

International Civil Aviation Organization

Middle East Regional Monitoring Agency Board

Thirteenth Meeting (MIDRMA Board/13) (Bahrain, 9–12 March 2014)

Agenda Item 4: RVSM Monitoring and Related Technical Issues

MID RVSM SAFETY MONITORING ACTIVITY

(Presented by the Secretariat)

SUMMARY

The aim of this paper is to review the outcome of MIDANPIRG/14 related to RVSM safety monitoring activity, and take follow-up action, as appropriate.

Action by the meeting is at paragraph 3.

REFERENCES

- MIDANPIRG/14 Report
- MIDRMA Board/12 Report

1. Introduction

1.1 The meeting may wish to recall that the duties and responsibilities of the MIDRMA include the development of RVSM Safety Monitoring Reports, with a view to verify that the defined safety levels as set out by MIDANPIRG continue to be met. In this regard, States are requested to provide required data on a regular basis and in a timely manner to the MIDRMA for the achievement of this task.

2. DISCUSSION

- 2.1 The meeting may wish to note that MIDANPIRG/14 noted with concern that the MIDRMA is still facing difficulties related to the provision of required data by States. The meeting recognized that the non-compliance with the requirement for reporting of data to the MIDRMA is a longstanding shortcoming in the MID Region, which needs to be addressed seriously. In this respect, it was re-iterated that the lack of awareness about the requirements for RVSM safety assessment activity is a major contributing factor.
- 2.2 MIDNAPIRG/14 recalled that, in accordance with MIDANPIRG Conclusion 13/67, with a view to improve the knowledge of the ATC and Air Operators personnel, the MIDRMA was requested to include in its work programme regular missions to the Member States, during which briefings on the MIDRMA activities and RVSM safety assessment requirements be provided to concerned personnel. In the same vein, the meeting agreed that such briefings could be provided in the MIDRMA premises in Bahrain to the personnel involved in RVSM safety assessment activity (ATC, RVSM Approval Authority and Air Operators) designated by member States, in coordination with the MIDRMA, when and where appropriate. Accordingly the meeting agreed to the following Conclusion which replaces and supersedes MIDANPIRG/13 Conclusion 13/67:

CONCLUSION 14/33: TRAINING ON RVSM SAFETY ASSESSMENT

That, with a view to raise the awareness related to the requirements for sustained RVSM safety assessment activity and improve the knowledge of the ATC, RVSM approval Authority and Air Operators personnel, the MIDRMA include in its work programme training activity/briefings on RVSM safety assessment requirements to be provided to concerned personnel either through missions to concerned States or through familiarization visits organized in the MIDRMA premises, when and where appropriate.

- 2.3 In accordance with the above Conclusion, a training session on RVSM Safety Assessment will be conducted during the proceedings of this meeting.
- It is to be highlighted that MIDANPIRG/14 noted with concern that only five States (Bahrain, Egypt, Iran, Kuwait and Saudi Arabia) attended the RVSM Scrutiny Group meeting held in Kuwait, 16 December 2012. The meeting underlined the importance of the tasks assigned to the RVSM Scrutiny Groups and in order to improve the efficiency of the MID RVSM Scrutiny Group, agreed that its work programme should be included in the agenda of the MIDRMA Board meetings. Based on the above, the meeting agreed to the following Decision:

DECISION 14/34: SCRUTINY GROUP WORK PROGRAMME

That, in order to improve the efficiency of the MID RVSM Scrutiny Group, its work programme be included in the agenda of the MIDRMA Board meetings.

- 2.5 The meeting may wish to note that MIDANPIRG/14 reviewed and endorsed the MID RVSM Safety Monitoring Report (SMR) 2012-2013 presented by the MIDRMA, which is available on the MIDRMA website (www.midrma.com). It was highlighted that the MID RVSM SMR 2012-2013 presents evidence that, according to the data and methods used, the key safety objectives as set out by MIDANPIRG, through Conclusion 12/16, continue to be met. In this respect, it was noted with appreciation that the three safety objectives were met.
- 2.6 The vertical risk estimation due to atypical errors has been demonstrated to be the major contributor in the overall vertical-risk estimation for the MID RVSM airspace, The final conclusions of the data processed have been severely limited by the continued NIL reporting of Large Height Deviations (LHDs) and Coordination Failure Reports (CFRs) from some States which does not support a high confidence in the result.
- 2.7 It was highlighted that a simplified LHD Template containing the minimum data necessary to trigger the process of reporting Large Height deviation (LHD) and/or Coordination Failure Report (CFR) would be developed by the MIDRMA, with a view to facilitate the process of reporting of LHDs and CFRs by the Air Traffic Controllers. It was also noted that an online reporting tool for the submission of LHD reports would also improve the level of reporting.
- 2.8 It is to be highlighted that MIDANPIRG/14 endorsed the Draft MID Air Navigation Strategy, which contains the Aviation System Block Upgrades (ASBU) Block 0 FICE, related to the implementation of AIDC/OLDI between the adjacent Area Control Centres (ACCs). It has been recognized that AIDC/OLDI improves significantly the coordination between the adjacent ACCs, which will reduce the amount of LHD Reports.
- 2.9 Considering all of the foregoing and to standardize and improve the reporting of required data to the MIDRMA, MIDANPIRG/14 agreed to the following Conclusion:

CONCLUSION 14/35: PROVISION OF REQUIRED DATA TO THE MIDRMA

That, considering the on-going requirement for RVSM safety monitoring in the MID Region:

- a) States provide the required data to the MIDRMA on a regular basis and in a timely manner. The data is to include, but is not necessarily limited to:
 - i) approval of operators and aircraft for RVSM operations (on monthly basis or whenever there's a change);
 - ii) Large Height Deviations (LHD) (on monthly basis);
 - iii) traffic data (as requested by the MIDRMA Board);
 - iv) radar data as, when and where required; and
 - v) airway structure (above FL 290) and waypoints.
- b) States not providing the required data to the MIDRMA on a regular basis and in a timely manner:
 - i) be included in the MIDANPIRG list of air navigation deficiencies; and
 - ii) might not be covered by the MID RVSM Safety Monitoring Report (SMR).
- 2.10 The meeting may wish to note that MIDANPIRG/14 recalled that further to the amendment of Annex 6 Part I and Part II concerning long term monitoring requirements for height keeping performance, and based on the MIDRMA Minimum Monitoring Requirements, States are required to ensure that a minimum of two aircraft of each aircraft type grouping of the operator have their height-keeping performance monitored, at least once every two years.
- 2.11 MIDANPIRG/14 noted with appreciation that the percentage of aircraft requiring height keeping monitoring in the MID Region was reduced from 46% to 10% since the last MIDRMA Board/11 meeting in September 2011. However, **119** aircraft are required to be monitored out of **131** RVSM approved aircraft without known height-keeping monitoring results. It was highlighted that the MIDRMA had been in close coordination with other RMAs to exchange all available height monitoring results, particularly with the Euro RMA that is providing the results of any MID RVSM approved aircraft flying over the European Height Monitoring Units (HMUs).
- 2.12 In connection with the above, the meeting agreed that Lebanon and Yemen be included in the MIDANPIRG list of air navigation deficiencies, for granting RVSM approvals for aircraft without known height-keeping monitoring results.
- 2.13 Based on the above, the meeting urged States to ensure that their aircraft operators fully comply with Annex 6 provisions related to long term height monitoring requirements and in accordance with the Minimum Monitoring Requirements (MMR) Tables. Accordingly, the meeting agreed to the following Conclusion:

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.

- 2.14 In connection with the above, MIDANPIRG/14 requested the MIDRMA to circulate the List of RVSM approved aircraft without known height-keeping monitoring results, to all MID States and other RMAs for appropriate action.
- 2.15 The meeting may wish to note that ICAO MID Region Office sent State Letters Ref: AN 6/5.10.15A 14/005 and 14/006 dated 9 January 2014 to Lebanon and Yemen, requesting them to urgently take all necessary measures to implement the provisions of the above Conclusion and to provide the ICAO MID Regional Office with their feedback before 1 March 2014. It is to be noted that Lebanon provided an updated List of RVSM approved aircraft, which indicates that those aircraft without known height monitoring results were not granted RVSM approval. The MIDRMA has been in close coordination with Lebanon and Yemen to solve this issue. In this respect, more details will be provided in a separate working paper presented by the MIDRMA.
- 2.16 MIDANPIRG/14 noted with appreciation that since January 2010, the MIDRMA conducted GMU height monitoring for more than 165 Aircraft and it's expected to conduct the GMU height monitoring for more than 80 aircraft in the near future.
- 2.17 In connection with the above, the meeting recalled that MIDANPIRG/13 noted the difficulties which hindered the MIDRMA to purchase 2 GMU Units from the CSSI Company, as agreed by the MIDRMA Board through Draft Conclusion 10/6. Therefore, it was noted that the MIDRMA order to purchase 2 Enhanced GMU units was still pending due to the CSSI conditions and restrictions.
- 2.18 The meeting may wish to note that MIDANPIRG/14 recalled that MIDANPIRG, through Conclusion 13/68, agreed that the MIDRMA initiate action for the development/purchase of suitable Vertical Collision Risk (VCR) software for the MID Region. In this respect, the meeting was apprised of the progress achieved for the development and validation of the MIDRMA Risk Analysis Software (MID RAS). Accordingly, the meeting noted with appreciation that the MIDRMA received on 24th November 2013, the final phase of the project after the completion of the required training.
- 2.19 It was highlighted that the MID RAS was used for the development of the SMR 2012-2013. MIDANPIRG/14 agreed that it is important to compare the computed TLS using the MID RAS with that computed using the EUROCONTROL Model.
- 2.20 The meeting may wish to note that MIDANPIRG/14 through Conclusion 14/38, agreed that for the development of the SMR 2014, the Traffic Data Sample (TDS) will be collected for the period 15 January 15 February 2014.
- 2.21 It was reiterated that the required data must be submitted in the right format using the excel sheet designed for this purpose which is the only sheet recognized by the MID RAS, any data received in a different format, or in an excel sheet different from the one available on the MIDRMA website, www.midrma.com will not be acceptable.
- 2.22 It was highlighted that the MID RAS will be able to evaluate the submitted data by each Member States automatically and send an evaluation report in the data status with all the errors/inconsistencies, if any, with an official statement related to the acceptance (or non-acceptance) of data.
- 2.23 Therefore, the meeting agreed to the Action Plan for the development of the MID RVSM SMR 2014. (Details about the subject will be presented in a separate WP).

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) review and update the status of provision of data by States and urge those that have not yet provided the required data to the MIDRMA to do so;
 - b) agree on the list of States to be included in the MIDANPIRG list of air navigation deficiencies for non provision of required data to the MID RMA, on a regular basis and in a timely manner; and
 - c) agree on necessary follow-up actions to the MIDANPIRG/14 Conclusions related to RVSM safety monitoring.