



International Civil Aviation Organization

ICAO

**Thirtieth Meeting of the Regional Airspace Safety Monitoring
Advisory Group (RASMAG/30)**

Bangkok, Thailand, 14 – 17 July 2025

Agenda Item 3: Reports from Asia/Pacific RMAs and EMAs

SUMMARY OF AKARA LHD EVENTS AND PROGRESS ON SHARING MECHANISM

(Presented by China RMA)

SUMMARY

This paper provides a comprehensive summary of Large Height Deviation (LHD) events in the AKARA Corridor for 2024, highlights the new LHD event sharing mechanism established through China-ROK bilateral coordination, and presents the performance and outcomes following the implementation of this enhanced mechanism. The analysis demonstrates the positive impact of the improved data exchange process on the timeliness and accuracy of LHD event reporting and confirmation between relevant stakeholders.

This paper is based on the Action “Consider the use of the options proposed in RASMAG/29 report or other means to assist with the timely exchange of LHD reports” in RASMAG/29 meeting.

1. INTRODUCTION

1.1 The AKARA Corridor, a critical air traffic channel connecting China, Japan, and the Republic of Korea (ROK), has historically been identified as an LHD hotspot area. Continuous monitoring and collaboration among China, ROK, China RMA, and PARMO are essential for enhancing airspace safety in this region from 2021. In 2024, significant progress was made in addressing LHD events through refined coordination mechanisms and data sharing practices.

1.2 China RMA was invited to participate in the 10th China-ROK ATM/CNS coordination meeting held in Shanghai in September 2024. At the meeting, China RMA introduced the definition of LHD, the importance of LHD reporting, the LHD events sharing mechanism, reporting reviews, and the current monitoring status of LHD events in the airspace of AKARA Corridor. China RMA also emphasized that timely and accurate sharing and confirmation of LHD events are crucial for operational safety, and called on relevant regions to continuously improve LHD events reporting and confirmation procedures.

2. DISCUSSION

2024 LHD Events Overview

2.1 In 2024, China RMA recorded a total of 84 LHD events reported by Shanghai ACC, with 81 occurring within RVSM airspace. Additionally, 42 LHD events were reported by Incheon ACC, of which 23 were within RVSM airspace. Through collaborative verification efforts, 26 events were jointly confirmed by both Shanghai ACC and Incheon ACC. The majority of LHD reports fell under Category E events, primarily involving issues such as no transfer, late transfer, or no flight level revision. Notably, some events within Chinese airspace were attributed to unidentified aircraft operations. Despite the occurrence of LHD events, the vertical risk in the AKARA Corridor has remained compliant with safety standards following the implementation of Phase 1, as transfer issues were detectable via radar

Table 1: LHD events between Incheon ACC and Shanghai ACC in 2024

Month-Year	Sharing ACC	Events Occurred in all Airspace Shared	Events Occurred in RVSM Airspace Shared	Events Confirmed
Jan-24	Shanghai	5	5	4
	Incheon	6	6	2
Feb-24	Shanghai	6	4	
Mar-24	Shanghai	11	10	
Apr-24	Shanghai	11	11	
May-24	Shanghai	14	14	
	Incheon	7	5	5
Jun-24	Shanghai	4	4	4
	Incheon	10	5	4
Jul-24	Shanghai	10	10	
	Incheon	8	1	
Aug-24	Shanghai	8	8	
	Incheon	4	1	
Oct-24	Shanghai	6	6	
	Incheon	6	4	4
Nov-24	Shanghai	8	8	2
Dec-24	Shanghai	1	1	
	Incheon	1	1	1
Total	Shanghai	84	81	10
	Incheon	42	23	16

New Sharing Mechanism Established through China-ROK Bilateral Coordination

2.2 Building on the outcomes of the 2024 China-ROK ATM/CNS Coordination Meeting and subsequent discussions, a new LHD event sharing mechanism was established between China and ROK. This mechanism, which commenced operation in early 2025, features a two-week/15-day reporting interval typically. Specifically:

- a) On the 3rd of each month, the Point of Contact (POC) of each State shares LHD events occurring between the 16th and 31st of the previous month.
- b) On the 18th of each month, the POC of each State shares LHD events happening from the 1st to 15th of the same month.

2.3 China RMA receives data from both States, validates the information (filtering out non-LHD events), and forwards the verified data to the other State's POC within two working days. PARMO is also copied throughout the process for further discussion and risk analysis purposes. This streamlined approach ensures prompt LHD sharing and confirmation, addressing previous challenges related to data expiration and untimely reporting.

Performance following Mechanism Implementation

2.4 Since the introduction of the new sharing mechanism, there has been a noticeable improvement in the timeliness and efficiency of LHD event reporting and confirmation:

- a) The shortened reporting interval has facilitated more rapid data exchange, reducing the lag time that previously hindered event confirmation within the data retention period.
- b) The designation of specific POCs for each State has enhanced accountability and streamlined communication channels, ensuring consistent and reliable data submission.
- c) The validation process conducted by China RMA has improved data quality, ensuring that only relevant and verified LHD events are shared and analyzed.

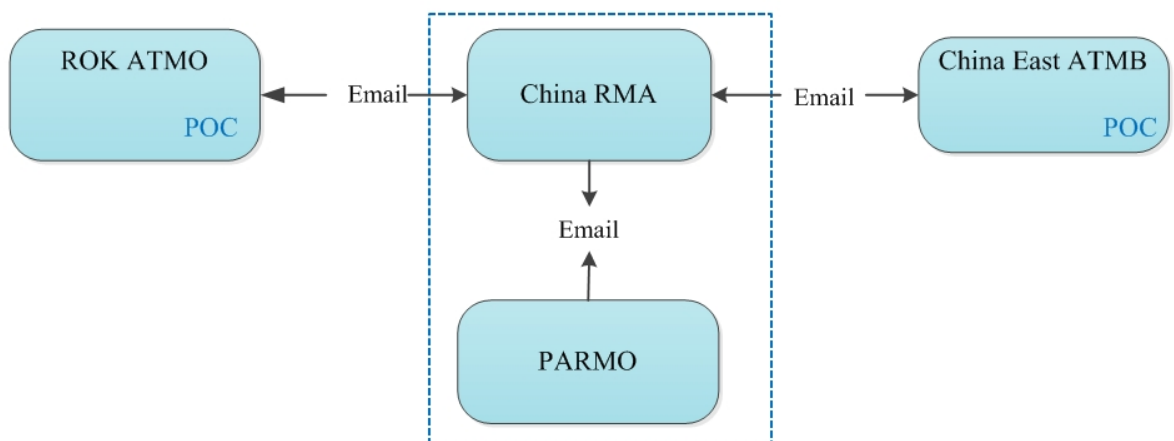


Figure 1: Improved LHD sharing mechanism

2.5 As illustrated in the data from early 2025, the number of confirmed LHD events has shown a positive trend, reflecting the effectiveness of the new mechanism in promoting collaboration and data accuracy between China and ROK.

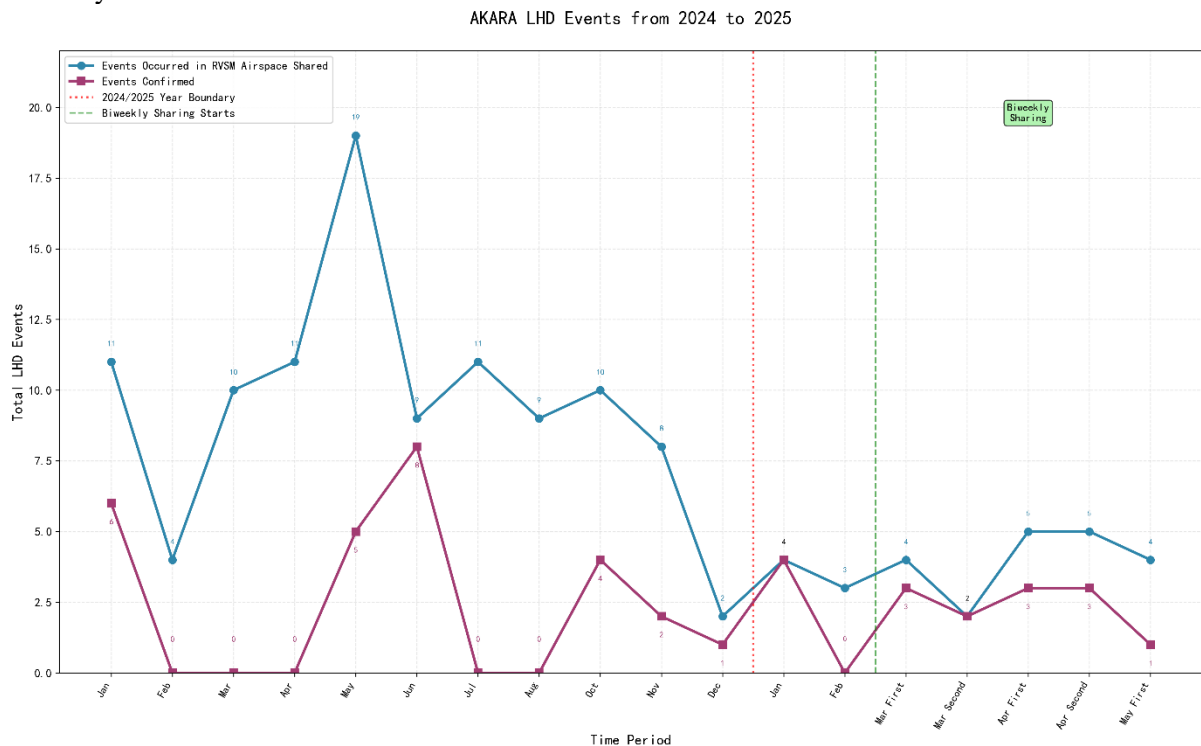


Figure 2: AKARA LHD Events from 2024 to early 2025

3. CONCLUSION

3.1 The implementation of the new LHD event sharing mechanism between China and ROK represents a significant step forward in enhancing airspace safety monitoring in the AKARA Corridor. The improved timeliness and accuracy of data exchange have contributed to more effective identification and analysis of LHD events, thereby supporting risk mitigation efforts in this airspace.

3.2 Looking ahead, China RMA will continue to strengthen cooperation with relevant stakeholders, including Shanghai ACC, Incheon ACC, and PARMO. Ongoing efforts will focus on further refining the sharing mechanism, exploring additional technical and operational improvements, and maintaining close coordination through bilateral meetings and the AKARA Corridor Technical Working Group (TWG). Through these collaborative initiatives, the goal is to continuously enhance the safety and efficiency of air traffic operations in the AKARA Corridor.

3.3 Under this mechanism, good communication is maintained, and the requirements and importance of LHD mitigation are highlighted to both sides to reduce operational issues. Efforts will continue to refine existing procedures and explore future enhancements to minimize LHD occurrences.

4. ACTION BY THE MEETING

4.1 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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