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WORKING PAPER

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Fifteenth Meeting of the Regional Aviation Safety Group – Pan America (RASG-PA/15) and Fifth RASG-PA–GREPECAS Joint Meeting (RASG-PA–GREPECAS/5)
Mexico City, Mexico, 2 to 4 March 2026

Agenda Item 6: Status of RASG-PA Safety Improvement Projects and Initiatives

PROGRESS REPORT ON RASG-PA SAFETY IMPROVEMENT PROJECTS AND INITIATIVES

(Presented by the Secretariat)

EXECUTIVE SUMMARY

This Working Paper provides an overview of the progress achieved in implementing the RASG-PA Work Programme, including Safety Enhancement Initiatives (SEIs) and their associated Detailed Implementation Plans (DIPs), safety advisories, collaborative initiatives, and activities carried out by the Secretariat and the PA-RAST since the last Plenary. Updates include the status of ongoing regional projects, actions implemented during 2024–2025, and initiatives supporting High-Risk Categories (HRC) (Controlled Flight Into Terrain (CFIT), Loss of Control In-Flight (LOC-I), Runway Excursion (RE), Mid-Air Collision (MAC), and Adverse Weather). The paper also presents information on the Safety Partners Programme and ongoing initiatives to strengthen regional collaboration.

Action:	As presented in Section 8.
Strategic Goals 2026-2050:	• Every flight is safe and secure
References:	• *Fourteenth Meeting of the Regional Aviation Safety Group – Pan America (RASG-PA/14) Final Report* • *RASG-PA Executive Steering Committee (ESC/40) Summary of Discussions* • *Sixty Seventh Meeting of the Pan America Regional Aviation Safety Team (PA-RAST/67) Meeting Report* • *Sixty Eighth Meeting of the Pan America Regional Aviation Safety Team (PA-RAST/68) Meeting Report* • *Sixty Ninth Meeting of the Pan America Regional Aviation Safety Team (PA-RAST/69) Meeting Report*

1. Introduction

1.1 To fulfil its mandate, RASG-PA executes its projects and processes through the Pan American Regional Aviation Safety Team (PA-RAST) and the Secretariat, coordinated by the NACC and SAM Regional Offices. RASG-PA's work remains focused on data-driven risk mitigation, the development of Safety Enhancement Initiatives (SEIs) and associated Detailed Implementation Plans (DIPs), support to the Global Aviation Safety Plan (GASP) implementation, publication of the Annual Safety Report (ASR), and engagement with States and industry.

1.2 This working paper summarizes progress on active projects, initiatives completed since RASG-PA/14, and ongoing activities aligned with the RASG-PA Work Programme.

2. Structure of Project and Initiative Reporting

2.1 Detailed progress information on individual RASG-PA Safety Improvement Projects and Initiatives is provided in a set of appendices to this Working Paper.

2.2 The body of this document presents an overview of the scope and organization of the activities undertaken since RASG-PA/14, while the appendices contain the detailed status of each project, initiative and supporting activity, as coordinated through the PA-RAST and the Secretariat.

2.3 The appendices are structured to reflect the main elements of the RASG-PA Work Programme, including:

- High-Risk Category (HRC) projects (**Appendix A**);
- Other regional safety projects and initiatives (**Appendix B**);
- Collaborative Safety Teams (CSTs) (**Appendix C**);
- Safety Partners Programme (**Appendix D**);
- Safety Days (**Appendix E**);
- Safety data review and linkage to SEIs/DIPs (**Appendix F**);
- PA-RAST/APRAST collaboration (**Appendix G**); and
- RSAs and RSIAs issued during the reporting period (**Appendix H**).

3. Overview of Activities Since RASG-PA/14

3.1 Since the RASG-PA/14 meeting, RASG-PA Safety Improvement Projects and Initiatives supported by the PA-RAST have continued to progress across all established High-Risk Categories, while also expanding the Group's capacity to address emerging operational safety issues.

3.2 Activities during the reporting period included the continuation and completion of projects addressing CFIT, LOC-I, Runway Excursion, Mid-Air Collision and Adverse Weather, as well as the implementation of other regional initiatives such as the Language Proficiency Project and the RASG-PA Aviation Safety Action Programme (ASAP).

3.3 In parallel, RASG-PA continued to strengthen collaborative mechanisms through the evolution of Collaborative Safety Teams, the Safety Partners Programme, and the conduct of RASG-PA Safety Days, all of which supported data-driven analysis, safety promotion and the development of targeted safety products.

3.4 Detailed information on the status, outputs and next steps for each project and initiative is provided in the appendices to this Working Paper.

4. Conclusion

4.1 Since the RASG-PA/14 meeting, RASG-PA safety improvement projects and initiatives supported by the PA-RAST, have continued to demonstrate consistent progress in supporting regional safety objectives through a structured, data-driven approach to risk identification and mitigation. Activities conducted during this period reflect sustained engagement across established High-Risk Categories, as well as the capacity to respond to emerging operational safety concerns through the timely development of Safety Advisories and Safety Issue Alerts.

4.2 The combination of ongoing project implementation, targeted analytical work, and the issuance of focused safety products has contributed to reinforcing safety awareness and promoting practical mitigation measures among States, operators, and other stakeholders. Collectively, these efforts underscore the PA-RAST's role in translating safety data and discussions into concrete outputs that support the continuous improvement of aviation safety across the Pan American Region.

5. Suggested Actions

5.1 The Meeting is invited to:

a) Note the progress achieved in the implementation of the RASG-PA Work Programme, including ongoing projects, initiatives, and supporting activities coordinated through the PA-RAST;

b) Encourage the continued engagement of States, industry, and other stakeholders in PA-RAST activities and collaborative mechanisms supporting regional safety objectives; and

c) Provide guidance, as appropriate, on the continuation and prioritization of identified initiatives within the RASG-PA Work Programme.

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APPENDIX A
STATUS OF HIGH-RISK CATEGORY (HRC) PROJECTS

1. Status of High-Risk Category (HRC) Projects

1.1 In this reporting period since the RASG-PA/14 Meeting in 2024, several technical products had been completed, outreach activities and safety promotion deliverables, including:

1.2 Controlled Flight into Terrain (CFIT)

1.2.1 The CFIT initiative aims to reduce terrain-related risks in the region through the development of RASG-PA Safety Advisories (RSAs) and the systematic monitoring of their adoption by States and operators. Its scope includes identifying and mitigating emerging hazards, particularly those associated with non-precision and Area Navigation (RNAV) approaches, altimeter setting errors, and the accuracy and availability of terrain and obstacle data.

1.2.2 The CFIT mitigation activities were completed during the reporting period through the execution of the second survey cycle to States and operators. All surveys were finalized as planned, and the Working Group analysed the responses received to assess the implementation status of CFIT mitigation measures at the regional level. State survey responses confirmed broad awareness and consideration of *RASG-PA Safety Advisory 07B* on CFIT mitigations. Several States reported coordination mechanisms between Civil Aviation Authorities (CAAs) and national infrastructure and planning authorities, including updates to terrain and obstacle data. Compared to the previous survey cycle, States indicated progress in addressing previously identified gaps, including the update of terrain and obstacle databases.

1.2.3 Operator survey results demonstrated a high level of implementation of CFIT-related mitigations associated with Terrain Awareness and Warning System (TAWS) and ALTA operations. Responses indicated strong adoption of software update requirements, Global Positioning System (GPS)-to-TAWS integration, terrain display usage during critical phases of flight, maintenance of TAWS serviceability, crew response training, and monitoring of TAWS alerts through flight data analysis programmes. Comparative results between Latin American and Caribbean Air Transport Association (ALTA)-only operators and operators implementing both International Air Transport Association (IATA) and ALTA frameworks showed generally consistent levels of compliance across the assessed recommendations.

1.2.4 Based on the completion of the surveys and the analysis of State and operator responses, **the CFIT Working Group concluded the project.** The collected data provided a regional snapshot of CFIT mitigation implementation and informed the closure of this activity, with no additional deliverables planned under this project.

1.2.5 The Group also initiated a focused analysis of a TAWS alert hotspot identified in the vicinity of Mexico City International Airport (MMMX), with particular attention to sink rate-related alerts.

1.2.6 Key outputs produced include the updated *RSA-07B* and the publication of *RSIA-01*, a short-format Safety Issue Alert addressing wrong altimeter setting practices. In addition, a new advisory, *RSA-07C*, has been proposed to address operational scenarios in which TAWS protection may be degraded or fall outside the standard alert envelope.

1.2.7 Safety data analysis indicates that Ground Proximity Warning System (GPWS)/TAWS activation rates in the Pan American region remain low, although still slightly above the global average. A detailed review of altimeter discrepancies suggests that such errors can lead to aircraft descending below published altitudes without triggering timely alerts, representing a significant latent CFIT risk.

1.2.8 As next steps, the Working Group will complete a final review of ongoing CFIT projects. Further work will include collaboration with operators, including Aeroméxico, to better characterise the identified MMMX hotspot and to determine whether specific regional or local mitigations are required.

1.3 Loss of Control In-Flight (LOC-I)

1.3.1 LOC-I mitigation activities continue to focus on enhancing manual flight operations and promoting Upset Prevention and Recovery Training (UPRT), with particular emphasis on supporting CAAs in aligning national regulatory frameworks with ICAO provisions. Workshops and surveys were conducted to assess current practices and identify gaps in training and oversight.

1.3.2 During the reporting period, key deliverables included the revision of *RSA-10* on *Manual Flight Operations* and *RSA-09* on *Automation Policy*. An airline survey was also deployed to evaluate trends in manual flight training, automation use, and associated operational policies. In addition, a specialised Upset Prevention and Recovery Training (UPRT) workshop was conducted in October 2024, combining theoretical instruction with simulator-based training for State flight operations inspectors.

1.3.3 Safety data reviews identified overbank events as a recurrent precursor to LOC-I, frequently occurring during initial turns after take-off or when aircraft overshoot a localiser. Inputs from Collaborative Safety Teams, notably the Brazilian CST (BCAST), were incorporated, including the use of a turbulence safety bulletin as a reference model for potential regional adaptation.

1.3.4 A follow-up UPRT workshop is planned for February 2026, specifically targeting States that were unable to participate in earlier sessions, with the objective of broadening regional coverage and strengthening inspector competencies.

1.4 Runway Excursion (RE)

1.4.1 RE activities remained focused on the regional implementation of the Global Action Plan for the Prevention of Runway Incursions (GAPPRI), along with ongoing work to adapt Brazilian safety enhancements into a regional advisory addressing runway veer-off risks.

1.4.2 The initiative continues to involve close coordination with industry and international partners, including ALTA, the Flight Safety Foundation, and Airports Council International – Latin America and Caribbean (ACI-LAC). Pilot implementations of GAPPRI-related measures are being explored at major regional hubs such as Bogota and Lima, with the aim of validating tools and processes before wider regional deployment.

1.4.3 Analysis of recent occurrences, including the 2022 accident in Lima and a 2024 incident in Brazil, has highlighted persistent safety issues related to non-standard phraseology, deficiencies in coordination during emergency response, and systemic risks associated with extended Line Up and Wait (LUAW) periods. Distractions within control towers were also identified as contributing factors.

1.4.4 The future work plan activities of this Initiative include the deployment of a GAPPRI Tracker to monitor the status of safety recommendations across the region, as well as the development of a unified regional safety advisory that consolidates lessons learned from recent accident and incident investigation reports.

1.5 Mid-Air Collision (MAC)

1.5.1 The MAC Project aims to reduce the risk of MAC in the region through the identification and mitigation of emerging hazards contributing to loss of separation between aircraft. To support this approach, the MAC project team has adopted PA-RAST's new standardized analytical process and is undertaking a systematic review of MAC related events that includes: any MAC accident investigation reports published (globally), any preliminary information on accidents related to MAC (globally), any information on recent serious incidents related to MAC (Pan America Region). This event analysis for hazard identification will be supplemented with Traffic Collision Avoidance System Resolution Advisories (TCAS RAs) data provided by the Aviation Safety Information Analysis and Sharing (ASIAS) and IATA, as well as safety intelligence from RASG-PA Safety Partners identifying specific TCAS RA hotspots that are of concern in the Region. In-depth analyses are planned for TCAS RA events in terminal and complex airspace environments, including Mexico City, São Paulo and Bogota.

1.5.2 Concurrently, the MAC project team is working in close and ongoing collaboration with the GREPECAS Scrutiny Group (GTE) to support joint analysis of Large Height Deviations (LHDs) in Reduced Vertical Separation Minima (RVSM) airspace. The group has drafted a RASG-PA Safety Advisory (RSA) based on an RSA created by the Asia-Pacific Regional Aviation Safety Team (APRAST), which addressed a similar issue. The RSA provides recommendations for air operators, Flight Information Regions and Oversight bodies intended to help reduce human coordination errors identified as a key contributor to LHDs in RVSM airspace. A second RSA, focused on unauthorized RVSM operations is also in development. Finally, with the support of ASIAS and IATA, the MAC team is conducting an analysis intended to highlight possible heightened risk of collision by combining LHD and TCAS-RA data to identify areas where both indicators converge.

1.5.3 Regional TCAS RA rates are generally higher than the global average across all flight levels. While some reductions have been achieved through airspace redesign and procedural improvements, further mitigations are required to address persistent risk areas.

1.5.4 This MAC Project will continue with the coordination with GREPECAS.

1.6 Adverse Weather (AWx)

1.6.1 The Adverse Weather work programme has evolved from an initial focus on turbulence to a broader Adverse Weather Operations Working Group within RASG-PA, reflecting the increasing operational impact of severe weather phenomena. Turbulence continues to be identified as the leading cause of in-flight injuries globally.

1.6.2 Key deliverables produced include a Turbulence Awareness video for airline use and a turbulence-focused micro-learning course made available by the Civil Air Navigation Services Organization (CANSO) through the Air Navigation Service Provider (ANSP) Learning Portal. In addition, a Brazilian safety bulletin addressing operations in adverse weather conditions was adapted for regional dissemination.

1.6.3 Discussions within the group emphasise the importance of real-time data-sharing platforms, such as IATA's Turbulence Aware, to enhance situational awareness and operational decision-making. Recent accident and serious incident reports, including icing-related events and severe hail damage cases, are being analysed to strengthen regional defences against adverse weather risks. An RSA on turbulence is being drafted to raise the profile of key recommendations to reduce the risk of injury from turbulence encounters.

1.6.4 Looking ahead, a Regional Conference on Turbulence is scheduled to take place in Chile in April 2026. The full Adverse Weather work programme for the 2025–2026 period will be presented for consideration at the in person RASG-PA/15 plenary meeting (March 2026).

1.6.5 Building on the work completed to date, the Adverse Weather Operations Working Group will focus on strengthening collaborative engagement with key regional and international stakeholders, including airline associations, air navigation service providers, flight crew organizations and ICAO bodies. Through structured interaction with organizations such as ALTA, CANSO, IFALPA and ICAO, the Working Group will review existing procedures, operational experiences, reported events and safety reviews related to turbulence and other adverse weather phenomena. The objective of this activity is to identify common challenges, capture lessons learned and support the development of future recommendations aimed at enhancing regional coordination, information sharing and operational mitigation strategies related to adverse weather risks.

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APPENDIX B
OTHER REGIONAL SAFETY PROJECTS AND INITIATIVES

1. Other Regional Safety Projects and Initiatives

1.1 Language Proficiency Project

1.1.1 The Language Proficiency Project continues to progress as a key regional initiative aimed at mitigating operational risks associated with air traffic services communication in the Pan American Region. Following the approval of the project and the allocation of RASG-PA resources, the Secretariat successfully concluded the tender process, resulting in the selection of Embry-Riddle Aeronautical University as the academic provider responsible for the development and delivery of English language training for air traffic controllers in the CAR and SAM Regions.

1.1.2 During the reporting period, the project transitioned from the procurement phase into the scholarship recipient designation phase. In parallel, a strategic reorganization of the project team was undertaken to strengthen governance arrangements and optimize programme oversight, ensuring clearer roles and more effective coordination between the Secretariat, the Regional Offices and the training provider.

1.1.3 Information provided to PA-RAST indicates that coordination activities with Embry-Riddle have been completed to align expectations, programme structure, and delivery timelines. A State Letter was issued inviting States to nominate eligible candidates, with the objective of ensuring balanced regional representation and alignment with the project's safety objectives. The final identification of scholarship beneficiaries is expected to be completed by late February 2026, subject to the confirmation of nominations received.

1.1.4 Based on the current implementation schedule, the formal commencement of training is planned for March 2026. This timeline allows for the completion of administrative arrangements and ensures that programme execution remains fully aligned with the intended objectives, namely the enhancement of English language proficiency among operational air traffic services personnel and the associated reduction of communication-related safety risks in international operations.

1.1.5 PA-RAST will continue to monitor the implementation of the Language Proficiency Project and receive periodic status updates from the Secretariat, with progress reports informing RASG-PA of key milestones, participation levels, and any emerging implementation considerations.

1.2 RASG-PA ASAP Project

1.2.1 Following the approval of the Aviation Safety Action Program (ASAP) initiative at the RASG-PA ESC/40 meeting in May 2025, the PA-RAST is actively executing its regional implementation strategy to address persistent gaps in Just Culture and non-punitive reporting. The overarching goal of this initiative is to enhance the safety intelligence of PA-RAST by leveraging safety data derived from these programmes to identify and mitigate regional safety risks. This is achieved through strategic partnerships fostered by the assistance and technical support provided by PA-RAST to States and service providers in establishing their own voluntary reporting frameworks. The project is led by the RASG-PA ASAP Working Group (RAWG), a joint government-industry body co-chaired by the US FAA and Aeroméxico. Key milestones achieved during the reporting period include:

- Implementation Guidance: Development of the *RASG-PA ASAP Implementation Guidance* document, which provides a structured framework for CAAs, service providers, and employee groups/labor unions to establish voluntary reporting programmes.
- Standardized Tools: Creation of a Memorandum of Understanding (MOU) template and an Event Review Committee (ERC) framework to ensure consensus-based, non-punitive processing of safety reports.

1.2.2 A targeted pilot project is currently underway to refine the implementation guidance through practical application:

- Colombia: A primary pilot has been launched involving key Colombian stakeholders such as the Aeronautica Civil and Avianca.
- Brazil: The Brazilian CAA (ANAC) has expressed formal interest as a future candidate for the programme.

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APPENDIX C
COLLABORATIVE SAFETY TEAMS (CSTs)

1. Collaborative Safety Teams (CSTs)

1.1.1 Collaborative Safety Teams (CSTs) remain a cornerstone of the RASG-PA safety strategy, providing an effective mechanism to foster structured collaboration between States, industry, and service providers in support of data-driven risk mitigation. CSTs facilitate the sharing and analysis of safety information, enabling the identification of safety trends and the development of targeted mitigation actions aligned with regional priorities.

1.1.2 During the reporting period, PA-RAST continued to monitor and support the evolution of existing CSTs in the Pan American Region, including both State-led and subregional initiatives. These teams have contributed to the analysis of operational safety issues, supported the implementation of SEIs, and strengthened coordination between regulatory authorities and industry stakeholders. Updates provided to PA-RAST indicate increased maturity of several CSTs, reflected in more structured working arrangements and clearer alignment with identified High-Risk Categories.

1.1.3 In Line with the CST Strategy and associated guidance material, PA-RAST maintained its role in promoting the establishment of new CSTs where safety data indicate potential benefits and where interest has been expressed by States and industry. Support activities during the period focused on awareness, the exchange of best practices, and the clarification of scalable CST models adaptable to different national and subregional contexts.

1.1.4 The outcomes of CST activities continue to inform PA-RAST discussions and contribute to regional safety monitoring, including inputs to safety advisories, Safety Issue Alerts, and project prioritization in support of relevant SEIs and DIPs.

1.1.5 Notably, the Peru Collaborative Aviation Safety Team (PCAST) demonstrated the efficacy of the CST model through its proactive role in the transition to the new Jorge Chávez International Airport (LIM). In anticipation of the June 2025 operational launch, PCAST—with the active participation of the Peruvian Civil Aviation Authority and the Air Navigation Service Provider—developed a comprehensive suite of safety bulletins and advisory materials. These publications addressed critical operational safety considerations for both domestic and international operators during the transition phase. This collaborative effort was further recognized when the United States Commercial Aviation Safety Team (CAST) published an information sheet for US operators based on these contributions, underscoring how mature local CST initiatives can effectively mitigate risks associated with large-scale infrastructure changes and inform international safety best practices. PA-RAST will continue to encourage broader participation in CST activities and to strengthen linkages between CST outputs, regional safety data analysis, and the RASG-PA Work Programme.

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APPENDIX D
SAFETY PARTNERS PROGRAMME

1. RASG-PA Safety Partners Programme

1.1 The RASG-PA Safety Partners Programme continues to serve as an important mechanism to strengthen collaboration between RASG-PA, industry stakeholders, international organizations, and other partners in support of regional aviation safety objectives. The Programme facilitates voluntary engagement by partners in activities aligned with the RASG-PA Work Programme, contributing expertise, operational insight and resources to support the implementation of SEIs and associated DIPs.

1.2 During the reporting period, Safety Partners actively contributed to PA-RAST activities through participation in meetings, technical discussions, data-sharing initiatives, and project-specific workstreams. These contributions supported the analysis of safety risks, the development of safety advisories and guidance material, and the advancement of mitigation strategies addressing High-Risk Categories, including CFIT, LOC-I, RE, MAC, and Adverse Weather.

1.3 Contributions from Safety Partners during this period emphasized the maturation of just culture based voluntary safety reporting frameworks and the harmonization of operational procedures. Key inputs included the benchmarking of Aviation Safety Action Programmes (ASAP), which demonstrated the value of "sole-source" reporting in identifying latent hazards—such as localized infrastructure malfunctions and undetected technical exceedances—that are otherwise invisible to flight data monitoring alone. Furthermore, partners shared critical lessons learned from the transition toward international communication standards (e.g., ICAO distress terminology) and the management of airline-specific engine-out procedures. These contributions highlighted the systemic need for enhanced coordination between flight crews and Air Traffic Control (ATC) during abnormal operations. Collectively, these inputs have reinforced the "Just Culture" model within the region, supporting the RASG-PA ASAP Initiative currently in progress for other operators to transition from reactive reporting to proactive, data-driven risk management. In addition, two new Safety Partners formally joined the Programme during 2025, further strengthening industry engagement and expanding the range of operational perspectives available to support PA-RAST safety analyses and initiatives.

1.4 The Programme has continued to enhance coordination between States and industry by providing a structured framework for cooperation, consistent with ICAO safety management principles and the non-punitive sharing of safety information. Inputs to PA-RAST from Safety Partners have complemented State-based data and analyses, reinforcing a comprehensive and operationally relevant understanding of regional safety issues.

1.5 Information presented to PA-RAST indicates that the Safety Partners Programme has contributed to improved alignment between regional safety priorities and ongoing industry initiatives, while promoting efficiency and avoiding duplication of efforts. The Programme has also supported knowledge transfer and the dissemination of best practices across the Pan American Region.

1.6 RASG-PA, through PA-RAST and the Secretariat, will continue to promote the Safety Partners Programme as a means to sustain active engagement, strengthen collaboration, and support the effective implementation of the RASG-PA Work Programme.

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APPENDIX E
SAFETY DAYS

1. RASG-PA Safety Days

1.1 The RASG-PA Safety Days continue to serve as an important forum for focused regional dialogue on priority operational safety issues. They facilitate the exchange of safety information among States, industry and international organisations, reinforce the collaborative approach underpinning the RASG-PA safety strategy, and complement the analytical and project-based work carried out within PA-RAST.

1.2 Safety Days are conducted in conjunction with RASG-PA Plenary Meetings and are structured around a single high-priority safety topic, allowing for in-depth discussion informed by regional safety data and expert analysis. This format has proven effective in supporting targeted exchanges on issues directly aligned with regional safety priorities and High-Risk Categories.

1.3 The first edition of the RASG-PA Safety Day, held during the RASG-PA/13 Plenary Meeting, focused on turbulence risk. As a follow-up to that event, PA-RAST was tasked with developing a dedicated work plan to address its conclusions and recommendations. Key outcomes during the reporting period included the finalisation of a multilingual turbulence awareness video for airline use. To ensure compliance with licensing and copyright requirements, the Secretariat established a formal procedure for members to access and stream the video through a password-protected platform. These activities were subsequently integrated into a broader Adverse Weather Operations work programme for 2025–2026, which also includes the adaptation of existing safety bulletins into regional advisories and the organisation of a Regional Conference on Turbulence scheduled to take place in Chile in April 2026.

1.4 The second edition of the RASG-PA Safety Day was conducted on 19 November 2024, in parallel with the RASG-PA/14 Plenary Meeting and was dedicated to the prevention of Mid-Air Collisions (MAC). The event brought together operational, regulatory, and industry perspectives to examine contributing factors, data trends and mitigation strategies, with particular attention to TCAS Resolution Advisories in high-altitude airspace and Large Height Deviations in RVSM operations.

1.5 The discussions held on the RASG-PA Safety Day, regarding MAC, supported deeper technical exchanges and generated a set of conclusions and recommendations that were formally incorporated into the PA-RAST MAC Working Group work programme. As a direct outcome, the group initiated the development of two new RASG-PA Safety Advisories addressing risks associated with LHD and unauthorised RVSM operations, in close coordination with the GREPECAS Scrutiny Working Group.

1.6 Outcomes from the Safety Days have consistently informed subsequent PA-RAST discussions and contributed to the identification of areas requiring further analysis, awareness actions or follow-up within existing Safety Improvement Projects. They have also complemented other thematic discussions held in PA-RAST meetings, including those related to turbulence and adverse weather, which continue to emerge as persistent safety challenges in the region.

1.7 RASG-PA Safety Days have proven effective in strengthening engagement with industry, promoting a shared understanding of priority safety risks, and fostering trust and transparency in the exchange of safety information. Through the Secretariat and PA-RAST, RASG-PA will continue to use Safety Days, when needed to focus efforts on a specific safety priority, as a complementary mechanism to support data-driven discussions, informed decision-making, and the effective implementation of the RASG-PA Work Programme.

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APPENDIX F
SAFETY DATA REVIEW AND LINKAGE TO SEIs/DIPs

1. Safety Data Review and Linkage to SEIs/DIPs

1.1 Safety data review remains a core element of the RASG-PA risk management framework and continues to underpin the identification, prioritization, and monitoring of SEIs and their associated DIPs. Safety data analyses conducted under the PA-RAST provide the basis for assessing regional safety trends, emerging risks and areas requiring targeted mitigation.

1.2 During the reporting period, safety data reviewed by PA-RAST drew on multiple sources, including information presented in the RASG-PA Annual Safety Report and data shared through collaborative mechanisms. These reviews supported ongoing monitoring of High-Risk Categories, including CFIT, LOC-I, RE, MAC, and Adverse Weather, and informed discussions on the effectiveness and relevance of existing initiatives.

1.3 The outcomes of safety data reviews were used to validate the continued relevance of active SEIs/DIPs, to support adjustments where necessary, and to identify opportunities for additional analysis, awareness actions, or follow-up activities. This process ensured that mitigation efforts remained aligned with observed risk patterns and operational realities in the Pan American Region.

1.4 Safety data reviews also contributed to the development and refinement of safety products, including safety advisories and Safety Issue Alerts, and supported coordination with Collaborative Safety Teams and Safety Partners, reinforcing a consistent, data-driven approach across RASG-PA activities.

1.5 By maintaining a structured linkage between safety data analysis and the implementation of SEIs/DIPs, RASG-PA, and PA-RAST continue to ensure that regional safety actions are evidence-based, coherent, and aligned with the objectives of the RASG-PA Work Programme.

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APPENDIX G
PA-RAST/APRAST COLLABORATION

1. PA-RAST/APRAST Collaboration

1.1 During the reporting period, PA-RAST and APRAST significantly strengthened their inter-regional partnership through coordination meetings and the exchange of safety intelligence. This collaborative framework aims to enhance safety by identifying emerging trends affecting multiple regions, reducing duplication of research, and sharing mitigation strategies. Key areas of focus included the systematic sharing of safety advisories.

1.2 A tangible outcome of this partnership was the successful cross-regional adoption of safety materials. Following the identification of serious cabin fire incidents in the APAC region linked to portable power banks, APRAST published a Safety Advisory on Lithium Battery Fires in Passenger Cabins. Recognizing the global relevance of this threat, PA-RAST subsequently adapted and published this material as a RASG-PA Safety Issue Alert (RSIA). This adoption demonstrates a commitment to the timely dissemination of safety information to air operators and regulators across both the Pan American and Asia-Pacific regions.

1.3 Another element of the collaboration is the sharing of the implementation strategy of the Aviation Safety Action Programme (ASAP) within the Pan American Region, a strategy presented by PA-RAST during the APRAST/24 meeting. This initiative, led by a joint Government-Industry working group co-chaired by the US FAA and Aeroméxico, with support from Delta Air Lines, focuses on fostering Just Culture based voluntary safety reporting programmes.

1.4 Moving forward, PA-RAST and APRAST have identified several technical areas for continued joint development.

1.5 Exploring the implementation of an enhanced data-driven approach to identify global operational risks, as outlined in S*ingapore's A42-WP/175*.

1.6 Leveraging APRAST’s newly developed "GAPPRI Tracker" to assess regional implementation of industry guidance for aerodromes and air operators.

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APPENDIX H
RSAs AND RSIAs ISSUED DURING THE REPORTING PERIOD

1. RSAs and RSIAs Issued in 2025

1.1 In 2025, the PA-RAST continued to support regional safety risk mitigation through the development and issuance of targeted RASG-PA Safety Advisories (RSAs) and RASG-PA ASIAS Safety Issue Alerts (RSIAs). These products were developed in response to identified risk trends, recent occurrences, and emerging operational safety concerns, complementing ongoing activities related to established High-Risk Categories and other safety initiatives. The issued RSAs and RSIAs aim to raise awareness, provide practical guidance, and support States, operators, and other stakeholders in the implementation of effective mitigation measures. The following RSAs and RSIAs were issued in 2025:

- **RSA-07C – Controlled Flight into Terrain (CFIT):** This revised Safety Advisory updates previous CFIT-related guidance, incorporating recent data analysis, lessons learned from regional and global occurrences, and current operational practices. RSA-07C reinforces the continued relevance of CFIT as a High-Risk Category in the Pan American Region and highlights mitigation strategies related to flight crew procedures, training, terrain awareness systems, and operational oversight. The advisory supports States and operators in strengthening existing CFIT prevention measures and sustaining positive safety trends.

- **RSA-12 – Runway Safety (Veer-offs):** RSA-12 addresses runway veer-off events, with a particular focus on contributing factors such as runway surface conditions, aircraft performance considerations, and operational decision-making during take-off and landing. The advisory consolidates information derived from data reviews, PA-RAST discussions, and industry inputs, providing actionable recommendations to mitigate runway excursion risks. This product contributes to ongoing runway safety efforts and complements other initiatives under the Runway Excursion High-Risk Category.

- **RSIA-02 – Lithium Battery Fires in Passenger Cabins:** RSIA-02 was issued to raise awareness of the risks associated with lithium battery fires in aircraft passenger cabins, particularly in light of recent events observed outside the region with potential relevance to Pan American operations. The alert emphasizes the hazards posed by lithium batteries carried by passengers, outlines typical initiation and propagation scenarios, and highlights the importance of preventive measures, crew preparedness, and passenger awareness. The RSIA supports timely risk awareness and encourages stakeholders to review and reinforce existing mitigation practices.

- **RSIA-03 – GNSS Interference:** RSIA-03 addresses the increasing concern related to Global Navigation Satellite System (GNSS) interference and its potential impact on flight operations, navigation performance, and situational awareness. The alert summarizes observed interference scenarios, associated operational risks, and the possible effects on aircraft systems and procedures. It also underscores the importance of reporting, monitoring, and coordination among States, ANSPs, and operators to better understand and mitigate GNSS interference risks in the region.

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