



International Civil Aviation Organization

AIR NAVIGATION SYSTEMS IMPLEMENTATION GROUP

First Meeting (ANSIG/1)
(Cairo, Egypt, 10 – 12 February 2015)

Agenda Item 4: Performance Framework for Regional Air Navigation Implementation

ATS ROUTES

(Presented by the Secretariat)

SUMMARY

This paper presents the outcome of the ATM SG/1 meeting related to ATS Routes and a draft Proposal for Amendment of the MID Basic ANP, Table ATS 1 – ATS Route Network, for the meeting review and endorsement.

Action by the meeting is at paragraph 3.

REFERENCES

- ATM SG/1 Report
- MIDANPIRG/14 Report

1. INTRODUCTION

1.1 The meeting may wish to note that the effective inter-regional coordination and collaboration between all stakeholders is essential in order to achieve seamless Air Traffic Management and more optimum routes through the airspace. Moreover, the implementation of Performance Based Navigation (PBN) routes can have significant efficiency benefits on flight operations in the Enroute environment.

2. DISCUSSION

2.1 The meeting may wish to note that a number of States were still implementing changes to the Regional ATS Route Network without complying with the established procedures for the amendment of the MID Air Navigation Plan (ANP).

2.2 In connection with the above, the ATM SG/1 meeting (Cairo, Egypt, 9-12 June 2014) noted with concern that the Proposal for Amendment (PfA) Serial No. MID Basic ANP 13/01 – ATM, which was approved by the President of the ICAO Council on 2 August 2013, has not yet been implemented by Egypt and Jordan. Accordingly, the meeting urged the concerned States to take necessary measures in order to resolve this pending issue.

2.3 The ATM SG/1 meeting noted with appreciation the implementation of UL308, UT100 and UT300 in Jeddah, which improved significantly the traffic flows between Saudi Arabia, Qatar, Oman, UAE and Yemen. In this regard, the meeting urged Saudi Arabia to coordinate with the ICAO MID Regional Office the assignment of appropriate route designators to replace UT300. It is to be noted that UT300 was realigned by Saudi Arabia to UL564.

2.4 The ATM SG/1 meeting recognized that Bahrain was the first State in the Region that completed, on 9 January 2014, the implementation of a full RNAV 1 ATS route structure in Bahrain FIR. The following benefits were noted:

- 40% increase of airspace capacity;
- reduced workload and improved productivity of air traffic controllers; and
- reduction in CO₂ emissions: due to the dedicated airways for traffic landing within Bahrain FIR and traffic departing Bahrain FIR, which allowed users to reach their optimum levels without interruptions. This would facilitate the implementation of continuous climb and descend operations.

2.5 Based on the above, the ATM SG/1 meeting encouraged States to report the environmental benefits accrued from the implementation of the operational improvements to the Second Meeting of the ATM Performance Measurements Task Force (APM TF/2), Cairo, 10-12 November 2014, in order to be included in the Second MID Air Navigation Environmental Report.

2.6 The ATM SG/1 meeting noted with concern the closure of UP975 between Ankara and Baghdad FIRs which affected dramatically the efficiency of the traffic flow between the two FIRs. The meeting agreed that IATA and ICAO follow-up this issue with the concerned States.

2.7 The ATM SG/1 meeting noted that Bahrain and Iraq are ready for the implementation of the proposed RNAV 1 routes between Bahrain and Iraq through Kuwait FIR (Top Ten Routes, TPR 9 and TPR 10 refer). Kuwait was expected to start RNAV 1 implementation in June 2014. The meeting may wish to note that coordination is ongoing for the implementation of new RNAV routes between Bahrain, Kuwait and Iraq.

2.8 The ATM SG/1 meeting noted that Iran and Iraq restricted the use of G202 to certain airlines, which obliged Users to fly longer routes via Kuwait or Turkey. Accordingly, the meeting urged the concerned States to remove the restriction on the use of the Route G202.

2.9 The ATM SG/1 meeting was apprised of the Users' concern related to flight planned route from Jeddah to Dubai via Bahrain. The meeting noted that Qatar has no objection if the traffic is routed via SALWA. Accordingly, the meeting agreed that concerned States and IATA should coordinate together to explore alternative solutions.

2.10 The ATM SG/1 meeting noted with concern that no progress has been reported related to the implementation of the proposed routes between Egypt - Malta, Egypt - Cyprus, Egypt - Jordan, Egypt - Saudi Arabia, Iran – Azerbaijan and Iraq - Saudi Arabia. Accordingly, the meeting urged concerned States to take necessary measures to implement the agreed proposed routes aiming to improve the traffic flow in the MID Region and to provide the ICAO MID Regional Office with an update on the actions undertaken, in order to be presented to the ANSIG/1 meeting. It is to be underlined that no update/feedback was provided to the ICAO MID Office on the above subject.

2.11 In accordance with MIDANPIRG/14 Conclusion 14/11, the ATM SG/1 meeting reviewed and updated the Top Ten Routes as at **Appendix A** and agreed to include TPR 2, TPR5, TPR 6, TPR 7, TPR 9 and TPR 10 in the MID Basic ANP Table ATS 1- ATS Route Network.

2.12 The ATM SG/1 meeting reviewed and updated the MID Basic ANP Table ATS 1. Accordingly, the meeting agreed that the ICAO MID Regional Office process a Proposal for Amendment of the MID Basic ANP, consolidating the outcome of the ATM SG/1 meeting. Accordingly, the meeting agreed to the following Draft Conclusion:

*DRAFT CONCLUSION 1/1: PROPOSAL FOR AMENDMENT TO THE MID BASIC ANP
TABLE ATS 1*

That, the ICAO MID Regional Office issue a Proposal for Amendment to the MID Basic ANP (Doc 9708) in order to update the Table ATS 1, consolidating the outcome of the ATM SG/1 meeting.

2.13 The meeting may wish to note that the Secretariat consolidated the inputs received from States as reflected in the Draft Proposal for Amendment of the Table ATS 1 at **Appendix B**.

2.14 The ATM SG/1 meeting reviewed and updated the information contained in the MID ATS Route Catalogue. The last version of the Catalogue is available on the ICAO MID website, under eDocuments.

2.15 The ATM SG/1 meeting noted that Egypt had been working on the restructuring of the ATS route network within Cairo FIR. In this regard, Egypt was invited to take into consideration the proposed routes contained in the routes Catalogue in their planning process.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) urge concerned States to implement the Top Ten Routes at **Appendix A**, and provide the ICAO MID Regional Office with an update on the action undertaken by **1 May 2015**;
 - b) review and update as deemed necessary the Draft Proposal for Amendment of the MID Basic ANP-Table ATS 1 at **Appendix B**; and
 - c) endorse the Draft Conclusion at para 2.12 emanating from the ATM SG/1.
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APPENDIX A**MID TOP 10 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-035	UL602	Iraq – Syria-Turkey	ATM SG/1	June 2014	Yes	Pending for Syria approval
2	RC-045	New	Saudi Arabia-Sudan	ATM SG/1	June 2014	Yes	Moved to ANP
3	RC-055	L315	Egypt-Saudi Arabia	ATM SG/1	June 2014	Yes	Saudi proposed SOBEL-DEDLI
4	RC-056	New	Egypt	ATM SG/1	June 2014	Yes	
5	RC-070	New	Egypt-Libya	ATM SG/1	June 2014	Yes	Moved to ANP
6	RC-082	New	Jordan-Saudi Arabia	ATM SG/1	June 2014	Yes	Route amended and moved to ANP
7	RC-083	New	Egypt-Libya-Saudi Arabia	ATM SG/1	June 2014	Yes	Route amended and moved to ANP
8	Eurocontrol Proposal 1	New	Egypt	ATM SG/1	June 2014	New	
9	UKMUG-SIDAD	New	Bahrain-Iraq-Kuwait	ATM SG/1	June 2014	New	RNAV 1 Routes
10	SIDNA-ASLAN	New	Bahrain-Iraq-Kuwait	ATM SG/1	June 2014	New	RNAV 1 Routes

Table explanation

- a) TPR used as reference for the proposed Top 10 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

APPENDIX A

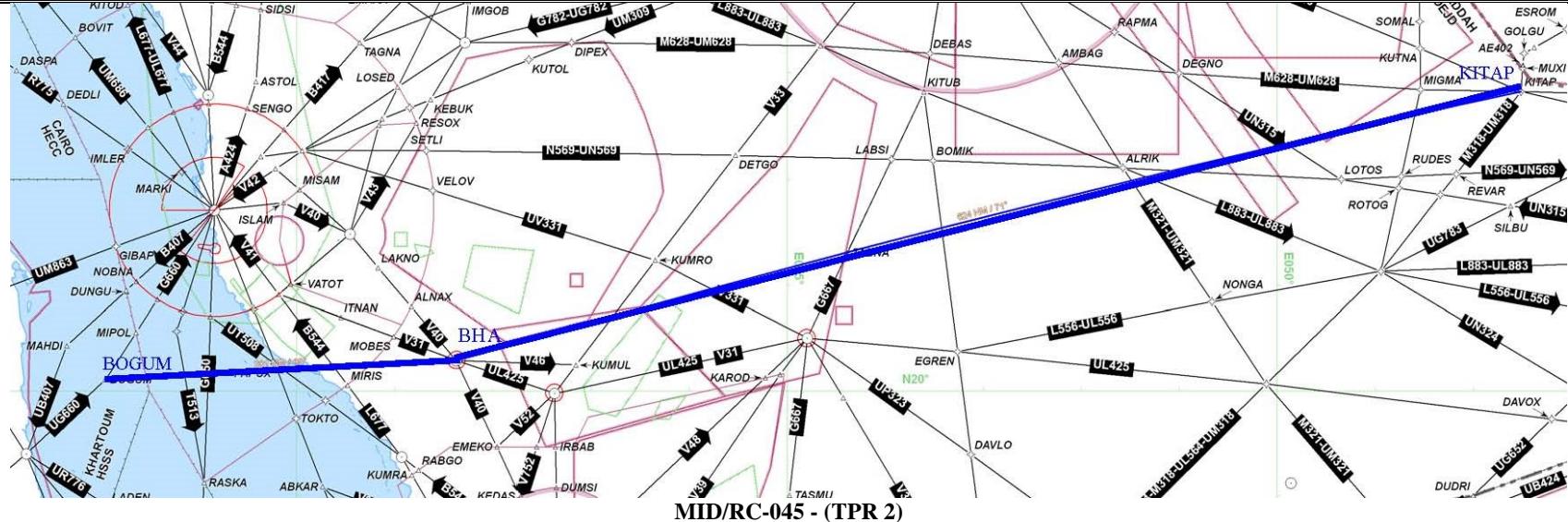
A-2

MID/RC-035 (TPR 1)	ATS Route Name: UL602	Entry-Exit: TUMAK (OB-OM) – KUKSI (OS-LT) MAKOL (LT) END	Inter- Regional Cross Reference if any		Users Priority	URGENT	Originator of Proposal	Iraq
							Date of Proposal	RDGE/11 (Oct 2009)
Route Description	States Concerned	Expected Impl. date		Implementation Status	ANP Status		Action Taken / Required	Deadline for each Action
GEPAP 334906N 0422851E ELEXI 344130N 0410900E DRZ 351724N 0401124E GAZ 365701N 0372824E SULAK 375439N 0361712E	Iraq Syria Turkey			Entire route Westbound	Suspended in the Damascus FIR GEPAP (OR) to SULSAK (LT) not implemented		Syria requested additional time to examine the communication requirements by concerned FIR's. Once the communication issues are resolved it is expected that the ATS route will be implemented. Iraq has no objection	Conditional on Communication Pending acceptance by Syria, based on the status of communication infrastructure
Flight Level Band: FL240-FL460								
Potential City Pairs:								
Conclusions/Remarks							Last updated	ATM SG/1 June 2014



A-3

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



APPENDIX A

A-4

MID/RC-055 (TPR 3)	ATS Route Name: New Route L315	Entry-Exit: HEMA-CVO	Inter-Regional Cross Reference if any		Users Priority		Originator of Proposal	IATA		
							Date of Proposal	ARN TF/2		
Route Description MAK-CVO		States Concerned	Expected Impl. date	Implementation Status		ANP Status	Action Taken / Required			
GIBAL		Egypt		Implemented with opposite direction CVO-HGD Eastbound GIBAL-HGD Westbound		Already in ANP	Saudi Arabia proposed L315 westbound and new Segment HDG or SOBEL-DEDLI for eastbound. This requires that CVO-HGD to be bi-directional. Pending Egypt approval			
HGD		Saudi Arabia								
CVO										
Flight Level Band: Upper										
Potential City Pairs: North-western Red Sea to HECA and Europe										
Conclusions/Remarks		Saves 9 miles					Last updated	ATM SG/1 June 2014		

A-5

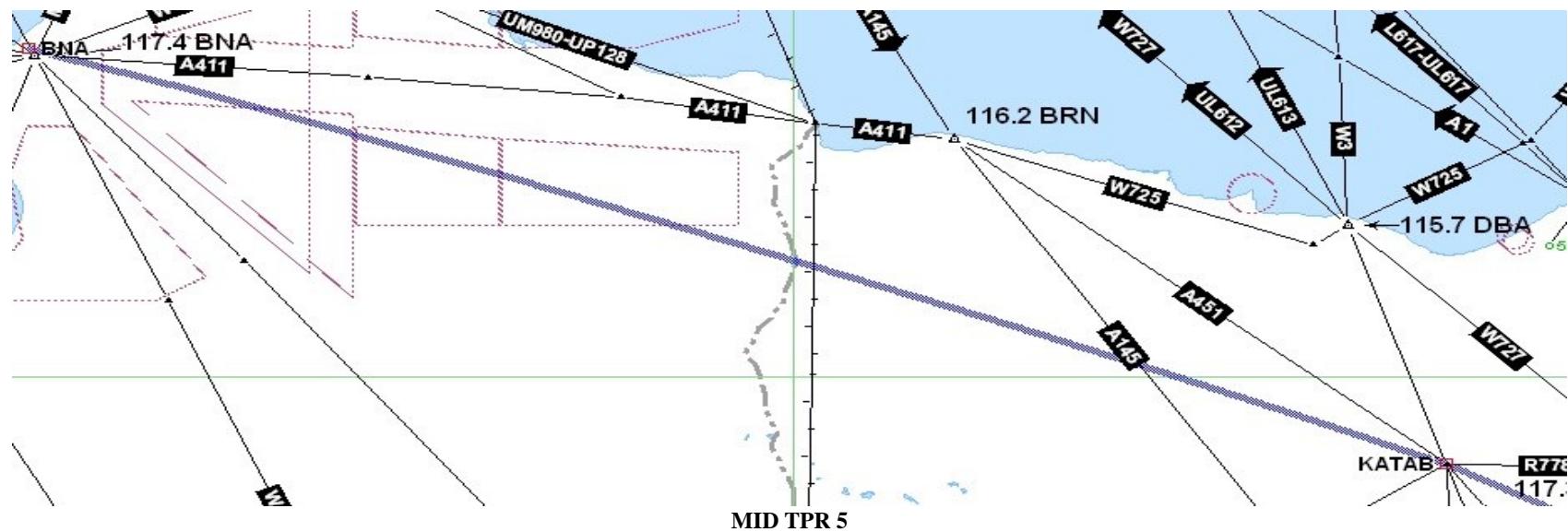
MID/RC-056 (TPR 4)	ATS Route Name: New Route	Entry-Exit: HEMA-SHM	Inter-Regional Cross Reference if any		Users Priority	Originator of Proposal	IATA				
						Date of Proposal	ARN TF/2				
Route Description HEMA-SHM		States Concerned	Expected Impl. date	Implementation Status		ANP Status	Action Taken / Required				
		Egypt	No progress reported				IATA to provide further details Tied with L315 await further discussions from Egypt.				
Flight Level Band: Upper											
Potential City Pairs: HESI, Eastern Mediterranean, Europe to Western Red Sea Coast											
Conclusions/Remarks	Saves 17 miles					Last updated	ATM SG/1 June 2014				



APPENDIX A

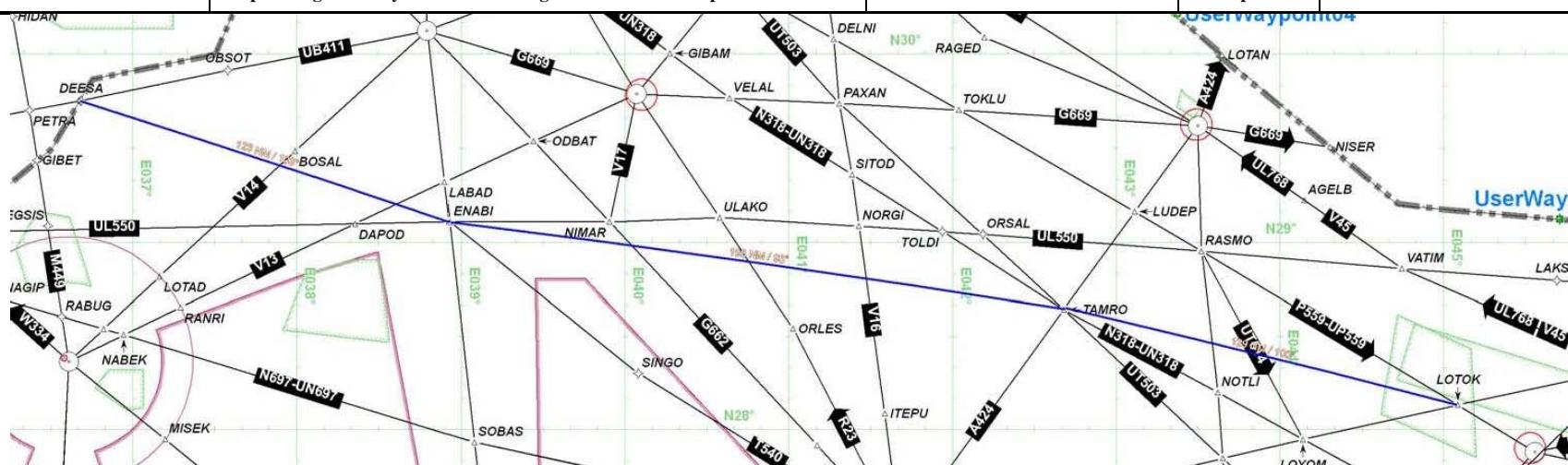
A-6

MID/RC-070 (TPR 5)	ATS Route Name: New Route	Entry-Exit: BNA-KATAB- SEMRU	Inter-Regional Cross Reference if any		Users Priority	High	Originator of Proposal	IATA					
							Date of Proposal	ARN TF/1					
Route Description		States Concerned	Expected Impl. date	Implementation Status		ANP Status	Action Taken/Required						
BNA (N32 07.5 E020 15.2) – KATAB (N29 25.0 E029 05.1)		Egypt		New ATS route.		Moved to ANP	Differed for the future Implement if possible Priority Routes	Deadline for each Action					
Flight Level Band: FL290 – FL410		Libya											
Potential City Pairs: CMN/ALG/TUN/TIP-DOH													
Conclusions/Remarks	This AWY would save considerable track miles BNA – KATAB – SEMRU Libya FIR to Egypt FIR					Last updated	ATM SG/1 June 2014						



A-7

MID/RC-082 (TPR 6)	ATS Route Name: New Route UQ597 Eastbound	Entry-Exit: DANAD - METSA - ASH - ULOVO	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			
DEESA ENABI TAMRO LOTOK		Jordan Saudi Arabia				Moved to ANP	Connecting to UP559. Implement if possible Priority Routes			
Flight Level Band:							Saudi Arabia to implement the route			
Potential City Pairs: Dakar FIR, Algiers FIR, Tripoli FIR, Cairo FIR, Jeddah FIR										
Conclusions/Remarks		Proposals agreed to by some State during the iFLEX workshop Dubai					Last updated	ATM/AIM/SAR SG/13 SEP 2013		

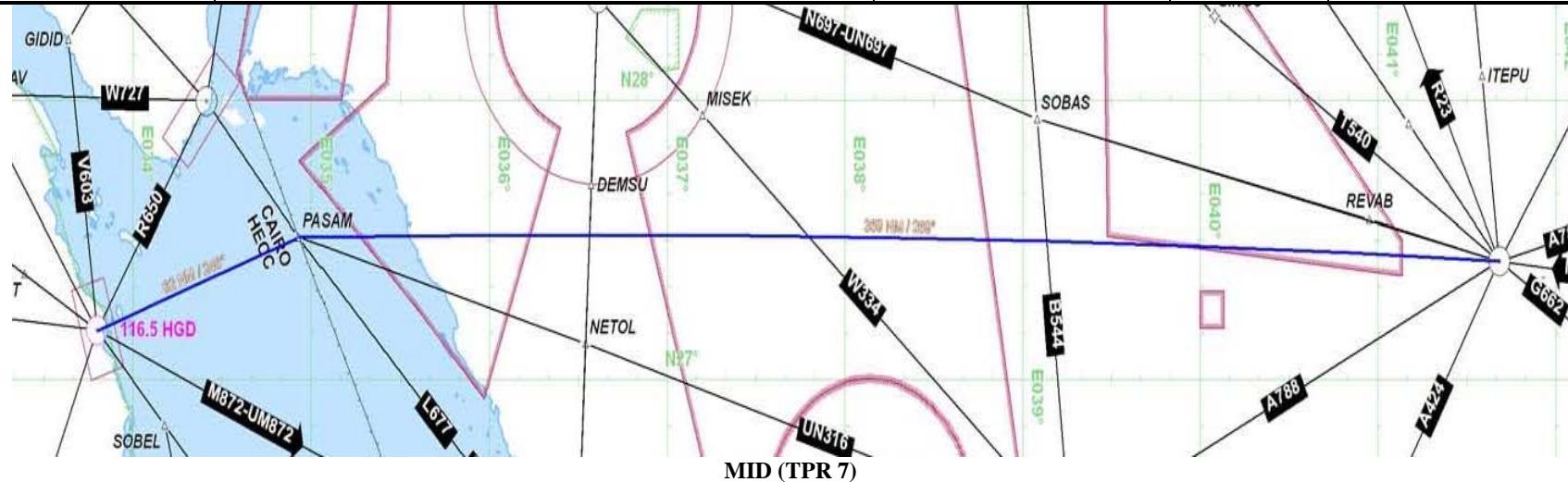


MID TPR 6

APPENDIX A

A-8

MID/RC-083 (TPR 7)	ATS Route Name: New Route UQ598 Westbound	Entry-Exit: DITAR – NABED – PASAM – HIL – ANTER - KUTEM	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	
HIL PASAM HGD	Egypt Saudi Arabia					Moved to ANP	Implement if possible 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	TBD
Flight Level Band:							Concerned States to implement the route	
Potential City Pairs:								
Conclusions/Remarks							Last updated	ATM SG/1 June 2014

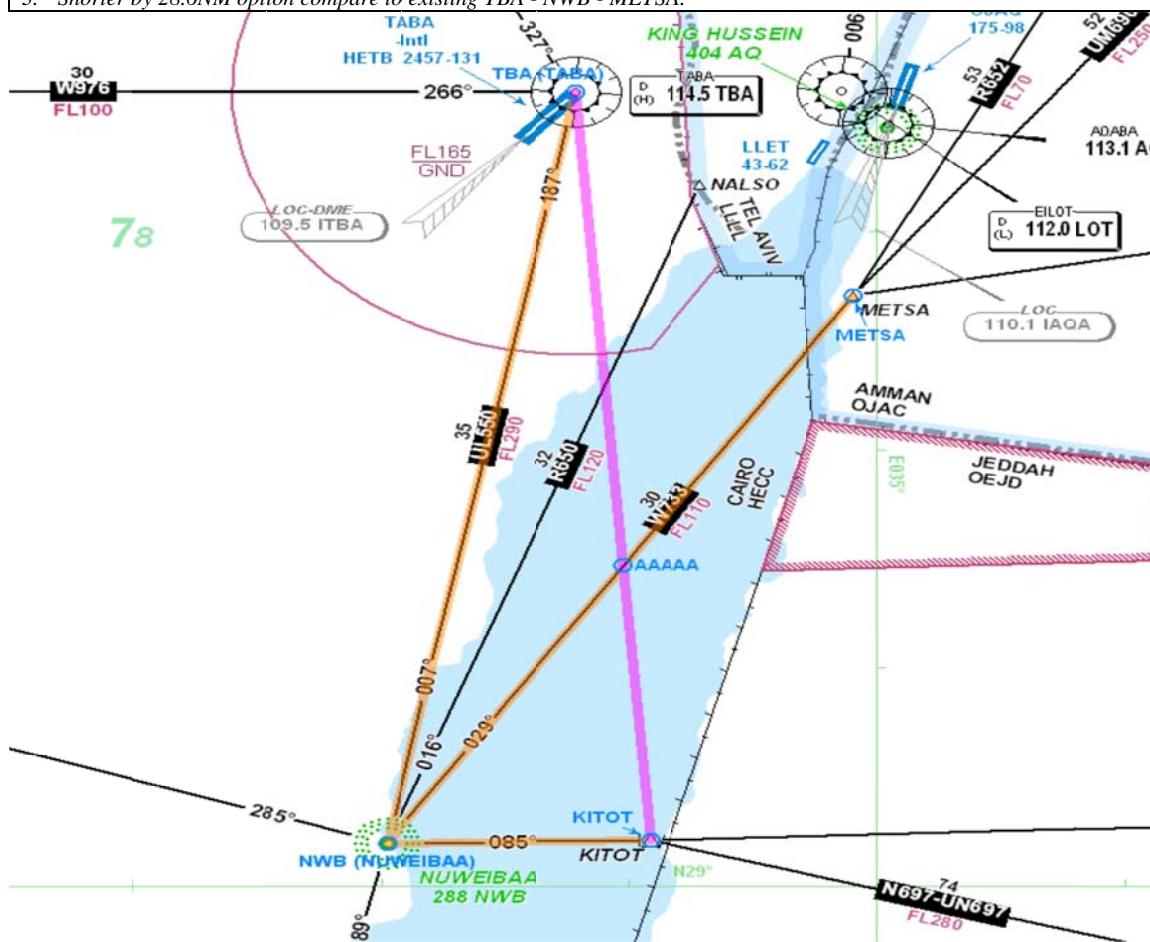


Eurocontrol proposals

Reference	Objective and Proposal	State(s) concerned
TPR 8	<u>Objective:</u> To further improve ATS route network within Cairo FIR.	EGY
	To implement bi-directional ATS route TBA - AAAAA - KITOT.	Originator EUROCONTROL

Notes:

1. AAAAA - crossing point between new TBA - KITOT and existing ATS route W733 allowing connection to/from METSA.
2. Shorter by 9.2NM option compare to existing TBA - NWB - KITOT.
3. Shorter by 28.6NM option compare to existing TBA - NWB - METSA.



Reference	Objective and Proposal	State(s) concerned
TPR 9	<i>Objective:</i> To further improve ATS route network between Baghdad and Kuwait FIRs.	Bahrain-Iraq-Kuwait
	To implement ATS route UKMUG-SIDAD- New Point East of RABAP then join the ATS Route network within Bahrain.	Originator ATM/AIM/SAR SG13 Oct 2013

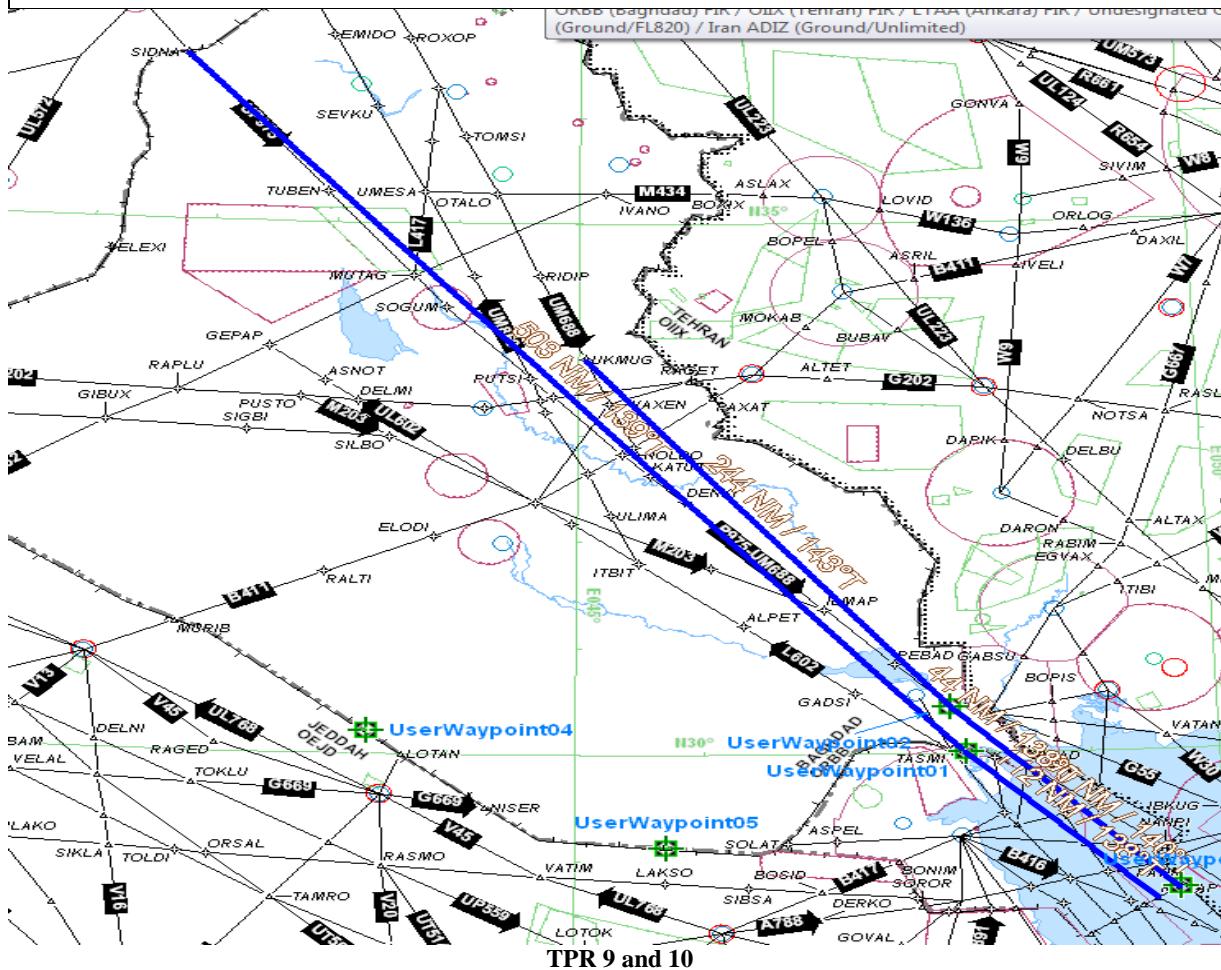
Notes:

- RNAV 1 Routes, target date of implementation second quarter of 2014.

Reference	Objective and Proposal	State(s) concerned
TPR 10	<i>Objective:</i> To further improve ATS route network between Baghdad and Kuwait FIRs.	Bahrain-Iraq-Kuwait
	To implement ATS route SIDNA-New point West of ASLAN-RABAP.	Originator ATM/AIM/SAR SG13 Oct 2013

Notes:

- RNAV 1 Routes, target date of implementation second quarter of 2014.



APPENDIX B

PROPOSAL FOR AMENDMENT OF THE ICAO
MID AIR NAVIGATION PLAN (DOC 9708), VOLUME I BASIC ANP

(Serial No. MID Basic ANP 15/XX - ATM)

- a) Plan: MID Basic Air Navigation Plan
- b) Proposed amendment: Editorial note: Amendments are arranged to show “deleted text” using strikeout (text to be deleted), and “added text” with grey shading (text to be inserted)

Amend requirement for ATS routes: A453/UA453, B415/UB415, B416/UB416, B419/UB419, B458/UB457, G663/UG663, L305/UL305, L564/UL564, L602/UL602, L604/UL604, L768/UL768, M318/UM318, M430/UM430, M557/UM557, M600/UM600, M677/UM677, N300/UN300, N318/UN318, N685/UN685, N687/UN687, N697/UN697, P425/UP425, P430/UP430, P559/UP559, P699/UP699 and P975/UP975 as follows:

LOWER AIRSPACE		UPPER AIRSPACE	
Designator	Significant Points	Designator	Significant Points
1	2	1	2
A453	PIRAN 2934.1N 06128.1E ZAHEDAN (ZDN) BANDAR ABBAS (BND) GHESHM (KHM) BANDAR LENGEH (LEN) KISH <u>MIDSI 264142N0515242E</u> <u>BOTOB 263350N 0514505E</u> <u>ALMOK 262832N 0513840E</u> <u>SOLOB 262241N 0513132E</u> TOBLI 262134N0512301E <u>SOGAT 262029N 0511443E</u> <u>ASTAD 261811N 0505646E</u> <u>OTATA 261843N0510052E</u> BAHRAIN <u>* Note 7 (OB, OI)</u> <u>ELOSO 262409N 0503550E</u> <u>EGMOR 264210N 0502906E</u> <u>LOTOR 264854N 0502200E</u> <u>RAMSI 270249N 0500714E</u> <u>ORNAK 272853N 0493248E</u> <u>PEBOS 262722N0503043E</u> <u>RULEX 264529N0501745E</u> <u>ALVUN 271028N0494455E</u> <u>SOLEM 275229N0491136E</u> <u>KUMBO 281705N0495526E</u> <u>AWADI 2834.5N 04843.9E</u> <u>DEBTI 2844.1N 04829.4E</u> <u>KUA 2913.1N 04759.1E</u>	UA453	PIRAN 2934.1N 06128.1E ZAHEDAN (ZDN) BANDAR ABBAS (BND) GHESHM (KHM) BANDAR LENGEH (LEN) KISH <u>MIDSI 264142N0515242E</u> <u>BOTOB 263350N 0514505E</u> <u>ALMOK 262832N 0513840E</u> <u>SOLOB 262241N 0513132E</u> TOBLI 262134N0512301E <u>SOGAT 262029N 0511443E</u> <u>ASTAD 261811N 0505646E</u> <u>OTATA 261843N0510052E</u> BAHRAIN <u>* Note 7 (OB, OI)</u> <u>ELOSO 262409N 0503550E</u> <u>EGMOR 264210N 0502906E</u> <u>LOTOR 264854N 0502200E</u> <u>RAMSI 270249N 0500714E</u> <u>ORNAK 272853N 0493248E</u> <u>PEBOS 262722N0503043E</u> <u>RULEX 264529N0501745E</u> <u>ALVUN 271028N0494455E</u> <u>SOLEM 275229N0491136E</u> <u>KUMBO 281705N0495526E</u> <u>AWADI 2834.5N 04843.9E</u> <u>DEBTI 2844.1N 04829.4E</u> <u>KUA 2913.1N 04759.1E</u>

LOWER AIRSPACE				UPPER AIRSPACE			
Designator	Significant Points	Designator	Significant Points				
1	2	1	2				
B415	DOHA (DOH) HAMAD INTERNATIONAL (DOH) 251459N 0513634E *Note 8 (DOH-BUNDU) KUPSA 250445N 0521151E AFNAN 2508.9N 05155.9E BUNDU 2500.4N 05229.4E *Note 7 (BUNDU-ADV) GADVO 2441.4N 05343.0E KUNGU 2437.9N 05356.4E ABU DHABI ADV 2425.1N 05440.4E	UB415	DOHA (DOH) HAMAD INTERNATIONAL (DOH) 251459N 0513634E *Note 8 (DOH-BUNDU) KUPSA 250445N 0521151E AFNAN 2508.9N 05155.9E BUNDU 2500.4N 05229.4E *Note 7 (BUNDU-ADV) GADVO 2441.4N 05343.0E KUNGU 2437.9N 05356.4E ABU DHABI ADV 2425.1N 05440.4E				
B416	KUWAIT (KUA) AMBIK 283222N 0492025E *Note 8 (AMBIK-KUVER) TESSO 282852N0492723E GEVAL 283625N0492722E 282101N 0494300E GOGMA 281421N 0495612E KUVER 280924N0500600E IMDAT 2741.0N 05111.0E ORSAR 2604.5N 05357.5E PEBAT 2551.9N 05423.9E DESDI 2536.0N 05442.5E	UB416	KUWAIT (KUA) AMBIK 283222N 0492025E *Note 8 (AMBIK-KUVER) TESSO 282852N0492723E GEVAL 283625N0492722E 282101N 0494300E GOGMA 281421N 0495612E KUVER 280924N0500600E IMDAT 2741.0N 05111.0E ORSAR 2604.5N 05357.5E PEBAT 2551.9N 05423.9E DESDI 2536.0N 05442.5E				
B419	(DHA) 261538N 0500824E * Note 8 (DHA-RAMSI) KING FAHD (KFA) * Note 7 (KFA-RAMSI) METLA (FIR BDRY) 265645.21 0500432.59E ASTOM 265552N 0500408E RAMSI 270249N 0500714E	UB419	(DHA) 261538N 0500824E * Note 8 (DHA-RAMSI) KING FAHD (KFA) * Note 7 (KFA-RAMSI) METLA (FIR BDRY) 265645.21 0500432.59E ASTOM 265552N 0500408E RAMSI 270249N 0500714E				
B457	NARMI 261802N 0501939E (OEJD FIR BDRY) BAH 261551 0503855 DENVO 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514206E BAHRAIN (BAH) * Note 7 ELOSA 2548.8N 05142.6E	UB457	NARMI 261802N 0501939E (OEJD FIR BDRY) BAH 261551 0503855 DENVO 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514206E BAHRAIN (BAH) * Note 7 ELOSA 2548.8N 05142.6E				
G663	KING KHALID (KIA) SILNO 2640.4N 04757.7E *Note 7 (KIA-KFA) GIBUS 255724N 0472829E *Note 8 (GIBUS-ALSER) KING FAHD (KFA) ULADA 264526N0501623E (OEJD FIR BDRY) LOTOR 264854N 0502200E RAKAK 265221N 0502618E TOLMO 265504N 0502927E KOBOK 265839N 0503349E ITIXA 270141N 0503735E	UG663	KING KHALID (KIA) SILNO 2640.4N 04757.7E *Note 7 (KIA-KFA) GIBUS 255724N 0472829E *Note 8 (GIBUS-ALSER) KING FAHD (KFA) ULADA 264526N0501623E (OEJD FIR BDRY) LOTOR 264854N 0502200E RAKAK 265221N 0502618E TOLMO 265504N 0502927E KOBOK 265839N 0503349E ITIXA 270141N 0503735E				

LOWER AIRSPACE				UPPER AIRSPACE			
Designator	Significant Points	Designator	Significant Points				
	1		1				
	GETAL 270409N 0504039E VEDOR 270855N 0504630E ALSER 271100N 0504900E ALSER-2710.8 05049.5E SHIRAZ (SYZ) YAZD (YZD) NODLA 3253.3N 05458.8E TABAS (TBS) MASHAD (MSD)		GETAL 270409N 0504039E VEDOR 270855N 0504630E ALSER 271100N 0504900E ALSER-2710.8 05049.5E SHIRAZ (SYZ) YAZD (YZD) NODLA 3253.3N 05458.8E TABAS (TBS) MASHAD (MSD)				
L305	DOHA / (DOH) HAMAD INTL (DOH) 251459N 0513634E ORMAL 252303N 0522200E ENANO 252348N 0522558E ALSEM 252703N 0524322E ASTOG 252822N 0525025E FIR BDRY *Note 7 (DOH-ITITA) *Note 8 (DOH-ASTOG) ASTOG-252822N 0525025E ITITA-2544.2N 05418.7E	UL305	DOHA / (DOH) HAMAD INTL (DOH) 251459N 0513634E ORMAL 252303N 0522200E ENANO 252348N 0522558E ALSEM 252703N 0524322E ASTOG 252822N 0525025E FIR BDRY *Note 7 (DOH-ITITA) *Note 8 (DOH-ASTOG) ASTOG-252822N 0525025E ITITA-2544.2N 05418.7E				
L564	DOHA (DOH) DOHA/HAMAD INTL DVOR/DME (DOH) 251459N 0513634E PASOM 245545N 0513713E DATRI 244239N 0513407E FIR BDRY DENSI 242519N 0512959E DENSI 242519N 0512959E *Note 8 (DOH-PURDA) NAJMA-250346N 0513908E BATHA (BAT) 241257N 0512707E MIGMA 225035N 0512749E PURDA-210805N 0510329N ASTIN 200410N 0495320E SHARURAH (SHA) ATBOT 171418N 0464706E LOTOS 2200.0N 05039.2E ALNUG 213009N 0500453E NONGA 2050.8N 04920.2E DENKU 201123N 0484331E GERUG 185530N 0473402E ASKET 181905N 0470113E PATOG 180241N 0464631E VUVOD 173941N 0463200E TULIS 173033N 0462616E ULBON 171425.318N 0461514.915E (Jeddah / Sana'a FIR BDRY POINT)	UL564	DOHA (DOH) DOHA/HAMAD INTL DVOR/DME (DOH) 251459N 0513634E PASOM 245545N 0513713E DATRI 244239N 0513407E FIR BDRY DENSI 242519N 0512959E DENSI 242519N 0512959E *Note 8 (DOH-PURDA) NAJMA-250346N 0513908E BATHA (BAT) 241257N 0512707E MIGMA 225035N 0512749E PURDA-210805N 0510329N ASTIN 200410N 0495320E SHARURAH (SHA) ATBOT 171418N 0464706E LOTOS 2200.0N 05039.2E ALNUG 213009N 0500453E NONGA 2050.8N 04920.2E DENKU 201123N 0484331E GERUG 185530N 0473402E ASKET 181905N 0470113E PATOG 180241N 0464631E VUVOD 173941N 0463200E TULIS 173033N 0462616E ULBON 171425.318N 0461514.915E (Jeddah / Sana'a FIR BDRY POINT)				

LOWER AIRSPACE**UPPER AIRSPACE**

Designator	Significant Points	Designator	Significant Points
1	2	1	2
	GEVEL 141229N 0442547E NOPVO 135436N 0441536E TAZ 134149.53N 0440818.98E PARIM 123142N 0432712E		GEVEL 141229N 0442547E NOPVO 135436N 0441536E TAZ 134149.53N 0440818.98E PARIM 123142N 0432712E

L602 TUMAK 255031N 0531108E
 (OMAE FIR BDRY)
 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
 ORSOL 272135N 0500207E
 ITNAS 274643N 0493957E
 ENAVI 275552N 0493151E
DAMUR 280137N 0492637E
 DAVUS 2823468N 0490622E
 (OKAC FIR BDRY)

UL602 TUMAK 255031N 0531108E
 (OMAE FIR BDRY)

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
 ORSOL 272135N 0500207E
 ITNAS 274643N 0493957E
 ENAVI 275552N 0493151E
DAMUR 280137N 0492637E
BAHRAIN (BAH)
***Note-7**
 PEBOS 262722N 0503043E
 RULEX 264529N 0501745E
 RAMSI 270249N 0500714E
 IVONI 275911N 0492131E
 DAVUS 282346N 0490622
 DARVA 284814N 0484734E
 ALVIX 2919.3N 04824.2E
 FALKA 292611N 0481819E
 TASMI 300120N 0475505E
 LOVEK322206N 0444000E
 DELMI331911N 0431731E
 ELEXI 344237N 0411054E
 DRZ 351724N 0401124E
 KUKSI 364508N 0374910E
 GAZ 365701N 0372824E

LOWER AIRSPACE**UPPER AIRSPACE**

Designator	Significant Points	Designator	Significant Points
1	2	1	2
L604	PLH 3513.7N 02340.9E SALUN 340000N 0242700E * BRN 3134.5N 02600.3E KHG 2526.9N 03035.4E LUXOR (LXR) 254458 N 0324607E IMRAD 260500N 0354400E WEJH 2610.8N 03629.3E HLF 262600N 03916.1E GASSIM (GAS) 2617.9N 04346.8E *Note 7 (GAS-KFA) PUSLA 261758N 0461706E *Note 8 to TOSNA MGA 2617.3N 04712.4E ALMAL 2615.9N 04821.1E KING FAHD (KFA) 2621.9N 04949.2E NARMI 261802N 0501939E FIR BDRY BAHRAIN DVOR/DME (BAH) 261551N 0503855E DENVO 260452N 0510509E ASNIX 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514207E KAPAX 254218N 0515118E ORSIS 252801N 0521636E ENANO 252348N 0522559E TOSNA 251612N 0524116E	UL604	PLH 3513.7N 02340.9E SALUN 340000N 0242700E * BRN 3134.5N 02600.3E KHG 2526.9N 03035.4E LUXOR (LXR) 254458 N 0324607E IMRAD 260500N 0354400E WEJH 2610.8N 03629.3E HLF 262600N 03916.1E GASSIM (GAS) 2617.9N 04346.8E *Note 7 (GAS-KFA) PUSLA 261758N 0461706E *Note 8 to TOSNA MGA 2617.3N 04712.4E ALMAL 2615.9N 04821.1E KING FAHD (KFA) 2621.9N 04949.2E NARMI 261802N 0501939E FIR BDRY BAHRAIN DVOR/DME (BAH) 261551N 0503855E DENVO 260452N 0510509E ASNIX 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514207E KAPAX 254218N 0515118E ORSIS 252801N 0521636E ENANO 252348N 0522559E TOSNA 251612N 0524116E
L768	ALPOB 254218N 0530055E * Note 7 to FIRAS * Note 8 (ALPOB-COPPI) ROTAG 255353N 0523621E SOLEG 260159N 0521756E MODOG 261012N 0515935E RAMKI 261138N 0515625E RABLA 261506N 0514834E SOLOB 262241N 0513132E MEDMA 263421N 0505454E TOTLA 263806N 0504301E EGMOR 264210.81N 0502906.73E ULADA 264526.72N 0501623.55E (OEJD FIR BDRY) COPPI 2750.6N 04744.0E	UL768	ALPOB 254218N 0530055E * Note 7 to FIRAS * Note 8 (ALPOB-COPPI) ROTAG 255353N 0523621E SOLEG 260159N 0521756E MODOG 261012N 0515935E RAMKI 261138N 0515625E RABLA 261506N 0514834E SOLOB 262241N 0513132E MEDMA 263421N 0505454E TOTLA 263806N 0504301E EGMOR 264210.81N 0502906.73E ULADA 264526.72N 0501623.55E (OEJD FIR BDRY) COPPI 2750.6N 04744.0E HFR VATIM 2851.6N 04444.7E RAFHA (RAF) ARAR (AAR) OVANO3148.0N 03909.9E OTILA 3201.5N 03901.9E MODAD 3235.7N 03841.6E SOKAN 3308.1N 03822.1E RAFIF 3312.8N 03819.3E SULAF 3327.3N 03810.4E FIRAS 3352.3N 03755.2E

LOWER AIRSPACE				UPPER AIRSPACE			
Designator	Significant Points	Designator	Significant Points				
1	2	1	2				
M318	<p>DARAX 260942N 0555300E *Note 8 (DARAX-MUXIT) SERSA 251945N 0553118E MIADA 245112N 0545736E ABU DHABI (ADV) 242508N 0544023E ATUDO 241708N 0543532E MUSEN 241429N 0543336E GOLGU 231151N 0523109E MUXIT 230230N 0523024E KITAP 224928N 0522923E PURDA 210805N 0510329E SHARURAH (SHA) NADKI 171418N 0464706E SAA 153059.6N 0441310.6E HDH 144622N 0425911E</p>	UM318	<p>DARAX 260942N 0555300E *Note 8 (DARAX-MUXIT) SERSA 251945N 0553118E MIADA 245112N 0545736E ABU DHABI (ADV) 242508N 0544023E ATUDO 241708N 0543532E MUSEN 241429N 0543336E GOLGU 231151N 0523109E MUXIT 230230N 0523024E KITAP 224928N 0522923E PURDA 210805N 0510329E SHARURAH (SHA) NADKI 171418N 0464706E SAA 153059.6N 0441310.6E HDH 144622N 0425911E</p>				
M430	<p>*Note 5 (KIA-DOH) KING KHALID (KIA) KOBOX 250716N 0475046E KIREN 251447.0N 0490724.0E *Note 8 (KIREN-TOSNA) HAS 2516.7N 04929.0E ULIKA 251545N 0503848E (OEJD FIR BDRY) GINTO 251605N 0510415E LAGNO 251613N 0511518E DOHA/HAMAD INTL DVOR/DME (DOH) 251459N 0513630E BOVIP 251554N 0523135E TOSNA 251612N 524116E (OMAE FIR BDRY) *Note 7 (DOH-KISAG) KISAG 251834N 0541408E</p>	UM430	<p>*Note 5 (KIA-DOH) KING KHALID (KIA) KOBOX 250716N 0475046E KIREN 251447.0N 0490724.0E *Note 8 (KIREN-TOSNA) HAS 2516.7N 04929.0E ULIKA 251545N 0503848E (OEJD FIR BDRY) GINTO 251605N 0510415E LAGNO 251613N 0511518E DOHA/HAMAD INTL DVOR/DME (DOH) 251459N 0513630E BOVIP 251554N 0523135E TOSNA 251612N 524116E (OMAE FIR BDRY) *Note 7 (DOH-KISAG) KISAG 251834N 0541408E</p>				
M557	<p>ATBOR 251007N 0551947E *Note7 & 8 to MIDS1 NADIL 252252N 0544717E NABOP 252607N 0540405E EMAGO 253456N 0535751E VUVOK 254408N 0533024E TUMAK 255031N 0531108E ALTOM 262230N 0515639E TOXEL 263020N 0515553E MIDS1 264142N 0515442E</p>	UM557	<p>ATBOR 251007N 0551947E *Note7 & 8 to MIDS1 NADIL 252252N 0544717E NABOP 252607N 0540405E EMAGO 253456N 0535751E VUVOK 254408N 0533024E TUMAK 255031N 0531108E ALTOM 262230N 0515639E TOXEL 263020N 0515553E MIDS1 264142N 0515442E</p>				
M600	<p>RANBI 251908N 0544500E KISAG 251834N 0541408E TUMAK 255031N 0531108E (OMAE FIR BDRY) VEDOM 260109N 0524456E VELAK 261307N 0521821E LABOP 261907N 0520429E ALTOM 262230N 0515639E DASOS 262429N 0515043E ALMOK 262832N 0513840E VEDOS 264105N 0510044E NABOS 264354N 0505145E MOGAS 264759N 0503909E</p>	UM600	<p>RANBI 251908N 0544500E KISAG 251834N 0541408E TUMAK 255031N 0531108E (OMAE FIR BDRY) VEDOM 260109N 0524456E VELAK 261307N 0521821E LABOP 261907N 0520429E ALTOM 262230N 0515639E DASOS 262429N 0515043E ALMOK 262832N 0513840E VEDOS 264105N 0510044E NABOS 264354N 0505145E MOGAS 264759N 0503909E</p>				

LOWER AIRSPACE				UPPER AIRSPACE			
Designator	Significant Points		Designator	Significant Points			
	1	2		1	2		
	RAKAK 265221N 0502618E RAMSI 270249N 0500714E ORNAK 272853N 0493248E SOLEM 275229N 0491136E KUMBO 281705N 0485526E (OKAC FIR BDRY) SINGU 253706N 052570E NOBLA 255111N 0522740E TOBLI 262134N 0512301E RULEX 264529N 0501745E			RAKAK 265221N 0502618E RAMSI 270249N 0500714E ORNAK 272853N 0493248E SOLEM 275229N 0491136E KUMBO 281705N 0485526E (OKAC FIR BDRY) SINGU 253706N 052570E NOBLA 255111N 0522740E TOBLI 262134N 0512301E RULEX 264529N 0501745E			
M677	SESRA 2908.0N 04854.9E RABAP 283625N 0492722E (OKAC FIR BDRY) 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 (OMAE FIR BDRY) GEVAL 282101N 0494300E UMAMA 265831N 0504648E		UM677	SESRA 2908.0N 04854.9E RABAP 283625N 0492722E (OKAC FIR BDRY) 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 (OMAE FIR BDRY) GEVAL 282101N 0494300E UMAMA 265831N 0504648E			
N300	DOHA/HAMAD INTL DVOR/DME (DOH) 251459N 0513634E *Note 7 & 8 to TONVO ELOBI 250752N 0521721E NAMLA 2505.5N 05233.3E BOXAK 244536N 0540032E MIADA 245112N 0545736E TONVO 250500N 0563200E		UN300	DOHA/HAMAD INTL DVOR/DME (DOH) 251459N 0513634E *Note 7 & 8 to TONVO ELOBI 250752N 0521721E NAMLA 2505.5N 05233.3E BOXAK 244536N 0540032E MIADA 245112N 0545736E TONVO 250500N 0563200E			

LOWER AIRSPACE		UPPER AIRSPACE		
Designator	Significant Points	Designator	Significant Points	
1	2	1	2	
N318	<p>QAA 314423N 0360926E ALNOR 313955N 0362507E KINUR 313626N 0363714E ELOXI 313359N 0364536E GENEX 3129.6N 3700.9E GURIAT (GRY) ORKAS 3047.4N 03846.3 E NEVOL 3024.7N 03938.6E VELAL2946.0N 04038.4E TAMRO 2838.6N 04240.8E * Note7 (OE, OB, OM, OO) MOGON 2738.8N 04445.9E TAGSO 272744N 0454510E *Note 8 (OB, OO) EGNOV 270301N 0474713E KUSAR 264741N 0490218E ASPAN 263255N 0494903E DEDAS 263011N 0501427E LADNA OEJD FIR BDRY 262749.34N 0502244.63E ELOSO 262409.19N 0503550.70E DAVOV 262255.00N 0504012.54E GOLKO 262149.22N 0504404.35E ASTAD 261811.64N 0505646.41E TOTIS 261119.11N 0511026.91E RASDI 260425.38N 0512407.37E VELAM 255426.12N 0514347.13E VUTAN 255015.91N 0515218.39E RESAR 253707.00N 0522328.00E ALSEM 252703.45N 0524322.04E OVONA FIR BDRY 252443.00N 0524739.00E ASTAD 261812N 0505646E VUTAN 255016N 0515218E RESAR 253707N 0522328E UMABA 252703N 0524322E (segment LOXAT - REXOD) KATIK 2517.1N 05315.2E KANIP 2410.7N 05520.7E LABRI 240344N 0553842E EGROK 235253N 0560126E LAKLU 232235N 0570401E GEVED 230105N 0575111E TOLDA 223720N 0583503E REXOD211230N 0613830E</p>	UN318 <p>QAA 314423N 0360926E ALNOR 313955N 0362507E KINUR 313626N 0363714E ELOXI 313359N 0364536E GENEX 3129.6N 3700.9E GURIAT (GRY) ORKAS 3047.4N 03846.3 E NEVOL 3024.7N 03938.6E VELAL2946.0N 04038.4E TAMRO 2838.6N 04240.8E * Note7 (OE, OB, OM, OO) MOGON 2738.8N 04445.9E TAGSO 272744N 0454510E *Note 8 (OB, OO) EGNOV 270301N 0474713E KUSAR 264741N 0490218E ASPAN 263255N 0494903E DEDAS 263011N 0501427E LADNA OEJD FIR BDRY 262749.34N 0502244.63E ELOSO 262409.19N 0503550.70E DAVOV 262255.00N 0504012.54E GOLKO 262149.22N 0504404.35E ASTAD 261811.64N 0505646.41E TOTIS 261119.11N 0511026.91E RASDI 260425.38N 0512407.37E VELAM 255426.12N 0514347.13E VUTAN 255015.91N 0515218.39E RESAR 253707.00N 0522328.00E ALSEM 252703.45N 0524322.04E OVONA FIR BDRY 252443.00N 0524739.00E ASTAD 261812N 0505646E VUTAN 255016N 0515218E RESAR 253707N 0522328E UMABA 252703N 0524322E (segment LOXAT-REXOD) KATIK 2517.1N 05315.2E KANIP 2410.7N 05520.7E LABRI 240344N 0553842E EGROK 235253N 0560126E LAKLU 232235N 0570401E GEVED 230105N 0575111E TOLDA 223720N 0583503E REXOD211230N 0613830E</p>	UN685 <p>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) NARMI 261802N 0501939E (OEJD FIR BDRY) BAHRAIN (BAH) 261551N 0503856E ASNIX 260452N 0510509E</p>	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) NARMI 261802N 0501939E (OEJD FIR BDRY) BAHRAIN (BAH) 261551N 0503856E

LOWER AIRSPACE				UPPER AIRSPACE			
Designator	Significant Points		Designator	Significant Points			
	1	2		1	2		
	PATOM 255821N 0511836E EMISA 254658N 0514207E *Note 7 to LAKLU KAPAX 254218N 0515118E ORSIS 252801N 0521636E ENANO 252348N 0522558E TOSNA 251612N 0524116E TOPSI 250910N 0531200E BOXAK 244536N 0540032E ADV 242508N 0544024 RETAS 235754N 0553423E *Note 8 (OO) PUTSO 232037N 0565322E LAKLU 232235N 0570401E			ASNIX 260452N 0510509E PATOM 255821N 0511836E EMISA 254658N 0514207E *Note 7 to LAKLU KAPAX 254218N 0515118E ORSIS 252801N 0521636E ENANO 252348N 0522558E TOSNA 251612N 0524116E TOPSI 250910N 0531200E BOXAK 244536N 0540032E ADV 242508N 0544024 RETAS 235754N 0553423E *Note 8 (OO) PUTSO 232037N 0565322E LAKLU 232235N 0570401E			
N687	KING KHALID (KIA) KINIB 254108N 0482317E *Note 5 & 7 & 8 KING FAHAD (KFA) ROTEL 264015N 0502149E (OEJD FIR BDRY) EGMOR 264210N 0502906E MUTAR 263611N 0500627E MEMKO 264611N 0504427E DAVRI 264936N 0505732E TORBO 265223N 0511024E		UN687		KING KHALID (KIA) KINIB 254108N 0482317E *Note 5 & 7 & 8 KING FAHAD (KFA) ROTEL 264015N 0502149E (OEJD FIR BDRY) EGMOR 264210N 0502906E MUTAR 263611N 0500627E MEMKO 264611N 0504427E DAVRI 264936N 0505732E TORBO 265223N 0511024E		
N697	MENLI 2947.0N 03152.1E SISIK 2936.0N 03241.E NUWEIBAA * Note 7 (NWB-KITOT below FL350) KITOT 2902.1N 03450.8E SOBAS 2756.0N 03904.9E HAIL (HIL) *Note 7 (HIL-KFA) BPN 2703.2N 04526.7E *Note 8 (BPN-TORBO) KING FAHD (KFA) NARMI 261802N 0501939E (OEJD FIR BDRY) BAHRAIN DVOR/DME (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 2947.0N 03152.1E SISIK 2936.0N 03241.E NUWEIBAA * Note 7 (NWB-KITOT below FL350) KITOT 2902.1N 03450.8E SOBAS 2756.0N 03904.9E HAIL (HIL) *Note 7 (HIL-KFA) BPN 2703.2N 04526.7E *Note 8 (BPN-TORBO) KING FAHD (KFA) NARMI 261802N 0501939E (OEJD FIR BDRY) BAHRAIN DVOR/DME (BAH) 261551N 0503855E *Note 7 GOLKO 262149N 0504404E TOSTA 262746N 0504912E MEDMA 263421N 0505454E VEDOS 264105N 0510044E SODAK 264634N 0510530E TORBO 265223N 0511024E		
P425	DAHRAN (DHA) *Note 8 to ALSER BAHRAIN DVOR/DME (BAH) 261551N 0503855E DAVOV 262255N 0504012E DATGO 262957N 0504130E TOTLA 263806N 0504301E		UP425		DAHRAN (DHA) *Note 8 to ALSER BAHRAIN DVOR/DME (BAH) 261551N 0503855E DAVOV 262255N 0504012E DATGO 262957N 0504130E TOTLA 263806N 0504301E		

LOWER AIRSPACE				UPPER AIRSPACE				
Designator	Significant Points		Designator	Significant Points				
	1	2		1	2			
	MEMKO 264611N 0504427E BOXOG 265403N 0504553E ALSER 271100N 0504900E (OIIIX FIR BDRY)			MEMKO 264611N 0504427E BOXOG 265403N 0504553E ALSER 271100N 0504900E (OIIIX FIR BDRY)				
P430	DOHA/HAMAD INTL DVOR/DME (DOH) 251459N 0513634E *Note 8 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 TOXEL 263020N 0515553E MIDS1 264142N 05155442E		UP430	DOHA/HAMAD INTL DVOR/DME (DOH) 251459N 0513634E *Note 8 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 TOXEL 263020N 0515553E MIDS1 264142N 05155442E				
P559	TURAIF (TRF) *Note 7 to DESDI KAVID 3035.9N 04011.8E TOKLU 2942.1N 04202.4E RASMO 2857.2N 04331.3E KMC ULOVO 274830N 0455420E *Note 8 (ULOVO-NAPLO) MUSKO 2726.7N 04737.1E KEDAT 2721.8N 04759.0E JUBAIL (JBL) DAROR 270244N 0495815E (OEJD FIR BDRY) RAMSI 270249N 0500714E GASSI 270257N 0502229E KOBOK 265839N 0503349E BOXOG 265403N 0504553E DAVRI 264936N 0505731E SODAK 264634N 0510530E DANOB 263946N 0512640E BOTOB 263350N 0514505E ROSAN 263129N 0515220E KUMLA 262609N 0520822E ASPAK 262115N 0522257E TOMSO 260611N 0530214E NALPO 255602N 0532945E (OMAE FIR BDRY) RAPSA 253700N 0541700E DESDI 253603N 0544230E		UP559	TURAIF (TRF) *Note 7 to DESDI KAVID 3035.9N 04011.8E TOKLU 2942.1N 04202.4E RASMO 2857.2N 04331.3E KMC ULOVO 274830N 0455420E *Note 8 (ULOVO-NAPLO) MUSKO 2726.7N 04737.1E KEDAT 2721.8N 04759.0E JUBAIL (JBL) DAROR 270244N 0495815E (OEJD FIR BDRY) RAMSI 270249N 0500714E GASSI 270257N 0502229E KOBOK 265839N 0503349E BOXOG 265403N 0504553E DAVRI 264936N 0505731E SODAK 264634N 0510530E DANOB 263946N 0512640E BOTOB 263350N 0514505E ROSAN 263129N 0515220E KUMLA 262609N 0520822E ASPAK 262115N 0522257E TOMSO 260611N 0530214E NALPO 255602N 0532945E RAPSA 253700N 0541700E DESDI 253603N 0544230E				
P699	ATBOR 251007N 0551947E							

LOWER AIRSPACE				UPPER AIRSPACE				
Designator	Significant Points		Designator	Significant Points		Designator	Significant Points	
1	2	1	2	1	2	1	2	
	*Note 7 (ATBOR-BAH)		UP699			ATBOR 251007N 0551947E		
	SITAT 251105N 0544500E					*Note 7 (ATBOR-BAH)		
	KISAG 251834N 0541408E					SITAT 251105N 0544500E		
	ITMUS 252322N 0535429E					KISAG 251834N 0541408E		
	ALSOK 252607N 0533904E					ITMUS 252322N 0535429E		
	RUBAL 252957N 0531723E					ALSOK 252607N 0533904E		
	ORMID 253354N 0525434E					RUBAL 252957N 0531723E		
	*Note 8 (ORMID-KFA)					ORMID 253354N 0525434E		
	DASLO 254537N 0523029E					*Note 8 (ORMID-KFA)		
	NAGOG 255214N 0521614E					DASLO 254537N 0523029E		
	BONAN 260200N 0515505E					NAGOG 255214N 0521614E		
	VEDED 260558N 0514627E					BONAN 260200N 0515505E		
	KUNDO 261631N 0512325E					VEDED 260558N 0514627E		
	SOGAT 262029N 0511443E					KUNDO 261631N 0512325E		
	ASTAD 261811N 0505646E					SOGAT 262029N 0511443E		
	BAHRAIN DVOR/DME(BAH) 261551N					ASTAD 261812N 0505646E		
	0503855E					BAHRAIN DVOR/DME(BAH) 261551N		
	NARMI 261802N 0501939E					0503855E		
	(OEJD FIR BDRY)					NARMI 261802N 0501939E		
	KING FHAD (KFA) 262153N 0494910E					(OEJD FIR BDRY)		
P975	NOLDO 324932N 0452129E		UP975			KING FHAD (KFA) 262153N 0494910E		
	*Note7							
	KATUT 323737N 0453439E							
	DENKI 322228N 0455122E							
	ILMAP 312133N 0465702E							
	PEBAD 305023N 0472958E							
	SIDAD 295231N 0482944E							
	LOVAR 2924.4N 04846.1E							
	SESRA 2908000N 004854.9E							
	DANAL 2851.5N 04904.8E							
	IMDOX 2834.9N 04914.6E							
	LONOS 283027N 0491713E							
	(OKAC FIR BDRY)							
	ORGEL 281312N 0494614E							
	DATEN 273118N 0501832E							
	REVAX 272026N 0502651E							
	GETAL 270409N 0504039E							
	LOSIS 270118N 0504208E							
	BOXOG 265403N 0504553E							
	NABOS 264354N 0505145E							
	TOTIS 261119N 0511026E							
	DETKO 280550N 0493130E							
	TOLMO 2655.1N 05029.4E							
	TORNA 2633.6N 05042.2E							
	MEMBO 262425N 0504737E							

Add requirement for ATS routes: L319/UL319, L438/UL438, L443/UL443, M444/UM444, P560/UP560, P531/UP561, P562/UP562 and P563/UP563 as follows:

L319	BAH DVOR/DME 261551N 0503855E DAVRI 264936N 0505731E OBTAR 265934N 0510309E (OIX FIR BDRY)	UL319	BAH DVOR/DME 261551N 0503855E DAVRI 264936N 0505731E OBTAR 265934N 0510309E (OIX FIR BDRY)
L438	LONOS 283027N 491713E FIR BDRY LOPOL 281849N 0492845E ATBAG 280842N 0493844E GODRI 280256N 0494307E RAKSO 275326N 0495032E GOGRA 274918N 0495344E OBNAX 272650N 0501103E DEKTA 271605N 0501946E VELOG 270215N 0503055E KOBOK 265839N 0503349E MOGAS 264759N 0503909E TOSTA 262746N 0504912E ASTAD 261811N 0505646E	UL438	LONOS 283027N 491713E FIR BDRY LOPOL 281849N 0492845E ATBAG 280842N 0493844E GODRI 280256N 0494307E RAKSO 275326N 0495032E GOGRA 274918N 0495344E OBNAX 272650N 0501103E DEKTA 271605N 0501946E VELOG 270215N 0503055E KOBOK 265839N 0503349E MOGAS 264759N 0503909E TOSTA 262746N 0504912E ASTAD 261811N 0505646E
L443	RABAP 283625N 0492722 FIR BDRY 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 FIR BDRY TESSO 282852N 0492723E LOPOL 281849N 0492845E ENAVI 275552N 0493151E GIRSI 274126N 0493310E ORDAN 271706N 0495442E RAMSI 270249N 0500714E GASSI 270257N 0502229E
M444	DOHA/HAMAD INTL DVOR/DME (DOH) 251459N 0513634E EMISA 254658N 0514206E PATOM 255821N 0511836E DENVO 260452N 0510509E BAHRAIN DVOR/DME (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 (OKAC FIR BDRY)	UM444	DOHA/HAMAD INTL DVOR/DME (DOH) 251459N 0513634E EMISA 254658N 0514206E PATOM 255821N 0511836E DENVO 260452N 0510509E BAHRAIN DVOR/DME (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 (OKAC FIR BDRY)
P560	PORT SUDAN (PSD) 311743N 0321416E BOGUM 200736N 0380360E AL BAH (BHA) 201832.9N 0413844.9E KITAP 224928N 0522923E	UP560	PORT SUDAN (PSD) 311743N 0321416E BOGUM 200736N 0380360E AL BAH (BHA) 201832.9N 0413844.9E KITAP 224928N 0522923E
P561	BENINA (BNA) 320728N 0201513E KATAB 292501N 0290506E	UP561	BENINA (BNA) 320728N 0201513E KATAB 292501N 0290506E

P562	DEESA 294509N 0364102E ENABI 290739N 0385650E TAMRO 283938N 0424147E LOTOK 280857N 0450512E	UP562	DEESA 294509N 0364102E ENABI 290739N 0385650E TAMRO 283938N 0424147E LOTOK 280857N 0450512E
P563	HAIL (HIL) 272630N 0414158E PASAM 273145N 0345642E HURGHADA (HGD) 271139.9N 0334847E	UP563	HAIL (HIL) 272630N 0414158E PASAM 273145N 0345642E HURGHADA (HGD) 271139.9N 0334847E

- c) **Originated by:** The First meeting of the Air Navigation Systems Implementation Group (ANSIG/1).
- d) **Originator's reasons for amendment:** The ANSIG/1 meeting reviewed and updated the Table ATS 1-ATS Routes of the MID Basic ANP, based on the outcome of the ATM SG/1 meeting and the inputs received from States.
- e) **Intended date of implementation:** As soon as practicable after approval.
- f) **Proposal circulated to following States and organizations:**

Bahrain	Saudi Arabia
Egypt	Syrian Arab Republic
Islamic Republic of Iran	United Arab Emirates
Iraq	Yemen
Jordan	CANSO
Kuwait	EUROCONTROL
Lebanon	IACA
Oman	IATA
Qatar	IFALPA
- g) **Secretariat's comments:** The changes proposed herein are the result of work undertaken by the MIDANPIRG ANSIG/1; the ICAO MID Regional Office and individual MID States to enhance MID Region ATS route network efficiency.

- END -