

International Civil Aviation Organization Asia and Pacific Office

# Twenty-third Meeting of the Asia Pacific Regional Aviation Safety Team (APRAST/23)

(Bangkok, Thailand, 7 to 11 April 2025)

## Agenda Item 5: Presentations – State / Industry / ICAO

#### **IATA ANNUAL SAFETY REPORT 2024**

(Presented by the International Air Transport Association)

#### **SUMMARY**

This paper highlights key findings from the IATA Annual Safety Report 2024 and provides updates on IATA's Safety Collaboration Platform.

## 1. INTRODUCTION

- 1.1 The IATA Annual Safety Report 2024 provides a comprehensive analysis of aviation safety. This paper provides a brief on annual Safety performance 2024. The complete report is available at link: <a href="https://www.iata.org/en/publications/safety-report/">www.iata.org/en/publications/safety-report/</a>
- 1.2 The IATA Accident Classification Task Force (ACTF) classified the 2024 accidents according to IATA Accident Criteria, identifying contributing factors using the Threat and Error Management (TEM) framework. Details are provided in Appendix A to this paper.

# 2. DISCUSSION

# 2.1 Summary of 2024 Safety Performance:

- 2.1.1 A total of 46 accidents met the IATA classification criteria (Note i) as determined by the ACTF, representing a 9% increase from 2023.
- 2.1.2 The all-accident rate of 1.13 per million flights (one accident per 881,541 flights) was better than the five-year average of 1.25 yet marginally higher than 1.09 in 2023.
- 2.1.3 In 2024, seven accidents were fatal, resulting in 244 onboard deaths and seven additional fatalities classified as 'other.' This marks a significant increase compared to 2023, which recorded 72 onboard fatalities.
- 2.1.4 Fatality risk rate per million sectors increased to 0.06 from 0.03 in 2023 but remained below the five-year average of 0.10. While the long-term trend continues its significant decline, falling from 0.69 in 2005 to 0.06 in 2024.

- 2.2 Accident categories in 2024, listed in order of the number of fatalities, with the number of accidents in brackets, were:
  - Other End State<sup>1</sup> (4) with 182 On-Board fatalities, plus one fatality onboard where aircraft experienced minimal damage
  - Loss of Control In-Flight (LOC-I) (1) with 62 On-Board fatalities
  - Runway Damage (1) 5 Other fatalities
  - Mid-Air Collision (1) 2 Other fatalities
    - <sup>1</sup> The Other End State is used where:
    - The information available at the ACTF meeting was not enough to determine the accident end state. For example:
      - Aircraft is missing,
    - The investigation is still ongoing, or the report is not available, and the ACTF is unable to assign an end state classification
    - The End State does not fit into other categories
- 2.3 The accident categories in 2024, listed by the frequency of non-fatal accidents, were:
  - Tail Strike (12)
  - Runway Excursion (10)
  - Landing Gear (5)
  - Ground Damage (3)
  - Runway Damage (2)
  - Off Runway Touchdown (Off or Partial) (2)
  - Hard Landing (2)
  - Other End State (2)
  - In-flight Damage (1)

# 2.3.1 Strengthening Safety with Timely, Comprehensive and Public Accident Reports

- 2.3.2 Delayed or incomplete accident reports deprive critical stakeholders (operators, manufacturers, regulators, and infrastructure providers) of essential insights needed to enhance aviation safety. IATA's analysis of 2018-2023 accident investigations reveals that only 57% were completed and published, as obligated by the Chicago Convention.
- 2.3.3 Accident report completion rates vary significantly across regions, with North Asia<sup>1</sup> leading at 75%, followed by Asia-Pacific is at 53%.

## 2.4 Accidents per region of operator:

2.4.1 Asia-Pacific (ASPAC): With seven accidents in 2024, the all-accident rate increased from 0.92 per million sectors in 2023 to 1.04 in 2024 but remained below the five-year regional average of 1.10. The fatality risk was unchanged from 2023 at 0.15. There was no dominant classification for accidents in the region, which included tail strikes, runway damage and turbulence, among others.

 $<sup>^{\</sup>rm 1}$  The ICAO APAC region is divided into IATA ASPAC and North Asia.

2.4.2 North Asia (NASIA): With a single accident, the all-accident rate increased slightly from zero accidents per million sectors in 2023 to 0.13 in 2024. This was better than the region's five-year average of 0.16 accidents per million sectors. Fatality risk remained at zero in 2024. There was only one accident involving North Asian-based operators, and it was related to a tail strike.

#### 2.5 IATA Connect: Safety Collaboration Platform

- 2.5.1 IATA Connect, launched in September 2024, is a unified digital platform for safety collaboration, accessible via website and app. With over 7,500 users worldwide, it serves as a central hub for airlines, regulators, OEMs, ground handlers, and cargo service providers, providing streamlined access to key resources, documentation, and collaborative tools. The platform facilitates peer-to-peer collaboration on Cabin, Flight, Ground, Cargo, IOSA, and regional safety issues.
- 2.5.2 APRAST participant organisations are requested to consider utilising the IATA Connect platform to monitor safety trends, discuss risk management, exchange regulatory updates and best practices. Regulators can also leverage the platform to share insights and strengthen oversight. Link to join this platform: <a href="https://www.iata.org/en/programs/safety/safety-connect/">https://www.iata.org/en/programs/safety/safety-connect/</a>

#### 3. ACTION BY THE MEETING

- 3.1 The Meeting is invited to:
  - a) Note the information contained in this paper;
  - b) Discuss the following:
    - o The Need for capacity building and collaboration to accelerate accident investigations.
    - Sensitising operators and promoting guidance material that addresses the top categories of accidents (e.g. SKYbrary Aviation article on Tail Strike: <a href="https://skybrary.aero/articles/tail-strike">https://skybrary.aero/articles/tail-strike</a>).
  - c) any relevant matters as appropriate.

**Note i:** IATA ACTF's definition differs from ICAO Annex 13; all IATA accident data aligns with the ACTF definition below: IATA defines an accident as an event where ALL of the following criteria are satisfied:

- Person(s) have boarded the aircraft with the intention of flight (either flight crew or passengers).
- The intention of the flight is limited to normal commercial aviation activities, specifically scheduled/charter passenger or cargo service. Executive jet operations, training, maintenance/test flights are all excluded.
- The aircraft is turbine powered and has a certificated Maximum Take-Off Weight (MTOW) of at least 5,700KG (12,540 lbs.).

Either

- The aircraft has sustained major structural damage adversely affecting the structural strength, performance or flight characteristics of the aircraft and would normally require major repair or replacement of the affected component exceeding \$1 million USD or 10% of the aircraft's hull reserve value, whichever is lower, or if the accident is relevant by ACTF, or the aircraft has been declared a hull loss.
- An event in which a person is fatally injured, as a result of
  - o being in the aircraft
  - o being in a collision with the operating aircraft
  - being in direct or indirect contact with any part of the aircraft, including parts which have become detached from the aircraft
  - o being in direct exposure to jet blast

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# Common contributing factors to the 2024 accidents:

The IATA Accident Classification Task Force (ACTF) classified accidents according to IATA Accident Criteria.

Additionally, ACTF members classify the factors that led to the accidents using the Threat and Error Management (TEM) framework.

In analysing TEM, the most common contributing factors to the 2024 accidents include undesired aircraft states, latent conditions, flight crew errors, environment and airline-related threats as well as the effectiveness of countermeasures, were:

- Aeroplane Flight Path Management, Manual Control was cited in 37% of the accidents
- Crew Response and Situational Awareness was a contributing factor in 37% of the accidents.
- Situation Awareness (SA) and Management of Information (MoI) were contributing factors in 35% of accidents, followed by aircraft flight path management and manual control.
- Manual Handling and Flight Control Errors was a contributing factor in 39% of accidents in 2024.
- Non-compliance to SOP (Standard Operating Procedures) was cited in 35% of accidents.
- Flight Operations: (SOPs and Checking as well as Training) were cited in 28% of the accidents
- **Abrupt Aircraft Control** was a contributing factor in **26%** of the 2024 accidents.
- Continued landing after **Unstable Approach** was cited in **26%** of the accidents.
- Aircraft Malfunction was a contributing factor in 22% of the accidents.
- Adverse weather was a contributing factor in 22% of the accidents with conditions relating to wind/wind shear/ gusty wind and thunderstorms most cited.
- Inadequate Safety Management System was cited in 13% of accidents.

Note: The percentages (%) shown for contributing factors are based on the number of accidents in each category. Since a single accident may involve multiple contributing factors, the total percentage may exceed 100%