



*International Civil Aviation Organization*

**The Twenty-First Meeting of the Regional Airspace Safety Monitoring  
Advisory Group (RASMAG/21)**

Bangkok, Thailand, 14-17 June 2016

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

**COMPARISON OF AVERAGE ASE BY AIRCRAFT GROUP AND RMA**

(Presented by the Monitoring Agency for Asia Region)

**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 Due to the relatively large number of Regional Monitoring Agencies (RMAs) in the Asia Pacific region, the Monitoring Agencies Working Group of the Asia Pacific region (RASMAG/MAWG) agreed to combine their ASE group performance data to give an overall picture of the region's MASPS compliance to its PIRG.

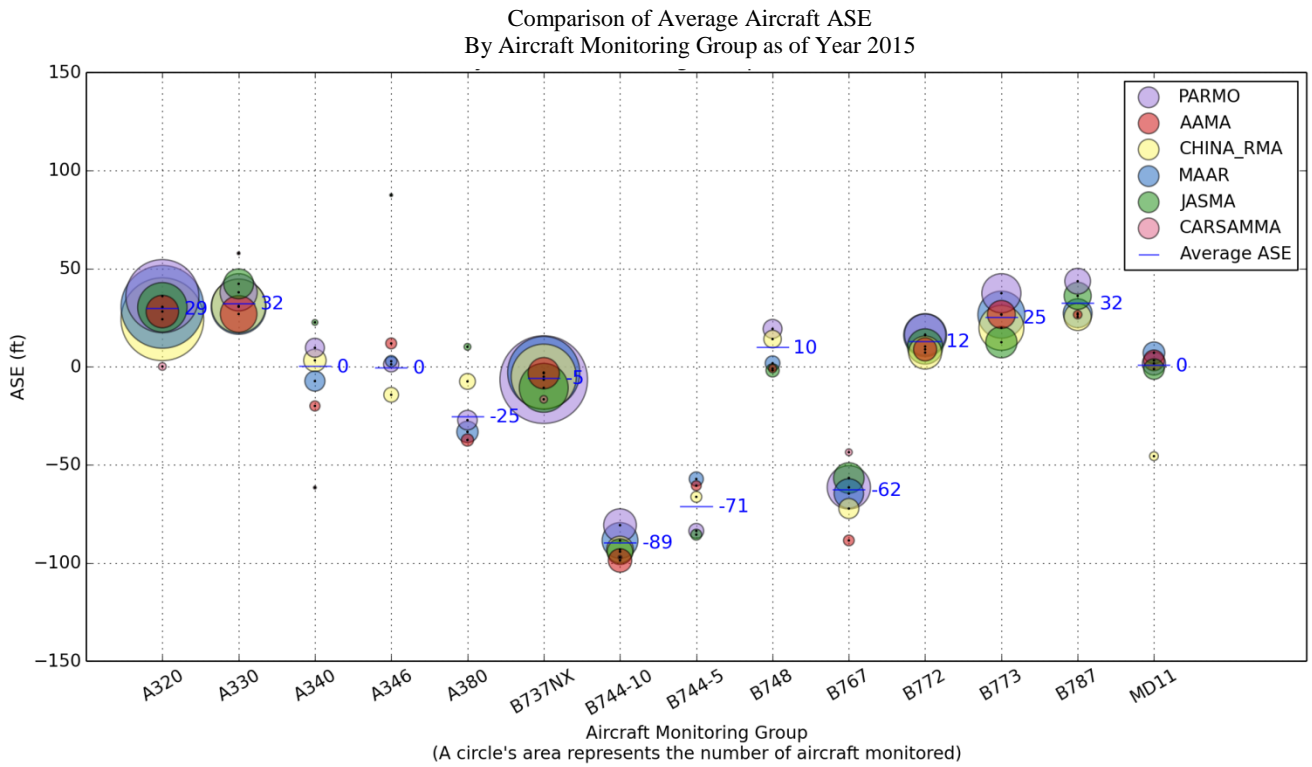
1.2 The MAAR automated the plotting process and produced a chart comparing average ASE by aircraft group and by RMA. It was agreed that the aircraft groups reported against would be A320, A330, A340, A346, A380, B737NX, B744, B748, B767, B772, B773, B787, and MD11. The first comparison chart was also presented in WP28 to the RASMAG/20 in May 2015, showing 2014 ASE data.

**2. DISCUSSION**

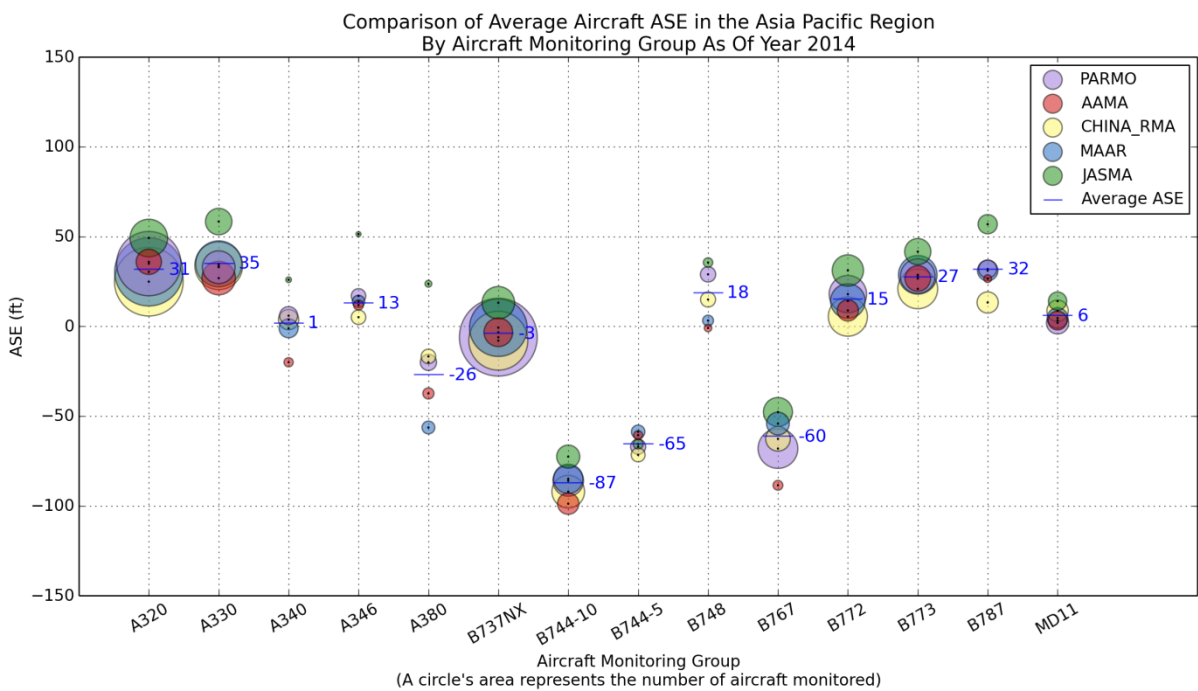
2.1 AAMA, CARSAMMA, China RMA, PARMO/NAARMO, and MAAR provided their average 2015 ASE data to MAAR while that of JASMA was obtained from the FAA KSN website, updated up to April 2016.

2.2 The data comparison is illustrated in **Figure 1**. The centre of circle represents the average ASE for each monitoring group observed by each RMA's monitoring system, 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 In comparison with the 2014 data collection (available in **Figure 2**), the 2015 average group ASE values mostly improved towards zero feet or remained constant. However, the average ASE of the B744-10 and B744-5 monitoring groups deteriorated from -87 to -89 feet and from -65 to -71 feet, respectively; the B744-10 monitoring group's ASE remained beyond the MASPS limit.



**Figure 1: comparison of aircraft group ASE by aircraft monitoring group as of year 2015**



**Figure 2: comparison of aircraft group ASE by aircraft monitoring group as of year 2014**

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the aircraft group performance presented in this paper and the importance of aircraft height-keeping performance monitoring requirement according to Annex 6 Operation of Aircraft;
- b) include the comparison chart in the Regional Safety Monitoring Assessment report to APANPIRG; and
- c) discuss any relevant matters as appropriate.

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