



*International Civil Aviation Organization*

**Middle East Regional Monitoring Agency Board**

**Fourteenth Meeting (MIDRMA Board/14)**  
*(Khartoum, Sudan, 1 – 3 February 2016)*

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**Agenda Item 4: RVSM Monitoring and related Technical Issues**

**MID STATES MINIMUM MONITORING REQUIREMENTS**

*(Presented by the MIDRMA)*

**SUMMARY**

This paper presents the current monitoring burden for aircraft registered by the 15 States assigned to MIDRMA to meet the ICAO Annex 6 Long Term Height Monitoring Requirements (MMR), as of January 2016.

Action by the meeting is at paragraph 3.

**REFERENCES**

- ANSIG/1 Report
- MIDANPIRG/15 Report
- MID RVSM SMR 2014
- MIDRMA Board/13 Report

**1. INTRODUCTION**

1.1 In order to accomplish the ICAO Annex 6 Long-Term Height Monitoring (LTHM) requirements, the MIDRMA coordinated with all Member States to publish their Minimum Monitoring Requirements (MMR) table which reflects all aircraft required to be monitored for each MIDRMA Member State, this table is published twice a year and continuously reviewed and updated by the MIDRMA.

1.2 To keep track of the monitoring burden to each MIDRMA Member State according to ICAO Annex 6 LTHM requirements and the global Minimum Monitoring Requirements (MMR), the MIDRMA continuously maintains a database of approvals and height monitoring history for each aircraft registered and RVSM approved by States under MIDRMA's responsibility. This paper provides an update on the MIDRMA monitoring burden as of January 2016.

**2. DISCUSSION**

2.1 The MIDRMA Board/13 meeting agreed to continue aiming for the performance target for height monitoring to reach **95%** of the total RVSM approved aircraft in the Middle East Region, this percentage of height monitored aircraft in the Middle East Region required States to enforce their MMR on all airline operators required to be monitored and shall take all necessary measures for operators not complying with ICAO Annex 6 height monitoring requirements.

2.2 The MIDRMA noticed that some Member States are active to comply with MIDANPIRG Conclusion 14/36 concerning height monitoring while some other members found to be so slow in achieving their monitoring targets.

*CONCLUSION 14/36: RVSM MINIMUM MONITORING REQUIREMENTS*

*That, States that have not yet done so, be urged to:*

- a) take necessary measures to ensure that their aircraft operators fully comply with Annex 6 provisions related to long term height monitoring requirements, based on the MIDRMA MMR Tables; and*
- b) provide feedback to the ICAO MID Regional Office before 1 March 2014.*

2.3 The MIDRMA based the current monitoring burden on the latest RVSM Approval List updated in the MIDRMA web site according to the table below:

MIDRMA Member States	RVSM Approvals Updated Date
Bahrain	14/01/2016
Egypt	04/01/2016
Iran	28/12/2015
Iraq	30/12/2015
Jordan	14/01/2016
Kuwait	20/12/2015
Lebanon	07/01/2016
Libya*	19/06/2015 from ARMA
Oman	20/10/2015
Qatar	04/01/2016
Saudi Arabia	07/01/2016
Sudan	22/10/2015
Syria	22/10/2015
UAE	04/01/2016
Yemen	24/11/2015

\*: No update since the aircraft transfer to MIDRMA

2.4 The MIDRMA managed to conduct GMU monitoring for **96** aircraft registered in the Middle East region since MIDANPIRG/14 and achieved **84%** with known height monitoring results which is **11%** less from the performance target for height monitoring set by MIDRMA Board/13 meeting. The resultant monitoring burden for the **1594** RVSM approved aircraft from the 15 MID States are **257** aircraft, the Minimum Monitoring Requirement (MMR) to cover these aircraft is to conduct monitoring for **138** aircraft as reflected in **Appendix A**.

**MID STATES RVSM AIRCRAFT MINIMUM MONITORING REQUIREMENTS****SUMMARY AS OF JANUARY 2016**

Seq #	MID States	RVSM Approved A/C	Have Results or Covered	Not Covered	Not Covered in %	A/C MMR	Remarks
1	BAHRAIN	50	48	2	4%	1	
2	EGYPT	125	116	9	7%	8	
3	IRAN	205	45	160	78%	55	
4	IRAQ	38	25	13	34%	10	
5	JORDAN	46	44	2	4%	2	
6	KUWAIT	50	44	6	12%	3	
7	LEBANON	24	20	4	17%	4	
8	LIBYA	22	6	16	73%	16	from ARMA
9	OMAN	51	47	4	8%	4	
10	QATAR	205	205	0	0%	0	
11	SAUDI ARABIA	205	195	11	5%	10	
12	SUDAN	9	0	9	100%	9	
13	SYRIA	6	6	0	0%	0	
14	UAE	549	533	16	3%	11	
15	YEMEN	9	3	5	67%	5	
	<b>TOTAL</b>	<b>1594</b>	<b>1337</b>	<b>257</b>	<b>16%</b>	<b>138</b>	

2.5 The MIDRMA Member States are required to put extra efforts to enforce their noncompliant operators to conduct height monitoring according to a strict monitoring schedule. Appendix A to this working paper provides details of the remaining monitoring burden based on the Minimum Monitoring Requirements.

2.6 The MIDRMA requested a waiver from the FAA to conduct height monitoring without restrictions for RVSM approved aircraft registered by some MIDRMA Member States and put much effort to coordinate with the FAA Middle East Office representative, Office of Foreign Assets Control in the U.S. Department of Treasury (OFAC) and the CSSI to receive this waiver. The process of obtaining this license/waiver was not an easy task at all for the MIDRMA, the procedure was so complicated and it took a long time to be approved by the concerned US Authorities, the waiver/license was approved recently to conduct height monitoring as requested and without restrictions. The MIDRMA would like to thank the representative of the FAA Middle East Office representative and his team for his support to the MIDRMA to obtain the required approval and for his continuous follow up with the concerned authorities in the US Department of Treasury (OFAC) until the waiver/license was granted to the MIDRMA.

2.7 By receiving the FAA waiver/license the MIDRMA is expected to achieve a higher percentage of the monitoring target for 2016 and shall coordinate with all concerned Middle East Civil Aviation Authorities to accomplish their monitoring requirements according to ICAO Annex 6 part 1.

### 3. ACTION BY THE MEETING

3.1 The meeting is invited to review and endorse the MIDRMA Member States Monitoring Burden at **Appendix A**.

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APPENDIX A

MIDRMA MEMBER STATES MONITORING BURDEN LIST  
As of January 2016

**Bahrain**

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
BAH	A9CBA	B722	200	B727	894002	07/01/2014	07/01/2016
<b>Aircraft need to be monitored = 1</b>							

**Egypt**

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
AVV	SUGBJ	B735	566	B737CL	01001A	N/A	N/A
CCE	SUEAF	T204	T204	T204	10049	15/03/2013	15/03/2015
CCE	SUEAG	T204	T204	T204	10048	08/07/2006	08/07/2008
CCE	SUEAI	T204	T204	T204	01004A	16/03/2013	16/03/2015
EAF	SUBGU	GLF3	GIII	GLF3	01006E	02/04/2010	02/04/2012
EAF	SUAZJ	FA20	20-E5	FA20	01006C	05/02/2014	05/02/2016
MSR	SUGBS	B772	266	B772	01002A	01/02/2011	01/02/2013
SME	SUSMG	BE30	B350	BE30	10155	30/09/2013	30/09/2015
<b>Aircraft need to be monitored = 8</b>							

**Iran**

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
ATR	EPTTB	A320	231	A320	735282	N/A	N/A
ATR	EPTTA	A320	231	A320	735281	N/A	N/A
CAO	EPFSC	F2TH	2000EX	F2TH	731A63	N/A	N/A
CPN	EPCAP	B737	400	B737NX	730C30	N/A	N/A
CPN	EPCAR	B737	400	B737NX	730C32	N/A	N/A
CPN	EPCPZ	MD83	83	MD80	730E1A	N/A	N/A
CPN	EPCPX	MD83	83	MD80	730E18	N/A	N/A
IRA	EPIAI	B742	230BM	B747CL	732429	N/A	N/A
IRA	EPIAH	B742	286BM	B747CL	732428	N/A	N/A
IRA	EPIAC	B745	sp-86	B745	732423	N/A	N/A
IRA	EPAGA	B737	286	B737NX	7304E1	N/A	N/A
IRA	EPIEG	A320	211	A320	7324A7	N/A	N/A
IRA	EPIDG	F100		F100	732487	02/11/2003	02/11/2005
IRA	EPIDF	F100		F100	732486	N/A	N/A
IRA	EPICF	A30B	203	A30B	732466	N/A	N/A
IRA	EPICE	A30B	203	A30B	732465	N/A	N/A
IRB	EPMDG	MD82	82	MD80	733487	N/A	N/A
IRC	EPATT	B722	222F	B727	730684	N/A	N/A
IRC	EPATQ	B722	222F	B727	730681	N/A	N/A
IRC	EPATG	F100		F100	730687	N/A	N/A

## APPENDIX A

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IRC	EPATF	F100		F100	730686	N/A	N/A
IRC	EPAPG	A320	231	A320	730607	N/A	N/A
IRC	EPAPF	A320	231	A320	730606	N/A	N/A
IRC	EPAPA	A343	311	A340	730601	23/09/2013	23/09/2015
IRG	EPSUS	F100		F100	734EB3	N/A	N/A
IRK	EPLCR	F100		F100	733072	N/A	N/A
IRK	EPLCQ	F100		F100	733071	N/A	N/A
IRM	EPMOS	RJ85	RJ85	AVRO	7335F3	N/A	N/A
IRM	EPMNU	A30B	605	A30B	7335D5	N/A	N/A
IRM	EPMNT	A30B	603	A30B	7335D4	N/A	N/A
IRM	EPMNE	B743	3B3	B747CL	7335C5	N/A	N/A
IRM	EPMND	B743	3B3	B747CL	7335C4	N/A	N/A
IRM	EPMMR	A346	642	A346	7335B2	N/A	N/A
IRM	EPMMQ	A346	642	A346	7335B1	N/A	N/A
IRM	EPMMD	A343	313	A340	7335A4	N/A	N/A
IZG	EPZAZ	A320	231	A320	73683A	N/A	N/A
IZG	EPZAT	A320	214	A320	736834	N/A	N/A
IZG	EPZAQ	MD83	83	MD80	736831	N/A	N/A
MRJ	EPAJA	A343	313	A340	730541	N/A	N/A
MRJ	EPSIG	A30B	622	A30B	734D27	N/A	N/A
MRJ	EPSIF	A30B	622	A30B	734D26	N/A	N/A
MRJ	EPAJI	A320	233	A320	730549	N/A	N/A
PYA	EPPUS	IL76	TD	IL76	7342B3	N/A	N/A
PYA	EPPUL	IL76	TD	IL76	7342AC	N/A	N/A
QSM	EPFQS	RJ85	RJ80	AVRO	731A33	N/A	N/A
QSM	EPFQV	RJ1H	RJ100	AVRO	731A36	N/A	N/A
QSM	EPFQR	A320	214	A320	731A32	N/A	N/A
QSM	EPFQP	A320	214	A320	731A30	N/A	N/A
QSM	EPFQO	A306	605R	A306	731A2F	N/A	N/A
QSM	EPFQN	A306	605R	A306	731A2E	N/A	N/A
QSM	EPFQJ	F100		F100	731A2A	N/A	N/A
TBM	EPTBG	RJ85	RJ85	AVRO	735047	N/A	N/A
TBM	EPTBH	A310	304	A310-GE	735048	N/A	N/A
TBM	EPTBF	MD88	88	MD80	735046	N/A	N/A
TBZ	EPTAC	A320	231	A320	735023	N/A	N/A

**Aircraft need to be monitored = 55**

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## Iraq

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
FBA	YIBAH	CRJ2	200	CARJ	728828	N/A	N/A
IAW	YIAQF	CRJ9	900	CRJ9	728626	N/A	N/A
IAW	YIAQE	CRJ9	900	CRJ9	728625	13/08/2013	13/08/2015
IAW	YIAQW	B763	300	B767	728637	16/08/2013	16/08/2015
IAW	YIASA	B744	4H6	B744-10	728661	16/08/2013	16/08/2015
IGC	YIASC	H25B	800XP	H25B-800	728663	24/09/2013	24/09/2015
IGC	YIASB	H25B	800XP	H25B-800	728662	24/09/2013	24/09/2015
MHK	YIAQX	IL76		IL76	728638	16/09/2013	16/09/2015
MHK	YIAQS	B734	400	B737CL	728633	16/08/2013	16/08/2015
MHK	YIAPZ	B732	200	B732	72861A	N/A	N/A
<b>Aircraft need to be monitored = 10</b>							

## Jordan

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
FJR	JYSOA	B733	33V	B737CL	29338	N/A	N/A
FJR	JYSOB	B733	33V	B737CL	29342	N/A	N/A
<b>Aircraft need to be monitored = 2</b>							

## Kuwait

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
KAC	9KGGB	GLF6	G650	GLF6	706053	N/A	N/A
KAC	9KGAA	B748	8	B748	70604B	N/A	N/A
KAC	9KAPE	A332	243	A330	706051	N/A	N/A
<b>Aircraft need to be monitored = 3</b>							

## Lebanon

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
EFB	ODTSW	H25B	800XP	H25B-800	748012	20/05/2013	20/05/2015
KWI	ODMAF	H25B	800XP	H25B-800	748039	N/A	N/A
MEA	ODCXJ	E135	550	E135-145	748050	N/A	N/A
SAS	ODEKF	H25B	800XP	H25B-800	748049	N/A	N/A
<b>Aircraft need to be monitored = 4</b>							

## Libya

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
AAW	5AONI	A319	111	A320	18047	N/A	N/A
AAW	5AONC	A319	111	A320	18034	N/A	N/A
AAW	5AOND	A319	111	A320	18035	N/A	N/A
AAW	5AONA	A320	214	A320	01802E	N/A	N/A
AAW	5AONB	A320	214	A320	01802F	N/A	N/A
AAW	5AONJ	A320	214	A320	18057	N/A	N/A
AAW	5AONF	A332	200	A330	18041	N/A	N/A
AAW	5AONH	A332	200	A330	18043	N/A	N/A
AAW	5AONE	A342	213	A340	18021	N/A	N/A
BRQ	5ADMG	B737	800	B737NX	01801F	N/A	N/A
BRQ	5ADMH	B737	8GK	B737NX	18020	N/A	N/A
LAA	5ADLY	A306	622R	A306	18025	N/A	N/A
LAA	5ADLZ	A306	622R	A306	18026	N/A	N/A
MOT	5AUAA	CL30	BD100	BD100	18030	N/A	N/A
MOT	5AUAD	CRJ2	CL65	CARJ	18055	N/A	N/A
MOT	5AUAB	GL5T	BD700	BD700	01803C	N/A	N/A
<b>Aircraft need to be monitored = 16</b>							

## Oman

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
MJN	MJN557	GLF4	400	GLF4	70C08C	N/A	N/A
MJN	MJN558	GLF4	400	GLF4	70C08B	N/A	N/A
OMA	A4OSA	B788	800	B787	70C0CD	N/A	N/A
ORF	A4OOMN	B744	400	B744-10	70C04D	N/A	N/A
<b>Aircraft need to be monitored = 4</b>							

## Qatar

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
<b>Aircraft need to be monitored = 0</b>							

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## KSA

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
Almusa	HZIAM	E135	EMB-135BJ	E135-145	7100FE	N/A	N/A
ALWALAAN	HZKME1	C560	560XLS	C650	710237	N/A	N/A
AVIATION HORIZONS	HZFJM	CL60	CL601	CL600	710020	N/A	N/A
AVIATION KNIGHTS	HZHHT	GLF3	G-1159A	GLF3	710221	N/A	N/A
PRIVATAIR	HZBRQ1	B350	B300	BE30	710025	N/A	N/A
Salem Aviation	HZBL1	C525	525	C525	7101F4	22/04/2013	22/04/2015
SVA	HZAI4	B748	87UF	B748	71001B	N/A	N/A
SVA	HZHM1A	B743	300	B747CL	710321	N/A	N/A
SVA	HZ110	H25B	800B	H25B-800	71038D	17/11/2013	17/11/2015
SVA	HZ103	GLF4	G-IV	GLF4	71038B	12/11/2013	12/11/2015
<b>Aircraft need to be monitored = 10</b>							

## Sudan

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
BDR	STBDN	IL76	76TD	IL76	07C03C	N/A	N/A
BDR	STBDE	IL76	76TD	IL76	152C09	N/A	N/A
NOV	STNVC	CRJ2	2B19	CARJ	07C03E	N/A	N/A
NOV	STNVB	CRJ2	2B19	CARJ	07C03B	N/A	N/A
SUD	5YBVZ	E135	135LR	E135-145	04C063	N/A	N/A
SUD	5YBVY	E135	135LR	E135-145	AB8C83	N/A	N/A
SUD	D6CAS	A320	200	A320	35081	N/A	N/A
SUD	STATB	A306	622	A306	07C026	N/A	N/A
SUD	STATA	A306	622	A306	07C022	N/A	N/A
<b>Aircraft need to be monitored = 9</b>							

## Syria

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
<b>Aircraft need to be monitored = 0</b>							

## UAE

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
AJA	A6GAL	H25B	800XP	H25B-800	hx896419	N/A	N/A
GBG	A6JMK	B733	300	B737CL	hx89624C	N/A	N/A
MIX	A6MDI	B742	200F	B747CL	hx8962C2	N/A	N/A
MIX	A6MDH	B742	200F	B747CL	hx8962C9	17/05/2013	17/05/2015
MJE	A6ELD	CL60	C605	CL600	hx896387	N/A	N/A
PFT	A6PFA	B748	8	B748	hx8962E9	N/A	N/A
RFS	A6SHJ	A320		A320	hx896436	N/A	N/A
UAF	UAE 1223	C17		C17	hx896C2B	N/A	N/A
UAF	UAE 1228	C17		C17	hx896C30	N/A	N/A
UAF	UAE 1302	A332	MRTT	A330	hx896C3C	N/A	N/A
UAF	UAE 1301	A332	MRTT	A330	hx896C3B	N/A	N/A
<b>Aircraft need to be monitored = 11</b>							

## Yemen

Operator	Registration	ICAO Type	Series	Monitoring Group	Hex Mode S	Last Monitoring Date	Complaint Expiry Date
IGA	7OYMN	B74S		B74S	89001	25/07/2013	25/07/2015
IGA	7OADW	A310	300	A310-GE	89001D	N/A	N/A
IGA	7OADV	A310	300	A310-GE	89001C	N/A	N/A
IGA	7OFAB	CRJ7		CRJ7	890012	N/A	N/A
IGA	7OFAA	CRJ7		CRJ7	890011	N/A	N/A
<b>Aircraft need to be monitored = 5</b>							

**Total Aircraft need to be monitored = 138**