E
	EGMOR 264210N 0502906E		EGMOR 264210N 0502906E
	LOTOR 264854N 0502200E		LOTOR 264854N 0502200E
	RAMSI 270249N 0500714E		RAMSI 270249N 0500714E
	ORDAN 271706N 0495442E		ORDAN 271706N 0495442E
	GIRSI 274126N 0493310E		GIRSI 274126N 0493310E
	ENASO 275706N 0491911E		ENASO 275706N 0491911E
	DAVUS 282346N 0490622E		DAVUS 282346N 0490622E
M449	BUSRA 322000N 0363700E	UM449	BUSRA 322000N 0363700E
	MUNRA [KE13]~~MAZAR~~ 3049448.0N 0360835~~10.0~~E		MUNRA [KE14]~~MAZAR~~ 3049448.0N 0360835~~10.0~~E
	GIBET 292620.~~3~~N 03625.~~0~~1E		GIBET 292620.~~3~~N 03625.~~0~~1E
	TABUK (TBK) 282153N 0363637E		TABUK (TBK) 282153N 0363637E
	WEJH (WEJ) 261046N 0362918E		WEJH (WEJ) 261046N 0362918E
M550	GOLGU 231051N 0523109E	UM550	GOLGU 231051N 0523109E
	RIBOT 230844N 0522428E		RIBOT 230844N 0522428E
	BOPEK 230059N 0520007E		BOPEK 230059N 0520007E
	MIGMA 225035N 0512749E		MIGMA 225035N 0512749E
	MEVDO 223205N 0494616E		MEVDO 223205N 0494616E
M551	KIVEL 165306N 0553633E	UM551	DONSA143518.~~3~~N0651136344.0E
	DAXAM 171612N 0544715E		ANGAL161404.~~1~~N 0600004.~~1~~E
			OTOTO 164004N 0570435E
			KIVEL 165306N 0553633E
			DAXAM 171612N 0544715E
M557	ATBOR 251007N 0551947E	UM557	ATBOR 251007N 0551947E
	*Note7 & 8 (ATBOR-VUVOK) ~~to MIDSI~~		*Note7 & 8 (ATBOR-VUVOK) ~~to MIDSI~~
	NADIL 252252N 0544717E		NADIL 252252N 0544717E
	NABOP 252607N 0540405E		NABOP 252607N 0540405E
	EMAGO 253456N 0535751E		EMAGO 253456N 0535751E
	VUVOK 254408N 0533024E		VUVOK 254408N 0533024E
M559	LABNI 165620N 0410921E	UM559	LABNI 165620N 0410921E
	NISMI 162415N 0421838E		NISMI 162415N 0421838E
	ITOLI 152825N 0450927E		ITOLI 152825N 0450927E
	MUKALLA (RIN) 144015N 0492329E		MUKALLA (RIN) 144015N 0492329E
	VEDET 120134N 0512410E		VEDET 120134N 0512410E
M561	KISH (KIS) 263131N 0535745E	UM561	KISH (KIS) 263131N 0535745E
	MOBET 2645.3N 05609.8E		MOBET 2645.3N 05609.8E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ASVIB 265724N 0631812E		ASVIB 265724N 0631812E
	~~(~~PANJGUR~~)~~ (PG) 265710N 0640813E		~~(~~PANJGUR~~)~~ (PG) 265710N 0640813E
		UM573	TEHERAN (TRN) 354149N 0511702E
			TABRIZ (TBZ) 3808~~.~~53N 04612473~~.9~~E
		UM574	MALE~~)~~ (MLE) 041223N 0733139E
			~~(~~POPET~~)~~ 071343~~.7~~N06813~~.~~36E
			NABIL 1222~~.~~00E0600~~.~~006E
			RIGAM 143932N 0530414E
			NOBSU 171554N 0431318E
M600	RANBI 251908N 0544500E	UM600	RANBI 251908N 0544500E
	KISAG 251834N 0541408E		KISAG 251834N 0541408E
	TUMAK 255031N 0531108E		TUMAK 255031N 0531108E
	VEDOM 260109N 0524456E		VEDOM 260109N 0524456E
	VELAK 261307N 0521821E		VELAK 261307N 0521821E
	LABOP 261907N 0520429E		LABOP 261907N 0520429E
	ALTOM 262230N 0515639E		ALTOM 262230N 0515639E
	DASOS 262429N 0515043E		DASOS 262429N 0515043E
	ALMOK 262832N 0513840E		ALMOK 262832N 0513840E
	VEDOS 264105N 0510044E		VEDOS 264105N 0510044E
	NABOS 264354N 0505145E		NABOS 264354N 0505145E
	MOGAS 264759N 0503909E		MOGAS 264759N 0503909E
	RAKAK 265221N 0502618E		RAKAK 265221N 0502618E
	RAMSI 270249N 0500714E		RAMSI 270249N 0500714E
	ORNAK 272853N 0493248E		ORNAK 272853N 0493248E
	SOLEM 275229N 0491136E		SOLEM 275229N 0491136E
	KUMBO 281705N 0485526E		KUMBO 281705N 0485526E
M628	LUDID 230227N 0551800E	UM628	DAFINAH (DFN) 231700N 0414312E
	LABSA 230153N 0555505E		KIPOM 225316N 0501518E
	EGVAN 230127N 0561907E		MIGMA 225035N 0512749E
	TULBU 230005N 0571827E		KITAP 224928N 0522923E
	IZIKI (IZK) 225319~~8.60~~N 057454~~32.73~~E		ALPEK 224648N 0535942E
	TOLDA 224008N 0583624E		LUDID 230227N 0551800E
	LOXOP 223722N 0594548E		LABSA 230153N 0555505E
	~~LADAP~~ LOSIM 223513N 0603238E		EGVAN 230127N 0561907E
	IVOMA 223408N 0605430E		TULBU 230005N 0571827E
	PARAR 222630N 0630700E		IZIKI (IZK) 225319~~8.60~~N 057454~~32.73~~E
			TOLDA 224008N 0583624E
			LOXOP 223722N 0594548E
			LOSIM 223513N 0603238E
			IVOMA 223408N 0605430E
			PARAR 222630N 0630700E
M634	ANGAL 161404~~6~~N 0600004~~6~~E	UM634	ANGAL 161404~~6~~N 0600004~~6~~E
	VEDET 120134N 0512410E		VEDET 120134N 0512410E
	DAROT 0911.4N 04721.2E		DAROT 0911.4N 04721.2E
M651	ATBOT 171418N 0464706E	UM651	ATBOT 171418N 0464706E
	ADEN (KRA) 124952N 0450125E		ADEN (KRA) 124952N 0450125E
	~~(HARGEISA)~~ HARGA 093112N 0440530E		~~(HARGEISA)~~ HARGA 093112N 0440530E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
M677	SESRA 290800N 0485454E	UM677	SESRA 290800N 0485454E
	RABAP 283625N 0492722E		RABAP 283625N 0492722E
	PASAK 282459N 0494846E		PASAK 282459N 0494846E
	GOGMA 281421N 0495612E		GOGMA 281421N 0495612E
	IVIVI 273734N 0502437E		IVIVI 273734N 0502437E
	VEDOR 270855N 0504630E		VEDOR 270855N 0504630E
	TOSDA 270004N 0505629E		TOSDA 270004N 0505629E
	TORBO 265222N 0511024E		TORBO 265222N 0511024E
	SOGAN 263915N 0515408E		SOGAN 263915N 0515408E
	DEGSO 261054N 0531946E		DEGSO 261054N 0531946E
	OBNET 260032N 0534514E		OBNET 260032N 0534514E
	ITITA 254410N 0541839E		ITITA 254410N 0541839E
	SERSA 251945N 0553118E		SERSA 251945N 0553118E
	LALDO 251806N 0563600E		LALDO 251806N 0563600E
M681	TARBO 244351N 0574637E	UM681	TARBO 244351N 0574637E
	*Note 7/8 (OO)		*Note 7/8 (OO)
	DAMUM 243236N 0591307E		DAMUM 243236N 0591307E
M686	LUXOR (LXR) 254458N 0324607E	UM686	LUXOR (LXR) 254458N 0324607E
	MEMPO 252518N 0335457E		MEMPO 252518N 0335457E
	GIBAL 243713~~2~~N 036344~~3~~2E		GIBAL 243713~~2~~N 036344~~3~~2E
	KING ABDULAZIZ (JDW) 214244N 0390723E		KING ABDULAZIZ (JDW) 214244N 0390723E
		UM688	CARSAMBA (CRM) 411556N 0363256E
			GULRA 402247N 0381646E
			ERZINCAN (ERN) 394230N 0393145E
			EVSAS 391929N 0401119E
			BAYIR 383541N 0412414 E
			ULTED 382102N 0414934E
			OTKEP 375133N 0423936E
			NINVA 372100N 0431300E
			ROXOP 364917N 0433100E
			VUSEB 361637N E0434800E
			OTALO 351700N 0441900E
			RIDIP 343012N 0444027E
			UKMUG 334300N 0450329E
			VAXEN 3318 00N 0451500E
			PAPUS 325334N 0452706E
			KATUT 323737N 0453439E
			DENKI 322228~~.46~~N 045512~~21.58~~E
			ILMAP 312133N 0465702E
			PEBAD 305023~~.09~~N 047295~~8.49~~E
			SIDAD 295231N 0482944E
		UM690	ZELAF 325656N 0371121E
			ORNAL 324755N0375153E
			KODER 323300N 0373800E
			DESLI 3149~~21~~00N 036590~~1~~9E
			ELOXI 313401~~359~~N 036453~~4~~6E
			KULDI 311847N 0363214E
			MUNRA [KE15]~~MAZAR~~ 3049~~44~~8.~~0~~N 036083~~510.0~~E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			~~ROVAR 292438N0345711E~~
			LONOL 300801N 0353500E
			SESMO 293458N 0351159E
			ULINA 292451N 0345817E
			NUWEIBAA (NWB) 290156N 0344016E
M691	~~DEDAS 2630.2N 05014.4E~~ LADNA 262749N 0502245E	UM691	~~DEDAS 2630.2N 05014.4E~~ LADNA 262749N 0502245E
	KING FAH~~A~~D 262153N 0494910E		KING FAH~~A~~D 262153N 0494910E
	KUSAR 264741N 0490218E		KUSAR 264741N 0490218E
	KEDAT 2721.8N 04759.0E		KEDAT 27214~~9.8~~9.8N 04759~~.0~~1E
	ITIXI 275031N 0470435E		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 42465~~0.8~~0.8N 034051~~6.3~~6.3E	UM860	KUGOS 42465~~0.8~~0.8N 034051~~6.3~~6.3E
	SINOP (SIN) 420120N 0350436E		SINOP (SIN) 420120N 0350436E
	CARSAMBA (CRM) 411556N 0363256E		CARSAMBA (CRM) 411556N 0363256E
	SIIRT (SRT) 37543~~8.6~~8.6N 041525~~5.9~~5.9E		SIIRT (SRT) 37543~~8.6~~8.6N 041525~~5.9~~5.9E
	KABAN N371456N 0423859E		KABAN N371456N 0423859E
	EMIDO 364411.~~33~~33N 0425600E		EMIDO 364411.~~33~~33N 0425600E
	SEVKU 36054~~8.02~~8.02N 043171~~65.84~~65.84E		SEVKU 36054~~8.02~~8.02N 043171~~65.84~~65.84E
	UMESA 35174~~1.49~~1.49N 043430~~76.89~~76.89E		UMESA 35174~~1.49~~1.49N 043430~~76.89~~76.89E
	TAGRU 34295~~8.95~~8.95N 044081~~6.67~~6.67E		TAGRU 34295~~8.95~~8.95N 044081~~6.67~~6.67E
	PUTSI 333200N E044 3700E		PUTSI 333200N E0443700E
	ITOVA 33195~~0.9~~0.91N 0444 2~~8.97~~8.97E		ITOVA 33195~~0.9~~0.91N 0444 2~~8.97~~8.97E
	SEPTU 331300N 0444400E		SEPTU 331300N 0444400E
	LONOR 32383~~98.63~~98.63N 045045~~8.48~~8.48E		LONOR 32383~~98.63~~98.63N 045045~~8.48~~8.48E
	ULIMA 321500N 0451600E		ULIMA 321500N 0451600E
	ITBIT 31473~~5.20~~5.20N 045 291~~6.57~~6.57E		ITBIT 31473~~5.20~~5.20N 045 291~~6.57~~6.57E
	RUGIR 30321~~9.06~~9.06N 046061~~8.20~~8.20E		RUGIR 30321~~9.06~~9.06N 046061~~8.20~~8.20E
	MOBIS 29510~~98.84~~98.84N 047045~~7.39~~7.39E		MOBIS 29510~~98.84~~98.84N 047045~~7.39~~7.39E
		UM861	ELEXI 344237~~1.5~~1.5N 041105~~49.0~~49.0E
			DIER-ZZOR (DRZ) 351731N 0400914E
			ALEPPO (ALE) 361047N 0371234E
			NISAP 364724N 0363830E
M863	KING ABDULAZIZ (JDW) 21424~~43~~43N 039072~~3~~39~~48~~48E	UM863	KING ABDULAZIZ (JDW) 21424~~43~~43N 039072~~3~~39~~48~~48E
	GIBAP 212218N 0380931E		GIBAP 212218N 0380931E
	TOMRU 204411N 0361950E		TOMRU 204411N 0361950E
	ASKOL 154854.~~9~~9N 024000~~5.1~~5.1E		ASKOL 154854.~~9~~9N 024000~~5.1~~5.1E
	KITOB 152143.~~7~~7N 022584~~5.8~~5.8E		KITOB 152143.~~7~~7N 022584~~5.8~~5.8E
	IPONO 150621 N 0222436 E		IPONO 150621 N 0222436 E
	N'DJAMENA (FL) 120830.~~5~~5N 015021~~8.3~~8.3E		N'DJAMENA (FL) 120830.~~5~~5N 015021~~8.3~~8.3E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
M872	PALEOCHORA (PLH) 351339.7N 0234051.9E	UM872	PALEOCHORA (PLH) 351339.7N 0234051.9E
	*Note 7 (PLH- SEMRU ~~DBA~~)		*Note 7 (PLH- SEMRU ~~DBA~~)
	METRU 340000N 0250900E		METRU 340000N 0250900E
	KANAR 322727N 0265330E		KANAR 322727N 0265330E
	EL DABA (DBA) 310041N 0282801E		EL DABA (DBA) 310041N 0282801E
	FAYOUM (FYM) 292351.8N 0302335.6E		FAYOUM (FYM) 292351.8N 0302335.6E
	~~*Note 7 (FYM-SEMRU)~~		~~*Note 7 (FYM-SEMRU)~~
	SEMRU 280200N 0320306E		SEMRU 280200N 0320306E
	HURGHADA (HGD) 271040N 0334747E		HURGHADA (HGD) 271040N 0334747E
	SILKA 263400N 0352900E		SILKA 263400N 0352900E
	WEJH (WEJ) 261046N 0362917E		WEJH (WEJ) 261046N 0362917E
	KODIN 251753.9N 03836.12E		KODIN 251753.9N 03836.12E
	MADINAH (PMA) 243251N 0394219E		MADINAH (PMA) 243251N 0394219E
	*Note 7 (PMA-MIDSI)		*Note 7 (PMA-MIDSI)
	BIR DARB (BDB) 241951N 0414928E		BIR DARB (BDB) 241951N 0414928E
	AL DAWADMI (DAW) 242656N 0440709E		AL DAWADMI (DAW) 242656N 0440709E
	KING KHALID (KIA) 245310N 0464534E		KING KHALID (KIA) 245310N 0464534E
	AKRAM 255036N 0475133E		AKRAM 255036N 0475133E
	*Note 8 (OB) ~~to MIDSI~~		*Note 8 (OB) ~~to MIDSI~~
	ALMAL 261553N 0482108E		ALMAL 261553N 0482108E
	DAVRI 264936N 0505732E		DAVRI 264936N 0505732E
	MIDSI 264142N0515442E		MIDSI 264142N0515442E
		UM877	VUSET 235540N 0590812E
			ITILA 234015N 0584817E
			KUSRA 232426N 0582611E
M999	SARIR (GS) 273900N 0223000E	UM999	SARIR (GS) 273900N 0223000E
	DITAR 265903N 0250000E		DITAR 265903N 0250000E
	EL KHARGA (KHG) 252654N 0303527E		EL KHARGA (KHG) 252654N 0303527E
	KUNAK 252745N 0304112E		KUNAK 252745N 0304112E
	~~(~~LUXOR~~)~~ (LXR) 254458N 0324607E		~~(~~LUXOR~~)~~ (LXR) 254458N 0324607E
	DEDLI 224232N 0373719E		DEDLI 224232N 0373719E
	IMLER 221706N 0381653E		IMLER 221706N 0381653E
	KING ABDULAZIZ (JDW) 214244N 0390723E TOKTO 194421N 00395945E DANAK 1608.00N 04129.00E (ASSAB) SB		KING ABDULAZIZ (JDW) 214244N 0390723E TOKTO 194421N 00395945E DANAK 1608.00N 04129.00E ~~(~~ASSAB~~)~~ (SB) 130400N 0423800E
N300	DOHA~~-~~ HAMAD INTL	UN300	DOHA HAMAD INTL ~~2514.0N 05134.6E~~
	(DOH) 251459N 0513635E		(DOH) 251459N 0513635E
	*Note 7 & 8 ~~to~~ (DOH-TONVO)		*Note 7 & 8 ~~to~~ (DOH-TONVO)
	ELOBI 250753N 0521722E		ELOBI 250753N 0521722E
	NAMLA 250532N 0523318E		NAMLA 250532N 0523318E
	BOXAK 244536N 0540032E		BOXAK 244536N 0540032E
	MIADA 245112N 0545736E		MIADA 245112N 0545736E
	TONVO 250500N 0563200E		TONVO 250500N 0563200E
N302	SIDAD 295231N 0482944E	UN302	SIDAD 295231N 0482944E
	ALVIX 291915N 0482944E		ALVIX 291915N 0482944E
N303	~~(HARGEISA)~~ HARGA 093112N 0440530E	UN303	~~(HARGEISA)~~ HARGA 093112N 0440530E
	PARIM 123142.7N 04327.12E		PARIM 123142.7N 04327.12E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	RIBOK154700N 0415230.5E		RIBOK154700N 0415230.5E
	LABNI 165620.3N 0410921.4E		LABNI 165620.3N 0410921.4E
N307	MELDO 320201N 0310406E	UN307	MELDO 320201N 0310406E
	LAKTO 323800N 0320500E		LAKTO 323800N 0320500E
N310	BALMA 342856N 0350302E	UN310	BALMA 342856N 0350302E
	CHEKA (CAK) 341802N 0354200E		CHEKA (CAK) 341802N 0354200E
	LATEB 340154.9N 0362404.1E		LATEB 340154.9N 0362404.1E
	BASEM 333337.6N 0373907.1E		BASEM 333337.6N 0373907.1E
		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) 245310N 0464534E
		UN316	HALAIFA (HLF) 262603N 0391609E
			PASAM 273045N 0345542E
N318	QUEEN ALIA (QAA) 314423N 0360926E	UN318	QUEEN ALIA (QAA) 314423N 0360926E
	ALNOR 313955N 0362507E		ALNOR 313955N 0362507E
	KINUR 313626N 0363714E		KINUR 313626N 0363714E
	ELOXI 313359N 0364536E		ELOXI 313359N 0364536E
	GENEX 312935N 370052E		GENEX 312935N 370052E
	GURIAT (GRY) 312445N 0371712E		GURIAT (GRY) 312445N 0371712E
	ORKAS 304725.4N 0384617 E		ORKAS 304725.4N 0384617E
	NEVOL 302446N 0393841E		NEVOL 302446N 0393841E
	VELAL 294602N 040382.14E		VELAL 294602N 040382.14E
	TAMRO 283838N 0424047E		TAMRO 283838N 0424047E
	* Note7 (OE, OB, OM, OO)		* Note7 (OE, OB, OM, OO)
	MOGON 273848N 0444554E		MOGON 273848N 0444554E
	TAGSO 272744N 0454510E		TAGSO 272744N 0454510E
	*Note 8 (OB, OO)		*Note 8 (OB, OO)
	EGNOV 270301N 0474713E		EGNOV 270301N 0474713E
	KUSAR 264741N 0490218E		KUSAR 264741N 0490218E
	ASPAN 263255N 0494903E		ASPAN 263255N 0494903E
	DEDAS 263011N 0501427E		DEDAS 263011N 0501427E
	LADNA 262749N 0502245E		LADNA 262749N 0502245E
	ELOSO 262409N 0503551E		ELOSO 262409N 0503551E
	DAVOV 262255N 0504013E		DAVOV 262255N 0504013E
	GOLKO 262149N 0504404E		GOLKO 262149N 0504404E
	ASTAD 261812N 0505646E		ASTAD 261812N 0505646E
	TOTIS 261119N 0511027E		TOTIS 261119N 0511027E
	RASDI 260425N 0512407E		RASDI 260425N 0512407E
	VELAM 255426N 0514347E		VELAM 255426N 0514347E
	VUTAN 255016N 0515218E		VUTAN 255016N 0515218E
	RESAR 253707N 0522328E		RESAR 253707N 0522328E
	ALSEM 252703N 0524322E		ALSEM 252703N 0524322E
	OVONA 252443N 0524739E		OVONA 252443N 0524739E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	~~(LOXAT – REXOD)~~		~~(LOXAT-REXOD)~~
	KATIK 251709N 0531515E		KATIK 251709N 0531515E
	KANIP 241040~~2~~N 0552042E		KANIP 241040~~2~~N 0552042E
	LABRI 240344N 0553842E		LABRI 240344N 0553842E
	EGROK 235253N 0560126E		EGROK 235253N 0560126E
	LAKLU 232235N 0570401E		LAKLU 232235N 0570401E
	GEVED 230105N 0575111E		GEVED 230105N 0575111E
	TOLDA 223720N 0583503E		TOLDA 223720N 0583503E
	REXOD211230N 0613830E		REXOD211230N 0613830E
		UN319	ZAHEDAN (ZDN) 292912N 0605406E
			TABAS (TBS) 334021N 0565331E
			DASHT-E-NAZ (DNZ) 363855N 0531120E
			ULDUS- 3800~~.~~00N 05101~~.~~00E
			LUSAL 4035~~.~~00N 04757~~.~~00E
			ADEKI 4117~~.~~48N 04645~~..~~00E
			TBILIS (TBS) 414014N 0445649E
			~~MUKHARANI (DF) 415500N 0443356E~~
			~~ALI (BT)~~
			~~LOBIN 42042810.9N 04300156.4E~~
			~~IBERI 4209.6N 04143.3E~~[KE16]
N324	PURDA 210805N 0510329E	UN324	PURDA 210805N 0510329E
	GOBRO 193622N 0534741E		GOBRO 193622N 0534741E
	ASTUN 180832N 0551040E		ASTUN 180832N 0551040E
N430	TARBO 244351N 0574637E	UN430	TARBO 244351N 0574637E
	*Note 7/8 (OO)		*Note 7/8 (OO)
	ITLOB 244325N 0590701E		ITLOB 244325N 0590701E
N438	LITAN 333456N 0343758E	UN438	LITAN 333456N 0343758E
	KALDE (KAD) 334827N 0352910E		KALDE (KAD)334827N 0352910E
	CHEKA (CAK) 341802N 0354200E		CHEKA (CAK) 341802N 0354200E
	KLEYATE (RA)343510N 0360010E		KLEYATE (RA) 343510N 0360010E
N440	MOBON 274414N 0552513E	UN440	MOBON 274414N 0552513E
	DARAX 260916N 0555307E		DARAX 260916N 0555307E
		UN555	~~BELGAUM (BBM~~[KE17]~~)~~
			BISET 182321~~.4~~N 0691807~~.1~~E
			KATBI 193133~~.6~~N 06500~~.~~02E
			LOTAV 2037~~.~~00N 06057~~.~~00E
N563	REXOD 211230N 0613830E	UN563	~~(BANGALORE) BBG~~[KE18]
	*Note 8 (OB, OM)		*Note 8 (OB, OM)
	*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

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	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~~
			VEMEM 221554N 0400118E
			LOTOS 220000N 0503912E
			*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 22263~~0.5~~ N 0630700E	UN571	~~(~~GUNIP 04295~~4.9~~N 09931~~.~~48E~~)~~
	*Note 7 & 8 (OB, OM, OO)		~~(~~VAMPI 06105~~6.9~~N 09735~~0~~8~~.1E)~~
	KIPOL 230410N 0612903E		~~(~~MEKAR 06301~~4.2~~N 06929~~2~~8~~.5E)~~
	RAGMA 230600N 0610539E		~~(~~SUGID- 19330~~3.1~~N 06921~~.~~00E~~)~~
	SODEB 234747N 0593023E		PARAR 22263~~0.5~~ N 0630700E
	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
	TOTLA 263806N 0504301E		ITROK 253557N 0532751E
	RULEX 264529N 0501745E		ALPOB 254218N 0530055E
	SILNO 264026N 0475745E		SOLOB 262241N 0513132E
	KUTEM 264359N 0473521E		MEDMA 263412N 0505454E
	BOPAN (BPN) 270314N 0452642E		TOTLA 263806N 0504301E
			RULEX 264529N 0501745E
			SILNO 264026N 0475745E
			KUTEM 264359N 0473521E
			BOPAN (BPN) 270314N 0452642E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
N629	TARDI 243418N 0560915E	UN629	TARDI 243418N 0560915E
	*Note 7 (OO)		*Note 7 (OO)
	NOSMI 241757N 0563002E		NOSMI 241757N 0563002E
	MUSUK 234320N 0572148E		MUSUK 234320N 0572148E
	GEPOT 231446N 0580053E		GEPOT 231446N 0580053E
	GIDAN 230104N 0582232E		GIDAN 230104N 0582232E
	TOTOX 215030N 0622230E		TOTOX 215030N 0622230E
N638	KING KHALED (KIA) 245310N 0464534E	UN638	KING KHALED (KIA) 245310N 0464534E
	OVEKU 250955N 0445701E		OVEKU 250955N 0445701E
	MADINAH (PMA) 243251N 0394219E		MADINAH (PMA) 243251N 0394219E
N685	TAGSO 272744N 0454510E	UN685	TAGSO 272744N 0454510E
	*Note 7 (TAGSO-KUSAR)		*Note 7 (TAGSO-KUSAR)
	*Note 8 (TAGSO-TOSNA)		*Note 8 (TAGSO-TOSNA)
	DEBOL 272116N 0461843E		DEBOL 272116N 0461843E
	TORTA 271906N 0462911E		TORTA 271906N 0462911E
	ALSAT 270611N 0473118E		ALSAT 270611N 0473118E
	EGNOV 270301N 0474713E		EGNOV 270301N 0474713E
	KUSAR 264741N 0490218E		KUSAR 264741N 0490218E
	KING FAH~~A~~D (KFA) 262153N 0494910E		KING FAH~~A~~D (KFA) 262153N 0494910E
	NARMI 261802N 0501939E		NARMI 261802N 0501939E
	BAHRAIN (BAH) 261551N 0503856E		BAHRAIN (BAH) 261551N 0503856E
	DENVO 260452N 0510509E		DENVO 260452N 0510509E
	PATOM 255821N 0511836E		PATOM 255821N 0511836E
	EMISA 254658N 0514207E		EMISA 254658N 0514207E
	*Note 7 to LAKLU		*Note 7 to LAKLU
	KAPAX 254218N 0515118E		KAPAX 254218N 0515118E
	ORSIS 252801N 0521636E		ORSIS 252801N 0521636E
	ENANO 252348N 0522559E		ENANO 252348N 0522559E
	TOSNA 251612N 0524116E		TOSNA 251612N 0524116E
	TOPSI 250910N 0531200E		TOPSI 250910N 0531200E
	BOXAK 244536N 0540032E		BOXAK 244536N 0540032E
	ABU DHABI (ADV)242508N 0544024		ABU DHABI (ADV) 242508N 0544024
	RETAS 235754N 0553423E		RETAS 235754N 0553423E
	*Note 8 (OO)		*Note 8 (OO)
	PUTSO 232037N 0565322E		PUTSO 232037N 0565322E
	LAKLU 232235N 0570401E		LAKLU 232235N 0570401E
N687	KING KHALID (KIA) 245310N 0464534E	UN687	KING KHALID (KIA) 245310N 0464534E
	KINIB 254108N 0482317E		KINIB 254108N 0482317E
	*Note 5 & 7 & 8		*Note 5 & 7 & 8
	KING FAHAD (KFA) 262153N 0494910E		KING FAHAD (KFA) 262153N 0494910E
	EMOLO 263559N 0500526E		EMOLO 263559N 0500526E
	ROTEL 264015N 0502149E		ROTEL 264015N 0502149E
	EGMOR 264210N 0502906E		EGMOR 264210N 0502906E
	DAVRI 264936N 0505732E		DAVRI 264936N 0505732E
	TORBO 265223N 0511024E		TORBO 265223N 0511024E
N694	KING KHALD (KIA) 245310N 0464534E	UN694	KING KHALD (KIA) 245310N 0464534E
	TORKI 261400N 0463103E		TORKI 261400N 0463103E
	SIBLI 265459N 0462334E		SIBLI 265459N 0462334E
	AKODI 275012N 0461320E		AKODI 275012N 0461320E
	HAFR AL BATIN 281949N 0460746E (HFR)		HAFR AL BATIN 281949N 0460746E (HFR)

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
N697	MENLI 294700N 0315206E	UN687	MENLI 294700N 0315206E
	SISIK 293600N 0324100E		SISIK 293600N 0324100E
	NUWEIBAA		NUWEIBAA
	* Note 7 (NWB-KITOT above FL350)		* Note 7 (NWB-KITOT above FL350)
	KITOT 290205N 0345050E		KITOT 290205N 0345050E
	SOBAS 275600N 0390454E		SOBAS 275600N 0390454E
	HAIL (HIL) 272530N 0414058E		HAIL (HIL) 272530N 0414058E
	*Note 7 (HIL–KFA)		*Note 7 (HIL–KFA)
	BPN 270312N 0452642E		BPN 270312N 0452642E
	*Note 8 (BPN-TORBO)		*Note 8 (BPN-TORBO)
	KING FAHD (KFA) 262153N 0494910E		KING FAHD (KFA) 262153N 0494910E
	NARMI 261802N 0501939E		NARMI 261802N 0501939E
	BAHRAIN (BAH) 261551N 0503855E		BAHRAIN (BAH) 261551N 0503855E
	*Note 7		*Note 7
	GOLKO 262149N 0504404E		GOLKO 262149N 0504404E
	TOSTA 262746N 0504912E		TOSTA 262746N 0504912E
	MEDMA 263421N 0505454E		MEDMA 263421N 0505454E
	VEDOS 264105N 0510044E		VEDOS 264105N 0510044E
	SODAK 264634N 0510530E		SODAK 264634N 0510530E
	TORBO 265223N 0511024E		TORBO 265223N 0511024E
N764	NOBSU 171554N 0431318E	UN764	NOBSU 171554N 0431318E
	MUKALLAH (RIN) 144015N 0492329E		MUKALLAH (RIN) 144015N 0492329E
	SOCOTRA (SOC) 123749N 0535429E		SOCOTRA (SOC) 123749N 0535429E
	SUHIL 120000N 0550000E		SUHIL 120000N 0550000E
	NABAM 101112N 0581424E		NABAM 101112N 0581424E
N767	PARAR 222630N 0630700E	UN767	PARAR 222630N 0630700E
	VUSIN 225940N 0605510E		VUSIN 225940N 0605510E
	* Note 7 (OO)		* Note 7 (OO)
	ATBED 230352N 0603752E		ATBED 230352N 0603752E
	ELIGO 232458N 0590848		ELIGO 232458N 0590848
		UN881	RASKI 230330N 0635200E
			SETSI 230412N 0614410E
			KIPOL 230410N 0612903E
			ATBED 230352N 0603752E
			AMBOS 230324N 0595405
			MUSRU 230256N 0592223E
			*Note 7 (OO)
			OBTIN 230216N 0585920E
			GIDAN 230104N 0582232E
			GEVED 230105N 0575111E
			TULBU 230005N 0571827E
N929	DASLO 254537N 0523029E	UN929	DASLO 254537N 0523029E
	*Note 7 & 8 ~~to~~ (DASLO-GIBUS)		*Note 7 & 8 ~~to~~ (DASLO-GIBUS)
	NAGOG 255214N 0521615E		NAGOG 255214N 0521615E
	BONAN 260201N 0515505E		BONAN 260201N 0515505E
	VEDED 260558N 0514628E		VEDED 260558N 0514628E
	SOGAT 262029N 0511443E		SOGAT 262029N 0511443E
	TOSTA 262746N 0504913E		TOSTA 262746N 0504913E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	DANAG 264438N 0494856E		DANAG 264438N 0494856E
	NADNA 264245N 0485309E		NADNA 264245N 0485309E
	SILNO 264026N 0475745E		SILNO 264026N 0475745E
	ASKOK 262623N 0474809E		ASKOK 262623N 0474809E
	MUSRI 261647~~.0~~N 0474137~~.0~~E		MUSRI 261647~~.0~~N 0474137~~.0~~E
	GIBUS 255724~~.0~~N 0472829~~.0~~E		GIBUS 255724~~.0~~N 0472829~~.0~~E
		UP146	RASHT (RST) 371935N 0493657E
			AGINA 3919~~.~~24N 04405~~.~~12E
			~~(~~AGRI~~)~~ (ARI) 393845N 0430137E
			~~(YAVUZ 4002.7N 04226.0E)~~
			~~(TRABZON (TBN)~~[KE19]
P300	KALDE (KAD) 334827N 0352910E	UP300	KALDE (KAD) 334827N 0352910E
	LATEB 340154~~.9~~N 0362404~~.1~~E		LATEB 340154~~.9~~N 0362404~~.1~~E
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	SHARJAH (SHJ) 251945~~4.9~~N 0553118~~.1~~E	UP307	SHARJAH (SHJ) 251945~~4.9~~N 0553118~~.1~~E
	Note 7 (OM,OO)		Note 7 (OM,OO)
	TONVO 250500N 0563200E		TONVO 250500N 0563200E
	PURNI 243804N 0574354E		PURNI 243804N 0574354E
	*Note 8 (OO)		*Note 8 (OO)
	KUNUS 241927N 0583226E		KUNUS 241927N 0583226E
	ALSAS 240054N 0591955E		ALSAS 240054N 0591955E
	DERTO 235033N 0594746E		DERTO 235033N 0594746E
	VAXIM 231900N 0611100E		VAXIM 231900N 0611100E
	SETSI 230412N 0614410E		SETSI 230412N 0614410E
	PARAR 222630N 0630700E		PARAR 222630N 0630700E
P312	MUKALLA (RIN) 144015N 0492329E	UP312	MUKALLA (RIN) 144015N 0492329E
	PAKER 1155~~.~~00N0463500E		PAKER 1155~~.~~00N0463500E
	~~(HARGEISA)~~ HARGA 093112N 0440530E		~~(HARGEISA)~~ HARGA 093112N 0440530E
P316	SALALLAH (SLL) 170259N 0540657E	UP316	SALALLAH (SLL) 170259N 0540657E
	* Note 7 (OO)		* Note 7 (OO)
	DAXAM 171612N 0544715E		DAXAM 171612N 0544715E
	GAGLA 180505N 0552410E		GAGLA 180505N 0552410E
	GIVNO 195011N 0563059E		GIVNO 195011N 0563059E
	MOBAB 201032N 0564415E		MOBAB 201032N 0564415E
	GISKA 213503N 0574014E		GISKA 213503N 0574014E
	RADAX 220809N 0580230E		RADAX 220809N 0580230E
	MUSCAT (MCT) 233528N 0581536E		MUSCAT (MCT) 233528N 0581536E
		UP323	DONSA143518~~.3~~N0651136344~~.0~~E
			GIDAS 142004N0600000E
			NODMA 1526~~.~~00N05334~~.~~00E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			THAMD 1717.00N 04955.00E
			WADI ALDAWASIR (WDR) 203019N 0451219E
P425	DAHRAN (DHA) 261538N 0500824E	UP425	DAHRAN (DHA) 261538N 0500824E
	*Note 8 to ALSER		*Note 8 to ALSER
	BAHRAIN (BAH) 261551N 0503855E		BAHRAIN (BAH) 261551N 0503855E
	DAVOV 262255N 0504012E		DAVOV 262255N 0504012E
	DATGO 262957N 0504130E		DATGO 262957N 0504130E
	TOTLA 263806N 0504301E		TOTLA 263806N 0504301E
	MEMKO 264611N 0504427E		MEMKO 264611N 0504427E
	BOXOG 265403N 0504553E		BOXOG 265403N 0504553E
	ALSER 271100N 0504900E		ALSER 271100N 0504900E
P430	DOHA/ HAMAD INTL	UP430	DOHA/ HAMAD INTL
	(DOH) 251459N 0513635E		(DOH) 251459N 0513635E
	*Note 7 & 8 (DOH-ALTOM) ~~to MIDSI~~		*Note 7 & 8 (DOH-ALTOM) ~~to MIDSI~~
	BAYAN 252926N 0514849E		BAYAN 252926N 0514849E
	~~*Note 7 to MIDSI~~		~~*Note 7 to MIDSI~~
	KAPAX 254218N 0515118E		KAPAX 254218N 0515118E
	VUTAN 255016N 0515218E		VUTAN 255016N 0515218E
	ALVEN 255418N 0515315E		ALVEN 255418N 0515315E
	BONAN 260201N 0515505E		BONAN 260201N 0515505E
	RAMKI 261138N 0515625E		RAMKI 261138N 0515625E
	ALTOM 262230N 0515639E		ALTOM 262230N 0515639E
P513	BUBAS 245938N 0570003E		
	GERAR 240600N 0573616E		
	MIXAM 234139N 0575523E		
	* Note 7 (OO)		
	MUSCAT (MCT) 233528N 0581536E		
		UP517	WAFRA (KFR) 283715N 0475729E
			GOVAL 281211N 0472908E
			KING SAUD AB (KMC) 275250N 0453320E
		UP552	DATEG 123549N 0471627E
			ULAXI 141524N 0482317E
			GINBO 160349N 0494017E
			IMPOS 183137N 0511848E
P557	NUBAR 220000N 0313806E	UP557	NUBAR 220000N 0313806E
	*~~See~~ Note 6&7		*~~See~~ Note 6&7
	MISUK 290507N 0290621E		MISUK 290507N 0290621E
	KATAB 292501N0290506E		KATAB 292501N0290506E
P559	RASLI 315424N 0383648E	UP559	RASLI 315424N 0383648E
	TURAIF (TRF) 314136N 0384405E		TURAIF (TRF) 314136N 0384405E
	*Note 7 ~~to~~ (TRF-DESDI)		*Note 7 ~~to~~ (TRF-DESDI)
	KAVID 303552N 0401147E		KAVID 303552N 0401147E
	TOKLU 294213N 04202204E		TOKLU 294213N 04202204E
	RASMO 285713N 0433119E		RASMO 285713N 0433119E
	KING SAUD AB (KMC) 275250N 0453321E		KING SAUD AB (KMC) 275250N 0453321E
	ULOVO 274830N 0455420E		ULOVO 274830N 0455420E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	*Note 8 (ULOVO-NAPLO)		*Note 8 (ULOVO-NAPLO)
	MUSKO 272640N 0473708E		MUSKO 272640N 0473708E
	KEDAT 272149N 0475901E		KEDAT 272149N 0475901E
	JUBAIL (JBL) 270222N 0492426E		JUBAIL (JBL) 270222N 0492426E
	DAROR 270244N 0495815E		DAROR 270244N 0495815E
	RAMSI 270249N 0500714E		RAMSI 270249N 0500714E
	GASSI 270257.9N 0502229.5E		GASSI 270257.9N 0502229.5E
	KOBOK 265839N 0503349E		KOBOK 265839N 0503349E
	BOXOG 265403N 0504553E		BOXOG 265403N 0504553E
	DAVRI 264936N 0505731E		DAVRI 264936N 0505731E
	SODAK 264634N 0510530E		SODAK 264634N 0510530E
	DANOB 263946N 0512640E		DANOB 263946N 0512640E
	BOTOB 263350N 0514505E		BOTOB 263350N 0514505E
	ROSAN 263129N 0515220E		ROSAN 263129N 0515220E
	KUMLA 262609N 0520822E		KUMLA 262609N 0520822E
	ASPAK 262115N 0522257E		ASPAK 262115N 0522257E
	TOMSO 260611N 0530214E		TOMSO 260611N 0530214E
	NALPO 255602N 0532945E		NALPO 255602N 0532945E
	RAPSA 253700N 0541700E		RAPSA 253700N 0541700E
	DESDI 253603N 0544230E		DESDI 253603N 0544230E
P560	PORT SUDAN (PSD) 311743N 0321416E	UP560	PORT SUDAN (PSD) 311743N 0321416E
	BOGUM 200736N 0380360E		BOGUM 200736N 0380360E
	AL BAHA (BHA) 201783N 0413784E		AL BAHA (BHA) 201783N 0413784E
	KITAP 224928N 0522923E		KITAP 224928N 0522923E
	PORT SUDAN (PSD) 311743N 0321416E		PORT SUDAN (PSD) 311743N 0321416E
P561	BENINA (BNA) 320728N 0201513E	UP561	BENINA (BNA) 320728N 0201513E
	KATAB 292501N 0290506E		KATAB 292501N 0290506E
P562	DEESA 294509N 0364102E	UP562	DEESA 294509N 0364102E
	ENABI 290739N 0385650E		ENABI 290739N 0385650E
	TAMRO 283938N 0424147E		TAMRO 283938N 0424147E
	LOTOK 280857N 0450512E		LOTOK 280857N 0450512E
P563	HAIL (HIL) 272630N 0414158E	UP563	HAIL (HIL) 272630N 0414158E
	PASAM 273145N 0345642E		PASAM 273145N 0345642E
	HURGHADA (HGD) 271140N 0334847E		HURGHADA (HGD) 271140N 0334847E
		UP567	BIRJAND (BJD) 325821N 0591200E
			ODKAT 3540.6N 05457.2E
			DASHT-E-NAZ (DNZ) 363855.7N 0531120.4E
			(ULDUS -3800.00N 05101.00E)
			NETON 394542.7N 0481142.7E
			BARUS 415414.2N 0425030.5E
P570	KITAL 2003.00N 06018.00E	UP570	TRIVENDRUM (TVM) 082831N 0765531E
	MIXAM 234139N 0575523E		POMAN 115605.1N 0715958200.0E
			LATEB 171704.1N 06422.02E
			KITAL 2003.00N 06018.00E
			MIXAM 234139N 0575523E
		UP574	(BELGAUM) BBM
			(BISET 1823.4N 06918.1E)[KE20]

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			TOTOX 215030N 0622230E
			* Note 7 (OM, OO)
			KUSRA 231726N 0585102E
			MIXAM 234138N 0575525E
			SOLUD 243223N 0564421E
			GISMO 244743N 0562236E
			BUBIN 245742N 0560642E
			TUKLA 2519.36N 0554010.2E
			KUMUN 254000N 0551512E
			PAPAR 264000N 0542700E
			SHIRAZ (SYZ) 293224N 0523520E
			SAVEH (SAV) 350107N 0502217E
			ULDUS 380000N 0510100E
		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	UP699	ATBOR 251007N 0551947E
	*Note 7 (ATBOR-BAH)		*Note 7 (ATBOR-BAH)
	SITAT 251105N 0544500E		SITAT 251105N 0544500E
	KISAG 251834N 0541408E		KISAG 251834N 0541408E
	ITMUS 252322N 0535429E		ITMUS 252322N 0535429E
	ALSOK 252607N 0533904E		ALSOK 252607N 0533904E
	RUBAL 252957N 0531723E		RUBAL 252957N 0531723E
	ORMID 253354N 0525434E		ORMID 253354N 0525434E
	*Note 8 (ORMID-KFA)		*Note 8 (ORMID-KFA)
	DASLO 254537N 0523029E		DASLO 254537N 0523029E
	NAGOG 255214N 0521614E		NAGOG 255214N 0521614E
	BONAN 260200N 0515505E		BONAN 260200N 0515505E
	VEDED 260558N 0514627E		VEDED 260558N 0514627E
	KUNDO 261631N 0512325E		KUNDO 261631N 0512325E
	SOGAT 262029N 0511443E		SOGAT 262029N 0511443E
	ASTAD 261812N 0505646E		ASTAD 261812N 0505646E
	BAHRAIN (BAH) 261551N 0503856E		BAHRAIN (BAH) 261551N 0503856E
	NARMI 261802N 0501939E		NARMI 261802N 0501939E
	KING FHAD (KFA) 262153N 0494910E		KING FHAD (KFA) 262153N 0494910E
P751	AMIBO 3456.7N 2136.4E	UP751	AMIBO 3456.7N 2136.4E
	SIDI BARANI (BRN) 313432.5N 0260020.3E		SIDI BARANI (BRN) 313432.5N 0260020.3E
	KATAB 2925.01N 290506.1E		KATAB 2925.01N 290506.1E
	ASYUT (AST) 270152.9N 0310157.9E		ASYUT (AST) 270152.9N 0310157.9E
	LUXOR (LXR) 254458N 0324607E		LUXOR (LXR) 254458N 0324607E
	ALEBA 2200.00N 03527.00E		ALEBA 2200.00N 03527.00E
	PORT SUDAN (PSD) 192404N 0371430E		PORT SUDAN (PSD) 192404N 0371430E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	[ASMARA] * Note 1 151704N 0385403E		[ASMARA] * Note 1 151704N 0385403E
	TOKAR 180624~~304.0~~N 0374812~~4238.8~~E		TOKAR 180624~~304.0~~N 0374812~~4238.8~~E
	PARIM 12314~~2.7~~N 04327~~.~~12E		PARIM 12314~~2.7~~N 04327~~.~~12E
	ADEN (KRA) 124952N 0450125E		ADEN (KRA) 124952N 0450125E
	ANGAL 16140~~4.1~~N 060000~~4.1~~E		ANGAL 16140~~4.1~~N 060000~~4.1~~E
	MUMBAI (BBB) 190511N 0725229E		MUMBAI (BBB) 190511N 0725229E
P891	MAGALA (MGA) 261720N 0471225E	UP891	MAGALA (MGA) 261720N 0471225E
	*Note 7 to KUA		*Note 7 to KUA
	KUTEM 264359N 0473521E		KUTEM 264359N 0473521E
	EGNOV 270301N 0474713E		EGNOV 270301N 0474713E
	EMILU275031N 0475943E		EMILU 275031N 0475943E
	KUNRU 283220N 0481050E		KUNRU 283220N 0481050E
	KUWAIT (KUA) 291306N 0475803E		KUWAIT (KUA) 291306N 0475803E
P899	MIXAM 234139N 0575523E	UP899	MIXAM 234139N 0575523E
	*Note 7 to KUPSA		*Note 7 to KUPSA
	PAXIM 240245N 0561~~7~~631E		PAXIM 240245N 0561~~7~~631E
	ITRAX 241248N 0554749E		ITRAX 241248N 0554749E
	AL AIN (ALN) 241535N 0553623E		AL AIN (ALN) 241535N 0553623E
	ABU DHABI (ADV) 242508N 0544024E		ABU DHABI (ADV) 242508N 0544024E
	DASLA ~~N~~243~~47N.8~~ ~~E~~0533~~248E.8~~		DASLA ~~N~~243~~47N.8~~ ~~E~~0533~~248E.8~~
	VEBAT ~~N~~244~~830N.5~~ ~~E~~05251~~.~~00E		VEBAT ~~N~~244~~830N.5~~ ~~E~~05251~~.~~00E
	MEKMA N245430 E0522506		MEKMA ~~N~~245430N ~~E~~0522506E
	*Note 8 (OB)		*Note 8 (OB)
	KUPSA N250445 E0521151		KUPSA ~~N~~250445N ~~E~~0521151E
		UP975	(ELAZIG) EZS 384230N 0391327E
			*Note7
			DIYARBAKIR (DYB) 384225N 0391328E
			LESRI 370420N 0411348E
			SIDNA 363~~584.0~~N 0414~~159.0~~E
			TUBEN 351724N 0425434E
			MUTAG 343003N 0433834E
			SOGUM 341212N 0435454E
			SINKA 332137N 0444753E
P975	NOLDO 324932N 0452129E		NOLDO 324932N 0452129E
	*Note 7		*Note 7
	KATUT 323737N 0453439E		KATUT 323737N 0453439E
	DENKI 322228N 0455122E		DENKI 322228N 0455122E
	ILMAP 312133N 0465702E		ILMAP 312133N 0465702E
	PEBAD 305023N 0472958E		PEBAD 305023N 0472958E
	SIDAD 295231N 0482944E		SIDAD 295231N 0482944E
	LOVAR 292424N 0484606E		LOVAR 292424N 0484606E
	SESRA 290800N ~~0~~0485454E		SESRA 290800N ~~0~~0485454E
	DANAL 285130N 0490448E		DANAL 285130N 0490448E
	IMDOX 283454N 0491436E		IMDOX 283454N 0491436E
	LONOS 283027N 0491713E		LONOS 283027N 0491713E
	ORGEL 281312N 0494614E		ORGEL 281312N 0494614E
	DATEN 273118N 0501832E		DATEN 273118N 0501832E
	REVAX 272026N 0502651E		REVAX 272026N 0502651E
	GETAL 270409N 0504039E		GETAL 270409N 0504039E
	LOSIS 270118N 0504208E		LOSIS 270118N 0504208E
	BOXOG 265403N 0504553E		BOXOG 265403N 0504553E

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	NABOS 264354N 0505145E		NABOS 264354N 0505145E
	TOTIS 261119N 0511026E		TOTIS 261119N 0511026E
R2	ATMUL 220000N 0290527E	UR2	ATMUL 220000N 0290527E
	TULOP 252209N 0262226E		TULOP 252209N 0262226E
	DITAR 265903N 0250000E		DITAR 265903N 0250000E
R205	ANARAK (ANK) 333215N 0534347E	UR205	ANARAK (ANK) 333215N 0534347E
	BIRJAND (BJD) 325821N 0591200E		BIRJAND (BJD) 325821N 0591200E
R219	KUKLA 341438.6N 0344447.8E	UR219	KUKLA 341438.6N 0344447.8E
	KALDE (KAD) 334827N 0352910E		KALDE (KAD) 334827N 0352910E
R401	AMPEX 08 1000N 055 0000E	UR401	AMPEX 08 1000N 055 0000E
	SUHIL 120000N 0550000E		SUHIL 120000N 0550000E
	DAPAP 151115N 0552354E		DAPAP 151115N 0552354E
	KIVEL 165306N 0553633E		KIVEL 165306N 0553633E
	ERDAX 175903N 0554458E		ERDAX 175903N 0554458E
	HAIMA (HAI) 195813N 0561651E		HAIMA (HAI) 195813N 0561651E
	DEMKI 224941N 0562308E		DEMKI 224941N 0562308E
	MUSAP 241754N 0555245E		MUSAP 241754N 0555245E
	GIDIS 243600N 0555600E		GIDIS 243600N 0555600E
	ANVIX 244655N 0555616E		ANVIX 244655N 0555616E
	AVAMI 250554N 0555647E		AVAMI 250554N 0555647E
	ULUSA 254925N 0555010E		ULUSA 254925N 0555010E
	SOGUR 255221N 0554943E		SOGUR 255221N 0554943E
	*Note7 ~~Eastbound~~ (SOGUR-KHM)		*Note7 ~~Eastbound~~ (SOGUR-KHM)
	GABKO 260404N 0554755E		GABKO 260404N 0554755E
	GHESHM (KHM) 264547N 0555428E		GHESHM (KHM) 264547N 0555428E
R402	LAKLU 232235N 0570401E	UR402	LAKLU 232235N 0570401E
	*Note 7 (OO)		*Note 7 (OO)
	HAIMA (HAI) 195813N 0561651E		HAIMA (HAI) 195813N 0561651E
R462	~~(~~JIWANI~~)~~ (JI) 250350N 0614744E	UR462	~~(~~JIWANI~~)~~ (JI) 250350N 0614744E
	DENDA 244230.5N 0605451.8E		DENDA 244230.5N 0605451.8E
	VUSET 235540N 0590812E		VUSET 235540N 0590812E
	*Note 7 (OO)		*Note 7 (OO)
	MIXAM 234139N 0575523E		MIXAM 234139N 0575523E
R650	ASRAB 254726.4N 0330619.3E	UR650	ASRAB 254726.4N 0330619.3E
	HURGHADA (HGD) 271040N 0334747E		HURGHADA (HGD) 271040N 0334747E
	SHARM EL SHEIKH (SHM)		SHARM EL SHEIKH (SHM)
	NUWEIBAA (NWB) 290156N 0344016E		NUWEIBAA (NWB) 290156N 0344016E
	NALSO 2932.10N 0345250 3.0E		NALSO 2932.10N 0345250 3.0E
R652	~~ROVAR 292438N0345711E~~	~~UR652~~	~~ROVAR 292438N0345711E~~
	QATRANEH (QTR) 311454N 0360334E		~~QATRANEH (QTR)~~
	KIPAS 312320N 0370641E		~~KIPAS 312320N 0370641E~~
	GURIAT (GRY) 312445N 371712E		~~GURIAT (GRY)~~
	*Note 7(OE)		~~*Note 7(OE)~~
	TURAIF (TRF) 314136N 0384405E		~~TURAIF (TRF)~~
	OVANO 3148.01N 0390951.8E		~~OVANO 3148.01N 0390951.8E~~[KE21]

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	DAXAN 320512N 0393719E		
	GIBUX 330500N 0411100E		
	RAPLU 332300N 0414530E		
	GEPAP 334906N 0422851E		
	MUTAG 343003N 0433834E		
	~~IVANO~~ DAVAS 351724N 0451235E		
R654	ZANJAN (ZAJ) 364647N 0482112E	UR654	MAGRI 385408N 0462300E
	SAVEH (SAV) 350107N 0502217E		ZANJAN (ZAJ) 364647N 0482112E
	ESFAHAN (ISN) 334449N 0514941E		SAVEH (SAV) 350107N 0502217E
	YAZD (YZD) 315352N 0541658E		ESFAHAN (ISN) 334449N 0514941E
	KERMAN (KER) 301706N 0465637E		YAZD (YZD) 315352N 0541658E
	~~NABOD 2816.1N 05825.3E~~		~~KERMAN (KER) 301706N 0465637E~~
	~~CHAH BAHAR (CBH)~~		~~NABOD 2816.1N 05825.3E~~
	~~EGPIC 2508.6N 06029.5E~~		~~CHAH BAHAR (CBH)~~ ~~EGPIC 2508.6N 06029.5E~~[KE22]
	DENDA DENDA 244230N 0605451E		DENDA DENDA 244230N 0605451E
R655	~~(~~LARNACA~~)~~ (LCA) 345222N 0333732E	UR655	~~(~~LARNACA~~)~~ (LCA) 345222N 0333732E
	CHEKA (CAK) 341802N 0354200E		CHEKA (CAK) 341802N 0354200E
	KARIATAIN (KTN) 341248N 0371551E		KARIATAIN (KTN) 341248N 0371551E
R659	TEHRAN(TRN) 354149N 0511702E	UR659	TEHRAN(TRN) 354149N 0511702E
	*Note 7 (ISN-TRN)		*Note 7 (ISN-TRN)
	BOXAM 343749N 0515147E		BOXAM 343749N 0515147E
	DAPOG 333744N 0522331E		DAPOG 333744N 0522331E
	*Note 3 (DAPOG-SYZ)		*Note 3 (DAPOG-SYZ)
	SHIRAZ (SYZ) 293224N 0523520E		SHIRAZ (SYZ) 293224N 0523520E
	MIDSI 264142N 0515442E		MIDSI 264142N 0515442E
	*Note 8 (MIDSI-DOH)		*Note 8 (MIDSI-DOH)
	*Note 7 (MIDSI-VELAM)		*Note 7 (MIDSI-VELAM)
	SOGAN 263915N 0515408E		SOGAN 263915N 0515408E
	ROSAN 263129N 0515220E		ROSAN 263129N 0515220E
	DASOS 262430N 0515043E		DASOS 262430N 0515043E
	RABLA 261506N 0514834E		RABLA 261506N 0514834E
	VEDED 260558N 0514628E		VEDED 260558N 0514628E
	VELAM 255426N 0514347E		VELAM 255426N 0514347E
	EMISA 254658N 0514207E		EMISA 254658N 0514207E
	DOHA HAMAD INTL (DOH) 251459N 0513635E		DOHA HAMAD INTL (DOH) 251459N 0513635E
R660	(ERZURUM) (ERZ) 395724N 0411226E	UR660	(ERZURUM) (ERZ) 395724N 0411226E
	DASIS 385431.~~5~~N 0441229.~~5~~E		RASHT (RST) 371935N 0493657E
	TABRIZ (TBZ) 380853N 0461247E		TEHRAN (TRN) 354149N 0511702E
	RASHT (RST) 371935N 0493657E		
	TEHRAN (TRN) 354149N 0511702E		
R661	DULAV 3857.0N 04537.9E	UR661	DULAV 3857.0N 04537.9E
	TABRIZ (TBZ) 380853N 0461247E		TABRIZ (TBZ) 380853N 0461247E
	ZANJAN (ZAJ) 364647N 0482112E		ZANJAN (ZAJ) 364647N 0482112E
	RUDESHUR (RUS) 352644N 0505419E		RUDESHUR (RUS) 352644N 0505419E
	VARAMIN (VR) 352034N 0513814E		VARAMIN (VR) 352034N 0513814E
	DEHNAMAK (DHN) 351514N 0524313E		DEHNAMAK (DHN) 351514N 0524313E

4A-41

	LOWER AIRSPACE		**UPPER AIRSPACE**
Designator	Significant Points	Designator	Significant Points
1	2	1	2
		UR674	SABEL 185158N 0520339E
			LOTEL 180926N 0514103E
			PASUL 180341N 0513803E
			GOGRI 170752N 0510857E
			OBTAS 164633N 0505756E
			RARBA 161021N 0503920E
			UKORA 152407N 0501547E
			NAKAD 150056N 0500402E
			DANAN 144010N 0495334E
			XABIL 142924N 0494809E
			EMABI 141627N 0494139E
			PAXED 135027N 0492759E
			DEMGO 120258N 0483040E
R777	DANAK 1608.00N 04129.00E	UR777	DANAK 1608.00N 04129.00E
	SANA'A (SAA) 153000N 0441311E		SANA'A (SAA) 153000N 0441311E
	TAIZ (TAZ) 134150N 0440819E		TAIZ (TAZ) 134150N 0440819E
	ARABO 123852.8N 04404.01E		ARABO 123852.8N 04404.01E
	TORBA 1210.36N 0440206.1E		TORBA 1210.36N 0440206.1E
R784	SHARJAH (SHJ) 251945N 0553118E	UR784	SHARJAH (SHJ) 251945N 0553118E
	ORSAR 260430 .5N 0535730.5E		ORSAR 260430 .5N 0535730.5E
	*Note 8 (OM)		*Note 8 (OM)
	DURSI 271219.3N 0520144.7 E		DURSI 271219.3N 0520144.7 E
	IMDAT 27410.0N 0511100 3.0E		IMDAT 27410.0N 0511100 3.0E
	ALNIN 28330540.9N 050103601.6E		ALNIN 28330540.9N 050103601.6E
	NANPI 290457N 0493157E		NANPI 290457N 0493157E
	SIDAD 295231N 0482944E		SIDAD 295231N 0482944E
R785	TURAIF (TRF)	UR785	TURAIF (TRF)
	ZELAF 325656 7.0N 037112 1800.0E		ZELAF 325656 7.0N 037112 1800.0E
	KARIATAIN (KTN) 341248N 0371551E		KARIATAIN (KTN) 341248N 0371551E
	BANIAS (BAN) 351342N 0355729E		BANIAS (BAN) 351342N 0355729E
	NIKAS 3511.36N 03543.00E		NIKAS 3511.36N 03543.00E
R794	ULDUS 3800.00N 05101.00E	UR794	ULDUS 3800.00N 05101.00E
	NOSHAHR (NSR) 363935N 0512805E		NOSHAHR (NSR) 363935N 0512805E
	DEHNAMAK (DHN) 351514N 0524313E		DEHNAMAK (DHN) 351514N 0524313E
	TABAS (TBS) 334021N 0565331E		TABAS (TBS) 334021N 0565331E
	BIRJAND (BJD) 325821N 0591200E		BIRJAND (BJD) 325821N 0591200E
	* Note 5 (OI)		* Note 5 (OI)
R799	IMPOS 183136N 0511848 E	UR799	IMPOS 183136N 0511848 E
	PASUL 180341N 0513803E		PASUL 180341N 0513803E
	TONRO 165850N 0522235E		TONRO 165850N 0522235E
	ASMAK 162327N 0524634E		ASMAK 162327N 0524634E
	ENADO 153333N 0532015E		ENADO 153333N 0532015E

STATUS OF CONTINGENCY AGREEMENTS IN THE MID REGION

As of December 2019

STATE	CORRESPONDING STATES			Status
BAHRAIN	☒ Iran ☒ Kuwait	☒ Qatar ☒ Saudi Arabia	☒ UAE	Completed
EGYPT	☒ Jordan ☒ Libya	☒ Saudi Arabia ☒ Sudan	☒ Cyprus (Recommended) ☒ Greece (Recommended) ☐ Israel (Recommended)	Completed
IRAN	☒ Bahrain ☒ Iraq	☐ Kuwait ☒ Oman	☒ UAE	4/5
	☒ Armenia ☐ Afghanistan	☐ Azerbaijan ☐ Turkmenistan	☒ Pakistan ☒ Turkey	Recommended
IRAQ	☒ Iran ☒ Jordan	☒ Kuwait ☒ Saudi Arabia	☐ Syria ☒Turkey (Recommended)	4/5
JORDAN	☒ Egypt ☒ Iraq	☒ Saudi Arabia ☐ Syria	☐ Israel (Recommended)	3/4
KUWAIT	☒ Bahrain ☐ Iran	☒ Iraq	☒ Saudi Arabia	3/4
LEBANON	☐ SYRIA	☐ CYPRUS (Recommended)		0/1
LIBYA	☒ Egypt ☐ Sudan	(Recommended) ☐ Algeria ☐ Chad	☐ Tunis ☐ Niger ☐ Malta	1/2
OMAN	☒ Iran ☒ Saudi Arabia	☒ UAE ☒ Yemen	☐ India (Recommended) ☐ Pakistan (Recommended)	4/4
QATAR	☒ BAHRAIN	☐ SAUDI ARABIA	☐ UAE	1/3
SAUDI ARABIA	☒ Bahrain ☒ Egypt ☒ Iraq ☒ Jordan	☒ Kuwait ☒ Oman ☐ Qatar ☐ Sudan	☒ UAE ☒ Yemen ☐ Eritrea(Recommended)	8/10
SUDAN	☒ Egypt ☐ Libya ☐ Saudi Arabia	(Recommended) ☐ Central African ☐ Chad	☐ Eritrea ☐ Ethiopia ☐ South Sudan	1/3
SYRIA	☐ Iraq ☐ Jordan	☐ Lebanon	☐ Cyprus (Recommended) ☐ Turkey (Recommended)	0/3
UAE	☒ Bahrain ☒Iran	☒ Oman ☐ Qatar	☒ Saudi Arabia	4/5
YEMEN	☒ Oman ☒ Saudi Arabia	(Recommended) ☐ India ☐ Djibouti	☐ Eritrea ☐ Ethiopia ☐ Somalia	2/2

☒ Agreement Signed ☐ Agreement NOT Signed Signed Agreements / Total No. of required Agreements

---

MID Region AIDC/OLDI Applicability Area (Priority 1 and 2 for Implementation)

As of December 2019

ACC	Adjacent ACCs						
Amman	Cairo (1)	Baghdad (2)	Damascus (2)	Jeddah (1)	Tel Aviv (~~2~~1)		
Baghdad	Amman (2)	Ankara (1)	Damascus (2)	Jeddah (2)	Tehran (2)	Kuwait (1)	
Bahrain	Doha (1)	Emirates **(1)**	Jeddah (1)	Kuwait (1)	Riyadh (1)	Tehran (2) AFTN MSG	Dammam(2)
Beirut	Damascus (2)		Nicosia (1)				
Cairo	Amman (1)	Athena (2)	Jeddah (1)	Khartoum (1)	Nicosia (1)	Tel Aviv (2)	Tripoli (2)
Damascus	Amman (2)	Ankara (2)	Bagdad (2)	Beirut (2)	Nicosia (2)		
Doha*	Bahrain (1)	Emirates **(1)**	Jeddah (2)	Riyadh (2)			
Emirates	Bahrain **(1)**	Doha **(1)**	Jeddah (1)	Muscat **(1)**	Tehran (2) AFTN MSG		
Jeddah	Amman (1)	Asmara (2)	Baghdad (2)	Bahrain (1)	Cairo (1)	Doha (2)	Emirates (1)
	Khartoum (1)	Kuwait (2)	Muscat (1)	Riyadh **(1)**		Sana'a (2)	
Riyadh	Bahrain (1)	Doha (2)	Kuwait (2)	Jeddah **(1)**			
Khartoum	Addis (1)	Asmara (2)	Brazzaville (2)	Cairo (1)	Entebbe (2)	Jeddah (1)	Juba (1)
	Kinshasa (2)	N'Djamena (2)	Nairobi (2)	Tripoli (2)			
Kuwait	Baghdad (1)	Bahrain (1)	Jeddah (2)	Tehran (2)			
Muscat	Emirates **(1)**	Jeddah (1)	Karachi (2)	Mumbai (1)	Sana'a (2)	Tehran (1) AFTN MSG	
Sana'a	Djibouti (Addis Ababa) (2)	Asmara (2)	Jeddah (2)	Mogadishu (2)	Mumbai (2)	Muscat (2)	
Tehran	Ankara (1)	Ashgabat (2)	Baghdad (2)	Bahrain (1) AFTN MSG	Baku (2)	Emirates (2) AFTN MSG	Kabul (2)
	Karachi (1)	Kuwait (2)	Muscat (1)	Yerevan (2)			
Tripoli	Algiers (2)	Cairo (2)	Khartoum (2)	Malta (2)	N'Djamena (2)	Niamey (2)	Tunis (2)

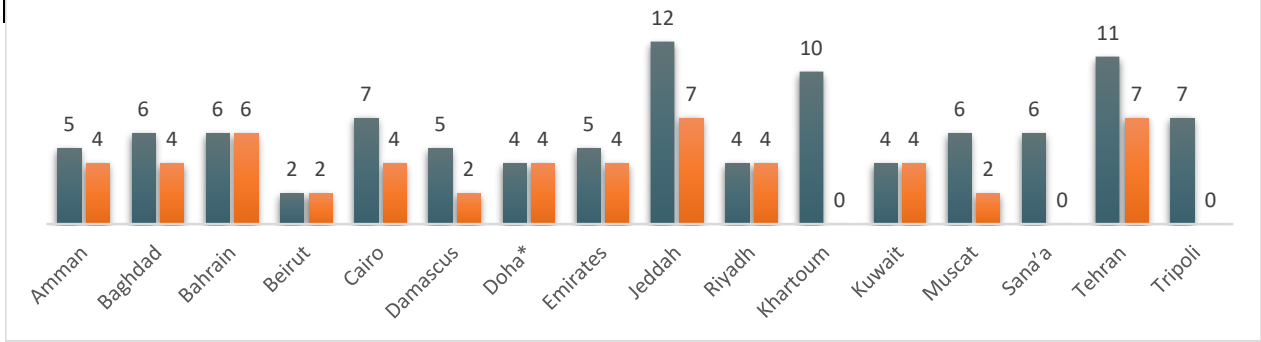
(1) = Priority 1 for implementation based on the number of traffic movements and/or operational needs (Green color means already implemented)

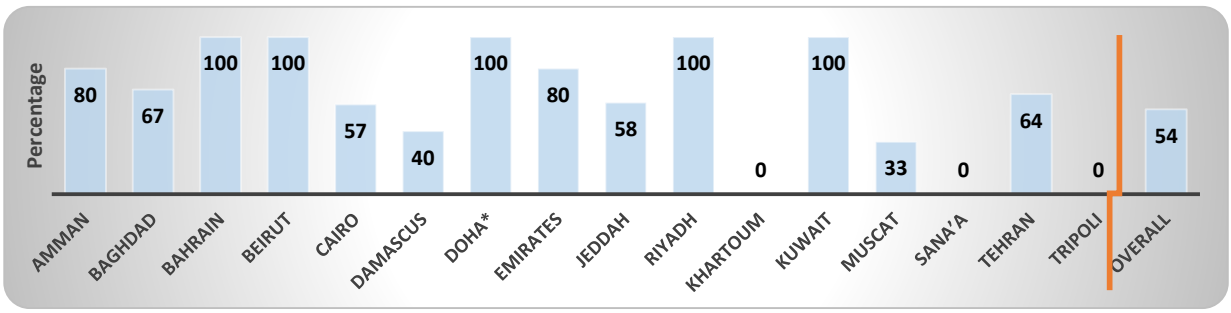
(2) = Priority 2 for implementation based on the number of traffic movements or if other solution is in place such as exchange of information via AFTN

MID REGION Status of 20 NM Longitudinal Separation Implementation

As of December 2019

ACC	Adjacent ACCs (Longitudinal Separation in (NM) or Minutes "mn")						
Amman	Cairo (20)	Bagdad 10mn	Damascus (20)	Jeddah (20)	Tel Aviv (10)		
Baghdad	Amman 10mn	Ankara (20)	Damascus 10mn	Jeddah (20)	Tehran (20)	Kuwait (20)	
Bahrain	Doha (10)	Emirates (10)	Jeddah (10)	Kuwait (10)	Riyadh (10)	Tehran (20)	
Beirut	Damascus (20)		Nicosia (20)				
Cairo	Amman (20)	Athena (20)	Jeddah (20) DEDLI 10mn	Khartoum 10mn	Nicosia (20)	Tel Aviv (20)	Tripoli 10&15mn
Damascus	Amman (20)	Ankara 10mn	Bagdad 10mn	Beirut (20)	Nicosia 10mn		
Doha*	Bahrain (10)	Emirates (10)	Jeddah (10)	Riyadh (10)			
Emirates	Bahrain (10)	Doha (10)	Jeddah 30	Muscat (8)	Tehran (20)		
Jeddah	Amman (20)	Asmara 10mn	Bagdad (20)	Bahrain (10)	Cairo (20) DEDLI 10mn	Doha (10)	Emirates 30
	Khartoum 10mn	20 Kuwait	Muscat (20)	Riyadh (10)		Sana'a 10mn	
Riyadh	Bahrain (10)	Doha (10)	Kuwait (20)	Jeddah (10)			
Khartoum	Addis Ababa 10mn	Asmara 10mn	Brazzaville 10mn	Cairo 10mn	Entebbe 10mn	Jeddah 10mn	Kinshasa 10mn
	N'Djamena 10mn		Nairobi 10mn	Tripoli 10mn			
Kuwait	Bagdad (20)	Bahrain (10)	Jeddah (20)	Tehran (20)			
Muscat	Emirates (8)	Jeddah (20)	Karachi 5mn	Mumbai 10mn	Sana'a 10mn	Tehran (50)	
Sana'a	Djibouti (Addis Ababa) 10mn	Asmara 10mn	Jeddah 10mn	Mogadishu 10mn	Mumbai 10mn	Muscat 10mn	
Tehran	Ankara (20)	Ashgabat (50)	Bagdad (20)	Bahrain (20)	Baku (20)	Emirates (20) URSAL&MIDSI (10)	Kabul (50) bl FL290 10mn
	Karachi (50)	Kuwait (20)	Muscat (50)	Yerevan (20)			
Tripoli	Algiers 10mn	Cairo 10 & 15mn	Khartoum 10mn	Malta 10mn	N'Djamena 10mn	Niamey 10mn	Tunis 10mn





ACAO/ICAO ATFM Workshop (Casablanca, Morocco, 17 – 18 March 2019)

The main objectives of the ACAO/ICAO ATFM Workshop (Casablanca, Morocco, 17 – 18 March 2019) were to is to raise awareness about ATFM, share other ICAO Regions and States' experience as well as discuss and agree on recommendations for the implementation of ATFM in the MID Region based on the work carried out by the ATFM Core Team.

The Workshop recognized that:

- a regional solution to manage the traffic flow across the MID Region became a priority.
- collaboration between all stakeholders is a key success for effective development and implementation of regional framework for ATFM/CDM.
- development of ATFM Concept of Operations requires inputs/data from all stakeholders to ensure it meet the projected objectives.
- sharing information is the most important enabler for ATFM/CDM.

The Workshop agreed to the following Recommendations

1. States and Stakeholders are encouraged to support ACAO and ICAO efforts related to the implementation of ATFM/CDM and in particular the work of the MIDANPIRG ATFM Task Force related to the Development of ATFM Concept of Operations for the MID Region taking into consideration other experiences.

States are encouraged to:

2. establish ATFM framework at the national level (regulations, organizational structure, functions, operating procedures, etc.)

3. develop ATFM National Implementation Plan

4. ensure that ATFM personnel are trained and qualified to effectively carry out their tasks. ATFM Manager (decision maker) should have adequate ATC experience.

5. carry out necessary studies to determine airspace and airports capacities

6. exhaust all measures that would increase capacity and continue working on the airspace improvements and the enhancement of the air navigation services within their relevant FIRs taking into consideration the airspace users' requirements.

7. support the implementation of the IFPS at regional level

8. ensure the implementation of the Collaboration Decision Making (CDM) concept.

9. support flight data exchange for the management and monitoring of air traffic flow at regional and inter-regional levels

ATFM TF is invited to:

10. develop a training programme template to be used by States.

11. develop a Template for National ATFM Implementation Plan

12. support States in carrying out their airspace and sector capacity studies

ACAO and ICAO, supported by ATFM experts as required, are invited to:

13. organize workshops and training courses related to ATFM.

14. conduct visits to States to support the ATFM Implementation.

THE MID RVSM SAFETY MONITORING REPORT 2018
Prepared by the Middle East Regional Monitoring Agency (MIDRMA)

SUMMARY

The aim of the MID RVSM Safety Monitoring Report 2018 is to provide airspace safety review of the MID RVSM airspace and to highlight by means of arguments and supporting evidence that the implementation of RVSM in the Middle East is acceptably safe.

1. Introduction:

1.1 Executive Summary

The MID RVSM Safety Monitoring Report is issued by the Middle East Regional Monitoring Agency (MIDRMA) for endorsement by the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG).

The report presents evidence that according to the data and methods used, only safety objectives No 1 and 3 set out in the MID RVSM Safety Policy in accordance with ICAO Doc 9574 (2nd Edition) continue to be met in operational services in the Middle East RVSM airspace .

To conclude on the current safety of RVSM operations, the three key safety objectives endorsed by MIDANPIRG have to be met:

Objective 1 The risk of collision in MID RVSM airspace due solely to technical height-keeping performance meets the ICAO target level of safety (TLS) of **2.5×10^{-9}** fatal accidents per flight hour.

The value computed for technical height risk is estimated **1.587×10^{-11}** this meets RVSM Safety Objective 1.

Objective 2 The overall risk of collision due to all causes which includes the technical risk and all risk due to operational errors and in-flight contingencies in the MID RVSM airspace meets the ICAO overall TLS of **5×10^{-9}** fatal accidents per flight hour.

This Report does not provide an estimate for the overall vertical-collision risk due to of the absence of suitable information on operational error reports therefore it is not possible to assess compliance with the ICAO overall TLS of 5 x 10-9 fatal accidents per flight hour.

Nevertheless, this Report provides recommendations to the MIDRMA for collecting that information for future assessments.

Objective 3 Address any safety-related issues raised in the SMR by recommending improved procedures and practices; and propose safety level improvements to ensure that any identified serious or risk-bearing situations do not increase and, where possible, that they decrease. This should set the basis for a continuous assurance that the operation of RVSM will not adversely affect the risk of en-route mid-air collision over the years.

1.2 Conclusions:

(i) The estimated risk of collision associated with aircraft height- keeping performance is **1.587×10^{-11}** and meets the ICAO TLS of **2.5×10^{-9}** fatal accidents per flight hour (RVSM Safety Objective1).

(ii) Subject to the limitations of data available and the collision risk model used, this SMR demonstrates that the Middle East RVSM operations met two safety objectives (safety objectives #1 and #3) out of the three principal safety objectives

(iii) Based on currently available information (including Tripoli, Damascus and Beirut FIRs), the MIDRMA cannot confirm that the continued operations of RVSM affects the overall vertical risk of collision.

1.3 Considerations on the RVSM Safety Objectives for MID RVSM SMRs

When considering the three safety objectives for RVSM, the following considerations should be borne in mind:

1. The assessment of risk against the TLS, both for technical and overall risk estimates, relies on height keeping performance data to assess the risk in the vertical plane and studies of traffic density to calculate the risk in the horizontal plane. There are numbers of assumptions that must be verified to satisfy the reliability of the risk assessment, the verification of these assumptions deals primarily with monitoring of aircraft performance issues.
2. The Aircraft performance is assessed by individual airframe and by monitoring group. A monitoring group consists of aircraft that are nominally of the same type with identical performance characteristics that are made technically RVSM compliant using a common compliance method. Monitoring group analysis is necessary to verify that the Minimum Aviation System Performance Standards (MASPS) for that group is valid. Aircraft that are made RVSM compliant on an individual basis are termed non-group.
3. The RVSM Safety Objective 2, dealing with overall risk, takes into account the technical risk together with the risk from all other causes. In practice, this relates to the human influence and assessment of this parameter relies on adequate reporting of Large Height Deviation (LHD) Reports, and the correct interpretation of events for input to the CRM.
4. RVSM Safety Objective 3 requires the RMA to monitor long-term trends and to identify potential future safety issues, this compare the level of risk bearing incidents for the current reporting period. It also highlights if there are issues that should be carried forward as recommendations to be adopted for future reports.

2.1 Discussion

Scope:

The geographic scope of the MID RVSM Safety Monitoring Report covers the MID RVSM airspace, which comprises the following FIRs/UIRs:

Amman	Bahrain	Beirut*	Baghdad	Cairo	Damascus*	Emirates
Jeddah	Kuwait	Khartoum	Muscat	Sana'a	Tehran	Tripoli*

T-1: FIRs/UIRs of the Middle East RVSM Airspace

*Note: Beirut, Damascus and Tripoli FIRs were excluded from the safety analysis due to lack of data.

The Data Sampling periods covered by SMR 2018 are as displayed in the below table

Report Elements	Time Period
Traffic Data Sample	01/08/2018 - 31/08/2018
Operational & Technical Errors	01/08/2018 - 31/07/2019

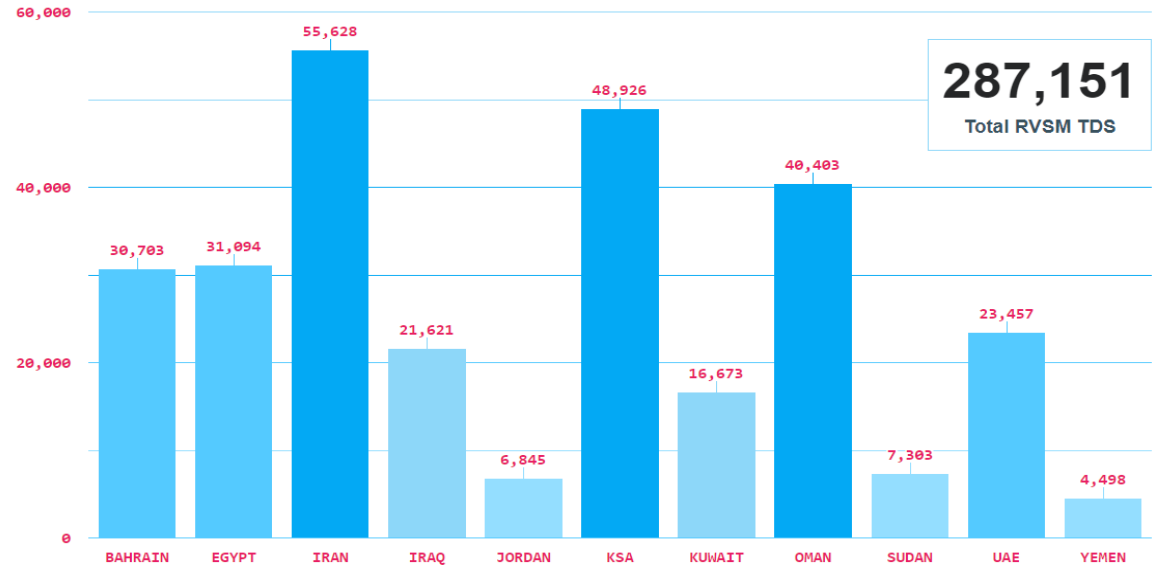
T-2: Time Period for the Reported Elements

MID States	**Status**	**Remarks**
Bahrain FIR	Accepted	Received on time (Corrupted)
Cairo FIR	Accepted	Received on time (Corrupted)
Amman FIR	Accepted	Received on time
Muscat FIR	Accepted	Received on time
Tehran FIR	Accepted	Received late (Corrupted)
Khartoum FIR	Accepted	Received on time
Emirates FIR	Accepted	Received on time
Damascus FIR	No TDS Submitted	Excluded
Sana'a FIR	Accepted	Received on time
Jeddah FIR	Accepted	Received late (Corrupted)
Beirut FIR	No TDS Submitted	Excluded
Baghdad FIR	Accepted	Received late (Corrupted)
Kuwait FIR	Accepted	Received late (Corrupted)
Tripoli FIR	No TDS Submitted	Excluded
Total	11 FIRs	

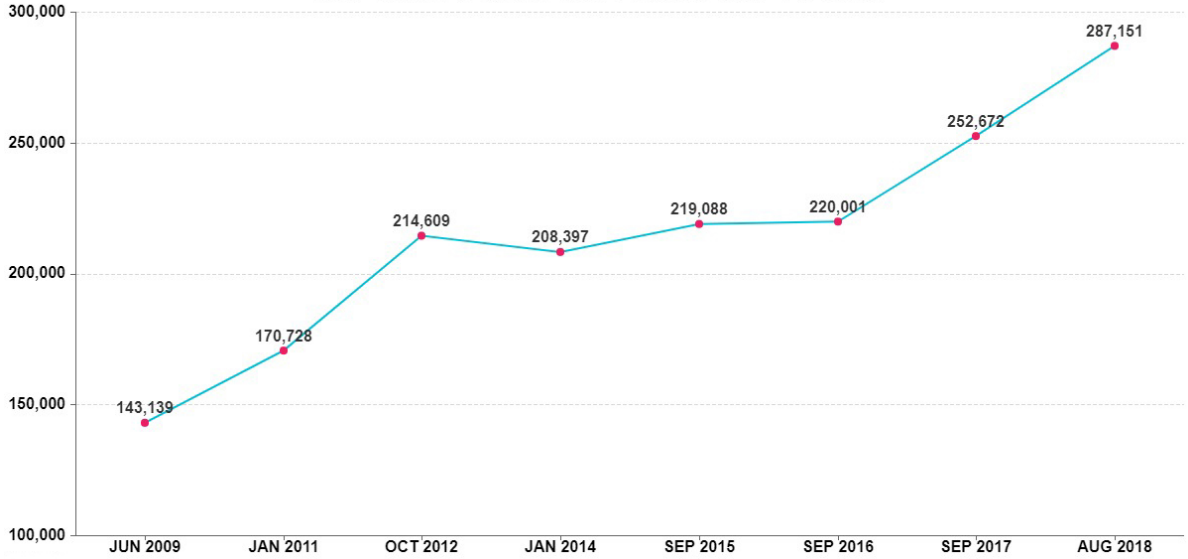
Table 1; Status of the MID States RVSM Traffic Data Sample (TDS) for August 2018

2.1.1 The description of the traffic data processed for each MIDRMA member state by the MID Risk Analysis Software (MIDRAS) is depicted in the graph below, a total of **287,151** flights were processed for the 11 FIRs, these flights were evaluated and processed very carefully to ensure accurate results according to the data submitted.

MID STATE AUGUST 2018 RVSM TDS



MID STATE RVSM TDS FROM 2009 TO 2018



SN	MID FIRs	No of TDS Sep 2017	No of TDS Aug 2018	Sep 2017 vs Aug 2018 (%)
1	Bahrain FIR	27736	30703	**10.7**
2	Cairo FIR	28225	31094	**10.16**
3	Amman FIR	6477	6845	**5.68**
4	Muscat FIR	40563	40403	**-0.39**
5	Tehran FIR	58331	55628	**-4.63**
6	Khartoum FIR	6717	7303	**8.72**
7	Emirates FIR	22125	23457	**6.02**
8	Damascus FIR	1671	No TDS	**-**
9	Sana'a FIR	4163	4498	**8.05**
10	Jeddah/Riyadh FIR	42378	48926	**15.45**
11	Beirut FIR	66	No TDS	**-**
12	Baghdad FIR	9732	21621	**122.16**
13	Kuwait FIR	4488	16673	**271.5**
14	Tripoli FIR	No TDS	No TDS	**-**
	Total	**252,672**	**287,151**	**+13.65%**

MID States RVSM TDS 2017 VS 2018

SN	Reporting Point	FIRs	No of Flights
1	**TASMI**	BAGHDAD / KUWAIT	**8841**
2	**SIDAD**	BAGHDAD / KUWAIT	**8666**
3	**NINVA**	BAGHDAD / ANKARA	**8332**
4	**RATVO**	BAGHDAD / ANKARA	**7754**
5	**DAVUS**	BAHRAIN / KUWAIT	**7537**
6	**TUMAK**	BAHRAIN / EMIRATES	**6314**
7	**MIDSI**	BAHRAIN / TEHRAN	**6265**
8	**GABKO**	EMIRATES / TEHRAN	**6215**
9	**BONAM**	TEHRAN / ANKARA	**5995**
10	**ORSAR**	EMIRATES / TEHRAN	**5370**
11	**ULADA**	BAHRAIN / JEDDAH	**4984**
12	**PASAM**	CAIRO / JEDDAH	**4883**
13	**TESVA**	TEHRAN / ANKARA	**4738**
14	**ALPOB**	EMIRATES / BAHRAIN	**4671**
15	**LONOS**	BAHRAIN / KUWAIT	**4594**
16	**ULINA**	CAIRO / AMMAN	**4500**
17	**ROTOX**	BAHRAIN / TEHRAN	4430
19	**PASOV**	EMIRATES / MUSCAT	4104
20	**DASIS**	TEHRAN / ANKARA	4097

TDS 2018 Top 20 Busiest FIR Entry / Exit Points

2.1.2 As usual practice for the preparation of every safety monitoring report to ensure that attention is drawn to the need of collecting the traffic data sample, the MIDRMA circulated a reminder email to all the focal points responsible for submitting the TDS on **29th July 2018** to ensure their readiness for this task before the effective date of MIDRMA Board DRAFT CONCLUSION 15/6, Unfortunately, the deadline for submitting the TDS to the MIDRMA passed and the same problems of corrupted data and late data submission still exist for this report

2.1.3 For the fourth consecutive Safety Monitoring Reports, Tripoli FIR excluded temporary from the RVSM safety analysis due to lack of TDS and LHD reports, taking into consideration the MIDRMA never done any risk analysis for Tripoli FIR RVSM airspace since Libya joint the MIDRMA, this issue require MIDANPIRG to decide what action should be taken if RVSM operations resume again within Tripoli FIR in the future.

2.1.4 The MIDRMA decided to exclude Damascus and Beirut FIRs from this risk analysis due to lack of traffic data for their RVSM airspace.

2.1.1 The Collision Risk Model (CRM)

2.2.1 The risk of collision to be modelled is that due to the loss of procedural vertical separation between aircraft flying above FL 290 in a given portion of an airspace. One collision between two aircraft is counted as the occurrence of two accidents. The risk of collision depends both on the total number and types of aircraft flying in the system and the system characteristics.

2.2.2 The CRM provides an estimate of the number of accidents within an airspace system that might occur per aircraft flight hour due to aircraft collisions resulting from the loss of procedural vertical separation in an RVSM environment analysis, is expressed in terms of quantifiable parameters. In the vertical dimension the CRM can be broken down in order to separately model a single route on which aircraft are flying in the same or opposite directions at adjacent flight levels, pairs of crossing routes and combinations of individual and intersecting routes, this model is applied equivalently to vertical, lateral and longitudinal separation.

2.2.3 Three parameters used within the CRM:

a. The Vertical Overlap Probability, denoted as Pz(1 000).

b. The Lateral Overlap Probability, denoted as Py(0).

c. The aircraft Passing Frequency are the most important quantities in determining the vertical collision risk. Of these, the vertical overlap probability is also an important parameter to calculate.

2.3 TECHNICAL HEIGHT KEEPING PERFORMANCE RISK ASSESSMENT

RVSM Safety Objective 1

The risk of collision in MID RVSM airspace due solely to technical height-keeping performance meets the ICAO target level of safety (TLS) of **2.5×10^{-9}** fatal accidents per flight hour.

2.3.1 Direct evidence of compliance with TLS for Technical Height-Keeping Error

The result shows the risk of collision due to technical height-keeping performance is estimated to be **1.587×10^{-11}** fatal accidents per flight hour, which is less than the ICAO TLS **2.5×10^{-9}**.

2.3.2 Supporting evidence of compliance with TLS for technical height-keeping performance

To demonstrate that the result is reliable, it is necessary to demonstrate that the following assumptions are true:

a. The estimated value of the frequency of horizontal overlap, used in the computations of vertical-collision risk, is valid;

b. Pz(1000) – the probability of vertical overlap due to technical height-keeping performance, between aircraft flying 1000 ft. separation in MID RVSM airspace is estimated **1.981×10^{-10}** valid and is less than the ICAO requirement of **1.7×10^{-8}**.

c. All aircraft flying with 1000ft vertical separation in MID RVSM airspace meet the ICAO Global Height Keeping Performance specifications for RVSM;

d. All aircraft flying 1000ft separation in MID RVSM airspace meet the individual ICAO performance specification for the components of total vertical error (TVE).

e. The monitoring target for the MID RVSM height-monitoring programme is an on-going process.

f. The input data used by the CRM is valid.

g. An adequate process is in place to investigate and correct problems in aircraft technical height-keeping performance.

2.3.3 Calculating the Probability of Lateral Overlap (P_y (0))

The probability of lateral overlap $P_y(0)$ is the probability of two aircraft being in lateral overlap which are nominally flying on (adjacent flight levels of) the same route. The calculation of the Py (0) for the SMR 2018 has the following to consider:

a. The MIDRMA continued to calculate the probability of lateral overlap $\boldsymbol{P_y(0)}$ for all the MID RVSM airspace as per the ICAO methodology developed for this purpose and derived by the MID Risk Analysis Software (MIDRAS).

b. The MIDRMA calculated the average of the probability of lateral overlap $\boldsymbol{P_y(0)}$ for the whole MID RVSM airspace is estimated to be **1.248×10^{-11}**

c. Overall, the results are considered to be valid.

2.3.4 Pz(1000) Compliance

The Pz(1000) is the probability that two aircraft at adjacent RVSM flight levels will lose vertical separation due to technical height keeping errors. The value of the probability of vertical overlap Pz(1000), based on the actual observed ASE and typical AAD data is estimated to be of **1.981×10^{-10}** . This value meets the Global System Performance Specification that the probability that two aircraft will lose procedural vertical separation of 1000ft should be no greater than **1.7×10^{-8}**.

According to the technical risk values as shown in the table below , the TLS value slightly and the MIDRMA continue to issue the minimum monitoring requirements (MMRs) for each MIDRMA member states according to the latest RVSM approvals received from all member states , the MMR table valid for SMR 2018 is available in **Appendix B**.

Note: The MIDRMA continuously update the MMR for all Member States; all members are required to check and comply with their MMR through the MIDRMA website (www.midrma.com).

Technical Risk Values				
Year 2006	**Year 2008**	**Year 2010**	**Year 2011**	**Year 2012/13**
2.17×10^{-14}	**1.93×10^{-13}**	**3.96×10^{-15}**	**5.08×10^{-14}**	**6.37×10^{-12}**
Year 2014	**Year 2015**	**Year 2016**	**Year 2017**	**Year 2018**
3.18×10^{-12}	**3.056×10^{-10}**	**6.347×10^{-11}**	**4.966×10^{-11}**	**1.587×10^{-11}**

According to the technical risk values as shown in the above graph the TLS values still, meet the ICAO TLS.

2.3.5 Conclusions on Technical Vertical Collision Risk:

a. The current computed vertical-collision risk due to technical height-keeping performance meets the ICAO TLS.

b. The probability of vertical-overlap estimate, Pz(1000), satisfies the global system performance specification.

c. Most monitoring groups are complying with ICAO TVE component requirements (also known as technical height-keeping group requirements).

2.3.6 Recommendations for Safety Objective 1:

a. The MIDRMA shall continue to review the content and structure of its aircraft monitoring groups.

b. The MIDRMA shall keep the methods of calculating the technical CRM parameters and the risk due to technical height keeping errors under review and explore more options to enhance the MID Risk Analysis Software (MIDRAS).

c. The MIDRMA shall carry out continuous survey and investigation on the number and causes of non-approved aircraft operating in RVSM airspace.

2.4 ASSESSMENT OF OVERALL RISK DUE TO ALL CAUSES AGAINST THE TLS OF 5 X 10^{-9} FATAL ACCIDENTS PER FLIGHT HOUR

RVSM Safety Objective 2

The overall risk of collision due to all causes which includes the technical risk and all risk due to operational errors and in-flight contingencies in the MID RVSM airspace meets the ICAO overall TLS of **5 x 10^{-9}** fatal accidents per flight hour.

It was not possible to assess its compliance as no suitable information was available to provide an estimate for the overall vertical-collision risk.

Overall Risk Values				
Year 2006	**Year 2008**	**Year 2010**	**Year 2011**	**Year 2012/13**
Not calculated	**$4.19x10^{-13}$**	**$6.92x10^{-12}$**	**$1.04x10^{-11}$**	**3.63x10-11**
Year 2014	**Year 2015**	**Year 2016**	**Year 2017**	**Year 2018**
$4.91x10^{-11}$	**$7.351x10^{-10}$**	**$5.691x10^{-10}$**	**$4.518 x10^{-11}$**	**Not Calculated**

2.4.1 The vertical risk estimation due to atypical errors has been demonstrated to be the major contributor in the overall vertical-risk estimation for the MID RVSM airspace, The final conclusions of the data processed have been severely influenced by NIL reporting of Large Height Deviations (LHDs) of categories A, B, C, D and J as without these data (especially from FIRs with high volume of traffic) it would be impossible to assess compliance with the ICAO overall TLS of **5 x 10^{-9}** fatal accidents per flight hour.

2.4.2 The MIDRMA highlighted the limited numbers of LHD reports in all previous SMRs and noted the final results of Safety Objective No 2 does not support high confidence, although the online LHD reporting system was developed and the reminders to all member states sent on a monthly basis with the monthly statistics distributed to all focal points concerned, the MIDRMA did not succeed in receiving the required reports from the vast majority of MIDRMA Member States.

2.4.3 Out of 15 member states only UAE continue to send their LHD reports of all categories as they always used to do for all the previous SMRs, while only a few member states sent NIL LHD reports or LHD reports category E which have no influence in calculating the overall vertical collision risk within the Middle East RVSM airspace.

MID FIRs	No. of Reported LHDs - CAT "A, B,C, D & J" and "B"
Bahrain	**0**
Baghdad	**0**
Amman	**0**
Tehran	**0**
Cairo	**0**
Damascus	**0**
Khartoum	**0**
Kuwait	**0**
Muscat	**0**
Jeddah	**0**
Riyadh	**0**
Tripoli	**0**
Emirates	**4**
Sanaa	**0**

MID FIRs	No. of Reported LHDs - CAT "E"	No. of Related LHDs - CAT "E"
Bahrain	**54**	**9**
Baghdad	**12**	**18**
Amman	**5**	**0**
Tehran	**63**	**4**
Cairo	**5**	**35**
Damascus	**0**	**0**
Khartoum	**1**	**1**
Kuwait	**0**	**69**
Muscat	**44**	**91**
Jeddah	**52**	**991**
Riyadh	**19**	**16**
Tripoli	**0**	**0**
Emirates	**5**	**7**
Sanaa	**2181**	**1**

MID States LHD Reports Received for SMR 2018 Reporting Period

2.4.4 The MIDRMA continued to monitor the LHD reports at the eastern FIR boundary of Muscat FIR filed by Mumbai, the MIDRMA indicated in SMR 2017 the level of LHD reports filed by Muscat, Mumbai and Karachi ATCUs related to each other's at their transfer of control points reached to a dangerous level and started to effect the ICAO TLS of RVSM implementation in the MID and APAC regions, therefore the MIDRMA requested from MIDRMA Board/15 meeting (Muscat – Oman 29 – 31 January 2018) to open a Safety Protocol for the purpose of resolving this issue as soon as possible.

2.4.5 However, the MIDRMA can't see much improvement during the reporting period of SMR 2018 and the level of reporting LHDs between Mumbai and Muscat remain high and the safety concern still exist at the common FIR boundary between the two FIRs while the level of reporting LHDs between Karachi and Muscat reduced and its back again to its normal reporting level.

Note: A Safety Protocol is a critical safety issue effecting the implementation of RVSM operations which require the concerned authority an immediate action to rectify/resolve the problem in a certain period of time under the supervision of MIDRMA and ICAO MID Office.

2.4.6 The MIDRMA Board/15 meeting agreed that a Special Coordination Meeting between Iran, India, Oman and Pakistan with the presence of MAAR, MIDRMA and ICAO APAC and MID Regional Offices, to meet during the ATM SG/4 on 02nd May 2018 to agree on clear action plan to mitigate the risk associated with the high level of coordination failures at the interfaces between the above mentioned States.

2.4.7 The special coordination meeting successfully held in Amman – Jordan during the ATM SG/4 but without the presence of Pakistan, the meeting adopted fruitful and effective short and long term solutions to be implemented by the concerned authorities to close the Safety Protocol.

2.4.8 The Safety Protocol is under continuous review by MIDRMA and MAAR and the LHD reports filed by all concerned ATC Units are investigated and evaluated through the MIDRMA online LHD system and further update will be addressed to the next MIDRMA Board meeting.

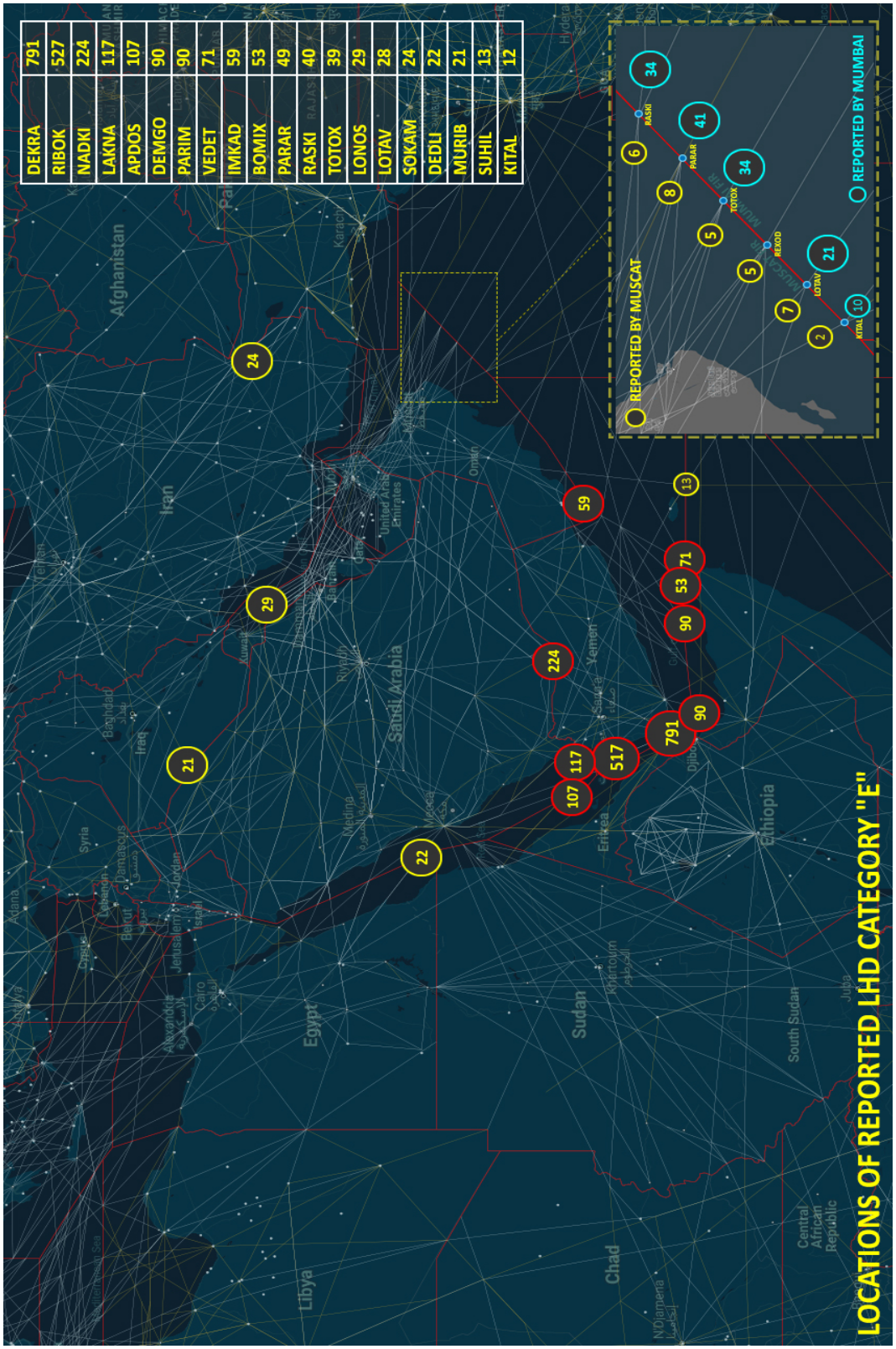
2.4.9 Table A below presents a summary of operational risk associated with Large Height Deviation (LHD) reports by LHD category, these reports are not enough to calculate the overall vertical collision risk for the MID RVSM airspace.

Code	Large Height Deviation (LHD) Category	No. of LHDs	Duration (Sec.)
A	Flight crew fails to climb or descend the aircraft as cleared	**1**	**15**
B	Flight crew climbing or descending without ATC clearance	**2**	**80**
C	Incorrect operation or interpretation of airborne equipment	**0**	**0**
D	ATC system loop error	**0**	**0**
E	ATC transfer of control coordination errors due to human factors	**2437**	**0**
F	ATC transfer of control coordination errors due to technical issues	**0**	**0**
G	Aircraft contingency leading to sudden inability to maintain level	**0**	**0**
H	Airborne equip. failure and unintentional or undetected FL change	**1**	**60**
I	Turbulence or other weather related cause	**0**	**0**
J	TCAS resolution advisory and flight crew correctly responds	**0**	**0**
K	TCAS resolution advisory and flight crew incorrectly responds	**0**	**0**
L	An aircraft being provided with RVSM separation is not RVSM approved	**0**	**0**
M	Other	**0**	**0**
	Total	**2441**	**145**

Table A: Summary of Operational Risk associated with Large Height Deviation

2.4.10 Table A reflects all the LHD categories received for SMR 2018 reporting period which represents nearly 3.5 million RVSM movements in one year, the number of LHD categories which have direct influence in calculating the overall vertical risk in the Middle East RVSM airspace does not support confidence to calculate the overall risk result, therefore the MIDRMA decided not calculate the overall TLS because it will be very close to the technical risk value.

2.4.11 The Map in the next page shows the approximate locations of the top 20 positions of reported LHD events category “E” received by the MIDRMA for SMR2018 reporting period.



2.4.12 Effects of Future Traffic Growth

The effect of future traffic growth on the vertical collision risk can be evaluated on the assumption of a linear relationship between traffic growth and frequency of horizontal overlap, which will directly affect the two components of the risk: the risk due to technical height-keeping performance and due to atypical operational errors.

This Report does not provide an estimate for the overall vertical-collision risk due to the absence of suitable information on operational error reports therefore it was not possible to assess the effects of future traffic growth for this SMR.

2.4.13 Conclusions on the overall vertical risk:

a. The overall risk of collision due to all causes which includes the technical risk and all risk due to operational errors and in-flight contingencies in the MID RVSM airspace, estimated from the operational and technical vertical risks was not calculated due to lack of operational error reports.

b. The effect of future traffic growth was not assessed.

2.4.14 Recommendations Applicable to Safety Objective 2:

a. MIDRMA to present the issue of lack of LHD reports other than category E to the next MIDRMA board meeting and propose of including member states not submitting their reports in the ICAO MID Air Navigation Deficiencies Database (MANDD).

b. The MIDRMA shall continue to encourage States to provide Large Height Deviation Reports (LHD) of all categories and not only related handover issues.

c. The MIDRMA, in coordination with concerned States, assure that incidents and violations which have direct impact on the implementation of RVSM within the MID Region are reported in a continuous basis through the MIDRMA LHD online reporting system in due time for operational safety assessment analysis.

2.5 ASSESSMENT OF SAFETY-RELATED ISSUES RAISED IN THIS REPORT

RVSM Safety Objective 3

Address any safety-related issues raised in the SMR by recommending improved procedures and practices; and propose safety level improvements to ensure that any identified serious or risk-bearing situations do not increase and, where possible, that they decrease. This should set the basis for a continuous assurance that the operation of RVSM will not adversely affect the risk of en-route mid-air collision over the years.

2.5.1 The identified safety-related issues are:

a. Confirmation of the approval status of aircraft filling RVSM flight plan (W in field 10), this is done through Bahrain and Emirates TDS received on a monthly basis.

b. Identification of operators requiring monitoring and address the minimum monitoring requirements to all MIDRMA member states.

2.5.2 Conclusions for Safety Objective 3

a. The MIDRMA improved its monitoring capabilities with the new Enhanced GMUs which gave the ability to respond for more height monitoring requests even from outside the Middle East Region.

b. The MIDRMA started to conduct studies and researches for implementing height monitoring using ADSB data.

c. The MIDRMA address the Hot Spots of each MID FIR generated by the (MIDRAS) Software (for information only).

d. Current risk-bearing situations have been identified by using the MIDRAS and the MID Visualization and Simulation of Air Traffic and actions will be taken to ensure resolving all violations to RVSM airspace by non-approved aircraft.

2.5.3 Recommendations for Safety Objective 3

a. The MIDRMA will start coordinating with Member States, which have ADSB to provide the ADSB archived data for RVSM height monitoring.

b. MIDRMA will continue to enhance the (MIDRAS) Software and shall include new features to overcome the issue of corrupted TDS (Traffic Data Sample).

c. The MIDRMA will continue to include in its work program briefings to the focal points appointed for airworthiness issues to ensure their follow up with their monitoring targets and to resolve any non-compliant RVSM approved aircraft. At the same time the MIDRMA will coordinate with the focal points appointed for ATC issues to deliver RVSM safety assessment briefing as necessary or when requested.

d. The MIDRMA shall continue to carry out continuous survey and investigation on the number and causes of non-approved aircraft operating in the MID RVSM airspace.

e. The MIDRMA will continue to encourage States to submit their Large Height Deviation Reports using the MIDRMA online reporting tool which has been upgraded to improve the level of reporting.

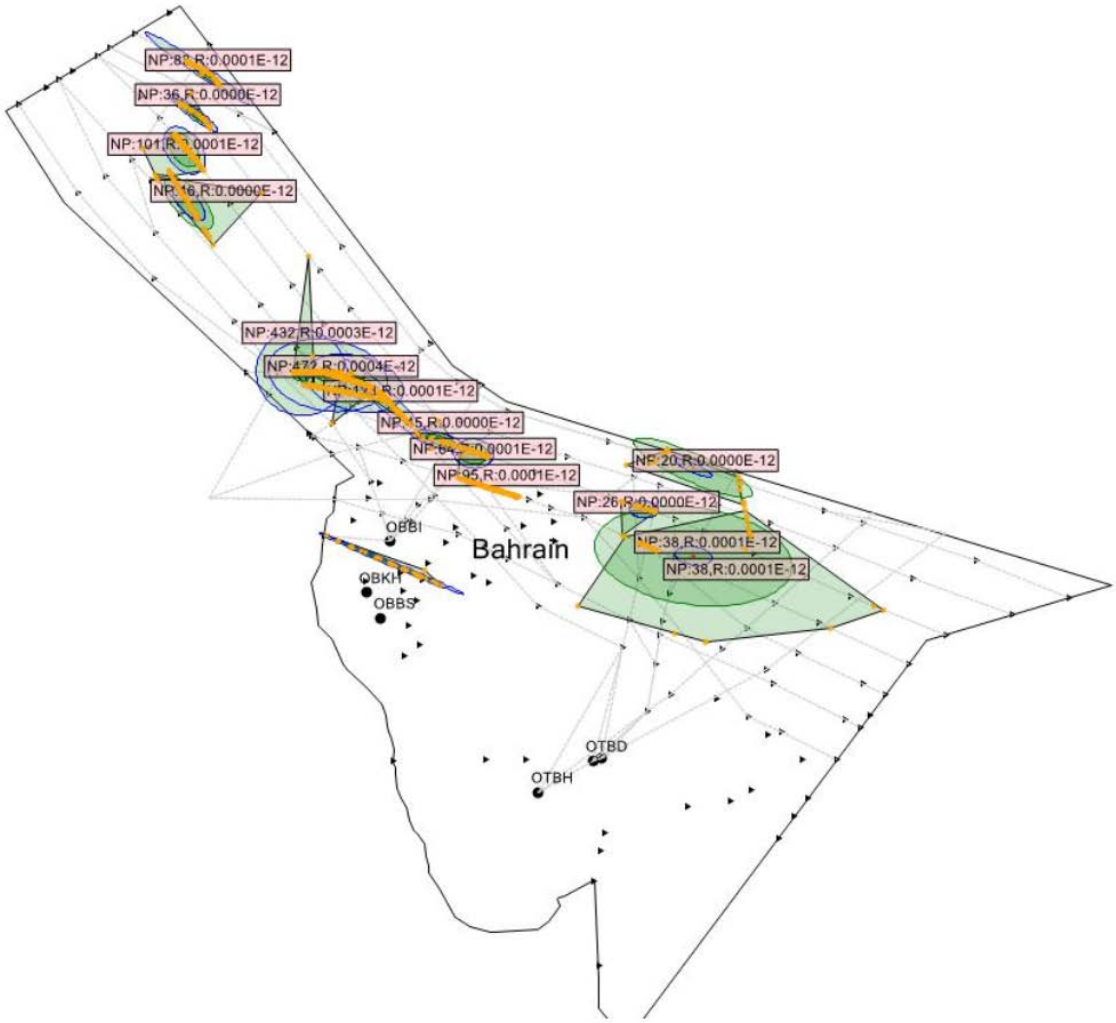
Therefore, it is concluded that this Safety Objective is currently met.

APPENDIX B

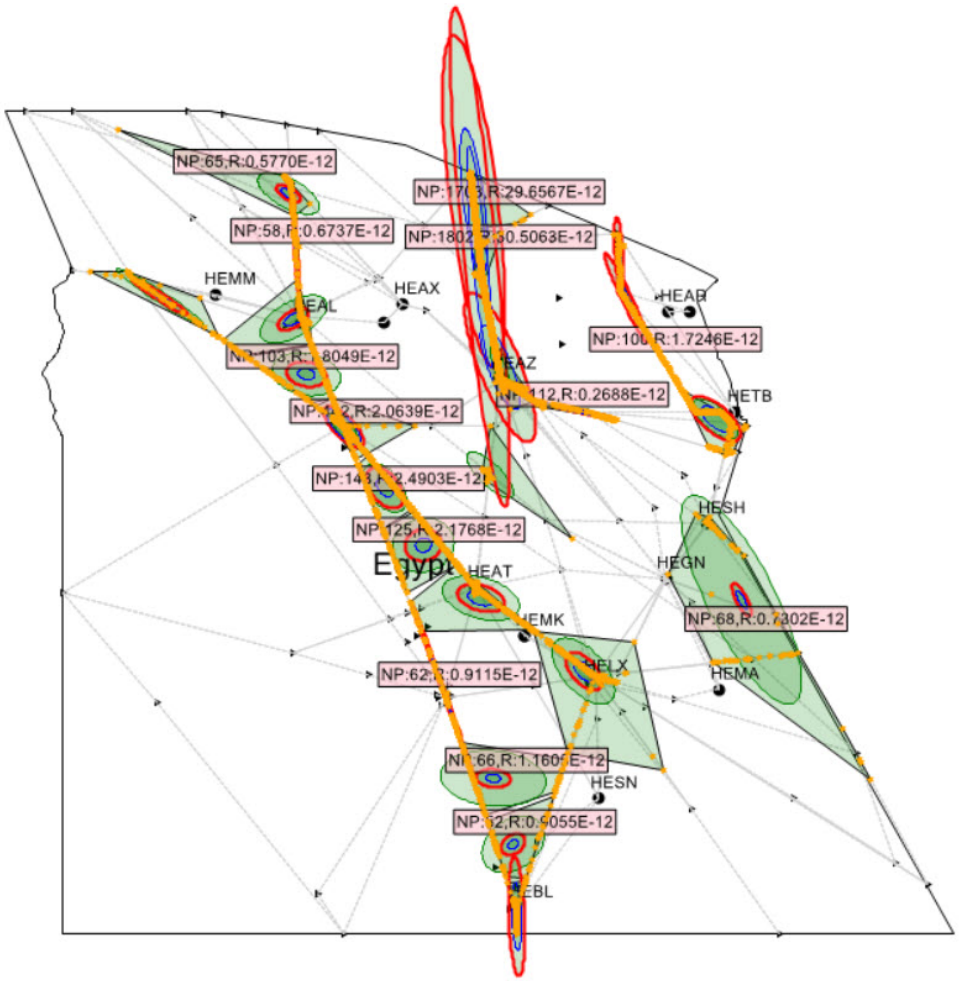
THE MID MMR as of October 2019

STATE	RVSM APPROVED A/C	RESULTS OR COVERED	NOT COVERED
BAHRAIN	57	57	0
EGYPT	149	127	22
IRAN	212	209	3
IRAQ	39	39	0
JORDAN	44	40	4
KSA	265	252	13
KUWAIT	60	51	9
LEBANON	28	28	0
LIBYA	27	26	1
OMAN	75	73	2
QATAR	272	272	0
SUDAN	21	17	4
SYRIA	14	11	3
UAE	593	584	9
YEMEN	6	0	6

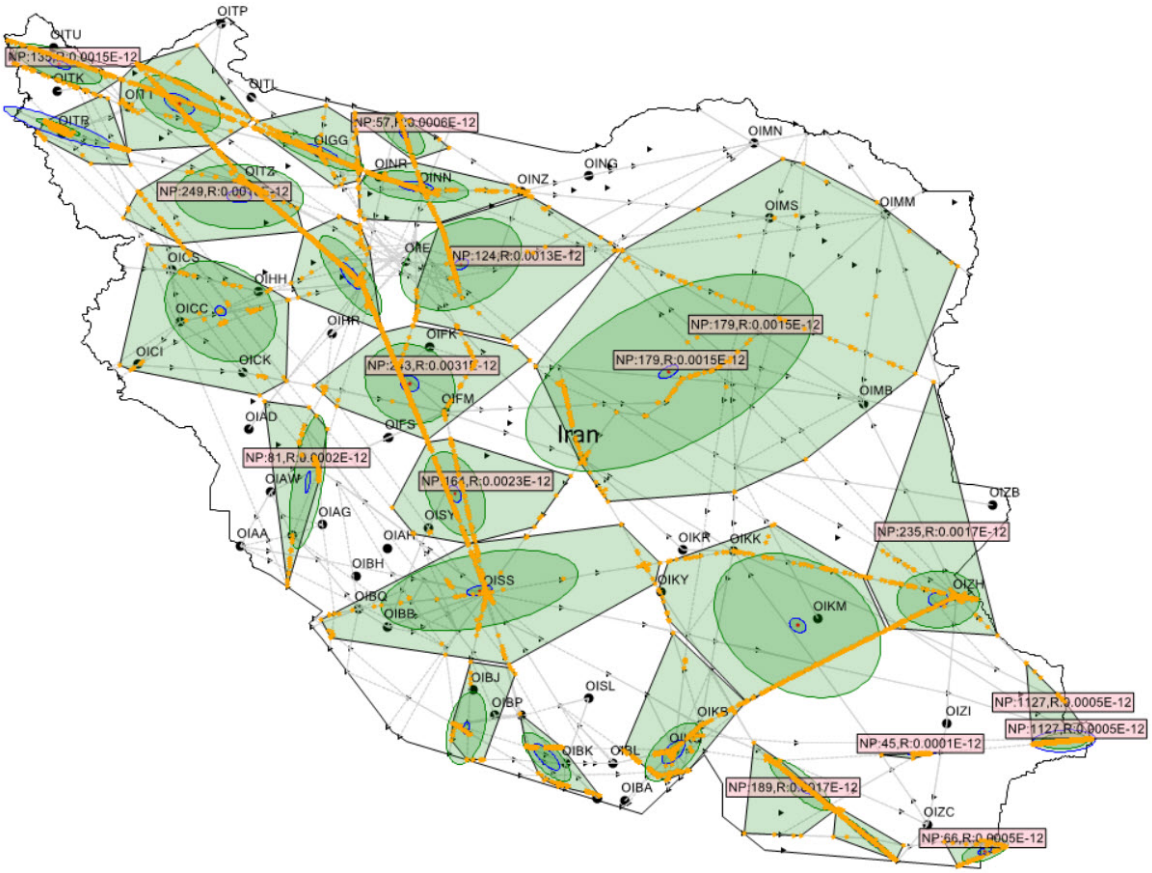
<u>APPENDIX C</u> –MIDRMA Member States Hot Spots Generated from September 2018 TDS (for information ONLY)



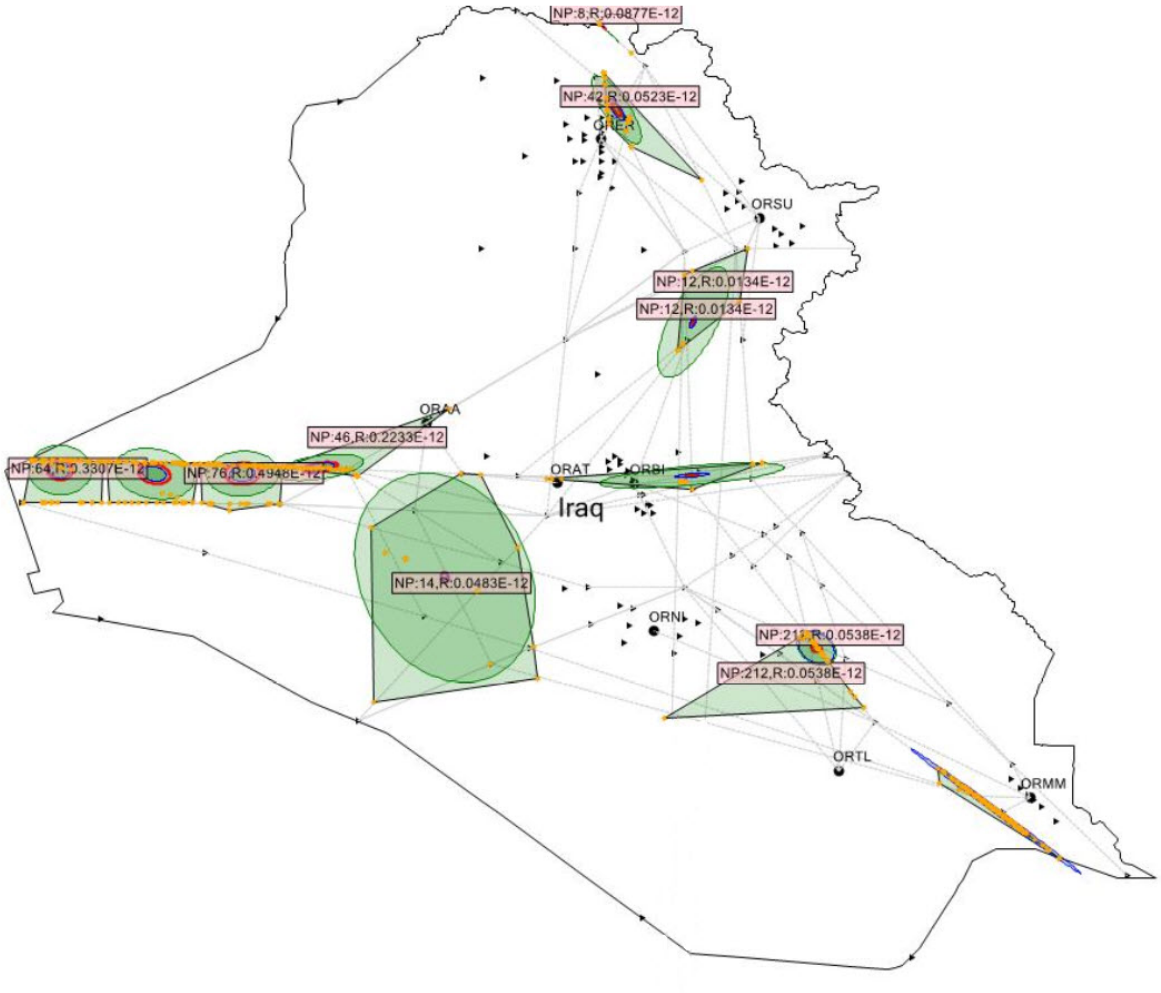
Bahrain FIR


NP:65,R:0.5770E-12
HEMM
HEAX
HEAB
HETB
HESH
HEGN
HEAT
HEMK
HELX
HEMA
HESN
HEBL

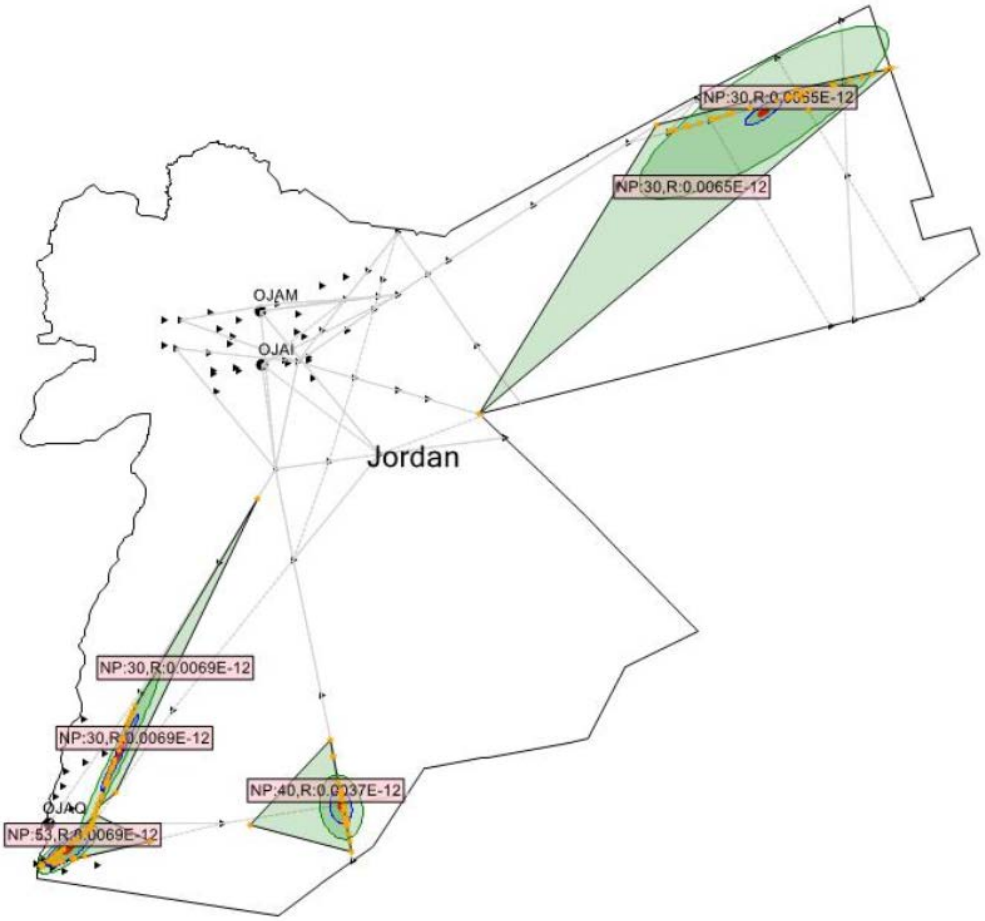
Cairo FIR


OITP
OITU
OITK
OITL
OITB
OIGG
OINR
OINN
OINZ
OING
OIMN
OIMS
OIMM
OITZ
OIE
OICS
OIHH
OICC
OIHR
OIFK
OICI
OICK
OIFM
OIFS
OIAD
OIAW
OIAG
OISY
OIAA
OIAH
OIBH
OIBQ
OIBB
OISS
OIBJ
OIBP
OISL
OIBK
OIBA
OIKR
OIKK
OIKY
OIKM
OIMB
OIZB
OIZH
OIZI
OIZC
Iran
NP:57,R:0.0006E-12
NP:249,R:0.0015E-12
NP:124,R:0.0013E-12
NP:179,R:0.0015E-12
NP:179,R:0.0015E-12
NP:81,R:0.0002E-12
NP:161,R:0.0023E-12
NP:235,R:0.0017E-12
NP:1127,R:0.0005E-12
NP:1127,R:0.0005E-12
NP:45,R:0.0001E-12
NP:189,R:0.0017E-12
NP:66,R:0.0005E-12

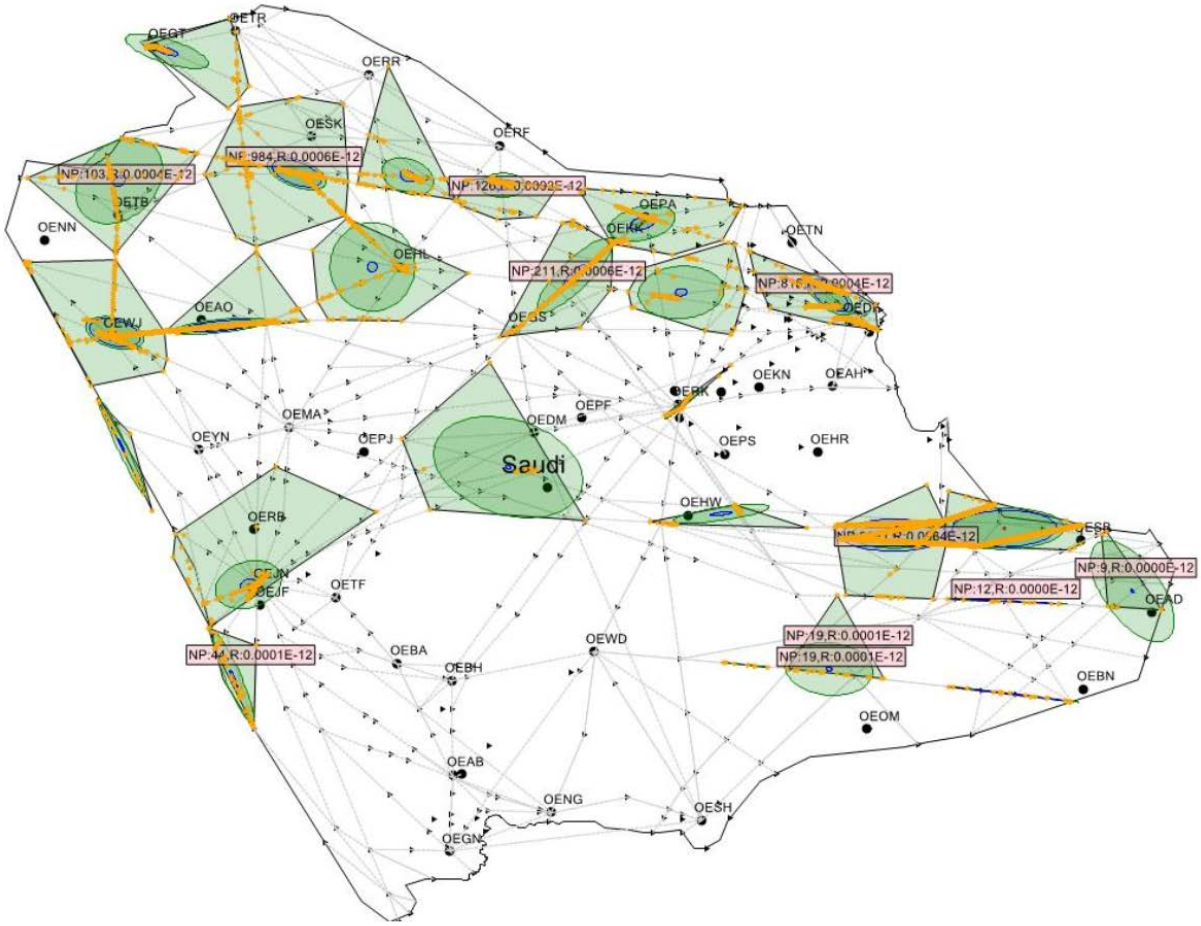
Tehran FIR


NP:8,R:0.0877E-12
NP:42,R:0.0523E-12
ORER
ORSU
NP:12,R:0.0134E-12
NP:12,R:0.0134E-12
ORAA
NP:46,R:0.2233E-12
NP:64,R:0.3307E-12
NP:76,R:0.4948E-12
ORAT
ORBI
Iraq
NP:14,R:0.0483E-12
ORNI
NP:212,R:0.0538E-12
NP:212,R:0.0538E-12
ORTL
ORMM

Baghdad FIR


NP:30,R:0.0065E-12
NP:30,R:0.0065E-12
OJAM
OJAI
Jordan
NP:30,R:0.0069E-12
NP:30,R:0.0069E-12
NP:40,R:0.0137E-12
OJAQ
NP:53,R:0.0069E-12

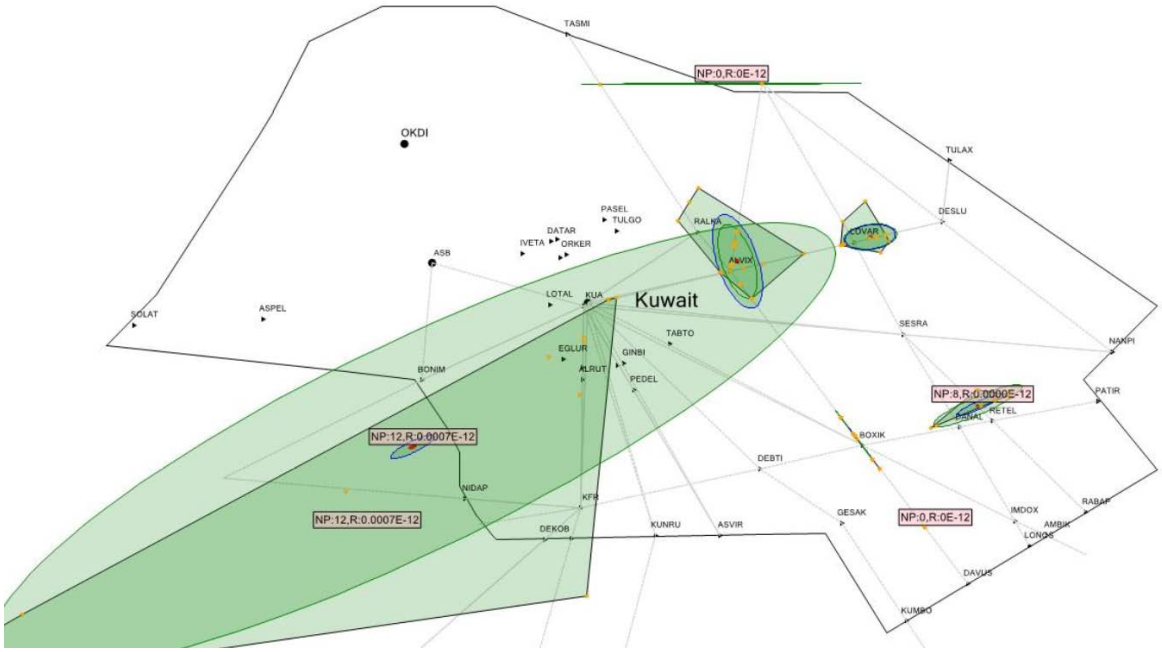
Amman FIR


OETR
OERR
OESK
OERF
OETB
OENN
OEHL
OEPA
OETN
OEAO
OEJS
OEDR
OEKN
OEAH
OEPF
OEMA
OEDM
OEYN
OEPJ
OEPS
OEHR
Saudi
OEHW
OERB
OETF
OEBA
OEBH
OEWD
OEBN
OEOM
OEAB
OENG
OESH
OEGN
NP:19,R:0.0001E-12
NP:12,R:0.0000E-12
NP:9,R:0.0000E-12

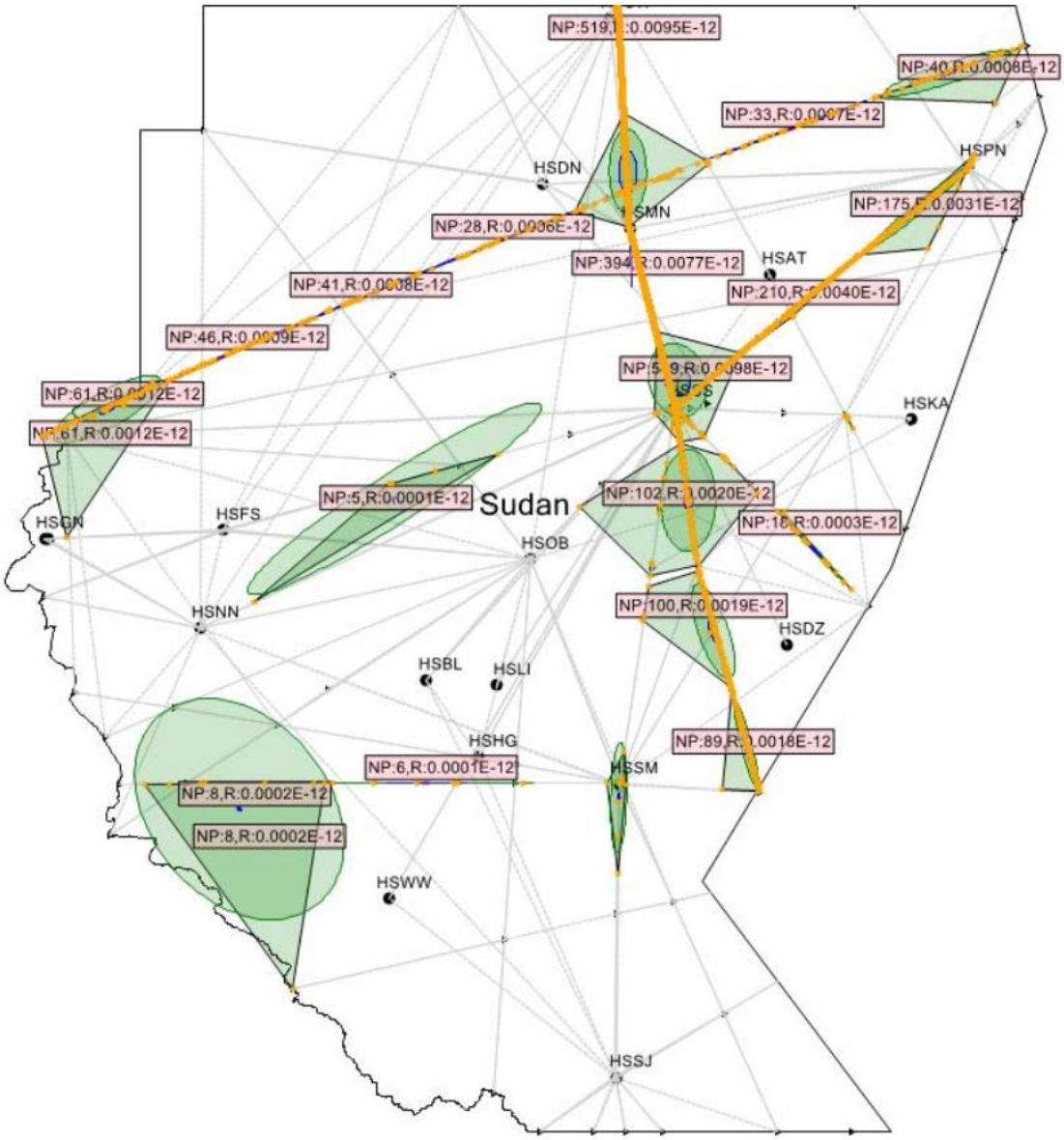
Jeddah FIR


OOSH
NP:654,R:0.0026E-12
OOMN
OOMS
NP:710,R:0.0053E-12
OOFO
NP:895,R:0.0018E-12
NP:734,R:0.0086E-12
OOGB
Oman
OOMA
NP:776,R:0.0082E-12
OODQ
OOMK
OOTH
OOSA

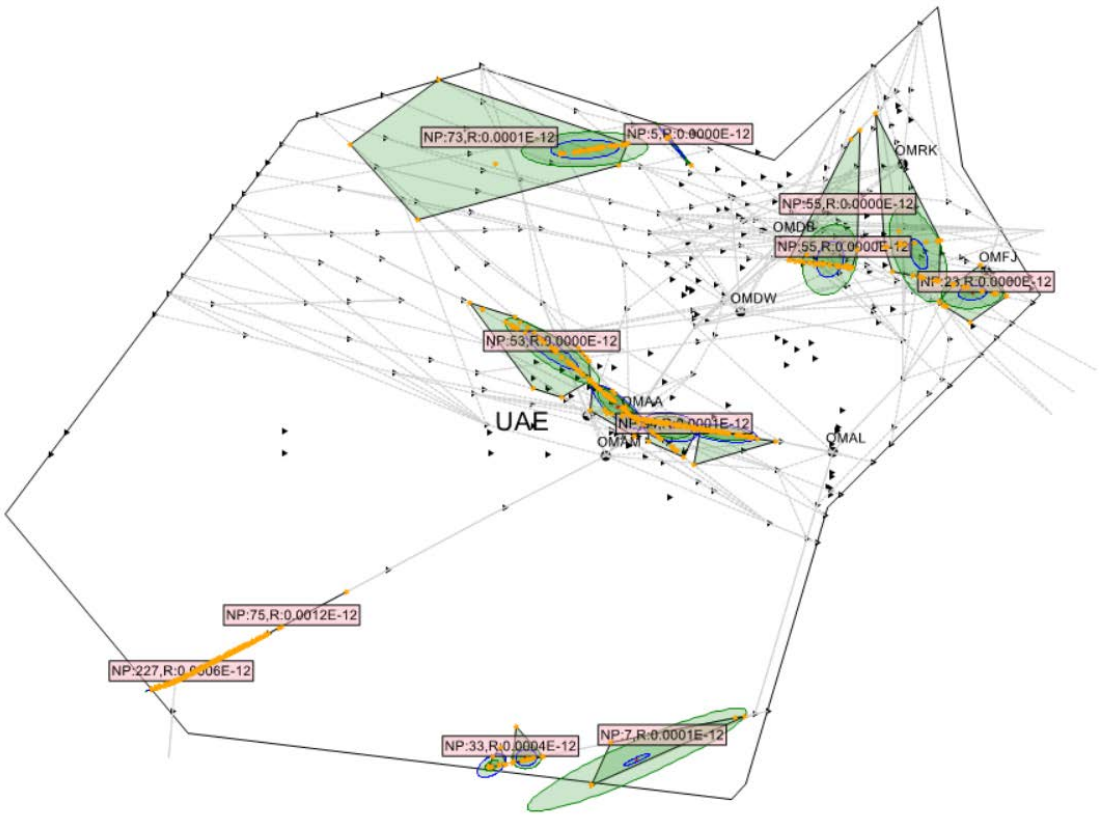
Muscat FIR


TASMI
NP:0,R:0E-12
OKDI
TULAX
PASEL
TULGO
DATAR
IVETA
ORKER
RALNA
COVAR
DESLU
ASB
AMVIX
LOTAL
KUA
Kuwait
SOLAT
ASPEL
SESRA
NANPI
TABTO
EGLUR
GINBI
BONIM
ALRUT
PEDEL
NP:8,R:0.0000E-12
PATIR
RETEL
NP:12,R:0.0007E-12
BOXIK
DEBTI
NIDAP
KFR
NP:12,R:0.0007E-12
GESAK
NP:0,R:0E-12
IMDOX
RABAP
AMBIK
LONOS
DEKOB
KUNRU
ASVIR
DAVUS
KUMRO

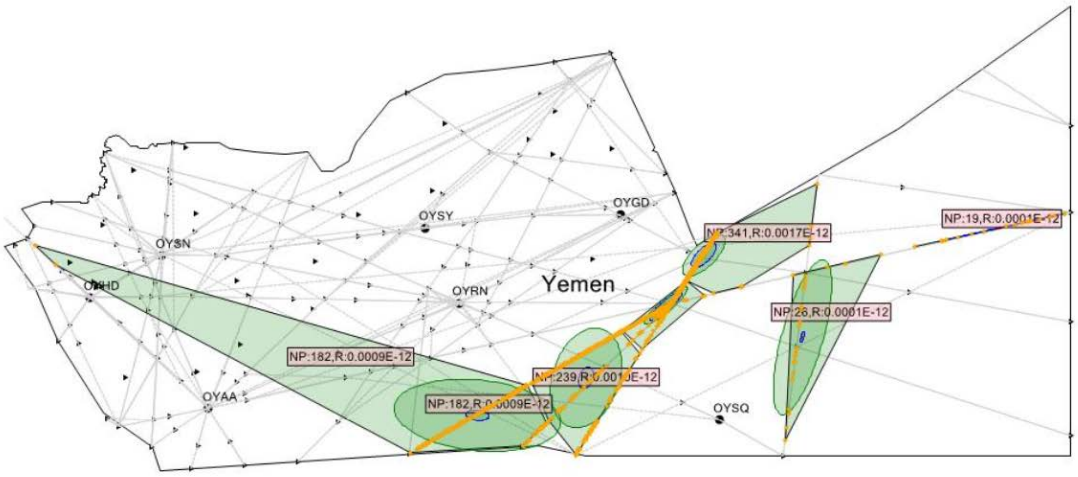
Kuwait FIR



Khartoum FIR



Emirates FIR


OYSY
OYGD
OYSN
OYHD
OYRN
Yemen
NP:341,R:0.0017E-12
NP:19,R:0.0001E-12
NP:26,R:0.0001E-12
NP:182,R:0.0009E-12
NP:239,R:0.0019E-12
NP:182,R:0.0009E-12
OYAA
OYSQ

Sana’a FIR

MID REGION SAR AGREEMENT STATUS BETWEEN ANSPS/ACCS

As of December 2019

STATE	CORRESPONDING STATES			REMARKS
BAHRAIN	☒ IRAN ☒ SAUDI ARABIA	☒ KUWAIT ☒ UAE	☐ QATAR	4/5
EGYPT	☒ CYPRUS ☐ JORDAN ☐ SUDAN	☐ GREECE ☒ LYBIA	☐ Israel ☐ SAUDI ARABIA	2/7
IRAN	☒ ARMENIA ☒ BAHRAIN ☒ OMAN ☐ TURKMANISTAN	☒ AZERBAIJAN ☒ IRAQ ☐ PAKISTAN ☒ UAE	☐ AFGHANISTAN ☒ KUWAIT ☐ TURKEY	7/11
IRAQ	☒ IRAN ☒ JORDAN	☐ KUWAIT ☐ SAUDI ARABIA	☐ SYRIA ☐ TURKEY	2/6
JORDAN	☐ EGYPT ☒ IRAQ	☐ ISRAEL ☒ SAUDI ARABIA	☐ SYRIA	2/5
KUWAIT	☒ BAHRAIN ☒ IRAN	☐ IRAQ	☒ SAUDI ARABIA	3/4
LEBANON	☒ CYPRUS	☐ SYRIA		1/2
LIBYA	☐ ALGERIA ☐ CHAD ☐ EGYPT	☐ MALTA ☐ NIGER	☐ SUDAN ☐ TUNIS	0/7
OMAN	☐ INDIA ☒IRAN	☒ SAUDI ARABIA ☐ PAKISTAN	☐ UAE ☐ YEMEN	2/6
QATAR	☐ BAHRAIN	☐ SAUDI ARABIA	☐ UAE	0/3
SAUDI ARABIA	☒ BAHRAIN ☐ IRAQ ☒ OMAN ☐ UAE	☐ EGYPT ☒ JORDAN ☐ Qatar ☐ YEMEN	☐ ERITREA ☒ KUWAIT ☐ SUDAN	4/11
SUDAN	☐ CENTRAL AFRICAN ☐ CHAD ☐ EGYPT	☒ ERITREA ☒ ETHIOPIA ☐ LIBYA	☐ SAUDI ARABIA ☐ SOUTH SUDAN	2/8
SYRIA	☐ IRAQ ☐ JORDAN	☐ LEBANON ☒ CYPRUS	☒ TURKEY	2/5
UAE	☒ BAHRAIN ☒ IRAN	☐ OMAN ☐ SAUDI ARABIA	☐ QATAR	2/5
YEMEN	☐ DJIBOUTI ☐ ERITREA ☐ ETHIOPIA	☐ INDIA ☐ OMAN ☐ SAUDI ARABIA	☐ SOMALIA	0/7

☒ Agreement Signed ☐ Agreement NOT Signed Signed Agreements / Total No. of required Agreements

---

Action Plan of the ICAO AFI/APAC/MID INTER-REGIONAL SAR WORKSHOP

(Salalah, Oman, 26 – 29 August 2019)

	Action	Responsible	Timeline	Status / Updates
1.	Organize ICAO Inter-regional AFI/APAC/MID SAR Workshops periodically on a rotational basis between the regions. ICAO ROs to initiate the coordination for the venue and dates of the next workshop and include the workshop's venue and dates in 2021 schedule of meetings	ICAO	Dec. 2020	
2.	ICAO ROs to coordinate with ICAO HQ to provide more support to SAR through the provision of adequate resources to ensure effective follow-up and assistance regarding global SAR issues.	ICAO	Oct. 2019	
3.	Consider the reduction of the uncertainty phase timing commensurate with adequate communications and surveillance capabilities.	ICAO/IMO SAR JWG	Sep. 2020	
4.	Clearly define the division of responsibilities regarding command and control and hand over between the search and rescue function (Annex 12) and the air accident investigation search and recovery function (Annex 13).	ICAO	TBD	
5.	ICAO Regional Offices to consider the establishment of SAR Working Groups focusing on SAR issues.	ICAO ROs	TBD	
6.	Development of AFI Regional SAR Plan in a harmonized manner, taking into consideration the APAC and MID SAR Plan and experience.	ICAO AFI	June 2020	
7.	Establishment of a legal framework to support the roles and responsibilities of SAR experts to handle various SAR missions.	States	Jun. 2020	
8.	Promulgate SAR Civil Aviation Regulations, if not yet done so.	States	Jun. 2020	
9.	Development and implementation of a comprehensive National SAR Plan addressing the ICAO and IMO requirements, involving the airspace operators and ensuring effective internal and cross borders cooperation, taking into consideration the regional SAR Plans. Aerodrome and airline emergency response plans and disaster management plans should be synchronized with the SAR Plans.	States	Jun. 2020	
10.	Establishment of national SAR committee that manages aeronautical, maritime, and civil/military cooperation aspects.	States ICAO	Dec. 2020	

11.	Development of a Template for national SAR Plan.	ICAO MID	Dec. 2019	
12.	Raise public awareness related to SAR through promotional material and conduct national, regional and inter-regional SAR workshops with the support of ICAO and IMO.	States ICAO IMO	Ongoing	
13.	Negotiate and sign SAR LoAs between adjacent States	States	Dec. 2020	
14.	States at the interface with the ICAO MID Region to follow-up with their ACCs the signature of the MID SAR Bilateral Arrangements with their relevant adjacent MID ACCs to ensure that alerting and coordination procedures are in place.	States adjacent to MID States	Jun. 2020	
15.	Staff RCCs and, as appropriate, RSCs on 24 hours basis with sufficient number of adequately trained and qualified operational personnel using radiotelephony communications who are proficient in the use of the English language	States	Jun. 2020	
16.	Establish effective coordination mechanism between ACC and RCC to ensure swift triggering of the alerting and coordination process.	States	Jun. 2020	
17.	Develop a short and long term plans for training of search and rescue personnel, including those involved in the oversight of SAR, derived from comprehensive training programmes, manual, etc. in order to ensure effective training and high level of competency. Regular Visits between ATS, RCC, AOs, AIG, ADs, etc.	ICAO IMO States	Jun. 2020	
18.	Coordinate SAR Standard Operation Procedures/SAR Plans, etc. with the accident and incident investigation authorities.	States	Ongoing	
19.	Enhance SAR experts' competency through the conduct of national, regional and inter-regional SAR courses with the support of ICAO and IMO as appropriate.	States ICAO IMO	Ongoing	
20.	Alternatives means of communication to promote, coordinate, SAR issues such as social media could be used. *Note. Social media should not be used as an initial alerting means in lieu of formal communication mechanism*	States	ongoing	
21.	In case no Joint Rescue Coordinator Centre (JRCC) is established, States should ensure close coordination between aeronautical and maritime RCCs.	States	Dec. 2020	
22.	Where ARCC and MRCC are not jointly established, the assignment for receipt of COSPAS-SARSAT messages should be done in consideration of the RCC which has the capability of facilitating efficient dissemination of the messages and ensure coordination of efficient responses.	States	Jun. 2020	
23.	Sharing of resources (Human, assets, funding, etc.) through the establishment of regional and sub-regional SAR JRCC	States ICAO	Ongoing	

24.	Making available funds to ensure effective provision of SAR services, which should cover the running cost of the RCC and the SAR missions in case of incidents and accidents, SAREX and the provisions of services during large scale SAR responses, such as Mass Rescue Operations (MRO).	States Donors Stakeholders	Ongoing	
25.	Review the GADSS Concept and consider their preparedness for implementation.	States Airlines	Dec 2019	
26.	Conduct national, regional, sub-regional and inter-regional SAREX. *Note. To test the SAR system in place, SAREX should be effective not such a demonstration showing what in place as capabilities*	States ICAO IMO	Ongoing	
27.	RCCs should be notified well in advance regarding any activity that may lead to a SAR response (adventure, experimental, etc.) within their area of responsibility by their relevant authorities, for appropriate actions.	States	Ongoing	
28.	Consider the use of drones for SAR services.	States	Ongoing	
29.	Development of guidance on the use of drones for SAR.	ICAO IMO Stakeholders	Dec 2020	
30.	Urge States to ensure the signature of Memorandum of Arrangements (MoA) between SPOCs and their associated MCCs	States	June 2020	
31.	Keep up-to-date the SPOC contact details, in particular States associated with Algeria, Italy, Spain, Saudi Arabian, and South Africa MCCs and respond actively to the COSPAS-SARSAT tests. Non-compliant States to be added to the list of Air Navigation Deficiencies of relevant to each region.	States ICAO ROs	Ongoing	
32.	MCCs to provide support and raise awareness of COSPAS-SARSAT as appropriate to their associated States	MCCs		
33.	Use the GADSS ADT Phase Basic Guidance developed by ICAO APAC SAR Working Group, which would constitute the basis for more comprehensive guidance material	ICAO AFI and MID States	Jun. 2020 Ongoing	
34.	Make arrangements for a 406 MHz ELT register. Register information regarding the ELT shall be immediately available to search and rescue authorities. States shall ensure that the register is updated whenever necessary**.** In addition, States should ensure that ELT tests are carried out on periodic basis. Moreover, States should provide the COSPAS-SARSAT secretariat with the applicable beacon information available in their country contacting mail@cospas-sarsat.int States to use the 406MHZ register on www.	States	Ongoing To provide feedback to ICAO ROs on annual basis (Dec.)	
35.	The ELT 121.5 MHz homing capability to be maintained	ICAO	TBD	

36.	Training to interact with the media should be provided to SAR Managers or any person involved with public communications.	States	Ongoing	
37.	Development and implementation of a Protocol between States and within States to protect the sensitive photos of fatalities from spreading on the Media.	States ICAO	TBD	
38.	Consider the emerging technology such as space-based ADS-B in their planning	States	Ongoing	
39.	States are invited to consult with other States in respect of sharing experience including those related to the use of SAR Software	States	Ongoing	
40.	Establishment of internal Quality Management System (QMS) for RCCs.	States	TBD	

MID REGION SAR FOCAL POINTS CONTACT DETAILS

State	Name	Title	Address	Email	Tel. & Mobile
Bahrain	Mr. Abdulla H. Al-Qadhi	Chief AIM & Airspace Planning	CAA	aalqadhi@mtt.gov.bh	Tel: +973 17321180 Mob: +973 36639955
	Mr. Ahmed Mohamed Bucheery	Chief ATM	CAA	a.ali@mtt.gov.bh	Tel: +973 17321158 Mob: +973 39522696
Egypt	Mr. Hesham AbdelBasset AbdelAziz	GM, Crisis Management	ECAA	crimang@civilaviation.gov.eg	Tel. +202 22677 617 Mob. +201141130 557
Iran	Mr. Mohammad Saied Sharafi	DG for ANS and Aerodrome Oversight Bureau CAO		m-sharafi@cao.ir	Tel: +98 21 66073534 Mob: +98 912 254 7912
	Mr. Masoud Nikbakht	General Director ATM		nikbakht@airport.ir masoudnikbakht@gmail.com	Tel:+98 21 445 44101 Mob: +98 912 326 3905
	Mr. Hamid reza saanei	Aeronautical Operations Chief Expert and Aerodrome Expert		h-saanei@cao.ir saanei@gmail.com	Tel: +982 166073534 Mob: +989125935990
	Mr. Masoud Nikbakht	General Director ATM		nikbakht@airport.ir masoudnikbakht@gmail.com	Tel: +98 21 445 44101 Mob: +98 912 326 3905
Iraq	Mr. Fadel Gatea Bedn	ATC/ACC Manager		atc@iraqcaa.com	Mob: +9647716440448
Jordan	Mr. Khaled Arabiyat	Director of Air Traffic Management	CARC	datm@carc.gov.jo	Tel.: +962 06 489 7729 Mob: +962 772333666
Kuwait	Eng. Emad A. Al-Sanousi	Air Navigation Director		ea.alsanousi@dgca.gov.kw	Tel: +965 2433 6699 Ext: 6767
Lebanon	Mr. Kamal Nassereddine	Director of AIR Navigation Department	DGCA	atm@beirutairport.gov.lb	Tel: +961 1 628178,+961 1 628000 1, 2 ,3 // Ext 3013 Mob: +961 3 331974

State	Name	Title	Address	Email	Tel. & Mobile
Libya	Mr. Mostafa M. Madi	Head of Air Traffic Control	CAA	Mostafa.madi@caa.gov.ly	Mob.:+218 91 323 9219
	Mr. Salem Elayana		CAA		
Oman	Mr. Hamad Al Abri	Director General of Air Navigation Services	PACA	h.alabri@paca.gov.om	Tel: +968-24354866 Mob: +968-
Oman (SAR)	Mr. Nasser Al Mazroui	Director ATC	PACA	n.almazroui@paca.gov.om	Tel: +968-24354867
Qatar	Mr. Sameer Al-Khalaf	Head of ATM	CAA	Sameer.alkhalaf@caa.gov.qa	Tel.: +974 4470 5999 Mob.: +974 5551 9192
	Mr. Nasser Al-Khalaf	Senior ATM Officer	CAA	Nasser.alkhalaf@caa.gov.qa	Tel.: +974 4470 5151 Mob.: +974 5550 8688
Saudi Arabia	Mr. Alwaleed Al-Enezi	ANS Safety Inspector	GACA	aenezi@gaca.gov.sa	Tel: +966 11 525 3222 Mob:+966566662992
	Mr. Abdullah albathi	ANS Safety Inspector	GACA	abalbathi@gaca.gov.sa	Tel: +966 11 525 3222 Mob:+966554185190
Saudi Arabia (SAR)	Mr. Fahad Saud Alharbi	Head of Aeronautical Search & Rescue Center	SANS	Fasalharbi@sans.com.sa	Tel: +966 11 525 3779 Mob: +966 505329284
	Mr. Mohammed alalawi	ANS Safety Inspector	SANS	malalwi@gaca.gov.sa	Tel: +966 11 525 3779 Mob: +966 505621582
Sudan					
Syria	Mr. Hassan Hamoud	ATM Director	CAA	hamoud_hasan@yahoo.com ans@scaa.sy	Tel: +963 11 54010180 Mob. +963 988235106

State	Name	Title	Address	Email	Tel. & Mobile
UAE	Mr. Ahmed Al Obeidli	Sr. Air Navigation Inspector	GCAA	aobaidli@gcaa.gov.ae	Tel: +971 2 4054 410 Mobile: +971 55 6322226
	Mr. Ahmed Al Jallaf	Assistant Director General Air Navigation Services	GCAA	aljallaf@szc.gcaa.ae	Tel: +971 2 599 6888 Mobile: +971 50 659 9242
	Mr. McEnroe Coelho	Executive Assistant	GCAA	mcoelho@szc.gcaa.ae	Tel: +971 2 599 6885 Mob: +971 50 720 9609
	ANS Regulations			ans.reg@gcaa.ae	
UAE (SAR)	Mr. Waleed Al Riyami	Sr. ATS & Search and Rescue Inspector	GCAA	walriyami@gcaa.gov.ae	Tel: +971 2 405 4214 Mob: +971 506 4186953
Yemen	Mr. Abdulmalik Saeed Ahmed	Advisor To CAMA		airnavaden@gmail.com	Tel: +967 2 343635 Mob: +967 771240857

Deficiencies in the ATM Field

BAHRAIN

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

EGYPT

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

IRAN

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 11 Para. 2.31	-	Development of contingency plan for implementation in the event of disruption or potential disruption of ATS and related supporting services. The Plan should also address natural disasters and public health emergencies. Contingency agreements should be signed with all adjacent ACCs.	Nov, 2006	Still to sign with Kuwait	H	Corrective Action Plan has not been formally provided by the State	Iran	Dec, 2020	A
2	MID ANP TABLE ATM II-MID-1 MID REGION ATS ROUTE NETWORK	-	ATS routes A418/UP574 not implemented	Dec, 2006	KUMUN-PAPAR segment not implemented.	S O	Corrective Action Plan has not been formally provided by the State	Iran- UAE	Dec, 2020	B
3	MID ANP Table ATM II-MID-1 MID REGION ATS ROUTE NETWORK	-	ATS Route G202 is restricted to certain defined airspace users	Jun, 2014	Not all Operators are authorized to fly G202	O	Corrective Action Plan has not been formally provided by the State	Iran	Dec, 2020	B

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

IRAQ

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	MID ANP Table ATM II-MID-1 MID REGION ATS ROUTE NETWORK	-	ATS route G667 not implemented	Sep, 2006	Segment ALSAN-ABD not implemented	S	Corrective Action Plan has not been formally provided by the State	Iraq- Iran-Kuwait	Dec, 2020	B
2	Annex 11 Para. 2.31	-	Development of contingency plan for implementation in the event of disruption or potential disruption of ATS and related supporting services. The Plan should also address natural disasters and public health emergencies. Contingency agreements should be signed with all adjacent ACCs.	Nov, 2006	Contingency Agreement to be signed with Syria	S	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2020	A
3	MID ANP Table ATM II-MID-1 MID REGION ATS ROUTE NETWORK	-	ATS route G795 not implemented	May, 2008	RAF-BSR segment not implemented	S	Corrective Action Plan has not been formally provided by the State	Iraq- Saudi Arabia	Dec, 2020	B

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
4	MID ANP Table ATM II-MID-1 MID REGION ATS ROUTE NETWORK	-	ATS route A424 not implemented	May, 2008	LOTAN-LOVEK segment not implemented	O	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2020	B
5	MID ANP Table ATM II-MID-1 MID REGION ATS ROUTE NETWORK	ATS route	ATS Route G669 not implemented	May, 2008	segment RAF - SOLAT not implemented	S	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2020	B

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

JORDAN

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 11 Para. 2.31	-	Development of contingency plan for implementation in the event of disruption or potential disruption of ATS and related supporting services. The Plan should also address natural disasters and public health emergencies. Contingency agreements should be signed with all adjacent ACCs.	Nov, 2006	Contingency agreements not signed with Syria.	H	Corrective Action Plan has not been formally provided by the State. State comment: due to political impact in the region Jordan is not able to complete the signature of contingency agreements with all adjacent States	Jordan	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

KUWAIT

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 11 Para. 2.31	-	Development of contingency plan for implementation in the event of disruption or potential disruption of ATS and related supporting services. The Plan should also address natural disasters and public health emergencies. Contingency agreements should be signed with all adjacent ACCs.	Nov, 2006	Contingency Plan to be signed with Iran	S	Corrective Action Plan has not been formally provided by the State	Kuwait	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

LEBANON

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 11 Para. 2.31	-	Development of contingency plan for implementation in the event of disruption or potential disruption of ATS and related supporting services. The Plan should also address natural disasters and public health emergencies. Contingency agreements should be signed with all adjacent ACCs.	Nov, 2006	Contingency agreements not signed with Syria	S	Corrective Action Plan has not been formally provided by the State	Lebanon	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

LIBYA

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 11 Para. 2.31	-	Development of contingency plan for implementation in the event of disruption or potential disruption of ATS and related supporting services. The Plan should also address natural disasters and public health emergencies. Contingency agreements should be signed with all adjacent ACCs	Dec, 2014	Agreement signed only with Egypt	S O	Corrective Action Plan has not been formally provided by the State	Libya	Dec, 2020	A
2	Annex 11 Para 3.3.5.1	-	Not reporting the required data to the MIDRMA in a timely manner.	Dec, 2013	-	H O	Corrective Action Plan has not been formally provided by the State	Libya	Dec, 2018	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

OMAN

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

QATAR

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 11 Para. 2.31	-	Development of contingency plan for implementation in the event of disruption or potential disruption of ATS and related supporting services. The Plan should also address natural disasters and public health emergencies. Contingency agreements should be signed with all adjacent ACCs.	Nov, 2006	Contingency agreements not signed with UAE.	S	Corrective Action Plan has not been formally provided by the State	Qatar-Bahrain	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

SAUDI ARABIA

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 11 Para. 2.31	-	Development of contingency plan for implementation in the event of disruption or potential disruption of ATS and related supporting services. The Plan should also address natural disasters and public health emergencies. Contingency agreements should be signed with all adjacent ACCs.	Nov, 2006	Contingency Agreements not signed with Iraq, Qatar and Sudan.	S	Corrective Action Plan has not been formally provided by the State	Saudi Arabia	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

SUDAN

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 11 Para. 2.31	-	Development of contingency plan for implementation in the event of disruption or potential disruption of ATS and related supporting services. The Plan should also address natural disasters and public health emergencies. Contingency agreements should be signed with all adjacent ACCs.	Dec, 2014	Contingency Agreement signed only with Egypt	H S O	Corrective Action Plan has not been formally provided by the State	Sudan	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

SYRIA

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	MID ANP Table ATM II-MID-1 MID REGION ATS ROUTE NETWORK	-	ATS route G202 not implemented	Dec, 1997	Segment DAKWE - Damascus not implemented	S	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2020	B
2	MID ANP Table ATM II-MID-1 MID REGION ATS ROUTE NETWORK	-	ATS route UL602 not implemented	Dec, 2003	Segments ELEXI-DRZ-GAZ not implemented.	S	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2020	B
3	Annex 11 Para. 2.31	-	Development of contingency plan for implementation in the event of disruption or potential disruption of ATS and related supporting services. The Plan should also address natural disasters and public health emergencies. Contingency agreements should be signed with all adjacent ACCs.	Nov, 2006	No signed agreement yet	H O	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2020	A
4	Annex 11 Para 3.3.5.1	-	Reporting unsatisfactory LHDs to MIDRMA	Oct, 2013	Syria to coordinate with MIDRMA.	H	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

UAE

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 11 Para. 2.31	-	Development of contingency plan for implementation in the event of disruption or potential disruption of ATS and related supporting services. The Plan should also address natural disasters and public health emergencies. Contingency agreements should be signed with all adjacent ACCs.	Nov, 2006	Plan completed and Agreements signed with Bahrain, Iran, Oman and Saudi Arabia. The plan next is to sign with Qatar after the finalisation of the LoA.	O	Corrective Action Plan has not been formally provided by the State	UAE	Dec, 2020	A
2	MID ANP Table ATM II-MID-1 MID REGION ATS ROUTE NETWORK	-	ATS routes A418/UP574 not implemented	Dec, 2006	KUMUN-PAPAR segment not implemented.	S	Corrective Action Plan has not been formally provided by the State	Iran- UAE	Dec, 2020	B

[(1)] Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the ATM Field

YEMEN

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 11 Para 3.3.5.1	-	Granting RVSM approvals for aircraft without known height-keeping monitoring results	Dec, 2012	-	H O	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2020	A
2	Annex 11 Para 3.3.5.1	-	Reporting Unsatisfactory LHDs to MIDRMA	Oct, 2013	Yemen to coordinate with MIDRMA.	H	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2020	A

[(1)] Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

BAHRAIN

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

EGYPT

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

IRAN

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

[1] Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

IRAQ

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 12 Para. 2.1	-	Lack of provision of required SAR services	Apr, 2012	-	O	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2020	A
2	Annex 6 Part I, Chap.6 and Part II Chap. 2 Annex 10, Vol III, Chap. 5 Annex 12 para. 2.6.4	ELT	Non-compliance with carriage of Emergency Locator Transmitter (ELT) requirements	Apr, 2012	-	O	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

JORDAN

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

KUWAIT

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 6 Part I chap. 6 and Part II chap. 2 Annex 10, Vol III, Chap. 5 Annex 12 para. 2.6.4	ELT	Non-compliance with carriage of Emergency Locator Transmitter (ELT) requirements	Apr, 2012	-	O	Corrective Action Plan has not been formally provided by the State	Kuwait	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

LEBANON

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 12 Para. 2.1	-	Lack of provision of required SAR services	Apr, 2012	-	O	Corrective Action Plan has not been formally provided by the State	Lebanon	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

LIBYA

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 6 Part I chap. 6 and Part II chap. 2 Annex 10, Vol III, Chap. 5 Annex 12 para. 2.6.4	-	Non-compliance with carriage of Emergency Locator Transmitter (ELT) requirements	Dec, 2014	-	H S O	Corrective Action Plan has not been formally provided by the State	Libya	Dec, 2020	A
2	Annex 12 Para. 2.1	-	Lack of provision of required SAR services	Dec, 2014	-	H S O	Corrective Action Plan has not been formally provided by the State	Libya	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

OMAN

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

QATAR

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

SAUDI ARABIA

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

SUDAN

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

SYRIA

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 12 Para. 2.1	-	Lack of provision of required SAR services	Apr, 2012	-	O	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2020	A
2	Annex 6 Part I chap. 6 and Part II chap. 2 Annex 10, Vol III, Chap. 5 Annex 12 para. 2.6.4	-	Non-compliance with carriage of Emergency Locator Transmitter (ELT) requirements	Apr, 2012	-	O	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

UAE

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the SAR Field

YEMEN

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 12 Para. 2.1	-	Lack of provision of required SAR services	Apr, 2012	-	O	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2020	A
2	Annex 6 Part I chap. 6 and Part II chap. 2 Annex 10, Vol III, Chap. 5 Annex 12 para. 2.6.4	-	Non-compliance with carriage of Emergency Locator Transmitter (ELT) requirements	Apr, 2012	-	O	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2020	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Note:* Priority for action to remedy a deficiency is based on the following safety assessments:

'U' priority = Urgent requirements having a direct impact on safety and requiring immediate corrective actions.

Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.

'A' priority = Top priority requirements necessary for air navigation safety.

Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.

'B' priority = Intermediate requirements necessary for air navigation regularity and efficiency.

Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.

Definition:

A deficiency is a situation where a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices, and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation.

---

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

TERMS OF REFERENCE (TOR) OF AIR TRAFFIC MANAGEMENT SUB-GROUP (ATM SG)

1. TERMS OF REFERENCE

1.1 **The Terms of Reference of the ATM Sub-Group are:**

a) ensure that the planning and implementation of ATM in the MID Region is coherent and compatible with developments in adjacent regions, and is in line with the Global Air Navigation Plan (GANP), the Aviation System Block Upgrades (ASBU) methodology and the MID Region Air Navigation Strategy;

b) monitor the status of implementation of the MID Region ATM-related ASBU Modules included in the MID Region Air Navigation Strategy as well as other required ATM facilities and services, identify the associated difficulties and deficiencies and provide progress reports, as required;

c) keep under review the MID Region ATM performance objectives/priorities, develop action plans to achieve the agreed performance targets and propose changes to the MID Region ATM plans/priorities~~, through the ANSIG~~;

d) seek to achieve common understanding and support from all stakeholders involved in or affected by the ATM developments/activities in the MID Region;

e) provide a platform for harmonization of developments and deployments in the ATM domain;

f) based on the airspace user needs and in coordination with stakeholders (States, International Organizations, user representative organizations and other ICAO Regions), identify requirements and improvements for achieving and maintaining an efficient route network in the MID Region;

g) foster and initiate actions aimed at improving civil/military cooperation and Flexible Use of Airspace (FUA) implementation;

h) keep under review the adequacy of requirements in Search and Rescue field, taking into account, *inter alia*, changes to aircraft operations and new operational requirements or technological developments;

i) ensure the effectiveness of the SSR code allocation system in the MID Region;

j) identify, State by State, those specific deficiencies that constitute major obstacles to the provision of efficient air traffic management and recommend specific measures to eliminate them;

k) develop the MID Region ATM Contingency Plan and ensure that its maintained up to date;

l) monitor the implementation of the MID Region ASBU Modules included in the MID Region Air Navigation Strategy related to the ATM, provide expert inputs for ATM related issues; and propose solutions for meeting ATM operational requirements;

m) monitor and review the latest developments in the area of ATM;

n) provide regular progress reports to the ANSIG Group and MIDANPIRG concerning its work programme; and

o) review periodically its Terms of Reference and propose amendments as necessary.

1.2 **In order to meet the Terms of Reference, the ATM Sub-Group shall**:

a) provide necessary assistance and guidance to States to ensure harmonization and interoperability in line with the GANP, the MID ANP and ASBU methodology;

b) provide necessary inputs to the MID Air Navigation Strategy through the monitoring of the agreed Key Performance Indicators related to ATM;

c) review the MID ATS Routes Network in order to assess its capacity and constraints;

d) identify requirements and improvements for achieving and maintaining an efficient ATS route network in the MID Region;

e) propose a strategy and prioritized plan for development of improvements to the route network, highlighting:

- areas that require immediate attention
- interface issues with adjacent ICAO Regions

f) develop a working depository for route proposals that will be used as a dynamic reference document for ongoing discussions on routes under development/ modification. In this respect, the Task Force should explore the utility that can be realized from the route catalogue concept/ATS routes database;

g) engage the necessary parties regarding routes under consideration, especially the Military Authorities;

h) promote civil/military cooperation and the implementation of the concepts of Flexible Use of Airspace (FUA), free flight, flexible tracks;

i) facilitate effective civil/military cooperation and joint use of airspace in the MID Region;

j) in coordination with the MIDRMA, carry out safety assessment of the proposed changes to the ATS Routes Network;

k) submit completed route proposals for amendment of the Basic ANP Table ATS-1, to the ICAO MID Regional Office for processing;

l) monitor the RVSM operations and support the continued safe use of RVSM in the MID Region;

m) review and maintain the MID Region SSR Code Allocation Plan and monitor the implementation of the SSR codes allocation procedures in the Region;

n) assist States in the development and co-ordination of contingency plans and ensure that the Regional contingency plan is maintained up-to-date;

o) assess the effectiveness of the agreed Contingency measures/procedures and propose mitigation measures, as appropriate;

p) address ATM and SAR interface issues with other regions and make specific recommendations to achieve seamlessness and harmonization;

q) review the requirements and monitor the status of implementation of ATM and SAR services;

r) analyse, review and monitor deficiencies in the ATM and SAR fields;

s) develop proposals for the updating of relevant ICAO documentation, including the amendment of relevant parts of the MID ANP, as deemed necessary;

t) establish and monitor ATM performance objectives for the MID Region; and

u) taking into account human factors studies and available guidance material, make operational recommendations related to ATM personnel in the changing technological environment.

2. COMPOSITION

2.1 The Sub-Group is composed of:

a) MIDANPIRG Member States;

b) experts nominated by Middle East Provider States from both Civil Aviation Authority and Military Authority;

c) concerned International and Regional Organizations as observers; and

d) other representatives from provider States and Industry may be invited on ad hoc basis, as observers, when required.

ATTACHMENT A

LIST OF PARTICIPANTS

NAME	TITLE
STATES **BAHRAIN** Mr. Abdulla Hasan Al Qadhi	Chief AIM & Airspace Planning Bahrain Civil Aviation Affairs P.O. Box 586 Manama - KINGDOM OF BAHRAIN
Mr. Ahmed Mohammed Bucheeri	Chief Air Traffic Management Bahrain Civil Aviation Affairs P.O. Box 586 Manama - KINGDOM OF BAHRAIN
CYPRUS Mr. Ioannis Theophilou	ACC SUP / IFP Expert Department of Civil Aviation Cyprus Pindarou Street 47 Nicosia 1429 - CYPRUS
EGYPT Nav. Tayseer Mohamed Abdel Kareem	G.M. ATS Egyptian Civil Aviation Authority (ECAA) Civil Aviation Complex Cairo International Airport Road Cairo - EGYPT
Mr. Wael Ezzat Mahmoud Ammar	Training director Cairo ACC National Air Navigation Services Company (NANSC) Cairo International, Airport Road Cairo - EGYPT
IRAQ Mr. Hayder Noori Obaid	Procedure Officer General Company for Air Navigation Services (GCANS) Baghdad International Airport Baghdad - IRAQ

NAME	TITLE
Mr. Mahmood Hashim Muttashar	Operation Manager General Company for Air Navigation Services (GCANS) Baghdad - IRAQ
Mr. Riad Chehayeb	Advisor Air Navigation Building General Company for Air Navigation Services (GCANS) Baghdad - IRAQ
Mr. Tariq Rasool Jawad Nawkhas	Directorate of Quality and Safety Department General Company for Air Navigation Services (GCANS) Baghdad - IRAQ
JORDAN Mr. Ahmad Al hiyari	Director Air Navigation Services / Queen Alia Airport Civil Aviation Regulatory Commission (CARC) Amman - JORDAN
Mr. Ahmad Awad Al-Natour	Chief of ATM Training Division Civil Aviation Regulatory Commission (CARC) Amman Civil Airport P.O. Box 7547 Amman 11110 - JORDAN
Mr. Ahmad Odeh	ATCO Civil Aviation Regulatory Commission (CARC) Amman - JORDAN
Ms. Anood Aladdin Abd Elutaibi	Air Traffic Controller Civil Aviation Regulatory Commission (CARC) Amman - JORDAN
Mr. Diab Abu Zaid	Air Navigation Commissioner Civil Aviation Regulatory Commission (CARC) Amman Civil Airport Amman 11110 - JORDAN

NAME	TITLE
Mr. Ibrahim Alhazaimeh	QSMS Manager & MR QMS - ANSP Quality & Safety Management System Civil Aviation Regulatory Commission (CARC) Amman Civil Airport P.O. Box 7547 Amman 11110 - JORDAN
Mr. Ibrahim Hilal Faraj Issa	Acting Director of ANS Civil Aviation Regulatory Commission (CARC) P.O. Box 7547 Amman - JORDAN
Mr. Khaled Ahmed Arabiyat	ATM Director Civil Aviation Regulatory Commission (CARC) P.O. Box 7547 Amman 11110 - JORDAN
Mr. Khalid Khazaleh	Chief of ATC and Air Navigation Branch RJAF HQ Amman, Marka - JORDAN
Mr. Mahmoud Mohammad K Sabrah	ATC Supervisor Civil Aviation Regulatory Commission (CARC) P.O. Box 7547 Amman 11110 - JORDAN
Mr. Mohammad Sulaiman Manqtay	ATC Civil Aviation Regulatory Commission (CARC) Amman - JORDAN Mobile: +962 79 890 1178
Mr. Mohammed Ali Yousef Almomani	Chief of Safety and Stander ATM Civil Aviation Regulatory Commission (CARC) Amman Civil Airport P.O. Box 15060 Amman 11110 - JORDAN
Mr. Mustafa Abu Farah	Civil Aviation Regulatory Commission (CARC) Amman Civil Airport P.O. Box 7547 Amman 11110 - JORDAN

NAME	TITLE
Mrs. Narman As'ad	ATCO Civil Aviation Regulatory Commission (CARC) Amman Civil Airport P.O. Box 7547 Amman 11110 - JORDAN
Mr. Omar Alomoush	ATC Civil Aviation Regulatory Commission (CARC) P.O. Box 7547 Amman - JORDAN
Mr. Shadi Mohammad Abdelrahman Ahmad	ATC Civil Aviation Regulatory Commission (CARC) Amman - JORDAN
OMAN Mr. Abdullah Al Hasani	Standard Officer Public Authority for Civil Aviation (PACA) Muscat – SULTANATE OF OMAN
Mr. Mohammed Alaamri	ATC Public Authority for Civil Aviation (PACA) Muscat – SULTANATE OF OMAN
QATAR Mr. Kevin Cooper	ANS Advisor Qatar Civil Aviation Authority (QCAA) P.O. Box 73 Doha - QATAR
Mr. Mohammed Abdulaziz Y M Al-Muhamadi	SATCO QCAA / AN Civil Aviation Authority P.O. Box 60267 Doha – QATAR
Mr. Yousuf Saleh A S Al-Mohannadi	ATCO Air Navigation Civil Aviation Authority P.O. Box 60267 Doha – QATAR

NAME	TITLE
SAUDI ARABIA Engr. Ahmad Amireh	Airspace Supervisor, Airspace Management & Planning, ATM Saudi Air Navigation Services (SANS) P.O. Box 15441 Jeddah 21444 - KINGDOM OF SAUDI ARABIA
Mr. Alwaleed Abdulaziz Alenezi	ATS Manager General Civil Aviation Authority (GACA) Riyadh 11483 - KINGDOM OF SAUDI ARABIA
UNITED ARAB EMIRATES Mr. Ahmed Al Jallaf	Assistant Director General Air Navigation Services Sheikh Zayed Air Navigation Services Centre GCAA P.O. Box 666 Abu Dhabi - UNITED ARAB EMIRATES
Mr. Hamad Al Belushi	Air Navigation Services Specialist Sheikh Zayed Air Navigation Services Centre GCAA P.O. Box 666 Abu Dhabi - UNITED ARAB EMIRATES
Mr. Omar Abdouli	Manager Air Traffic Control Sheikh Zayed Air Navigation Services Centre GCAA P.O. Box 666 Abu Dhabi - UNITED ARAB EMIRATES
UNITED STATES OF AMERICA Mr. Robert Roxbrough	Senior Representative - Abu Dhabi Office of International Affairs Federal Aviation Administration (FAA), Embassies Embassies District (Airport Rd) St. #4 Abu Dhabi 09825 - UNITED ARAB EMIRATES

NAME	TITLE
ORGANIZATIONS/INDUSTRIES	
ACAO	
Mr. Mohamed Rejeb	ACAO Air Navigation and Aviation Safety Expert Arab Civil Aviation Organization 20 Ait Ba amran Mohammed VI Street P.O. 5025 Souissi Rabat - MOROCCO
EUROCONTROL	
Mr. Alberto Perdones	Airspace Design Expert EUROCONTROL, Network Management Directorate, ACD/OPL/DES 96 Rue de la Fusée 1130 Brussels - BELGIUM
Mr. Keith Crawford	Senior ATFCM Expert EUROCONTROL, Network Management Directorate, ACD/OPL 96 Rue de la Fusée 1130 Brussels - BELGIUM
Mr. Tihomir Todorov	Head of Section Airspace Design EUROCONTROL, Network Management Directorate, ACD/OPL/DES 96 Rue de la Fusée 1130 Brussels - BELGIUM
IATA	
Mr. Jehad Faqir	Assistant Director Safety & Flight Operations International Air Transport Association (IATA), MENA King Abdallah II Street P.O. Box 940587 Amman 11194 – JORDAN
Ms. Sharron Caunt	Regional Director Safety & Flight Operations (Africa & Middle East) International Air Transport Association (IATA) King Hussain Business Park, Building 8 P.O. Box 940587 Amman 11194 - JORDAN

NAME	TITLE
Ms. Zainab Khudhair	Manager, Safety and Flight Operation - ATM Infrastructure International Air Transport Association (IATA) MENA King Hussain Business Park, Building 8 P.O. Box 940587 Amman 11194 - JORDAN
MIDRMA Mr. Fareed Abdulla AlAlawi	MIDRMA Manager MIDRMA P.O. Box 50486 HIDD KINGDOM OF BAHRAIN
Mr. Fathi Ebrahim AlThawadi	MIDRMA Officer MIDRMA P.O. Box 50486 HIDD KINGDOM OF BAHRAIN
ICAO EUR/NAT Mr. Sven Halle	Regional Officer - ICAO EUR/NAT Office 3bis, Villa Emile Bergenat F-92522 NEUILLY-S-SEINE Paris - FRANCE
ICAO MID Mr. Elie El Khoury	Regional Officer, Air Traffic Management/Search and Rescue (ATM/SAR) Middle East Regional Office Ministry of Civil Aviation Complex Airport Road Cairo – EGYPT

- END -