

International Civil Aviation Organization

Middle East Regional Monitoring Agency Board

Eighteenth Meeting (MIDRMA Board/18) (Doha, Qatar, 19 – 20 September 2022)

Agenda Item 4: RVSM Monitoring and related Technical Issues

RVSM HEIGHT MONITORING ACTIVITIES

(Presented by the MIDRMA)

SUMMARY

This Working Paper presents the MIDRMA Height Monitoring Activities since January 2022 for RVSM Approved Aircraft registered in the ICAO Middle East Region and outside the MID Region.

Action by the meeting is at paragraph 3.

REFERENCES

- MID RVSM SMR 2021
- MIDRMA Board/17 Report
- MMR Table December 2021
- MIDRMA Auto MMR https://midrma.com/en/monitoringResults

1. Introduction

- 1.1 The MIDRMA considers, along with the support of MIDANPIRG, that the RVSM Minimum Monitoring Requirements (MMRs) adopted for global application by all ICAO Regional Monitoring Agencies (RMAs) shall be the basis for the implementation of this requirement.
- 1.2 RVSM Height Monitoring is the method to confirm Height-Keeping performance of Aircraft for Air Traffic Control (ATC) to maintain safety in reduced vertical separation minima. The actual altitude (not the pressure altitude flown) is not observable by pilots, ATC and other Aircraft. The EGMU RVSM Monitoring checks samples the aircraft performance using GPS height and altitude and compares it with the pressure altitude readings. If the aircraft performs within the safety tolerance for vertical error, the aircraft is considered RVSM Height Monitoring Compliant and can be approved by the authority issuing the RVSM approval.
- 1.3 In order to accomplish the ICAO Annex 6, Part 1: Height monitoring requirements, the MIDRMA continued to coordinate with all MIDRMA Member States to publish their minimum monitoring requirements through the automated MMR system, and publish the results in the MIDRMA

website to ensure the availability of these requirements all the time for the concerned MID Civil Aviation Authorities and the airline operators.

2. DISCUSSION

- 2.1 All airline operators of RVSM approved aircraft are required to participate in the RVSM height monitoring program. The principle purposes of the long-term height monitoring program are the verification of long-term ASE stability and the efficacy of an operator's continued airworthiness program.
- 2.2 MIDRMA was able to conduct EGMU height monitoring for 75 Aircraft since January 2022, among this figure there were 13 aircraft registered in India (10 aircraft checked in Chennai, India in a dedicated mission and 3 Aircraft in Bahrain).
- 2.3 Height Monitoring of GACA, Saudi Arabia RVSM Approved Aircraft
- 2.3.1 The GACA, Saudi Arabia is one of the most active authorities in the Middle East Region in tracking the validity of all RVSM approvals which is a total of 281 aircraft. This number requires continuous follow-up and direct instructions to all operators to perform the necessary checks within a specified period of time and before the expiration of the RVSM approvals, because the consequences will be the withdrawal of the granted approval from operating within the RVSM airspace. The MIDRMA would like extend its deep gratitude and appreciation to the responsible Airworthiness Inspector in the KSA GACA for his excellent cooperation and continuous support.
- 2.3.2 More than 15 RVSM approved aircraft registered by GACA, Saudi Arabia checked by the MIDRMA EGMUs and the Airworthiness inspector is coordinating with MIDRMA to close the remaining MMR number (four aircraft) in order to be fully compliant for RVSM height monitoring.
- 2.4 MIDRMA Application for OFAC Licenses to Monitor the Syrian Registered Aircraft
- 2.4.1 With the increased number and activities of the RVSM approved aircraft registered by the Syrian Civil Aviation Authority in the ICAO Middle East Region, the MIDRMA submitted an official request since last year for an OFAC License to the FAA and the US Department of Treasury to conduct RVSM height monitoring by using the Enhanced GMU equipment, this license is under process and follow-up by MIDRMA and the FAA but without knowing if the OFAC license will be granted or not.
- As we all know, height monitoring is a very critical safety issue and it's very much related to the analysis conducted in the annual SMR because lack of height monitoring means lack of 1000ft vertical separation assurance. The Syrian Civil Aviation Authority (SCAA) shows positive and responsible actions towards this matter and ready to conduct the required monitoring for all their registered approved aircraft as soon as possible, but without an OFAC license that restricts MIDRMA to perform height monitoring in accordance with the agreed purchase agreement for the EGMUs, MIDRMA is unable to accomplish this task.
- 2.4.3 The MIDRMA coordinated with the SCAA Flight Safety Department to legalize the lack of height monitoring issue and to follow the procedure for granting temporary RVSM approvals for all the registered aircraft and to put an official request to MIDRMA for conducting height monitoring as per ICAO Annex 6 Part 1 requirements during the 60 days waiver period. The MIDRMA received the SCAA Flight Safety Department request and coordinated with ICAO MID Office to escalate this issue with the FAA, which is already done but no update received until now concerning our application for the OFAC license.

Note: In case no OFAC license is granted to monitor the Syrian aircraft before 2nd October 2022, which is the end of the waiver period granted by the SCAA, the MIDRMA will have to circulate a warning to all MIDRMA Member States and to all other RMAs the status of height monitoring of all Syrian RVSM approved aircraft, and it's going to be the responsibility of all individual ATCUs of accepting these aircraft within their RVSM airspace or not.

- 2.5 Height Monitoring Missions to Check IRAN CAO RVSM Approved Aircraft
- 2.5.1 The MIDRMA continued to cooperate with the FAA to use the EGMU monitoring equipment under the US Treasury OFAC license which was granted with two years validity until 31st January 2023 to inspect IRAN CAO RVSM approved aircraft.
- 2.5.2 MIDRMA put official request on October 2021 to the FAA to renew the OFAC License for monitoring the Iranian aircraft but until now there is no news or update available concerning our request.
- 2.5.3 So far, the MIDRMA completed RVSM height monitoring for 93 RVSM approved aircraft registered by IRAN CAO in three monitoring missions to Tehran which was handled professionally and without any difficulties by FARSCO and supervised by IRAN CAO. Another 13 aircraft remain for IRAN CAO to be fully compliant for RVSM height monitoring.
- 2.6 Height Monitoring Missions to Check IRAQ RVSM Approved Aircraft
- 2.6.1 Iraq CAA Flight Safety Department is considered to be one of the best authorities in the MID region for maintaining their approval list to be fully compliant for height monitoring. The authority is always committed to height monitoring and never allow any of their approved aircraft to operate without making sure their ASEs are within the allowable tolerance, the MIDRMA take this opportunity to thanks the responsible ICAA Airworthiness Inspectors for their excellent cooperation and follow up.
- 2.6.2 MIDRMA managed to check 6 aircraft in Baghdad and one aircraft from Bahrain under the supervision of ICAA Flight Safety Department, the seven aircraft covered the whole MMR for Iraq to be fully compliant for RVSM height monitoring.
- 2.7 Height Monitoring to Check Libya CAA RVSM Approved Aircraft
- 2.7.1 Currently, the total number of the Libyan RVSM approved aircraft is 33, among this number the total minimum monitoring requirement is 18 aircraft which is a very high percentage of non-compliant for height monitoring. These aircraft are considered violating the RVSM airspace. These aircraft will start to affect the ICAO TLS for technical risk if this issue is not resolved due to the lack of known height monitoring results for a long period.
- 2.7.2 The MIDRMA is in contact with most of the Libyan Airline Operators and coordinating with them through a focal point appointed for the RVSM height monitoring task.
- 2.7.3 The agreement with all the operators is to conduct the height monitoring within Tunis FIR and the tentative date to start the monitoring is 15th October 2022. The MIDRMA request the ICAO MID Office to coordinate with Tunisia CAA to facilitate the MIDRMA mission for the Libyan aircraft similar to the arrangements done in 2018 and 2019.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) request the ICAO MID Office to provide support to:
 - i. support in issuing the OFAC License to monitor the Syrian RVSM approved aircraft;
 - ii. renew the OFAC license granted to monitor IRAN CAO RVSM approved aircraft; and
 - iii. coordinate with Tunisia CAA to facilitate the MIDRMA height monitoring within Tunis FIR.
 - b) urge States to continuously check and comply with their minimum monitoring requirement (MMR) as published in the MIDRMA website https://midrma.com/en/monitoringResults.