



International Civil Aviation Organization
The Second Meeting of South China Sea Major Traffic Flow Review Group
(SCS-MTFRG/2)
Haikou, Hainan, China, 22-24 July 2015

**Agenda Item 3: Review of the data analysis on MTFs, review route structures in SCS
Airspace and identifying priorities**

LARGE HEIGHT DEVIATION OCCURRENCES IN THE KOTA KINABALU FIR
(Presented by Malaysia)

SUMMARY

This paper presents information and data of Large Height Deviation (LHD) Occurrences between States Adjacent to Kota Kinabalu FIR in Asia/Pacific Region from 2011 till June 2015

This paper relates to –

Strategic Objectives:

A: **Safety** – Enhance global civil aviation safety

ICAO APAC - SEACG relevant meetings

1. INTRODUCTION

- 1.1 SEACG/22 meeting WP02 - The RASMAG/19 Secretariat presented an overview of safety assessment results from a regional perspective. **Figure 1** below indicated the regional Asia/Pacific regional Reduced Vertical Separation Minimum Target Level of Safety (RVSM TLS) compliance as reported to RASMAG/19 (LHD Category E).
- 1.2 Para 2.6 & 2.7 in the Final Meeting Report of the Fourth Meeting of the South Asia/Indian Ocean ATM Coordination Group (SAIOACG/4) and Twenty-first Meeting of the South-East Asia ATS Coordination Group (SEACG/21) held from 24 to 28 February 2014.
 - Southeast Asia – there were a large number of LHD hot spots associated with the Manila Flight Information Region (FIR).
 - Malaysia advised the SAIOACG4/SEACG21 meeting that the Flight Level Orientation Scheme (FLOS) transition in their airspace had caused Large Height Deviations (LHDs) because of the need for controller intervention to remedy reciprocal conflicts at the same level (refer KK FLAS on page 3).
- 1.3 In SEACG Task Force Meetings, it was mentioned LHD reports to be tackled at Supervisory level between ACCs and to submit monthly LHD reports to MAAR.
- 1.4 This Information Paper highlights the types of LHD occurred between States and future direction to reduce if not totally eliminate the occurrences.

RASMAG/19.

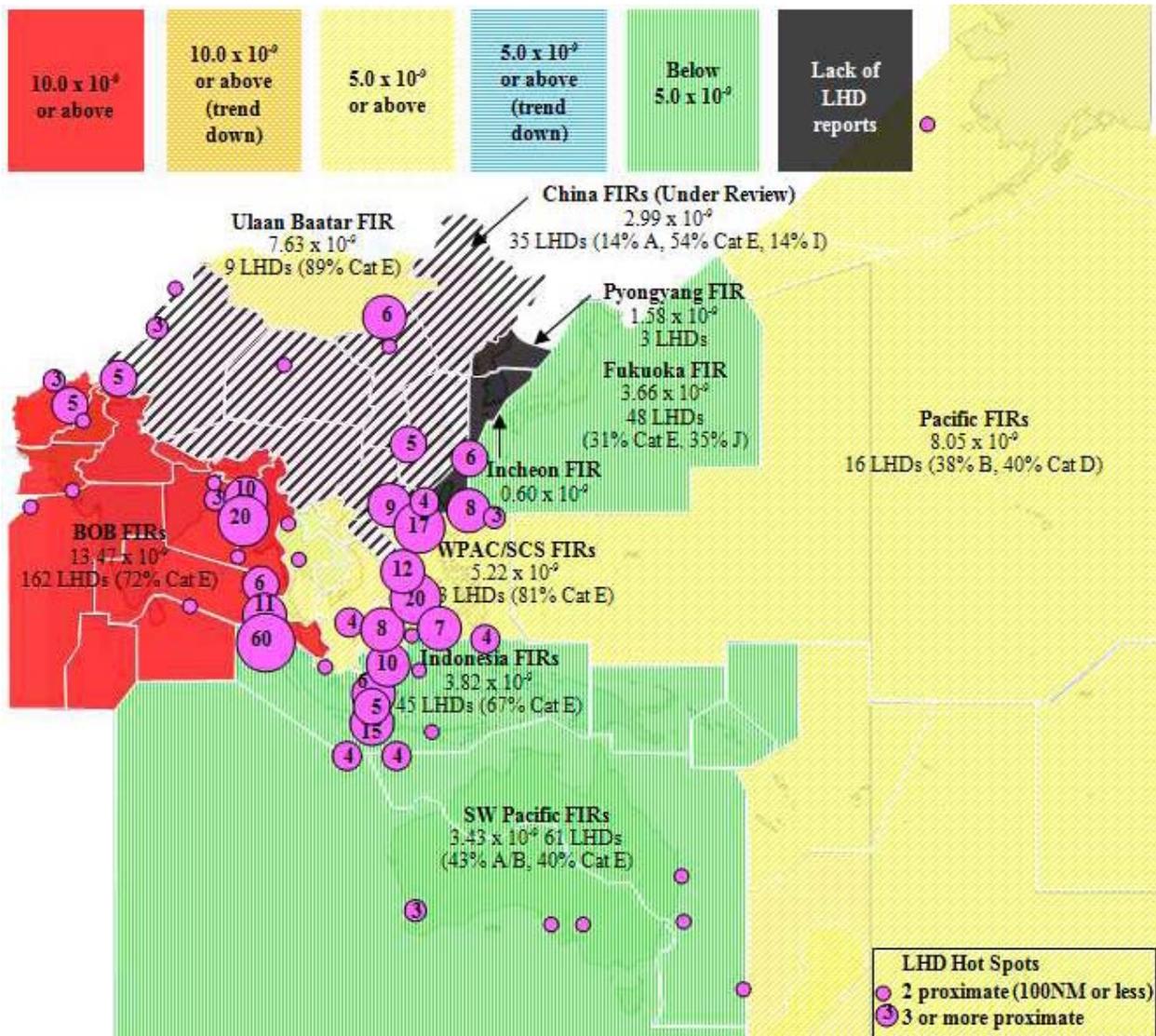


Figure 1 indicates the following sub-regional regional trends.

- **Southeast Asia** has not met the TLS, which was largely connected with two major interface problems. The first was between Indonesian airspace and Singapore and Philippines airspace, and continued internal problems within Indonesian airspace between the Jakarta FIR and the Ujung Pandang FIR.

The second was between the Philippines airspace and Singapore, Malaysian, Vietnam, Hong Kong and Japanese airspace. The increased reporting by Indonesia was a positive. The level of continued operational errors involving interfaces with both the Indonesian and the Philippines airspace remains deeply concerning

2.1 (a) Table below shows number and types of LHD Occurrences:

YEAR	Wrong FLAS level transferred	Wrong TCP estimates	No TCP Estimates	No estimate Revisions
2011	5		4	2
2012	5	2	6	4
2013	5	9	8	10
2014	11	4	5	6
2015 (June)	4	1	3	5

2.2 The Surveillance Working Group (SWG) established at the SEACG/19 had presented WP3 Appendix 1(a) to Appendix 1(g) and Point (c) of the agreed recommendations:

- ADS-B with VHF Communications should be considered in areas with lack of infrastructure. Sharing of ADS-B data and VHF Communications between adjacent States should also be considered to improve safety and efficiency.

2.3 LHD reports sent via e-mail by MAAR on 06 July 2015 regarding LHD reports involving Malaysia ACCs with recommendations in order to reduce human error:

- A review of coordination procedure between transferring and accepting units to find inherent problems with the procedure
- Sharing of surveillance data (ADS-B/Radar)
- Improving voice communication channel and/or English Proficiency between the involving units
- Urging pilots to contact accepting ATS unit before the flight passes the transfer of control point entering the FIR
- A review of ATC automation system's design of human-machine interface that will help remind the air traffic controller of the transferring ACC unit to send flight information revision to the accepting ATC unit when necessary
- Implementation of AIDC

2.4 This paper would like to draw the attention of all States about the grey areas where no surveillance coverage are available at the moment and the urgent needs to implement AIDC, Surveillance Data Sharing or ADS-B with VHF Communications and including the necessity to revise the present FLOS/FLAS System.

3. ACTION BY THE MEETING

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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