



International Civil Aviation Organization

Middle East Regional Monitoring Agency Board

Twentieth Meeting (MIDRMA Board/20)
(Muscat, Oman, 10 – 11 November 2024)

Agenda Item 4: RVSM Monitoring and related Technical Issues

RVSM HEIGHT MONITORING ACTIVITIES

(Presented by the MIDRMA)

SUMMARY

This working paper outlines the RVSM height monitoring activities conducted by the MIDRMA since January 2024 for RVSM-approved aircraft registered within the ICAO Middle East Region and other regions. This working paper highlights monitoring accomplishments, workshops, and collaborations with member states to ensure their compliance with RVSM height monitoring requirements.

Action by the meeting is at paragraph 3.

REFERENCES

- MID-RVSM SMR 2023
- MIDRMA Board/19 Report
- MMR Table October 2024
- MIDRMA Auto MMR Tool in <https://midrma.com> website

1. INTRODUCTION

1.1 The MIDRMA, with support from MIDANPIRG, adheres to the globally adopted RVSM Minimum Monitoring Requirements (MMRs) established by ICAO Regional Monitoring Agencies (RMAs). These requirements serve as the framework for implementing height monitoring to verify that aircraft meet altitude stability standards necessary for safe operation in Reduced Vertical Separation Minimum (RVSM) airspace.

1.2 Height monitoring evaluates an aircraft's ability to maintain assigned altitude, a vital component for air traffic control (ATC) in maintaining safe separation. MIDRMA's EGMU RVSM Monitoring program uses GPS technology to measure and validate aircraft height, comparing actual altitude with pressure altitude to ensure compliance. Aircraft that meet the prescribed vertical tolerance are confirmed as compliant and approved for RVSM airspace by the relevant authority.

1.3 In line with ICAO Annex 6, Part 1, the MIDRMA collaborates with member states to meet monitoring requirements. The results are accessible on the MIDRMA website, providing transparent and ongoing monitoring data for Civil Aviation Authorities and operators across the MID region.

2. DISCUSSION

2.1 All airline operators with RVSM-approved aircraft must join the RVSM height monitoring program. The main goals of this long-term program are to check the long-term stability of aircraft height-keeping performance and Altimetry System Error (ASE) and to ensure the effectiveness of the operator's ongoing airworthiness program.

General Requirements

2.2 All airline operators with RVSM-approved aircraft are required to participate in the RVSM height monitoring program. This ongoing initiative aims to confirm the stability of aircraft altitude-keeping performance and assess the effectiveness of each operator's airworthiness programs.

Recent Monitoring Activities

2.3 Since January 2024, MIDRMA has conducted EGMU height monitoring for 115 aircraft. Among these, two aircraft were registered outside the MID region (one in Kyrgyzstan and the other in San Marino).

Saudi Arabia RVSM Monitoring

2.4 Saudi Arabia's GACA has shown exceptional commitment to RVSM compliance by ensuring the validity of RVSM approvals for its 341 aircraft. Through rigorous follow-ups and direct instructions, GACA maintains these approvals, withdrawing any that fail to comply. MIDRMA extends gratitude to GACA's Airworthiness Inspector for his ongoing cooperation and assistance. To date, MIDRMA has monitored more than 12 GACA aircraft, with checks for three additional aircraft planned to achieve full compliance.

Iraq RVSM Monitoring

2.5 Iraq's CAA Flight Safety Department is highly proactive in ensuring RVSM compliance. MIDRMA conducted checks on nine aircraft in Baghdad, with the support of the ICAA Flight Safety Department, with only two remaining to be reviewed by the end of 2024. MIDRMA acknowledges the commitment of ICAA inspectors in ensuring operational safety.

Libya RVSM Monitoring and Training Workshop

2.6 MIDRMA conducted RVSM height monitoring for 23 aircraft registered by Libya's CAA during a recent mission to Tripoli. This successful effort, facilitated with support from the Libyan Airworthiness Section and the Libyan Wing operator, has brought the Libyan MMR into full compliance with RVSM requirements. Notably, two aircraft were removed from Libya's RVSM approval list due to maintenance needs.

2.7 Additionally, MIDRMA organized an RVSM Risk Awareness Workshop (attended by 25 persons) specifically for Libya's Air Traffic Control and Flight Safety Department. This workshop proved highly beneficial, offering comprehensive training on safety protocols and RVSM height monitoring practices. It provided valuable insights for Air Traffic Controllers and Airworthiness Inspectors, emphasizing regulatory compliance to ensure safe and efficient operations in RVSM airspace.

Iran RVSM Monitoring

2.8 Following a lengthy process, MIDRMA received the renewed OFAC License on July 23, 2024, which is valid until July 22, 2026. This license allows for height monitoring of Iranian aircraft, a critical measure due to the high volume of Iranian flights over the Middle East region.

MIDRMA strongly recommends eliminating OFAC licensing requirements for monitoring Iranian and Syrian aircraft to streamline compliance. In 24th September 2024, MIDRMA completed monitoring for 37 Iranian aircraft in Tehran and plans additional missions to monitor 74 more by early 2025.

Constraints and Difficulties in Obtaining an OFAC License for Monitoring the Iranian and the Syrian Aircraft Monitoring

2.9 Obtaining an OFAC (Office of Foreign Assets Control) license to perform RVSM height monitoring for Iranian aircraft presents several challenges, which complicate and delay the MIDRMA's efforts to maintain regional airspace safety. This process is inherently lengthy and complex due to the regulatory restrictions imposed on activities involving Iranian entities. Here are the main constraints and associated safety concerns:

Lengthy Approval Timeline

2.10 Securing an OFAC license often involves months or even years of processing and waiting, as demonstrated by the MIDRMA's recent experience. The license renewal requested in 2021, for example, was not granted until July 2024—a delay of over two years. This prolonged timeline hinders timely RVSM compliance checks, as MIDRMA cannot legally monitor Iranian aircraft without the OFAC License.

Complex Regulatory Compliance Requirements

2.11 The OFAC application involves numerous bureaucratic steps, requiring extensive documentation and adherence to strict guidelines. This compliance process requires a level of coordination across different agencies, often beyond MIDRMA's control, which adds layers of complexity and makes the application process arduous.

Impact on Regional RVSM Airspace Safety

2.12 The prolonged absence of height monitoring for Iranian aircraft due to these delays increases the risk of non-compliance within RVSM airspace, which relies on precise altitude-keeping to prevent conflicts. Iranian aircraft, without regular monitoring, may unknowingly operate outside the allowed altitude deviation, potentially compromising safety in the densely trafficked Middle Eastern airspace.

Resource and Operational Burden

2.13 The requirement to repeatedly apply for an OFAC license places a burden on MIDRMA's resources, redirecting attention and effort away from critical monitoring tasks. Additionally, it affects MIDRMA's operational capacity to monitor other regional aircraft, as resources are diverted to address compliance with OFAC's conditions.

Rationale for Cancelling the OFAC License Requirement

2.14 Given the significant delays, administrative burdens, and safety implications of maintaining this licensing requirement, it is recommended that the need for an OFAC license to monitor Iranian (and Syrian) RVSM-approved aircraft be reassessed and removed. This change would allow MIDRMA to:

- a. ensure consistent and timely monitoring: without OFAC delays, MIDRMA could perform height monitoring more efficiently, ensuring compliance and safety in a timely manner.
- b. focus resources on safety: cancelling this requirement would enable MIDRMA to allocate resources more effectively, focusing on safety initiatives rather than complex compliance tasks.

- c. address safety concerns: eliminating the OFAC requirement would directly address the urgent need to maintain the safety and stability of RVSM airspace by allowing for uninterrupted monitoring of Iranian aircraft.

2.15 Removing the OFAC license requirement is critical to maintain safety standards and ensure that the entire Middle East airspace, including Iranian traffic, adheres to RVSM compliance. This adjustment is in the best interest of regional and global aviation safety.

3. ACTION BY THE MEETING

- a) note the RVSM height monitoring activities reported in this paper;
- b) urge states to regularly check and comply with their minimum monitoring requirements (MMR) as published on the MIDRMA website: <https://midrma.com/en/monitoringResults>; and
- c) support the cancellation of future needs for OFAC License to monitor Iranian and Syrian RVSM-approved aircraft.

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