**Regional Aviation Safety Group – Pan America (RASG-PA)**

# 67th Meeting – Pan America Regional Aviation Safety Team (PA-RAST/67) Report

Lima, Peru, 22 to 24 April 2025

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# Acknowledgements

We express sincere appreciation to those who contributed to and participated in this meeting, all of whom contributed to its great success.

Special thanks to Delta, American Airlines and Aeroméxico that provided the Meeting with pertinent and important presentations on different safety related issues.

# Acronyms

| | |
|---|---|
| ACSA | Central American Aviation Safety Agency *(Agencia Centroamericana de Seguridad Aeronáutica)* |
| AFAC | Federal Civil Aviation Agency of Mexico *(Agencia Federal de Aviación Civil)* |
| AI | Artificial Intelligence |
| ALP | ANSP Learning Portal |
| ALTA | Latin American & Caribbean Air Transport Association |
| ANAC | National Civil Aviation Agency of Brazil *(Agência Nacional de Aviação Civil)* |
| ANSP | Air Navigation Service Provider |
| APRAST | Asia Pacific Regional Aviation Safety Team |
| ASAP | Aviation Safety Action Programme |
| ASIAS | Aviation Safety Information Analysis and Sharing Programme |
| ATFM | Air Traffic Flow Management |
| BCAST | Brazilian Commercial Aviation Safety Team |
| CAA | Civil Aviation Authority |
| CADENA | CANSO ATFM Data Exchange Network for the Americas |
| CAR | Caribbean Region |
| CAG | Collaborative Analysis Group *(Canada)* |
| CANSO | Civil Air Navigation Services Organisation |
| CARSAMA | CAR/SAM Monitoring Agency |
| CAST | Commercial Aviation Safety Team |
| CFIT | Controlled Flight Into Terrain |
| CIIFRA | CANSO-IATA-ICAO Free Route Airspace |
| CNS | Communications, Navigation and Surveillance |
| DGAC | Directorate General of Civil Aviation *(Dirección General de Aeronáutica Civil)* |
| EASA | European Union Aviation Safety Agency |
| ESC | Executive Steering Committee |
| FDM | Flight Data Monitoring |
| FDX | Flight Data eXchange |
| FOQA | Flight Operations Quality Assurance |
| GPWS | Ground Proximity Warning System |
| GREPECAS | CAR/SAM Regional Planning and Implementation Group |
| GPS | Global Positioning System |
| GTE | Scrutiny Working Group |

| | |
|---|---|
| HRC | High-Risk Category |
| IATA | International Air Transport Association |
| ICAO | International Civil Aviation Organization |
| IFALPA | International Federation of Air Line Pilots' Associations |
| ILS | Instrument Landing System |
| LAP | Lima Airport Partners |
| LHD | Large Height Deviations |
| LOC-I | Loss of Control In-flight |
| LOSA | Line Operations Safety Audit |
| MAC | Mid-Air Collision |
| MMMX | Benito Juárez International Airport *(Aeropuerto Internacional Benito Juárez)* |
| NACC | North America, Central America and Caribbean |
| RASG-PA | Regional Aviation Safety Group – Pan America |
| RFI | Radio Frequency Interference |
| RNAV | Area Navigation |
| RSA | RASG-PA Safety Advisory |
| RVSM | Reduced Vertical Separation Minima |
| SAM | South American Region |
| SMS | Safety Management System |
| SSP | State Safety Programme |
| TAWS | Terrain Awareness and Warning System |
| TCAS | Traffic Collision Avoidance System |
| UPRT | Upset Prevention and Recovery Training |

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# Summary of discussions

## 1. Opening remarks and agenda approval

1.1. The co-chair representing the industry and the vice co-chair representing the States offered opening remarks, welcome and invited participants to introduce themselves.

1.2. The Meeting then proceeded to review the agenda, which was approved unanimously.

## 2. Industry Session

### Delta Airlines Presentation

2.1. Delta Airlines provided presentation P/01 concerning how to create a voluntary employee reporting programme under a just culture lens. The briefing explained how the Aviation Safety Action Programme (ASAP) was constructed and is administered in United States.

2.2. Delta also discussed the challenges of implementing a just culture in aviation, emphasising the need for regulator support to ensure non-punitive reporting. The airline highlighted the *Circular de Asesoramiento* in Mexico as a model that could be followed by other Spanish-speaking countries. The airline highlighted the many benefits that a regulator, an airline and an employee group can derive from implementing such a programme, notably, an increase in trust from the employee group driving increased event reporting and enhanced data analysis.

2.3. Delta provided details on the Event Review Committee's purpose, composition and outcomes inside an ASAP programme. Finally, the Delta employee reporting statistics were provided.

2.4. The airline then described the mitigating actions underway, both in relation to the crews and in relation to air traffic control agencies. The group discussed the importance of ASAP and the need for guidance materials to explain its benefits. It also considered using self-disclosure reports within Safety Management System (SMS) to implement ASAP. The Federal Aviation Administration (FAA)'s role in influencing regulators was noted as crucial in Mexico.

## American Airlines Presentation

2.5. American Airlines provided presentation P/02 on its voluntary, proactive, confidential/de-identified and non-punitive safety programmes as the foundational element supporting all other aspects of their operation, from product quality to schedules. This approach is centred around a SMS driven by the continuous collection and analysis of data to enable improvement and fleet-specific training, and relies on key data streams:

- ASAP, which is a voluntary, self-reporting programme capturing detailed pilot perspectives on inadvertent errors, general concerns, and events like ground operations, tail strikes, or even galley flooding, often serving as the sole data source for these incidents.
- Flight Operations Quality Assurance (FOQA) captures objective aircraft data but lacks context.
- Line Operations Safety Audit (LOSA) uses an independent observer to capture a more holistic view of threats, crew interaction, and crucially, how errors are trapped on the line, differing from check ride performance, and is a continuous program at American.
- Learning Improvement Team (LIT), described as "safety 2.0," which actively seeks to identify and understand what crews are doing correctly and what makes operations resilient.

2.6. The presentation also included a discussion on the implementation and evolution of ASAP at American Airlines, which began as a beta test in 1994 and grew into a comprehensive safety programme involving the FAA, the company, and the union. Key factors for its success include strong relationships, alignment with the FAA's compliance philosophy, and the commitment to implement corrective actions based on crew reports. The bridge between Flight Data Monitoring (FDM) and ASAP data was also addressed, emphasising the importance of integrating both sources to support effective safety measures.

2.7. Looking forward, American Airlines is exploring Artificial Intelligence (AI) to improve the accuracy and summarization of ASAP reports and sees AI's potential for automated LOSA observations as a possible "next generation" step, acknowledging the significant trust-building, especially with unions, required for such advancements.

### Aeroméxico Presentation

2.7 Aeromexico provided a presentation P/04 on its utilization of the ASAP and Fatigue Risk Management Systems (FRMS), highlighting how ASAP enhances proactive safety through voluntary reporting and how FRMS manages fatigue risks. The implementation and success of ASAP at Aeromexico were discussed in detail. Initiated in 2019, the programme saw significant growth, with 2,800 safety reports in 2021, increasing to 14,000 in 2023 and 16,000 in 2024. In 2025, there was a 13% increase compared to 2023. The collaboration with Delta and the Federal Civil Aviation Agency (*Agencia Federal de Aviación Civil* - AFAC) was noted as instrumental. Initial challenges included a lack of understanding within AFAC of the importance of the ASAP concept. Over time, a user-friendly and transparent reporting system was implemented, enabling timely responses and effective follow-up. Trust and transparency were emphasised as key factors, with more than 6,500 unique reports and 4,600 occurrences identified. Notably, over 80% of Aeromexico's pilots have participated in the programme at some point, contributing significantly to its effectiveness by helping to identify and mitigate issues that might otherwise have gone unnoticed. In addition, it was emphasized the importance of the enhanced implementation of CST (Collaborative Safety Teams). Aeromexico views these programmes as vital for improving operational safety standards throughout the Americas via enhanced collaboration.

### IFALPA Presentation

2.8 The International Federation of Air Line Pilots' Associations (IFALPA) delivered presentation P/03 on "Fostering a Positive Safety Culture", emphasizing that a strong safety culture in commercial aviation is essential. Such a culture depends on proactive hazard identification and effective risk management.

The Federation underscored the importance of non-punitive reporting systems as a cornerstone of this approach and expressed strong support for programs such as the ASAP, viewing them as critical to fostering trust and transparency within the industry.

2.9 IFALPA also advocates for collaboration among all aviation stakeholders, highlighting that a unified approach enhances the overall safety ecosystem.

## 3. Discussions resulting from industry presentations

3.1. The Meeting highlighted the essential role of voluntary reporting programmes such as ASAP, FOQA/FDM and LOSA in fostering a strong safety culture. Presentations from Delta, American Airlines, Aeromexico and IFALPA emphasised that regulatory support is critical to ensure these programmes remain non-punitive and based on just culture's principles. United States FAA's compliance philosophy was cited as a positive example, reinforcing that regulators must actively promote trust for such systems to function effectively.

3.2. Participants discussed cultural barriers in Latin America that hinder reporting, including fear of retaliation and lack of trust in institutions. Building confidence was recognised as a long-term process that can be quickly undone without a sustained commitment to just culture. Support from unions and associations was deemed vital to encourage participation and overcome scepticism among frontline staff.

3.3. Voluntarily submitted reports were acknowledged as uniquely valuable for identifying human factors and latent risks not captured by mandatory or technical data. These insights are crucial for understanding underlying causes and improving safety proactively. The integration of such data into airline SMS and State Safety Programme (SSP) was strongly encouraged, while acknowledging technical and legal challenges and gaps related to ensuring protection of this information.

3.4. Effective implementation of these programmes depends on transparent collaboration between operators, regulators and labour groups. A model of equal partnership—where safety-focused units within unions operate independently from collective bargaining—was recommended to build trust and shared accountability. Success stories, like Aeromexico's data-driven updates to unstable approach policies, illustrated the benefits of this approach.

3.5. Conclusions included concrete proposals for regional action under RASG-PA/PA-RAST: adopting Mexico's advisory circular as a regional guide, launching a pilot ASAP programme with joint leadership, and promoting data-sharing among willing airlines.

3.6. Overall, the Meeting reaffirmed the urgency of advancing safety culture in the region through collaboration and agreed on the development of a strategy proposal for the implementation of ASAP in the Pan-American region, to be submitted to the Executive Steering Committee (ESC) (**Action Item 07/2025**).

## 4. CST Status

4.1. In Brazil, the Brazilian Civil Aviation Safety Team (B-CAST) recently hosted a national seminar on safety investigation involving all Brazilian airlines, the National Civil Aviation Agency (*Agência Nacional de Aviação Civil* – ANAC), the Department of Airspace Control (*Departamento de Controle do Espaço Aéreo* – DECEA), and the Aeronautical Accidents Investigation and Prevention Centre (*Centro de Investigação e Prevenção de Acidentes Aeronáuticos* – CENIPA). The seminar clarified differences between investigations conducted under a service provider's SMS and those under Annex 13 by the State. All eight B-CAST working groups are currently active, including the recently consolidated Operational Training Group.

4.2. The Data Sharing Working Group was created in response to concerns over whether the most critical safety issues were being identified and addressed. The group concluded that setting priorities should be based on data-driven analysis rather than expert perception alone. Their work began by collecting, analysing and prioritising available safety data, especially reports and 41

Safety Performance Indicators (SPIs) defined jointly by ANAC and airlines in 2022. Challenges included inconsistencies in data collection and analysis methods, varying risk criteria, and taxonomy issues among stakeholders. The group decided not to pursue raw flight data (such as FDM or FOQA), opting instead to rely on already processed and shared datasets. A mandatory reporting programme launched in June 2023 has since produced nearly 30,000 protected reports, mostly from airlines and airports.

4.3. Three methods were used for analysis: multi-criteria analysis (limited by high-volume events such as component failures and bird strikes), an event classification aligned with European standards, and the AVA statistical methodology. Results were then compared with the perceptions of the three largest airlines, which shared their top five operational safety concerns. These insights were combined into a comprehensive list of safety issues, now being prioritised through a sector-wide airline survey, alongside efforts to clarify reporting obligations and maintain trust within the B-CAST framework.

4.4. In United States, the Commercial Aviation Safety Team (CAST) is analysing interactions between IFR and VFR flights at airports with high commercial flight traffic. The analysis will serve as the basis for safety mitigations, if necessary. Additionally, CAST recommended the United States Aviation Safety Team to capture best practices related to mitigate turbulence related injuries such as clear briefings and commands to cabin crew, seatbelt sign on at top of descend, etc.

4.5. The Peru Collaborative Aviation Safety Team (P-CAST) presented an update on its structure, objectives, and current activities. P-CAST brings together stakeholders from the civil aviation authority (DGAC), airlines, airport operators, specialised service providers, and state aviation, creating a unified platform to raise and address safety concerns. Its objective is to foster continuous improvement in aviation safety in Peru by promoting best practices, analysing hazards, and proposing action plans through a collaborative, multi-sectoral approach.

4.6. In Peru, the P-CAST has identified some priority safety concerns: operations at the new Lima airport (LIM), infrastructure at interior airports, runway incursions, bird strikes, and windshield-related issues. The most urgent focus areas are new Lima and regional infrastructure. The group has conducted joint risk assessments, participated in simulation exercises, and raised discrepancies between its risk evaluations and those of Lima Airport Partners (LAP), the airport operator. It has also voiced concern over deteriorating runway pavements, ad hoc repairs, and runway lighting limitations at several regional airports. These concerns have been formally communicated to both LAP and the Dirección General de Aeronáutica Civil (DGAC).

4.7. Operational challenges at new LIM include tight stand configurations, displaced approach lighting, and incomplete taxiway infrastructure, all of which pose safety and efficiency issues. P-CAST continues to advocate for more extensive testing before the new terminal opens. The team has earned national and regional recognition for fostering trust, improving coordination, and providing credible safety input to authorities. Its effectiveness has attracted attention from other

States, such as Chile and Colombia, interested in replicating the model. P-CAST exemplifies the value of collaborative safety groups in proactively managing complex operational environments.

4.8. In Canada, the Collaborative Analysis Group (CAG) is conducting a high-level risk assessment of ground operations using the bow tie model. Although ground operations are not currently regulated in Canada, the aim is to identify safety improvements to effectively manage risk in this type of activity. Safety enhancement initiatives in the CAG can be actions developed and adopted voluntarily by industry as well as inform initiatives by the regulator (regulations, standards, guidance, etc). The central event analysed is operational deviation, with threats grouped into airline operations, airport operations, human factors, and environmental aspects.

4.9. Consequences assessed include undetected damage, take-off with damage, undetected injury, and equipment damage. Only critical barriers within the bow tie model are being prioritised for effectiveness evaluation, based on their potential to reduce either the likelihood of a deviation or its impact. A three-day expert workshop with representatives from airlines, airports, and ground handlers (e.g., Swissport) is scheduled for May 2025. This evaluation is considered essential before proposing safety mitigations. Using the bowtie model for this type of strategic activity requires a broader systems-thinking approach to design of the bowtie, different from operator-level bow tie models. The focus remains on identifying key leverage points for impactful safety gains. Development of mitigation strategies will begin in the autumn, with the aim of completing a mitigation plan by December 2025. Potential options will be assessed for effectiveness, sustainability, and feasibility. While the full report may not be published, conclusions, safety gaps, and proposed mitigations will be shared. The team is also engaging with the Ground Handling Operational Safety Team (GHOST) and reviewing European Union Aviation Safety Agency (EASA) materials on ground operations.

4.10. The PA-RAST, for its part, ratified its commitment to fully support and accompany the CSTs that require any type of support or assistance.

## 5. Project Status Review

### Adverse Weather (Champion: IFALPA)

5.1. The work programme proposal below was developed for the implementation of actions related to adverse weather.

| Activity | Deliverable | Date | Champion |
|---|---|---|---|
| Adaptation of the document: "*Operação em Meteorologia Adversa*" from B-CAST | RASG-PA Safety Advisory RSAXX on Adverse Weather Operation | By PARAST68 | IFALPA (O. Ugarte) |
| Translation of the above | RSAXX available on English and Spanish | By PARAST69 | Secretariat |
| Promotion of the RASG-PA Turbulence Awareness video | Reach a target of 10 reproductions by RASG-PA members on their safety events | By the end of 2025 | IFALPA (O. Ugarte |
| Analysis of the Latam A320-200 Severe Hail Damage 26 Oct 2022 Accident | Analysis of the final report, including gap analysis between contributing factors and RASG-PA products | Up to 3 months after the publication of the final report | IFALPA (O. Ugarte |
| Analysis of the Analysis of the Voepass Linhas Aéreas Flight 2283 | Analysis of the final report, including gap analysis between contributing factors and RASG-PA products | Up to 3 months after the publication of the final report | IFALPA (O. Ugarte |
| Regional Conference on Turbulence in collaboration of DGAC Chile | 2 Day Regional Conference on Turbulence in Collaboration with DGAC of Chile (Santiago de Chile) | April 2026 | IFALPA (O. Ugarte |

## Analysis of Accident Reports (Champion: United States)

5.2. A proposal was presented for the PA-RAST to systematically analyse regional accidents and serious incidents to extract lessons and develop applicable recommendations.

5.3. While the group strives to be proactive, it was emphasised that it must not ignore major events occurring within its area of responsibility. Examples included the 2022 runway incursion accident in Lima, Peru, the Voepass accident in Brazil, and the hard landing accident in Toronto, Canada.

5.4. The proposal encourages High-Risk Category (HRC) teams — such as Runway Safety, Loss of Control In-flight (LOC-I), Controlled Flight Into Terrain (CFIT), and Mid-Air Collision — to perform sequence of events analyses to identify failed safety barriers and derive recommendations or highlight existing mitigations that could have prevented or reduced the severity of the event.

5.5. The intent is not to reinvestigate events, but to ensure lessons are disseminated and applied beyond those directly involved. This approach aims at uncovering hidden precursors and supporting the development of practical safety tools and strategies for the region.

5.6. The discussion led to a broader exchange on the need for PA-RAST to establish a standardised analytical process for its HRC project teams to routinely integrate other sources of intelligence, in addition to flight data shared from the Aviation Safety Information Analysis and Sharing Programme (ASIAS) and International Air Transport Association (IATA), in the safety analysis and mitigation development process. This would include incorporating both proactive and reactive information sources, such as causes and contributing factors from accident investigation reports, as well as available serious incident data. It would also involve reviewing recommendations from these reports to assess their broader applicability across the region and supporting States in their implementation. An Ad hoc group will be created to develop this process. (**Action Item 10/2025**).

### CFIT (Champion: United States)

5.7. The representatives from the CFIT working group provided the analysis resulting from the responses to the surveys provided by the States. However, due to the low response rates, the results should not be viewed as representative of the region. In general, States are aware of the RSA-07B developed by PA-RAST and reported actions taken as a result of the RSA such as updating their terrain and obstacle data. All the actions associated with this project have been completed. The team will provide a final review of this project by PA-RAST/68.

5.8. The CFIT working group will also work with Aeromexico to analyse and characterise the potential Terrain Awareness and Warning System (TAWS) alerts hotspot near Benito Juárez International Airport (MMMX). The objective is to understand the causes of the alerts and evaluate the need for mitigations.

### Language Proficiency Project (Secretariat - Roberto Sosa)

5.9. The Secretariat informed about the progress of the Language Proficiency Project. The tender process has been successfully concluded, with Embry-Riddle Aeronautical University selected as the provider responsible for developing and implementing the language training programme for air traffic controllers in the CAR/SAM Regions.

5.10. The upcoming steps include formalising the contractual agreement with Embry-Riddle and coordinating to initiate the development and delivery of the training programme in alignment with the project's objectives and timeline. Concurrently, coordination with the CAR/SAM States will be undertaken to facilitate the nomination of suitable participants for the programme, ensuring broad regional representation and engagement

5.11. This initiative represents a key milestone in strengthening air traffic services across the CAR/SAM Regions by enhancing English language proficiency among operational personnel, thereby contributing to greater safety and efficiency in international aviation operations.

## LOC-I (Champion: Boeing)

5.12. The PA-RAST LOC-I Working Group updated its ongoing work, highlighting that mitigating HRC events typically involves product changes, procedural revisions, or training. Product solutions—such as Ground-Based Warning Systems (GBWS), bank angle alerts, and global aircraft tracking—are often effective but may be retrofit-only. Procedural changes include standard operating procedures, maintenance protocols, and regulatory updates, while training focuses on cultural and operational improvement.

5.13. A key focus has been Upset Prevention and Recovery Training (UPRT), aligned with the guidance (Revision 3) from ICAO. A survey conducted with ICAO support revealed that although many States claim to require UPRT, not all meet ICAO standards. To address this, the Group organised a three-day UPRT workshop in Miami with support from the (FAA), Air Tariff Regulations (ATR), and Airbus, featuring theory sessions, simulator training, and regulator panels.

5.14. Feedback from a post-workshop survey sent to 12 participating States was largely positive, with countries like Costa Rica and Central American Corporation for Air Navigation Services (COCESNA's) Central American Agency for Aviation Safety (*Agencia Centroamericana de Seguridad Aeronáutica*, ACSA) initiating regulatory updates. Challenges remain with simulator approvals for updated UPRT criteria, prompting discussion of alternative solutions such as using corporate jets. States also requested further clarification on the differences between European Union Aviation Safety Agency (EASA) and FAA UPRT frameworks.

5.15. In response, a second workshop is being considered for February 2026, targeting States that did not attend the initial session. The LOC-I group is also pursuing related workstreams, including reviewing B-CAST practices, safety assessments on environmental conditions affecting aircraft upset events, and adverse weather phenomena such as turbulence.

## Mid-Air Collision (MAC) (Champion: Airbus)

5.16. There is an outstanding commitment for PA-RAST MAC WG to collaborate with the CAR/SAM Regional Planning and Implementation Group/Scrutiny Working Group (GREPECAS/GTE) towards addressing the risk posed by Large Height Deviations (LHDs) in Reduced Vertical Separation Minima (RVSM) airspace. At this time, no PA-RAST member (State or industry stakeholder) has stepped forward to replace IATA as the lead of the MAC WG. The leadership situation of the MAC WG will be addressed prior to the next PA-RAST meeting.

## Turbulence Video (Secretariat)

5.17. The procedure for accessing and publishing the turbulence video has been finalised by the Secretariat, with only the contracting of the cloud hosting service remaining, which will be completed in the coming weeks. Starting in May, any RASG-PA member will be able to request access to the video through the link below:

https://forms.office.com/pages/responsepage.aspx?id=QjYJ5mP7u0iGg9HV2ioS6o52XWRax4FOr3dXtasTii9UQkw5SkowWEVZODRGVERTV0tMVUhQNktBRC4u&route=shorturl

## Runway Safety (Champion: ALTA)

5.18. ALTA delivered a presentation centred on a comparative analysis of the 2022 Lima accident and the Global Action Plan for the Prevention of Runway Incursions (GAPPRI), which full version was released in 2024. The presentation outlined the circumstances of the fatal collision between an Airbus A320 and a fire truck during take-off in Lima, highlighting that the official investigation identified contributing factors such as a lack of coordination during an emergency response exercise and the use of non-standard communication. A similar, non-fatal accident in Brazil in 2024 was also cited, reinforcing the ongoing risk of runway incursions in the region.

5.19. The core of the presentation focused on comparing the Lima accident investigation recommendations with those of GAPPRI, a multi-stakeholder initiative involving over 100 institutions. Key areas of overlap included the importance of runway safety teams, standardised ICAO phraseology, surface surveillance, hotspot mitigation, training, just culture, and voluntary reporting.

5.20. While GAPPRI takes a proactive and systemic view of runway safety, the Lima report placed greater emphasis on infrastructure readiness and emergency coordination. Both, however, highlighted the critical need for cross-sector collaboration. ALTA also presented insights from the B-CAST, which is analysing GAPPR'sI recommendations and developing projects on runway incursion prevention and operational culture. Technologies such as virtual incursion barriers and cultural shifts to support go-arounds were explored.

Emerging from the discussions, a proposal for assessing the viability of a new safety advisory based on GAPPRI, integrating updated procedures and incorporating revisions to the existing advisory on runway excursion prevention has been accepted. This unified advisory would address compatibility issues between landing performance requirements and touchdown zone definitions, providing a comprehensive framework to enhance runway safety through harmonized guidance and operational practices. (Action item 12/2025). The presentation concluded by stressing the need for coordinated planning, systemic tools, and strong communication to foster a preventive safety culture.

### Translation Project (Secretariat)

With the approval of annual resources for the translation of documents, this project is considered to have been completed and will become an ongoing activity of the Secretariat. The documents to be translated will be periodically selected by PA-RAST.

## 6. RASG-PA Safety Partners Programme Updates

6.1. The States Co-chair presented a proposed strategy for the PA-RAST Safety Partner Programme, developed by an Ad hoc Group created during the previous meeting. The initiative aims to establish a mutually beneficial framework for engagement between PA-RAST and its safety partners. Key elements of the strategy include voluntary participation, leveraging partner expertise, promoting inter-airline collaboration across the Americas, and reinforcing safety-focused dialogue. One practical measure adopted was the creation of a contact list to enable direct communication among safety partners, facilitating informal exchanges and strengthening collective safety insight.

6.2. A significant discussion point centred on the terminology used when inviting safety partner input—specifically whether to use "top five safety risks" or "top five safety priorities". While many participants felt that "risks" would offer deeper insight into pressing issues across the entire airline enterprise, others noted the potential for this term to create public misperceptions, particularly in summaries shared externally. It was agreed that both terminology options hold merit, and the language used would be adapted depending on the communication context.

6.3. Operationally, the programme proposes brief annual or semi-annual sessions where States and safety partners share their top safety concerns, feeding into PA-RAST's planning cycle. These exchanges are intended to highlight emerging or persistent risks, ideally linked to high-risk categories, though broader safety management themes are also welcomed. Input from partners will also be sought to validate regional safety advisories. To maintain inclusivity, it was agreed that the latest draft of the strategy document would be redistributed to all safety partners with a 30-day window for feedback. The overarching aim remains to keep the programme flexible and collaborative, while structured enough to ensure consistent and meaningful engagement.

## 7. Safety Data Review

### CAST Presentation

7.1. CAST provided an update from the ASIAS programme that covered aggregated safety data for the period from January 2020 to December 2024 of United States' commercial operators in the Pan American airports and airspace. This data update included information related to LOC-I, Unstable Approaches, CFIT and MAC.

7.2. For LOC-I, the group reviewed data related to overbanks. It is important to note that the majority of events did not present a significant safety concern. In this context, CAST explained that the data showed that overbank events were seen more often in the climb and approach phases of flight.

7.3. During the review of unstable approaches data, it was noted that the exceeded parameters of flights that land and go around are different, which may provide a clue into crews' decision-making. High rate of descent is the parameter that is exceeded the most when crews elect to land, while for unstable approaches with go-around it is unstable pitch. However, there are multiple parameters exceeded, and these vary by altitudes when crews elect to go around. As far as trends go, unstable approaches with landing exhibit a decreasing trend for the five-year window; however, in the last 12 months the rate of unstable approaches under 500 feet that continue to land exhibit a shallower decreasing trend. The category of exceeded parameter for unstable approaches with landing includes rate of descent, thrust, airspeed and Ground Proximity Warning System (GPWS) alerts. Meanwhile, the category of parameters exceeded for unstable approaches with go-around includes configuration, altitude and Instrument Landing System (ILS).

7.4. As far as CFIT, CAST discussed a small cluster of TAWS alerts near MMMX which may be related to sink rate issues. The CFIT WG will analyse this issue with Aeromexico.

7.5. For MAC, the data showed that the rate of TCAS RA at take-off and landing remains low.

## 8. RASG-PA Matters Under PA-RAST Responsibility

### RASG-PA Safety Day

8.1. PA-RAST is considering Just Culture as a topic for the next RASG-PA Safety Day. That said, considering current deliverables, PA-RAST will be evaluating whether or not to proceed with a Safety Day in 2025. A recommendation will be provided to RASG-PA ESC prior to the annual ESC meeting to be held at the end of May 2025.

### Annual Safety Report (ASR)

8.2. Annual Safety Report – ICAO Secretariat will coordinate a call with RASG-PA ESC co-chairs, PA-RAST co-chairs/vice chairs and ICAO Regional Directors to clarify expectations related to objectives of the RASG-PA Annual Safety Report (**Action Item 06/2025**).

## PA-RAST & GTE Coordination

8.3. The GTE presented its annual safety review, focusing on LHDs data and overall safety monitoring in Reduced Vertical Separation Minimum (RVSM) airspace, specifically from flight level 290 to 410. The Group stressed the importance of wider dissemination of this data, traditionally shared only once a year.

8.4. LHDs - defined as deviations of 300 feet or more - are a key metric for assessing safety performance in RVSM airspace and are used to estimate the risk of mid-air collisions. The analysis considered factors such as time spent at incorrect altitudes, levels crossed without appropriate separation, and aircraft characteristics. Contributing factors identified include a combination of operational, human, and technical elements, with human performance remaining a predominant area of focus for safety enhancement.

8.5. ICAO sets the Target Level of Safety (TLS) in RVSM airspace at $5 \times 10^{-9}$ accidents per flight hour. While the overall performance in the CAR and SAM Regions remained within acceptable limits in 2023, certain operational trends highlighted areas requiring enhanced attention and coordination. In particular, the analysis identified recurring challenges related to air traffic control interactions across specific interface points.

8.6. In response, GTE is collaborating with relevant stakeholders to mitigate these risks through targeted initiatives. These include strengthening Communications, Navigation and Surveillance (CNS) infrastructure, enhancing coordination protocols between civil aviation authorities and Caribbean and South American Monitoring Agency (CARSAMA), and promoting improved compliance with RVSM approval processes. Additional efforts involve reviewing procedures—such as Letters of Agreement (LoAs) and airspace design—to address operational complexities and support safer cross-boundary transitions.

## PA-RAST & Asia Pacific Regional Aviation Safety Team (APRAST) Coordination

8.7. The United States provided the Meeting with a presentation highlighting the growing collaboration between the PA-RAST and the APRAST.

8.8. As the longest-standing regional aviation safety group, PA-RAST has served as a model for other regions, including Asia Pacific. Since last year, both groups have exchanged best practices, safety alerts, hazard identification, and project methodologies. APRAST has already adopted PA-RAST products, such as the Wrong Altimeter Setting (RSIA-01), and adjusted its structure, aligning with PA-RAST's WG model, in an effort to streamline management of safety risk through HRC-based task forces.

8.9. PA-RAST and APRAST held a virtual call in April 2025 where the groups reaffirmed their commitment to pursue a co-operation initiative. PA-RAST, through support of the ICAO NACC Regional office, has created a MS Teams group that will support communications and exchange between PA-RAST and APRAST for the duration of the collaborative project.

8.10. A shared area of concern is the increasing risk of lithium battery fires on board aircraft, particularly involving devices carried by passengers. APRAST has prioritised this issue following a catastrophic battery fire incident in South Korea in January 2024. Data presented indicated 110 thermal runaway events reported in 2024, most of which occurred in the cabin and frequently involved devices such as e-cigarettes. PA-RAST was encouraged to investigate whether similar trends exist within the Pan American region.

8.11. In response, the Meeting proposed the establishment of a dedicated subgroup under PA-RAST to address this issue. The subgroup's mandate will include analysing the prevalence of lithium battery fires in the Pan American Region, identifying gaps in existing practices or regulations, and developing a targeted safety product or recommendations. These outputs may incorporate relevant guidance from organisations such as the IATA and the European Union Aviation Safety Agency (EASA), with a focus on practical mitigation strategies and operational risk management—without necessarily recommending restrictions on battery carriage. (**Action Item 08/2025**).

8.12. The presentation also featured the Runway Safety Tracker, a tool developed by the APRAST based on the GAPPRI recommendations from the Flight Safety Foundation.

8.13. With over 100 runway safety recommendations, the GAPPRI can be complex to apply; the Tracker simplifies this by categorising measures into essential, intermediate, and advanced levels. Nine States in the Asia Pacific region have already completed the Tracker. (**Action Item 11/2025**). Its use was suggested as a potential opportunity for the PA-RAST region, allowing for a comparative assessment of implementation status and helping identify areas where support is needed. This aligns with PA-RAST's mission to assist States in strengthening runway safety initiatives.

## 9. Administrative aspects

### Next PA-RAST Meeting dates

9.1. Location and dates for the next meetings are as follows:

| | | |
|---|---|---|
| PA-RAST/67 | Lima, Peru | 22 to 24 April 2025 |
| PA-RAST/68 | Bogota, Colombia | 12 to 14 August 2025 |
| PA-RAST/69 | Mexico City, Mexico | 7 to 9 October 2025 |
| PA-RAST/70 | Miami, United States | 3 to 5 February 2026 |
| PA-RAST/71 | Lima, Peru | 28 to 30 April 2026 |
| PA-RAST/72 | Sao Paulo, Brazil | 18 to 20 August 2026 |
| PA-RAST/73 | Mexico City, Mexico | 6 to 8 October 2026 |

## Appendix – Open Action Items derived from past PA-RAST Meetings

| Action Items | Meeting | What | When | Who | Status |
|---|---|---|---|---|---|
| 12/2025 | RAST/67 | Assess the viability of developing a RASPA safety advisory integrating updated procedures and incorporating revisions to the existing advisory on runway incursion prevention | RAST/69 | ALTA | Valid |
| 11/2025 | RAST/67 | Coordinate with APRAST and relevant stakeholders to assess the applicability of the runway safety tracker in the Pan-American region and develop a proposal for its adaptation and use within PA-RAST | RAST/69 | ALTA | Valid |
| 10/2025 | RAST/67 | Establish a standard analytical process for HRC project teams to routinely integrate various sources of information into their work | RAST/69 | Canada with support from United States, Boeing, Brazil, ALTA, IATA, Dominican Republic, Aruba, Costa Rica | Valid |
| 09/2025 | RAST/67 | Send a query to all PA-RAST participants asking if those who are part of any of the PA-RAST working groups are concerned about continuing to participate and to the others if they are interested in joining any of the groups and which one it would be. | ESC/40 | Secretariat | Valid |
| 08/2025 | RAST/67 | Establish a dedicated ad hoc group to address the risk of lithium battery fires on board aircraft | PA-RAST/69 | United States | Valid |

| Action Items | Meeting | What | When | Who | Status |
|---|---|---|---|---|---|
| 07/2025 | RAST/67 | Develop a strategy proposal for the implementation of Aviation Safety Action Programmes (ASAP) in the Pan-American region, to be submitted to the ESC. | ESC/40 | United States with support from Canada | Valid |
| 06/2025 | RAST/66 | PA-RAST to discuss which would be the best format for the Annual Safety Report in the PA-RAST/67, in a way that a proposal could be submitted to the ESC/40 | PA-RAST/67<br><br>(To be discussed in PA-RAST/68) | PA-RAST | Valid<br>( |
| 05/2025 | RAST/66 | Airbus to study and propose an action plan to follow up on the uncertainty related to the future participation of IATA in RASG-PA | PA-RAST/67 | Airbus | Cancelled |
| 04/2025 | RAST/66 | US to coordinate with the GTE Rapporteur the establishment of the ad hoc group decided by the RASG-PA/GREPECAS joint plenary meeting | PA-RAST/67 | United States | Completed |
| 03/2025 | RAST/66 | CANSO (with support from ALTA) to review/collect and present the material available in Spanish from 2012 on phraseology | PA-RAST/68 | CANSO | Valid |
| 02/2025 | RAST/66 | US, (with support from Airbus, Canada and ATR) to draft a proposal for a process to deal with accidents | PA-RAST/67<br><br>(To be discussed in PA-RAST/68) | United States | Valid |
| 01/2025 | RAST/66 | Canada (with support from Air Canada and Aruba 0 would draft a proposal to enhance the operational engagement of partners | PA-RAST/67 | Canada | Completed |
| 25/2024 | RAST/65 | B-CAST to present data monitoring group experience | PA-RAST/67 | B-CAST | Completed |

| Action Items | Meeting | What | When | Who | Status |
|---|---|---|---|---|---|
| 24/2024 | RAST/65 | Secretariat to develop procedures for the access of the Turbulence video | PA-RAST/67 | Secretariat | Completed |
| 23/2024 | RAST/65 | Secretariat to translate GAPPRI to Spanish | PA-RAST/66<br><br>(Activity being taken by Costa Rica. To be presented at PA-RAST/68) | Secretariat | Valid |
| 22/2024 | RAST/65 | Secretariat to circulate Veer Off safety advisory | PA-RAST/66<br><br>(Postponed. Pending final revision by ALTA. To be delivered at PA-RAST/68) | Secretariat | Valid |
| 21/2024 | RAST/65 | PARAST to discuss future of Safety Partners and how to integrate it to the work programme | PA-RAST/66 | Secretariat | Completed |
| 19/2024 | RAST/65 | Adverse WX working group to present working programme for 2025-2026 | PA-RAST/66 | IFALPA | Valid – IFALPA to verify status and provide feedback. Boeing, ATR and Airbus volunteer to support the WG. Draft to be presented on the ESC |
| 18/2024 | RAST/65 | PA-RAST to determine how to better include accident analysis and discussions in its work programme | PA-RAST/66 | Secretariat | Superseded by 02/2025 |

| Action Items | Meeting | What | When | Who | Status |
|---|---|---|---|---|---|
| 17/2024 | RAST/64 | IATA to share the results of the Manual Flight Operations Survey | PA-RAST/65 | IATA | Completed |
| 16/2024 | RAST/64 | Canada to draft a template of RSAs/RSIAs | PA-RAST/65 | Canada | Completed |
| 15/2024 | RAST/64 | Adverse Weather Group to propose a procedure for the use of the Turbulence video | PA-RAST/65 | IFALPA | Completed |
| 14/2024 | RAST/64 | Secretariat to explore means to share deliverables with other Regions. | Oct 2024 | ICAO | Completed |
| 13/2024 | RAST/63 | Recommend to the ESC the hiring of a community manager for RASG-PA to manage the LinkedIn page | Oct 2024 | ICAO | Valid |
| 11/2024 | RAST/63 | OEMs comment on the question of whether it is appropriate to use TCAS to cross an active runway | By PA-RAST/64 | OEMs | Completed |
| 10/2024 | RAST/63 | Secretariat to coordinate a meeting between PA-RAST and RAST from APAC | By PA-RAST/64 | ICAO | Completed |
| 09/2024 | RAST/63 | PA-RAST to define actions related to the GAPPRI | By PA-RAST/65 | ALTA | Completed |
| 08/2024 | RAST/62 | Boeing led team to prepare the RASG-PA Safety Day 2024, including the identification of presenters and subjects | By ESC/39 | ICAO | Completed |
| 04/2024 | RAST/62 | Secretariat and CFIT Working Group champion to coordinate efforts to get States to identify airports with RNAV approaches and no ILS approaches, in order for PA-RAST to explore the prevalence of altimeter discrepancies as it relates to CFIT risk. | Update report by PA-RAST/63 | ICAO/USA | Cancelled (current data shows it is not an issue anymore) |
| 01/2024 | RAST/62 | Secretariat to present an update on the Language Proficiency Project | By PA-RAST/63 report back on RAST65 | ICAO | Valid |

| Action Items | Meeting | What | When | Who | Status |
|---|---|---|---|---|---|
| 22/2023 | RAST/61 | CFIT Team to coordinate the issuance of new surveys to the States and operators with ICAO SAM and NACC along with IATA and ALTA. The new surveys will be issued in September 2024 with results expected by March 2025. | By September 2024 Survey sent to ICAO/ALTA/IATA | USA ICAO ALTA | Completed |
| 20/2023 | RAST/61 | Distribute RSA-10 (Manual Flight Operations) to the airlines and develop a FDX monitoring metric to measure the time it takes, during approach, from the intentional automation disconnections until touchdown, on a monthly basis, in 3 levels: Level 1 = AP off; Level 2 = AP+FD off; Level 3 = AP+FD+AT off. | PARAST65 Pending response | IATA | Completed |
| 19/2023 | RAST/61 | LOC-I WG to develop a survey to the airlines to understand how they are training their flight crews on manual flight. * | September 2024 (15 dec 2024) | Boeing | Completed |
| 14/2023 | RAST/60 | Determine feasibility of converting CAST SEs 237 into an RSA | December 2025 | Boeing | Valid |
| 09/2023 | RAST/60 | Translate PA-RAST 101 presentation to Spanish | 30 Sep 2023 | IFAL | Completed |

-END-