



International Civil Aviation Organization

**The 18th Meeting of the Regional Airspace Safety Monitoring Advisory Group
(RASMAG/18)**

Bangkok, Thailand, 01 – 04 April 2013

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

MONITORING RESULTS OF SETOUCHI HMU

(Presented by Japan)

SUMMARY

This paper presents a summary of the height monitoring service and the scrutiny process concerning Setouchi height monitoring unit (HMU).

This paper relates to –

Strategic Objectives:

A: Safety – Enhance global civil aviation safety

Global Plan Initiatives:

GPI-2 Reduced vertical separation minima

1. INTRODUCTION

1.1 Total of 49267 monitoring data were obtained from Setouchi HMU for the period between 16 April 2012 and 15 February 2013. JASMA conducts careful verification including monitoring flight information over Setouchi HMU to updating the RMA's (KSN) Knowledge Sharing Network website and Japan Airspace Safety Monitoring Agency (JASMA) website. JASMA uploaded periodically the monitoring date, registration number and Mode S code which were successful height monitored results except some anomalies data in KSN and JASMA website. This paper reports the details of monitoring results.

2. DISCUSSION

2.1 In the scrutiny process, JASMA found some divide into two or more tracks of measurement results of height-keeping performance toward a single straight/level flight of an aircraft in the Setouchi HMU coverage. HMU is supposed to produce a single track from the plot data measured every second if the flight in its coverage is level in altitude and straight in direction. Some of the causes of multiple measurement tracks supposed to be a timing of measurement, length of measurement, direction of measurement, weather condition and so forth. JASMA is still conducting manually in the scrutiny process.

2.2 JASMA will show a monitoring result based on the past statistics data. To make a statistic data for ASE assessment, the process of filtering the monitoring data to determine which track data should use is important.

2.3 **Figure 1** shows the proportion of monitoring groups monitored by Setouchi HMU between 16 April 2012 and 15 February 2013. The top ten of the monitoring groups are B737NX, B772, B767, A320, B737CL, B744-10, E170-190, B773, A330 and MD11 in this period. The proportion of B737NX, B772, B767 and A320 are continuously large amount as previous report.

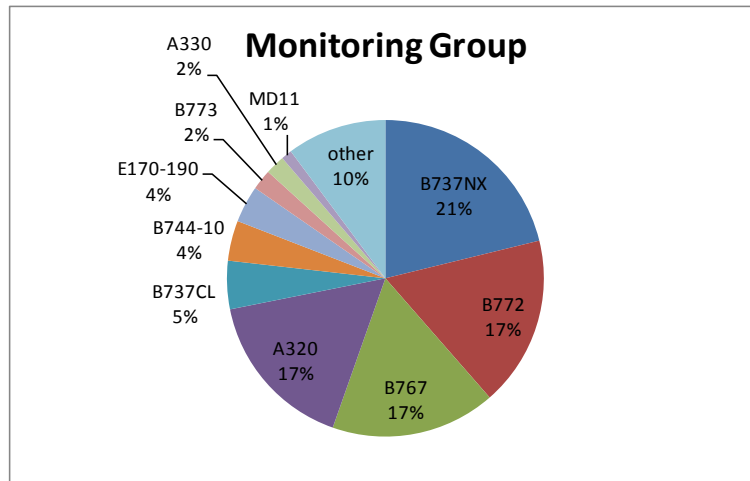


Figure 1: Percentage of Aircraft monitoring group monitored by Setouchi HMU

2.4 **Table 1** shows the mean TVE, AAD, ASE and ASE+3SD of each monitoring groups. **Figure 2** draws focus to the data of mean ASE of each monitoring group and made it a bar graph. Because of the system adjustment is not completed, the following result includes incomplete monitoring data.

Table 1: Result of recent height monitoring per monitoring groups

Monitoring Group	count	Mean (ft)			ASE+3SD (ft)
		TVE	AAD	ASE	
B737NX	10432	6.7	-0.1	6.8	171.4
B772	8570	23.5	-0.1	23.6	185.1
B767	8287	-60.1	0.1	-60.2	128.0
A320	8111	61.6	2.0	59.6	242.7
B737CL	2430	-60.2	0.0	-60.2	140.6
B744-10	2020	-72.3	-0.1	-72.2	147.6
E170-190	1855	33.6	-0.1	33.7	204.9
B773	1028	18.3	-0.1	18.4	179.7
A330	980	55.7	0.4	55.3	220.4
MD11	537	22.6	11.9	10.7	187.6

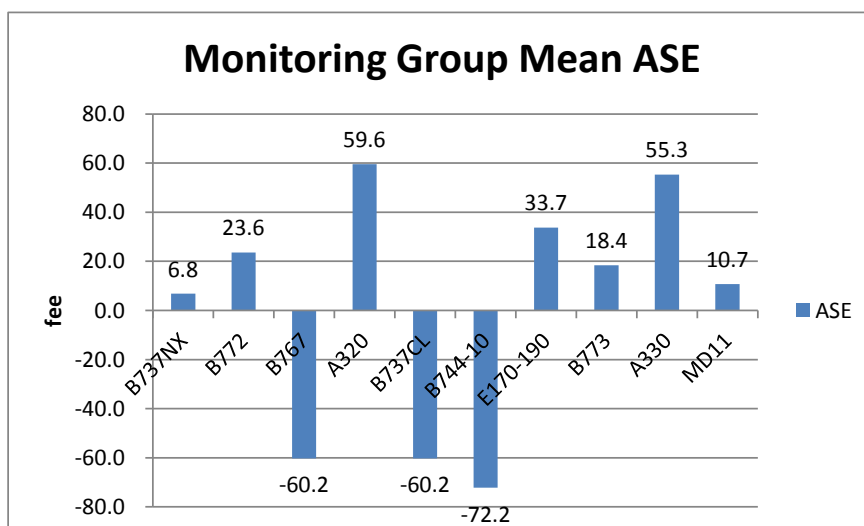


Figure 2: Mean ASE of each Monitoring Group

2.5 JASMA provides the monitoring services of aircraft height-keeping performance using Setouchi HMU. As JASMA website, if an aircraft operator would like to consult about a tailored flight plan for height monitoring, Air Traffic Management Center (ATMC) Fukuoka, Japan would coordinate five (5) weekdays prior to requesting monitoring date with concerning ATC facilities.

2.6 JASMA has conducted the height-keeping performance monitoring for ~~38~~ 49267 flights between 16 April 2012 and 15 February 2013. The summary of the successful measurement results will be shown in the 'Reports' page of the JASMA website about every 4 weeks.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

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