



International Civil Aviation Organization

# **RASMAG STUDY ON THE EFFECT OF AIDC ON FLIGHT SAFETY**

ICAO APAC OFFICE

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SIP AIDC Seminar in Cairo



# RASMAG

Many RVSM Large Height Deviations (LHDs) are being reported to RASMAG. (2009)

LHD – Any vertical deviation of 90m/300ft or more from the flight level expected to be occupied by the flight.

The use of AIDC has long been advocated by RASMAG as a way of reducing ATC unit to ATC unit coordination errors.

# AIDC Implementation



**AIDC has been implemented among the area control centres (ACCs) of Japan and the Republic of Korea since 15 June 2009. RASMAG reviewed the effect on the occurrence of Large Height Deviations (LHDs) before and after the implementation of AIDC.**

# **RASMAG Review**

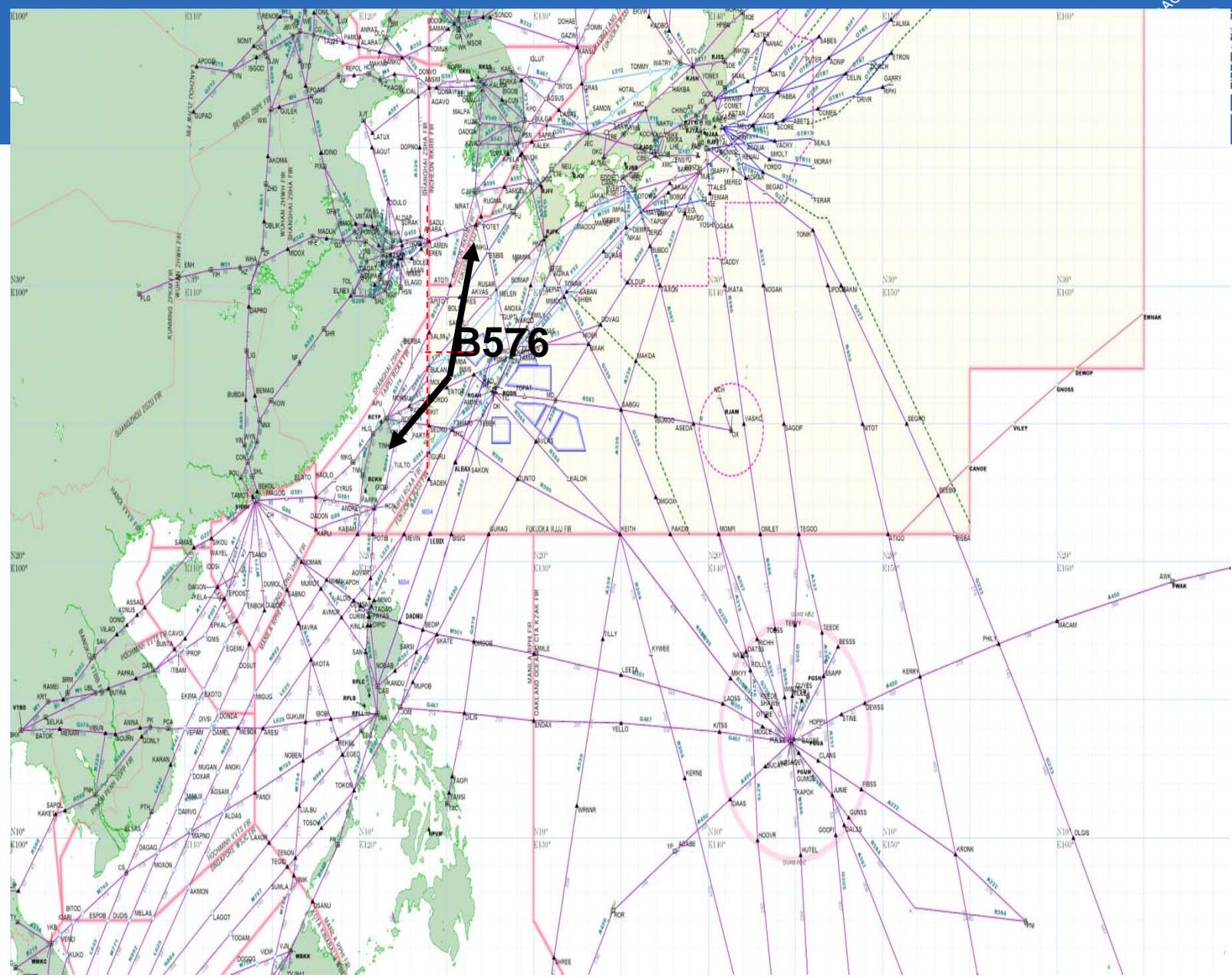
**Japan and the United States (Regional Monitoring Agency (RMA) responsible for ROK) conducted analyses on occurrences of LHD caused by ATC-to-ATC transfer errors**



# Analysis on B576

Japan and the United States focused on ATS route B576 (next slide)

B576 – bidirectional and 228 aircraft movement per day at that time



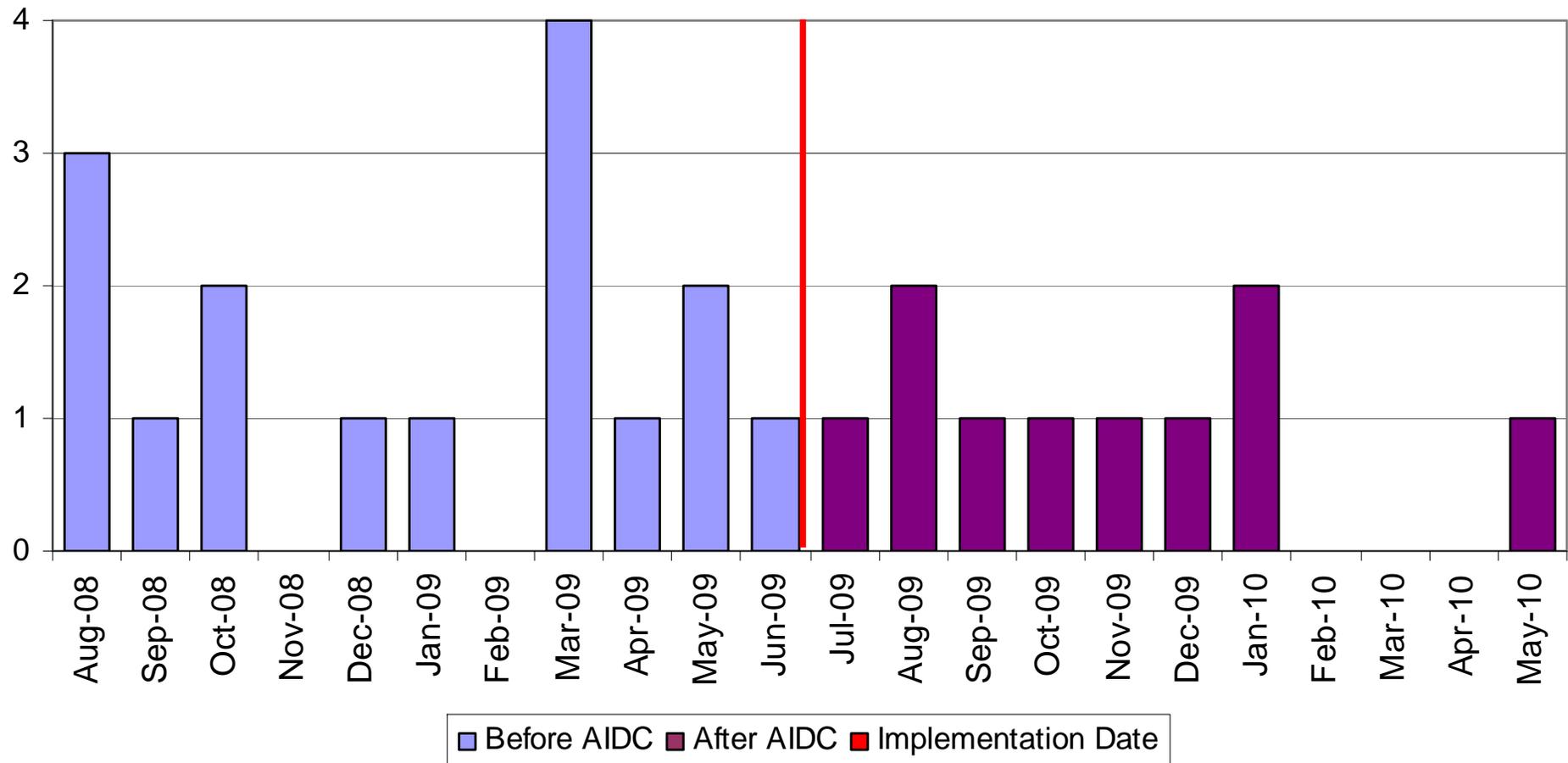
# Summary of LHD Occurrences and Duration



A total of 26 LHD events - from 1 August 2008 to 31 May 2010.

Table (next slide) shows the summary of occurrences in terms of numbers and duration.

## Number of LHD Category E/F Reports for Japan and ROK Before and After Implementation of AIDC





# Findings

**16 LHDs in 11 months before the AIDC implementation**

**vs.**

**10 LHDs in 11 months after the AIDC implementation**

**Significant reduction however not perfect**

Event Date	Source	Location of Deviation	Duration of LHD (min) in Incheon FIR	Code
21-Jul-09	Naha ACC	ATOTI (B576)	0	E
19-Aug-09	Incheon ACC	SADLI (A593)	0.08	E
23-Aug-09	Incheon ACC	ATOTI (B576)	0.08	E
21-Sep-09	Naha ACC	ATOTI (B576)	0	E
1-Oct-09	Naha ACC	ATOTI (B576)	0	E
15-Nov-09	Naha ACC	ATOTI (B576)	Unknown	E
7-Dec-09	Naha ACC	ATOTI (B576)	0	E
21-Jan-10	Naha ACC	ATOTI (B576)	0	E
26-Jan-10	Naha ACC	ATOTI (B576)	0	E
11-May-10	Fukuoka	ATOTI (B576)	Unknown	E



# Conclusions

**RASAMG – continues the study of effect of AIDC to improve safety.**

**AIDC – not perfect at the time however is a powerful tool to reduce the LHDs between ATC units.**

**States – be encouraged to implement AIDC as soon as possible.**