

International Civil Aviation Organization

The Twentieth Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/20)

Bangkok, Thailand, 26-29 May 2015

Agenda Item 5: Airspace Safety Monitoring Activities/Requirements in the Asia/Pacific Region

COMPARISON OF AIRCRAFT GROUP ASE IN THE ASIA PACIFIC REGION

(Presented by the USA and Thailand)

SUMMARY

This paper presents a comparison chart of aircraft group ASE measured by ground-based height monitoring systems from RMAs in the Asia Pacific region. The chart provides a very high-level summary of the ASE monitoring results in the Asia Pacific region, and can be included in the Regional Safety Monitoring Assessment report to APANPIRG on an annual basis.

1. INTRODUCTION

1.1 At the 2nd meeting of RASMAG/MAWG, the PARMO proposed an annual report to RASMAG containing summarized height-monitoring data from all Asia Pacific RMAs with ASE monitoring capabilities. This comparison can become part of the RMA safety monitoring reports submitted to RASMAG.

1.2 The meeting reviewed and agreed that the RMAs should undertake monitoring data comparison, and submit a high level annual report to APANPIRG through RASMAG, demonstrating the effectiveness by which RMAs are using data from across the region to validate monitoring results. The meeting also agreed that the aircraft groups reported against would be A320, A330, A340, A346, A380, B737NX, B744, B748, B767, B772, B773, B787, and MD11.

2. DISCUSSION

2.1 MAAR developed an automated process to plot a chart comparing aircraft group ASE measured by ground-based height monitoring systems of each Asia Pacific RMA. The long-term average aircraft ASE values for AAMA, JASMA, and MAAR were obtained from the monitoring data shared on the FAA KSN updated up to April 2015. China RMA provided their monitoring results last updated in April 2015, and PARMO provided the data of the entire year of 2014. Please refer to the complete data set in the **Appendix**.

2.2 The data comparison is illustrated in **Figure 1**. The center of circle represents the average ASE for each monitoring group observed by each RMA's ground-based monitoring systems, while the area represents the number of aircraft monitored by each RMA. An overall average for each aircraft group was calculated and depicted as a blue horizontal line along with the corresponding value.

2.3 It can be observed from **Figure 1** that the average ASE of B744-10 monitoring group is in excess of 25m (80ft), which is the limit specified in MASPS. The chart also shows that the average ASE values of JASMA are generally higher than those of other RMAs, which is consistent with the results presented in IP07 (Per-airframe ASE comparison between JASMA's HMUs and MAAR's AHMS) from RASMAG/MAWG2.



Figure 1: Comparison of Aircraft Group ASE in the Asia Pacific Region

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note and review the information contained in this paper;
 - b) include the comparison in the Regional Safety Monitoring Assessment report to APANPIRG, if agreed; and
 - c) discuss any relevant matters as appropriate.

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