INTERNATIONAL CIVIL AVIATION ORGANIZATION

THE MIDDLE EAST AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP (MIDANPIRG)

REPORT OF THE SEVENTH MEETING OF ATM/SAR/AIS SUB-GROUP

Cairo, 11 –14 October 2004

The views expressed in this Report should be taken as those of the MIDANPIRG ATM/SAR/AIS 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

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PART I – HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1 The Seventh Meeting of the MIDANPIRG ATM/SAR/AIS Sub-Group (ATM/SAR/AIS SG/7) was held at the meeting room of the ICAO Middle East Regional Office, Cairo, from 11 –14 October 2004.

2. OPENING

2.1 The meeting was officially opened by Mr. A. Zerhouni, ICAO Regional Director, Middle East Regional Office, Cairo who welcomed the delegates and wished them a successful meeting. He pointed out that the ATM/SAR/AIS Sub-Group has a very important role to play within the framework of the MIDANPIRG planning mechanism and, in particular, in the implementation of the CNS/ATM plan. He expressed his confidence in the Sub-Group in guiding the region for an evolutionary transition towards the implementation of the global ATM operational concept, which has been endorsed, by the 11th Air Navigation Conference and 35th ICAO Assembly meeting.

2.1.1 Mr. A. Zerhouni once again reiterated his appreciation to the UAE for supporting the activities of the Middle East Central Monitoring Agency (MECMA) and the significant progress which has been achieved through that mechanism. He informed the meeting on follow-up action being taken with a view to establish an autonomous MID Regional Monitoring Agency (RMA) for taking over the duties and responsibilities from MECMA. He also indicated that a MID Forum, hosted by Bahrain, is being established. He finally apprised the meeting of the nomination of Mr. M. Khonji to the post of ICAO Regional Director with effect from 1 January 2005 and wished him good luck.

2.2 Mr. Hamad M. Alaufi, Manager of ATS Planning, Presidency of Civil Aviation, Saudi Arabia, the Chairman of the Sub-Group and Mr. M. Khonji, Deputy Regional Director, ICAO Middle East Office, also addressed the meeting and wished the participants a fruitful meeting.

3. ATTENDANCE

3.1 The meeting was attended by a total of forty three participants from ten States (Bahrain, Egypt, Iraq, Jordan, Kuwait, Oman, Saudi Arabia, UAE, United States and Yemen) and one Organization (IATA). The list of participants is at **Appendix A** to the report**.**

4. OFFICERS AND SECRETARIAT

4.1 The meeting was Chaired by Mr. Hamad M. Alaufi, Manager of ATS Planning, Presidency of Civil Aviation, Saudi Arabia. Mr. D. Ramdoyal, Regional Officer for Air Traffic Management and Search and Rescue (RO/ATM/SAR) from the ICAO Middle East Cairo Office, was Secretary of the meeting, assisted by Mr. M Smaoui, Regional Officer Aeronautical Information and Charts (RO/AIS/MAP) and supported by Mr. M. Khonji, the Deputy Regional Director.

5. LANGUAGE

5.1 The discussions were conducted in English. Documentation was issued in English.

6. AGENDA

6.1 The following Agenda was adopted:

Item 1: Follow-up of Decisions and Conclusions of MIDANPIRG/8 addressing the ATM/SAR and AIS/MAP Fields

Item 2: Update on activities in the ATM/SAR fields

2.1: Review of requirements of the MID ATS route network.

2.2: Review of report of the RNP/RNAV Task Force/7

2.3: Review of report of the RVSM Task Force/11

2.4: Review of report of the Regional ATS Analysis Task Force/3

2.5 Allocation of ICAO five-letter name-code designators (5LNCDs)

2.6 Status of implementation of ICAO provisions in the search and rescue (SAR) fields

Item 3: Review of the report of the AIS/MAP TF/2 meeting.

Item 4: Review of air navigation deficiencies in the ATM/SAR and AIS/MAP fields.

Item 5: Any other business.

7. CONCLUSIONS AND DECISIONS – DEFINITION

7.1 All MIDANPIRG Sub-Groups and Task Forces record their actions in the form of Conclusions and Decisions with the following significance:

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

b) **Decisions** deal with matters of concern only to the MIDANPIRG and its contributory bodies

8. LIST OF DRAFT CONCLUSIONS AND DRAFT DECISIONS

DRAFT DECISION 7/1:	AMENDMENT TO THE MID BASIC ANP
DRAFT CONCLUSION 7/2:	AIRSPACE REORGANIZATION
DRAFT DECISION 7/3:	EXTENSION OF ATS ROUTE N/UN764 BETWEEN SANAÁ AND MUMBAI FIRS
DRAFT CONCLUSION 7/4:	RNAV/RNP IMPLEMENTATION STRATEGY FOR THE MID REGION
DRAFT CONCLUSION 7/5:	ESTABLISHMENT OF A REGIONAL SAFETY AND MONITORING AGENCY IN THE MID REGION
DRAFT CONCLUSION 7/6:	IMPLEMENTATION OF P-RNAV
DRAFT CONCLUSION 7/7:	IMPLEMENTATION OF THE ATS SAFETY MANAGEMENT PROGRAMMES IN THE MID REGION
DRAFT CONCLUSION 7/8:	SAFETY ASSESSMENTS AND MONITORING REQUIREMENTS IN RESPECT OF P-RNAV

PART II – REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1: FOLLOW-UP OF MIDANPIRG/8 CONCLUSIONS/DECISIONS IN THE ATM/SAR/AIS FIELDS

1.1 Under this agenda item, the meeting was apprised of status of implementation of conclusions and decisions emanating from MIDANPIRG/8 Meeting (Cairo, 11- 14 October 2004). It was noted that MIDANPIRG/8 formulated 21 Conclusions and 7 Decisions relating to the ATM/SAR/AIS fields. It was recalled that ATM/SAR/AIS Sub-Group is accordingly charged to follow-up on the implementation process and inform MIDANPIRG on progress achieved and problems being encountered. The status of implementation/follow-up action is at **Appendix 1A** to the report on Agenda Item 1.

ATM/SAR/AIS SG/7
Appendix 1A to the Report on Agenda Item 1

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
CONCLUSION 8/10: TRAFFIC ORIENTATION SCHEME WITHIN CAIRO FIR *That, In view of the concerns raised by users on the traffic orientation scheme implemented within Cairo FIR, the matter be progressed, initially through informal meetings, between the parties concerned.*	On-going	Informal meeting was organized with National Air Navigation Services Company (NANSC) and approval is being sought from military authorities regarding some of the requirements
DECISION 8/11: ALLOCATION OF FIVE-LETTER NAME-CODES *That, with a view to facilitate the selection and allocation of five-letter name-codes to MID States for the designation of reporting points, the Secretariat coordinates with the ICAO Paris Office to enable the MID Region to use the ICAO Five-Letter Name Code and Route Designator (ICARD) System.*	Middle East Region database updated and to be forwarded to ICAO Paris Office	- States to review and forward changes to the draft ASAP. - To be operational before end of 2004 and States will have password access to the database
CONCLUSION 8/12: ESTABLISHMENT OF A REGIONAL SAFETY AND MONITORING AGENCY *That,* *a) the task of monitoring safety in conjunction with implementation of RVSM in the Middle East Region be assigned to a Central Monitoring Agency;* *b) the monitoring agency, referred to as the Middle East Central Monitoring Agency (MECMA), will be established and staffed by the United Arab Emirates' General Civil Aviation Authority (UAE-GCAA) based at the Head Office in Abu Dhabi; and* c) *the Terms of Reference of MECMA be amended as indicated at Appendix 6F to the report on Agenda Item 6, to include additional tasks for carrying out safety and airspace monitoring in respect of RNP/RNAV implementation*.	a) To be addressed within the framework of MIDANPIRG b) Note: Support from UAE not available WEF 1 June 2004	- MMS/2 meeting (Bahrain 19-21 September 2004) addressed the issue. - Considerations being given for the establishment of an autonomous MID RMA. Modalities to be worked out - ATM/SAR/AIS SG/7 reviewed the conclusion - New draft TOR prepared by ATM/SAR/AIS SG/7 meeting

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
CONCLUSION 8/13: ***IMPLEMENTATION OF THE ATS SAFETY MANAGEMENT PROGRAMMES IN THE MID REGION*** *That,* *a) In accordance with the provisions of Annex 11(Chapter 2 paragraph 2.26), States shall implement systematic and appropriate ATS safety management programme with a view to ensure that,* *i) the established level of safety applicable to the provision of ATS within an airspace or at an aerodrome is met; and* *ii) safety-related enhancements be implemented whenever necessary;* b) *with a view to ensure that the activities necessary for the implementation of safety management programmes be carried out in a timely manner, adequate budgetary provisions be made by States;* c) *sustained cooperation and co-ordination with adjacent States/service providers be made in the process; and* d) *States explore ways and means of establishing a mechanism for setting up the standards, monitoring requirements and criteria for the regional implementation of ATS safety management programme and MECMA be invited to play a leading role in the process.*	On-going activity	Conclusion has been reviewed by the ATM/SAR/AIS SG/7
DECISION 8/14: ***TERMS OF REFERENCE, AND WORK PROGRAMME OF THE ATS INCIDENT ANALYSIS TASK FORCE*** *That the revised Terms of Reference and Work Programme at* ***Appendix 6G*** *to the report on Agenda Item 6 be adopted for the ATS Incident Analysis Task Force.*	Already endorsed by MIDANPIRG/8-*Note: Proposal for the discontinuation of the Task Force being proposed to MIDANPIRG for consideration*	- Conclusion reviewed by the ATM/SAR/AIS SG/7.

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
CONCLUSION 8/15: METHODOLOGY FOR THE REPORTING AND ANALYSIS OF ATS INCIDENTS. *That,* *a) The methodology indicated at **Appendix 6H** to the report on Agenda Item 6 be adopted for the reporting and analysis of ATS incidents in the region;* *b) With a view to simplify and facilitate the reporting of ATS incidents to consolidate the IATA database, States/service providers use the simplified ATC Incident Reporting form at **Appendix 6I** to the report on Agenda Item 6 for the reporting of data;* *c) States explore ways and means of establishing a non-punitive system for prompting ATCs to report any incident or situation which might have an impact on the safety of air navigation in the region and an awareness programme be initiated, highlighting the objectives and nature of the process; and* d) *States accord high priority any incident attributed to human factors, in particular, taking into account the new CNS/ATM human–machine automated environment.*	- Already endorsed by MIDANPIRG/8 - Clarifications sought by ICAO Council and the Air Navigation Commission regarding its impact on the provisions of Annex 13 and PANS-ATM Doc 4444	- Lack of significant inputs from States - Reviewed by the third meeting of the ATS Incident Analysis Task Force (AIA TF/3) and new methodology being proposed However, ATM/SAR/AIS SG/7 has proposed the discontinuation of the Task Force
CONCLUSION 8/16: ATC PROFICIENCY *That States, with a view to ensure that the level and quality of services are maintained, be invited, through their safety management programme, to evaluate and identify the requirement for ATC refresher courses, including English language training for Air Traffic Controllers.*	On-going activity	
DECISION 8/17: AIR-GROUND COMMUNICATIONS PROBLEMS That taking into account the number of recurring incidents attributed to poor air-ground communication problems in the region, the matter be addressed within the framework of the CNS/MET Sub-Group. "Except when operating wholly within an FIR for which a	On-going activity	

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
State responsible has notified in its AIP or by NOTAM that these requirements do not apply**".**		
DECISION 8/18: ***SURVEY ON THE IMPLEMENTATION OF ACAS II IN THE MID REGION*** That, a survey be carried out by the Secretariat on the implementation status of ACAS II in the MID Region.	On-going	Overtaken by events
CONCLUSION 8/19: ***THE DEVELOPMENT AND PROMULGATION OF CONTINGENCY PLANS*** *That,* *a) In accordance with the provisions of Annexes 11 and 15, States develop and promulgate contingency plans;* *b) Such contingency plans be developed with the assistance of ICAO as necessary, in close coordination with the air traffic services authorities responsible for the provision of services in adjacent portions of airspace and with airspace users concerned.*	To follow-up On-going	Most States do have contingency plans
CONCLUSION 8/20: ***ENDORSEMENT OF GUIDANCE MATERIALS DEVELOPED WITHIN THE FRAMEWORK OF THE RVSM TASK FORCE*** *That, States use the provisions of the ATC, Operations/Airworthiness Manuals and the RVSM Model Safety Plan developed within the framework of the RVSM Task Force for regional application and in the development of their own Manuals/Procedures.*	Endorsed by MIDANPIRG/8 Completed	

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
Conclusion 8/21: Amendment to the MID ATS Route Network *That, taking into account the fact that the safety assessment for the implementation of RVSM in the MID Region has been built on the existing ATS route structure, States adopt a conservative approach while carrying out major change(s) to the MID ATS route network and it be coordinated with MECMA.*	On-going activity	Still effective
CONCLUSION 8/22: COORDINATION PROBLEMS OVER THE RED SEA AREA *That,* *a) with effect from 27 November 2003, the procedures developed at ***Appendix 6K** to the report on Agenda Item 6, be followed by all uncoordinated flights operating over the Red Sea;* *b) States concerned publish an AIP Supplement as soon as possible, and no later than 30 October 2003 for the promulgation of these procedures;* *c) IATA ensures that concerned operators are fully conversant with these procedures; and* *d) State/military aircraft when flying under "Due Regard" over the Red Sea be informed of the procedures to be followed by Civil Uncoordinated Flights and be requested to take into account the restrictions applicable within RVSM airspace.* *Note:* Procedures have been finalized through:* - *informal meeting(s)/ consultations by Egypt;* - *two meetings organized by the Arab Civil Aviation Commission (ACAC);* - *Sustained support from IATA;* - *RVSM Task Force; and* - Willingness of concerned States to find a solution to the problem in the interest of safety.	On-going activity	- Some non-adherence to agreed procedures have been reported - IATA requested to assist - AFI/MID Interface meeting in Nairobi *(30 November to 3 December 2004)* to address the issue

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
CONCLUSION 8/23: IMPLEMENTATION OF RVSM IN THE MID REGION *That,* *Having considered the issues listed under items a) through i), below, a reduced vertical separation minimum (RVSM) will be implemented on an exclusive basis between FL 290 and FL 410 on **27 November 2003 at 0200 UTC** within the Middle East Region*:* *a) operator readiness has been assessed through traffic sampling and is found to be sufficient for safe and efficient implementation of RVSM;* *b) the target level of safety (TLS) for technical risk of 2.5 x 10^{-9} fatal accidents per aircraft flight hour** has been met through application of an operational concept based on a structure of dual uni-directional RNP trunk routes with application of the semi-circular level allocation system as set out in Annex 2, Appendix 3;* *c) safety objectives for operational risk are satisfied through evaluation and mitigation measures associated with functional hazard assessments (FHA) carried out in conjunction with development and continued updating of national safety plans (NSP);* *d) A regional monitoring agency, MECMA, has been established, staffed and equipped to perform the required safety-related tasks;* *e) legal and regulatory measures have been taken by all States;* *f) guidance material for operations, airworthiness and air traffic management, including training, has been developed and issued;* *g) States within the MID RVSM Area have committed to complete all outstanding tasks in due time for implementation;* *h) operators have been given due notice through aeronautical information circulars (AIC) and AIP Supplements; and*	Implemented	RVSM post-implementation safety assessment still not been carried out

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
i) an awareness campaign has been developed and will be undertaken as a joint effort between States, ICAO and IATA. ** Except Kabul and Baghdad FIRs.* *** The Task Force applied a value of 1.25 x 10-9 as system performance specification to ensure continued satisfaction of TLS at least until the end of the decade, taking into account projected traffic growth.*		
CONCLUSION 8/24: DATA FOR SUSTAINED SAFETY ASSURANCE OF RNP AND RVSM WITHIN THE MID REGION *That, considering the on-going requirement for safety assurance related to RVSM and RNP operations within the Middle East Region,* *a) all States report data and incidents necessary for performing collision risk calculations required for sustained safe RVSM operations to MECMA. The data will include, but not necessarily be limited to:* *i) assigned altitude deviations of 300 ft or more (monthly);* *ii) total number of IFR movements (monthly);* *iii) average time per movement spent in the level band FL290 - FL410;* *iv) ATC/ATC coordination failures (monthly); and* *v) traffic data (as requested by MECMA);* *b) monitoring States report navigational errors and traffic data in accordance with the Letter of Agreement concerning monitoring associated with RNP;* *c) air operators maintain procedures for reporting of turbulence;* *d) States report data on approval of operators and aircraft for RVSM operations (monthly); and* e) *MECMA ensures that further processing and evaluation of this data within its Terms of Reference and identifies or develops methodologies for assessing risk associated with operational procedures prevailing within the MID Region.*	Awaiting the setting up of a MID RMA, States invited to forward reports to ICAO Regional Office	- In the absence of support from MECMA - No reports are being sent. - Need to follow-up on RVSM implementation within Baghdad and Kabul FIRs

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
CONCLUSION 8/25: INTEGRATED AERONAUTICAL INFORMATION PACKAGE *That, in accordance with ICAO provisions:* *a) States, not having done so, are urged to make their national AIP available in the new format without further delay; being aware that publication of the AIP in this restructured new format represents the first step towards the development of the electronic AIP;* *b) States note the vital importance for safety to keep the AIP up to date and are encouraged to issue AIP Amendments on a regular basis.* *c) States refrain from retaining NOTAMs, AIP Supplements or AICs in force for indefinite periods when the information contained therein would be more appropriate for inclusion in the AIP.* *d) at least "seven days" advance notice shall be given when NOTAMs are issued to activate an established danger, restricted or prohibited area or for airspace restrictions/reservation; and* e) *a monthly printed plain-language summary of NOTAM in force, including references to the latest AIP Amendments, checklists of AIP Supplements and AIC issued, is required to be prepared and forwarded by the most expeditious means to all recipients of the Integrated Aeronautical Information Package.*	Ongoing	Action by States
CONCLUSION 8/26: AIRAC SYSTEM *That, in accordance with Annex 15 and the MID Basic ANP Chapter VIII provisions:* *a) a schedule of AIRAC effective dates, publication dates and cut-off dates for the receipt by AIS of the raw information to be promulgated through the AIRAC system should be issued by means of AIC once a year and distributed to all services and agencies responsible for the origination of the raw information.*	Ongoing	Action by States

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
b) States take the necessary actions to improve coordination between AIS and other air navigation services providing aeronautical raw data, to ensure that: *i) the required information is supplied to the AIS as promptly and accurately as possible;* *ii) aeronautical information of operational significance reaches users at least 28 days in advance of the AIRAC effective date.* *Note:- information/data prepared in hard copy format shall be issued and distributed at least 56 days prior to effective date; and information/data provided in electronic format shall be issued and distributed at least 35 days prior to effective date.*		
CONCLUSION 8/27: NOTIFICATION OF DIFFERENCES *That, in accordance with Article 38 of the Convention on International Civil Aviation (Doc 7300), States which have not yet done so, notify ICAO of any differences, which may exist between their national regulations and ICAO provisions related to AIS/MAP and ensure that relevant information is also published under paragraph GEN 1.7 of their national AIP.*	Ongoing	Action by States
CONCLUSION 8/28: IMPLEMENTATION OF ICAO AERONAUTICAL CHARTS *That, in accordance with ICAO Annex 4 provisions, MID States not having done so, are urged to make the mandatory aeronautical charts available without further delay.*	Ongoing	Action by States
CONCLUSION 8/29: RESPONSIBILITY FOR THE PRODUCTION OF THE WORLD AERONAUTICAL CHART ? ICAO 1:1 000 000 (WAC) *That, the MID Regional Office:* *a) call the attention of MID States to the fact that MID Basic ANP and FASID did not assign any*	- Actioned	- Replies to State Letter (AN 8/1.2 – 235 dated 10/11/03) have been received from Iran and UAE. - A decision should be taken, pending a reply from Oman.

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
responsibility for the production of the World Aeronautical Chart ? ICAO 1:1 000 000 (WAC) sheets: 2548, 2563 and 2670; and *b) iInitiates consultations with States supposed to be covered by the aforementioned sheets with a view to identifying those States that could accept to produce these sheets and/or provide assistance to other States in this respect.*		
DECISION 8/30: USE OF "X" AND "XI" IN FASID TABLE AIS-5 AND AIS-6 *That, in order to make the difference between the requirements for planning purposes and the implementation status more clear, the Group agreed to adopt for FASID Tables AIS-5 (WGS-84 requirements) and FASID Table AIS-6 (Aeronautical charts requirements) the same technique adopted for the FASID table CNS-3, i.e. use: "X" for required and not implemented and "XI" for required and implemented.*	Completed	
DECISION 8/31: AIS/MAP TASK FORCE *That, the AIS/MAP Task Force be reactivated with revised Terms of Reference and Work Programme, as shown in Appendix 6L to the report on Agenda Item 6, to examine the Status of implementation of the ICAO requirements in the field of AIS/MAP and recommend action to be taken to overcome difficulties/deficiencies in that field with emphasis on AIS Automation and Quality Management Systems.*	Actioned	
CONCLUSION 8/32: PROPER STATUS OF AIS *That, in accordance with the MID Basic ANP Chapter VIII provisions, States are reminded of the requirement for ensuring that:* *a) AIS, which is a crucial component of the CNS/ATM system playing a critical supporting service role, is given proper status in their Administrations; and* *b) sufficient funds and trained personnel are made available to AIS.* *Note: investment in the improvement of AIS will contribute overall to increased aviation safety and performance.*	Ongoing	Action by States

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
CONCLUSION 8/33: AUTOMATION OF AERONAUTICAL INFORMATION SERVICES *That,* *a) a survey on automation of Aeronautical Information Services be carried out with a view to obtain information from MID States regarding to what extent automation is included within their Aeronautical Information Services;* *b) the results of this survey should serve as a basis for the development of an AIS/MAP Automation Plan for the MID Region;* *c) the AIS/MAP Task Force evaluate the level of AIS automation required for the MID Region; and* *d) the various experiences of MID States and other States from adjacent Regions in the field of AIS/MAP automation be taken into consideration in any regional approach to automation, pending the development of guidelines by ICAO regarding storage and exchange of electronic aeronautical information/data.*	- Actioned - Ongoing	Eleven (11) States among the fifteen MIDANPIRG provider States have responded to the questionnaire.
CONCLUSION 8/34: QUALITY SYSTEM *That in accordance with Annex 15 provisions, MID States, not having done so, are urged to take the necessary measures to implement a quality system within their Aeronautical Information Services, in conformity with the ISO 9000 series of standards.* *Note: The ISO 9000 series of quality management system provide a basic framework for the development of a quality management programme, which has to be formulated by each State and in most cases, is unique to the State organization.*	Ongoing	Action by States.
CONCLUSION 8/35: AIS/MAP SEMINAR IN THE MID REGION *That a Seminar be organized in the MID Region to address issues related to the latest developments in the field of AIS/MAP particularly AIS automation and Quality Systems.*	Ongoing	The Seminar is scheduled to be held in Cairo from 6 to 9 Dec 2004

FOLLOW-UP ACTION ON MIDANPIRG/8 CONCLUSIONS/DECISIONS		
CONCLUSIONS/DECISIONS	**STATUS**	**REMARKS**
CONCLUSION 8/36: WGS-84 IMPLEMENTATION IN THE MID REGION *That States:* *a) not having done so, are urged to achieve the total implementation of the WGS-84 System;* *b) use the ICAO uniform format (FASID Table AIS-5) for reporting the status of implementation of WGS-84; and* ***c)*** *report the status of implementation of WGS-84 on a regular basis until the system is fully implemented.*	Ongoing	Action by States.

ATM/SAR/AIS SG/7
Report on Agenda Item 2

REPORT ON AGENDA ITEM 2.1: REVIEW OF REQUIREMENTS OF THE MID ATS ROUTE NETWORK

2.1.1 Under this agenda item the Sub-Group reviewed the requirements of the MID ATS route network. It was noted that established procedures for the amendment of the MID Basic Air Navigation Plan were not followed for the implementation of some strategic routes. It was however pointed out that agreements were reached through informal meetings among States and users and the ICAO MID Office was kept apprised of developments. The meeting accordingly endorsed the changes and instructed the Secretariat to include the new requirements in the MID Basic ANP (See **Appendix 2A** to the report on the Agenda Item 2).

2.1.2 The Sub-Group recognized the urgency for the convening of an informal meeting under the aegis of ICAO, with a view to review the ATS route network between Amman, Damascus and Jeddah FIRs. The need for the creation of some additional parallel routes was expressed and the presence of the military authorities was considered essential to the success of the meeting.

2.1.3 The meeting also noted the requirements for the extension of some routes between Sana'a and Mumbai FIRs. The Secretariat was requested to coordinate these requirements through the ICAO Asia/PAC Office.

2.1.4 The meeting took advantage of the presence of the Iraqi delegation, to discuss coordination/communications problems between Baghdad FIR and other adjacent FIRs and to review/sign operational letters of agreement (LOAs) with adjacent ACCs. The meeting noted the proposed establishment of a parallel route network agreed within the framework of informal coordination meetings organized by ICAO. However, no significant progress was achieved due to the absence from the neighboring States.

2.1.5 Based on the foregoing the meeting accordingly framed the following draft Conclusions/ Decisions:

DRAFT DECISION 7/1: AMENDMENT TO THE MID BASIC ANP

That, the Secretariat initiates procedures for the harmonization of the MID Basic ANP and the inclusion of additional ATS route requirements in accordance with established procedures.

DRAFT CONCLUSION 7/2: AIRSPACE REORGANIZATION

That,

a) an informal meeting be organized under the aegis of ICAO to review the ATS route requirements between Amman, Damascus and Jeddah FIRs; and

b) military authorities from all concerned States be invited to attend the meeting.

DRAFT DECISION 7/3: EXTENSION OF ATS ROUTE N/UN764 BETWEEN SANAÁ AND MUMBAI FIRS

That, the Secretariat liaises with the ICAO Asia/PAC Office for coordinating the proposed extension of ATS route N/UN764 betweeen Sanaá and Mumbai FIRs as follows:

NOBSU 171554N 0431318E
RIYAN (RIN)
SOCATRA
SUHIL)
VUTAS) Mumbai FIR
P2)
DADAR)

2.1.6 The Sub-Group was also informed of the outcome of the informal discussions between the Egyptian authorities and IATA regarding user requirements within Cairo FIR. It noted the concerns of users regarding some choke points nearing saturation within Cairo FIR. It was pointed out that clearance from the military authorities will be sought for the implementation of the requirements and IATA will be informed accordingly.

2.1.7 The meeting also noted that the Egyptian authorities have endorsed the proposal by Eurocontrol (RNDSG) for an interchange of designators for segments of UL607 (EL DABA TO TANSA) and UL613 SITIA -ALEXANDRIA). This will harmonize the route designators within Cairo and Athens FIRs accordingly. It has been agreed that the Secretariat will coordinate through the ICAO Paris Office for effecting the proposed changes, on an agreed AIRAC cycle date, as follows:- UL613 will be used for segment EL DABA TO TANSA (3400.0N 02649.0E) and UL607 will be used for the segment SITIA - ALEXANDRIA.

REPORT ON AGENDA ITEM 2.2: REVIEW OF THE REPORT OF THE SEVENTH MEETING OF THE RNP/RNAV TASK FORCE

2.2.1 Under this agenda item the meeting reviewed the report of the Seventh Meeting of the RNP/RNAV Task Force which was held in Cairo from 10 – 12 May 2004. The Task Force accordingly reviewed and updated the MID Region RNP/RNAV implementation, taking into account the outcome of the 11th Air Navigation Conference and other regional developments, as follows:

DRAFT CONCLUSION 7/4: RNAV/RNP IMPLEMENTATION STRATEGY FOR THE MID REGION

That, the Phase 2 implementation strategy for the RNAV/RNP implementation in the MID Region be as follows:

a) the MID Region will establish RNAV/RNP areas instead of RNP/RNAV routes with a view to make maximum flexible use of the airspace;

b) the lower limit of the RNAV/RNP areas will be progressively reduced from FL285 to FL195, where feasible, taking into account VHF coverage capability and its incidence on the agreed target level of safety;

c) unidirectional routes will be established in lieu of the present bi-directional routing network with a view to introduce parallel/flexible routes in an RNP 5 environment;

d) plan for a smooth transition towards satellite-based air navigation taking into consideration the outcome of the 11th Air Navigation Conference; and

e) *the military authorities be involved in the planning process.*

2.2.2 The ATM/SAR/AIS Sub-Group endorsed the views of the RNP/RNAV TF/7 Task Force regarding the urgent need for the establishment of a central monitoring agency in order to take over the RNP related duties and responsibilities of MECMA. The revised draft Terms of Reference of the MID RMA is at **Appendix 2B** to the report on Agenda Item 2 accordingly endorsed the following draft Conclusion:

DRAFT CONCLUSION 7/5: ESTABLISHMENT OF A REGIONAL SAFETY AND MONITORING AGENCY IN THE MID REGION

That, as a matter of urgency, States consider the establishment of a regional monitoring mechanism for carrying out the activities from the Middle East Central Monitoring Agency (MECMA).

2.2.3 The meeting noted some inconsistencies regarding RNP as highlighted by the 11th Air Navigation Conference and that a study group named "Required Navigation Performance and Special Operational Requirements Study Group (RNPSORSG)" has been established by the ICAO Council with a view to urgently address and progress the issues associated with the introduction of RNAV and RNP.

2.2.3.1 Inconsistencies/further work were/was identified in the following fields:

i) need for reassessment of the merits of RNP concept in its application to various phases of flight and against future operational demands;

ii) need to review the definition of the RNP and its relationship with RNAV and separation standards;

iii) development of aircraft and operator approval criteria to ensure that there is a consistency between operational and functional requirements applied to the use of RNAV, RNP types and the definition of RNP airspace;

iv) harmonization of charting specifications for GNSS and RNP operations;

v) review of adequacy of technical SARPs for terrestrial navigation aids to support RNAV and RNP operations;

vi) development of guidance on testing of RNAV and RNP procedures;

vii) definition of the RNP and RNAV navigation infrastructure requirements; and

viii) development of material on NOTAMs, status monitoring and knowledge of aircraft performance in the RNP and RNAV environment.

2.2.4 The Sub-Group recalled that Precision Area Navigation (P-RNAV) is being progressively implemented in terminal airspace within the European Region (EUR) as an interim step towards RNP-1. Airworthiness and Operational approval criteria were published in JAA Temporary Guidance Leaflet No. 10 (TGL-10) in December 2000, while Regional Supplementary Procedures for P-RNAV were incorporated in ICAO Doc 7030 in 2003.

2.2.4.1 It was pointed out that P-RNAV application addresses navigation performance for track keeping accuracy but does not satisfy all aspects of the Required Navigation Performance (RNP) concept promulgated by ICAO in documents 9613 and 9650*(draft).* The European Region is expecting P-RNAV to be replaced by RNP/RNAV operations when approval criteria have been developed and met by a sufficiently high proportion of aircraft. Additionally, Eurocontrol has developed publications dealing with related operational and functional requirements and with the design of terminal airspace procedures for DME/DME- and GNSS-based area navigation.

2.2.4.2 The meeting took note of implementation strategies being followed in Europe regarding RNP and RNAV and agreed that whilst awaiting the necessary provisions regarding RNP1 approval criteria, States may, in the mean time, implement P-RNAV within some busy TMAs.

2.2.4.3 The meeting accordingly endorsed the following draft Conclusions of the RNP/RNAV Task Force:

DRAFT CONCLUSION 7/6: IMPLEMENTATION OF P-RNAV

Recognizing that, while ICAO approval criteria for RNP 1 will not be ready in time to meet the operational requirements of Middle East States and such regulatory criteria, along with guidance on procedure and airspace design, ATC training material and information material for various categories of operational staff has been issued in the European Region, that:

a) MID States are encouraged to introduce airworthiness and operational approval criteria equivalent to JAA TGL-10 in order that MID-based operators can benefit from P-RNAV procedures currently being implemented in Europe;

b) MID Regional Supplementary Procedures be updated to encompass provisions for introduction of P-RNAV. This provision should be framed in such a manner that States may proceed with implementation at a time and manner suited to their prevailing requirements;

c) MID States intending to implement P-RNAV provide prior notice through an Aeronautical Information Circular setting out the aircraft and operational approval criteria, RNAV procedure design principles and ATC operational procedures;

d) Operators be consulted and given the longest possible lead time when P-RNAV is to be implemented ; and

e) *P-RNAV be superseded by RNP 1 after publication of SARPs, PANS and harmonized guidance material by ICAO.*

2.2.4.4 The meeting highlighted the need for carrying out safety assessments prior to implementing P-RNAV and RNP 1 in the region. It also stressed the need for the establishment of a regional mechanism for safety assessments in support of safety management programmes.

2.2.4.5 The meeting also recalled the requirements for the implementation of safety management programmes (SMS) in the MID Region which was endorsed by MIDANPIRG/8 meeting and taking into account the fact that MECMA is no longer supporting the activities of the MID RMA with effect from 1 June 2004, it accordingly amended the Conclusion as follows:

DRAFT CONCLUSION 7/7: IMPLEMENTATION OF THE ATS SAFETY MANAGEMENT PROGRAMMES IN THE MID REGION

That,

a) In accordance with the provisions of Annex 11(Chapter 2 paragraph 2.26), States shall implement systematic and appropriate ATS safety management programme (SMS) with a view to ensure that,

i) *the established level of safety applicable to the provision of ATS within an airspace or at an aerodrome is met; and*

ii) safety-related enhancements be implemented whenever necessary;

b) *with a view to ensure that the activities necessary for the implementation of safety management programmes be carried out in a timely manner, adequate budgetary provisions be made ;*

c) *sustained cooperation and co-ordination with adjacent States/service providers be made in the process; and*

d) *States explore ways and means of establishing a mechanism for setting up the standards, monitoring requirements and criteria for the regional implementation of ATS safety management programmes*.

2.2.4.6 The following draft Conclusion from the RNP/RNAV Task Force was also endorsed:

DRAFT CONCLUSION 7/8: SAFETY ASSESSMENTS AND MONITORING REQUIREMENTS IN RESPECT OF P-RNAV AND RNP 1 IMPLEMENTATION

That, States intending to implement P-RNAV and RNP 1 within TMAs in the MID Region, take appropriate steps for ensuring that implementation is supported by conclusive safety assessments and proper monitoring mechanism be established.

2.2.5 The Sub-Group expressed its appreciation to MECMA for carrying out safety assessments regarding implementation/post-implementation of RNP 5 in the MID Region. It agreed that, taking into account the number of flights which have been monitored, the region has gained enough confidence on the reliability/maturity of the system established, the monitoring mechanism established by MECMA may be discontinued. It accordingly endorsed the following draft Conclusion:

DRAFT CONCLUSION 7/9: MONITORING REQUIREMENTS IN RESPECT OF RNP 5

That,

a) *taking into account, conclusive reports from MECMA indicating that the region has gained enough confidence on the reliability/maturity of the system established for the safe implementation and post-implementation of RNP 5 in the MID region, the monitoring mechanism as established by MECMA be discontinued; and*

b) *the discontinuation of the monitoring mechanism for RNP 5 established by MECMA does not absolve States of their responsibilities in ensuring that, within the framework of safety management programmes, appropriate measures are taken for ensuring that:*

i) *the agreed level of safety is met and continues to be met; and*

ii) *prompt remedial actions be taken in case any adverse trend is noted.*

2.2.6 The meeting also expressed the need for the establishment of RNAV SIDs ands STARs in the region and formulated the following draft Conclusion:

DRAFT CONCLUSION 7/10: ESTABLISHMENT OF RNAV SIDS AND STARS IN THE MID REGION

That, in accordance with the requirements of the MID CNS/ATM implementation plan, States develop RNAV SIDS and STARS.

REPORT ON AGENDA ITEM 2.3: REVIEW OF REPORT OF THE ELEVENTH MEETING OF THE RVSM TASK FORCE

Monitoring requirements

2.3.1 The Sub-Group recalled the requirements for system performance monitoring to ensure that implementation and continued operation of RVSM meets the safety objectives. It was pointed out that monitoring of aircraft height-keeping performance is demanding, particularly as regards estimation of aircraft altimetry system error (ASE). While discussion of height-keeping performance monitoring considers both the technical requirements for a monitoring system and the application of monitoring before and after RVSM implementation in an airspace, the need for obtaining sufficient data on ASE to permit calculation of the vertical overlap probability, Pz(1000), with the required level of confidence was highlighted.

2.3.2 It was emphasized that the objectives for aircraft height-keeping performance stated in Doc 9574 are applicable to both the pre- and post-implementation phases. In general, however, evidence of ASE stability would not normally be expected to be a product of the pre-implementation phase monitoring as this is a long-term consideration.

2.3.3 The continued requirement for *Initial Monitoring* as new operators are formed within the region or extra-regional operators without RVSM experience wish to commence operations into MID RVSM airspace was highlighted. It was agreed that, all new operators that intend to operate in the airspace were RVSM is applied are required to participate in the monitoring programme.

2.3.4 The Sub-Group recalled ICAO HQ State Letter Ref. AN 13/13.1-04/71 dated 30 June 2004 concerning a proposal for amendment to Annex 6, Parts I and II and Annex 11 concerning height-keeping performance and height-monitoring requirements associated with reduced vertical separation, which will become applicable on **24 November 2005**, the same height-keeping performance criteria to be applicable on a global basis when issuing approvals, have been proposed with a view to ensure standardization.

2.3.4.1 The proposed amendment to Annex 11 reads as follows:

> *" For all airspace where a reduced vertical separation minimum of 300 m (1000ft) is applied between FL 290 and FL410 inclusive, a programme will be instituted, on a regional basis, for monitoring the height-keeping performance of aircraft operating at these levels, in order to ensure that the implementation and continued application of this vertical separation minimum meets the safety objectives. The coverage of height-keeping facilities provided under this programme shall be adequate to permit monitoring of the relevant aircraft types of all operators who operate in RVSM airspace.*
>
> *Note.- The number of separate monitoring programmes should be restricted to the minimum necessary to effectively provide the required services for the region*
>
> *Arrangements shall be put in place, through inter-regional agreement, for the sharing between regions of data from monitoring programmes."*

2.3.5 Based on the foregoing, the Sub-Group accordingly adopted the following draft Conclusions on the understanding that a new mechanism will be established for taking over the duties and responsibilities from MECMA:

DRAFT CONCLUSION 7/11: REQUIREMENTS FOR MONITORING

That,

a) operators having met the monitoring requirements as tabulated in ***Appendix 2C*** *to the report on Agenda Item 2 for a given fleet/type of aircraft will be accepted as having satisfied the requirements for the Middle East Region. In case of Middle East operators, documentation for monitoring shall be provided to the MID Regional Monitoring Agency;*

b) for non-MID operators, about whose approval status doubt exist, documentation for monitoring shall be provided to the Regional Monitoring Agency; and

c) the Regional Monitoring Agency will update the table in the light of data and experience gained in other Regions.

Note: With effect from 1 June 2004, MECMA is no longer supporting the activities of the MID Regional Monitoring Agency (MID RMA) and MIDANPIRG Member States have agreed, in principle, for the setting up of an autonomous regional mechanism to carry out the tasks assigned to MECMA.

DRAFT CONCLUSION 7/12: MONITORING OF SAFETY IN THE MID REGION

That,

a) Having considered the requirements set out in Annex 11, Doc 9574, Doc 9613, the draft SMS manual for ATS and the draft RMA Handbook, concerning various forms of monitoring, namely:

i) *system performance monitoring is necessary to ensure that the implementation and continued operation of RVSM meet the safety objectives;*

ii) *navigation performance monitoring is required to ensure safety objectives are met in the implementation and continued operation of RNP/RNAV; and*

iii) *States are required to carry out continuous monitoring and regular assessment of the safety level achieved in conjunction with implementation of ATS safety management (SMS).*

b) Noting ICAO policy that States be assisted in meeting their responsibilities based, on or related to, monitoring and assessment by a regional monitoring agency (RMA), whose tasking, inter alia, shall include collection and analysis and compilation of data necessary for identification of hazards and trends in safety;

c) safety-related requirements be addressed through establishment of an RMA with personnel possessing the technical skills and experience to, carry out the main functions summarized under items i) through iii) above.

Apparent False filings – *Update from MECMA*

2.3.6 The Sub-Group recalled that one of MECMA's responsibilities is to "… provide the means for identifying non-RVSM approved operators using Middle East airspace where RVSM is applied; and notifying the appropriate State approval authority". This task is given to ensure that application of RVSM within MID RVSM airspace is limited to aircraft and operators actually having been granted the necessary approvals by their State authorities. It was thus pointed out that application of RVSM to an aircraft pair, where either or both aircraft do not hold the required approvals, constitutes a technical loss of separation. Consequently, checking of flight plans with letter **W** capability indicator in Item 10 against the approvals database is necessary to ensure the integrity of flight plan data upon which Middle East providers of air traffic services base their procedures.

2.3.6.1 It was noted that since RVSM was implemented on 27 November 2003, MECMA has received only one query concerning approval status of operators. This may be interpreted as being indicative of a faith in the correctness of flight data submitted by operators that unfortunately appears to be unwarranted.

2.3.6.2 The Sub-Group noted that in the absence of queries from the States, MECMA carried out a check of flight plans for flights within the Emirates FIR (OMAE) with the "W" capability indicator in Item 10 against the RVSM approvals registry. The survey encompasses 67, 687 flights, of which 2,161 (3.19%) cannot be confirmed as being RVSM-approved based on the contents of the RVSM registry. This percentage is ten times higher than that obtained through a similar survey in the European Region after the first few months of RVSM operations and casts serious doubts on the safety assurance measures associated with MID RVSM.

2.3.6.3 The Sub-Group was of the view that, either the RVSM approvals registry is incomplete, resulting in flights being included in the list, although operator and aircraft actually are approved; or o*perators are erroneously filing flight plans with the RVSM qualifier "W" in item 10.*

2.3.6.4 Notwithstanding repeated pleas from MECMA, provision of information to the approvals registry has been inadequate. It is, therefore, likely that some of the flights registered as being falsely filed as RVSM capable actually had the required approvals.

2.3.6.5 It noted that 82% of the 2,161 flights being listed as having falsely filed flight plans as being RVSM compliant were operated by agencies registered in States cognizant to other RMAs. However, as MECMA is exchanging data with other RMAs on a regular basis, this type of discrepancies indicate a more widespread problem.

2.3.6.6 The Sub-Group shared the concerns of the Task Force and noted that a survey of flight planning carried out by MECMA revealed a widespread lack of adherence to ICAO standards and procedures, manifested in:

- late filing of FPL
- no filing of FPL
- use of incorrect aircraft type designators
- incorrect procedures for filing of changes to FPL
- duplicate filing of FPL
- incorrect addressing of FPL

2.3.6.7 These deficiencies are hampering ATC units in carrying out their tasks of ensuring that correct separation minima are applied within RVSM airspace. It is clear that serious questions exist with regards to the integrity of the basis upon which access to RVSM airspace is granted and MECMA is in the process of ascertaining the approval status of operators and aircraft. However, the effectiveness of this process hinges on several conditions:

2.3.6.8 It was also agreed that, to the extent that queries are not resolved with conclusive and positive responses, it is essential that flights by operators, for which doubt exists, be excluded from access to RVSM airspace.

2.3.6.9 The traffic sample of 67,687 flights was obtained from a single FIR (Emirates) and it is probable that other non-conformances exist for flights / operators not navigating within the surveyed airspace. To ensure compliance, traffic samples from all MID RVSM States will be required.

2.3.6.10 The Sub-Group accordingly endorsed the following draft Conclusions and emphasized the urgent need for the establishment of a regional mechanism to take over the duties and responsibilities from MECMA:

DRAFT CONCLUSION 7/13: PROVISION OF UP-TO-DATE INFORMATION TO THE MID RVSM APPROVALS REGISTRY.

*That, considering the requirement for a correct and up-to-date registry of RVSM approvals of operators and aircraft in the on-going safety efforts related to RVSM operations within the Middle East Region; States are reminded to provide the *MID RMA regular updates to the regional database of operator and aircraft approvals.*

**Being established*

DRAFT CONCLUSION 7/14: EXCLUSION FROM MID RVSM AIRSPACE OF AIRCRAFT AND OPERATORS NOT REGISTERED AS BEING RVSM APPROVED.

That, considering the on-going requirement for safety assurance related to RVSM operations within the Middle East Region:

a) Operators for whom positive approval data has not been received, be excluded from MID RVSM airspace with immediate effect until approval status, supported by data from an approved monitoring service provider, has been received; and

b) MID RVSM provider States, States of Registry and adjacent RMAs be informed about the exclusion.

DRAFT CONCLUSION 7/15: REGION-WIDE TRAFFIC SAMPLE AS BASIS FOR FOLLOW-UP AGAINST INCORRECT FLIGHT PLAN FILING

That, considering the need to identify operators who are filing flight plans incorrectly indicating RVSM approval status, traffic samples from all MID RVSM States will be required as the basis for a survey and regulatory action against fraudulent filing of flight plans.

ATC OPERATIONS ASPECTS

Proper handling of flight plans

2.3.7 The meeting noted the concerns of the users regarding delays in the processing/transmission of flight plans and highlighted that there is an urgent need to ensure that flight plans are properly filed and transmitted over the AFTN. It was noted that most of the time the problem is related to human factors, where improper addressees are being typed or typing errors at the level of manual processing systems, resulting in rejection of the flight plan at the level of automated systems.

2.3.7.1 The meeting was also informed that some FDPS systems, outside the MID Region, cannot accept more than 7 to 8 characters in item 10 of the flight plan and RVSM status, letter **W** is often chopped off. This results in treating those flights as non-RVSM approved in the MID Region and aircraft are often instructed to descent below RVSM flight levels.

Reliability of AFTN systems

2.3.8 The meeting was informed that many flight plans do not reach their destinations. In addition to the need for using proper addressees, transmission delays/outages have also been noted. The need to carry out a survey on the reliability and serviceability of the AFTN system in the MID Region was highlighted.

Uncoordinated flights over the Red Sea

2.3.9 The meeting expressed concerns that, up to now, problems concerning uncoordinated flights over the Red Sea are still not resolved. It was pointed out that the agreed procedures which were endorsed by MIDANPIRG/8 and the ICAO Council are systematically not being followed by some flights over-flying the Red Sea area, thus having a negative impact on the safety of aircraft in the region, in particular, within the Jeddah and Sana'a FIRs. It was recalled that IATA has been requested to assist in ensuring that all operators are fully conversant with these procedures.

2.3.9.1 The meeting requested IATA and ICAO to assist in the process as the present situation presents a major risk to the safety of air navigation and urgent remedial action should be taken. The need for informing all operators flying over the Red Sea area of the inherent risks of encountering flights at uncoordinated flight levels was also highlighted. Even the safe implementation of RVSM is being questioned in this environment. The Sub-Group was informed that an informal AFI/MID interface meeting is being organized under the aegis of ICAO in Nairobi, from 30 November to 3 December 2004, and will address some of the issues being raised.

Outcome of the Second MIDANPIRG Member States Meeting, (Bahrain, 19 – 21 September 2004)
Proposal for the establishment of an autonomous MID Regional Monitoring Agency (MID RMA)

2.3.10 The meeting noted that the RVSM Task Force also shared the concerns of the of the Air Navigation Commission and the ICAO Council over the decision by the UAE to stop supporting, solely, the activities of MECMA with effect from 1 June 2004 and proposed some options for consideration by States. It was pointed out that in the absence of a Regional Monitoring Agency, many regional activities regarding RVSM implementation/post-implementation, RNP/RNAV implementation strategy and establishment of safety management programmes have been delayed due to lack of regional expertise. Although it was recognized that it is a State responsibility to ensure that the target level of safety is not infringed, ICAO was requested to assist in finding a long-lasting solution to this problem.

2.3.10.1 It was noted that MIDANPIRG Member States (MMS) have been approached over the issue and several ways and means have been being explored to establish a self-funding mechanism for the MID Region which will take over the responsibilities of MECMA. To that effect, the Task Force proposed the following options for consideration by MIDANPIRG Members and the respective DGCA Executives.

2.3.10.2 The Sub-Group noted with appreciation the initiative by the ICAO Middle East office to have the matter discussed within the framework of the MIDANPIRG Member States Meeting (MMS/2) which was hosted by Bahrain from 19 –21 September 2004. The Sub-Group endorsed the proposal for the creation of an autonomous authority to take over the duties and responsibilities of MECMA. The following recommendations from the MMS/2 meeting was noted and fully endorsed:

Recommendation 1: Scope of RMA

That the initial scope of the RMA will be limited to:

a) RVSM

i) Pre-implementation safety assessment –Afghanistan and Iraq *(Note: separate funding required);*

ii) Post-implementation safety assurance

b) RNP

i) RNP5

ii) P-RNAV/RNP1

c) Safety Management Systems (SMS)

Recommendation 2: Management of RMA

That the MID RMA will be an autonomous body managed by a board comprised of only one member of each of the Participating States and will report to MIDANPIRG.

Recommendation 3: Administrative arrangements

ICAO Middle East Office will oversee the functioning of the RMA.

Recommendation 4: Methodology

Work will be subcontracted to suitably qualified and experienced companies and/or organizations for periods ensuring adaptability to new operational developments and stability in provision of services.

Recommendation 5: Funding (Option 1 – A)

That funding of the MID RMA will be achieved by Participating States sharing equally the cost of establishing and operating the RMA.

Recommendation 6: Funding (Option 1 – B)

With a view to cover the cost of establishing and operating the RMA, that funding of the MID RMA will be achieved by:

i) Participating States contributing an annual fee; and

ii) Participating States collecting a surcharge per FIR flight for monthly remittance to the ***RMA Fund Management Office.***

Recommendation 7: A special multidisciplinary coordination meeting, to be hosted by the Kingdom of Bahrain, be organized as soon as possible under the aegis of ICAO, with a view to finalize the modalities of the arrangements for the funding and operation of the MID RMA and outside expertise be sought from other adjacent regions/RMAs.

2.3.10.3 The meeting noted the concerns of IATA regarding the funding modalities being proposed for the establishment of the MID RMA and the fact that they were not invited to the meeting. It was clarified that at this stage of the discussions only MIDANPIRG Member States were being consulted and eventually IATA will be fully involved in the process.

REPORT ON AGENDA ITEM 2.4: REVIEW OF REPORT OF THE REGIONAL ATS INCIDENT ANALYSIS TASK FORCE

2.4.1 Under this agenda item the Sub-Group noted action which has been taken on Conclusions/Decisions emanating from the Second Task Force meeting. It was pointed out that the report was reviewed by the Sixth Meeting of the ATM/SAR/AIS Sub-Group and MIDANPIRG/8.

2.4.1.1 It was noted that the Air Navigation Commission (ANC) welcomed MIDANPIRG's initiative in addressing the need for analysis of ATS incidents at the regional level (Conclusion 8/15 refers). However, noting that the methodology for the submission and processing of ATS incident reports (Appendix 6H to the report of MIDANPIRG/8) calls for the submission to IATA and the ICAO Regional Office in Cairo and not to the service provider, clarification was sought on the relationship of the proposed procedure to the existing Standards and Recommended practices (SARPs) in Annex 13-Aircraft Accident and Incident Investigation and Procedures for Air Navigation Services-Air Traffic Management (PANS-ATM, Doc 4444) relating to reporting of ATS incidents.

2.4.2 The meeting was apprised of the following relevant provisions from Annex 13: regarding reporting and analysis of ATS incidents:

> "8.1 A State shall establish a mandatory incident reporting system to facilitate collection of information on actual or potential safety deficiencies
>
> *8.2 A State should establish a voluntary reporting system to facilitate the collection of information that may not be captured by a mandatory incident reporting system*
>
> 8.3 A voluntary incident reporting system shall be non-punitive and afford protection to the sources of the information
>
> *Note*
>
> *1 A non-punitive environment is fundamental to voluntary reporting*
>
> *2. States are encouraged to facilitate and promote the voluntary reporting of events that could affect aviation safety by adjusting their applicable laws, regulations and policies, as necessary*
>
> *8.4 : A State should establish an accident and incident database to facilitate the effective analysis of information obtained, including that from its incident reporting systems.*
>
> 8.5: *The database systems should use standardized formats to facilitate data exchange.*
>
> *Note:. States are encouraged to foster regional arrangements, as appropriate, when implementing 8.4"*

2.4.3 The Sub-Group also recalled that in the Manual on Safety Management for Air Traffic Services it has been highlighted that hazards can only be controlled if their existence is known. Furthermore, it is indicated that a system for reporting safety occurrences is one of the key tools available for identifying previously undetected hazards.

2.4.4 It was also pointed out that the Eleventh Air Navigation Conference (Doc 9828) under recommendation 2/3 concerning, sharing of ATM accident and incident data stated that:

ICAO:

a) develop guidance material on the use of the ADREP 2000 data base; and

b) *encourage States to share information on ATM accidents and incidents*.

2.4.5 Based on the foregoing, the Sub-Group noted that the Task Force had accordingly reviewed the methodology which was adopted with a view to allay concerns of any misinterpretations to ICAO provisions.

2.4.6 The Sub-Group however pointed out that although simplified reporting forms and methodology for reporting of incidents was developed, very few incident reports were forwarded to consolidate the IATA database and the objectives of the Task Force were far from being met. Concerns were still being raised on the nature and confidentiality of the data received and the contribution of the Task Force in the identification of serious trends likely to have an impact on the safety of air navigation in the region.

2.4.7 It was pointed out that within the framework of safety management programmes many States have already instituted procedures for the gathering of ATS incident reports and a non-punitive reporting system of reporting has also been established. Furthermore, these issues will also be addressed during safety oversight audits.

2.4.8 Taking into account the lack of interest showed by States in providing data on incidents, the Sub-Group questioned the rationale behind the existence of the ATS Incident Analysis Task Force and was of the view that MIDANPIRG be invited to discontinue the Task Force. It was however agreed that ATS incident trends be instead addressed within the framework of the ATM/SAR/AIS Sub-Group.

2.4.9 Based on the foregoing, the Sub-Group framed the following draft Conclusion:

DRAFT CONCLUSION 7/16: REPORTING OF ATS INCIDENTS

That:

a) reporting of incidents/accidents will be in accordance with provisions of Annex 13-Aircraft Accident and Incident Investigation and Procedures for Air Navigation Services-Air Traffic Management (PANS-ATM, Doc 4444); and

b) States share information on ATM accidents and incidents.

DRAFT DECISION 7/17: DISCONTINUATION OF THE ATS INCIDENT ANALYSIS TASK FORCE

That, in view of the lack of support and enthusiasm from States to provide relevant and comprehensive data on ATS Incidents in the region:

a) MIDANPIRG be invited to consider dissolving the ATS Incident Analysis Task Force;

b) the ATM/SAR/AIS Sub-Group be requested to follow-up on the ATS incident trends in the region and its impact on safety of air navigation; and

c) IATA continues to update the ATM/SAR/AIS Sub-Group on ATS incident trends noted within the framework of its safety enhancement mechanisms.

2.4.10 The meeting was also apprised of safety enhancement activities being carried out by IATA, as follows:

a) IATA Members have developed an action oriented safety programme covering the six segments of Safety activities (Safety Auditing, Cargo Safety, Cabin Safety, Infrastructure Safety, Safety Data Management and Safety Training) with the aim to:

i) Reduce the Air Transport Accident Rate Worldwide by 25% by 2006;
ii) Ensure 80 Member airlines become IOSA Registered in 2004, and 40 Members implement Safety Management Systems;
iii) Ensure Safety Management System is implemented within the Airlines and CAAs;

b) Operators have been surveyed on the status of the implementation of the Flight Operations Quality Assurance (FOQA) Programme;

c) Operators have been encouraged to use the open and non-punitive reporting system,which is the Safety Trend Evaluation, Analysis & Data Exchange System (STEADES).

d) Jointly with Eurocontrol, it has organized a Level Bust toolkit workshop to raise awareness of the level bust issues and to reduce the number of the level busts;

e) Promoting and encouraging the IATA Operational Safety Audit (IOSA) Registry; and

f) Established language training courses to encourage airlines awareness in English Language Proficiency.

REPORT ON AGENDA ITEM 2.5: ALLOCATION OF FIVE-LETTER NAME-CODE DESIGNATORS (5LNCDS)

2.5.1 The meeting recalled that the need to facilitate the transfer and allocation of five-letter name-codes for the designation of reporting points was recognized by MIDANPIRG and it was agreed that the database which has been developed by the ICAO European and North Atlantic Office, in close coordination with Eurocontrol, should also be extended to cover the MID Region. This would enable authorized users and States to identify their preferences from the available ICAO Five-Letter Name-Code and Route Designator (ICARD) system and to request formal allocation over the internet. To this effect MIDANPIRG/8 meeting endorsed the following Decision:

"DECISION 8/11: ALLOCATION OF FIVE-LETTER NAME-CODES

That, with a view to facilitate the selection and allocation of five-letter name-codes to MID States for the designation of reporting points, the Secretariat coordinates with the ICAO Paris Office to enable the MID Region to use the ICAO Five-Letter Name Code and Route Designator (ICARD) System."

2.5.2 As a follow-up to the above decision, it was noted that the ICAO MID Office was accordingly trained by the ICAO Paris Office on the preparation/updating of the database. The meeting noted with appreciation the work carried out by the Office in updating the master document of the list of ICAO five-letter name-code designators which have been allocated to States. To this effect, many duplicated codes and/or codes not assigned to MID Region have been identified. With a view to finalize the document, an updated draft document has been prepared by the Secretariat using States' AIPs and Jeppesen Charts. Prior to submitting the list to Eurocontrol, there is a need to review the list which has been prepared by the Secretariat and make necessary corrections/ updates as required.

2.5.3 It was agreed that States review the draft list of five-letter name-codes as prepared by the ICAO Middle East Office and forward their comments as soon as possible and preferably before the end on November 2004.

REPORT ON AGENDA ITEM 2.6 STATUS OF IMPLEMENTATION OF SEARCH AND RESCUE PROVISIONS (SAR)

Status of implementation of SAR provisions

2.6.1 The Sub-Group recalled that the basic principles, operational requirements and planning criteria related to search and rescue services, have been developed for the MID Region. It was pointed out that these requirements are considered as the minimum necessary for effective planning of SAR facilities and services and are indicated in the SAR Part of the MID Basic Air Navigation Plan (Basic ANP). A detailed description/list of facilities and/or services to be provided to fulfil these requirements are indicated in the SAR Part of the Facilities and Services Implementation (FASID) Document.

2.6.2 It noted the concerns of MIDANPIRG/8 indicating that a detailed evaluation on the status of implementation of recommendations/conclusions emanating from the LIM/MID RAN Meeting 1996 and other relevant recommendations in the SAR fields has not been completed. To this effect, States were requested to complete the forms highlighting the status of implementation of SAR provisions at **Appendix 2D** to the report of the Agenda Item 2 and forward it to the ICAO MID Office for review by the MIDANPIRG/9 meeting.

ATM/SAR/AIS TF/7
Appendix 2A to the Report on Agenda Item 2

TABLE ATS 1 - ATS ROUTES
TABLEAU ATS 1 - ROUTES ATS
TABLA ATS 1 - RUTAS ATS

EXPLANATION OF THE TABLE

Column

1 **Designator of ATS route.**

2 **Significant points defining the ATS routes. Only prominent locations have been listed. Additional points where facilities are provided to complete navigational guidance along a route, but not otherwise marking significant characteristics of the route (change of heading of centre line, intersection with other routes, etc.) have normally not been included. Locations shown in parentheses indicate significant points outside the Region.**

Note 1. ***Not representing the operator's requirements.*** **Operator's required route and/or navaids are shown in square brackets ([ ]).**

Note 2. ***Subject to further study*****. Including the associated navigation aid coverage.**

Note 3 ***Subject to military agreement.***

Note 4. ***Not acceptable at present.***

Note 5. ***At present, implementation possible only during specific periods (e.g. weekends, nights, etc., as published).***

Note 6. ***At present, implementation of the RNAV route only possible above FL 300, or as published.***

Note 7. ***Unidirectional use.***

FRENCH

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
A145	**(LUXOR)** **WEJH** **GASSIM** **KING FAHD**	**UA145**	**(LUXOR)** **WEJH** **GASSIM** **KING FAHD**
A219	**(NAWABSHAH)** **SERKA 2951.0N 06615.0E** **KANDAHAR** **(TERMEZ)**	**UA219**	**(NAWABSHAH)** **SERKA 2951.0N 06615.0E** **KANDAHAR** **(TERMEZ)**
A400	**KAPET 163322N 0530614E** **IMPOS 183136N 0511848E** **SILPA 184953N 0510158E** **ASTIN 200410N 0495320E** **NONGA 205048N 0492014E** **ALRIK 220631N 0482535E** **AMBAG 230529N 0474611E** **RESAL 240649N 0470427E** **KIA 245310N 0464534E**	**UA400**	**KAPET 163322N 0530614E** **IMPOS 183136N 0511848E** **SILPA 184953N 0510158E** **ASTIN 200410N 0495320E** **NONGA 205048N 0492014E** **ALRIK 220631N 0482535E** **AMBAG 230529N 0474611E** **RESAL 240649N 0470427E** **KIA 245310N 0464534E**
		~~**UA401**~~	~~**GIBAL 2437.2N 03634.7E**~~ ~~**EGSOP 2251N 05015 E**~~ ~~**ALPEK 2246.8N 05358.7E**~~ ~~**LUDID 2302.5 N 05518.0 E**~~ ~~**OBROD 230812N 0554714E**~~ ~~**LAKLU 232300N 0570500E**~~ ~~**ITURA 232225N 0580407E**~~ ~~**KUSRA 231726N 0595102E**~~ ~~**RAGMA 230600N 0610530E**~~ ~~**SETSI 230543N 0614947E**~~ ~~**RASKI 230330N 0635200E**~~
A408	**(ADDIS ABABA)** **SALEH 140000N 0420000E** **HODEIDAH**	**UA408**	**(ADDIS ABABA)** **SALEH 140000N 0420000E** **HODEIDAH**
A411	**(CAIRO)** **SHARM EL SHEIKH** **PASAM 2730.8N 03455.7E** ***Note 7(OE)** **WEJH** **KING ABDULAZIZ** **JAZAN**	**UA411**	**(CAIRO)** **SHARM EL SHEIKH** **PASAM 2730.8N 03455.7E** ***Note 7(OE)** **WEJH** **KING ABDULAZIZ** **JAZAN**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	SANA'A		**SANA'A**
A412	**JERUSALEM * Note 4(OJ)** **AMMAN** **ZELAF 3257.0N 03800.0E** **TANF**	**UA412**	**JERUSALEM* Note 4(OJ)** **AMMAN** **ZELAF 3257.0N 03800.0E** **TANF**
A413	**TESSO 2828.9N 04927.4E** **VUXAL 2835.5N 04946.1E** **ALNIN 2840.9N 05001.6E** **BUSHEHR**	**UA413**	**TESSO 2828.9N 04927.4E** **VUXAL 2835.5N 04946.1E** **ALNIN 2840.9N 05001.6E** **BUSHEHR**
A414	**GITLA 3219.1N 03402.8E** **(SITIA)**	**UA414**	**GITLA 3219.1N 03402.8E** **(SITIA)**
A415	**KING KHALID** **DOHA * Note 5(OE)** **SHARJAH**	**UA415**	**KING KHALID** **DOHA * Note 5(OE)** **SHARJAH**
A416	**ARDABIL** **RASHT** **NOSHAHR** **DASHTE NAZ** **SABZEVAR**	**UA416**	**ARDABIL** **RASHT** **NOSHAHR** **DASHTE NAZ** **SABZEVAR**
~~**A417**~~	~~**HAWIJA**~~ ~~**SAMARRA**~~ ~~**BAGHDAD**~~ ~~**HASHIMIYA**~~ ~~**SHATRA**~~ ~~**BASRAH**~~ ~~**ABADAN**~~	~~**UA417**~~	~~**HAWIJA**~~ ~~**SAMARRA**~~ ~~**BAGHDAD**~~ ~~**HASHIMIYA**~~ ~~**SHATRA**~~ ~~**BASRAH**~~ ~~**ABADAN**~~
A418	~~**SHARJAH**~~ **KUMUN 254000N 0551515E** **PAPAR 2640N 05427E* Note 7** **Segment KUMUN-PAPAR(OI and OM)** **SHIRAZ** ~~**ESFAHAN**~~ ~~**TEHRAN**~~		
A419	**(ASHGABAT)** **RIKOP 3740.0N 05814.8E**	**UA419**	**(ASHGABAT)** **RIKOP 3740.0N 05814.8E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	SABZEVAR **TABAS** **DARBAND** **KERMAN** **BANDAR ABBAS** **DARAX 260942N 0555300E** **SHARJAH** **~~ABU DHABI~~ * Note 4 (OM)** **~~NORLO 211028N 0510142E~~** **~~TADBO 195538N 0494113~~** **MIADA 245112N 0545736E** **MEMBI 243705N 0542631E *See Note 4 for segment KITAP-MEMBI** **KITAP 224928N 0522923E** **PURDA 210805N 0510329E** **ASTIN 200410N 0495320E** **DIXEL 182927N 0481202E** **SHARURAH (SHA)** **SANA'A** **HODEIDA**		**SABZEVAR** **TABAS** **DARBAND** **KERMAN** **BANDAR ABBAS** **DARAX 260942N 0555300E** **SHARJAH** **~~ABU DHABI~~ * Note 4 (OM)** **~~NORLO 211028N 0510142E~~** **~~TADBO 195538N 0494113~~** **MIADA 245112N 0545736E** **MEMBI 243705N 0542631E*See Note 4 for segment KITAP-MEMBI** **KITAP 224928N 0522923E** **PURDA 210805N 0510329E** **ASTIN 200410N 0495320E** **DIXEL 182927N 0481202E** **SHARURAH (SHA)** **SANA'A** **HODEIDA**
~~A421~~	**~~HADITHA * Note 4~~** **~~(SANLIURFA)~~** **~~(GEMEREK) * Note 3~~**	**~~UA421~~**	**~~HADITHA*Note 4~~** **~~(SANLIURFA)~~** **~~(GEMEREK) * Note 3~~**
A422	**UROMIYEH** **TABRIZ** **PARSABAD** **(BAKU)**	**UA422**	**UROMIYEH** **TABRIZ** **PARSABAD** **(BAKU)**
A424	**BAGHDAD** **RAFHA * Note 3** **HAIL** **MADINAH** **KING ABDULAZIZ**	**UA424**	**BAGHDAD** **RAFHA * Note 3** **HAIL** **MADINAH** **KING ABDULAZIZ**
A451	**LUXOR** **ALEBA** **PORT SUDAN** **[ASMARA] * Note 1** **ASSAB 1304.0 N 04238.8E** **PARIM 1231.7N 04327.2E** **ADEN** **ANGAL 1614.0N 06000.0E**	**UA451**	**LUXOR** **ALEBA** **PORT SUDAN** **[ASMARA] * Note 1** **ASSAB 1304.0N 04238.8E** **PARIM 1231.7N 04327.2E** **ADEN** **ANGAL 1614.0N 06000.0E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	(MUMBAI)		**(MUMBAI)**
A453? ??	**KABUL GHAZNI KANDAHAR ZAHEDAN BANDAR ABBAS GHESHM (KHM) BANDAR LENGEH KISH PIMAL 2626.5N05122.1E BAHRAIN * Note 7 (OB, OI)**	**UA453**	**KABUL GHAZNI KANDAHAR ZAHEDAN BANDAR ABBAS GHESHM (KHM) BANDAR LENGEH KISH PIMAL 2626.5N05122.1E BAHRAIN * Note 7 (OB, OI)**
A466	**(TERMEZ) AMDAR 3712.5N 06720.6E KABUL3431.1N 06909.1E SANAM 3305.0N 07003.0E (DERA ISMAIL KHAN) (JHANG 3116.0N 07218.0E) (SAMAR 3120.8N 07434.0E) (ASARI 3048.3N 07509.6E)**	**UA466**	**(TERMEZ) AMDAR 3712.5N 06720.6E KABUL 3431.1N 06909.1E SANAM 3305.0N 07003.0E (DERA ISMAIL KHAN) (JHANG 3116.0N 07218.0E) (SAMAR 3120.8N 07434.0E) (ASARI 3048.3N 07509.6E)**
		UA775	**REXOD 211230N 0613830E KUSRA 231726N 0585102E**
A777	**TONVO 250500N 0563200E BUBAS 245938N 05700 03E NADSO 244957N 0574926E MIXOL 240618N 0592739E VAXIM 231900N 0611100E**		
A788	**SHIRAZ BUSHEHR KAPIP 290217N 0500054E PATIR 285606N 0492923E WAFRA 2837.3N 04757.5E HAFR AL BATIN HAIL HALAIFAH**	**UA788**	**SHIRAZ BUSHEHR KAPIP 290217N 0500054E PATIR 285606N 0492923E WAFRA 2837.3N 04757.5E HAFR AL BATIN HAIL HALAIFAH**
A791	**SISIK 2936.0N 03241.E NUWEIBAA KITOT 2902.1N 03450.8E *Note 7 (OE)**	**UA791**	**SISIK 2936.0N 03241.1E NUWEIBAA KITOT 2902.1N 03450.8E *Note 7 (OE)**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	SOBAS 2756.0N 03904.9E **HAIL** **KING FAHD** **BAHRAIN Note 7 Bahrain-Sharjah** **RATUN 2646.2N 05108.0E** **SHARJAH** **IMLOT 2517.1N 05708.1E** **(JIWANI)**		**SOBAS 2756.0N 03904.9E** **HAIL** **KING FAHD** **BAHRAIN*Note 7 Bahrain-Sharjah** **RATUN 2646.2N 05108.0E** **SHARJAH** **IMLOT 2517.1N 05708.1E** **(JIWANI)**
B121	**RUDESHUR(RUS)** **RASHT(RST)** **MEGRI(MGR)**	**UB121**	**RUDESHUR(RUS)** **RASHT(RST)** **MEGRI(MGR)**
B400	**SEEB (MCT)** **ITURA 232351N 0580720E** **IZKI (IZK)** **HAIMA (HAI)** **DAXAM 171612N 0544715E** **BOSKI 1607.3N 5416.8E** **ALULA 1207.3N 05102.7E** **(MOGADISHU)**	**UB400**	**SEEB(MCT)** **ITURA 232351N 0580720E** **IZKI (IZK)** **HAIMA (HAI)** **DAXAM 171612N 0544715E)** **BOSKI 1607.3N 5416.8E** **ALULA 1207.3N 05102.7E** **(MOGADI SHU)**
B401	**ARAR** **BASRAH * Note 3**	**UB401**	**ARAR** **BASRAH * Note 3**
B402	~~**HADITHA**~~ **ELEXI 3441.5N 04109.0E** **DIER-ZZOR** **ALEPPO** **NISAP 364724N 0363830E** ~~**(GETAK 364648N 0363843E)**~~ ~~**(BUK 401430N 0330617E)**~~	**UB402**	~~**HADITHA**~~ **ELEXI 3441.5N 04109.0E** **DIER-ZZOR** **ALEPPO** **NISAP 364724N 0363830E** ~~**GETAK 364648N 0363843E)**~~ ~~**(BUK 401430N 0330617E)**~~
		UB403	~~**MOGADISHU**~~ **MANDERA** **ATUKO 081811N 046040E** **UBTEN 120814N049561 1E** **ODAKA 144036N 0523400E**
B404	**HARGEISA** **IMRUB 120200N 0481500E** ~~**SABEL 185158N 0520339E**~~	**UB404**	**HARGEISA** **IMRUB 120200N 0481500E** ~~**SABEL 185158N 0520339E**~~

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	ODAKA144036N 0523400E		ODAKA144036N 0523400E
B406	BEN GURION (LARNACA)	UB406	BEN GURION (LARNACA)
B407	KING ABDULAZIZ MAHDI 2026.0N 03739.3E (PORT SUDAN)	UB407	KING ABDULAZIZ MAHDI 2026.0N 03739.3E (PORT SUDAN)
B410	(MUT) CHEKKA *Note 3 (OS) DAMASCUS	UB410	(MUT) CHEKKA *Note 3 (OS) DAMASCUS
B411	METSA 2930.0N 03500.0E AL SHIGAR* Notes2 and 3 ARAR ~~HASHIMIYA~~ ~~ZUBEIDIYA~~ ~~MANDALY * Note 3~~ LOVEK 3222.1N 04440.0E NOLDO 3249.5N 04521.5E PAXAT 332056N 0460519E ILAM MALAYER SAVEH [TEHRAN] * Note 1 DEHNAMAK MASHHAD	UB411	METSA 2930.0N 03500.0E AL SHIGAR* Notes2 and 3 ARAR ~~HASHIMIYA~~ ~~ZUBEIDIYA~~ LOVEK 3222.1N 04440.0E NOLDO 3249.5N 04521.5E PAXAT332056N 0460519E ILAM MALAYER SAVEH [TEHRAN] * Note 1 DEHNAMAK MASHHAD
B412	DAMASCUS [AMMAN] * Note 2(OS, OJ) AL SHIGAR [KING ABDULAZIZ]	UB412	DAMASCUS [AMMAN] * Note 2(OS, OJ) AL SHIGAR [KING ABDULAZIZ]
B413	(PORT SUDAN) DANAK 1608.0N 04129.0E HODEIDAH TAIZ ADEN ZIZAN 1151.6N 04539.2E (GAGDO 0725.0N 04827.0E) (PRASLIN)	UB413	(PORT SUDAN) DANAK 1608.0N 04129.0E HODEIDAH TAIZ ADEN ZIZAN 1151.6N 04539.2E (GAGDO 0725.0N 04827.0E) (PRASLIN)
B415	DOHA	UB415	DOHA

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	BUNDU 2500.4N 05229.4E **ABU DHABI AUH**		**BUNDU 2500.4N 05229.4E** **ABU DHABI AUH** **F**
B416	**KUWAIT** **KUVER 2809.4N 05006.0E** **IMDAT 2741. 0N 05111.0E** **ORSAR 2604.5N 05357.5E** **SHARJAH**	**UB416**	**KUWAIT** **KUVER 2809.4N 05006.0E** **IMDAT 2741.0N 05111.0E** **ORSAR 2604.5N 05357.5E** **SHARJAH**
B417	**MAHSHAHR** **TULAX 2938 53N 04903 01E** **DESLU 2928.0N 04901.8E** **ALVIX 2919.3N04824.2E** **KUWAIT *See Note 3** **HAFR AL BATIN** **GASSIM** **KING ABDULAZIZ**	**UB417**	**MAHSHAHR** **TULAX 2938 53N 04903 01E** **DESLU 2928.0N 04901.8E** **ALVIX 2919.3N04824.2E** **KUWAIT*See Note 3** **HAFR AL BATIN** **GASSIM** **KING ABDULAZIZ**
B418	**SEMRU 2802.0N 03203.0E** **HURGHADA** **WEJH** **MADINAH** **BIR DARB (BDB)** **KING KHALID** **KING FAHD** **PIMAL 2626.5N 05122.1E**	**UB418**	**SEMRU 2802.0N 03203.0E** **HURGHADA** **WEJH** **MADINAH** **BIR DARB (BDB)** **KING KHALID** **KING FAHD** **PIMAL 2626.5N 05122.1E**
B419	**[DOHA]** **[KING FAHD] * Note3 (OB, OT)** **ALVON 2700.2N 05007.2E** **SELEG 2801.5N 04922.2E** **KUWAIT**	**UB419**	**[DOHA]** **[KING FAHD] * Note3 (OB, OT)** **ALVON 2700.2N 05007.2E** **SELEG 2801.5N 04922.2E** **KUWAIT**
B424	**SANA' A 153000N0441310.6E** **SABEL 185200N 05203.7E** **OTISA 201000N 0554556E** **GISKA 213503N 0574014E**	**UB424**	~~**PURAD 145500N 0415354E**~~ **SANA' A 153000N0441310.6E** ~~**HAIMA**~~ **SABEL 185200N 05203.7E** **OTISA 201000N 0554556E** **GISKA 213503N 0574014E**
B441	**MASHHAD** **OTRUZ 363108N 0610956E** **ASHGABAT**	**UB441**	**MASHHAD** **OTRUZ 363108N 0610956E** **ASHGABAT**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
B549	**Reserved for Yemen**		
~~**B450**~~	~~**TOTOX 215030N 0622230E**~~ ~~*** Note 7**~~ ~~**TULBU 230005N 0571827E**~~	~~**UB450**~~	~~**TOTOX 215030N 0622230E**~~ ~~*** Note 7**~~ ~~**TULBU 230005N 0571827E**~~
B451	**DEHNAMAK** **BOJNORD (BRD)** **DOLOS 375006N 0580200E** **(ASHGABAT)**	**UB451**	**DEHNAMAK** **BOJNORD (BRD)** **DOLOS 375006N 0580200E** **(ASHGABAT)**
B457	**BAHRAIN** **ELOSA 2548.8N 05142.6E** *** Note7 (*segment ELOSA-REXOD)*** **ABU DHABI** **LABRI 240344N 0553842E** **EGROK 235253N 0560126E** **LAKLU 232235N 0570401E** **LOTUD 223720N 0583503E** **REXOD211230N 0613830E**	**UB457**	**BAHRAIN** **ELOSA 2548.8N 05142.6E** *** Note7 *(segment ELOSA-REXOD)*** **ABU DHABI** **LABRI 240344N 0553842E** **EGROK 235253N 0560126E** **LAKLU 232235N 0570401E** **LOTUD 223720N 0583503E** **REXOD 211230N 0613830E**
B466	**NAWABSHAH 2613.1N 06823.1E** **KANDAHAR 312900N 0655400E** **CHARN 351000N 0610800E**		
B524	**NADSO 244957N 0574926E** **ALPOR 2404 42N 06120E**		
B525	**LALDO 251806N 0563600E** **NADSO 244957N 0574926E** **EGTAL 2434 58N 06037 24E**		
B526	**(ASMARA)** **HODEIDAH** ~~**SANA'A**~~ ~~**BEIHAN**~~ ~~**ATAQ**~~ **RIYAN** **ODAKA 1440.6N 05234.0E**	**UB526**	**(ASMARA)** **HODEIDAH** ~~**SANA'A**~~ ~~**BEIHAN**~~ ~~**ATAQ**~~ **RIYAN** **ODAKA 1440.6N 05234.0E**
B535	**(DJIBOUTI)** **ADEN** **RIYAN** **KAPET 1633 22N 0530614E**	**UB535**	**(DJIBOUTI)** **ADEN** **RIYAN** **KAPET 1633 22N 0530614E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	SALALAH **MARMUL(MRL)**		**SALALAH** **MARMUL(MRL)**
B538	**(GAZIANTEP)** **ALEPPO** **KARIATAIN** **DAMASCUS * Note 2(OS)**	**UB538**	**(GAZIANTEP)** **ALEPPO** **KARIATAIN** **DAMASCUS * Note 2 (OS)**
B540	**TOTOX 215030N 0622230E** **ITUDO 2347N 0580113E** **PASOV 243841N 0565037E** **KUPMA 245148N 0562648E** **BUBIN 245742N 0560642E**		
B544	**(GAZIANTEP)** **ALEPPO** **TANF** **TURAIF** **AL SHIGAR** **HALAIFA** **MADINAH** **RABIGH** **KING ABDULAZIZ** **ABHA** **NOBSU** **SANA'A** **KRA**	**UB544**	**(GAZIANTEP)** **ALEPPO** **TANF** **TURAIF** **AL SHIGAR** **HALAIFA** **MADINAH** **RABIGH** **KING ABDULAZIZ** **ABHA** **NOBSU** **SANA'A** **KRA**
B545	**(MUT)** **BALMA 3428.9N 035 3.0E** **KHALDEH** **AMMAN * Note 3&4 (OJ)**	**UB545**	**(MUT)** **BALMA 3428.9N 035 3.0E** **KHALDEH** **AMMAN * Note 3&4(OJ)**
G183	**(KAROL 3252.0N 03229.0E)** **PASOS** **EL ARISH** **TABA** **NUWEIBAA**		
G202	**(VELOX 3349.0N 03405.0E)** **SILKO 3347.9N 03435.0E** **KHALDEH* Note 4 (OS)** **DAKWE 3338.9N 03555.0E** **DAMASCUS**	**UG202**	**(VELOX 3349.0N 03405.0E)** **SILKO 3347.9N 03435.0E** **KHALDEH * Note 4(OS)** **DAKWE 3338.9N 03555.0E** **DAMASCUS**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	TANF **MODIK 3328.1N 03901.0E** ~~**HADITHA**~~ ~~**SAMARRA**~~ ~~**SALAM**~~ ~~**MANDALY**~~ **RAPLU 3323.0N 04145.5E** **PUSTO 3321.0N 04245.0E** **BGD** **PARUN 3324.2N 04502.0E** **RAGET 3330.8N 04553.8E** **ILAM** **KHORAM ABAD** **ESFAHAN** **NODLA** **BIRJAND** **KAMAR 3239.0N 06044.0E** **DILARAM** **KANDAHAR** **(ZHOB)** **(RAHIM YAR KHAN)**		**TANF** **MODIK 3328.1N 03901.0E** ~~**HADITHA**~~ ~~**SAMARRA**~~ ~~**SALAM**~~ ~~**MANDALY**~~ **RAPLU 3323.0N 04145.5E** **PUSTO 3321.0N 04245.0E** **BGD** **PARUN 3324.2N 04502.0E** **RAGET 3330.8N 04553.8E** **ILAM** **KHORAM ABAD** **ESFAHAN** **NODLA** **BIRJAND** **KAMAR 3239.0N 06044.0E** **DILARAM** **KANDAHAR** **(ZHOB)** **(RAHIM YAR KHAN)**
G206	**DILARAM** **KABUL** **SABAR 3537.0N 07131.0E** **(PURPA 3656.5N 07524.5E)** *** Note 3**	**UG206**	**DILARAM** **KABUL** **SABAR 3537.0N 07131.0E** **(PURPA 3656.5N 07524.5E)** *** Note 3**
G208	**(PANJGUR)** **ZAHEDAN** **DARBAND** **NODLA 325330N 0545850E** **ANARAK** **TEHRAN** **ZANJAN** **UROMIYEH** **ALRAM 3743.0N 04437.0E** **(SIIRT)**	**UG208**	**(PANJGUR)** **ZAHEDAN** **DARBAND** **NODLA 325330N 0545850E** **ANARAK** **TEHRAN** **ZANJAN** **UROMIYEH** **ALRAM 3743.0N 04437.0E** **(SIIRT)**
G452	**SHIRAZ** **KERMAN** **ZAHEDAN** **(RAHIMYAR KHAN)**	**UG452**	**SHIRAZ** **KERMAN** **ZAHEDAN** **(RAHIMYAR KHAN)**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
G462	**BAHRAIN** **PIMAL2626.5N 05122.1E** *** Note 7 between AUH and ~~PIMAL~~** **URITO** **URITO 2616.1N 05148.8 E** **BALUS 2545.9N 05304.4E** **ABU DHABI**	**UG462**	**BAHRAIN** **PIMAL2626.5N 05122.1E** *** Note 7 between AUH and ~~PIMAL~~** **URITO** **URITO 2616.1N 05148.8 E** **BALUS 2545.9N 05304.4E** **ABU DHABI**
G650	**KING ABDULAZIZ** **RASKA 1908.0N 03903.0E** **(ASMARA)**	**UG650**	**KING ABDULAZIZ** **RASKA 1908.0N 03903.0E** **(ASMARA)**
~~G651~~	**~~ADEN~~** **~~(HARGEISA)~~**	**~~UG651~~**	**~~ADEN~~** **~~(HARGEISA)~~**
G652	**ADEN** **~~SAYUN~~ ~~* Note 2 (OY)~~** **~~HAIMA~~** **IMPOS 183136N 0511848E** **DUDRI 190000N 0520000E** **~~ETUKO 2214.0N 05525.2E~~** **~~Note 7 (OO)~~** **TOKRA 220925N 0553350E** **TAPDO 2424N 06120 E**	**UG652**	**ADEN** **~~SAYUN~~ ~~* Note 2 (OY)~~** **~~HAIMA~~** **IMPOS 183136N 0511848E** **DUDRI 190000N 0520000E** **~~ETUKO 2214.0N 05525.2E~~** **~~Note 7 (OO)~~** **TOKRA 220925N 0553350E** **TAPDO 2424N 06120 E**
G660	**(PORT SUDAN)** **BOGUM 2006.6N 03803.0E** **KING ABDULAZIZ** **ABU DHABI * Note3 (OE, OM)**	**UG660**	**(PORT SUDAN)** **BOGUM 2006.6N 03803.0E** **KING ABDULAZIZ** **ABU DHABI * Note3 (OE, OM)**
G662	**[DAMASCUS]** **[GURIAT] * Notes1 and 3 (OS, OJ)** **AL SHIGAR** **HAIL** **GASSIM** **KING KHALID**	**UG662**	**[DAMASCUS]** **[GURIAT] * Notes 1 and 3 (OS, OJ)** **AL SHIGAR** **HAIL** **GASSIM** **KING KHALID**
G663	**KING KHALID** **KING FAHD** **SHIRAZ** **YAZD** **TABAS** **MASHAD**	**UG663**	**KING KHALID** **KING FAHD** **SHIRAZ** **YAZD** **TABAS** **MASHAD**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
G664	**APLON 3352.0N 03204.0E BEN GURION AMMAN**	**UG664**	**APLON 3352.0N 03204.0E BEN GURION AMMAN**
G665	**ABADAN SHIRAZ * Note 5 (OI) NABOD 2816.1N 05825.8E EGSAL 2716.8N 06249.0E (PANJGUR)**	**UG665**	**ABADAN SHIRAZ * Note 5 (OI) NABOD 2816.1N 05825.8E EGSAL 2716.8N 06249.0E (PANJGUR)**
G666	**SHIRAZ * Note 7 (OI) LAMERD LAVAN ORSAR 2604 .5N 05357.5E DESDI 2536.1N 05442.5E MIADA 245112N 0545736E ABU DHABI (AUH)**	**UG666**	**SHIRAZ * Note 7 (OI) LAMERD LAVAN ORSAR 2604.5N 05357.5E DESDI 2536.1N 05442.5E MIADA 245112N 0545736E**
G667	**TEHRAN SAVEH AHWAZ ABADAN ALSAN 2957.1N 04814.9E FALKA KUWAIT WAFRA MAGALA KING KHALID WADI AL DAWASIR NEJRAN SANA'A ~~NOSKI 145116N 0440310E)~~ ~~YASIN 135859.6N 0434942E~~ PARIM 123142.7N 0432712E (DJIBOUTI)**	**UG667**	**TEHRAN SAVEH AHWAZ ABADAN ALSAN 2957.1N 04814.9E FALKA KUWAIT WAFRA MAGALA KING KHALID WADI AL DAWASIR NEJRAN SANA'A ~~NOSKI 145116N 0440310E)~~ ~~YASIN 135859.6N 0434942E~~ PARIM 123142.7N 0432712E (DJIBOUTI)**
G668	**ZHOB GHAZNI RAPTA 3727.0N 06538.0E**	**UG668**	**ZHOB GHAZNI RAPTA 3727.0N 06538.0E**
G669	**KARIATAIN *Note 1,2&3 (OJ) TONTU 3148.1N 03811.2E AL SHIGAR**	**UG669**	**KARIATAIN *Note 1,2&3 (OJ) TONTU 3148.1N 03811.2E AL SHIGAR**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	AL JOUF **RAFHA** **SOLAT 2909.7N 04638.2E** **KUWAIT** **SESRA 2908.1N 04854.9E** **NANPI 2905.0N 04932.0E** **BUSHEHR** **VATOB 285126N 0511636E)** **[SHIRAZ[**		**AL JOUF** **RAFHA** **SOLAT 2909.7N 04638.2E** **KUWAIT** **SESRA 2908.1N 04854.9E** **NANPI 2905.0N 57N 04932.0E** **BUSHEHR** **VATOB 285126N 0511636E** **[SHIRAZ]**
G670	**RASHT** **LALDA 3817.1N 04943.0E** **(BAKU)**	**UG670**	**RASHT** **LALDA 3817.1N 04943.0E** **(BAKU)**
G671	**TANF** **HAWIJA** **MOSUL** **UROMIYEH * Notes 2 and 3**	**UG671**	**TANF** **HAWIJA** **MOSUL** **UROMIYEH * Notes 2 and 3**
G674	**MADINAH** **GASSIM 2617.9N 04346.8E**	**UG674**	**MADINAH** **GASSIM 2617.9N 04346.8E**
G775	**(ASHGABAT)** **ORPAB 3742N 05834.5E** **MASHHAD** **[BIRJAND] * Note 1** **ZAHEDAN**	**UG775**	**(ASHGHABAT)** **ORPAB 3742N 05834.5E** **MASHHAD** **[BIRJAND] * Note 1** **ZAHEDAN**
G781	**(VAN)** **BONAM 3802.9N 04418.0E** **UROMIYEH** **ROVON 3716 01N 0455322E** **ZANJAN**	**UG781**	**(VAN)** **BONAM 3802.9N 04418.0E** **UROMIYEH** **ROVON 3716 01N 0455322E** **ZANJAN**
G782	**KING ABDULAZIZ** **RAGABA** **KING KHALID** **MAGALA** **WAFRA 2837.3N 04757.5E** **KUWAIT**	**UG782**	**KING ABDULAZIZ** **RAGABA** **KING KHALID** **MAGALA** **WAFRA 2837.3N 04757.5E** **KUWAIT**
		UG783	**PURDA 210805N 0510329E** **TANSU 224136N 0542828E** **NIGEL230146N 0551430E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
			ELUDA 235107N 0552905E ALN 241535N 0553623E GIDIS 243600N 055600E BUBIN 245742N 0560642E
G787E	LAKLU 232235N 0570401E SEEB(MCT) DORAB 235033N 0594746E ALPOR 240441N 0612000E LATEM (KC)	UG787E	LAKLU 232235N 05704 01E SEEB(MCT) DORAB 235033N 0594746E ALPOR 240441N 0612000E LATEM (KC)
G787W	(KC) PARET TAPDO 242400N 0612000E VUSET 235540N 0590812E PASOV 243841N 0565037E	UG787W	(KC) PARET TAPDO 242400N 0612000E VUSET 235540N 0590812E PASOV 243841N 0565037E
G792	(TURKMENBASHI) MASHAD CHARN 3510.0N 06108.0E HERAT KANDAHAR ~~QUETTA * Note 3 (OA)~~ ASLUM 3101N 06637E (RAHIM YAR KHAN)	UG792	(TURKMENBASHI) MASHAD CHARN 3510.0N 06108.0E HERAT KANDAHAR ~~QUETTA * Note 3 (OA)~~ ASLUM 3101N 06637E (RAHIM YAR KHAN)
G795	~~BAHRAIN~~ ~~SELEC 2801.5N 04922.2E~~ ~~ALSAN 2957.5N 04815.0E * Note 2~~ FALKA 2926.2N 04818.3E TASMI 300120N 0475505E BSR 303132.4N 0472112E RAFHA	UG795	~~BAHRAIN~~ ~~SELEC 2801.5N 04922.2E~~ ~~ALSAN 2957.5N 04815.0E * Note 2~~ FALKA 2926.2N 04818.3E TASMI 300120N 0475505E BSR 303132.4N 0472112E RAFHA
G799	PMA DAFFINAH	UG799	PMA DAFFINAH
		UL124	(VAN) BONAM URUMIYEH (UMH) ZANJAN(ZAJ) SAVEH (SAV)

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
			YAZD(YZD) **KERMAN(KER)** **KEBUD 273558N 0625028E** **(PANJGUR)**
		UL125	**DULAV 3857N 04537.9E** **TABRIZ (TBZ)** **ZANJAN** **PAROT 360940N 0495756E** **TEHRAN** **ANARAK** **DARBAND** **ZAHEDAN** **DANIB 2909.5N 06120.1E** **(PANJGUR)**
L126	**PUSTO 3321.0N 04245.0E** **SOGUM 3412.2N 04354.9E** **MIGMI 3345.9N 04527.4E** **ILAM**	**UL126**	**PUSTO 3321.0N 04245.0E** **SOGUM 3412.2N 04354.9E** **MIGMI 3345.9N 04527.4E** **ILAM**
L200	**AMMAN** **PASIP 3300.0N 03855.2E** **RAPLU 3323.0N 04145.5E**	**UL200**	**AMMAN** **PASIP 3300.0N 03855.2E** **RAPLU 3323.0N 04145.5E**
L223	**SIRRI** **NALTA 250242N 0553955E** **TARDI 243418N 0560915E** **LAKLU 232235N 05704 01E**	**UL223**	**UROMIYEH** **SANANDAJ** **KHORAM ABAD** **MESVI 312920N 0495701E** **LAMERD** **SIRRI * Note 7 (OI, OM)** **NALTA 250242N 0553955E** **TARDI 243418N 0560915E** **LAKLU 232235N 05704 01E**
		UL300	**LUXOR** **GIBAL2437.2N03634.7E** **YENBO 2408.8N 03803.9E** **DAFINAH 2317.0N 04143.2E** ~~**LOTOS 2200N 05039.2E**~~ ~~**ALPEK 2246.8N 05350.7E**~~
L301	**RASKI 230330N 0635200E** **VAXIM 231900N 0611100E**	**UL301**	**AAU 5153N 07523 38.6E** **NOBAT 210902.5N 0880000.1E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	RAGMA 232301N 0603846E **MIBSI 234139N 0575523E**		**RASKI 230330N 0635200E** **VAXIM 231900N 0611100E** **RAGMA 232301N 0603846E** **MIBSI 234139N 0575523E**
L305	**DOHA** **ITITA 2544.2N 05418.7E**		
L306	**TOKRA 220925N 0553350E* *** **Note- (OO)** **DEMKI 224941N 0562308E** **LAKLU 232235N 0570401E**	**UL306**	~~**MUSRU 230256N 0592223E**~~ ~~**TULBU 230005N 0571827E**~~ **TOKRA 220925N 0553350E** *** Note- (OO)** **DEMKI 224941N 0562308E** **LAKLU 232235N 0570401E**
L315	**CAIRO * Note 3 (HE** **HURGHADA)** **GIBAL 2437.2N 03634.7E**	**UL315**	**CAIRO * Note 3 (HE)** **HURGHADA** **GIBAL 2437.2N 03634.7E**
L321	**KATAB 292501N 0290506E** **KUNKI 290726N 0291949E** **LUGAN 224205N 0313722E** **SML 222118N 0313719E**	**UL321**	**KATAB 292501N 0290506E** **KUNKI 290726N 0291949E** **LUGAN 224205N 0313722E** **SML 222118N 0313719E**
		UL322	**MUMBAI * Note 7&1** **SUGID 1933.1N 06921.0E** **BOLIS 2033.5N 065 00.0E** **REXOD 2112.5N 06138.5E**
		UL333	**DASIS** **TABRIZ** **RASHT** **ORSOK 362236N 0523020E** **AMBEG 351737N 0553059E** **TASLU 342632N 0574234E** **SOKAM 331316N 0603754E**
L417	**RAMPI 3516.7N 04356.3E** **SOGUM 3412.2N 04354.9E** **BGD** **LOVEK 3222.1N 04440.0E**	**UL417**	**RAMPI 3516.7N 04356.3E** **SOGUM 3412.2N 04354.9E** **BGD** **LOVEK 3222.1N 04440.0E**
		UL425	**KING ABDULAZIZ** **MALIK 2053.4N 03949.6E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
			AL BAHA **BISHA** **WADI AL DAWASIR** ~~**TADBO 195538N 0494113E**~~ ~~**GIPNA 193735N 0514311E**~~ **EGREN 202236N 0464422E** **ASTIN 200410N 0495320E** **DIRAS 195235N 0513704E** **GOBRO 193622N 0534741E** **BOVOS 182230N 0575844E** **ASPUX 174406N 0600006E** **(TRIVANDRUM)**
L513	**KHALDEH** **CHEKKA** **LEBOR 3415.9N 03635.0E** **DAMASCUS * Note 3 (OS)** **BUSRA 3220.0 N 03637.0 E** **HAZEM 3214.0 N 03638.0 E** **QUEEN ALIA** **QATRANEH (QTR)**	**UL513**	**KHALDEH** **CHEKKA** **LEBOR 3415.9N 03635.0E** **DAMASCUS * Note 3 (OS)** **BUSRA 3220.0 N 03637.0E** **HAZEM 3214.0 N 03638.0E** **QUEEN ALIA** **QATRANEH (QTR)**
L519	**MIADA 245112N 0545736E** ***Note 7** **KUMUN 254000N 0551512E**	**UL519**	**ABU DHBI (AUH) * Note 7** **MIADA 245112N 0545736E**
		UL550	**WAFRA *Note7 (OE)** **ROSID 2842.4N 04652.6E** **VATIM 2851.6N 04444.7E** **RASMO 2857.2N 04331.3E** **ORSAL2902.8N 04210.8E** **NIMAR 2906.6N 03954.4E** **KITOT 2902.1N 03450.8E*Note 7** **NUWEIBAA** **TABA** **EL ARISH** **PASOS** **(KAROL 3252.0N 03229.0E)**
L555	~~**LAKLU 232235N 0570401E**~~ ~~**GIDAN 230104N 0582232E**~~ **TOTOX 215030N 0622230E** **TUMET 222307N 0595702E** **LOTUD 224008N 0583624E**	**UL555**	~~**LAKLU 232235N 0570401E**~~ ~~**GIDAN 230104N 0582232E**~~ **TOTOX 215030N 0622230E** **TUMET 222307N 0595702E** **LOTUD 224008N 0583624E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	

UL556	~~**TUBMA 202100N 0463000E**~~ **EGREN 202236N 0464422E** **NONGA 205048N 0492014E** **PURDA 210805N 0510329E** **Note:- 7 (OO, OB)** **IMDAM 202416N 0550801E** **HAIMA 195813N 0561651E** **KUTVI 184306N 0582642E**
UL560	**ARDABIL 3819.9N 04824.9E** *** Note 3&4 (OI)** **SEVAN 4032.0N 04456.9E**
UL566	**PAKER 115500N 0463500E** **KAPET 163322N 0530614E**
UL572	**KAMISHLY (KML)** **LESRI 3704.3N 04113.8E**
UL573	**DAFINAH 231658N 0414310E** **WEHJ 261045N 0362917E**
UL601	**(BAGLUM –BAG 04004.2 03248.6)** *** Note 7** **ADANA 3656.4N 03512.6E** **TUNLA 3553.0N 0360200E)** **KARIATAIN 3412.8N 03715.9E**
UL602	**BAHRAIN** **ALVON 270009N 0500711E*Note 7** **SELEG 280130N 0492212E** **RAPSI 282326N 0490551E** **DARVA 284814N 0484734E** **ALVIX 2919.3N04824.2E** **FALKA 292611N 0481819E** **TASMI 300120N 0475505E** **BASRAH** **LOVEK322206N 0444000E** **DELMI331911N 0431731E** **ELEXI 344237N 0411054E** **DRZ 351724N 0401124E** **KUKSI 364508N 0374910E** **GAZ 365701N 0372824E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
		~~UL610~~	~~FESAL 3429.9N 03731.4E~~ ~~* Note 4(OS)~~ ~~NIKAS 3511.6N 03543.0E~~ ~~(VESAR 3554.0N 03401.0E)~~
		UL607	SITIA (SIT)* Note 7 PAXIS 3357.1N02720.0E OTIKO 3134.4N 02936.6E ALEXANDRIA (AXD)
		UL613	EL DABA (DBA)*Note 7 SOKAL 3236.0N 02737.1E TANSA 3400.0N 02649.0E
L631	TOTOX 215030N0622230E SEVLA 233321N 0591122E	UL631	TOTOX 215030N0622230E SEVLA 233321N 0591122E
		~~UL675~~	~~WADI AL DAWASIR~~ ~~NORLO 211028N0510142E~~ ~~ETUKO 221354N 0552454E~~
L750	ZHOB 3121.3N 06927.6E ROSIE 3140.0N 06900.0E MAXIM 3246.2N 06727.4E HORST 3327.6N 06627.5E VELDT 3430.0N 06454.1E RANAH 3535.0N 06312.0E (AFGAN-3824.0N 05817.0E	UL750	ZHOB 3121.3N 06927.6E ROSIE 3140.0N 06900.0E MAXIM 3246.2N 06727.4E HORST 3327.6N 06627.5E VELDT 3430.0N 06454.1E RANAH 3535.0N 06312.0E (AFGAN-3824.0N 05817.0E
L764	SEEB (MCT) ALMOG 233524N 0574940E IVETO 233520N 0570704E PAXIM 240245N 0561631E	UL764	SEEB (MCT) ALMOG 233524N 0574940E IVETO 233520N 0570704E PAXIM 240245N 0561631E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
		UL768	PIMAL 2626.5N 05122.1E ALVON2700.2N 05007.2E COPPI 2750.6N 04744.0E HFR VATIM 2851.6N 04444.7E RAFHA (RAF) ARAR (AAR) OVANO3148.0N 03909.9E OTILA 3201.5N 03901.9E
		UL883	~~ETUKO 221354N 0552454E~~ ~~EMARA 215222N 0564256E~~ ~~GOLNI 210014N 0594130E~~ ~~LOTAV 203700N 0605700E~~ REXOD 211230N 0613830E UMILA 211555N 0584738E SITOL 211604N 0552514E PURDA 210805N 0510329E ALRIK 220631N 0482535E PMA N243251N 0394219E
M203	PUSTO 3321.0N 04245.0E LOVEK 3222.1N 04440.0E DISAR 3131.3N 04613.4E	UM203	PUSTO 3321.0N 04245.0E LOVEK 3222.1N 04440.0E DISAR 3131.3N 04613.4E
M300	LOTAV 2037N 0605700E EMURU 221535N 0584950E	UM300	(CALICUT) LOTAV 2037N 0605700E EMURU 221535N 0584950E
M301	SANA'A SAA KAPET 163322N 0530614E	UM301	SANA'A SAA ~~DANAK 160800N 0412000E~~ ~~LAKNA 160000N 0420000E~~ KAPET 163322N 0530614E
		UM309	KIND KHALED NASIR 221444N 0400315E
M320	KING FAHD JUBAIL KUWAIT	UM320	KING FAHD JUBAIL KUWAIT
		UM321	~~RAGHBA~~ ~~HAIL~~ HALAIFA 262602N 0391609E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
			KING KHALED
M508	KING KHALED OVEKU 250955N 0445701E MADINAH	UM508	KING KHALED OVEKU 250955N 0445701E MADINAH
M551	AVAVO 1646.3N 05526.1E DAXAM 171612N 0544715E	UM551	DONSA1435.3N06344.0E ANGAL1614.1N 06000.1E AVAVO 1646.3N 05526.1E DAXAM 171612N 0544715E
UM552	(RAHIM YAR KHAN) BIRJAND (BJD) DEHNAMAK(DHN) TEHERAN (TRN) ZANJAN TABRIZ (TBZ)	UM552	(RAHIM YAR KHAN) BIRJAND (BJD) DEHNAMAK(DHN) TEHERAN (TRN) ZANJAN TABRIZ (TBZ)
~~M555~~	~~HAZEM 3214.0 N 03638.0 E GURIAT 3124.8 N 03717.2 E * Note 3 (OS, OJ)~~	~~UM555~~	~~HAZEM 3214.0 N 03638.0E GURIAT 3124.8 N 03717.2E * Note 3 (OS, OJ)~~
M561	KISH * Note 3&4 (OI) MOBET 2645.3N 05609.8E EGSAL 2716.8N06249.0E PANJGUR	UM561	RATUN 2646.2N05108.0E *See Note 7 MIDSI 2641.7N05154.7E KISH * Note 3&4 (OI) MOBET 2645.3N 05609.8E EGSAL 2716.8N06249.0E PANJGUR
		UM573	TEHERAN (TRN) TABRIZ 3808.3N 04613.9E
		UM574	(MALE) (POPET) 0713.7N06813.6E NABIL 1222.0E0600.0E ODAKA 1440.6N05234.0E SYN 1557.7N04847.2E HELAL 1716.0N04422.0E NOBSU 171554N 0431318E ABHA 1814.4N04239.5E JEDDAH
M628	~~DIPIG 231423N 0562002E~~	UM628	DAFINAH 231700N 0414312E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	~~LAKLU 232235N 0570401E~~ ~~GEPOT 231446N 0580053E~~ ~~MUSRU 230256N 0592223E~~ GEVED 230105N 0575111E GIDAN 230104N 0582232E KAXEM 225103N 0595243E PARAR 222630N 0630700E		KIPOM 225316N 0501518E MIGMA 225035N 0512749E KITAP 224928N 0522923E ALPEK 224648N 0535942E LUDID 230227N 0551800E ~~DIPIC 231423N 0562003E~~ ~~LAKLU 232235N 0570401E~~ ~~GEPOT 231446N 0580053E~~ EGVAN 230127N 0561907E TULBU 230005N 0571827E GEVED 230105N 0575111E GIDAN 230104N 0582232E KAXEM 225103N 0595243E MUSRU 230256N 0592223E PARAR 222630N 0630700E
M634	ANGAL 161406N 0600006E ~~ALULA~~ UBTEN 120814N0495611E	UM634	ANGAL 161406N 0600006E ~~ALULA~~ UBTEN 120814N0495611E
M651	ADEN (HARGEISA)	UM651	ADEN (HARGEISA)
M762	REXOD 211230N 0613830E SUR 223159N 0592829E ALMOG 233524N0574940E TAPRA 242607N 0563803E VAXAS 244308N 0561807E * Note 7 (OM, OO) BUBIN 245742N 0560642E		
		UM877	VUSET 235540N 0590812E KUSRA 232426N 0582611E
M881	(BANNU -BN) LAJAK 3356.0N 07030.0E JALAL 3430.0N 07045.0E MATAL 3600.0N 07100.0E ANWAR 3652.0N 07034.0E (GARRI- 3825.0N 07034.0E)	UM881	(BANNU -BN) LAJAK 3356.0N 07030.0E JALAL 3430.0N 07045.0E MATAL 3600.0N 07100.0E ANWAR 3652.0N 07034.0E (GARRI- 3825.0N 07034.0E
~~M999~~	~~(LUXOR)~~ ~~DEDLI 2242 32N 03737 19E~~ ~~OSAMA 2215 54N 03817 34E~~	UM999	(LUXOR) DEDLI 2242 32N 03737 19E OSAMA 2215 54N 03817 34E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	~~KING ABDULAZIZ (JDW~~		KING ABDULAZIZ (JDW)
N303	(HARGEISA) PARIM 1231.7N 04327.2E RIBOK 1547N 04152.5E LABNI 1656.3N 04109.4E	UN303	(HARGEISA) PARIM 1231.7N 04327.2E RIBOK1547N 04152.5E LABNI 1656.3N 04109.4E
		UN315	ASPUX 174406N 0600006E KUTVI 184306N 0582642E ~~HAIMA~~ ~~IMDAM 202416N 0550901E~~ Note:- 7 (OO/OB) SITOL 211604N 0552514E LOTOS 220000N 0503912E RAPMA 232229N 0482010E RESAL 240649N 0470427E KING KHALED
		UN316	HALAIFA 262602N 0391609E PASAM 273045N 0345542E
		UN318	~~BALMA 3428.0N 03503.0E~~ ~~* Note 7 (OE, OJ, OL, OS)~~ ~~CHEKKA 3418.0N 03542.0E~~ ~~LEBOR 3415.0N 03635.0E~~ ~~KARIATIAN~~ TONTU 314804N 0381110E RAGOM 313227N 0381656E NEVOL 3024.7N 03938.6E VELAL2946.0N 04038.4E TAMRO 2838.6N 04240.8E MOGON 2738.8N 04445.9E TAGSO 2727.7N 04545.2E ~~MEDRI 2758.33N 0425306E~~ ~~TOTAD 2750.3N 0433904E~~ KUSAR 2647.7N 04902.3E KFA
		UN319	ZAHEDAN TABAS (TBS) DASHT-E-NAZ (DNZ) ULDUS- 3800.0N 05101.0E
N324	NALTI 221858N 0500751E	UN324	NALTI 221858N 0500751E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	OBNAM 211843N 0503532E **PURDA 210805N 0510329E** **GOBRO 193622N 0534741E** **MRL 180832N 0551040E**		**OBNAM 211843N 0503532E** **PURDA 210805N 0510329E** **GOBRO 193622N 0534741E** **MRL 180832N 0551040E**
N519	**KHI -245436N 0671036E** **SAPNA 233000N 0675000E** **PRN 213824N 0693948E** **TAXUN 211906N 0701520E** **EXOLU 201248N 0713412E** **(BBB- 190506N 0725230E**		
		UN555	**BELGAUM** **BISET 1823.4N 06918.1E** **KATBI 1931.6N 06500.0E** **LOTAV 2037.0N 06057.0E**
N563	**REXOD 211230N 0613830E*Note 7 (OO.OM)** **EMURU 221357N 0585338E** **TULBU 230005N 0571827E** ~~**GOLKO 234312N 0554635E**~~ **MEKNA 223309N 0560815E** **SODEX 234954N 0553202E** **NOBTO 235525N 0551840E** **AUH 242612N 0543900E**	**UN563**	**(BANGALORE)** **REXOD 211230N 0613830E*Note 7 (OO.OM)** **EMURU 221357N 0585338E** **TULBU 230005N 0571827E** ~~**GOLKO 234312N 0554635E**~~ **MEKNA 223309N 0560815E** **SODEX 234954N 0553202E** **NOBTO 235525N 0551840E** **AUH 242612N 0543900E**
		UN569	**JDW 214045N 0390958E** **NASIR 221642N 0400318E** **LOTOS** ~~**ETUKO 221354N 0552454E**~~ ~~**REXOD 211230N 0613830E**~~ **Note:- 7 (OB/OO)** **TOKRA 220925N 0553350E** **UMILA 211555N 0584738E** **LOTAV 203700N 0605700E**
N571	**PARAR 2226.5 N 06307E* Note 7 (OO)** **RAGMA 230600N 0610539E** *** Note 7 (OO, OM, OB)** **VUSET 235540N 0590812E** ~~**ENADA 245956N 0563451E**~~	**UN571**	**(SUGID- 1933.1 N 06921.0E)** **PARAR 2226.5 N 06307E* Note 7 (OO OM, OB)** **RAGMA 230600N 0610539E** *** Note 7 (OO)** **VUSET 235540N 0590812E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	MENSA 245750N 0563249E **ATBOR 251007N 0551947E** **RANBI 251908N 0544500E** **BALUS 254554N 0530424E**		~~**ENADA 245956N 0563451E**~~ **MENSA 245750N 0563249E** **ATBOR 251007N 0551947E** **RANBI 251908N 0544500E** **BALUS 254554N 0530424E**
N629	**TARDI 243418N 0560915E *Note 7 (OO)** **NOSMI 241757N 0563002E** **RAGUD 234701N 0571644E** **SEEB (MCT)**	**UN629**	**TARDI 243418N 0560915E* Note 7 (OO)** **NOSMI 241757N 0563002E** **RAGUD 234701N 0571644E** **SEEB (MCT)**
N638	**KING KHALED** **PMA 243251N0394219E**	**UN638**	**KING KHALED** **PMA 243251N0394219E**
		UN644	**(DERA ISMAIL KHAN)** **GHAZNI (GN)** **LEMOD 3610.0N 06417.5E** **(MEKOL -3730.0N 06200.0E)** **(TABIP-3900.0N 05820.0E**
N764	**NOBSU 171554N 0431318E** **RIN 144015N 0492329E** **SOCOTRA 123749N 0535429E**	**UN764**	**NOBSU 171554N 0431318E** **RIN 144015N 0492329E** **SOCOTRA 123749N 0535429E**
N767	**PARAR 222630N 0630700E** **SEVLA 233321N 0591122E** **SEEB (MCT) * Note 7**	**UN767**	**PARAR 222630N 0630700E** **SEVLA 233321N 0591122E** **SEEB (MCT) * Note 7**
		UN881	**RASKI 230330N 0635200E** **SETSI 230412N 0614410E** **MUSRU 230256N 0592223E** • **Note 7** **GIDAN 230104N 0582232E**
P302	**HALAIFA*Note 3(OE,OJ)** **GURIAT** **HAZEM**	**UP302**	**HALAIFA *Note 3(OE,OJ)** **GURIAT** **HAZEM**
		UP307	**SHJ VOR** **Note 7 OM/OO** **PARAR 222630N 0630700E**
P312	**RIYAN**	**UP312**	**RIYAN**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	PAKER 1155.0N0463500E **(HARGEISA)**		**PAKER 1155.0N0463500E** **(HARGEISA)**
P316	**SALALLAH * Note 7 (OO)** **DAXAM** **GAGLA 180505N 0552410E** **RADAX 220809N 0580230E** **SEEB (MCT)**	**UP316**	**SALALLAH * Note 7 (OO)** **DAXAM 171612N 0544715E** **GAGLA 180505N 0552410E** **GIVNO 195011N 0563059E** **SITAD 201032N 0564415E** **GISKA 213503N 0574014E** **RADAX 220809N 0580230E** **SEEB (MCT)**
		UP318N	**NOBAT 2109 02N 0680000E** **KABIM 2330 00N 06628 00E** **PAXUR-2400N 0660000E** **PARET 2527.2N 06451.5E** **PANJGUR * Note 7 (OI)**
P319	**PANJGUR * Note 7 (OI)** **DOSTI 255800N 0650300E** **KHI -255436N 0671036E** **SAPNA 2330N 06750E** **PAXUR 2400N 06600E** **BILAT 205824N 06800E**	**UP319**	**PANJGUR * Note 7 (OI)** **DOSTI 255800N 0650300E** **KHI -255436N 0671036E** **SAPNA 2330N 06750E** **PAXUR 2400N 06600E** **BILAT 205824N 06800E**
		UP323	**ANODA 0958.1N 07224.0E** **GOLEM 1157.7N 0672202E** ~~**DONGA 143518N0651533E**~~ **GIDAS 142004N0600000E** **KADER151300N 05500E** **PATAP 152744N0532929E** ~~**SHARURAH 1728.2N 04708E**~~ **AL-GHAIDAH** **THAMUD 1717.0N 04955.0E** **BISHA 1958.7N 04237.5E** **JEDDAH**
P500	**(DERA ISMAIL KHAN - DI)** **(BANNU -BN)** **(HANGU- 3329.1N 07100.4E)** **(PESHAWAR-PS)** **(CHITRAL -3553.2N 07148.0E)** **(GERRY-3612.0N 07135.0E)** **PADDY- 3628.0N 07138.0E**	**UP500**	**(DERA ISMAIL KHAN - DI)** **(BANNU -BN)** **(HANGU- 3329.1N 07100.4E)** **(PESHAWAR-PS)** **(CHITRAL -3553.2N 07148.0E)** **(GERRY-3612.0N 07135.0E)** **PADDY- 3628.0N 07138.0E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	FIRUZ 3640.0N 07138.0E		**FIRUZ- 3640.0N 07138.0E**
P513	**BUBAS 245938N 0570003E** **GERAR 240600N 0573616E** **MIBSI 234139N 0575523E** **SEEB (MCT) * Note 7**		
		UP517	**WAFRA** **GOVAL** **KMC**
		UP555	**NUWEIBAA*See Note 3** **RASDA 3306.0N 03057.0E** **(KAVOS)**
P557	**NUBAR 220000N** **0313806E*SeeNote 6&7** **MISUK 290507N 0290621E** **KATAB 292501N0290506E**	**UP557**	**NUBAR 220000N** **0313806E*SeeNote 6&7** **MISUK 290507N 0290621E** **KATAB 292501N0290506E**
P559	**LARNACA)** **KUKLA 3414.6N 3444.8E** **KHALDEH (KAD)** **DAKWE 3338.9N 03555.0E** *** Note 4 (OS)** **DAMASCUS** **TONTU 3148.1N 03811.2E** *** Note 3(OS,OJ)**	**UP559**	**LARNACA)** **KUKLA 3414.6N 3444.8E** **KHALDEH (KAD)** **DAKWE 3338.9N 03555.0E** **DAMASCUS** **TONTU 3148.1N 03811.2E** *** Note 3 (OS,OJ)** **TURAIF (TRF)** **KAVID 3035.9N 04011.8E** **TOKLU 2942.1N 04202.4E** **RASMO 2857.2N 04331.3E** **KMC** **MUSKO 2726.7N 04737.1E** **KEDAT 2721.8N 04759.0E** **JUBAIL (JBL)** **ALVON 2700.2N 05007.2E** **RATUN 2646.2N 05108.0E**
		UP567	**BIRJAND** **ODKAT 3540.6N 05457.2E** **DASHT-E-NAZ -3638.7N 05311.4E** **(ULDUS -3800.0N 05101.0E)**
P570	**KITAL 2003N 06018E**	**UP570**	**TRIVENDRUM**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	MIBSI 234139N 0575523E		**VISET1831 12N 06229 64E** **KITAL 2003N 06018E** **MIBSI 234139N 0575523E**
P571	**LABNI 16 620N 0410921E** **NISMI 162415N 0421838E** **SANA'A (SAA)** **RIN**	**UP571**	**LABNI 165620N 0410921E** **NISMI 162415N 0421838E** **SANA'A (SAA)** **RIN**
		UP574	**(BELGAUM)** **(BISET- 1823.4N 06918.1E)** **TOTOX 215030N 0622230E** *** Note 7 (OO)** **KUSRA 231726N 0585102E** **MIBSI 234138N 0575525E** **LUDAL 235023N 0574305E** **SOLUD 243223N 0564421E** **GISMO 244743N 0562236E** **BUBIN 245742N 0560642E** **KUMUN 254000N 0551512E** *** Note 7 (KUMUN-PAPAR)** **PAPAR 264000N 0542700E** **SHIRAZ** **ESFAHAN** **TEHRAN** **ULDUS**
		UP634	**LALDO 251806N 0563600E** **ATBOR 251007N 0551947E**
		UP891	**MAGALA** **EGNOV** **EMILU** **ASVIR** **KUWAIT**
P899	**PARAR 222630N 0630700E *Note 7 (OO,OM)** **MIBSI 234139N 0575523E** **PAXIM 240245N 05617631E** **ITRAX 241248N 0554749E** **AL AIN (ALN)** **ABU DHABI**	**UP899**	**PARAR 222630N 0630700E*Note 7 (OO,OM)** **MIBSI 234139N 0575523E** **PAXIM 240245N 05617631E** **ITRAX 241248N 0554749E** **AL AIN (ALN)** **ABU DHABI**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
		UP975	**(ELAZIG)*Note7 (DYB) 384225N 0391328E LESRI 370420N 0411348E KANOK 3634.0N 04141.0E SOGUM 341212N 0435454E ETBOM 332143N 0444813E NOLDO 324930N 0452130E PUSMO 304444N 0473547E SIDAD 295231N 0482944E LONOS 283414N 0492344E TESSO 282852N 0492723E MIXAR 270800N 0503300E RATUN 264613N 0510759E**
R205	**ANARAK BIRJAND**	**UR205**	**ANARAK BIRJAND**
R219	**SHARJAH * Note 7 (OM) RATUN 2646.2N 05108.0E KING FAHD BOROP 2653 17 N 04852 03E KEDAT 2721 49N 04759 01E ~~KING KHALID (KMC)~~ ~~TAMRO 2838.6N 04240.8E~~ ~~TURAIF~~ ~~FESAL3429.0N 037 31.4E~~ ~~BASEL 3434.1N 03624.4E~~ ~~FANOS 3436.5N 03541.0E~~**	**UR219**	**~~PARAR 2226.5N 06307.0E~~ ~~* Note 7~~ ~~ENADA 245056N 0563451E~~ ~~PIMAL 2626.5N 05122.1E~~ ~~ALVON 2700.2N 05007.2E~~ ~~KEDAT 2721 49N 04759 01E~~ ~~KING KHALID (KMC)~~ ~~TAMRO 2838.6N 04240.8E~~ ~~TURAIF~~ ~~FESAL3429.9N 03731.4E~~ ~~BASEL 3434.1N 03624.4E~~ ~~FANOS 3436.5N 03541.0E~~ OTILA 3201.5N 03901.9E*Note 7 ~~ARAAM 3430.8N 03731.8E~~ ~~SOMAR 3437.0N 03715.2E~~ ~~ALPHA 3453.0N 03640.0E~~ ~~BANIAS 3513.7N 03557.5E~~ MODAD SOKAN RAFIF SULAF FIRAS**
R401	**AMPEX 0810.0N 05500.0E SUHIL 1200.0N 05500.0E KADER 1506.0N 05500.0E AVAVO 1647.1N 05526.1E**	**UR401**	**AMPEX 08 10.0N 055 00.0E SUHIL 12 00.0N 055 00.0E KADER 15 06.0N 055 00.0E AVAVO 16 47.1N 055 26.1E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	HAIMA **~~DEBOK 2328.5 N 05544.0 E~~** **DEMKI 224941N 0562308E** **MUSAP 241754N 0555245E** **GIDIS 243600N 0555600E** **RAS AL** **DARAX**		**HAIMA** **~~DEBOK 2328.5 N 05544.0 E~~** **DEMKI 224941N 0562308E** **MUSAP 241754N 0555245E** **GIDIS 243600N 0555600E** **RAS AL KHAIMAH** **DARAX**
R402	**LAKLU 232235N 0570401E** **~~DEKLI 220201N 0564510E~~** **HAIMA (HAI)**	**UR402**	**LAKLU 232235N 0570401E** **~~DEKLI 220201N 0564510E~~** **HAIMA (HAI)**
B407	**KING ABDULAZIZ** **MAHDI 2026.0N 03739.3E** **(PORT SUDAN)**	**UB407**	**KING ABDULAZIZ** **MAHDI 2026.0N 03739.3E** **(PORT SUDAN)**
R456	**KITAL200300N 0601800E** **(MALE)**	**UR456**	**KITAL200300N 0601800E** **(MALE)**
R462	**(JIWANI)** **DENDA 2442.5N 06054.8E** **VUSET 235540N 0590812E** **MIBSI 234139N 0575523)** ***Note 7 (OO)**	**UR462**	**(JIWANI)** **DENDA 2442.5N 06054.8E** **VUSET 235540N 0590812E** **MIBSI 234139N 0575523E** ***Note 7 (OO)**
R650	**LUXOR** **HURGHADA** **SHARM EL SHEIKH** **NUWEIBAA** **NALSO 2932.0N 03453.0E**	**UR650**	**LUXOR** **HURGHADA** **SHARM EL SHEIKH** **NUWEIBAA** **NALSO 2932.0N 03453.0E**
R651	**TANF** **SHATRA**	**UR651**	**TANF** **SHATRA**
R652	**TURAIF** ***Note 7(OE)** **GURIAT** **QATRANEH** **AQABA** **METSA 2930.0N 03500.0E**	**UR652**	**TURAIF** ***Note 7(OE)** **GURIAT** **QATRANEH** **AQABA** **METSA 2930.0N 03500.0E**
R653	**JERUSALEM* Note 4(OS)** **RAMTHA** **DAMASCUS**	**UR653**	**JERUSALEM * Note 4(OS)** **RAMTHA** **DAMASCUS**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
R654	**ESFAHAN** **YAZD** **KERMAN** **NABOD 2816.1N 05825.3E** **CHAH BAHAR (CBH)** **~~DENDA~~** **EGTAL 243458N 0603724E** **VAXIM 231900N 0611100E**	**UR654**	**ESFAHAN** **YAZD** **KERMAN** **NABOD 2816.1N 05825.3E** **CHAH BAHAR (CBH)** **~~DENDA~~** **EGTAL 243458N 0603724E** **VAXIM 231900N 0611100E**
R655	**(LARNACA)** **CHEKKA** **KARIATAIN**	**UR655**	**(LARNACA)** **CHEKKA** **KARIATAIN**
R658	**SEEB** **MELMI 2647.0N 05723.0E** **BANDAR ABBAS**	**UR658**	**SEEB** **MELMI 2647.0N 05723.0E** **BANDAR ABBAS**
R659	**SHIRAZ** **DOHA** **MARMI 251400N 0511330E** **MIGMA 225035N 0512749E** **PURDA 210805N 0510329E** **ASTIN 200410N 0495320E** **TULIS 173033N 0462616E** **ALHAZM 161230N 0444742E** **SANA'A**	**UR659**	**SHIRAZ** **DOHA** **MARMI 251400N 0511330E** **MIGMA 225035N 0512749E** **PURDA 210805N 0510329E** **ASTIN 200410N 0495320E** **TULIS 173033N 0462616E** **ALHAZM 161230N 0444742E** **SANA'A**
R660	**(ERZERUM)** **DASIS 38 54.5N 044 12.5E** **TABRIZ** **RASHT** **TEHRAN**	**UR660**	**RASHT** **TEHRAN**
R661	**DULAV 3857.0N 04537.9E** **TABRIZ** **ZANJAN** **RUDESHUR** **VARAMIN** **DEHNAMAK**	**UR661**	**DULAV 3857.0N 04537.9E** **TABRIZ** **ZANJAN** **RUDESHUR** **VARAMIN** **DEHNAMAK**
R674	**Reserved for Yemen**		
R775	**LUXOR (LXR) 254458N 0324607E**	**UR775**	**~~LUXOR~~**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	DEDLI 2242 32N 03737 19E **KING ABDULAZIZ** **DANAK 1608.0N 04129.0E** **(ASSAB)**		**KING ABDULAZIZ** **DANAK 1608.0N 04129.0E** **(ASSAB)**
R777	**DANAK 1608.0N 04129.0E** **SANA'A** **TAIZ** **ARABO 1238.8N 04404.0E** **TORBA 1210.6N 04402.1E**	**UR777**	**DANAK 1608.0N 04129.0E** **SANA'A** **TAIZ** **ARABO 1238.8N 04404.0E** **TORBA 1210.6N 04402.1E**
R784	**SHARJAH** **ORSAR2604.5N 05357.5E** **DURSI 2712.3N 05201.7E** **IMDAT 2740.0N 05113.0E** **ALNIN 2840.9N 05001.6E** **NANPI 2905.0N 04932.0E** **SIDAD 2952.5N 04829.7E** ~~**SHATRA**~~ ~~**MILAD 3249.54N 04521.49E**~~ ~~**VALRE 3324.20N 04502.02E**~~ ~~**ZUBEIDYA**~~ ~~**SALAM 3400.13N 04442.0E**~~ ~~**HAWIJA 3516.66N 04356.25E**~~ ~~**MOSUL**~~ ~~**KIMBO 3600.00N 04327.00E**~~ **PUSMO 304444N 0473547E** **ALVET 313500N 0471500E** **ITSOP 330422N 0454208E** **GONSI 332622N 0451837E** **SIGNI 340006N 0444200E** **RAMPI 351642N 0435618E** **KATOT 360000N 0432700E** **KABAN 3715.0N 04239.0E** **(SIIRT)**	**UR784**	**SHARJAH** **ORSAR 2604.5N 05357.5E** **DURSI 2712.3N 05201.7 E** **IMDAT 2740.0N 05113.0E** **ALNIN 2840.9N 05001.6E** **NANPI 2905.0N 04932.0E** **SIDAD 2952.5N 04829.7E** ~~**SHATRA**~~ ~~**MILAD 3249.54N 04521.49E**~~ ~~**VALRE 3324.20N 04502.02E**~~ ~~**ZUBEIDYA**~~ ~~**SALAM 3400.13N 04442.0E**~~ ~~**HAWIJA 3516.66N 04356.25E**~~ ~~**MOSUL**~~ ~~**KIMBO 3600.00N 04327.00E**~~ **PUSMO 304444N 0473547E** **ALVET 313500N 0471500E** **ITSOP 330422N 0454208E** **GONSI 332622N 0451837E** **SIGNI 340006N 0444200E** **RAMPI 351642N 0435618E** **KATOT 360000N 0432700E** **KABAN 3715.0N 04239.0E** **(SIIRT)**
R785	**TURAIF** **ZELAF 3257.0N 03800.0E** **KARIATAIN** **BANIAS** **NIKAS 3511.6N 03543.0E**	**UR785**	**TURAIF** **ZELAF 3257.0N 03800.0E** **KARIATAIN** **BANIAS** **NIKAS 3511.6N 03543.0E**
R794	**ULDUZ 3810.0N 05020.0E** **NOSHAHR**	**UR794**	**ULDUZ 3810.0N 05020.0E** **NOSHAHR**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos	Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2	1	2
LOWER AIRSPACE		UPPER AIRSPACE	
	DEHNAMAK **TABAS** **BIRJAND * Note 5 (OI)**		**DEHNAMAK** **TABAS** **BIRJAND * Note 5 (OI)**
R799	**SILPA 184953N0510158E** **PATAP 152744N 0532929.5E**	**UR799**	**SILPA 184953N0510158E** **PATAP 152744N 0532929.5E**
~~*New Designator to be assigned*~~		~~UT507~~	~~PIMAL 2626.5N 05122.1E~~ ~~ALVON2700.2N 05007.2E~~ ~~COPPI 2750.6N 04744.0E~~ ~~HFR~~ ~~VATIM 2851.6N 04444.7E~~ ~~RAFHA (RAF)~~ ~~ARAR (AAR)~~ ~~OVANO3148.0N 03909.9E~~ ~~OTILA 3201.5N 03901.9E~~
~~*New Designator to be assigned*~~		~~UW335~~	~~KING KHALED~~ ~~OVEKU 250855N 0445701E~~ ~~MADINAH~~
~~*New Designator to be assigned*~~		~~UV999~~	~~MAGALA~~ ~~ECNOV~~ ~~EMILU~~ ~~ASVIR~~ ~~KUWAIT~~
~~*New Designator to be assigned*~~		~~UT517~~	~~WAFRA~~ ~~GOVAL~~ ~~KMG~~

ATM/SAR/AIS SG/7
Appendix 2B to the Report on Agenda Item 2

DUTIES AND RESPONSIBILITIES OF THE MID RMA

The Middle East Regional Monitoring Agency (MID RMA) for RVSM and RNP implementation has the following duties and responsibilities:

a) to establish and maintain a central registry of State RVSM approvals of operators and aircraft using the Middle East Region airspace where RVSM is be applied;

b) to facilitate the transfer of approval data to and from other RVSM regional monitoring agencies;

c) to establish and maintain a data base containing the results of height-keeping performance monitoring and all altitude deviations of 300 ft or more within Middle East Region airspace, and to include in the database the results of MID RMA requests to operators and States for information explaining the causes of observed large height deviations;

d) provide timely information on changes of monitoring status of aircraft type classifications to State authorities and operators;

e) to assume overall responsibility for assessing compliance of operators and aircraft with RVSM height-keeping performance requirements in conjunction with RVSM introduction in the Middle East Region;

f) to provide the means for identifying non-RVSM approved operators using Middle East airspace where RVSM is applied; and notifying the appropriate State approval authority; and

g) *to conduct readiness assessments and safety assessments as an aid for the Middle East RVSM Task Force for decision making in preparation for RVSM implementation;

h) to carry out post-implementation safety assessments with a view to verify that the defined safety level continues to be met;

i) to establish and maintain a database containing the results of navigation error monitoring;

j) to prepare, each six months, reports setting out the results of navigation error monitoring for the preceding six-month period. These reports shall be presented to the ICAO Middle East Regional Office, Cairo, and States as part of their decision process related to safety management;

k) to conduct safety assessments in conjunction with expansion or changes to the RNP route structure within the Middle East Region;

l) to assist States in carrying out safety assessments in relation to requirements identified within the framework of safety management programmes likely to have an impact on the safety of air navigation at a sub-regional level; and

m) to liaise with other Regional Monitoring Agencies and organizations to harmonise implementation strategies.

Note: The MID RMA will be guided by the working principles indicated in the RMA Manual (Doc….)

- Baghdad and Kabul FIRs

ATM/SAR/AIS SG/7
Appendix 2C to the Report on Agenda Item 2

MIDDLE EAST RVSM MINIMUM MONITORING REQUIREMENTS

AS OF 01 MAY 2004

Initial Monitoring All operators that operate or intend to operate in airspace where RVSM is applied are required to participate in the RVSM monitoring program. The table of monitoring requirements shown below establishes requirements for initial RVSM monitoring, applicable to operators without previous RVSM status, intending to commence operations in MID RVSM airspace. In their application to the appropriate State authority for RVSM approval, operators must show a plan for meeting the applicable initial monitoring requirements.

Aircraft Status for Monitoring Aircraft engineering work required for the aircraft to receive RVSM airworthiness approval must be completed prior to the aircraft being monitored. Any exception to this rule will be co-ordinated with the State authority.

Follow-on Monitoring Monitoring is an on-going program that will be maintained after the initial RVSM approval process. A follow-on sampling program for additional operator aircraft shall ensure continued fulfilment of the percentage rules set out in Table 1. Additionally, monitoring shall be carried out every two years to ensure that ASE stability is satisfactory for sustained RVSM operations.

Monitoring of Airframes that are RVSM Compliant on Delivery If an operator adds new RVSM compliant airframes of a type for which it already has RVSM operational approval and has completed monitoring requirements for the type in accordance with the table below, the new airframes are not required to be monitored – except as targeted at a later date in the follow-on monitoring program. If an operator adds new RVSM compliant airframes of an aircraft type for which it has NOT previously received RVSM operational approval, then the operator should complete monitoring in accordance with the table below.

Applicability of European, North Atlantic and Asia/Pacific Monitoring Monitoring data obtained in conjunction with RVSM monitoring programmes from other regions can be used to meet Middle East monitoring requirements.

Update of Monitoring Requirements Table and Website As significant data is obtained, monitoring requirements for specific aircraft types may change. When the table is updated, States and operators will be informed by the Regional Monitoring Agency.

MONITORING IS REQUIRED IN ACCORDANCE WITH THIS CHART Monitoring prior to the issue of RVSM approval is not a requirement			
Category		Aircraft Type	Minimum Operator Monitoring For Each Aircraft Group
1	Group Approved: Data indicates compliance with the RVSM MASPS	[A30B, A306], [A312 (GE) A313(GE)], [A312 (PW) A313(PW)], A318, [A319, A320, A321], [A332, A333], [A342, A343], A345, A346 B712, [B721, B722], B732, [B733, B734, B735], B737(Cargo), [B736, B737/BBJ, B738/BBJ, B739], [B741, B742, B743], B74S, B744 (5" Probe), B744 (10" Probe), B752, B753, [B762, B763], B764, B772, B773 CL60(600/601), CL60(604), C560, [CRJ1, CRJ2], CRJ7, DC10, F100, GLF4, GLF5, LJ60, MD10, MD11, MD80 (All series), MD90, T154	10% or Two airframes from each fleet* of an operator to be monitored as soon as possible but not later than 6 months after the issue of RVSM approval and thereafter as directed by the RMA * Note. For the purposes of monitoring, aircraft within parenthesis [ ] may be considered as belonging to the same fleet. For example, an operator with six A332 and four A333 aircraft may monitor one A332 and one A333 or two A332 aircraft or two A333 aircraft.
2	Group Approved: Insufficient data on approved aircraft	Other group aircraft other than those listed above including: ASTR, B703, B731, BE20,BE40, C500, C25A, C25B, C525, C550**, C56X, C650, C750, CRJ9, [DC86, DC87], DC93, DC95, [E135, E145], F70, [F900, F900EX], FA20, FA10, GLF2(II), GLF(IIB), GLF3, GALX, GLEX, H25B(700), H25B(800), H25C, IL62, IL96, J328, L101, L29(2), L29(731), LJ31, [LJ35,LJ36], LJ45, LJ55, SBR1, T134, T204, P180, PRM1,YK42	60% of airframes from each fleet of an operator or individual monitoring, as soon as possible but not later than 6 months after the issue of RVSM approval and thereafter as directed by the RMA. ** Refer to aircraft group table for detail on C550 monitoring
3	Non-Group	Aircraft types other than those listed under categories 1 and 2, above.	100% of aircraft shall be monitored as soon as possible, but not later than 6 months after the issue of RVSM approval.

Table 1. MID-RVSM Monitoring Requirements

In order to achieve the operator-monitoring requirement, monitoring results from other regions may be used. An individual aircraft that has demonstrated satisfactory height-keeping performance through monitoring in another region will not require re-monitoring as part of the MID-RVSM monitoring programme.

Table 2. Pre Applied Monitoring Groups for Aircraft Certified under Group Approval Requirements

Monitoring Group	ICAO Type Designator	A/C Type	A/C Series
A124	A124	AN-124 RUSLAN	ALL SERIES
A300	A306 A30B	A300 A300	600, 600F, 600R, 620, 620R, 620RF B2-100, B2-200, B4-100, B4-100F, B4-120, B4-200, B4-200F, B4-220, C4-200
A310-GE	A310	A310	200, 200F,300, 300F
A310-PW	A310	A310	220, 220F,320
A318	A318	A318	ALL SERIES
A320	A319 A320 A321	A319 A320 A321	CJ , 110, 130 110, 210, 230 110, 130, 210, 230
A330	A332, A333	A330	200, 220, 240, 300, 320, 340
A340	A342, A343,	A340	210, 310
A345	A345	A340	540
A346	A346	A340	640
A3ST	A3ST	A300	600R ST BELUGA
AN72	AN72	AN-74, AN-72	ALL SERIES
ASTR	ASTR	1125 ASTRA	ALL SERIES
ASTR-SPX	ASTR	ASTR SPX	ALL SERIES
AVRO	RJ1H, RJ70, RJ85	AVRO	RJ70, RJ85, RJ100
B712	B712	B717	200
B727	B721 B722	B727	100, 100C, 100F,100QF, 200, 200F
B732	B732	B737	200, 200C
B737CL	B733 B734 B735	B737	300, 400, 500
B737NX	B736 B737 B738 B739	B737 B737 B737 B737	600 700, 700BBJ 800, BBJ2 900
B737C	B737	B737	700C
B747CL	B741 B742 B743	B747	100, 100B, 100F, 200B, 200C, 200F, 200SF, 300
B74S	B74S	B747	SR, SP
B744-5	B744	B747	400, 400D, 400F (With 5 inch Probes)
B744-10	B744	B747	400, 400D, 400F (With 10 inch Probes)
B752	B752	B757	200, 200PF

Monitoring Group	ICAO Type Designator	A/C Type	A/C Series
B753	B753	B757	300
B767	B762 B763	B767	200, 200EM, 200ER, 200ERM, 300, 300ER, 300ERF
B764	B764	B767	400ER
B772	B772	B777	200, 200ER, 300, 300ER
B773	B773	B777	300, 300ER
BE40	BE40	BEECHJET 400A	ALL SERIES
BE20	BE20	BEECH 200 -KINGAIR	ALL SERIES
C500	C500	500 CITATION, 500 CITATION I, 501 CITATION I SINGLE PILOT	ALL SERIES
C525	C525	525 CITATIONJET, 525 CITATIONJET I	ALL SERIES
C525-II	C25A	525A CITATIONJET II	ALL SERIES
C525 CJ3	C25B	CITATIONJET III	ALL SERIES
C550-552	C550	552 CITATION II	ALL SERIES
C550-B	C550	550 CITATION BRAVO	ALL SERIES
C550-II	C550	550 CITATION II, 551 CITATION II SINGLE PILOT	ALL SERIES
C550-SII	C550	S550 CITATION SUPER II	ALL SERIES
C560	C560	560 CITATION V, 560 CITATION V ULTRA, 560 CITATION V ULTRA ENCORE	ALL SERIES
C56X	C56X	560 CITATION EXCEL	ALL SERIES
C650	C650	650 CITATION III , 650 CITATION VI , 650 CITATION VII	ALL SERIES
C750	C750	750 CITATION X	ALL SERIES
CARJ	CRJ1, CRJ2	REGIONALJET	100, 200, 200ER, 200LR
CRJ-700	CRJ7	REGIONALJET	700
CRJ-900	CRJ9	REGIONALJET	900
CL600	CL60	CL-600 CL-601	CL-600-1A11 CL-600-2A12, CL-600-2B16
CL604	CL60	CL-604	CL-600-2B16
BD100	CL30	CHALLENGER 300	ALL SERIES
BD700	GL5T	GLOBAL 5000	ALL SERIES
CONC	CONC	CONCORDE	ALL SERIES
DC10	DC10	DC-10	10, 10F, 15, 30, 30F, 40, 40F
DC86-7	DC86, DC87	DC-8	62, 62F, 72, 72F
DC93	DC93	DC-9	30, 30F
DC95	DC95	DC-9	SERIES 51
E135-145	E135, E145	EMB-135, EMB-145	ALL SERIES

Monitoring Group	ICAO Type Designator	A/C Type	A/C Series
F100	F100	FOKKER 100	ALL SERIES
F2TH	F2TH	FALCON 2000	ALL SERIES
F70	F70	FOKKER 70	ALL SERIES
F900	F900	FALCON 900, FALCON 900EX	ALL SERIES
FA10	FA10	FALCON 10	ALL SERIES
FA20	FA20	FALCON 20 FALCON 200	ALL SERIES
FA50	FA50	FALCON 50, FALCON 50EX	ALL SERIES
GALX	GALX	1126 GALAXY	ALL SERIES
GLEX	GLEX	BD-700 GLOBAL EXPRESS	ALL SERIES
GLF2	GLF2	GULFSTREAM II (G-1159),	ALL SERIES
GLF2B	GLF2	GULFSTREAM IIB (G-1159B)	ALL SERIES
GLF3	GLF3	GULFSTREAM III (G-1159A)	ALL SERIES
GLF4	GLF4	GULFSTREAM IV (G-1159C)	ALL SERIES
GLF5	GLF5	GULFSTREAM V (G-1159D)	ALL SERIES
H25B-700	H25B	BAE 125 / HS125	700B
H25B-800	H25B	BAE 125 / HAWKER 800XP, BAE 125 / HAWKER 800, BAE 125 / HS125	ALL SERIES/A, B/800
H25C	H25C	BAE 125 / HAWKER 1000	A , B
IL86	IL86	IL-86	NO SERIES
IL96	IL96	IL-96	M , T, 300
J328	J328	328JET	ALL SERIES
L101	L101	L-1011 TRISTAR	1 (385-1), 40 (385-1), 50 (385-1), 100, 150 (385-1-14), 200, 250 (385-1-15), 500 (385-3)
L29B-2	L29B	L-1329 JETSTAR 2	ALL SERIES
L29B-731	L29B	L-1329 JETSTAR 731	ALL SERIES
LJ31	LJ31	LEARJET 31	NO SERIES, A
LJ35/6	LJ35 LJ36	LEARJET 35 LEARJET 36	NO SERIES, A
LJ40	LJ40	LEARJET 40	ALL SERIES
LJ45	LJ45	LEARJET 45	ALL SERIES
LJ55	LJ55	LEARJET 55	NO SERIES B, C
LJ60	LJ60	LEARJET 60	ALL SERIES
MD10	MD10	MD-10	ALL SERIES
MD11	MD11	MD-11	COMBI, ER, FREIGHTER, PASSENGER

Monitoring Group	ICAO Type Designator	A/C Type	A/C Series
MD80	MD81, MD82, MD83, MD87, MD88	MD-80	81, 82, 83, 87, 88
MD90	MD90	MD-90	30, 30ER
P180	P180	P-180 AVANTI	ALL SERIES
PRM1	PRM1	PREMIER 1	ALL SERIES
T134	T134	TU-134	A, B
T154	T154	TU-154	A , B, M, S
T204	T204, T224, T234	TU-204, TU-224, TU-234	100, 100C, 120RR, 200, C
YK42	YK42	YAK-42	ALL SERIES

Note: This list is not considered exhaustive.

ATM/SAR/AIS SG/7
Appendix 2D to the Report on Agenda Item 2

STATUS OF IMPLEMENTATION OF SEARCH AND RESCUE REQUIREMENTS IN THE MID REGION

CONCLUSIONS/RECOMMENDATIONS IN THE SEARCH AND RESCUE FIELDS APPLICABLE TO THE MID REGION

STATES	LIM/MID REC.3/9 Chart SAR 1	LIM/MID REC.3/4 Co-ordination SAR Authorities and IMO	ASIA/PAC REC. 7/6 Provision of SAR facilities	ASIA/PAC REC.7/5 Capacity of rescue units	LIM/AFI REC. 3/6 Satellite aided SAR	ASIA/PAC REC.7/24 SAR escort service	ASIA/PAC REC.7/11 Assistance-SAR services	LIM/MID REC. 3/14 emergency frequency 2182 Khz	LIM/MID REC. 3/15 development of pre-search procedures	ASIA/PAC REC. 7/12a) com. between Acft	ASIA/PAC A REC.7/13 com. means for	LIM/MID REC.3/16 Carriage of survival radio equipment	ASIA/PAC REC.7/16 A)&B). Ship reporting system	ASIA/PAC REC.7/16 C) RCC and RSC	LIM/MID REC.3/17 AMVER system	ASIA/PAC REC.7/17 SAR Exercises	ASIA/PAC REC7/18 SAR training	ASIA/PAC REC.7/9 co-operation between States	ASIA/PAC REC.7/15 Improvement to SAR system
Afghanistan																			
Bahrain	✓	✓	✓	✓	✓	X	✓	X	X	X	✓	✓	✓	✓	✓	X	✓	✓	
*Egypt	E	E	C	C	E	D	E	E	D	D	E	E	E	D	A	D	E	A	C
Iran, Islamic Republic																			
Iraq																			
Israel																			
Jordan	✓	✓	✓	✓	*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	D
Kuwait																			
Lebanon																			
Oman	Y	Y	Y	Y	Y	No	Y	Y	No	Y	Y	Y	MCT Radio	Y	NA	No	NA	Y	NA
*Pakistan	E	D	D	D	C	D	D	D	D	C	E	E	D	E	D	B	C	C	C
Qatar																			
Saudi Arabia																			
Syrian Arab Republic																			
United Arab Emirates	X	X	N/A	N/A	NO	N/A	N/A	N/A	NO	N/A	N/A	✓	N/A	N/A	NO	N/A	N/A	N/A	N/A
Yemen																			

- Egypt and Pakistan have used the categorization as used in Appendix 'A' to Part V11 of Asia/Pacific FASID as follows:
  A=not implemented, B=initial implementation, C=meets Annex 12 requirements in some areas, D= meets Annex 12 requirements in most areas,
  E=Fully meets Annex 12 requirements, Blank=no response.

REPORT ON AGENDA ITEM 3: REVIEW OF THE REPORT OF THE AIS/MAP TF/2 MEETING

3.1 Under this agenda item the Sub-Group reviewed the report of the Second meeting of the AIS/MAP Task Force, which was held in Cairo, 15-17 March 2004. The outcome of the meeting is summarized as follows:

a) the Task Force reviewed and updated the status of implementation of AIS/MAP requirements in the MID Region;

b) it reviewed and updated the FASID AIS Tables as well as the list of deficiencies in the AIS/MAP field;

c) with regard to the status of implementation of AIS automation in the MID Region, the Task Force reviewed the results of the survey carried out in the MID region and developed consequently two draft Conclusions regarding the approach to be used for the implementation of AIS automaton in the MID Region and the harmonization of AIS, MET and FPL information;

d) the Task Force reiterated the need to comply with Annex 15 provisions related to the implementation of quality system and to take urgent action on MIDANPIRG/8 Conclusion 8/34 and developed a draft Conclusion related to a survey on the implementation of quality system within MID States' AISs;

e) it was of view that the development of some AIS/MAP timelines could be a useful planning tool for the MID Region and accordingly framed a draft Conclusion in this regard;

f) in discussing the issue pertaining to AIS/MAP personnel training and licensing, and with a view to assist and support the activities of the CNS/ATM Human Resources Planning and Training Task Force, the meeting developed a draft Conclusion related to the development of an AIS/MAP training action plan for the MID Region;

g) the Task Force reviewed the proposed programme for the MID AIS/MAP Seminar, which is scheduled to be convened in Cairo, from 6 to 9 December 2004 and agreed on the subjects to be addressed during this seminar; and

h) proceeded to the review of its Terms of Reference and Work Programme.

3.2 While discussing the outcome of the AIS/MAP Task Force meeting, IATA pointed out that although the implementation of WGS-84 should have been completed since 1998, the majority of MID States have still not implemented the geoid undulation referenced to the WGS-84 ellipsoid. It was highlighted, in this regard, that the geoid undulation is not required only for those international airports where GNSS/GPS and/or ILS precision approaches are implemented, but in accordance with Annexes 4, 14 and 15 provisions and with reference to Doc 9674 (WGS-84 Manual), the geoid undulation is required for the aerodrome elevation position, independently from the type of approach and for the runway thresholds with different values of accuracy and resolution depending on the type of approach implemented.

3.3 IATA, then, stressed out that, while the importance and need for the provision of high quality æronautical information is gaining momentum, the implementation of quality system appears to be a specific domain with low degree of implementation among MID States and that many States need to be assisted to comply with Annex 15 provisions. It was clarified also, in this regard, that the objective of the survey on quality system, which will be carried out in the MID

Region is to obtain information from MID States regarding the status of implementation of quality system within their Aeronautical Information Services and/or the difficulties they face to implement the required system and that States should not wait for the results of this survey to initiate the implementation procedure. Reference was also made to the Terms of Reference and Work Programme of the AIS/MAP Task Force, which, inter-alia, is mandated to assist States to implement a quality system for aeronautical information in an expeditious manner.

3.4 The meeting then noted that the subject of quality system has been addressed in many fora (ATM/SAR/AIS SG/6, AIS/MAP TF/2, etc) and that for clarification purposes, the participants to those meetings were presented with consistent background materials on quality management systems, particularly the ISO 9001 version 2000 concept and requirements. It was also mentioned that the up-coming MID AIS/MAP Seminar scheduled to be convened in Cairo, 6 -9 December 2004, will constitute an additional forum where the subject of quality system would be extensively addressed.

3.5 With regard to the World Aeronautical Chart, the Sub-Group recalled that MID Basic ANP and FASID does not assign any responsibility for the production of the World Aeronautical Chart (WAC) sheets: 2548, 2563 and 2670, which cover part of Iran, Oman and UAE and that pending information from Oman, the Task Force agreed that this subject be tackled by the ATM/SAR/AIS SG/7 meeting. Based on the foregoing, Oman accepted to be assigned the responsibility to produce the WAC sheets 2563 and 2670 and the Sub-Group agreed accordingly to the following draft Conclusion:

DRAFT CONCLUSION 7/18: ASSIGNMENT OF THE RESPONSIBILITY FOR THE PRODUCTION OF THE WAC SHEETS: 2548, 2563 AND 2670

That,

a) the responsibility for the production of the World Aeronautical Chart ? ICAO 1:1 000 000:

i) WAC sheet 2548 is assigned to Iran,
ii) WAC sheets 2563 and 2670 are assigned to Oman; and

b) MID FASID Table AIS-7 be updated consequently.

3.6 In view of the above, the Sub-Group reviewed and endorsed the following draft Conclusions/Decisions emanating from the Task Force:

DRAFT CONCLUSION 7/19: ENHANCED PRE-FLIGHT INFORMATION SERVICE

That, with a view to avoid overloading pilots with aeronautical information, which are either not important or not relevant to their flight, States are encouraged to:

a) refrain from retaining NOTAMs in force for indefinite periods;

b) implement in their automated pre-flight information systems:

i) a selection functionality based on the ICAO NOTAM Selection Criteria, in order to enable the selection of particular information in the Pre-flight Information Bulletins (PIBs), and

ii) *an update briefing functionality in order to enable the notification of updates following an initial briefing*.

DRAFT CONCLUSION 7/20: PROPOSAL FOR AMENDMENT OF MID FASID AIS TABLES

That, a proposal for Amendment of the MID FASID be circulated to States to reflect the changes made to Tables AIS 1, AIS 2, AIS 4, AIS 5, AIS 6 and AIS 8.

DRAFT CONCLUSION 7/21: APPROACH TO AIS AUTOMATION

That, with a view to ensure progressive implementation of automated AIS systems in accordance with the AIS Manual (Doc 8126) and the MID Basic Air Navigation Plan provisions, States, which have not yet introduced automation within their Aeronautical Information Services, are urged to:

a) plan to initially automate their NOTAM and pre-flight information services; or

b) arrange for the provision of automated services on their behalf on the basis of bilateral or multilateral agreements with States or other non-governmental organizations.

Note: In case a State has an AIS automation plan for, it should be ensured that the automated NOTAM and pre-flight information system to be implemented is modular, expandable and based on data exchange concept to support further developments and applications.

DRAFT CONCLUSION 7/22: HARMONIZATION OF AIS, MET AND FPL INFORMATION

That, in any approach to AIS automation, States should take the necessary measures to enable users to access both AIS and MET information from a common interface based on the flight plan entry, to support combined AIS/MET/FPL pre-flight briefing.

DRAFT CONCLUSION 7/23: IMPLEMENTATION OF QUALITY SYSTEM WITHIN MID STATES' AISS

That, with a view to obtain information from MID States regarding the status of implementation of quality system within their Aeronautical Information Services and/or the difficulties they face to implement the required system:

a) ICAO MID Regional Office carries out a survey on the implementation of quality system; and

b) the results of this survey should serve as a basis for the development of a Quality Management Plan for the MID Region to guide and assist States in the implementation of a Quality Management System in conformity with the ISO 9000 series of standards.

DRAFT CONCLUSION 7/24: AIS/MAP TIMELINES FOR THE MID REGION

That, as a support to the global ATM operational concept, the AIS/MAP timelines at ***Appendix 3A*** *to the report on Agenda Item 3, be used in the MID Region as an internal planning tool for the implementation of specific AIS/MAP related subjects*.

DRAFT DECISION 7/25: AIS/MAP TRAINING ACTION PLAN FOR THE MID REGION

That, with a view to assist and support the activities of the CNS/ATM Human Resources Planning and Training Task Force, the AIS/MAP Task Force should:

a) identify the AIS/MAP training resources already available in the MID Region; and

b) *propose an AIS/MAP training action plan for the MID Region*.

DRAFT DECISION 7/26: REVISED TERMS OF REFERENCE AND WORK PROGRAMME OF THE AIS/MAP TASK FORCE

That, revised Terms of Reference and Work Programme of the AIS/MAP Task Force be adopted as shown at ***Appendix 3B*** *to the report on Agenda Item 3.*

Middle East Region

AIS/MAP IMPLEMENTATION PLAN

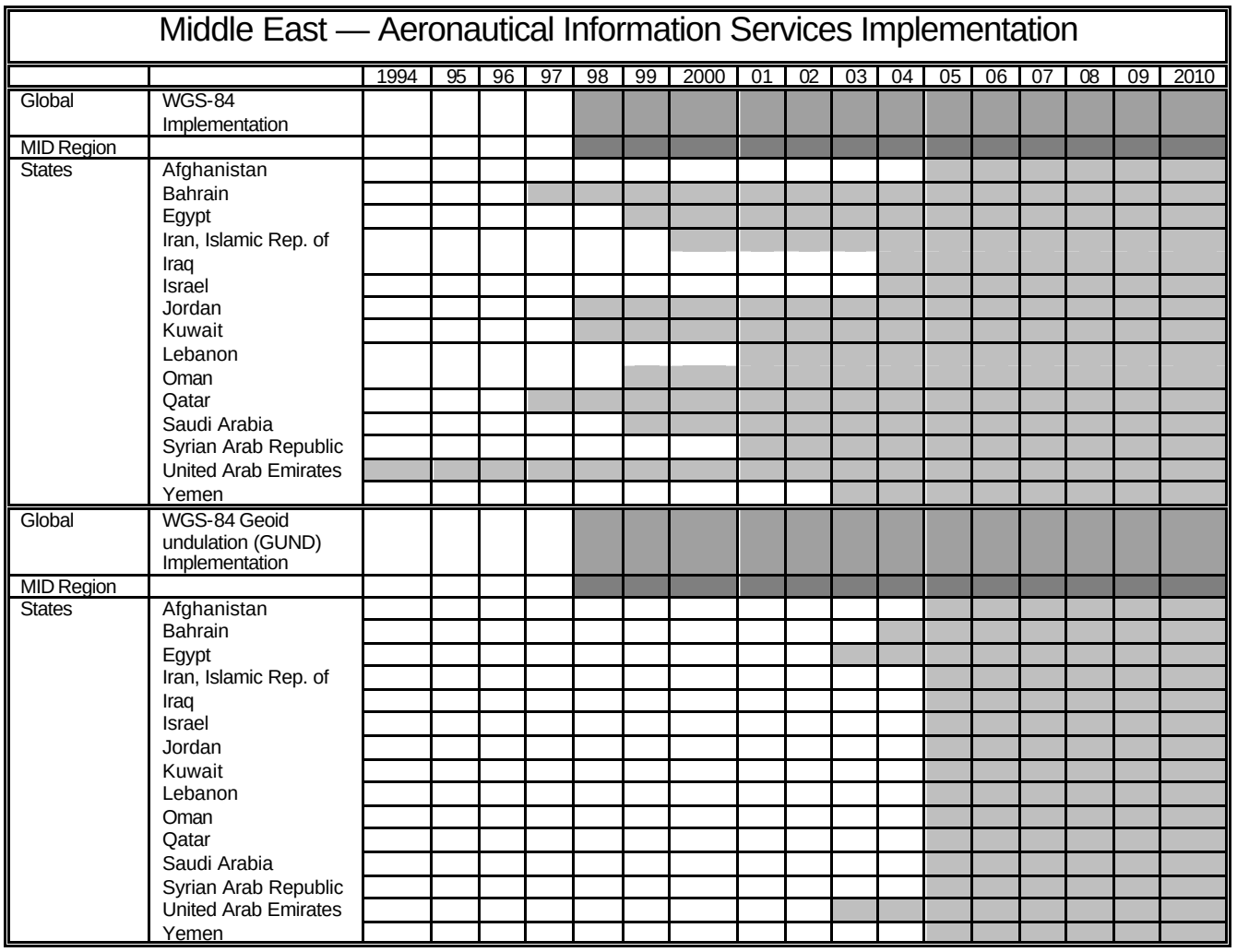
Updated timelines

TIMELINES:

Global

Regional

National


Middle East — Aeronautical Information Services Implementation
1994
95
96
97
98
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2000
01
02
03
04
05
06
07
08
09
2010
Global
WGS-84 Implementation
MID Region
States
Afghanistan
Bahrain
Egypt
Iran, Islamic Rep. of
Iraq
Israel
Jordan
Kuwait
Lebanon
Oman
Qatar
Saudi Arabia
Syrian Arab Republic
United Arab Emirates
Yemen
Global
WGS-84 Geoid undulation (GUND) Implementation
MID Region
States
Afghanistan
Bahrain
Egypt
Iran, Islamic Rep. of
Iraq
Israel
Jordan
Kuwait
Lebanon
Oman
Qatar
Saudi Arabia
Syrian Arab Republic
United Arab Emirates
Yemen

Middle East — Aeronautical Information Services Implementation

		1994	95	96	97	98	99	2000	01	02	03	04	05	06	07	08	09	2010
Global	Quality System Implementation																	
MID Region																		
States	Afghanistan																	
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. Of																	
	Iraq																	
	Israel																	
	Jordan																	
	Kuwait																	
	Lebanon																	
	Oman																	
	Qatar																	
	Saudi Arabia																	
	Syrian Arab Republic																	
	United Arab Emirates																	
	Yemen																	
Global	Quality System Certification																	
MID Region																		
States	Afghanistan																	
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. Of																	
	Iraq																	
	Israel																	
	Jordan																	
	Kuwait																	
	Lebanon																	
	Oman																	
	Qatar																	
	Saudi Arabia																	
	Syrian Arab Republic																	
	United Arab Emirates																	
	Yemen																	

Middle East — Aeronautical Information Services Implementation

		1994	95	96	97	98	99	2000	01	02	03	04	05	06	07	08	09	2010
Global	Implementation of an automated NOF and pre-flight Information System																	
MID Region																		
States	Afghanistan																	
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. Of																	
	Iraq																	
	Israel																	
	Jordan																	
	Kuwait																	
	Lebanon																	
	Oman																	
	Qatar																	
	Saudi Arabia																	
	Syrian Arab Republic																	
	United Arab Emirates																	
	Yemen																	
Global	Harmonization of AIS, MET and flight plan information to support combined AIS/MET/FPL pre-flight briefing.																	
MID Region																		
States	Afghanistan																	
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. Of																	
	Iraq																	
	Israel																	
	Jordan																	
	Kuwait																	
	Lebanon																	
	Oman																	
	Qatar																	
	Saudi Arabia																	
	Syrian Arab Republic																	
	United Arab Emirates																	
	Yemen																	
Global	Interrogation of aeronautical databases from the aircraft for combined automated AIS/MET/FPL in-flight briefing.	SARPs not yet available																
MID Region																		
States	Afghanistan																	
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. Of																	
	Iraq																	
	Israel																	
	Jordan																	
	Kuwait																	
	Lebanon																	
	Oman																	
	Qatar																	
	Saudi Arabia																	
	Syrian Arab Republic																	
	United Arab Emirates																	
	Yemen																	

Middle East — Aeronautical Information Services Implementation

		1994	95	96	97	98	99	2000	01	02	03	04	05	06	07	08	09	2010
Global	Publication of the Integrated Aeronautical Information Package on a CD-ROM and on the website.	SARPs not available																
MID Region																		
States	Afghanistan																	
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. of																	
	Iraq																	
	Israel																	
	Jordan																	
	Kuwait																	
	Lebanon																	
	Oman																	
	Qatar																	
	Saudi Arabia																	
	Syrian Arab Republic																	
	United Arab Emirates																	
	Yemen																	
Global	Implementation of a fully automated AIS Database/System.	SARPs not available																
MID Region																		
States	Afghanistan																	
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. of																	
	Iraq																	
	Israel																	
	Jordan																	
	Kuwait																	
	Lebanon																	
	Oman																	
	Qatar																	
	Saudi Arabia																	
	Syrian Arab Republic																	
	United Arab Emirates																	
	Yemen																	

MIDANPIRG
AERONAUTICAL INFORMATION SERVICES AND AERONAUTICAL CHARTS TASK FORCE (AIS/MAP/TF)

1. TERMS OF REFERENCE

The AIS/MAP Task Force shall:

1) examine the Status of implementation of the ICAO requirements in the field of AIS/MAP;

2) identify and review those specific deficiencies related to AIS/MAP and recommend action to be taken to eliminate them;

3) prepare amendments to relevant MID Basic ANP and FASID, as appropriate; ~~and~~

4) assist States to implement a quality system for aeronautical information in an expeditious manner;

5) monitor and review latest developments in the AIS/MAP field.

6) foster the integrated improvement of aeronautical information services through proper training and qualification of the personnel performing technical duties in this aeronautical activity.

The AIS/MAP Task Force shall report to the ATM/SAR/AIS Sub-Group at each Sub-Group meeting.

2. WORK PROGRAMME

Ref	Tasks	Priority	Target Completion Date
1	Identify reasons that hinder States from implementation and adherence to the AIRAC System and suggest ways and means, which would facilitate adherence to the AIRAC System.	A	2004
2	Analyze the status of implementation of WGS-84 in the MID Region and recommend measures to be taken to improve the situation.	A	~~2004~~ 2005
3	Review the status of implementation of ICAO requirements pertaining to the Integrated Aeronautical Information Package and aeronautical charts in the MID Region.	A	~~2003~~ -(1)
4	Foster the standardized production of aeronautical charts in the MID Region, identifying the obstacles that States could have in adjusting to the specifications of ICAO Annex 4.	A	~~2004~~ 2005
5	Recommend possible course of action to be taken by States in order to comply with ICAO Annex 4 requirements.	A	~~2004~~ 2005
~~6~~	~~Define technical and administrative aspects to facilitate the production of aeronautical charts based on WGS-84.~~	~~A~~	~~2005~~
~~7~~ 6	Foster the implementation of Quality System within the Aeronautical Information Services in the MID Region, identifying the difficulties that States could have to comply with the specifications of ICAO Annex 15.	A	~~2004~~ 2005
~~8~~ 7	Recommend possible course of action to be taken by each State in order to comply with ICAO requirements pertaining to Quality system.	A	~~2004~~ 2005
~~9~~ 8	Develop a Quality assurance/management Plan for the MID Region to orient/assist States in the implementation of Quality Management System in accordance with ISO 9001-2000.	A	2005
9	Monitor and review technical and operating developments in the area of automation and AIS databases.	A	2005
10	Develop a cohesive Air Navigation Plan ~~concerning~~ for AIS Automation in the MID Region taking into consideration the outcomes of the 11th Air Navigation Conference. ~~AIS/MAP 98 Divisional meeting in terms of data models, exchange of electronic aeronautical information, electronic aeronautical charts and Study/develop technical requirements for the provision of electronic data~~.	A	2005
11	Describe the integrated Regional Automated AIS System for the MID Region: ✓ Recommend distribution and fall-back procedures; ✓ Recommend the communications network requirements for the MID Region Automated AIS Systems; ✓ Recommend provisions to meet reliability and redundancy requirements; ✓ Recommend common AIS query procedures;	A	2005
12	Carry out studies for the harmonization and automated processing of AIS, MET and FPL products in the MID Region;	A	2005
13	Prepare amendments to relevant MID Basic ANP and FASID, as appropriate.	A	-(1)
14	~~Ensure~~ Highlight the importance of giving ~~that~~ AIS its ~~given~~ proper status in the Civil Aviation Administrations. ~~and that AIS personnel is well trained; and recommend possible course of action to be taken by each State in order to meet the future CNS/ATM requirements.~~	A	~~2004~~ 2005
15	Identify the AIS/MAP training resources available in the MID Region.	A	2005
16	Propose an AIS/MAP training action plan for the MID Region	A	2005

(1) Continuous Task

3. PRIORITIES

A High priority tasks, on which work should be speeded up.

B Medium priority tasks, on which work should begin as soon as possible, but without detriment to priority A tasks.

C Tasks of lesser priority, on which work should begin as time and resources allow, but without detriment to priority A and B tasks.

4. COMPOSITION

~~All MID~~ MIDANPIRG Provider States + IATA + IFALPA

- END -

REPORT ON AGENDA ITEM 4: REVIEW OF AIR NAVIGATION DEFICIENCIES in the ATM/SAR and AIS/MAP Fields

4.1 Under this agenda item, the Sub-Group recalled that MIDANPIRG/8 developed Conclusion 8/54 inviting MID States to allocate sufficient resources for the elimination of the air navigation deficiencies and urging them to inform ICAO of any implementation problems they encounter in the elimination of deficiencies within their State(s) giving the rationale for non-elimination of deficiencies. To this end, States were requested to formulate and review on a regular basis an action plan including the rationale for non-elimination of deficiencies, using the format at **Appendix 4C** to the report on Agenda Item 4 The first action plan should have been submitted to the ICAO MID Regional Office for review, prior to the 31st December 2003.

4.2 The meeting was informed that as a follow-up action to MIDANPIRG/8 Conclusion 8/54, a State Letter Ref. AN 2/2 –242 dated 19 November 2003 has been sent to MID States in order to provide the ICAO MID Regional Office with the updated list of deficiencies, including those related to the AIS/MAP field, and the action plan they had developed and implemented to eliminate these deficiencies. Six (6) States have, so far, provided the requested action plan and updated list of deficiencies.

4.3 It was brought to the attention of the meeting that as a follow-up action to the Secretary General State Letter M6/1-02/79 dated 27 September 2002 and further to the serious concerns expressed by the ICAO Council in March 2004 that many deficiencies have persisted for a number of years thereby posing a potential threat to safety of civil aviation, a second State Letter M6/1 dated 15 July 2004 signed by the Secretary General of ICAO has been sent to MID States in order to provide ICAO with the action plan they had developed and implemented to eliminate their air navigation deficiencies. Three (3) States (Egypt, Jordan and UAE) have, so far, replied to this letter.

4.4 The updating of the list of deficiencies is an on-going activity of the Secretariat to reflect the identified/reported air navigation deficiencies in the MID Region. Taking into consideration the replies received and the information provided during the meeting, the Sub-Group reviewed and updated the list of deficiencies in the AIS/MAP and ATM/SAR fields as shown at **Appendices 4A** and **4B** to the report on Agenda Item 4.

4.5 While reviewing the list of deficiencies, the Sub-Group noted that the totality of the deficiencies in the ATM field are related to the non implementation of ATS routes required by the MID Basic ANP. The meeting recognized in this regard, that the rationale for non-implementation does not relate to lack of resources and that these deficiencies are mainly attributed to either State (political issue) and/or Military conditions.

4.6 With regard to AIP Afghanistan and Iraq and their compliance to Annex 15 provisions, the representative of the United States expressed the need for assistance and welcomed any comments/suggestions, which could enhance these aeronautical information publications. The Iraqi delegation promised to keep the ICAO MID Office informed about any developments related to AIP Iraq.

ATM/SAR/AIS SG/7
Appendix 4A to the Report on Agenda Item 4

UPDATED AIR NAVIGATION DEFICIENCIES IN THE MIDDLE EAST REGION

AIS/MAP FIELD

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
1	ANNEX 15: Para 4.1.1	Afghanistan, Iraq	Newly Restructured AIP	June 1996		Need to produce and issue the new restructured AIP	Indicated States	Dec. 2004	U
2	ANNEX 15: Para 4.2.9 & 4.3.7	Afghanistan, Iraq, ~~Israel, Kuwait~~, Syria, Yemen	Lack of regular and effective updating of the AIP	January 2003	ICAO to follow up with States	Need to update the AIP on a regular basis	Indicated States	~~Afghanistan: Dec. 2004~~ ~~Iraq: Dec. 2004~~ ~~Syria: Mar. 2004~~ ~~The remaining States:~~ Dec. ~~2003~~ 2004	~~A~~ U
3	ANNEX 15: Para 6.	Afghanistan, Iraq, Israel, Jordan, Kuwait, Syria, Oman, Yemen	Lack of implementation of AIRAC System	May 1995	ICAO to follow up with States	Need for implementation of AIRAC requirements	Indicated States	~~Afghanistan: Dec. 2004~~ ~~Iraq: Dec. 2004~~ ~~Syria: March 2003~~ ~~The remaining States: Dec. 2003~~ Dec. 2004	A
4	ANNEX 15: Para 3.6.4	Afghanistan, Iraq, Israel,	Implementation of WGS-84	December 1997		Need to implement WGS-84	Indicated States	~~Israel: Nov. 2003~~ ~~The remaining States:~~ Dec. 2004	U
5	ANNEX 15: Para 3.6.4	~~Bahrain~~, Iran, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Yemen	~~Lack of full implementation of WGS-84~~ Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	January 2003	ICAO to follow up with States to determine what action is needed to achieve implementation.	Need to ~~complete the full implementation of~~ implement geoid undulation referenced to the WGS-84 ellipsoid.	Indicated States	Jordan: Dec. 2005 ~~Yemen: June 2003~~ The remaining States: ~~Mar. 2004~~ Dec. 2004	A

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
6	ANNEX 15 Para. 3.2	Afghanistan, Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Yemen	Implementation of a Quality System	January 2003		Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Indicated States	~~Dec. 2004~~ Bahrain: Dec. 2004 The remaining States: Dec. 2005	A
7	ANNEX 15 Para. 5.2.8.3	Afghanistan, Iraq, Israel, ~~Oman~~, ~~Syria~~	Non-production of the monthly printed plain language summary of NOTAM, regularly	January 2003		Need to produce the monthly printed plain language summary of NOTAM on a regular basis	Indicated States	~~Nov. 2003~~ ~~Jun.~~ Dec. 2004	A
8	ANNEX 4 Para. 7.2	Afghanistan, Iraq, Israel, Jordan, ~~Qatar~~, Saudi Arabia, Syria, Yemen	Non-production of the Enroute Chart-ICAO	May 1995	Jordan has produced an Enroute chart but it is not 100% compliant with Annex 4 provisions	Need to produce the Enroute Chart-ICAO	Indicated States	~~Afghanistan: Dec. 2004~~ ~~Iraq: Dec. 2004~~ ~~Saudi Arabia: May 2004~~ ~~Syria: Dec 2003~~ ~~Mar 2004~~ ~~Yemen: June 2003~~ ~~The remaining States: May~~ Dec 2004	A

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
9	ANNEX 4 Para. 3.2	Afghanistan, Egypt, Iran, ~~Oman~~, Saudi Arabia, Syria, UAE, Yemen	Non-production of Aerodrome Obstacle Chart-ICAO Type A	May 1995	For some RWYs in Egypt, ~~Oman~~, Saudi Arabia, Syria, UAE and Yemen the Aerodrome Obstacle Chart-ICAO Type A has not been produced	Need to produce Aerodrome Obstacle Chart-ICAO Type A for all Int'l Airports RWYs, except if a notification to this effect is published in the AIP (if no significant obstacles exist)	Indicated States	~~Afghanistan: Dec. 2004~~ ~~Iraq: Dec. 2004~~ ~~Saudi Arabia: May 2004~~ ~~Syria: Dec 2003~~ ~~Mar 2004~~ ~~Yemen: June 2003~~ ~~The remaining States: May~~ ~~Sep.~~ Dec. 2004	A
10	ANNEX 4 Para. 13.2	Afghanistan ~~Bahrain~~, Iran, Iraq, Qatar	Non-production of Aerodrome/ Heliport Chart - ICAO	May 1995		Need to produce Aerodrome/ Heliport Chart - ICAO for all Int'l Aerodromes	Indicated States	~~Afghanistan: Dec. 2004~~ ~~Iraq: Dec. 2004~~ ~~The remaining States: May 2004~~ Dec 2004	A
11	ANNEX 4 Para. 11.2	Afghanistan, Iraq, Yemen	Non-production of Instrument Approach Chart-ICAO	January 2003	Yemen has produced the Instrument Approach Chart-ICAO except for TAIZ/Ganad (OYTZ) Airport	Need to produce Instrument Approach Chart-ICAO for all Int'l Aerodromes	Indicated States	~~Yemen: June 2003~~ ~~The remaining States:~~ Dec. 2004	A
12	ANNEX 4 Para. 6.2	Egypt, Iraq	Non-production of Precision Approach Terrain Chart-ICAO	January 2003		Need to produce Precision Approach Terrain Chart-ICAO for precision approach RWYs CAT II and III.	Indicated States	Dec. 2004	A
13	ANNEX 4 Para. 6.2	Iran	Precision Approach Terrain Chart-ICAO for Tehran Mehrabad Int'l Airport RWY 29L not updated	July 2001		Precision Approach Terrain Chart-ICAO for Tehran Mehrabad Int'l Airport RWY 29L has to be updated	Iran	~~Jun.~~ Dec. 2004	A

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
14	ANNEX 4 Para. 16.2	Afghanistan ~~Bahrain~~, Egypt, Iran Iraq, Kuwait, Lebanon, Saudi Arabia, Syria, Yemen	Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May 1995		Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Indicated States	~~Saudi Arabia: May Sep~~ 2004 ~~Yemen: June 2003~~ ~~The remaining States: Sep.~~ Dec 2004	B
15	ANNEX 15 Para. 8.1	Afghanistan Iran, Iraq, Israel, Kuwait, Syria, Yemen	Non provision of pre-flight information service at international airports	Mar. 2004		Need to provide a pre-flight information service at all aerodromes used for international air operations.	Indicated States	Dec. 2004	A

EXPLANATORY NOTES

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

AU@ 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.

AA@ 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.

AB@ 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.

UPDATED AIR NAVIGATION DEFICIENCIES IN THE MID REGION - ATM/SAR FIELD

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
1	MID ANP Table ATS-1	Iraq	With the recent developments in Iraq, the ATS route requirements over Baghdad FIR is being reviewed in consultation with the State, IATA and the coalition forces		-To follow-up with all parties concerned. -Need for review communication coordination procedures have been highlighted	-New requirements being identified in consultation with the State, IATA and the coalition forces -Parallel route network developed within the framework of informal coordination meetings organized by ICAO. Tentative implementation date 25 November 2004	Iraq, ICAO, IATA, Coalition Forces	Dec.2004	A
2	LIM/MID/RAN Concl. 3/7 Cooperation between States in SAR	All MID States	Lack of Search and Rescue Agreements between neighboring States	11/11/94	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved -ICAO to assist	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	-All MID States -	Dec.2005 Dec.2005 Dec. 2005	A
3	MID ANP Table ATS-1 Plan of ATS routes	Afghanistan Uzbekistan	Segment of ATS route **A219** not implemented	5/12/97	ICAO to follow up with States to determine what action is needed to achieve implementation *Probably to extend B466 till TERMEZ in the MID Plan and delete requirement for A219.*	Segment Kandahar – Termez: Not implemented	Afghanistan Uzbekistan	Dec. 2005	B

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
4	MID ANP Table ATS-1 Plan of ATS routes	Israel Jordan Syria	ATS route **A412** not implemented	5/12/97	Jerusalem to Amman not yet implemented (Informed by Jordan that implementation not possible at present -non-technical nature of issue noted) *Segment Amman – Tanf shown as A 52)*	ICAO to follow up with States to determine what action is needed to achieve implementation	States ICAO to assist	Dec.2006	B
5	MID ANP Table ATS-1 Plan of ATS routes	Qatar Saudi Arabia	ATS route **A415** not implemented	5/12/97	Doha to King Khalid implemented at variance with the Plan . slightly longer -Military restrictions Economic impact -Not affecting safety	Saudi Arabia and Qatar to continue negotiations to open this route.	Saudi Arabia Qatar	Dec. 2006	B
~~6~~	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Iran Qatar	ATS route **A453** not implemented	5/12/97	Initial direct alignment KISH – BAHRAIN was changed to pass via PIMAL. Still not yet implemented -Economic impact -Not affecting safety	States to follow-up	Bahrain Iran ICAO	Dec. 2005	B
7	MID ANP Table ATS-1 Plan of ATS routes	Israel Cyprus	ATS route **B406** not implemented	5/12/97	No sections implemented Implemented as B17/UB17 Larnaca- MERVA(FIR BDY)	To be followed by both the ICAO EUR and MID Offices	Israel Cyprus ICAO to assist	Dec. 06	B
8	MID ANP Table ATS-1 Plan of ATS routes	Lebanon Syria	ATS route **B410** not implemented	5/12/97	UL620 proceeding to BALMA then, R655-Chekka Chekka- Damascus to be implemented -Non –technical nature -Economic impact -Aircraft using longer routes	To be discussed in EMAC*** meetings.	Syria ICAO to assist	Dec. 2006	B
9	MID ANP Table ATS-1 Plan of ATS routes	Jordan Syria	ATS route **B412** not implemented	5/12/97	-Most segments not implemented. Jordan ready to implement. *-Only segment RBG - King Abdulaziz implemented*	-States to co-ordinate to finalize implementation -Informal meeting proposed by ATM/SAR/AIS SG/7 -Realignment would be considered	Jordan Syria ICAO to assist	Dec. 2006	B

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
10	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Qatar Saudi Arabia	ATS route **B419** not implemented	5/12/97	Not implemented Doha - King Fahd -Economic impact Subject to military restrictions Saudi Arabia ready to implement	States to continue negotiations with one another and military	Bahrain Qatar Saudi Arabia	Dec. 2006	B
11	MID ANP Table ATS-1 Plan of ATS routes	Syria Turkey	ATS route **B538** not implemented within Damascus FIR	5/12/97	*-(Segment Gaziantep – Aleppo:B544/V836)* *- (segment Aleppo – kariatain:W5)* -(Not implemented: Kariatain – Damascus) -Economic impact -alternative routes available -Not affecting safety	ICAO to follow up with States to determine what action is needed to achieve implementation	ICAO	Dec. 2006	B
12	MID ANP Table ATS-1 Plan of ATS routes	Jordan Lebanon Turkey	ATS route **B545** not implemented	5/12/97	Segment MUT- BALMA: Implemented as UL620. Segment KHALDEH-AMMAN: Not implemented -Non-technical nature -Economic impact *Segment BALMA- Khaldeh: B15)*	To be discussed in EMAC*** meetings. ICAO to follow-up	Jordan Lebanon Syria	Dec. 2006	B
13	MID ANP Table ATS-1 Plan of ATS routes	Lebanon Syria	ATS route **G202** not implemented	5/12/97	Not implemented DAKWE - Damascus Economic impact- alternative routes available but longer -Not affecting safety	ICAO to follow-up	Lebanon Syria	Dec. 2006	B
14	MID ANP Table ATS-1 Plan of ATS routes	Saudi Arabia U.A.E.	ATS route **G660** not implemented	5/12/97	Not implemented King Abdulaziz to Abu Dhabi -Economic impact -Not affecting safety	States to organize informal coordination meeting to review route structure from Gulf south into Arabian Peninsula	States	Dec. 2006	B
15	MID ANP Table ATS-1 Plan of ATS routes	Jordan Syria	ATS route **G662** not implemented	5/12/97	Not implemented Damascus to Guriat	States to continue coordination to achieve implementation	Jordan Syria	Dec. 2006	B

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	**States/ facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of complete**	**Priority for action***
16	MID ANP Table ATS-1 Plan of ATS routes	Israel Jordan	ATS route **G664** not implemented	5/12/97	A route exists within Nicosia FIR till boundary of Tel Aviv FIR (APLON-LEDRA-SOLIN) Requirement is from Ben Gurion to Amman Non-technical nature of issue noted	The need for the establishment of an ATS route between Ben Gurion and Amman has been identified.	Israel Jordan ICAO to assist	Dec 2006	B
17	MID ANP Table ATS-1 Plan of ATS routes	Iran	ATS route **G665** not implemented	5/12/97	Implemented, but segment Shiraz - NABOD is only available at night -economic impact only -not affecting safety	ICAO to follow up with Iran to determine what action is needed to achieve full implementation	ICAO	Dec. 2006	B
18	MID ANP Table ATS-1 Plan of ATS routes	Israel Jordan Syria	ATS route **R653** not implemented	5/12/97	-No sections implemented -Non-technical nature of issue noted -aircraft using alternative routes -economic impact only		States/IATA and ICAO to assist	Dec. 2006	B

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

AU@ 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.

AA@ 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.

AB@ 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.

STATES ACTION PLAN FOR ELIMINATION OF AIR NAVIGATION DEFICIENCIES

State:…….. **Date:**…….

Item No	Deficiency	Corrective Action		Remarks*
		Description	Date of completion	

(*) Rationale for non-elimination, Difficulties encountered, other States concerned, etc.

REPORT ON AGENDA ITEM 5: ANY OTHER BUSINESS

Next meeting of the ATM/SAR/AIS Sub-Group

5.1 Under this agenda item, the meeting agreed that the next meeting of the Sub-Group will be organized after MIDANPIG/9 meeting, at a date to be coordinated between the Chairman and the Secretariat.

ATM/SAR/AIS SG/7
Appendix A to the Report

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