



ICAO CAIRO UNITING AVIATION

ATS Routes and ATM Contingency Planning

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ICAO

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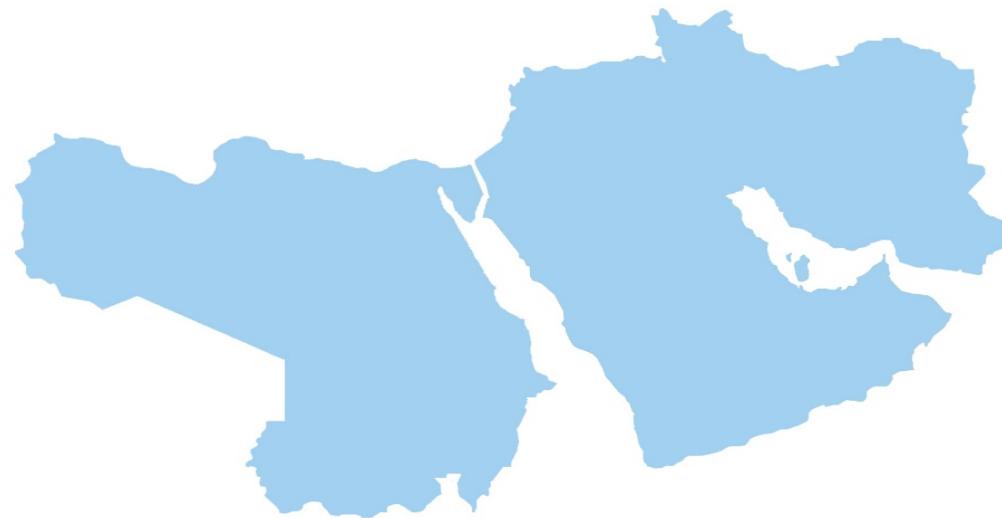




Presentation Outline

- Airspace challenges
- ATS Routes
- RDWG
- ICARD
- Contingency

The MID Region



The Middle East Region is composed of **15 States**:

Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, UAE and Yemen

MID Region Interfaces





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ATS Route Network



Airspace Management Challenges



- Non- optimized ATS Route Network
- Airspace Capacity
- Significant unused airspace
- Contingency
- No regional ATFM solution
- Traffic flow measures
- Civil/Military Cooperation
- GNSS Interference
- Outdated ATS LoAs



Points for consideration

- To achieve the vision of optimized ATS Route Network (**User Preferred Routes, Unidirectional Parallel Routes, Free Route Concept**); national and bilateral efforts should be incorporated into a regional framework.
- Civil/Military Cooperation will lead to a better approach in **sharing the airspace** supported by the implementation of the **Flexible Use of Airspace (FUA)** Concept, which would **increase** significantly capacity
- ATFM will be the optimal solution for **balancing Demand and Capacity, which** supports enhancing efficiency and maximizing the use of the available airspace

The proposed solution was through ARNOP

The ATS Route Network Optimization Project (**ARNOP**), endorsed by the General Ministerial Aviation Summit (Riyadh, Saudi Arabia, 29-31 August 2016) as one of the air navigation priority **project**, had not been initiated due to many challenges such as:

- ❖ No **Budget** allocation
- ❖ Current focus on **local solutions** and **quick wins**
- ❖ No **vision** for long term **optimum** solution
- ❖ Difficulties affecting cross border solutions
- ❖ Etc.



Extract from ATM SG/4 meeting:

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

It was highlighted that in respect to TPR/2 (HIL-PASAM – Westbound), Egypt agreed on the establishment of the segment PASAM-HGD and Saudi Arabia had been studying the establishment of the segment HIL-PASAM. The envisaged implementation date is 19 July 2018. The meeting noted with appreciation that segment NWB-DATOK will be available for use soon.



The ATM SG/4 meeting noted that Egypt and Sudan are still working together on the improvement of the ATS route structure at the interface between Cairo and Khartoum FIRs, as a follow-up to the Special Coordination Meeting that was held at the ICAO MID Office, Cairo, Egypt, 29-30 March 2017. The meeting was informed that the proposed ATS route improvements will be considered during the planning process of the Airspace Structure Project for Cairo FIR. Meanwhile, both States agreed to the implementation of 30NM radar longitudinal separation to be further reduced to 20NM.

The ATM SG/4 meeting noted that Jordan is coordinating with Saudi Arabia the improvement of the ATS Route Network at the South-East part of Amman FIR to split the traffic flows through Guriat (GRY) on two parallel unidirectional routes.

Oman and Yemen agreed to the realignment of UB403 to ensure smooth traffic flows between Muscat-Mogadishu through Sana'a FIR. The implementation date is planned for (date TBD).



MSG CONCLUSION 6/9: REMOVAL OF PREFIX “U” FROM ROUTE DESIGNATORS

That,

- a) States take necessary measures to remove the prefix “U” from the route designators published in their AIPs to be completed by **December 2020**;
- b) a Proposal for Amendment to the MID eANP Volume II-Specific Regional Requirements - Table ATM II-MID-1 - MID Region ATS Routes be processed to remove the prefix ‘U’; and
- c) States support the MID Office to optimize the use of route designators in the MID Region

Solution for the shortage of route designators



Taking into consideration the significant changes to the MID Region ATS Route Network, the ATM SG/4 meeting agreed that a comprehensive review of the Table II-MID-1 of the MID eANP should be carried out. Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 4/3:

MID ANP TABLE II-MID-1

That,

States provide the ICAO MID Office with their inputs to the Table II-MID-1 at Appendix 4A before 15 June 2018; and

the Secretariat consolidate the inputs and process a proposal for amendment to the MID ANP Volume II, by 15 July 2018.



MID Route Development Working Group (MID RDWG)

MIDANPIRG CONCLUSION 17/18: MID RDWG AND MID REGION ATS ROUTE CATALOGUE

That, States be urged to:

- a) *use the MID Route Development Working Group (MID RDWG) as the main platform to facilitate bilateral and multilateral coordination related to the improvement of the ATS Route Network and airspace management in the MID Region; and*
- b) *review the MID Region ATS Route Catalogue and take actions related to the implementation of the ATS proposals relevant to their FIRs.*

MID Route Development Working Group (MID RDWG) Terms of Reference are at Appendix D



Points for consideration

- a) Route catalogue proposal by IATA for a dynamic platform including a mechanism for the processing of proposals under the frame work of RDWG
- b) Flight Planning System limitations impacting the selecting of some published ATS by ANSPs mainly.
- c) Measures should be taken to ensure timely implementation of agreed proposals/actions



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ICAO International Codes and Route Designators (ICARD)





The following issues related to ICARD/5LNCs were addressed by the ATM and AIM Sub-Groups:

- publication in National AIPs of 5LNCs, which have not been registered in ICARD;
- 5LNCs duplicates (5LNCs used in more than one State);
- sound-like proximity;
- 5LNCs registered in ICARD but not used;
- increasing demand of 5LNCs for terminal use (SIDs, STARs, IAPs);
- shortage of available 5LNCs for allocation;
- coordination of 5LNCs used as FIR BDRY with the neighboring States; and
- ICARD system/platform issues



MSG CONCLUSION 6/11:

ICARD ISSUES

That,

- a) *States be urged to take necessary actions on the resolution of the issues related to ICARD/5LNCs, including:*
 - b) *registration of all 5LNCs published in AIP into ICARD;*
 - *5LNCs duplicates;*
 - *Non-ICAO codes;*
 - *sound-like proximity;*
 - *release of unused registered 5LNCs; and*
 - *use of Alphanumeric codes for terminal airspace, in accordance with PANS-OPS (Doc 8168) provisions.*
 - c) *Users (IATA, IFALPA, Jeppesen, etc.) are invited to report issues related to ICARD/5LNCs in the MID Region to the ICAO MID Office; and*
 - d) *an air navigation deficiency be filed against those States that are not complying with Annex 11 and Doc 8168 provisions related to 5LNCs.*



Requirements related to ICARD is now in the MID ANP since April 2019.

ICAO International Codes and Route Designators (ICARD)

ICARD Platform/database should be used as the only mean for managing Five Letters Name-Codes (5LNCs).

5LNCs in terminal airspace (SIDs, STARs, an IAP) not used for radiotelephony should be assigned with alphanumeric codes in accordance with PANS-OPS (Doc 8168) provisions (i.e. last 2 letters of the aerodrome plus 3 digits; example XY324).

States should ensure that the 5LNCs published in their AIPs are registered in ICARD and are not duplicates.



5LNCs Duplicates

States are commended for their cooperation in resolving 5LNCs duplicates and like-soundings

The List of duplicates as of December 2019 is at [Appendix C](#), further actions should be taken to remove duplicates.

In accordance with its term of reference, the ATM SG is tasked to:

1. review the MID ATS Routes Network in order to assess its capacity and constraints;
2. identify requirements and improvements for achieving and maintaining an efficient ATS Route Network in the MID Region; and
3. propose a strategy and prioritized plan for development of improvements to the route network, highlighting the areas that require immediate attention and the inter-regional issues/improvements with the adjacent ICAO Regions.





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ATM Contingency Planning





Prior 2013

- MID Region Contingency Plan was around 150 pages gathering procedures from national contingency plans in a single document.
- Contingency Routing Scheme Asia/Middle East/Europe-2003 (CRAME-03) developed in 2003 during the Gulf War.
- It was challenging keeping the 2 Regional Plans up-to-date

MID Region ATM Contingency Plan (MID Doc 003)

- Endorsed by MIDANPIRG/14 (Jeddah, Saudi Arabia, 15-19 December 2013)
- Available on the MID Office website
- Includes the MID Region **Volcanic Ash Contingency Plan**
- Main Objective to Ensure coordination and sharing of information between stakeholders to agree on the implementation of **contingency measures/routes**
- Through:
 - ✓ Notification Procedures
 - ✓ Establishment of Contingency Coordination Teams (CCTs) on case-by-case basis



MID DOC 003

INTERNATIONAL CIVIL AVIATION ORGANIZATION

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

MID REGION ATM CONTINGENCY PLAN

EDITION JUNE, 2015

MID Region ATM Contingency Plan objectives

- ✓ Ensure the continued **safety** of air transport in the event of disruption or potential disruption of Air Traffic Services and related supporting services in the ICAO MID Region.

- ✓ The Plan is also activated in cases when airspace users decided to circumnavigate airspace(s) due to **conflict zones, weather**, etc. which might increase significantly the air traffic in other airspace(s).





How it works

- Upon receipt of **information** from any source (IATA, States, media, internal or external, etc.) ICAO MID Office initiates the coordination with ICAO HQ, IATA MENA, States concerned and monitors closely the situation in accordance with the agreed Notification Procedure
- **Contingency Coordination Team (CCT)** would be established once a conclusion is reached between **ICAO and IATA MENA**
- **ICAO MID Office** maintains close liaison with the **States concerned**, **activate/deactivate** the CCTs, issue the updates and conduct teleconferences and face-to-face meetings as required.
- **IATA** coordinates with the **airlines** in order to address the airlines views and needs and keep very close coordination with ICAO MID Office

Contingency Coordination Teams (CCTs)

- Used as the **main platform for sharing of information and coordination** to implement **contingency measures** to overcome the associated challenges affecting the air traffic flow across the ICAO MID Region.
- **CCT framework** is also used for the implementation of **recovery plans** for the normalization of air operations in airspaces where the contingency events had ceased.





Airspace Avoidance Notification/Coordination Process				
Airlines	Airline Actions	IATA Actions	ICAO MID Office	States/ ANSPs
Monitor global activities that have an effect on flight operations. (currently in place)	NONE	NONE	NONE	NONE
Review State activity that requires airline safety and security review (currently in place)	Notify IATA as to effected FIR' and factors under review. (security and or safety)	When more than (30%) of airlines reporting, notify ICAO MID	Call for the Contingency Coordination Team (CCT)	NONE
Identify specific Factors and possible triggering events (currently in place)	inform IATA on review findings and possible triggering events	Inform CCT on findings and number of airlines reporting	Notify effected States/ANSPs on number of airlines reviewing current activity	NONE
Event triggered: reviewing avoidance options and select avoidance scenario	Inform IATA of selected scenario and volume/initial timelines.	Inform CCT	Notify effected States/ANSP scenario and volume/timelines	Review scenario and give feedback on feasibility
48 Hours prior to activation of planned avoidance re-routes	Notify IATA	Notify CCT	Notify effected States/ANSPs	Prepare NOTAMs and avoidance scenario
24 Hours prior to activation of planned avoidance re-routes	Notify IATA	Notify CCT	Notify effected States/ANSPs	Publish NOTAMs



Contingency Coordination Teams (CCTs)

- **CCTs are established** of members from **ICAO** (MID, HQ, relevant ROs), **IATA** [as permanent members], **States** affected by traffic changes, **EUROCONTROL**, **FAA**, and other interested **Organizations**.
- **Active CCTs:** Iraq, Libya, Qatar, Syria, Yemen.
- **Closed CCTs:** Beirut-Cyprus (3 CCTs), Ankara-Bagdad-Tehran Interface (5 CCTs), Turkey Coup, Tehran-Bahrain and Kuwait interface (2 CCTs), Egypt (Sinai Peninsula).
- **Other focused** CCTs related to different factors that had impact on the MID Region traffic flows such as ATC strikes, weather, etc. which had addressed the issues and were closed after the situation returned to normal.



Contingency Coordination Teams (CCTs)

Under the framework of the CCTs several Special Coordination Meetings were convened. In 2019 2 meetings were convened in MID Region in addition to several side meetings to main meetings:

1. Europe-Middle East ATM Special Coordination Meeting (EMA SCM) in Beirut on 17 & 18 January 2019 between Cyprus, Egypt, Lebanon, EUROCONTROL, IATA and ICAO to discuss the improvements of the ATM measures at the EUR/MID interface.
2. Second Special Coordination Meeting on the Implementation of ATM Contingency Arrangements (SCM-ACA/2) Muscat, Oman, from 16 to 18 July 2019.

Contingency Coordination Teams (CCTs)

- Taking into consideration that the MID Region has been under contingency measures for several years and the situation has been getting more and more complicated due to the prolonged nature of the disruption affecting the traffic flows across the MID Region; the SCM ACA/2 meeting main objective was to bring ATM stakeholders together to share their experience, concerns, lesson learnt, discuss the issues related to air traffic safety and capacity and agree on clear plan to overcome the prevailing challenges.
- The SCM ACA/2 meeting was attended by fifty-nine (59) participants from fourteen (14) States (Azerbaijan, Bahrain, Cyprus, Egypt, India, Iraq, Iran, Kuwait, Oman, Qatar, Saudi Arabia, Syria, UAE, USA) and three (3) Organizations (EUROCONTROL, IATA and ICAO).
- The SCM ACA/2 meeting discussed the ATM issues within the MID Region as well at the interface with APAC and EUR Regions.
- 15 side meetings were convened, in which agreements on some deliverables and proposals were agreed upon.

Keys to Success

- Confidence (States' buy-in)
- Good relationship with States at higher and technical levels
- Identification of States' ATM key players
- Open Communication, transparency and neutrality
- Cooperation with the Organizations concerned
- Dedication and professionalism of the CCTs members
- Effective coordination between MID RO-IATA and HQs



Challenges

- The plan was developed and has been implemented with very **limited resources**.
- Coordination are carried out through emails, teleconferences, phone calls.
- **Budget** constraint does not allow for required face-to-face meetings, to foster implementation of agreed measures, and in particular for the unplanned ones.
- Other

In Need

- **Tool**: the establishment of a system/Platform to be used for CCTs' activities, IATA is working on this.
- **Budget**: more budget should be allocated for contingency & emerging situations.
- **Human resources**: additional staff might be required.



Conclusions

- CCTs framework proved its effectiveness and success in ensuring the continued safety of traffic during contingency.
- Success for ICAO as a whole mainly in accommodating States' needs during such situations. ICAO had been commended for leading the regional contingency planning.
- Effective **communication, support** and high level of **cooperation** between all parties should be maintained.
- Building on the Excellent cooperation and success of the CCTs, the development of Recovery Plans for the normalization of traffic through **Baghdad, Beirut, Damascus, Sana'a and Tripoli FIRs** as well as the **Gulf** had been initiated for implementation in a timely manner once the situation improved.
- ATM Contingency Plan Action Group was developed to review the MID Region ATM Contingency Plan and present a revised version to the MID ATM SG/5 meeting.
- Reference is made to MIDANPIRG Conclusions 17/19 and 17/20

**CONCLUSION 17/19 SAFETY ASSESSMENTS DUE TO CONTINGENCY WITH IMPACT ON ATS ROUTE NETWORK**

That,

- a) Bahrain, Iran, Oman, Qatar and UAE be urged to provide the outcomes of their safety assessment of the contingency routes and/or changes to the ATS Routes Network to the ICAO MID Office by 15 June 2019, as well as the relevant data for the analysis of the disruption and its impact to the network;
- b) the ATM SG/5, with the MIDRMA support, carry out analyses of the data/inputs received from States to identify the challenges and agree on necessary measures to mitigate any safety risk; and
- c) conduct a lessons-learned session during the ATM SG/5 meeting with the participation of affected stakeholders reviewing the impact of the disruption to the network, allowing all stakeholders to present their views and feedback.

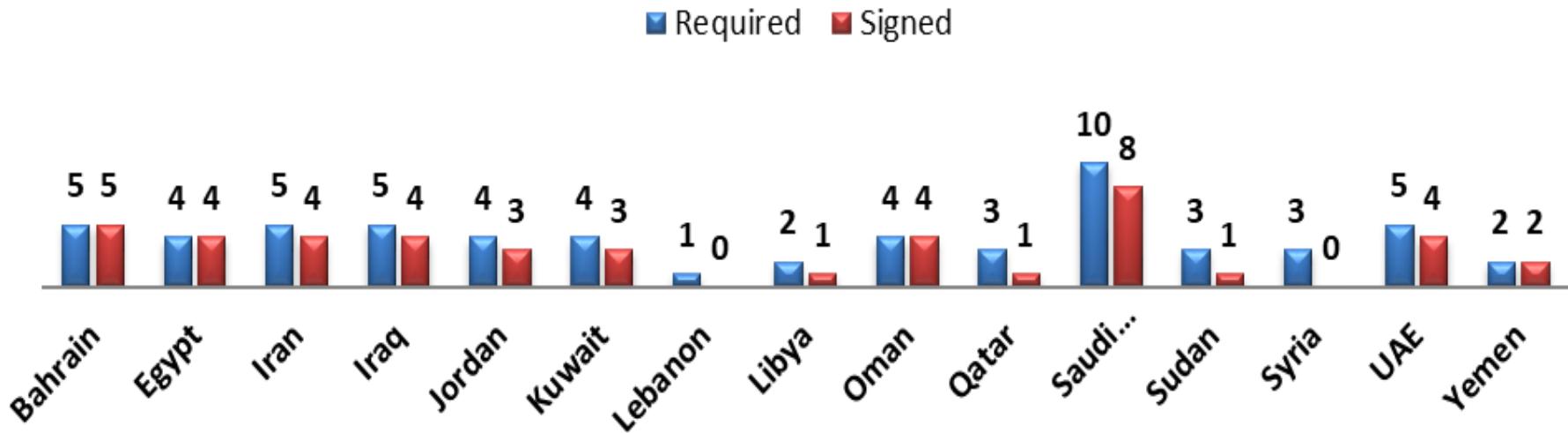
CONCLUSION 17/20 ENHANCED FRAMEWORK FOR THE MID CCT

That,

- a) States intending to restrict traffic or close all or part of their airspace be urged to consider adequate time before affecting the required change to minimize traffic disruption;
- a) States, under the framework of the CCT, in coordination with airspace users, agree on interim guidance with a progressive set of flow measures to address the current Air Traffic Flow disruption caused by the closure of Pakistan airspace; and
 - a) the ATM SG/5:
 - i. develop guidelines on how extended disruptions in the network are to be managed in a balanced manner; and
 - ii. enhance the notification and coordination process of contingency operations in the frame of the MID CCT, particularly for:
 - consistency of interrelated contingency information promulgated by more than one State; and
 - agreement on recovery plan for each contingency situation.

Status of ATM Contingency Agreements

Overall 73%





The meeting is invited to:

- a) take action with respect to improvements of the ATS route network;
- b) urge States to implement the provisions related to ICARD and continue their efforts in order to resolve 5LNCs duplicates and like-sounding;
- c) urge States to implement the MIDANPIRG Conclusion 17/18 related to RDWG;
- d) encourage States and airspace users to support the implementation of the new Route Catalogue process managed by IATA; and
- e) agree on the next steps for the development of an enhanced version of the ATM Contingency Plan including enhanced CCT Framework



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Central American
and Caribbean
(NACC) Office
Mexico City

South American
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Lima

ICAO
Headquarters
Montreal

Western and
Central African
(WACAF) Office
Dakar

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North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU

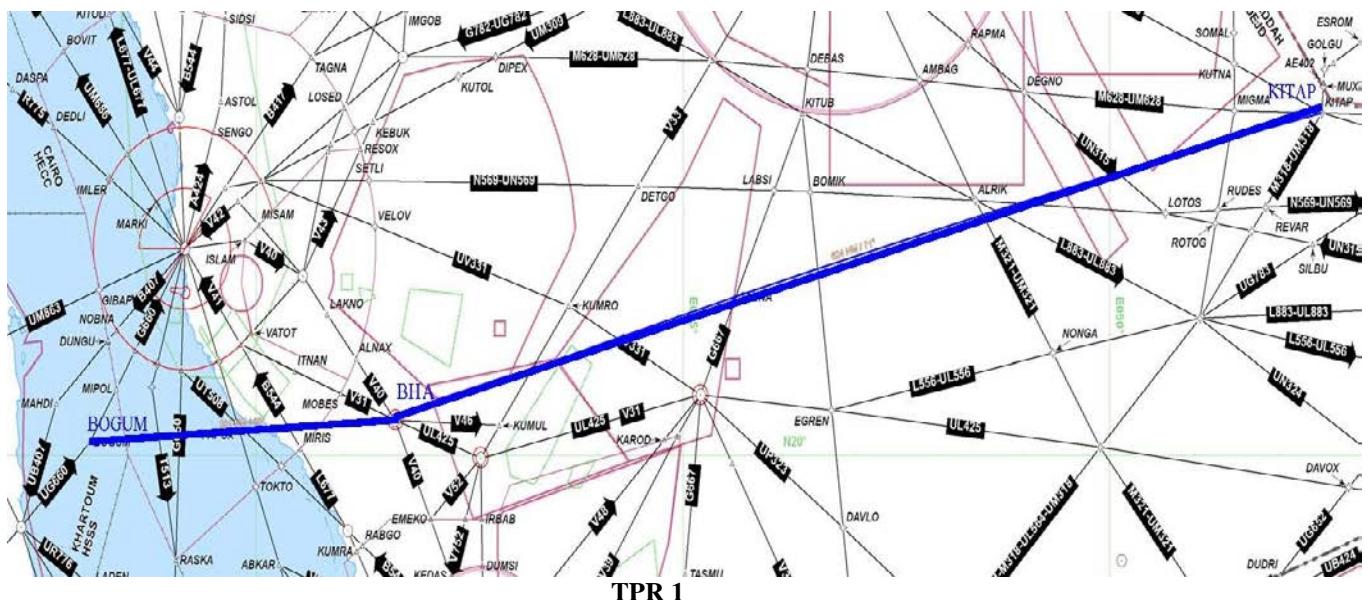
APPENDIX A**MID TOP SIX PROPOSED ATS ROUTES**

TPR	ATS Route Catalogue Reference	ATS Route Affected	States Concerned	Status			Remarks
				Reviewed by	Date	Changed	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	RC-045	New	Saudi Arabia-Sudan	ATM SG/2	Dec. 2015	No	Moved to ANP
2	RC-083	New	Egypt-Saudi Arabia	ATM SG/2	Dec. 2015	No	Route amended and moved to ANP
3	Not from catalogue	New	Iran-Pakistan	ATM SG/2	Dec. 2015	Yes	
4	Not from catalogue	New	Egypt-Cyprus	ATM SG/2	Dec. 2015	Yes	

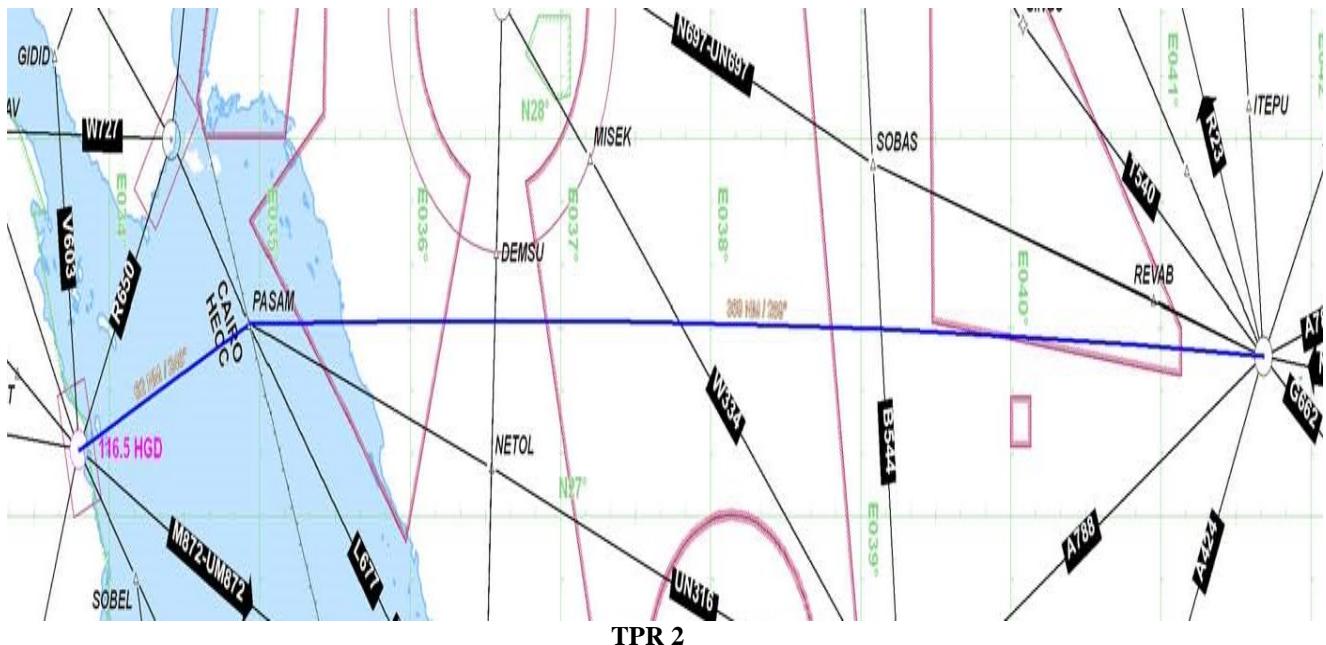
Table Explanation

- a) TPR used as reference for the proposed Top Six routes to be considered for implementation, numbers do not reflect the level of priority.
- b) Source of the proposed routes.
- c) Affected ATS Routes by the implementation of the new proposed routes.
- d) States Concerned with the implementation.
- e) The Group, Sub-Group or Task Force that had reviewed and updated the status of implementation of these top 10 routes.
- f) Date of last status update.
- g) Indicates if the status is changed or Not.
- h) Remarks.

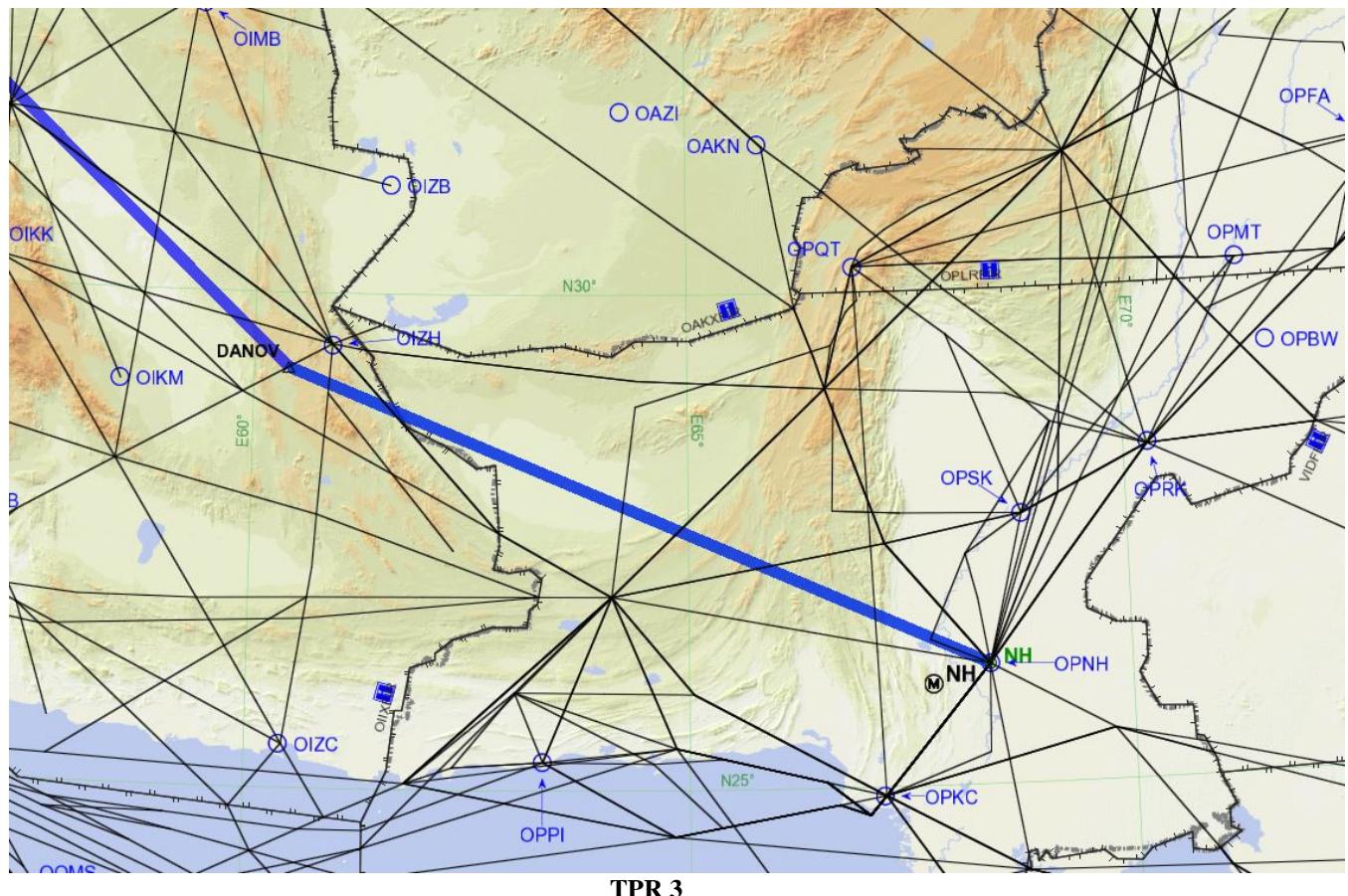
TPR 1 (MID/RC -045)	ATS Route Name: New Route	Entry-Exit: PSD- KITAP	Inter-Regional Cross Reference		Users Priority	Originator of Proposal	IATA	
			Date of Proposal	ARN TF/2				
Route Description		States Concern ed	Expected Impl. date	Implementation Status	ANP Status	Action Taken / Required	Deadline for each Action	
Port Sudan (PSD) BOGUM AI BAHA (BHA) KITAP		Saudi Arabia Sudan		Not implemented	Moved to ANP August 2014	Sudan has no objection from Port Sudan to SALWA (CDR) KSA suggest Port Sudan BHA-KITAP (Normal route) will avoid CDR KSA needs more time for studying. <u>2017</u> <u>amended</u>		
Flight Level Band:								
Potential City Pairs: DGAA, DNMM, HSSS, OEJN, SBGR to OBBI, OMAA, OMDB, OTBD (Central and Eastern Arabian Peninsula to Sudan, West Africa, South America)								
Conclusions/Remarks	Saves 58 miles and 3196 Kg of CO2 to recalculate				Last updated	ATM SG/2 Dec. 2015		



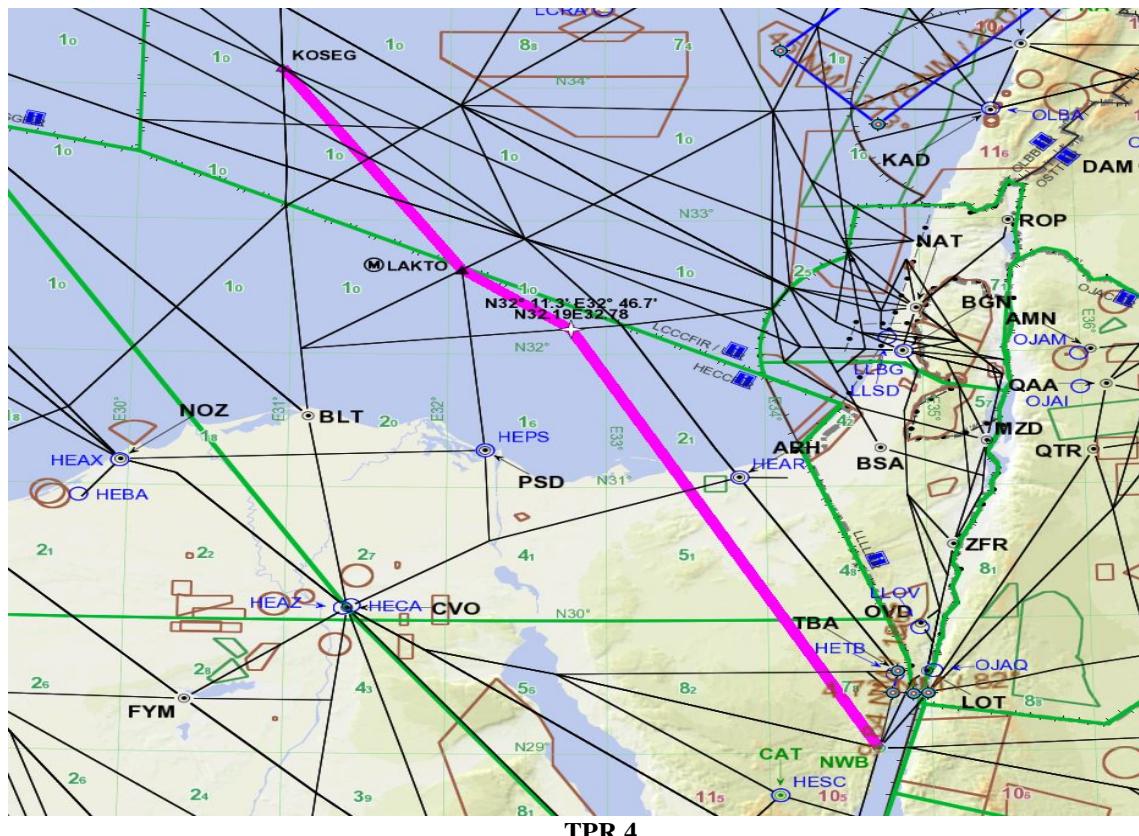
TPR 2	ATS Route Name: New Route UQ598 Westbound	Entry-Exit: PASAM – HIL	Inter- Regional Cross Reference if any		Users Priority	High	Originator of Proposal	IATA iFLEX Proposal
							Date of Proposal	17 May 2011
Route Description		States Concerned	Expected Impl. date	Implementation Status	ANP Status		Action Taken/Required	Deadline for each Action
HIL		Egypt			Moved to ANP	Priority Routes Important Segment HGD-PASAM It's a west bound direction (FUA) N697 - HIL-PASAM- HGD -V608 RC 083 amended to include segment AST- DITAR only Concerned States to implement the route		TBD
PASAM		Saudi Arabia						
HGD								
Flight Level Band:								
Potential City Pairs:								
Conclusions/Remarks							Last updated	ATM SG/2 Dec. 2015



TPR 3	ATS Route Name: New Route	Entry-Exit: New	Inter- Regional Cross Reference if any		Users Priority	High	Originator of Proposal	Iran						
							Date of Proposal	11 May 2015						
Route Description		States Concerned	Expected Impl. date	Implementation Status	ANP Status		Action Taken/Required	Deadline for each Action						
DANOV NH		Iran Pakistan					Iran is ready to implement the route as soon as possible pending Turkey acceptance	TBD						
Flight Level Band:														
Potential City Pairs:							Concerned States to implement the route							
Conclusions/Remarks		To ensure efficient continuity of Iran OTS in Karachi FIR				Last updated	ATM SG/2 Dec 2015							



TPR 4	ATS Route Name: New Route	Entry-Exit: PASAM – HIL	Inter- Regional Cross Reference if any		Users Priority	High	Originator of Proposal	Egypt							
							Date of Proposal	1 Dec 2015							
Route Description		States Concerned	Expected Impl. date	Implementation Status	ANP Status		Action Taken/Required	Deadline for each Action							
NWB New Point LAKTO KOREG		Egypt Cyprus					Egypt is ready to implement the route as soon as possible pending Cyprus acceptance More coordination is required for the continuity of the route within Nicosia FIR Concerned States to implement the route	TBD							
Flight Level Band:															
Potential City Pairs:															
Conclusions/Remarks							Last updated	ATM December 2015							
							SG/2								



TPR 4

APPENDIX B

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

EXPLANATION OF THE TABLE

Column

- 1 *Designator of ATS route and Type (Conventional, RNAV5 or RNAV1 etc.)*
- 2 *MIGNMficant points defining the ATS routes. Only prominent locations have been listed. Additional points where facilities are provided to complete navigational guidance along a route, but not otherwise marking significant characteristics of the route (change of heading of centre line, intersection with other routes, etc.) have normally not been included. Locations shown in parentheses indicate significant points outside the Region.*

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

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

Note 3 *Subject to military agreement.*

Note 4. *Not acceptable at present.*

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

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

Note 7. *Unidirectional use.*

Note 8. *For ATS route or part thereof is RNAV 1*

APPENDIX B

B-2

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
A1	METRU 340000N 0250900E SOKAL 323601N 0273706E KATEX 320701N 0282436E BOPED 312939N 0292655E ALEXANDRIA (NOZ) 311113N 0295701E MENKU 310531N 0301806E CAIRO (CVO) 300532N 0312318E	UA1	METRU 340000N 0250900E SOKAL 323601N 0273706E KATEX 320701N 0282436E BOPED 312939N 0292655E ALEXANDRIA (NOZ) 311113N 0295701E MENKU 310531N 0301806E CAIRO (CVO) 300532N 0312318E
A16	RASDA 330600N 0305700E MELDO 320201N 03104 10 6E BALTIM (BLT) 313144N 0311035E DEGDI 311429N 0311035E CAIRO (CVO) 300532N 0312318E	UA16	RASDA 330600N 0305700E MELDO 320201N 03104 10 6E BALTIM (BLT) 313144N 0311035E DEGDI 311429N 0311035E CAIRO (CVO) 300532N 0312318E
A408	(ADDIS ABABA) GWZ 090622N 0384612E SALEH 140000N 0420000E ORNIS 1416.215N0423657.9E HODEIDAH (HDH) 1446.4N 04259.2E 144622N 0425911E	UA408	(ADDIS ABABA) GWZ 090622N 0384612E SALEH 140000N 0420000E ORNIS 1416.215N0423657.9E HODEIDAH (HDH) 1446.4N 04259.2E 144622N 0425911E
A411	BENINA (BNA) 3207-28N 0201513E NASER 3151-12N 0235518.3E LOSUL 314100N 250800E SIDI BARANI (BRN) 3134532N 0260020E	UA411	BENINA (BNA) 3207-28N 0201513E NASER 3151-12N 0235518.3E LOSUL 314100N 250800E SIDI BARANI (BRN) 3134532N 0260020E
A412	TANF (TAN) 332857N 0383915E ZELAF 325656N 0371121E DAXEN 324444N 0374105E ASLON 321211N 0365111E NADEK 322728N 0371429E KUPRI 320825N 0364530E LUDAN 320256N 0363713E QUEEN ALIA (QAA) 314423N 0360926E	UA412	TANF (TAN) 332857N 0383915E ZELAF 325656N 0371121E DAXEN 324444N 0374105E ASLON 321211N 0365111E NADEK 322728N 0371429E KUPRI 320825N 0364530E LUDAN 320256N 0363713E QUEEN ALIA (QAA) 314423N 0360926E
A416	TABRIZ (TBZ) 380853N 0461247E ARDABIL (ARB) 381856N 0482605E RASHT (RST) 371935N 0493657E RAMSAR (RSR) 365412N 0504050E NOSHAHR (NSR) 363935N 0512805E DASHTE NAZ (DNZ) 363855N 0531120E SABZEVAR (SBZ) 361011N 0573415E MASHHAD (MSD) 361352N 0593901E SOKAM 331316N 0603754E	UA416	TABRIZ (TBZ) 380853N 0461247E ARDABIL (ARB) 381856N 0482605E RASHT (RST) 371935N 0493657E RAMSAR (RSR) 365412N 0504050E NOSHAHR (NSR) 363935N 0512805E DASHTE NAZ (DNZ) 363855N 0531120E SABZEVAR (SBZ) 361011N 0573415E MASHHAD (MSD) 361352N 0593901E SOKAM 331316N 0603754E
A418	KUMUN 254000N 0551515E PAPAR 264000N 0542700E * Note 7 (OI and OM) Segment KUMUN PAPAR	UA418	KUMUN 254000N 0551515E PAPAR 264000N 0542700E * Note 7 (OI and OM) Segment KUMUN PAPAR
	SHIRAZ (SYZ) 293224N 0523520E		SHIRAZ (SYZ) 293224N 0523520E
A422	UROMIYEH (UMH) 374001N 0450343E SETNA 375615.3N 0455522.4E TABRIZ (TBZ) 380853N 0461247E PARSABAD (PAD) 393443N 0475803E	UA422	UROMIYEH (UMH) 374001N 0450343E SETNA 375615.3N 0455522.4E TABRIZ (TBZ) 380853N 0461247E PARSABAD (PAD) 393443N 0475803E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	PARSU 39374.8N 048044.8E		PARSU 39374.8N 048044.8E
	KARAD 40181814.3N 0500356 04929.5E		KARAD 40181814.3N 0500356 04929.5E
	(BAKU)		(BAKU)
A424	LOVEK 322208N 0444001E	UA424	LOVEK 322208N 0444001E
	LOTAN 295942.7N 04338.48E		LOTAN 295942.7N 04338.48E
	RAFHA (RAF) 293718N 0432953E		RAFHA (RAF) 293718N 0432953E
	HAIL (HIL) 272530N 0414058E		HAIL (HIL) 272530N 0414058E
	MADINAH (PMA) 243251N 0394219E		MADINAH (PMA) 243251N 0394219E
	ASTOL 2255.00N 03935.12E		ASTOL 2255.00N 03935.12E
	KING ABDULAZIZ (JDW) 214244N 0390723E		KING ABDULAZIZ (JDW) 214244N 0390723E
A453	PIRAN 2934076N 06128096E	UA453	PIRAN 2934076N 06128096E
	ZAHEDAN (ZDN) 292912N 0605406E		ZAHEDAN (ZDN) 292912N 0605406E
	BANDAR ABBAS (BND) 271149N 0562200E		BANDAR ABBAS (BND) 271149N 0562200E
	GHESHM (KHM) 264547N 0555428E		GHESHM (KHM) 264547N 0555428E
	*Note 7 (KHM, BAH)		*Note 7 (KHM, BAH)
	BANDAR LENGEH (LEN) 263210N 0545104E		BANDAR LENGEH (LEN) 263210N 0545104E
	KISH (KIS) 263131N 0535745E		KISH (KIS) 263131N 0535745E
	MIDSI 264142.7N0515442.5E		MIDSI 264142.7N0515442.5E
	BOTOB 263350N 0514505E		BOTOB 263350N 0514505E
	ALMOK 262832N 0513840E		ALMOK 262832N 0513840E
	SOLOB 262241N 0513132E		SOLOB 262241N 0513132E
	TOBLI 262134N0512301E		TOBLI 262134N0512301E
	SOGAT 262029N 0511443E		SOGAT 262029N 0511443E
	ASTAD 261811N 0505646E		ASTAD 261811N 0505646E
	BAHRAIN (BAH) 261551N 0503856E		BAHRAIN (BAH) 261551N 0503856E
	* Note 7 (OB, OI)		* Note 7 (OB, OI)
	ELOSO 262409N 0503550E		ELOSO 262409N 0503550E
	EGMOR 264210N 0502906E		EGMOR 264210N 0502906E
	LOTOR 264854N 0502200E		LOTOR 264854N 0502200E
	RAMSI 270249N 0500714E		RAMSI 270249N 0500714E
	ORNAK 272853N 0493248E		ORNAK 272853N 0493248E
	SOLEM 275229N 0491136E		SOLEM 275229N 0491136E
	KUMBO 281705N 0495526E		KUMBO 281705N 0495526E
	AWADI 283430N 0484354E		AWADI 283430N 0484354E
	DEBTI 284406N 0482924E		DEBTI 284406N 0482924E
	KUWAIT (KUA) 291306N 04759036E		KUWAIT (KUA) 291306N 04759036E
A454	KARACHI (KC) 245443.6N 0671054.6E	UA454	KARACHI (KC) 245443.6N 0671054.6E
	*Note 7 (KC-PASOV)		*Note 7 (KC-PASOV)
	BEGIM 2443-02N 06700-01E		BEGIM 2443-02N 06700-01E
	* Note 7 (OO, OP)		* Note 7 (OO, OP)
	MELOM 2503345.0N 06631342.0E		MELOM 2503345.0N 06631342.0E
	PUNEL 25183520.0N 06522453.0E		PUNEL 25183520.0N 06522453.0E
	PARET 2525187.2N 0645102.5E		PARET 2525187.2N 0645102.5E
	TAPDO 242400N 0612000E		TAPDO 242400N 0612000E
	VUSET 235540N 0590812E		VUSET 235540N 0590812E
	PASOV 243841N 0565037E		PASOV 243841N 0565037E
A727	ΦPAXIS 335706.4N 02720.00E	UA727	ΦPAXIS 335706.4N 02720.00E
	OTIKO 313421.3N 02936.36E		OTIKO 313421.3N 02936.36E
	ALEXANDRIA (NOZ) 311115N 0295703E		ALEXANDRIA (NOZ) 311115N 0295703E

APPENDIX B

B-4

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	MENKU 310531.5N 0301806.4E		MENKU 310531.5N 0301806.4E
	CAIRO (CVO) 300532N 0312318E		CAIRO (CVO) 300532N 0312318E
	LUXOR (LXR) 254458N 0324607E		LUXOR (LXR) 254458N 0324607E
	ABU SIMBLE (SML) 222118N 0313719E		ABU SIMBLE (SML) 222118N 0313719E
	NUBAR 220000N 03143806.4E		NUBAR 220000N 03143806.4E
	MEROWE (MRW) 182659N 0314907E		MEROWE (MRW) 182659N 0314907E
	KHARTOUM (KTM) 153358N 0323312E		KHARTOUM (KTM) 153358N 0323312E
	KENANA (KNA) 130141N 0325423E		KENANA (KNA) 130141N 0325423E
	LODWAR (LOV) 030627N 0353646E		LODWAR (LOV) 030627N 0353646E
	NAKURU (NAK) 001817S 0360919E		NAKURU (NAK) 001817N 0360919E
	NAIROBI (NV) 011800S 0365715E		NAIROBI (NV) 011800S 0365715E
	KILIMANJARO (KV) 032540S 0370624E		KILIMANJARO (KV) 032540S 0370624E
		UA775	REXOD 211230N 0613830E
			TUMET 222307N 0595702E
			IMDEK 224647N 0592217E
			OBTIN 230216N 0585920E
			KUSRA 231726N 0585102E
A777	TONVO 250500N 0563200E		
	BUBAS 245938N 0570003E		
	* Note 7 (OO)		
	NADSO 244957N 0574926E		
	MUNGA 242516N 0584533E		
	MIXOL 240618N 0592739E		
	VAXIM 231900N 0611100E		
A788	HALAIFAH (HLF) 262603N 0391609E	UA788	HALAIFAH (HLF) 262603N 0391609E
	HAIL (HIL) 272530N 0414058E		HAIL (HIL) 272530N 0414058E
	HAFR AL BATIN (HFR) 281950N 0460746E		HAFR AL BATIN (HFR) 281950N 0460746E
	*Note 7 (HFR-PATIR)		*Note 7 (HFR-PATIR)
	WAFRA *(KFR) 283715.-3N 0475729.-5E		WAFRA (KFR) 283715.-3N 0475729.-5E
	PATIR 285606N 0492923E		PATIR 285606N 0492923E
	KHARK (KHG) 291550N 0501901E		KHARK (KHG) 291550N 0501901E
	SHIRAZ (SYZ) 293225N 0523520E		SHIRAZ (SYZ) 293225N 0523520E
B12	TANSA 340000N 0264900E	UB12	TANSA 340000N 0264900E
	SOKAL 323601N 0273706E		SOKAL 323601N 0273706E
	EL DABA (DBA) 310041N 0282801E		EL DABA (DBA) 310041N 0282801E
	KATAB 292501N 0290506E		KATAB 292501N 0290506E
	BOPOS 264318N 0300722E		BOPOS 264318N 0300722E
	DEPNO 262438N 0301413E		DEPNO 262438N 0301413E
	EL KHARGA (KHG) 252654N 0303527E		EL KHARGA (KHG) 252654N 0303527E
	ABU SIMBEL (SML) 222118N 0313719E		ABU SIMBEL (SML) 222118N 0313719E
B121	RUDESHUR (RUS) 352644N 0505419E	UB121	RUDESHUR (RUS) 352644N 0505419E
	RASHT (RST) 371935N 0493657E		RASHT (RST) 371935N 0493657E
	MAGRI 385408N 0462300E		MAGRI 385408N 0462300E
B400	MUSCAT (MCT) 233528N 0581536E	UB400	MUSCAT (MCT) 233528N 0581536E
	ITURA 232351N 0580720E		ITURA 232351N 0580720E
	IZKI (IZK) 225319N 0574543E		IZKI (IZK) 225319N 0574543E
	HAIMA (HAI) 195813N 0561651E		HAIMA (HAI) 195813N 0561651E
	ASTUN 180832N0551040E		ASTUN 180832N0551040E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	DAXAM 171612N 0544715E		DAXAM 171612N 0544715E
	MUTVA 165325N 0543201E		MUTVA 165325N 0543201E
	IMKAD 155245N 0535147E		IMKAD 155245N 0535147E
	NODMA 152603N 0533358E		NODMA 152603N 0533358E
	RIGAM 143932N 0530414E		RIGAM 143932N 0530414E
	RAPDO 132317N 0521532E		RAPDO 132317N 0521532E
	VEDET 120134N 0512410E		VEDET 120134N 0512410E
	(MOGADISHU) MOGDU 020024N 0451736E		(MOGADISHU) MOGDU 020024N 0451736E
		UB403	MANDERA (MAV) 035625N 0415151E
			BOMIX 121002N 0502757E
			ODBEN 123747N 0505648E
			KAVAN 133250N 0515431E
			RIGAM 143932N 0530414E
B404	HARGA (HARGEISA) 093112N 0440530E	UB404	HARGA (HARGEISA) 093112N 0440530E
	DEMGO 120258N 0483040E		DEMGO 120258N 0483040E
	PURKA 131208N 0503042E		PURKA 131208N 0503042E
	GESIX 134440N 0512823E		GESIX 134440N 0512823E
	RIGAM 143932N 0530414E		RIGAM 143932N 0530414E
B407	KING ABDULAZIZ (JDW) 214244N 0390723E	UB407	KING ABDULAZIZ (JDW) 214244N 0390723E
	KAROX 205717N 0381547E		KAROX 205717N 0381547E
	MAHDI 2026.00N 0373918.3E		MAHDI 2026.00N 0373918.3E
	(PORT SUDAN) (PSD) 192404N 0371430E		(PORT SUDAN) (PSD) 192404N 0371430E
B411	ROVAR 292438N0345711E	UB411	ROVAR 292438N0345711E
	TAKSU 293625N 0343623E		TAKSU 293625N 0343623E
	*Note 7 (TAKSU-ULINA)		*Note 7 (TAKSU-ULINA)
	KARIK 292733N 0344641E		KARIK 292733N 0344641E
	ULINA 292451N 0345817E		ULINA 292451N 0345817E
	ELETA 293201N 0352900E		ELETA 293201N 0352900E
	LORIK 293640N 0354840E		LORIK 293640N 0354840E
	LORIK 293640N 0354840E		LORIK 293640N 0354840E
	AL SHIGAR (ASH) 300722N 0384753E		AL SHIGAR (ASH) 300722N 0384753E
	ARAR (AAR) 305429N 0410832E		ARAR (AAR) 305429N 0410832E
	MURIB 311337N 0415136E		MURIB 311337N 0415136E
	LOVEK 322208.4N 0444001.9E		LOVEK 322208.4N 0444001.9E
	NOLDO 324932.5N 0452129.5E		NOLDO 324932.5N 0452129.5E
	PAXAT 332056N 0460519E		PAXAT 332056N 0460519E
	ILAM (ILM) 333442N 0462455E		ILAM (ILM) 333442N 0462455E
	KERMANSHAH (KMS) 342023N 0471009E		KERMANSHAH (KMS) 342023N 0471009E
	SAVEH (SAV) 350107N 0502217E		SAVEH (SAV) 350107N 0502217E
	[TEHRAN] (TRN) 354149N 0511702E		[TEHRAN] (TRN) 354149N 0511702E
	*Note 4		*Note 4
	DEHNAMAK (DHN) 351514N 0524313E		DEHNAMAK (DHN) 351514N 0524313E
	SABZEVAR (SBZ) 361011N 0573415E		SABZEVAR (SBZ) 361011N 0573415E
	MASHHAD (MSD) 361352N 0593902E		MASHHAD (MSD) 361352N 0593902E
B412	HALAIFA (HLF) 262603N 0391609E	UB412	HALAIFA (HLF) 262603N 0391609E
	RABIGH (RBG) 224731N 0390550E		RABIGH (RBG) 224731N 0390550E
	[KING ABDULAZIZ] (JDW) 214244N 0390723E		[KING ABDULAZIZ] (JDW) 214244N 0390723E

APPENDIX B**B-6**

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
B413	LADEN 185342.7N 0380506.4E DANAK 1608.00N 04129.00E HODEIDAH (HDH) 144622N 0425911E TAIZ (TAZ) 134150N 0440819E ADEN (KRA) 124952N 0450125E ZIZAN 1151.36N 04539.12E AVIMO 033252.9N 0505239.6E	UB413	LADEN 185342.7N 0380506.4E 1608.00N 04129.00E HODEIDAH (HDH) 144622N 0425911E TAIZ (TAZ) 134150N 0440819E ADEN (KRA) 124952N 0450125E ZIZAN 1151.36N 04539.12E AVIMO 033252.9N 0505239.6E
B415	DOHA HAMAD INTL (DOH) 251500N 0513635E *Note 8 (DOH-BUNDU) KUPSA 250445N 0521151E BUNDU 250024N 0522924E *Note 7 (BUNDU-ADV) LAGMI 245709N 0524148E GADVO 2441264N 0534300E KUNGU 243754N 05356-274E ABU DHABI ADV 242508N 0544024E	UB415	DOHA HAMAD INTL (DOH) 251500N 0513635E *Note 8 (DOH-BUNDU) KUPSA 250445N 0521151E BUNDU 250024N 0522924E *Note 7 (BUNDU-ADV) LAGMI 245709N 0524148E GADVO 2441264N 0534300E KUNGU 243754N 05356-274E ABU DHABI ADV 242508N 0544024E
B416	KUWAIT (KUA) 291306N 0475803E AMBIK 283222N 0492025E *Note 8 (AMBIK-KUVER) TESSO 282852N0492723E GEVAL 282101N 0494300E GOGMA 281421N 0495612E KUVER 280924N 0500600E IMDAT 274100N 0511100E ORSAR 260430N 0535730E PEBAT 255153N 0542357E DESDI 253603N 0544230E	UB416	KUWAIT (KUA) 291306N 0475803E AMBIK 283222N 0492025E *Note 8 (AMBIK-KUVER) TESSO 282852N0492723E GEVAL 282101N 0494300E GOGMA 281421N 0495612E KUVER 280924N 0500600E IMDAT 274100N 0511100E ORSAR 260430N 0535730E PEBAT 255153N 0542357E DESDI 253603N 0544230E
B417	MAHSHAHR (MAH) 303323N 0490858E TULAX 2938 53N 04903 01E DESLU 2928.00N 0490150.8E ALVIX 2919.318N04824.12E KUWAIT (KUA) 291306N 0475803E *See Note 3 HAFR AL BATIN (HFR) 281950N 0460746E KING SAUD AB (KMC) 275250N 0453320E GASSIM (GAS) 261753N 0434647E BIR DARB (BDB) 241951N 0414928E ASVIV 235458N 0412321E TAGNA 231652N 0403851E KING ABDULAZIZ (JDW) 214244N 0390723E	UB417	MAHSHAHR (MAH) 303323N 0490858E TULAX 2938 53N 04903 01E DESLU 2928.00N 0490150.8E ALVIX 2919.318N04824.12E KUWAIT (KUA) 291306N 0475803E *See Note 3 HAFR AL BATIN (HFR) 281950N 0460746E KING SAUD AB (KMC) 275250N 0453320E GASSIM (GAS) 261753N 0434647E BIR DARB (BDB) 241951N 0414928E ASVIV 235458N 0412321E TAGNA 231652N 0403851E KING ABDULAZIZ (JDW) 214244N 0390723E
B419	DHAHRAN (DHA) 261538N 0500824E * Note 8 (DHA-RAMSI) KING FAHD (KFA) 262153N 0494910E * Note 7 (KFA-RAMSI) METLA 265645N 0500432E RAMSI 270249N 0500714E	UB419	DHAHRAN (DHA) 261538N 0500824E * Note 8 (DHA-RAMSI) KING FAHD (KFA) 262153N 0494910E * Note 7 (KFA-RAMSI) METLA 265645N 0500432E RAMSI 270249N 0500714E
B424	ITOLI 152825N 0450927E	UB424	ITOLI 152825N 0450927E

B-7

	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	SABEL 185158200N 0520339.7E		SABEL 185158200N 0520339.7E
	OTISA 201000N 0554556E		OTISA 201000N 0554556E
	GISKA 213503N 0574014E		GISKA 213503N 0574014E
B441	MASHHAD (MSD) 361352N 0593901E	UB441	MASHHAD (MSD) 361352N 0593901E
	OTRUZ 363108N 0610956E		OTRUZ 363108N 0610956E
	MARAD 363730.6N 06127.48E		MARAD 363730.6N 06127.48E
B451	DEHNAMAK (DHN) 351514N 0524313E	UB451	DEHNAMAK (DHN) 351514N 0524313E
	BOJNORD (BRD) 372943N 0571923E		BOJNORD (BRD) 372943N 0571923E
	DOLOS 375006N 0580200E		DOLOS 375006N 0580200E
	ASHGABAT (ASB) 380011N 0582008E		ASHGABAT (ASB) 380011N 0582008E
B457	NARMI 261802N 0501939E	UB457	NARMI 261802N 0501939E
	BAHRAIN (BAH) 261551N 0503855E		BAHRAIN (BAH) 261551N 0503855E
	DENVO 260452N 0510509E		DENVO 260452N 0510509E
	PATOM 255822N 0511836E		PATOM 255822N 0511836E
	EMISA 254658N 0514206E		EMISA 254658N 0514206E
B505	LALDO 251806N 0563600E *		
	Note 7/8 (OO)		
	NADSO 244957N 0574926E		
	ITLOB 244325N 0590701E		
	EGTAL 2434.58N 06037 24E		
	APELO 243455.9N 0612000E		
	PASNI (PI) 251717.3N 0632055.9E		
B524	NADSO 244957N 0574926E		
	* Note 7		
	DAMUM 243236N 0591307E		
	VEKAN 241235N 0604454E		
	ALPOR 240442N 0612000E		
B526	ASMARA (ASM) 151704N 0385403E	UB526	ASMARA (ASM) 151704N 0385403E
	HODEIDAH (HDH) 144622N 0425911E		HODEIDAH (HDH) 144622N 0425911E
	MUKALLA (RIN) 144015N 0492329E		MUKALLA (RIN) 144015N 0492329E
	RIGAM 143932N 0530414E		RIGAM 143932N 0530414E
B535	DJIBOUTI (DTI) 113255N 0430537E	UB535	DJIBOUTI (DTI) 113255N 0430537E
	ADEN (KRA) 124952N 0450125E		ADEN (KRA) 124952N 0450125E
	MUKALLA (RIN) 144015N 0492329E		MUKALLA (RIN) 144015N 0492329E
	KAPET 1633 22N 0530614E		KAPET 1633 22N 0530614E
	SALALAH (SLL) 170259N 0540657E		SALALAH (SLL) 170259N 0540657E
	ASTUN 180832N 0551040E		ASTUN 180832N 0551040E
B538	ALEPO (ALE) 361047N 0371234E	UB538	ALEPO (ALE) 361047N 0371234E
	KARIATAIN (KTN) 341248N 0371551E		KARIATAIN (KTN) 341248N 0371551E
B540	GERAR 240600N 0573616		
	PASOV 243841N 0565037E		
	KUPMA 245148N 0562648E		
	BUBIN 245742N 0560642E		

APPENDIX B

B-8

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
B544	(GAZIANTEP) (GAZ) 365705N 0372823E ALEPPO (ALE) 361047N 0371234E TANF (TAN) 332857N 0383915E NAMBO 331826N0383939E SODAR 315532N0384317E TURAIF (TRF) 314136N 0384405E AL SHIGAR (ASH) 300722N 0384753E HALAIFA (HLF) 262603N 0391609E MADINAH (PMA) 243251N 0394219E RABIGH (RBG) 224731N 0390550E KING ABDULAZIZ (JDW) 214244N 0390723E QUNFIDAH (QUN) 192211N 0410429E ABHA (ABH) 181431N 0423925E NOBSU 171554N 0431318E ADEN (KRA) 124952N 0450125E	UB544	(GAZIANTEP) (GAZ) 365705N 0372823E ALEPPO (ALE) 361047N 0371234E TANF (TAN) 332857N 0383915E NAMBO 331826N0383939E SODAR 315532N0384317E TURAIF (TRF) 314136N 0384405E AL SHIGAR (ASH) 300722N 0384753E HALAIFA (HLF) 262603N 0391609E MADINAH (PMA) 243251N 0394219E RABIGH (RBG) 224731N 0390550E KING ABDULAZIZ (JDW) 214244N 0390723E QUNFIDAH (QUN) 192211N 0410429E ABHA (ABH) 181431N 0423925E NOBSU 171554N 0431318E ADEN (KRA) 124952N 0450125E
B549	THAMUD 171700N 0495500E ITELI 171310N 0502605E GOGRI 170752N 0510857E TONRO 165850N 0522235E PUTRA 165432N 0525631E LADAR 165324N 0534655E MUTVA 165325N 0543201E KIVEL 165306N 0553633E	UB549	THAMUD 171700N 0495500E ITELI 171310N 0502605E GOGRI 170752N 0510857E TONRO 165850N 0522235E PUTRA 165432N 0525631E LADAR 165324N 0534655E MUTVA 165325N 0543201E KIVEL 165306N 0553633E
G183	(KAROL 3252.00N 03229.00E) PASOS 311300N 0330600E EL ARISH (ARH) 310423N 0334955E TABA (TBA) 293624N 0344751E		
G202	(VELOX 3349.00N 03405.00E) SILKO 3347.9N 03435.0E ELIKA 334455N 0343500E KHALDEH (KAD) 334827N 0352910E * Note 4 (OS) DAKWE 3338.957N 03554595.0E DAMASCUS (DAM) 332154N 0362807E TANF (TAN) 332857N 0383915E MODIK 332806.4N 03901.00E RAPLU 3323.00N 0414530.5E PUSTO 3321.00N 04245.00E DELMI 331918.34N 04313287.59E LAGLO 331538N 0441457E ITOVA 331950.91N 0444128.97E RAGET 3330.48N 04553.48E ILAM (ILM) 333442N 0462455E KHORAM ABAD (KRD) 332603N 0481731E ESFAHAN (ISN) 334449N 0514941E NODLA 325330N 0545850E BIRJAND (BJD) 325821N 0591200E	UG202	(VELOX 3349.00N 03405.00E) SILKO 3347.9N 03435.0E ELIKA 334455N 0343500E KHALDEH (KAD) 334827N 0352910E * Note 4 (OS) DAKWE 3338.957N 03554595.0E DAMASCUS (DAM) 332154N 0362807E TANF (TAN) 332857N 0383915E MODIK 332806.4N 03901.00E RAPLU 3323.00N 0414530.5E PUSTO 3321.00N 04245.00E DELMI 331918.34N 04313287.59E LAGLO 331538N 0441457E ITOVA 331950.91N 0444128.97E RAGET 3330.48N 04553.48E ILAM (ILM) 333442N 0462455E KHORAM ABAD (KRD) 332603N 0481731E ESFAHAN (ISN) 334449N 0514941E NODLA 325330N 0545850E BIRJAND (BJD) 325821N 0591200E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	{KAMAR 3239-00N 06044.00E}		{KAMAR 3239-00N 06044.00E}
G208	{PANJGUR} (PG) 265710N 0640813E KEBUD 273552.9N 06250.24E ZAHEDAN (ZDN) 292912N 0605406E DARBAND (DAR) 314659N 0565940E NODLA 325330N 0545850E ANARAK (ANK) 333215N 0534347E TEHRAN (TRN) 354149N 0511702E ZANJAN (ZAJ) 364647N 0482112E UROMIYEH (UMH) 374001N 0450343E ALRAM 37423.0N 0443736.0E (SHRT)		
G216	LAKLU 232235N 0570401E *Note 7 (OO/OP) (MCT-KC) MUSCAT (MCT) 233528N 0581536E ITILA 234055N 0584817E SODEB 234747N 0593023E DORAB 235033N 0594746E ALPOR 240441N 0612000E LATEM 243144N 0644944E KARACHI (KC) 245443N 0671054E	UG216	LAKLU 232235N 0570401E *Note 7 (OO/OP) (MCT-KC) MUSCAT (MCT) 233528N 0581536E ITILA 234055N 0584817E SODEB 234747N 0593023E DORAB 235033N 0594746E ALPOR 240441N 0612000E LATEM 243144N 0644944E KARACHI (KC) 245443N 0671054E
G452	SHIRAZ (SYZ) 293224N 0523520E KERMAN (KER) 301706N 0465637E ZAHEDAN (ZDN) 292912N 0605406E DERBO 292542.7N 06117:01E (RAHIM YAR KHAN) (RK) 282156N 0701623E	UG452	SHIRAZ (SYZ) 293224N 0523520E KERMAN (KER) 301706N 0465637E ZAHEDAN (ZDN) 292912N 0605406E DERBO 292542.7N 06117:01E (RAHIM YAR KHAN) (RK) 282156N 0701623E
G462	ROVOS 241825N 0552143E Note 7-to (ROVOS-ITROK) NIBAX 245748N 0541437E RAGTA 250850N 0535840E ALSOK 252607N 0533904E ITROK 253557N 0532751E TUMAK 255031N 0531108E	UG462	ROVOS 241825N 0552143E Note 7-to (ROVOS-ITROK) NIBAX 245748N 0541437E RAGTA 250850N 0535840E ALSOK 252607N 0533904E ITROK 253557N 0532751E TUMAK 255031N 0531108E
G650	KING ABDULAZIZ (JDW) 214244N 0390723E RASKA 190732N 0390329E ASMARA (ASM) 151704N 0385403E	UG650	KING ABDULAZIZ (JDW) 214244N 0390723E RASKA 190732N 0390329E ASMARA (ASM) 151704N 0385403E
G652	ADEN (KRA) 124952N 0450125E IMPOS 183136N 0511848E DUDRI 190000N 0520000E *Note 8 (DUDRI-TOKRA) TOKRA 220925N 0553350E TAPDO 242400N 0612000E	UG652	ADEN (KRA) 124952N 0450125E IMPOS 183136N 0511848E DUDRI 190000N 0520000E *Note 8 (DUDRI-TOKRA) TOKRA 220925N 0553350E TAPDO 242400N 0612000E
G660	{PORT SUDAN} (PSD) 192404N 0371430E BOGUM 2006.36N 03803.00E MIPOL 203322N 0382145E KING ABDULAZIZ (JDW) 214244N 0390723E	UG660	{PORT SUDAN} (PSD) 192404N 0371430E BOGUM 2006.36N 03803.00E MIPOL 203322N 0382145E KING ABDULAZIZ (JDW) 214244N 0390723E

APPENDIX B**B-10**

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
G662	BUSRA 322000N 0363700E KUPRI 3208265.87N 0364530.24E ALKOT 313254.22N 0371122.54E GURIAT (GRY) 312445.8N 03717.12E AL SHIGAR (ASH) 300722N 0384753E HAIL (HIL) 272530N 0414058E GASSIM (GAS) 261753N 0434647E KING KHALID (KIA) 245310N 0464534E	UG662	BUSRA 322000N 0363700E KUPRI 3208265.87N 0364530.24E ALKOT 313254.22N 0371122.54E GRY 312445.8N 03717.12E AL SHIGAR (ASH) 300722N 0384753E HAIL (HIL) 272530N 0414058E GASSIM (GAS) 261753N 0434647E KING KHALID (KIA) 245310N 0464534E
G663	KING KHALID (KIA) 245310N 0464534E SILNO 264024N 0475742E *Note 7 (KIA-KFA) GIBUS 255724N 0472829E *Note 8 (GIBUS-ALSER) KING FAHD (KFA) 262153N 0494910E ULADA 264526N 0501623E LOTOR 264854N 0502200E RAKAK 265221N 0502618E TOLMO 265504N 0502927E KOBOK 265839N 0503349E ITIXA 270141N 0503735E GETAL 270409N 0504039E VEDOR 270855N 0504630E ALSER 271100N 0504900E SHIRAZ (SYZ) 293224N 0523520E YAZD (YZD) 315352N 0541658E NODLA 325318N 0545848E TABAS (TBS) 334021N 0565331E MASHAD (MSD) 361352N 0593901E	UG663	KING KHALID (KIA) 245310N 0464534E SILNO 264024N 0475742E *Note 7 (KIA-KFA) GIBUS 255724N 0472829E *Note 8 (GIBUS-ALSER) KING FAHD (KFA) 262153N 0494910E ULADA 264526N 0501623E LOTOR 264854N 0502200E RAKAK 265221N 0502618E TOLMO 265504N 0502927E KOBOK 265839N 0503349E ITIXA 270141N 0503735E GETAL 270409N 0504039E VEDOR 270855N 0504630E ALSER 271100N 0504900E SHIRAZ (SYZ) 293224N 0523520E YAZD (YZD) 315352N 0541658E NODLA 325318N 0545848E TABAS (TBS) 334021N 0565331E MASHAD (MSD) 361352N 0593901E
G665	ARAR (AAR) 305429N 0410832E ABADAN (ABD) 302216N 0481342E SHIRAZ (SYZ) 293224N 0523520E * Note 5 (OI) NABOBOX 281630.4N 0582501.8E LOXOL 274556.9N 0604538.6E ASVIB 265724N 0631812E (PANGUR) (PG) 265710N 0640813E	UG665	ARAR (AAR) 305429N 0410832E ABADAN (ABD) 302216N 0481342E SHIRAZ (SYZ) 293224N 0523520E * Note 5 (OI) NABOBOX 281630.4N 0582501.8E LOXOL 274556.9N 0604538.6E ASVIB 265724N 0631812E (PANGUR) (PG) 265710N 0640813E
G666	SHIRAZ (SYZ) 293224N 0523520E LAMERD (LAM) 272222N 0531102E LAVAN (LVA) 264843N 0532121E * Note 7 (OI) ORSAR 260430.5N 0535730.5E ITITA 254410N 0541839E SINBI 250842N 0543741E ABU DHABI (ADV) 242508N 0544024E	UG666	SHIRAZ (SYZ) 293224N 0523520E LAMERD (LAM) 272222N 0531102E LAVAN (LVA) 264843N 0532121E * Note 7 (OI) ORSAR 260430.5N 0535730.5E ITITA 254410N 0541839E SINBI 250842N 0543741E ABU DHABI (ADV) 242508N 0544024E
G667	PUTMA 3748.00N 05157.36E NOSHAHR (NSR) 363935N 0512805E TEHRAN (TRN) 354149N 0511702E SAVEH (SAV) 350107N 0502217E MIS-ARAK (ARK) 340814N 0495114E	UG667	PUTMA 3748.00N 05157.36E NOSHAHR (NSR) 363935N 0512805E TEHRAN (TRN) 354149N 0511702E SAVEH (SAV) 350107N 0502217E MIS-ARAK (ARK) 340814N 0495114E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	AHWAZ (AWZ) 312015N 0484552E		AHWAZ (AWZ) 312015N 0484552E
	ABADAN (ABD) 302216N 0481342E		ABADAN (ABD) 302216N 0481342E
	ALSAN 295707N 0481456E		ALSAN 295707N 0481456E
	FRALKA 292611N 0481819E		FRALKA 292611N 0481819E
	KUWAIT (KUA) 291306N 0475803E		KUWAIT (KUA) 291306N 0475803E
	WAFRA (KFR) 283715N 0475729E		WAFRA (KFR) 283715N 0475729E
	*Note 7 (KFR-MGA)		*Note 7 (KFR-MGA)
	COPPI 275033N 0474359E		COPPI 275033N 0474359E
	*Note 8 (COPPI-AVOBO)		*Note 8 (COPPI-AVOBO)
	EMENI 273232N 0473849E		EMENI 273232N 0473849E
	MUSKO 272640N 0473708E		MUSKO 272640N 0473708E
	ALSAT 270611N 0473118E		ALSAT 270611N 0473118E
	LUGAL 264533N 0472528E		LUGAL 264533N 0472528E
	MAGALA (MGA) 261720N 0471225E		MAGALA (MGA) 261720N 0471225E
	AVOBO 260334N 0470719E		AVOBO 260334N 0470719E
	KING KHALID (KIA) 245310N 0464534E		KING KHALID (KIA) 245310N 0464534E
	WADI ALDAWASIR (WDR) 203019N 0451219E		WADI ALDAWASIR (WDR) 203019N 0451219E
	NEJRAN (NEJ) 173625N 0442456E		NEJRAN (NEJ) 173625N 0442456E
	SANA'A (SAA) 153000N 0441311E		SANA'A (SAA) 153000N 0441311E
	PARIM 123142.7N 0432712E		PARIM 123142.7N 0432712E
	DJIBOUTI (DTI) 113255N 0430537E		DJIBOUTI (DTI) 113255N 0430537E
G669	AL SHIGAR (ASH) 300722N 0384753E	UG669	AL SHIGAR (ASH) 300722N 0384753E
	AL JOU (AJF) 294722N 0400418E		AL JOU (AJF) 294722N 0400418E
	RAFHA (RAF) 293713N 0432953E		RAFHA (RAF) 293713N 0432953E
	NISER 293030.5N 0441825.4E		NISER 293030.5N 0441825.4E
	*Note 3 (OK)		*Note 3 (OK)
	SOLAT 290942N 0463810E		SOLAT 290942N 0463810E
	KUWAIT (KUA) 291306N 0475803E		KUWAIT (KUA) 291306N 0475803E
	SESRA 290803N 0485453E		SESRA 290803N 0485453E
	NANPI 290457N 0493157E		NANPI 290457N 0493157E
	KHARK(KHG) 291550N 0501901E		KHARK(KHG) 291550N 0501901E
	SHIRAZ (SYZ) 293224N 0523520E		SHIRAZ (SYZ) 293224N 0523520E
G670	RASHT (RST) 371935N 0493657E	UG670	RASHT (RST) 371935N 0493657E
	LALDA 3816157.4N 04945113.0E		LALDA 3817.1N 04943.0E
	(BAKU) GYD		(BAKU) GYD
G674	MADINAH (PMA) 243251N 0394219E	UG674	MADINAH (PMA) 243251N 0394219E
	GASSIM (GAS) 261753.9N 0434647.8E		GASSIM (GAS) 261753.9N 0434647.8E
	BOPAN (BPN) 270314N 0452643E		BOPAN (BPN) 270314N 0452643E
G775	ASHGHABAT (ASB) 380011N 0582008E	UG775	ASHGHABAT (ASB) 380011N 0582008E
	ORPAB 374200N 0583430.5E		ORPAB 374200N 0583430.5E
	MASHHAD (MSD) 361352N 0593901E		MASHHAD (MSD) 361352N 0593901E
	[BIRJAND] (BJD) 325821N 0591200E		[BIRJAND] (BJD) 325821N 0591200E
	* Note 1		* Note 1
	ZAHEDAN (ZDN) 292912N 0605406E		ZAHEDAN (ZDN) 292912N 0605406E
G781	(VAN)	UG781	(VAN)
	BONAM 380256.9N 04417598.0E		BONAM 380256.9N 04417598.0E
	UROMIYEH (UMH) 374001N 0450343E		UROMIYEH (UMH) 374001N 0450343E
	ROVON 371601N 0455322E		ROVON 371601N 0455322E

APPENDIX B**B-12**

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ZANJAN (ZAJ) 364647N 0482112E		ZANJAN (ZAJ) 364647N 0482112E
	NOSHAHR(NSR) 363935N 0512805E		NOSHAHR(NSR) 363935N 0512805E
G782	KING ABDULAZIZ (JDW) 214244N 0390723E DAFINAH (DFN) 231658N 0414310E RAGA\HBA (RGB) 235533N 0443547E KING KHALID (KIA) 245310N 0464534E MAGALA (MGA) 261720N 0471225E *Note 7 (MGA-KFR) LUGAL 264533N 0472528E WAFRA (KFR) 283715N 0475729E KUWAIT (KUA) 291306N 0475803E	UG782	KING ABDULAZIZ (JDW) 214244N 0390723E DAFINAH (DFN) 231658N 0414310E RAGA\HBA (RGB) 235533N 0443547E KING KHALID (KIA) 245310N 0464534E MAGALA (MGA) 261720N 0471225E *Note 7 (MGA-KFR) LUGAL 264533N 0472528E WAFRA (KFR) 283715N 0475729E KUWAIT (KUA) 291306N 0475803E
G783	PURDA 210805N 0510329E TANSU 224136N 0542828E RIGIL 230146N 0551430E ELUDA 235107N 0552905E ALN 241535N 0553623E GIDIS 243600N 0555600E BUBIN 245742N 0560642E	UG783	PURDA 210805N 0510329E TANSU 224136N 0542828E RIGIL 230146N 0551430E ELUDA 235107N 0552905E ALN 241535N 0553623E GIDIS 243600N 0555600E BUBIN 245742N 0560642E
G792	BODKA 3939.0N 05130.0E [KE1] GIRUN 3806.12N 0562018.3E BOJNORD (BRD) 372943N 0571923E MASHAD (MSD) 361352N 0593901E	UG792	BODKA 3939.0N 05130.0E GIRUN 3806.12N 0562018.3E BOJNORD (BRD) 372943N 0571923E MASHAD (MSD) 361352N 0593901E
G795	FRALKA 292611N 0481819E TASMI 300120N 0475505E BSR 303132.4N 0472112E RAFHA (RAF) 293713N 0432953E	UG795	FRALKA 292611N 0481819E TASMI 300120N 0475505E BSR 303132.4N 0472112E RAFHA (RAF) 293713N 0432953E
G799	MADINAH (PMA) 243251N 0394219E DAFINAH (DFN) 231658N 0414310E	UG799	MADINAH (PMA) 243251N 0394219E DAFINAH (DFN) 231658N 0414310E
		UL124	(VAN)[KE2] BONAM 380256.9N 04417598.0E URUMIYEH (UMH) 374001N 0450343E ZANJAN (ZAJ) 364647N 0482112E SAVEH (SAV) 350107N 0502217E DISEL 332904N 0510118E YAZD (YZD) (R654) 315352N 0541658E KERMAN (KER) 301706N 0465637E KEBUD 273558N 0625028E (PANJGUR) (PG) 265710N 0640813E
		UL125	DULAV 385700N 04538007.9E TABRIZ (TBZ) 380853N 0461247E ZANJAN (ZAJ) 364647N 0482112E PAROT 360940N 0495756E TEHRAN (TRN) 354149N 0511702E ANARAK (ANK) 333215N 0534347E DARBAND (DAR) 314659N 0565940E ZAHEDAN (ZDN) 292912N 0605406E DANIB 290706N 0611717E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			KEBUD 273558N 0625028E
L126	PUSTO 3321.00N 04245.00E SOGUM 3412.12N 0435454.9E SIGNI 340006.4N 0444200.2E MIGMI 334554.9N 0452724.4E [KE3] ILAM (ILM) 333442N 0462455E	UL126	PUSTO 3321.00N 04245.00E SOGUM 3412.12N 0435454.9E SIGNI 340006.4N 0444200.2E MIGMI 334554.9N 0452724.4E ILAM (ILM) 333442N 0462455E
L200	LOXER 320256N 362500E LUDAN 320256N 0363713 E KUPRI 320825N 0364530 E ASLON 321211N 0365111E NADEK 322728N 0371429E DAXEN 324444N 0374105E ORNAL 324755N0375153E KAREM 325110N 0380324 E KUMLO 325811N 0382807 E DAPUK 330139N 0384026 E PASIP 330600N 0385600E GIBUX 330715N 0411625E SIGBI 330200N 0422000E SILBO 325900N 0432900E	UL200	LOXER 320256N 362500E LUDAN 320256N 0363713 E KUPRI 320825N 0364530 E ASLON 321211N 0365111E NADEK 322728N 0371429E DAXEN 324444N 0374105E ORNAL 324755N0375153E KAREM 325110N 0380324 E KUMLO 325811N 0382807 E DAPUK 330139N 0384026 E PASIP 330600N 0385600E GIBUX 330715N 0411625E SIGBI 330200N 0422000E SILBO 325900N 0432900E
L223	SIRRI (SIR) 255452N 0543206E * Note 7 (OI-OM-OQ SIR-LAKLU) NALTA 250242N 0553955E TARDI 243418N 0560915E LAKLU 232235N 05704 01E	UL223	DASIS 3854319N 044122930E UROMIYEH (UMH) 374001N 0450343E SANANDAJ (SNJ) 351420N 0470028E KHORAM ABAD (KRD) 332603N 0481731E MESVI 312920N 0495701E LAMERD (LAM) 272222N 0531102E SIRRI (SIR) 255452N 0543206E * Note 7 (OI-OM-OQ SIR-LAKLU) NALTA 250242N 0553955E TARDI 243418N 0560915E LAKLU 232235N 05704 01E
L300	LUXOR (LXR) 254458N 0324607E MEMPO 252518N 0335457E GIBAL 243713.2N0363443.7E YENBO (YEN) 2408.58N 03802193.9E	UL300	LUXOR (LXR) 254458N 0324607E MEMPO 252518N 0335457E GIBAL 243713.2N0363443.7E YENBO (YEN) 2408.58N 03802193.9E
L301	RASKI 230330N 0635200E VAXIM 231900N 0611100E RAGMA 232301N 0603846E	UL301	AURANGABAD (AAU) 19514053N 0752419338.6E NOBAT 2109032.5N 06880000.4E LADOT 220502N 0660001 RASKI 230330N 0635200E VAXIM 231900N 0611100E AGMA 232301N 0603846E
L305	DOHA HAMAD INTL (DOH) 251500N 0513635E *Note 7 (DOH-ITITA) *Note 8 (DOH-ASTOG) ORMAL 252304N 0522201E	UL305	DOHA HAMAD INTL (DOH) 251500N 0513635E *Note 7 (DOH-ITITA) *Note 8 (DOH-ASTOG) ORMAL 252304N 0522201E

APPENDIX B**B-14**

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ENANO 252348N 0522559E		ENANO 252348N 0522559E
	ALSEM 252703N 0524322E		ALSEM 252703N 0524322E
	ASTOG 252822N 0525025E		ASTOG 252822N 0525025E
	ITITA 54410N 0541839E		ITITA 254410N 0541839E
L306	TOKRA 220925N 0553350E * Note- 7 (OO) DEMKI 224941N 0562308E LAKLU 232235N 0570401E	UL306	TOKRA 220925N 0553350E * Note- 7 (OO) DEMKI 224941N 0562308E LAKLU 232235N 0570401E
L308	EGNOV 270301N 0474713E *Note 7 (EGNOV- SERSA) *Note 8 (EGNOV- OBNET) JUBAIL (JBL) 270220N 04924267E RAMSI 270249N 0500714E GASSI 270257.9N 0502229.5E TOSDA 270005N 0505629E TORBO 265223N 0511024E SOGAN 263915N 0515408E DEGSO 261054N 0531946E OBNET 260032N 0534514E ITITA 254410N 0541839E DESDI 253603N 0544230E RAGOL 252743N 0550739E SERSA 251945N 0553118E TUKLA 251936N 0554010E NADNI 251915N 0555658E LALDO 251806N 0563600E IMLOT 251708.4N 0570804.4E KATUS 2516005.9N 05747.00E DIVAB 2510.7N 05952.1E [KE4] EGPIC 2508.6N 06029.5E (JIWANI)-(JI) 250350N 0614744E LATEM 243144.7N 0644944.7E	UL308	EGNOV 270301N 0474713E *Note 7 (EGNOV- SERSA) *Note 8 (EGNOV- OBNET) JUBAIL (JBL) 270220N 04924267E RAMSI 270249N 0500714E GASSI 270257.9N 0502229.5E TOSDA 270005N 0505629E TORBO 265223N 0511024E SOGAN 263915N 0515408E DEGSO 261054N 0531946E OBNET 260032N 0534514E ITITA 254410N 0541839E DESDI 253603N 0544230E RAGOL 252743N 0550739E SERSA 251945N 0553118E TUKLA 251936N 0554010E NADNI 251915N 0555658E LALDO 251806N 0563600E IMLOT 251708.4N 0570804.4E KATUS 2516005.9N 05747.00E DIVAB 2510.7N 05952.1E EGPIC 2508.6N 06029.5E (JIWANI)-(JI) 250350N 0614744E LATEM 243144.7N 0644944.7E
L310	BOXAK 244536N 0540032E *Note 7 & 8 to LALDO SIGBO 245526.4N 0545653.9E NALTA 250242.7N 0553955.8E AVAMI 250554.9N 0555647.8E LALDO 251806N 0563600E	UL310	BOXAK 244536N 0540032E *Note 7 & 8 to LALDO SIGBO 245526.4N 0545653.9E NALTA 250242.7N 0553955.8E AVAMI 250554.9N 0555647.8E LALDO 251806N 0563600E
L314	NABAN 163124N 0430148E GOMRI 131816N 0443224E	UL314	NABAN 163124N 0430148E GOMRI 131816N 0443224E
L315	CAIRO(CVO) 300532N 0312318E HURGHADA (HGD) 271040N 0334747E GIBAL 243713.2N 0363443.7E	UL315	CAIRO(CVO) 300532N 0312318E HURGHADA (HGD) 271040N 0334747E GIBAL 243713.2N 0363443.7E
L319	BAHRAIN (BAH) 261551N 0503855E DAVRI 264936N 0505731E OBTAR 265934N 0510309E	UL319	BAHRAIN (BAH) 261551N 0503855E DAVRI 264936N 0505731E OBTAR 265934N 0510309E
L321	KATAB 292501N 0290506E	UL321	KATAB 292501N 0290506E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	KUNKI 290726N 0291949E		KUNKI 290726N 0291949E
	KUNAK 252745.7N 03041.12E		KUNAK 252745.7N 03041.12E
	LUGAV 224205N 0313722E		LUGAV 224205N 0313722E
	ABU SIMBEL (SML) 222118N 0313719E		ABU SIMBEL (SML) 222118N 0313719E
		UL322 [KE5]	MUMBAI (BBB) 190511N 0725229E * Note 7&1 SUGID 193303.1N 06921.00E BOLIS 203333.5N 06500.02E REXOD 211230.5N 0613830.5E
		UL333	DASIS 385431N 0441229E TABRIZ (TBZ) 380853N 0461247E RASHT (RST) 371935N 0493657E GIBAB 3532137.0N 05436560.9E ALRAS [KE6] 3511.3N 05541.6E TASLU 342632N 0574234E SOKAM 331316N 0603752E
L417	VUSEB 361637N 0434800E UMESA 351741N 0434307E MUTAG 343003N 0433834 E LAGLO 3351538.6 0441457.0E ELOSI 330800N 0441800E LOVEK 322208.4N 04440.01E ELIBA 320915N 0444645E NADOX 310505N 0451851E	UL417	VUSEB 361637N 0434800E UMESA 351741N 0434307E MUTAG 343003N 0433834 E LAGLO 3351538.6 0441457.0E ELOSI 330800N 0441800E LOVEK 322208.4N 04440.01E ELIBA 320915N 0444645E NADOX 310505N 0451851E
		UL425	KING ABDULAZIZ (JDW) 214244N 0390723E TONBO 205502N 0394911E AL BAHA (BHA) 201733N 0413745E BISHA (BSH) 195840N 0423728E WADI ALDAWASIR (WDR) 203019N 0451219E EGREN 202236N 0464422E ASTIN 200410N 0495320E DIRAS 195235N 0513704E GOBRO 193622N 0534741E NOVNO 193313N 0535858E ITUVO 190315N 0554328E DEDSO 185811N 0560041E BOVOS 182230N 0575844E ASPUX 174406N 0600006E TRIVANDRUM (TVM) 082831N 0765531E
L430	VAXIM 231900N 0611100E MESPO 244936N 0593411E MELMI 264625N 0572300E TAVNO 281112N 0563252E ASMET 284827N 0560806E SIRJAN (SRJ) 293323.4N 0553923.6E	UL430	VAXIM 231900N 0611100E MESPO 244936N 0593411E MELMI 264625N 0572300E TAVNO 281112N 0563252E ASMET 284827N 0560806E SIRJAN (SRJ) 293323.4N 0553923.6E
L438	LONOS 283027N 0491713E	UL438	LONOS 283027N 0491713E

APPENDIX B**B-16**

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	LOPOL 281849N 0492845E		LOPOL 281849N 0492845E
	ATBAG 280842N 0493844E		ATBAG 280842N 0493844E
	GODRI 280256N 0494307E		GODRI 280256N 0494307E
	RAKSO 275326N 0495032E		RAKSO 275326N 0495032E
	GOGRA 274918N 0495344E		GOGRA 274918N 0495344E
	OBNAZ 272650N 0501103E		OBNAZ 272650N 0501103E
	DEKTA 271605N 0501946E		DEKTA 271605N 0501946E
	VELOG 270215N 0503055E		VELOG 270215N 0503055E
	KOBOK 265839N 0503349E		KOBOK 265839N 0503349E
	MOGAS 264759N 0503909E		MOGAS 264759N 0503909E
	TOSTA 262746N 0504912E		TOSTA 262746N 0504912E
	ASTAD 261811N 0505646E		ASTAD 261811N 0505646E
L440	KANIP 241040.7N 05520.7E *Note 7 RETAS 235754N 0553423E	UL440	KANIP 241040.7N 05520.7E *Note 7 RETAS 235754N 0553423E
L443	RABAP 283625N 0492722 TESSO 282852N 0492723E LOPOL 281849N 0492845E ENAVI 275552N 0493151E GIRSI 274126N 0493310E ORDAN 271706N 0495442E RAMSI 270249N 0500714E GASSI 270257N 0502229E	UL443	RABAP 283625N 0492722 TESSO 282852N 0492723E LOPOL 281849N 0492845E ENAVI 275552N 0493151E GIRSI 274126N 0493310E ORDAN 271706N 0495442E RAMSI 270249N 0500714E GASSI 270257N 0502229E
L444	KIPOL 230410N 0612903E *Note 7 (OO) VUSIN 225940N 0605510E MIBSA 225400N 0601338E KAXEM 225103N 0595243E IMDEK 224647N 0592217E TOLDA 224008N 0583624E	UL444	KIPOL 230410N 0612903E *Note 7 (OO) VUSIN 225940N 0605510E MIBSA 225400N 0601338E KAXEM 225103N 0595243E IMDEK 224647N 0592217E TOLDA 224008N 0583624E
L513	MURAK 3456009.4N 0364200.4E [KE7] LEBOR 341556.9N 03634595.0E DAMASCUS (DAM) 332154N 0362807E * Note 3 (OS) BUSRA 3220.00 N 03637.00 E QUEEN ALIA (QAA) 314423N 0360926E QATRANEH (QTR) 311454N 0360334E MUNRA [KE8]MAZAR 3049448.0N 036083510.0E	UL513	MURAK 3456009.4N 0364200.4E LEBOR 341556.9N 03634595.0E DAMASCUS (DAM) 332154N 0362807E * Note 3 (OS) BUSRA 3220.00 N 03637.00 E QUEEN ALIA (QAA) 314423N 0360926E QATRANEH (QTR) 311454N 0360334E MUNRA [KE9]MAZAR 3049448.0N 036083510.0E
		UL516	KITAL 2003.00N 06018.00E ELKEL 0149.08N 06911.00E DIEGO GARCIA (NDG NKW) 071900S 0722442E
L519	ABU DHABI (ADV) *Note 7 (OM) NAMSI 243731.5N 05456.48E EMERU 244829N 0550303 LUDER 245733.5N 0550511.2E	UL519	ABU DHABI (ADV) *Note 7 (OM) NAMSI 243731.5N 05456.48E EMERU 244829N 0550303 LUDER 245733.5N 0550511.2E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
		UL550	WAFRA (KFR) 283715N 0475729E NIDAP 283850N 0473656E BOSID 284227.4N 04654012.6E VATIM 2851.36N 0444443.7E RASMO 2857132N 0433119.3E ORSAL 290235.8N 04211070.8E NIMAR 290635.6N 0395425.4E KITOT 290205.4N 0345050.8E NUWEIBAA (NWB) 290156N 0344016E TABA (TBA) EL ARISH (ARI) KARIK 292733N 0344641E TAKSU 293625N 0343623E DATOK 293624N 0341400E SERMA 312200N 0330834E PASOS 321300N 0330600E (KAROL 3252.0N 03229.0E)
L551	ANTAR 334800N 0281600E EL DABA (DBA) 310041N 0282801E	UL551	ANTAR 334800N 0281600E EL DABA (DBA) 310041N 0282801E
L555	TOTOX 215030N 0622230E TUMET 222307N 0595702E TOLDA 224008N 0583624E	UL555	TOTOX 215030N 0622230E TUMET 222307N 0595702E TOLDA 224008N 0583624E
		UL556	EGREN 202236N 0464422E NONGA 205048N 0492014E PURDA 210805N 0510329E Note:- 7 (OO, OB) IMDAM 202416N 0550801E OTISA 201000N 0554556E HAIMA (HAI) 195813N 0561651E GIVNO 195011N 0563059E KUTVI 184306N 0582642E
		UL560	ARDABIL (ARB) 3818569.9N 04826054.9E * Note 3&4 (OI) SEVAN (SVN) 4032.03N 04457176.9E
L564	DOHA/HAMAD INTL (DOH) 251500N 0513635E LADEM 245545N 0513714E DATRI 244239N 0513407E DENSI 242519N 0512959E *Note 8 (DOH-PURDA) BATHA (BAT) 241257N 0512707E MIGMA 225035N 0512749E LOTOS 220000N 0503912E ALNUG 213009N 0500453E NONGA 205048N 0492012E DENKU 201123N 0484331E GERUG 185530N 0473402E	UL564	DOHA/HAMAD INTL (DOH) 251500N 0513635E LADEM 245545N 0513714E DATRI 244239N 0513407E DENSI 242519N 0512959E *Note 8 (DOH-PURDA) BATHA (BAT) 241257N 0512707E MIGMA 225035N 0512749E LOTOS 220000N 0503912E ALNUG 213009N 0500453E NONGA 205048N 0492012E DENKU 201123N 0484331E GERUG 185530N 0473402E

APPENDIX B**B-18**

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ASKET 181905N 0470113E		ASKET 181905N 0470113E
	PATOG 180241N 0464631E		PATOG 180241N 0464631E
	UVUOD 173941N 0463200E		UVUOD 173941N 0463200E
	TULIS 173033N 0462616E		TULIS 173033N 0462616E
	ULBON 171425N 0461515E		ULBON 171425N 0461515E
	RAGNI 163454N 0454815E		RAGNI 163454N 0454815E
	LOPAD 161651N 0453738E		LOPAD 161651N 0453738E
	ITOLI 152825N 0450927E		ITOLI 152825N 0450927E
	OBNAM 144541N 0444448E		OBNAM 144541N 0444448E
	GEVEL 141229N 0442547E		GEVEL 141229N 0442547E
	NOPVO 135436N 0441536E		NOPVO 135436N 0441536E
	TAZ 134150N 0440819E		TAZ 134150N 0440819E
	PARIM 123142N 0432712E		PARIM 123142N 0432712E
		UL566	ASMAK 162327N 0524634E UKNEN 160542N 0522012E PURUG 151204N 0510142E KUSOL 144009N 0501534E NOTBO 142609N 0495530E EMABI 141627N 0494139E SOKEM 134235N 0485329E DATEG 123549N 0471627E
		UL572	KAMISHLY (KML) LESRI 370420.3N 0411349.8E KAMISHLY (KML) 370100N 0411106E HASSAKEH (HAS) 3629N 04045.3E DIER ZZOR (DRZ) 351731N 0400914E TANF (TAN) 332857N 0383915E
		UL573	DAFINAH (DFN) 231658N 0414310E MADINAH (PMA) 243251N 0394219E WEJH (WEJ) 261045N 0362917E
		UL601	BAGLUM (BAG) 04004.12 0324838.6) * Note 7 (BAG-KTN) ADANA (ADA) 365626.4N 0351237.6E (ADA) TUNLA 3553.00N 0360200E KARIATAIN 3412.48N 0371551.9E
L602	TUMAK 255031N 0531108E VEDOM 260109N 0524456E VELAK 261307N 0521821E LABOP 261907N 0520429E ALTOM 262230N 0515639E DASOS 262429N 0515043E ALMOK 262832N 0513840E VEDOS 264105N 0510044E NABOS 264354N 0505145E MEMKO 264611N 0504427E MOGAS 264759N 0503909E TOLMO 265504N 0502927E EGLIT 270255N 0502005E TOKMA 270938N 0501159E	UL602	TUMAK 255031N 0531108E VEDOM 260109N 0524456E VELAK 261307N 0521821E LABOP 261907N 0520429E ALTOM 262230N 0515639E DASOS 262429N 0515043E ALMOK 262832N 0513840E VEDOS 264105N 0510044E NABOS 264354N 0505145E MEMKO 264611N 0504427E MOGAS 264759N 0503909E TOLMO 265504N 0502927E EGLIT 270255N 0502005E TOKMA 270938N 0501159E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ORSOL 272135N 0500207E		ORSOL 272135N 0500207E
	ITNAS 274643N 0493957E		ITNAS 274643N 0493957E
	ENAVI 275552N 0493151E		ENAVI 275552N 0493151E
	DAMUR 280137N 0492637E		DAMUR 280137N 0492637E
	DAVUS 282346N 0490622E		DAVUS 282346N 0490622E
			DARVA 284814N 0484734E
			ALVIX 291918N 0482412E
			FRALKA 292611N 0481819E
			TASMI 300120N 0475505E
			LOVEK3222086N 04440010E
			DELMI331911N 0431731E
			ELEXI 344237N 0411054E
			DRZ 35173124N 04009141124E
			KUKSI 364508N 0374910E
			GAZIANTEP (GAZ) 365705N 03728234E
L604	PLH 351339N 0234051E	UL604	PALEOCHORA (PLH) 351339N 0234051E
	SALUN 340000N 0242700E		SALUN 340000N 0242700E
	SIDI BARANI (BRN) 3134320N 0260020+8E		SIDI BARANI (BRN) 3134320N 0260020+8E
	EL KHARGA (KHG) 252654N 03035274E		EL KHARGA (KHG) 252654N 03035274E
	LUXOR (LXR) 254458 N 0324607E		LUXOR (LXR) 254458 N 0324607E
	IMRAD 260506N 0354444E		IMRAD 260506N 0354444E
	WEJH(WEJ) 261048N 0362918E		WEJH(WEJ) 261048N 0362918E
	HALAIFA (HLF) 2626030N 03916.096E		HALAIFA (HLF) 2626030N 03916.096E
	GASSIM (GAS) 261754N 0434648E		GASSIM (GAS) 261754N 0434648E
	*Note 7 (GAS-KFA)		*Note 7 (GAS-KFA)
	PUSLA 261758N 0461706E		PUSLA 261758N 0461706E
	*Note 8 to TOSNA		*Note 8 to TOSNA
	MAGALA (MGA) 261720+8N 0471225+4-E		MAGALA (MGA) 261720+8N 0471225+4-E
	ALMAL 261554N 0482106E		ALMAL 261554N 0482106E
	KING FAHD (KFA) 2621534N 04949102E		KING FAHD (KFA) 2621534N 04949102E
	NARMI 261802N 0501939E		NARMI 261802N 0501939E
	BAHRAIN (BAH) 261551N 0503855E		BAHRAIN (BAH) 261551N 0503855E
	DENVO 260452N 0510509E		DENVO 260452N 0510509E
	PATOM 255821N 0511836E		PATOM 255821N 0511836E
	EMISA 254658N 0514207E		EMISA 254658N 0514207E
	KAPAX 254218N 0515118E		KAPAX 254218N 0515118E
	ORSIS 252801N 0521636E		ORSIS 252801N 0521636E
	ENANO 252348N 0522559E		ENANO 252348N 0522559E
	TOSNA 251612N 0524116E		TOSNA 251612N 0524116E
		UL607	SITIA (SIT) 350406N 0261121E
			* Note 7
			PAXIS 335706.4N 02720.00E
			OTIKO 313421.3N 02936.36E
			ALEXANDRIA (NOZ) 311113N 0295701E
L612	KUMBI 334250N 0284500E LABNA 321956N 0301612E BALTIM (BLT) 313144N 0310721E	UL612	KUMBI 334250N 0284500E LABNA 321956N 0301612E BALTIM (BLT) 313144N 0310721E
		UL613	EL – DABA (DBA)
			* Note 7

APPENDIX B**B-20**

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			SOKAL 3236.01N 0273706.20.0E
			TANSA 3400.00N 02649.00E
L617	ALEXANDRIA NOZ 311113N 0295701E IMRUT 313259N 0293346E ASNIR 323849N 0282144E TANSA 340000N 0264900E	UL617	ALEXANDRIA NOZ 311113N 0295701E IMRUT 313259N 0293346E ASNIR 323849N 0282144E TANSA 340000N 0264900E
L620	BALMA 342856N 0350302E <u>KALDE (KAD)</u> 334827N 0352910E	UL620	BALMA 342856N 0350302E <u>KALDE (KAD)</u> 334827N 0352910E
L631	TOTOX 215030N0622230E IVOMA 223408N 0605430E * Note 7 (OO) MIBSA 225400N 0601338E AMBOS 230324N 0595405E ELIGO 232458N 0590848E KARAR 233042N 0585438E MUSCAT (MCT) 233528.01N 0581536E.47	UL631	TOTOX 215030N0622230E IVOMA 223408N 0605430E * Note 7 (OO) MIBSA 225400N 0601338E AMBOS 230324N 0595405E ELIGO 232458N 0590848E KARAR 233042N 0585438E MUSCAT (MCT) 233528.01N 0581536E.47
L677	CAIRO (CV-AIRO) 300532.5N 0312318.3E MENLI 2947.00N 0315206.4E <u>KAPIT</u> 2917.0N 03236.1E [KE10] SHARM EL SHEIKH (SHM) 275953N 0342448E PASAM 273045.8N 0345542.7E *Note 7(OE) WEJH (WEJ) 261046.8N 0362917.3E MUVAT 253755.9N 0365446.8E <u>YENBO</u> (YEN) 2408.58N 03802193.9E KING ABDULAZIZ (JDW) 214244N 0390723E QUNFIDAH (QUN) 192211.2N 0410429.5E TALIB 183854.9N 0413114.2E <u>JAZAN</u> (GIZ) 165428.5N 0423439.7E NABAN 163124.4N 043014.8E IMSIL 1557.6N 04313.2E SANAA (SAA) 1530.00N 0441311.2E	UL677	CAIRO (CV-AIRO) 300532.5N 0312318.3E MENLI 2947.00N 0315206.4E <u>KAPIT</u> 2917.0N 03236.1E SHARM EL SHEIKH (SHM) 275953N 0342448E PASAM 273045.8N 0345542.7E *Note 7(OE) WEJH (WEJ) 261046.8N 0362917.3E MUVAT 253755.9N 0365446.8E <u>YENBO</u> (YEN) 2408.58N 03802193.9E KING ABDULAZIZ (JDW) 214244N 0390723E QUNFIDAH (QUN) 192211.2N 0410429.5E TALIB 183854.9N 0413114.2E <u>JAZAN</u> (GIZ) 165428.5N 0423439.7E NABAN 163124.4N 043014.8E IMSIL 1557.6N 04313.2E SANAA (SAA) 1530.00N 0441311.2E
L681	EGNOV 270301N 0474713E * Note 5 & 7 & 8 to (EGNOV-SALWA) GEPAK 2633.00N 0484328.5E <u>RADMA</u> 2623.0N 04857.5E [KE11] <u>DELMU</u> 2618.9N 04903.4E <u>ROSEM</u> 2607.7N 04919.0E SALWA 251538N 0503048E	UL681	EGNOV 270301N 0474713E * Note 5 & 7 & 8 to (EGNOV-SALWA) GEPAK 2633.00N 0484328.5E <u>RADMA</u> 2623.0N 04857.5E <u>DELMU</u> 2618.9N 04903.4E <u>ROSEM</u> 2607.7N 04919.0E SALWA 251538N 0503048E
L695	PAROK 231030N 0590245E *Note 7 (OO) ITURA 232351N 0580720E	UL695	PAROK 231030N 0590245E *Note 7 (OO) ITURA 232351N 0580720E
L764	MUSCAT (MCT) 233528N 0581536E ALMOG 233524N 0574940E IVETO 233520N 0570704E PAXIM 240245N 0561631E	UL764	MUSCAT (MCT) 233528N 0581536E ALMOG 233524N 0574940E IVETO 233520N 0570704E PAXIM 240245N 0561631E
L768	ALPOB 254218N 0530055E	UL768	ALPOB 254218N 0530055E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	* Note 7 to FIRAS		* Note 7 to FIRAS
	* Note 8 (ALPOB-COPPI)		* Note 8 (ALPOB-COPPI)
	ROTAG 255353N 0523621E		ROTAG 255353N 0523621E
	SOLEG 260159N 0521756E		SOLEG 260159N 0521756E
	MODOG 261012N 0515935E		MODOG 261012N 0515935E
	RAMKI 261138N 0515625E		RAMKI 261138N 0515625E
	RABLA 261506N 0514834E		RABLA 261506N 0514834E
	SOLOB 262241N 0513132E		SOLOB 262241N 0513132E
	MEDMA 263421N 0505454E		MEDMA 263421N 0505454E
	TOTLA 263806N 0504301E		TOTLA 263806N 0504301E
	EGMOR 264211N 0502907E		EGMOR 264211N 0502907E
	ULADA 264527N 0501624E		ULADA 264527N 0501624E
	JUBAIL (JBL) 270222N 0492426E		JUBAIL (JBL) 270222N 0492426E
	COPPI 275033N 0474359E		COPPI 275033N 0474359E
			HFR 281950N 0460746E
			VATIM 285136N 04444432E
			RAFHA (RAF) 281950N 0460746E
			ARAR (AAR) 305429N 0410832E
			OVANO 314801N 0390951E
			OTILA 320131N 0390153E
			MODAD 323542N 0384136E
			SOKAN 330806N 0382206E
			RAFIF 331248N 0381918E
			SULAF 332718N 0381024E
			FIRAS 335218N 0375512E
		UL883	REXOD 211230N 0613830E
			GADMA 211439N 0600938E
			TAVKO 211519N 0593147E
			UMILA 211555N 0584738E
			MEVLI 211632N 0565606E
			KUROV 211627N 0561853E
			ALNUN 211625N 0561041E
			SITOL 211604N 0552514E
			PURDA 210805N 0510329E
			ALRIK 220631N 0482535E
			UMRAN 231508.4N 0452023.4E
			TUKVU 234626.4N 0435319.3E
			BIR DARB (BDB)
			MADINAH (PMA) 243251N 0394219E
		UL894	KITAL 2003.00N 060180.0E
			(MALE (MLE) 041223N 0733139E)
			(SUNAN 0028.7N 07800.0E)
			(DADAR 0200.0S 07927.1E)
			(PERTH (PH) KE12)
M203	PUSTO 3321.00N 04245.00E	UM203	PUSTO 3321.00N 04245.00E
	LOVEK 322208.4N 04440.01E		LOVEK 322208.4N 04440.01E
	ILMAP 312133N 0465702E		ILMAP 312133N 0465702E
M300	LOTAV 203700N 0605700E	UM300	(CALICUT) CLC 110806N 0755717E
	EMURU 221535N 0584950E		LOTAV 203700N 0605700E

APPENDIX B

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LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			EMURU 221535N 0584950E
M301	PURAD 145500N 0415354E SANAA (SAA) 153000N 0441311E ITOLI 152825N 0450927E ASMAK162327N 0524634E	M301	PURAD 145500N 0415354E SANAA (SAA) 153000N 0441311E ITOLI 152825N 0450927E ASMAK162327N 0524634E
M303	MUSCAT (MCT) 233528.01N 0581536E-47 *Note 7 (OO) SEVLA 233321N 0591122E KIPOL230410N 0612903E	UM303	MUSCAT (MCT) 233528.01N 0581536E-47 *Note 7 (OO) SEVLA 233321N 0591122E KIPOL230410N 0612903E
M305	SIDI BARANI (BRN) 313432.5N 0260020.3E ATMUL 200000N 290527.4E *Note 3	UM305	SIDI BARANI (BRN) 313432.5N 0260020.3E ATMUL 200000N 290527.4E *Note 3
		UM309	KINGD KHALED (KIA) 245310N 0464534E *Note 1 (KIA-VEMEM) RAGHBA (RGB) 235533N 0443547E VEMEM 221554N 0400118E RABTO 221608N 0400326E
M312	EL DABA (DBA) 310041.7N 0282801.0E AMIBO 345640.7N 213627.4E *Note 3 (HE)	UM312	EL DABA (DBA) 310041.7N 0282801.0E AMIBO 345640.7N 213627.4E *Note 3 (HE)
M316	KANAS 251552N 0574700E GOKSO 265542N 0604012E	UM316	KANAS 251552N 0574700E GOKSO 265542N 0604012E
M318	GABKO 260404N 0554755E GITSA 254132N 0553926E *Note 7 (SERSA-GABKO) Eastbound SERSA 251945N 0553118E MIADA 245112N 0545736E ABU DHABI (ADV) 242508N 0544024E ATUDO 241708N 0543532E MUSEN 241429N 0543336E GOLGU 231051N 0523109E MUXIT 230229N 0523024E KITAP 224928N 0522923E PURDA 210805N 0510329E SHARURAH (SHA) 172813N 0470802E NADKI 171418N 0464706E SANAA (SAA) 153100N 0441311E HODEIDAH (HDH) 144622N 0425911E	UM318	
M319	ULINA 292451N 0345817E SESMO 293458N 0351159E LOXUS 301301N 0352601E LOSIL 304951N 0354841E QATRANEH (QTR) 311454N 0360334E	UM319	ULINA 292451N 0345817E SESMO 293458N 0351159E LOXUS 301301N 0352601E LOSIL 304951N 0354841E QATRANEH (QTR) 311454N 0360334E
M320	KING FAHD (KFA) 262153N 0494910E KODAG 2703.3N 04920.4E	UM320	KING FAHD (KFA) 262153N 0494910E KODAG 2703.3N 04920.4E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	JUBAIL (JBL) 270222N 0492426E		JUBAIL (JBL) 270222N 0492426E
	RAS MISHAB (RAS) 280441N 0483653E		RAS MISHAB (RAS) 280441N 0483653E
	ASVIR 283220N 0482220E		ASVIR 283220N 0482220E
	KUWAIT (KUA) 291306N 0475803E		KUWAIT (KUA) 291306N 0475803E
M321	HALAIFA (HLF) 262602N 0391609E (HLF)	UM321	HALAIFA (HLF) 262602N 0391609E (HLF)
	ROSUL 253945.7N 0421519.3E		ROSUL 253945.7N 0421519.3E
	OVEKU 250955.9 04457-01E		OVEKU 250955.9 04457-01E
	KING KHALED (KIA) 245310N 0464534E RESAL 240649N 0470427E AMBAG 230529N 0474611E ALRIK 220631N 0482525E NONGA 205048N 0492014E ASTIN 200410N 0495320E SILPA 184953N 0510158E IMPOS 183136N 0511848E LOTEL 180926N 0514103E PUTRA 165432N 0525631E		KING KHALED (KIA) 245310N 0464534E RESAL 240649N 0470427E AMBAG 230529N 0474611E ALRIK 220631N 0482525E NONGA 205048N 0492014E ASTIN 200410N 0495320E SILPA 184953N 0510158E IMPOS 183136N 0511848E LOTEL 180926N 0514103E PUTRA 165432N 0525631E
M425	SILKO ELIKA 3349557.9N 03435.00E CHEKA (CAK) 341802N 0354200E	UM425	SILKO ELIKA 3349557.9N 03435.00E CHEKA (CAK) 341802N 0354200E
M428	RIKET 251859N 0560200E *Note 7/8 (OO/OM) GOMTA 251115N 0563447E TARBO 244351N 0574637E MUNGA 242516N 0584533E	UM428	RIKET 251859N 0560200E *Note 7/8 (OO/OM) GOMTA 251115N 0563447E TARBO 244351N 0574637E MUNGA 242516N 0584533E
M430	*Note 5 (KIA-DOH) KING KHALID (KIA) 245310N 0464534E KOBOX 250716N 0475046E KIREN 251447N 0490724E *Note 8 (KIREN-TOSNA) AL AHSA (HAS) 251645N 0492903E SALWA 251538N 0503048E ULIKA 251545N 0503849E GINTO 251606N 0510416E LAGNO 251613N 0511518E DOHA HAMAD INTL (DOH) 251500N 0513635E BOVIP 251555N 0523135E TOSNA 251612N 0524116E *Note 7 (DOH-KISAG) KISAG 251834N 0541408E	UM430	*Note 5 (KIA-DOH) KING KHALID (KIA) 245310N 0464534E KOBOX 250716N 0475046E KIREN 251447N 0490724E *Note 8 (KIREN-TOSNA) AL AHSA (HAS) 251645N 0492903E SALWA 251538N 0503048E ULIKA 251545N 0503849E GINTO 251606N 0510416E LAGNO 251613N 0511518E DOHA HAMAD INTL (DOH) 251500N 0513635E BOVIP 251555N 0523135E TOSNA 251612N 0524116E *Note 7 (DOH-KISAG) KISAG 251834N 0541408E
M434	UMESA 351741N 0434307E OTALO 351700N 0441900E IVANO 351724N 0451235E BOXIX 351724N 0460921E ALSAX 351607N 0463118E SANANDAJ (SNJ) 351420N 0470028E HAMDAN(HAM) 345201N 0483301E SAVEH(SAV) 350107N 0502217E	UM434	UMESA 351741N 0434307E OTALO 351700N 0441900E IVANO 351724N 0451235E BOXIX 351724N 0460921E ALSAX 351607N 0463118E SANANDAJ (SNJ) 351420N 0470028E HAMDAN(HAM) 345201N 0483301E SAVEH(SAV) 350107N 0502217E

APPENDIX B

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LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
		UM440	KING KHALED (KIA) 245310N 0464534E OTAMA 235148N 0494707E KUTNA 231341N 0512730E KITAP 224928N 0522923E TOKRA 220925N 0553350E
M444	DOHA/HAMAD INTL (DOH) 251500N 0513635E EMISA 254658N 0514207E PATOM 255821N 0511836E DENVO 260452N 0510509E BAHRAIN (BAH) 261551N 0503855E ELOSO 262409N 0503550E EGMOR 264210N 0502906E LOTOR 264854N 0502200E RAMSI 270249N 0500714E ORDAN 271706N 0495442E GIRSI 274126N 0493310E ENASO 275706N 0491911E DAVUS 282346N 0490622E	UM444	DOHA/HAMAD INTL (DOH) 251500N 0513635E EMISA 254658N 0514207E PATOM 255821N 0511836E DENVO 260452N 0510509E BAHRAIN (BAH) 261551N 0503855E ELOSO 262409N 0503550E EGMOR 264210N 0502906E LOTOR 264854N 0502200E RAMSI 270249N 0500714E ORDAN 271706N 0495442E GIRSI 274126N 0493310E ENASO 275706N 0491911E DAVUS 282346N 0490622E
M449	BUSRA 322000N 0363700E MUNRA [KE13]MAZAR 3049448.0N 036083510.0E GIBET 292620.3N 03625.01E TABUK (TBK) 282153N 0363637E WEJH (WEJ) 261046N 0362918E	UM449	BUSRA 322000N 0363700E MUNRA [KE14]MAZAR 3049448.0N 036083510.0E GIBET 292620.3N 03625.01E TABUK (TBK) 282153N 0363637E WEJH (WEJ) 261046N 0362918E
M550	GOLGU 231051N 0523109E RIBOT 230844N 0522428E BOPEK 230059N 0520007E MIGMA 225035N 0512749E MEVDO 223205N 0494616E	UM550	GOLGU 231051N 0523109E RIBOT 230844N 0522428E BOPEK 230059N 0520007E MIGMA 225035N 0512749E MEVDO 223205N 0494616E
M551	KIVEL 165306N 0553633E DAXAM 171612N 0544715E	UM551	DONSA143518.3N 0651136344.0E ANGAL161404.1N 0600004.1E OTOTO 164004N 0570435E KIVEL 165306N 0553633E DAXAM 171612N 0544715E
M557	ATBOR 251007N 0551947E *Note7 & 8 (ATBOR-VUVOK) to MDSI NADIL 252252N 0544717E NABOP 252607N 0540405E EMAGO 253456N 0535751E VUVOK 254408N 0533024E	UM557	ATBOR 251007N 0551947E *Note7 & 8 (ATBOR-VUVOK) to MDSI NADIL 252252N 0544717E NABOP 252607N 0540405E EMAGO 253456N 0535751E VUVOK 254408N 0533024E
M559	LABNI 165620N 0410921E NISMI 162415N 0421838E ITOLI 152825N 0450927E MUKALLA (RIN) 144015N 0492329E VEDET 120134N 0512410E	UM559	LABNI 165620N 0410921E NISMI 162415N 0421838E ITOLI 152825N 0450927E MUKALLA (RIN) 144015N 0492329E VEDET 120134N 0512410E
M561	KISH (KIS) 263131N 0535745E	UM561	KISH (KIS) 263131N 0535745E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	MOBET 2645.3N 05609.8E		MOBET 2645.3N 05609.8E
	ASVIB 265724N 0631812E		ASVIB 265724N 0631812E
	GPANJGUR PG 265710N 0640813E		GPANJGUR PG 265710N 0640813E
		UM573	TEHERAN (TRN) 354149N 0511702E
			TABRIZ (TBZ) 3808.53N 04612473.9E
		UM574	MALE (MLE) 041223N 0733139E
			POPET 071343.7N 06813.36E
			NABIL 1222.00E 0600.006E
			RIGAM 143932N 0530414E
			NOBSU 171554N 0431318E
M600	RANBI 251908N 0544500E	UM600	RANBI 251908N 0544500E
	KISAG 251834N 0541408E		KISAG 251834N 0541408E
	TUMAK 255031N 0531108E		TUMAK 255031N 0531108E
	VEDOM 260109N 0524456E		VEDOM 260109N 0524456E
	VELAK 261307N 0521821E		VELAK 261307N 0521821E
	LABOP 261907N 0520429E		LABOP 261907N 0520429E
	ALTOM 262230N 0515639E		ALTOM 262230N 0515639E
	DASOS 262429N 0515043E		DASOS 262429N 0515043E
	ALMOK 262832N 0513840E		ALMOK 262832N 0513840E
	VEDOS 264105N 0510044E		VEDOS 264105N 0510044E
	NABOS 264354N 0505145E		NABOS 264354N 0505145E
	MOGAS 264759N 0503909E		MOGAS 264759N 0503909E
	RAKAK 265221N 0502618E		RAKAK 265221N 0502618E
	RAMSI 270249N 0500714E		RAMSI 270249N 0500714E
	ORNAK 272853N 0493248E		ORNAK 272853N 0493248E
	SOLEM 275229N 0491136E		SOLEM 275229N 0491136E
	KUMBO 281705N 0485526E		KUMBO 281705N 0485526E
M628	LUDID 230227N 0551800E	UM628	DAFINAH (DFN) 231700N 0414312E
	LABSA 230153N 0555505E		KIPOM 225316N 0501518E
	EGVAN 230127N 0561907E		MIGMA 225035N 0512749E
	TULBU 230005N 0571827E		KITAP 224928N 0522923E
	IZIKI (IZK) 2253198.60N 05745432.73E		ALPEK 224648N 0535942E
	TOLDA 224008N 0583624E		LUDID 230227N 0551800E
	LOXOP 223722N 0594548E		LABSA 230153N 0555505E
	LAADAP LOSIM 223513N 0603238E		EGVAN 230127N 0561907E
	IVOMA 223408N 0605430E		TULBU 230005N 0571827E
	PARAR 222630N 0630700E		IZIKI (IZK) 2253198.60N 05745432.73E
			TOLDA 224008N 0583624E
			LOXOP 223722N 0594548E
			LOSIM 223513N 0603238E
			IVOMA 223408N 0605430E
			PARAR 222630N 0630700E
M634	ANGAL 1614046N 06000046E	UM634	ANGAL 1614046N 06000046E
	VEDET 120134N 0512410E		VEDET 120134N 0512410E
	DAROT 0911.4N 04721.2E		DAROT 0911.4N 04721.2E
M651	ATBOT 171418N 0464706E	UM651	ATBOT 171418N 0464706E
	ADEN (KRA) 124952N 0450125E		ADEN (KRA) 124952N 0450125E

APPENDIX B**B-26**

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	(HARGEISA) HARGA 093112N 0440530E		(HARGEISA) HARGA 093112N 0440530E
M677	SESRA 290800N 0485454E RABAP 283625N 0492722E PASAK 282459N 0494846E GOGMA 281421N 0495612E IVIVI 273734N 0502437E VEDOR 270855N 0504630E TOSDA 270004N 0505629E TORBO 265222N 0511024E SOGAN 263915N 0515408E DEGSO 261054N 0531946E OBNET 260032N 0534514E ITITA 254410N 0541839E SERSA 251945N 0553118E LALDO 251806N 0563600E	UM677	SESRA 290800N 0485454E RABAP 283625N 0492722E PASAK 282459N 0494846E GOGMA 281421N 0495612E IVIVI 273734N 0502437E VEDOR 270855N 0504630E TOSDA 270004N 0505629E TORBO 265222N 0511024E SOGAN 263915N 0515408E DEGSO 261054N 0531946E OBNET 260032N 0534514E ITITA 254410N 0541839E SERSA 251945N 0553118E LALDO 251806N 0563600E
M681	TARBO 244351N 0574637E *Note 7/8 (OO) DAMUM 243236N 0591307E	UM681	TARBO 244351N 0574637E *Note 7/8 (OO) DAMUM 243236N 0591307E
M686	LUXOR (LXR) 254458N 0324607E MEMPO 252518N 0335457E GIBAL 2437132N 03634432E KING ABDULAZIZ (JDW) 214244N 0390723E	UM686	LUXOR (LXR) 254458N 0324607E MEMPO 252518N 0335457E GIBAL 2437132N 03634432E KING ABDULAZIZ (JDW) 214244N 0390723E
		UM688	CARSAMBA (CRM) 411556N 0363256E GULRA 402247N 0381646E ERZINCAN (ERN) 394230N 0393145E EVVAS 391929N 0401119E BAYIR 383541N 0412414 E ULTED 382102N 0414934E OTKEP 375133N 0423936E NINVA 372100N 0431300E ROXOP 364917N 0433100E VUSEB 361637N E0434800E OTALO 351700N 0441900E RIDIP 343012N 0444027E UKMUG 334300N 0450329E VAXEN 331800N 0451500E PAPUS 325334N 0452706E KATUT 323737N 0453439E DENKI 322228.46N 04551221.58E ILMAP 312133N 0465702E PEBAD 305023.09N 0472958.49E SIDAD 295231N 0482944E
		UM690	ZELAF 325656N 0371121E ORNAL 324755N 0375153E KODER 323300N 0373800E DESLI 31492400N 03659019E ELOXI 313401359N 03645346E KULDI 311847N 0363214E MUNRA [KE15]MAZAR 3049448.9N

	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			036083510.0E
			ROVAR 292438N0345711E
			LONOL 300801N 0353500E
			SESMO 293458N 0351159E
			ULINA 292451N 0345817E
			NUWEIBAA (NWB) 290156N 0344016E
M691	DEDAS 2630.2N 05014.4E LADNA 262749N 0502245E	UM691	DEDAS 2630.2N 05014.4E LADNA 262749N 0502245E
	KING FAHAD 262153N 0494910E		KING FAHAD 262153N 0494910E
	KUSAR 264741N 0490218E		KUSAR 264741N 0490218E
	KEDAT 2721.8N 04759.0E		KEDAT 272149.8N 04759.01E
	ITIXI 275031N 0470435E		ITIXI 275031N 0470435E
M762	REXOD 211230N 0613830E		
	SUR 223159N 0592829E		
	ITURA 232351N 0580720E		
	ALMOG 233524N0574940E		
	TAPRA 242607N 0563803E		
	VAXAS 244308N 0561807E		
	* Note 7 (OM, OO)		
	BUBIN 245742N 0560642E		
M860	KUGOS 424650.8N 0340516.3E	UM860	KUGOS 424650.8N 0340516.3E
	SINOP (SIN) 420120N 0350436E		SINOP (SIN) 420120N 0350436E
	CARSAMBA (CRM) 411556N 0363256E		CARSAMBA (CRM) 411556N 0363256E
	SIIRT (SRT) 375438.6N 0415255.9E		SIIRT (SRT) 375438.6N 0415255.9E
	KABAN N371456N 0423859E		KABAN N371456N 0423859E
	EMIDO 364411.33N 0425600E		EMIDO 364411.33N 0425600E
	SEVKU 360548.02N 04317165.84E		SEVKU 360548.02N 04317165.84E
	UMESA 351741.49N 04343076.89E		UMESA 351741.49N 04343076.89E
	TAGRU 342958.95N 0440816.67E		TAGRU 342958.95N 0440816.67E
	PUTSI 333200N E044 3700E		PUTSI 333200N E0443700E
	ITOVA 331950.91N 0444 28.97E		ITOVA 331950.91N 0444 28.97E
	SEPTU 331300N 0444400E		SEPTU 331300N 0444400E
	LONOR 3238398.63N 0450458.48E		LONOR 3238398.63N 0450458.48E
	ULIMA 321500N 0451600E		ULIMA 321500N 0451600E
	ITBIT 314735.20N 045 2916.57E		ITBIT 314735.20N 045 2916.57E
	RUGIR 303219.06N 0460618.20E		RUGIR 303219.06N 0460618.20E
	MOBIS 2951098.84N 0470457.39E		MOBIS 2951098.84N 0470457.39E
		UM861	ELEXI 3442371.5N 04110549.0E
			DIER-ZZOR (DRZ) 351731N 0400914E
			ALEPPO (ALE) 361047N 0371234E
			NISAP 364724N 0363830E
M863	KING ABDULAZIZ (JDW) 21424437N 0390723948E	UM863	KING ABDULAZIZ (JDW) 21424437N 0390723948E
	GIBAP 212218N 0380931E		GIBAP 212218N 0380931E
	TOMRU 204411N 0361950E		TOMRU 204411N 0361950E
	ASKOL 154854.9N 0240005.4E		ASKOL 154854.9N 0240005.4E
	KITOB 152143.7N 0225845.8E		KITOB 152143.7N 0225845.8E
	IPONO 150621 N 0222436 E		IPONO 150621 N 0222436 E

APPENDIX B

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LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	N'DJAMENA (FL) 120830.5N 0150218.3E		N'DJAMENA (FL) 120830.5N 0150218.3E
M872	PALEOCHORA (PLH) 351339.7N 0234051.9E *Note 7 (PLH- SEMRU DBA) METRU 340000N 0250900E KANAR 322727N 0265330E EL DABA (DBA) 310041N 0282801E FAYOUM (FYM) 292351.8N 0302335.6E *Note 7 (FYM SEMRU) SEMRU 280200N 0320306E HURGHADA (HGD) 271040N 0334747E SILKA 263400N 0352900E WEJH (WEJ) 261046N 0362917E KODIN 251753.9N 03836.12E MADINAH (PMA) 243251N 0394219E *Note 7 (PMA-MIDSI) BIR DARB (BDB) 241951N 0414928E AL DAWADI (DAW) 242656N 0440709E KING KHALID (KIA) 245310N 0464534E AKRAM 255036N 0475133E *Note 8 (OB) to MIDS1 ALMAL 261553N 0482108E DAVRI 264936N 0505732E MIDSI 264142N0515442E	UM872	PALEOCHORA (PLH) 351339.7N 0234051.9E *Note 7 (PLH- SEMRU DBA) METRU 340000N 0250900E KANAR 322727N 0265330E EL DABA (DBA) 310041N 0282801E FAYOUM (FYM) 292351.8N 0302335.6E *Note 7 (FYM SEMRU) SEMRU 280200N 0320306E HURGHADA (HGD) 271040N 0334747E SILKA 263400N 0352900E WEJH (WEJ) 261046N 0362917E KODIN 251753.9N 03836.12E MADINAH (PMA) 243251N 0394219E *Note 7 (PMA-MIDSI) BIR DARB (BDB) 241951N 0414928E AL DAWADI (DAW) 242656N 0440709E KING KHALID (KIA) 245310N 0464534E AKRAM 255036N 0475133E *Note 8 (OB) to MIDS1 ALMAL 261553N 0482108E DAVRI 264936N 0505732E MIDSI 264142N0515442E
		UM877	VUSET 235540N 0590812E ITILA 234015N 0584817E KUSRA 232426N 0582611E
M999	SARIR (GS) 273900N 0223000E DITAR 265903N 0250000E EL KHARGA (KHG) 252654N 0303527E KUNAK 252745N 0304112E ELUXOR (LXR) 254458N 0324607E DEDLI 224232N 0373719E IMLER 221706N 0381653E	UM999	SARIR (GS) 273900N 0223000E DITAR 265903N 0250000E EL KHARGA (KHG) 252654N 0303527E KUNAK 252745N 0304112E ELUXOR (LXR) 254458N 0324607E DEDLI 224232N 0373719E IMLER 221706N 0381653E
	KING ABDULAZIZ (JDW) 214244N 0390723E TOKTO 194421N 00395945E DANAK 1608.00N 04129.00E (ASSAB) SB		KING ABDULAZIZ (JDW) 214244N 0390723E TOKTO 194421N 00395945E DANAK 1608.00N 04129.00E (ASSAB) SB 130400N 0423800E
N300	DOHA HAMAD INTL (DOH) 251500N0513635E *Note 7 & 8 to (DOH-TONVO) ELOBI 250753N 0521722E NAMLA 250532N 0523318E BOXAK 244536N 0540032E MIADA 245112N 0545736E TONVO 250500N 0563200E	UN300	DOHA HAMAD INTL 2514.0N 05134.6E (DOH) 251500N0513635E *Note 7 & 8 to (DOH-TONVO) ELOBI 250753N 0521722E NAMLA 250532N 0523318E BOXAK 244536N 0540032E MIADA 245112N 0545736E TONVO 250500N 0563200E
N302	SIDAD 295231N 0482944E ALVIX 291915N 0482944E	UN302	SIDAD 295231N 0482944E ALVIX 291915N 0482944E
N303	(HARGEISA) HARGA 093112N 0440530E	UN303	(HARGEISA) HARGA 093112N 0440530E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	PARIM 123142. 7 N 04327. 1 2E		PARIM 123142. 7 N 04327. 1 2E
	RIBOK154700N 0415230. 5 E		RIBOK154700N 0415230. 5 E
	LABNI 165620. 3 N 0410921. 4 E		LABNI 165620. 3 N 0410921. 4 E
N307	MELDO 320201N 0310406E	UN307	MELDO 320201N 0310406E
	LAKTO 323800N 0320500E		LAKTO 323800N 0320500E
N310	BALMA 342856N 0350302E	UN310	BALMA 342856N 0350302E
	CHEKA (CAK) 341802N 0354200E		CHEKA (CAK) 341802N 0354200E
	LATEB 340154. 9 N 0362404. 1 E		LATEB 340154. 9 N 0362404. 1 E
	BASEM 333337. 6 N 0373907. 4 E		BASEM 333337. 6 N 0373907. 4 E
		UN315	ASPUX 174406N 0600006E
			KUTVI 184306N 0582642E
			Note:- 7 (OO/OB)
			SITOL 211604N 0552514E
			LOTOS 220000N 0503912E
			RAPMA 232256N 0482028E
			RESAL 240649N 0470427E
			KING KHALED (KIA) 245310N 0464534E
		UN316	HALAIFA (HLF) 262603N 0391609E
			PASAM 273045N 0345542E
N318	QUEEN ALIA (QAA) 314423N 0360926E	UN318	QUEEN ALIA (QAA) 314423N 0360926E
	ALNOR 313955N 0362507E		ALNOR 313955N 0362507E
	KINUR 313626N 0363714E		KINUR 313626N 0363714E
	ELOXI 313359N 0364536E		ELOXI 313359N 0364536E
	GENEX 312935N 370052E		GENEX 312935N 370052E
	GURIAT (GRY) 312445N 0371712E		GURIAT (GRY) 312445N 0371712E
	ORKAS 3047254N 0384617 E		ORKAS 3047254N 0384617E
	NEVOL 302446N 0393841E		NEVOL 302446N 0393841E
	VELAL 294602N 04038214E		VELAL 294602N 04038214E
	TAMRO 283838N 0424047E		TAMRO 283838N 0424047E
	* Note7 (OE, OB, OM, OO)		* Note7 (OE, OB, OM, OO)
	MOGON 273848N 0444554E		MOGON 273848N 0444554E
	TAGSO 272744N 0454510E		TAGSO 272744N 0454510E
	*Note 8 (OB, OO)		*Note 8 (OB, OO)
	EGNOV 270301N 0474713E		EGNOV 270301N 0474713E
	KUSAR 264741N 0490218E		KUSAR 264741N 0490218E
	ASPAK 263255N 0494903E		ASPAK 263255N 0494903E
	DEDAS 263011N 0501427E		DEDAS 263011N 0501427E
	LADNA 262749N 0502245E		LADNA 262749N 0502245E
	ELOSO 262409N 0503551E		ELOSO 262409N 0503551E
	DAVOV 262255N 0504013E		DAVOV 262255N 0504013E
	GOLKO 262149N 0504404E		GOLKO 262149N 0504404E
	ASTAD 261812N 0505646E		ASTAD 261812N 0505646E
	TOTIS 261119N 0511027E		TOTIS 261119N 0511027E
	RASDI 260425N 0512407E		RASDI 260425N 0512407E
	VELAM 255426N 0514347E		VELAM 255426N 0514347E
	VUTAN 255016N 0515218E		VUTAN 255016N 0515218E
	RESAR 253707N 0522328E		RESAR 253707N 0522328E
	ALSEM 252703N 0524322E		ALSEM 252703N 0524322E

APPENDIX B**B-30**

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	OVONA 252443N 0524739E (LOXAT REXOD)		OVONA 252443N 0524739E (LOXAT REXOD)
	KATIK 251709N 0531515E		KATIK 251709N 0531515E
	KANIP 2410402N 0552042E		KANIP 2410402N 0552042E
	LABRI 240344N 0553842E		LABRI 240344N 0553842E
	EGROK 235253N 0560126E		EGROK 235253N 0560126E
	LAKLU 232235N 0570401E		LAKLU 232235N 0570401E
	GEVED 230105N 0575111E		GEVED 230105N 0575111E
	TOLDA 223720N 0583503E		TOLDA 223720N 0583503E
	REXOD211230N 0613830E		REXOD211230N 0613830E
		UN319	ZAHEDAN (ZDN) 292912N 0605406E TABAS (TBS) 334021N 0565331E DASHT-E-NAZ (DNZ) 363855N 0531120E ULDUS- 3800-00N 05101-00E LUSAL 4035-00N 04757-00E ADEKI 4117-48N 04645-00E TBILIS (TBS) 414014N 0445649E MUKHARANI (DF) 415500N 0443356E ALI (BT) LOBIN 42042810.9N 04300156.4E IBERI 4209.6N 04143.3E [KE16]
N324	PURDA 210805N 0510329E GOBRO 193622N 0534741E ASTUN 180832N 0551040E	UN324	PURDA 210805N 0510329E GOBRO 193622N 0534741E ASTUN 180832N 0551040E
N430	TARBO 244351N 0574637E *Note 7/8 (OO) ITLOB 244325N 0590701E	UN430	TARBO 244351N 0574637E *Note 7/8 (OO) ITLOB 244325N 0590701E
N438	LITAN 333456N 0343758E KALDE (KAD) 334827N 0352910E CHEKA (CAK) 341802N 0354200E KLEYATE (RA) 343510N 0360010E	UN438	LITAN 333456N 0343758E KALDE (KAD) 334827N 0352910E CHEKA (CAK) 341802N 0354200E KLEYATE (RA) 343510N 0360010E
N440	MOBON 274414N 0552513E DARAX 260916N 0555307E	UN440	MOBON 274414N 0552513E DARAX 260916N 0555307E
		UN555	BELGAUM (BBM) [KE17] BISET 182321.4N 0691807.4E KATBI 193133.6N 06500-02E LOTAV 2037-00N 06057-00E
N563	REXOD 211230N 0613830E *Note 8 (OB, OM) *Note 7 (OB, OO, OM) EMURU 221357N 0585338E TULBU 230005N 0571827E MEKNA 223309N 0560815E SODEX 234954N 0553202E NOBTO 235525N 0551840E ADV MEMBI 243705N 0542631E	UN563	(BANGALORE) BBG [KE18] *Note 8 (OB, OM) REXOD 211230N 0613830E *Note 7 (OB, OO, OM) EMURU 221357N 0585338E TULBU 230005N 0571827E MEKNA 223309N 0560815E SODEX 234954N 0553202E NOBTO 235525N 0551840E MEMBI 243705N 0542631E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ATBEX 250739N 0535019E		ATBEX 250739N 0535019E
	ITROK 253557N 0532751E		ITROK 253557N 0532751E
	ALPOB 254218N 0530055E		ALPOB 254218N 0530055E
	ROTAG 255353N 0523621E		ROTAG 255353N 0523621E
	SOLEG 260159N 0521756E		SOLEG 260159N 0521756E
	SOLOB 262241N 0513132E		SOLOB 262241N 0513132E
	MEDMA 263412N 0505454E		MEDMA 263412N 0505454E
	TOTLA 263806N 0504301E		TOTLA 263806N 0504301E
	RULEX 264529N 0501745E		RULEX 264529N 0501745E
	SILNO 264026N 0475745E		SILNO 264026N 0475745E
	GIBUS 255724N 0472829E		GIBUS 255724N 0472829E
		UN569	BONUM 221252N 0393805E RABTO 221608N 0400326E VEMEM 221554N 0400118E LOTOS 220000N 0503912E *Note:- 7 (LOTOS-GOLNI) TOKRA 220925N 0553350E TOPSO 215653N 0562043E MOGOK 215057N 0564236E KEBAS 214330N 0570948E GISKA 213503N 0574014E UMILA 211555N 0584738E GOLNI 210014N 0594130E LOTAV 203700N 0605700E
N571	PARAR 222630.5 N 0630700E *Note 7 & 8 (OB, OM, OO) KIPOL 230410N 0612903E RAGMA 230600N 0610539E SODEB 234747N 0593023E VUSET 235540N 0590812E KIROP 243000N 0574700E MENSA 245750N 0563249E AVAMI 250554N 0555647E ATBOR 251007N 0551947E MUVLA 251716N 0544500E SENTO 251908N 0544500E ELUKU 252910N 0535610E ITROK 253557N 0532751E ALPOB 254218N 0530055E SOLOB 262241N 0513132E	UN571	{GUNIP 042954.9N 09931.48E} {VAMPI 061056.9N 0973508.4E} {MEKAR 063014.2N 0692928.5E} {SUGID- 193303.4N 06921.00E} PARAR 222630.5 N 0630700E *Note 7 & 8 (OB, OM, OO) KIPOL 230410N 0612903E RAGMA 230600N 0610539E SODEB 234747N 0593023E VUSET 235540N 0590812E KIROP 243000N 0574700E MENSA 245750N 0563249E AVAMI 250554N 0555647E ATBOR 251007N 0551947E MUVLA 251716N 0544500E SENTO 251908N 0544500E MEDMA 263412N 0505454E TOTLA 263806N 0504301E RULEX 264529N 0501745E SILNO 264026N 0475745E KUTEM 264359N 0473521E BOPAN (BPN) 270314N 0452642E

APPENDIX B**B-32**

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

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	HAFR AL BATIN 281949N 0460746E (HFR)		HAFR AL BATIN 281949N 0460746E (HFR)
N697	MENLI 294700N 0315206E SISIK 293600N 0324100E NUWEIBAA * Note 7 (NWB-KITOT above FL350) KITOT 290205N 0345050E SOBAS 275600N 0390454E HAIL (HIL) 272530N 0414058E *Note 7 (HIL-KFA) BPN 270312N 0452642E *Note 8 (BPN-TORBO) KING FAHD (KFA) 262153N 0494910E NARMI 261802N 0501939E BAHRAIN (BAH) 261551N 0503855E *Note 7 GOLKO 262149N 0504404E TOSTA 262746N 0504912E MEDMA 263421N 0505454E VEDOS 264105N 0510044E SODAK 264634N 0510530E TORBO 265223N 0511024E	UN687	MENLI 294700N 0315206E SISIK 293600N 0324100E NUWEIBAA * Note 7 (NWB-KITOT above FL350) KITOT 290205N 0345050E SOBAS 275600N 0390454E HAIL (HIL) 272530N 0414058E *Note 7 (HIL-KFA) BPN 270312N 0452642E *Note 8 (BPN-TORBO) KING FAHD (KFA) 262153N 0494910E NARMI 261802N 0501939E BAHRAIN (BAH) 261551N 0503855E *Note 7 GOLKO 262149N 0504404E TOSTA 262746N 0504912E MEDMA 263421N 0505454E VEDOS 264105N 0510044E SODAK 264634N 0510530E TORBO 265223N 0511024E
N764	NOBSU 171554N 0431318E MUKALLAH (RIN) 144015N 0492329E SOCOTRA (SOC) 123749N 0535429E SUHIL 120000N 0550000E NABAM 101112N 0581424E	UN764	NOBSU 171554N 0431318E MUKALLAH (RIN) 144015N 0492329E SOCOTRA (SOC) 123749N 0535429E SUHIL 120000N 0550000E NABAM 101112N 0581424E
N767	PARAR 222630N 0630700E VUSIN 225940N 0605510E * Note 7 (OO) ATBED 230352N 0603752E ELIGO 232458N 0590848	UN767	PARAR 222630N 0630700E VUSIN 225940N 0605510E * Note 7 (OO) ATBED 230352N 0603752E ELIGO 232458N 0590848
		UN881	RASKI 230330N 0635200E SETSI 230412N 0614410E KIPOL 230410N 0612903E ATBED 230352N 0603752E AMBOS 230324N 0595405 MUSRU 230256N 0592223E *Note 7 (OO) OBTIN 230216N 0585920E GIDAN 230104N 0582232E GEVED 230105N 0575111E TULBU 230005N 0571827E
N929	DASLO 254537N 0523029E *Note 7 & 8 to (DASLO-GIBUS) NAGOG 255214N 0521615E BONAN 260201N 0515505E VEDED 260558N 0514628E SOGAT 262029N 0511443E	UN929	DASLO 254537N 0523029E *Note 7 & 8 to (DASLO-GIBUS) NAGOG 255214N 0521615E BONAN 260201N 0515505E VEDED 260558N 0514628E SOGAT 262029N 0511443E

APPENDIX B

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LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	TOSTA 262746N 0504913E		TOSTA 262746N 0504913E
	DANAG 264438N 0494856E		DANAG 264438N 0494856E
	NADNA 264245N 0485309E		NADNA 264245N 0485309E
	SILNO 264026N 0475745E		SILNO 264026N 0475745E
	ASKOK 262623N 0474809E		ASKOK 262623N 0474809E
	MUSRI 261647.0N 0474137.0E		MUSRI 261647.0N 0474137.0E
	GIBUS 255724.0N 0472829.0E		GIBUS 255724.0N 0472829.0E
		UP146	RASHT (RST) 371935N 0493657E AGINA 3919.24N 04405.12E AGRI (ARI) 393845N 0430137E (YAVUZ 4002.7N 04226.0E) (TRABZON (TBN) KE19)
P300	KALDE (KAD) 334827N 0352910E	UP300	KALDE (KAD) 334827N 0352910E
	LATEB 340154.9N 0362404.1E		LATEB 340154.9N 0362404.1E
P304	EGROK 235253N 0560126E *Note 7 (OO) MEKNA 233309N 0560815E EGVAN 230127N 0561907E DEMKI 224941N 0562308E NAMVA 223309N 0562223E TOPSO 215653N 0562043E KUROV 211627N 0561853E VELIK 203322N 0561656E	UP304	EGROK 235253N 0560126E *Note 7 (OO) MEKNA 233309N 0560815E EGVAN 230127N 0561907E DEMKI 224941N 0562308E NAMVA 223309N 0562223E TOPSO 215653N 0562043E KUROV 211627N 0561853E VELIK 203322N 0561656E
P307	SHARJAH (SHJ) 2519454.9N 0553118.4E Note 7 (OM,OO) TONVO 250500N 0563200E PURNI 243804N 0574354E *Note 8 (OO) KUNUS 241927N 0583226E ALSAS 240054N 0591955E DERTO 235033N 0594746E VAXIM 231900N 0611100E SETSI 230412N 0614410E PARAR 222630N 0630700E	UP307	SHARJAH (SHJ) 2519454.9N 0553118.4E Note 7 (OM,OO) TONVO 250500N 0563200E PURNI 243804N 0574354E *Note 8 (OO) KUNUS 241927N 0583226E ALSAS 240054N 0591955E DERTO 235033N 0594746E VAXIM 231900N 0611100E SETSI 230412N 0614410E PARAR 222630N 0630700E
P312	MUKALLA (RIN) 144015N 0492329E PAKER 1155.00N0463500E (HARGEISA) HARGA 093112N 0440530E	UP312	MUKALLA (RIN) 144015N 0492329E PAKER 1155.00N0463500E (HARGEISA) HARGA 093112N 0440530E
P316	SALALLAH (SLL) 170259N 0540657E * Note 7 (OO) DAXAM 171612N 0544715E GAGLA 180505N 0552410E GIVNO 195011N 0563059E MOBAB 201032N 0564415E GISKA 213503N 0574014E RADAX 220809N 0580230E MUSCAT (MCT) 233528N 0581536E	UP316	SALALLAH (SLL) 170259N 0540657E * Note 7 (OO) DAXAM 171612N 0544715E GAGLA 180505N 0552410E GIVNO 195011N 0563059E MOBAB 201032N 0564415E GISKA 213503N 0574014E RADAX 220809N 0580230E MUSCAT (MCT) 233528N 0581536E
		UP323	DONSA143518.3N0651136344.0E GIDAS 142004N0600000E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			NODMA 1526.00N05334.00E
			THAMD 1717.00N 04955.00E
			WADI ALDAWASIR (WDR) 203019N 0451219E
P425	DAHRAN (DHA) 261538N 0500824E *Note 8 to ALSER BAHRAIN (BAH) 261551N 0503855E DAVOV 262255N 0504012E DATGO 262957N 0504130E TOTLA 263806N 0504301E MEMKO 264611N 0504427E BOXOG 265403N 0504553E ALSER 271100N 0504900E	UP425	DAHRAN (DHA) 261538N 0500824E *Note 8 to ALSER BAHRAIN (BAH) 261551N 0503855E DAVOV 262255N 0504012E DATGO 262957N 0504130E TOTLA 263806N 0504301E MEMKO 264611N 0504427E BOXOG 265403N 0504553E ALSER 271100N 0504900E
P430	DOHA/HAMAD INTL (DOH) 251500N 0513635E *Note 7 & 8 (DOH-ALTOM) to MIDS1 BAYAN 252926N 0514849E *Note 7 to MIDS1 KAPAX 254218N 0515118E VUTAN 255016N 0515218E ALVEN 255418N 0515315E BONAN 260201N 0515505E RAMKI 261138N 0515625E ALTOM 262230N 0515639E	UP430	DOHA/HAMAD INTL (DOH) 251500N 0513635E *Note 7 & 8 (DOH-ALTOM) to MIDS1 BAYAN 252926N 0514849E *Note 7 to MIDS1 KAPAX 254218N 0515118E VUTAN 255016N 0515218E ALVEN 255418N 0515315E BONAN 260201N 0515505E RAMKI 261138N 0515625E ALTOM 262230N 0515639E
P513	BUBAS 245938N 0570003E GERAR 240600N 0573616E MIXAM 234139N 0575523E * Note 7 (OO) MUSCAT (MCT) 233528N 0581536E		
		UP517	WAFRA (KFR) 283715N 0475729E GOVAL 281211N 0472908E KING SAUD AB (KMC) 275250N 0453320E
		UP552	DATEG 123549N 0471627E ULAXI 141524N 0482317E GINBO 160349N 0494017E IMPOS 183137N 0511848E
P557	NUBAR 220000N 0313806E *See Note 6&7 MISUK 290507N 0290621E KATAB 292501N0290506E	UP557	NUBAR 220000N 0313806E *See Note 6&7 MISUK 290507N 0290621E KATAB 292501N0290506E
P559	RASLI 315424N 0383648E TURAIF (TRF) 314136N 0384405E *Note 7 to (TRF-DESIDI) KAVID 303552N 0401147E TOKLU 294213N 04202204E RASMO 285713N 0433119E KING SAUD AB (KMC) 275250N 0453321E	UP559	RASLI 315424N 0383648E TURAIF (TRF) 314136N 0384405E *Note 7 to (TRF-DESIDI) KAVID 303552N 0401147E TOKLU 294213N 04202204E RASMO 285713N 0433119E KING SAUD AB (KMC) 275250N 0453321E

APPENDIX B**B-36**

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	ULOVO 274830N 0455420E		ULOVO 274830N 0455420E
	*Note 8 (ULOVO-NAPLO)		*Note 8 (ULOVO-NAPLO)
	MUSKO 272640N 0473708E		MUSKO 272640N 0473708E
	KEDAT 272149N 0475901E		KEDAT 272149N 0475901E
	JUBAIL (JBL) 270222N 0492426E		JUBAIL (JBL) 270222N 0492426E
	DAROR 270244N 0495815E		DAROR 270244N 0495815E
	RAMSI 270249N 0500714E		RAMSI 270249N 0500714E
	GASSI 270257.9N 0502229.5E		GASSI 270257.9N 0502229.5E
	KOBOK 265839N 0503349E		KOBOK 265839N 0503349E
	BOXOG 265403N 0504553E		BOXOG 265403N 0504553E
	DAVRI 264936N 0505731E		DAVRI 264936N 0505731E
	SODAK 264634N 0510530E		SODAK 264634N 0510530E
	DANOB 263946N 0512640E		DANOB 263946N 0512640E
	BOTOB 263350N 0514505E		BOTOB 263350N 0514505E
	ROSAN 263129N 0515220E		ROSAN 263129N 0515220E
	KUMLA 262609N 0520822E		KUMLA 262609N 0520822E
	ASPAK 262115N 0522257E		ASPAK 262115N 0522257E
	TOMSO 260611N 0530214E		TOMSO 260611N 0530214E
	NALPO 255602N 0532945E		NALPO 255602N 0532945E
	RAPSA 253700N 0541700E		RAPSA 253700N 0541700E
	DESDI 253603N 0544230E		DESDI 253603N 0544230E
P560	PORT SUDAN (PSD) 311743N 0321416E	UP560	PORT SUDAN (PSD) 311743N 0321416E
	BOGUM 200736N 0380360E		BOGUM 200736N 0380360E
	AL BAHA (BHA) 2017833N 04137845E		AL BAHA (BHA) 2017833N 04137845E
	KITAP 224928N 0522923E		KITAP 224928N 0522923E
	PORT SUDAN (PSD) 311743N 0321416E		PORT SUDAN (PSD) 311743N 0321416E
P561	BENINA (BNA) 320728N 0201513E	UP561	BENINA (BNA) 320728N 0201513E
	KATAB 292501N 0290506E		KATAB 292501N 0290506E
P562	DEESA 294509N 0364102E	UP562	DEESA 294509N 0364102E
	ENABI 290739N 0385650E		ENABI 290739N 0385650E
	TAMRO 283938N 0424147E		TAMRO 283938N 0424147E
	LOTOK 280857N 0450512E		LOTOK 280857N 0450512E
P563	HAIL (HIL) 272630N 0414158E	UP563	HAIL (HIL) 272630N 0414158E
	PASAM 273145N 0345642E		PASAM 273145N 0345642E
	HURGHADA (HGD) 271140N 0334847E		HURGHADA (HGD) 271140N 0334847E
		UP567	BIRJAND (BJD) 325821N 0591200E
			ODKAT 3540.6N 05457.2E
			DASHT-E-NAZ (DNZ) 363855.7N 0531120.4E
			(ULDUS -3800-00N 05101-00E)
			NETON 394542.7N 0481142.7E
			BARUS 415414.2N 0425030.5E
P570	KITAL 2003-00N 06018-00E	UP570	TRIVENDRUM (TVM) 082831N 0765531E
	MIXAM 234139N 0575523E		POMAN 115605.4N 0715958200.0E
			LATEB 171704.4N 06422.02E
			KITAL 2003-00N 06018-00E
			MIXAM 234139N 0575523E
		UP574	(BELGAUM) BBM

	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
			[BISET 1823.4N 06918.1E] [KE20] TOTOX 215030N 0622230E * Note 7 (OM, OO) KUSRA 231726N 0585102E MIXAM 234138N 0575525E SOLUD 243223N 0564421E GISMO 244743N 0562236E BUBIN 245742N 0560642E TUKLA 2519.36N 0554010.2E KUMUN 254000N 0551512E PAPAR 264000N 0542700E SHIRAZ (SYZ) 293224N 0523520E SAVEH (SAV) 350107N 0502217E ULDUS 380000N 0510100E
		UP634	LALDO 251806N 0563600E *Note 7 ATBOR 251007N 0551947E
		UP693	AL AHSA (HSA) 251644N 0492902E *Note 8 to BUNDU BATHA (BAT) 241257N 0512707E BUNDU 250024N 0522924E
P699	ATBOR 251007N 0551947E *Note 7 (ATBOR-BAH) SITAT 251105N 0544500E KISAG 251834N 0541408E ITMUS 252322N 0535429E ALSOK 252607N 0533904E RUBAL 252957N 0531723E ORMID 253354N 0525434E *Note 8 (ORMID-KFA) DASLO 254537N 0523029E NAGOG 255214N 0521614E BONAN 260200N 0515505E VEDED 260558N 0514627E KUNDO 261631N 0512325E SOGAT 262029N 0511443E ASTAD 261812N 0505646E BAHRAIN (BAH) 261551N 0503856E NARMI 261802N 0501939E KING FHAD (KFA) 262153N 0494910E	UP699	ATBOR 251007N 0551947E *Note 7 (ATBOR-BAH) SITAT 251105N 0544500E KISAG 251834N 0541408E ITMUS 252322N 0535429E ALSOK 252607N 0533904E RUBAL 252957N 0531723E ORMID 253354N 0525434E *Note 8 (ORMID-KFA) DASLO 254537N 0523029E NAGOG 255214N 0521614E BONAN 260200N 0515505E VEDED 260558N 0514627E KUNDO 261631N 0512325E SOGAT 262029N 0511443E ASTAD 261812N 0505646E BAHRAIN (BAH) 261551N 0503856E NARMI 261802N 0501939E KING FHAD (KFA) 262153N 0494910E
P751	AMIBO 3456.7N 2136.4E SIDI BARANI (BRN) 313432.5N 0260020.3E KATAB 2925-01N 290506-1E ASYUT (AST) 270152.9N 0310157.9E LUXOR (LXR) 254458N 0324607E ALEBA 2200.00N 03527.00E	UP751	AMIBO 3456.7N 2136.4E SIDI BARANI (BRN) 313432.5N 0260020.3E KATAB 2925-01N 290506-1E ASYUT (AST) 270152.9N 0310157.9E LUXOR (LXR) 254458N 0324607E ALEBA 2200.00N 03527.00E

APPENDIX B

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LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	PORT SUDAN (PSD) 192404N 0371430E [ASMARA] * Note 1 151704N 0385403E TOKAR 180624304.0N 03748124238.8E PARIM 123142.7N 04327.12E ADEN (KRA) 124952N 0450125E ANGAL 161404.4N 0600004.4E MUMBAI (BBB) 190511N 0725229E		PORT SUDAN (PSD) 192404N 0371430E [ASMARA] * Note 1 151704N 0385403E TOKAR 180624304.0N 03748124238.8E PARIM 123142.7N 04327.12E ADEN (KRA) 124952N 0450125E ANGAL 161404.4N 0600004.4E MUMBAI (BBB) 190511N 0725229E
P891	MAGALA (MGA) 261720N 0471225E *Note 7 to KUA KUTEM 264359N 0473521E EGNOV 270301N 0474713E EMILU 275031N 0475943E KUNRU 283220N 0481050E KUWAIT (KUA) 291306N 0475803E	UP891	MAGALA (MGA) 261720N 0471225E *Note 7 to KUA KUTEM 264359N 0473521E EGNOV 270301N 0474713E EMILU 275031N 0475943E KUNRU 283220N 0481050E KUWAIT (KUA) 291306N 0475803E
P899	MIXAM 234139N 0575523E *Note 7 to KUPSA PAXIM 240245N 05617631E ITRAX 241248N 0554749E AL AIN (ALN) 241535N 0553623E ABU DHABI (ADV) 242508N 0544024E DASLA N243747N.8 E0533248E.8 VEBAT N244830N.5 E05251.00E MEKMA N245430 E0522506 *Note 8 (OB) KUPSA N250445 E0521151	UP899	MIXAM 234139N 0575523E *Note 7 to KUPSA PAXIM 240245N 05617631E ITRAX 241248N 0554749E AL AIN (ALN) 241535N 0553623E ABU DHABI (ADV) 242508N 0544024E DASLA N243747N.8 E0533248E.8 VEBAT N244830N.5 E05251.00E MEKMA N245430 E0522506 *Note 8 (OB) KUPSA N250445 E0521151
		UP975	(ELAZIG) EZS 384230N 0391327E *Note 7 DIYARBAKIR (DYB) 384225N 0391328E LESRI 370420N 0411348E SIDNA 3633584.0N 0414159.0E TUBEN 351724N 0425434E MUTAG 343003N 0433834E SOGUM 341212N 0435454E SINKA 332137N 0444753E
P975	NOLDO 324932N 0452129E *Note 7 KATUT 323737N 0453439E DENKI 322228N 0455122E ILMAP 312133N 0465702E PEBAD 305023N 0472958E SIDAD 295231N 0482944E LOVAR 292424N 0484606E SESRA 290800N 00485454E DANAL 285130N 0490448E IMDOX 283454N 0491436E LONOS 283027N 0491713E ORGEL 281312N 0494614E DATEN 273118N 0501832E REVAX 272026N 0502651E GETAL 270409N 0504039E LOSIS 270118N 0504208E		NOLDO 324932N 0452129E *Note 7 KATUT 323737N 0453439E DENKI 322228N 0455122E ILMAP 312133N 0465702E PEBAD 305023N 0472958E SIDAD 295231N 0482944E LOVAR 292424N 0484606E SESRA 290800N 00485454E DANAL 285130N 0490448E IMDOX 283454N 0491436E LONOS 283027N 0491713E ORGEL 281312N 0494614E DATEN 273118N 0501832E REVAX 272026N 0502651E GETAL 270409N 0504039E LOSIS 270118N 0504208E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	BOXOG 265403N 0504553E		BOXOG 265403N 0504553E
	NABOS 264354N 0505145E		NABOS 264354N 0505145E
	TOTIS 261119N 0511026E		TOTIS 261119N 0511026E
R2	ATMUL 220000N 0290527E	UR2	ATMUL 220000N 0290527E
	TULOP 252209N 0262226E		TULOP 252209N 0262226E
	DITAR 265903N 0250000E		DITAR 265903N 0250000E
R205	ANARAK (ANK) 333215N 0534347E	UR205	ANARAK (ANK) 333215N 0534347E
	BIRJAND (BJD) 325821N 0591200E		BIRJAND (BJD) 325821N 0591200E
R219	KUKLA 341438.6N 0344447.8E	UR219	KUKLA 341438.6N 0344447.8E
	KALDE (KAD) 334827N 0352910E		KALDE (KAD) 334827N 0352910E
R401	AMPEX 08 1000N 055 0000E	UR401	AMPEX 08 1000N 055 0000E
	SUHIL 120000N 0550000E		SUHIL 120000N 0550000E
	DAPAP 151115N 0552354E		DAPAP 151115N 0552354E
	KIVEL 165306N 0553633E		KIVEL 165306N 0553633E
	ERDAX 175903N 0554458E		ERDAX 175903N 0554458E
	HAIMA (HAI) 195813N 0561651E		HAIMA (HAI) 195813N 0561651E
	DEMKI 224941N 0562308E		DEMKI 224941N 0562308E
	MUSAP 241754N 0555245E		MUSAP 241754N 0555245E
	GIDIS 243600N 0555600E		GIDIS 243600N 0555600E
	ANVIX 244655N 0555616E		ANVIX 244655N 0555616E
	AVAMI 250554N 0555647E		AVAMI 250554N 0555647E
	ULUSA 254925N 0555010E		ULUSA 254925N 0555010E
	SOGUR 255221N 0554943E		SOGUR 255221N 0554943E
	*Note7 Eastbound (SOGUR-KHM)		*Note7 Eastbound (SOGUR-KHM)
	GABKO 260404N 0554755E		GABKO 260404N 0554755E
	GHESHM (KHM) 264547N 0555428E		GHESHM (KHM) 264547N 0555428E
R402	LAKLU 232235N 0570401E	UR402	LAKLU 232235N 0570401E
	*Note 7 (OO)		*Note 7 (OO)
	HAIMA (HAI) 195813N 0561651E		HAIMA (HAI) 195813N 0561651E
R462	JIWANI (JI) 250350N 0614744E	UR462	JIWANI (JI) 250350N 0614744E
	DENDA 244230.5N 0605451.8E		DENDA 244230.5N 0605451.8E
	VUSET 235540N 0590812E		VUSET 235540N 0590812E
	*Note 7 (OO)		*Note 7 (OO)
	MIXAM 234139N 0575523E		MIXAM 234139N 0575523E
R650	ASRAB 254726.4N 0330619.3E	UR650	ASRAB 254726.4N 0330619.3E
	HURGHADA (HGD) 271040N 0334747E		HURGHADA (HGD) 271040N 0334747E
	SHARM EL SHEIKH (SHM)		SHARM EL SHEIKH (SHM)
	NUWEIBAA (NWB) 290156N 0344016E		NUWEIBAA (NWB) 290156N 0344016E
	NALSO 2932.10N 03452503.0E		NALSO 2932.10N 03452503.0E
R652	ROVAR 292438N034571E	UR652	ROVAR 292438N034571E
	QATRANEH (QTR) 311454N 0360334E		QATRANEH (QTR)
	KIPAS 312320N 0370641E		KIPAS 312320N 0370641E
	GURIAT (GRY) 312445N 371712E		GURIAT (GRY)
	*Note 7(OE)		*Note 7(OE)
	TURAIF (TRF) 314136N 0384405E		TURAIF (TRF)

APPENDIX B**B-40**

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	OVANO 3148.01N 0390951.8E		OVANO 3148.01N 0390951.8E [KE21]
	DAXAN 320512N 0393719E		
	GIBUX 330500N 0411100E		
	RAPLU 332300N 0414530E		
	GEPAP 334906N 0422851E		
	MUTAG 343003N 0433834E		
	IVANO DAVAS 351724N 0451235E		
R654	ZANJAN (ZAJ) 364647N 0482112E SAVEH (SAV) 350107N 0502217E ESFAHAN (ISN) 334449N 0514941E YAZD (YZD) 315352N 0541658E KERMAN (KER) 301706N 0465637E NABOD 2816.1N 05825.3E CHAH BAHAR (CBH) EGPIC 2508.6N 06029.5E	UR654	MAGRI 385408N 0462300E ZANJAN (ZAJ) 364647N 0482112E SAVEH (SAV) 350107N 0502217E ESFAHAN (ISN) 334449N 0514941E YAZD (YZD) 315352N 0541658E KERMAN (KER) 301706N 0465637E NABOD 2816.1N 05825.3E CHAH BAHAR (CBH) EGPIC 2508.6N 06029.5E [KE22]
	DENDA DENDA 244230N 0605451E		DENDA DENDA 244230N 0605451E
R655	ELARNACA (LCA) 345222N 0333732E CHEKA (CAK) 341802N 0354200E KARIATAIN (KTN) 341248N 0371551E	UR655	ELARNACA (LCA) 345222N 0333732E CHEKA (CAK) 341802N 0354200E KARIATAIN (KTN) 341248N 0371551E
R659	TEHRAN(TRN) 354149N 0511702E *Note 7 (ISN-TRN) BOXAM 343749N 0515147E DAPOG 333744N 0522331E *Note 3 (DAPOG-SYZ) SHIRAZ (SYZ) 293224N 0523520E MIDSI 264142N 0515442E *Note 8 (MIDSI-DOH) *Note 7 (MIDSI-VELAM) SOGAN 263915N 0515408E ROSAN 263129N 0515220E DASOS 262430N 0515043E RABLA 261506N 0514834E VEDED 260558N 0514628E VELAM 255426N 0514347E EMISA 254658N 0514207E DOHA HAMAD INTL (DOH) 251500N 0513635E	UR659	TEHRAN(TRN) 354149N 0511702E *Note 7 (ISN-TRN) BOXAM 343749N 0515147E DAPOG 333744N 0522331E *Note 3 (DAPOG-SYZ) SHIRAZ (SYZ) 293224N 0523520E MIDSI 264142N 0515442E *Note 8 (MIDSI-DOH) *Note 7 (MIDSI-VELAM) SOGAN 263915N 0515408E ROSAN 263129N 0515220E DASOS 262430N 0515043E RABLA 261506N 0514834E VEDED 260558N 0514628E VELAM 255426N 0514347E EMISA 254658N 0514207E DOHA HAMAD INTL (DOH) 251500N 0513635E
R660	(ERZURUM) (ERZ) 395724N 0411226E DASIS 385431.5N 0441229.5E TABRIZ (TBZ) 380853N 0461247E RASHT (RST) 371935N 0493657E TEHRAN (TRN) 354149N 0511702E	UR660	(ERZURUM) (ERZ) 395724N 0411226E RASHT (RST) 371935N 0493657E TEHRAN (TRN) 354149N 0511702E
R661	DULAV 3857.0N 04537.9E TABRIZ (TBZ) 380853N 0461247E ZANJAN (ZAJ) 364647N 0482112E RUDESHUR (RUS) 352644N 0505419E VARAMIN (VR) 352034N 0513814E	UR661	DULAV 3857.0N 04537.9E TABRIZ (TBZ) 380853N 0461247E ZANJAN (ZAJ) 364647N 0482112E RUDESHUR (RUS) 352644N 0505419E VARAMIN (VR) 352034N 0513814E

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	LOWER AIRSPACE		UPPER AIRSPACE
Designator	Significant Points	Designator	Significant Points
1	2	1	2
	DEHNAMAK (DHN) 351514N 0524313E		DEHNAMAK (DHN) 351514N 0524313E
		UR674	SABEL 185158N 0520339E LOTEL 180926N 0514103E PASUL 180341N 0513803E GOGRI 170752N 0510857E OBTAS 164633N 0505756E RARBA 161021N 0503920E UKORA 152407N 0501547E NAKAD 150056N 0500402E DANAN 144010N 0495334E XABIL 142924N 0494809E EMABI 141627N 0494139E PAXED 135027N 0492759E DEMGO 120258N 0483040E
R777	DANAK 1608-00N 04129-00E SANA'A (SAA) 153000N 0441311E TAIZ (TAZ) 134150N 0440819E ARABO 123852.8N 04404-01E TORBA 1210.36N 0440206.4E	UR777	DANAK 1608-00N 04129-00E SANA'A (SAA) 153000N 0441311E TAIZ (TAZ) 134150N 0440819E ARABO 123852.8N 04404-01E TORBA 1210.36N 0440206.4E
R784	SHARJAH (SHJ) 251945N 0553118E ORSAR 260430-.5N 0535730.5E *Note 8 (OM) DURSI 271219-.3N 0520144.7 E IMDAT 27410-0N 05111003.0E ALNIN 28330540.9N 050103601.6E NANPI 290457N 0493157E SIDAD 295231N 0482944E	UR784	SHARJAH (SHJ) 251945N 0553118E ORSAR 260430-.5N 0535730.5E *Note 8 (OM) DURSI 271219-.3N 0520144.7 E IMDAT 27410-0N 05111003.0E ALNIN 28330540.9N 050103601.6E NANPI 290457N 0493157E SIDAD 295231N 0482944E
R785	TURAIF (TRF) ZELAF 3256567.0N 0371121800.0E KARIATAIN (KTN) 341248N 0371551E BANIAS (BAN) 351342N 0355729E NIKAS 3511.36N 03543.00E	UR785	TURAIF (TRF) ZELAF 3256567.0N 0371121800.0E KARIATAIN (KTN) 341248N 0371551E BANIAS (BAN) 351342N 0355729E NIKAS 3511.36N 03543.00E
R794	ULDUS 3800-00N 05101-00E NOSHAHR (NSR) 363935N 0512805E DEHNAMAK (DHN) 351514N 0524313E TABAS (TBS) 334021N 0565331E BIRJAND (BJD) 325821N 0591200E * Note 5 (OI)	UR794	ULDUS 3800-00N 05101-00E NOSHAHR (NSR) 363935N 0512805E DEHNAMAK (DHN) 351514N 0524313E TABAS (TBS) 334021N 0565331E BIRJAND (BJD) 325821N 0591200E * Note 5 (OI)
R799	IMPOS 183136N 0511848 E PASUL 180341N 0513803E TONRO 165850N 0522235E ASMAK 162327N 0524634E ENADO 153333N 0532015E	UR799	IMPOS 183136N 0511848 E PASUL 180341N 0513803E TONRO 165850N 0522235E ASMAK 162327N 0524634E ENADO 153333N 0532015E

Name Code	Latitude	Longitude	Coord. States	Duplication	Purpose
Bahrain					
* AKRAM	255035.88N	0475133.12E	Also Saudi Arabia	Also EUR/NAT	
* KISAB	272335.16N	0490606.12E		Also SAM	ENR
* MUTAR	231341.16N	0512729.88E		Also ESAF	
Iran					
* NOTSO	351416.08N	0593033.84E		Also FAA	
* RULIK	353553.88N	0532949.92E		Also EUR/NAT	ENR
Iraq					
* SINKA	332101.08N	0444856.88E		Also NACC	ENR
Kuwait					
* DARVA	284814.04N	0484734.08E		Also EUR/NAT	
Lebanon					LBN
* LATEB	340154N	0362403.60E	Also Syrian Arab Republic	Also APAC	FIR
Libya					LBY
* AMPOL	220000N	0122400E	Also Chad	Also EUR/NAT	
* FARES	320949N	0105652E	Also Tunisia	Also FAA,MID	FIR
Saudi Arabia					
* AKRAM	255035.88N	0475133.12E	Also Bahrain	Also EUR/NAT	
* KARIM	240919N	0473342E		Also EUR/NAT	TA
* KOBAS	170427.84N	0402029.04E		Also APAC	
* LAGMO	263446.92N	0494708.88E		Also EUR/NAT	TA
* LOTOS	220000N	0503912E		Also EUR/NAT	ENR
* MUSKO	272640N	0473708E		Also FAA	ENR
* NAMBI	275915.60N	0483834.70E		Also SAM	TA
* PETOL				Also EUR/NAT	
* RAGAN	173936.16N	0443015.82E		Also EUR/NAT	TA
* SAMAD	261815.12N	0450401.57E		Also APAC	
* SOLAR	203124N	0450600E		Also FAA	
* SUKAK	251212N	0493124E		Also EUR/NAT	TA
Sudan					
* ANTAX	040000N	0352248E	Also Ethiopia	Also ESAF	FIR
* ATUGA	040000N	0314800E		Also ESAF	FIR
* HAMID	140400N	0254023E		Also FAA	ENR
* KUMRU				Also EUR/NAT	
* LADEN	185342N	0380506E	Also Eritrea	Also EUR/NAT	FIR
* MAHDI	202559.88N	0373918E		Also EUR/NAT	
Syria					
* LATEB	340154N	0362403.60E	Also Lebanon	Also APAC	FIR
Yemen					
* AMBOD	133356.88N	0481527E		Also ESAF	ENR
* FARES	145406N	0420106E	Also Eritrea	Also EUR/NAT,FAA	FIR
* KORAB	121108.88N	0445027.96E		Also EUR/NAT	ENR
* MISAN	150001.08N	0440521.84E		Also APAC	ENR
* PAKER	115500N	0463500E	Also Somalia	Also NACC	FIR

APPENDIX D**MID RDWG Scope, Terms of Reference, Composition, and Working Procedures****SCOPE:**

The MID Route Development Working Group (RDWG) works on matters related to ATS route planning and implementation in the Middle East Region.

In order to achieve its mandate, The RDWG builds on previous work aiming at enhancing the regional ATS route network, including but not limited to: MIDRAR, CNS/ATM study, work of the Advanced Inter-regional ATS Routes Development Task Force (AIRARD TF), work of the Middle East ATM Enhancement Programme (MAEP), work of ICAO ARN Task Force, etc.

TERMS OF REFERENCE:

1. Based on airspace users' needs and in coordination with stakeholders (States, Regional and International Organizations, and other ICAO Regions), identify requirements and improvements for achieving and maintaining an efficient ATS route network in the MID Region.
2. Recommend measures and support the ATM SG in the development and maintenance of working procedures to plan and implement requirements/improvements to the MID ATS route network.
3. Facilitate the implementation of agreed ATS routes by engaging concerned parties including the Military Authorities.
4. In coordination with the MIDRMA, carry out safety assessment of the proposed changes to the ATS route network.
5. Support the implementation of the approved amendments to the ATS route network and MID ANP;
6. Coordinate and support implementation of the ATS routes over the high seas;
7. Address inter-regional ATS routes improvements with adjacent ICAO Regions, through the AIRARD Task Force, RDGE, AAMA SCM etc.
8. Report, regularly, to the ATM Sub Group and to MAEP Board the work progress of the RDWG.

COMPOSITION:

The RDWG will be composed of:

- a) experts nominated by Middle East States from both Civil Aviation and Military Authorities;
- b) Concerned Regional and International Organizations; and
- c) Other representatives from adjacent States and Organizations as required.

In addition, the RDWG will have a core team composed of AACO, IATA and ICAO. The core team will be responsible for developing the activities of the RDWG through effective coordination between airspace users and RDWG members.

WORKING PROCEDURES:

The RDWG will meet as required and under the format of Task Forces gathering concerned States and stakeholders to carry its work, with the following work procedures:

- The Core Team will coordinate users' requirements based on trunk routes and city-pair priorities.
- For each set of requirements, concerned airspace users will submit proposals which will be communicated to the concerned States for review.
- Coordination will be carried out with concerned State(s) through correspondence and teleconferences and, if required, face-to-face meetings with stakeholders on case-by-case basis.
- The Core Team will continue to follow up with concerned States to ensure implementation of the agreed proposals and their migration to the MID ANP.
- The Core Team will follow-up with the concerned State(s) and air operators the conduct of post implementation review of the implemented ATS route improvements, to assess the impact and estimate the benefit accrued from the implementation.

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