



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 3: Reports from Asia/Pacific RMAs and EMAs

JASMA SAFTY REPORT

(Presented by Japan)

SUMMARY

This paper presents the results of the airspace safety assessment of the Fukuoka Flight Information Region (FIR) by the Japan Airspace Safety Monitoring Agency (JASMA) for the time period from 1 January 2012 to 31 December 2013.

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 This paper provides details of the airspace safety oversight assessment undertaken by the Japan Airspace Safety Monitoring Agency (JASMA) for the RVSM implementations in the Fukuoka FIR. The report is detailed in **Attachment 1**.

2. DISCUSSION

2.1 The report shows that for the Fukuoka FIR, the target level of safety (TLS) was met for the reporting period with the assessed risk calculated as 4.34×10^{-9} .

Executive Summary

2.2 **Table 1** summarizes Fukuoka FIR RVSM technical, operational, and total risks. **Figure 1** presents collision risk estimate trends during the period from 1 January 2012 to 31 December 2012.

Fukuoka FIR – estimated annual flying hours = 1101469 hours (note: estimated hours based on Dec 2012 traffic sample data)			
Source of Risk	Risk Estimation	TLS	Remarks
<i>RASMAG 17 Total Risk</i>	4.87×10^{-9}	5.0×10^{-9}	<i>Below TLS</i>
Technical Risk	0.36×10^{-9}	2.5×10^{-9}	Below Technical TLS
Operational Risk	3.97×10^{-9}	-	-
Total Risk	4.34×10^{-9}	5.0×10^{-9}	Below TLS

Table 1: Fukuoka FIR RVSM Risk Estimates

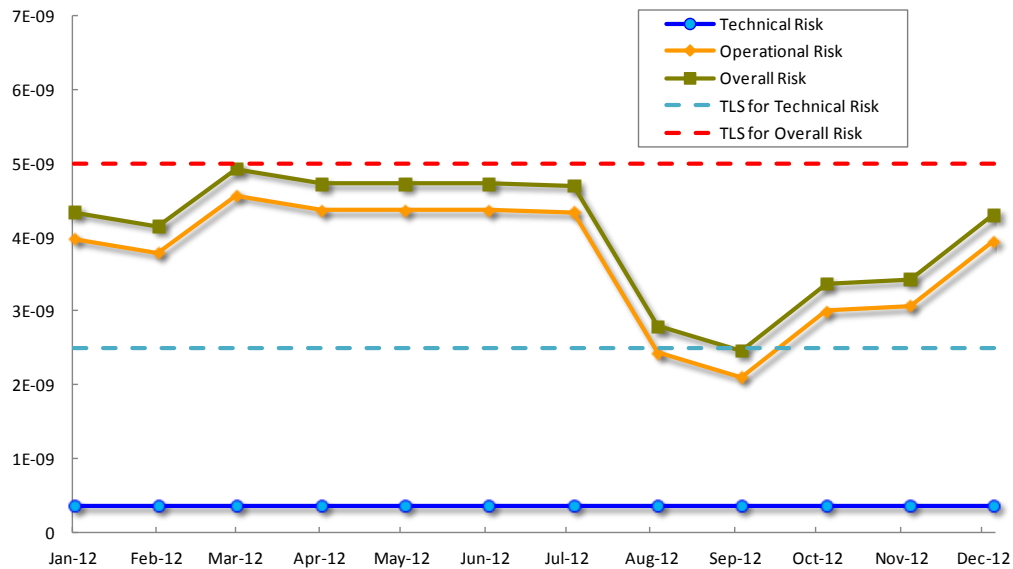


Figure 1: Fukuoka FIR RVSM Risk Estimate Trends

2.3 **Table 2** presents a summary of the LHD causes within Fukuoka FIR from 1 January 2012 until 31 December 2012.

Code	LHD Category Description	No.
A	Flight crew fails to climb or descend the aircraft as cleared	0
B	Flight crew climbing or descending without ATC clearance	2
C	Incorrect operation or interpretation of airborne equipment	2
D	ATC system loop error	3
E	ATC transfer of control coordination errors due to human factors	10
F	ATC transfer of control coordination errors due to technical issues	0
G	Aircraft contingency leading to sudden inability to maintain level	1
H	Airborne equipment failure and unintentional or undetected level change	5
I	Turbulence or other weather related cause	2
J	TCAS resolution advisory and flight crew correctly responds	9
K	TCAS resolution advisory and flight crew incorrectly responds	0
L	Non-approved aircraft is provided with RVSM separation	0
M	Other	1
Total		35

Table 2: Summary of LHD Causes within Fukuoka FIR

2.4 **Figure 2** provides the geographic location of risk bearing LHD reports within Fukuoka FIR during the assessment period.

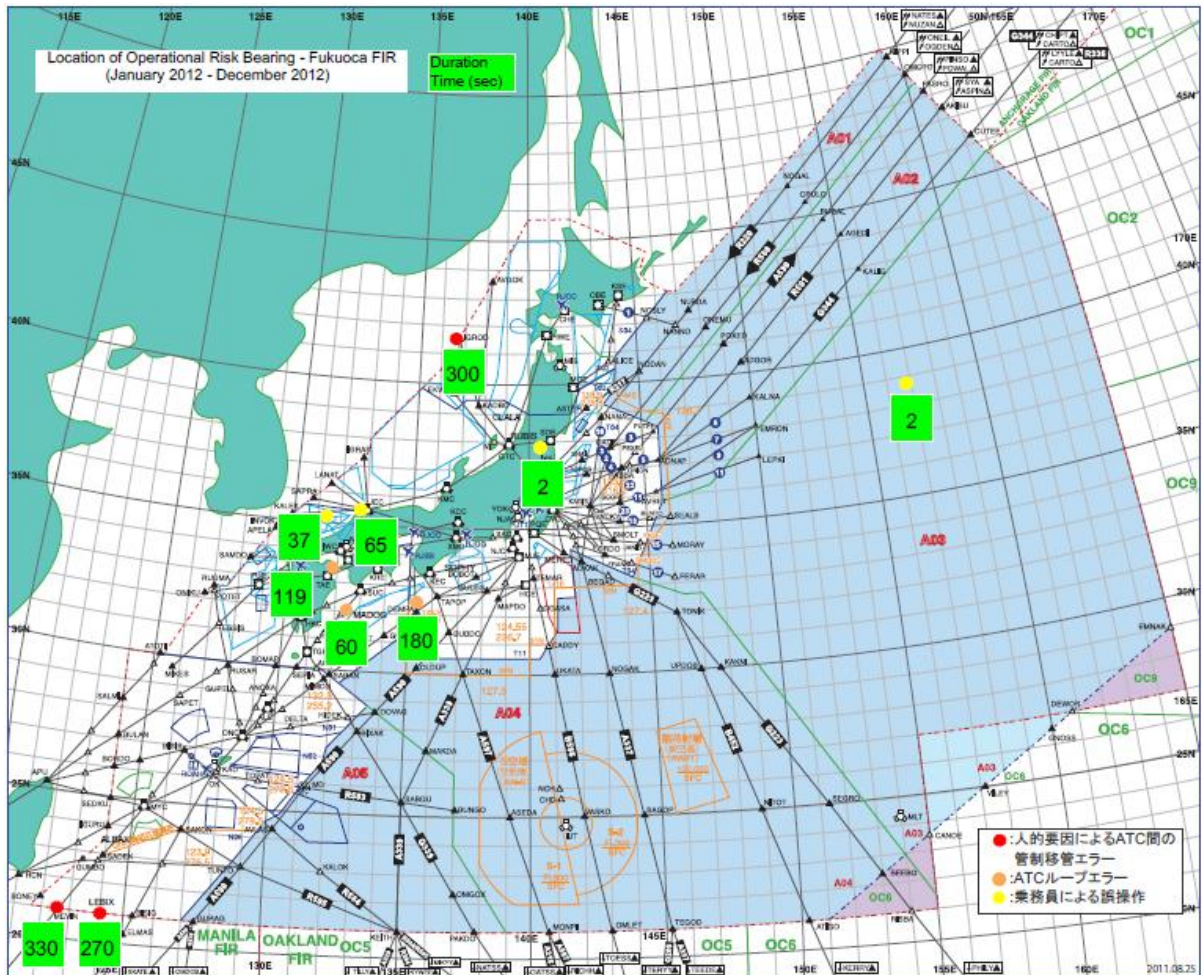


Figure 2: Fukuoka FIR – Risk Bearing LHD

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss the results of the airspace safety oversight presented in this working paper and the attached documentation.

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