



International Civil Aviation Organization
Asia and Pacific Office

Thirteenth Meeting of the Asia Pacific Accident Investigation Group (APAC-AIG/13)

(New Delhi, India, 30-31 October 2025)

Agenda Item 4: Enhancing accident investigation capabilities

TRANSPORT SAFETY DIVISION (BRUNEI DARUSSALAM) ATTACHMENT PROGRAM WITH TRANSPORT SAFETY INVESTIGATION BUREAU (SINGAPORE)

*(Presented by Transport Safety Division, Brunei Darussalam
in collaboration with Transport Safety Investigation Bureau of Singapore)*

SUMMARY

The Transport Safety Division (TSD), Brunei Darussalam undertook an attachment program, focusing on aviation and marine safety investigation, with the Transport Safety Investigation Bureau (TSIB), Singapore from 11–28 August 2025.

The program, which was slightly more than a week, provided exposure to aviation safety investigation practices, including ICAO requirements, investigation procedures, occurrence reporting, and the use of analytical tools. It also encompassed investigation administration, record management, and capacity-building initiatives.

This collaboration strengthened TSD's technical competencies, enhanced regional cooperation, and reinforced Brunei Darussalam's commitment to international standards in aviation safety investigation.

1. INTRODUCTION

1.1 The TSD successfully completed an attachment program with TSIB, conducted under the framework of the Memorandum of Understanding (MOU) on Cooperation in Transport Safety Investigation between Brunei Darussalam and Singapore. Held from 11 to 28 August 2025, the attachment program aimed to enhance training, knowledge exchange, and capacity development in both aviation and marine safety investigation. This working paper will focus on the aviation part of the attachment program.

1.2 Aligned with ICAO Annex 13 - Aircraft Accident and Incident Investigation, the attachment to TSIB provided exposure to practical aspects of investigation procedures, administration, occurrence reporting, and the application of advanced digital analysis tools.

2. OBJECTIVE

2.1 The objective of the attachment program was to strengthen TSD’s technical knowledge and practical skills in aviation accident investigation, with particular emphasis on:

- Application of ICAO Annex 13;
- Familiarisation with occurrence reporting and investigation administration; and
- Enhancing investigative competency through knowledge transfer and practical exercises.

2.2 This initiative was anchored in the bilateral MOU between Brunei Darussalam and Singapore, which promotes collaboration in training, mutual assistance, and joint investigation efforts. It also reflected the ICAO APAC-AIG Code of Conduct on Cooperation in Civil Aviation Accident/Incident Investigation (COC), emphasising mutual support, coordination, and timely information sharing in cross-border investigations.

2.3 The attachment not only enhanced TSD’s technical capacity but also reaffirmed the shared commitment of Brunei Darussalam and Singapore to advancing regional and international cooperation in aviation safety investigation.

3. DISCUSSION

3.1 During the attachment program, the following key areas were covered in detail:

3.1.1 Organisation and Structure of an independent investigation agency

The program provided insight into the organizational framework of TSIB, including its investigative divisions, reporting lines, and coordination mechanisms. Understanding this structure offered TSD a reference model for strengthening its own institutional arrangements for aviation safety investigations.

3.1.2 Development of Investigation-Related Legislation and Manuals

TSD was exposed to the process of developing and updating aviation investigation legislation and procedural manuals in line with ICAO Annex 13 requirements. This included reviewing of mechanisms to ensure compliance with international standards and to maintain alignment with evolving safety investigation practices.

3.1.3 Notification of Occurrences and Response Actions

The attachment program detailed how TSIB manages its duty officer system, including notification handling, immediate response actions to occurrences, and coordination with relevant authorities. This model highlighted effective methods of ensuring 24/7 readiness for aviation accident and incident response.

3.1.4 ICAO Universal Safety Oversight Audit Programme (USOAP) Preparation

Training was provided on audit preparedness, focusing on how TSIB aligns its processes with ICAO USOAP Protocol Questions (PQs). TSD gained exposure to audit preparation activities, documentation requirements, and demonstration of compliance ahead of Brunei Darussalam’s scheduled USOAP audit in September 2026.

3.1.5 Investigation Operations and Use of Personal Protective Equipment (PPE)

Practical sessions emphasised the conduct of on-site investigations, including evidence preservation, wreckage handling, and the proper use of PPE to ensure investigator safety. This highlighted the importance of preparedness and resource availability for immediate deployment.

3.1.6 Intergovernmental Coordination

3.1.7 The program covered how TSIB coordinates with local agencies and international partners during an investigation. This included notification procedures, communication protocols, and adherence to ICAO Annex 13 requirements for cooperation between States in cross-border investigations.

3.1.8 State Database Management

TSD gained exposure to TSIB's database management practices for storing and analysing occurrence data. This included processes for secured record-keeping, information retrieval, and data analysis to support trend monitoring and safety recommendations.

3.1.9 Flight Recorder Readout and Analysis

3.1.10 The attachment included demonstrations of flight recorders (FDR and CVR) readout processes and subsequent analysis. Emphasis was placed on how flight recorder data supports fact-finding, reconstruction of events, and the formulation of safety recommendations.

3.1.11 Case Studies of Aviation Investigations

3.1.12 Selected past investigations were reviewed, illustrating investigation methodologies, human factors considerations, and the analysis of organisational factors. These case studies provided TSD with practical insights into the conduct and reporting of aviation safety investigations.

4. COST

4.1 There is no cost for the program itself. However, accommodation and travel expenses was fully borne by TSD.

5. ACTION BY THE MEETING

5.1 The Meeting is invited to:

- a) Note the successful completion of TSD's attachment to TSIB which strengthened TSD's technical competencies and enhanced regional cooperation.
- b) Encourage ICAO Member States and COC signatories to seek similar aviation-focused attachment programs, not limited to bilateral MOUs, but extended across ICAO Member States to promote mutual cooperation in aviation accident and incident investigations within the Asia-Pacific region; and

- c) Endorse the attachment program as a positive contribution to strengthening aviation investigation capabilities, capacity-building, knowledge exchange, and regional safety enhancement.

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