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

PA-RAST/62 Meeting Report

Miami, 6 to 8 February 2024

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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.

We appreciate the hospitality of IATA for once again allowing us to hold the meeting in their office.

Special thanks to American Airlines and Air Canada that participated in the meeting and contributed with information on safety.

Acronyms

ALTA	Latin American & Caribbean Air Transport Association
AMOC	Alternative Methods of Compliance
ASIAS	Aviation Safety Information Analysis and Sharing Program
BCAST	Brazilian Commercial Aviation Safety Team
CAA	Civil Aviation Authority
CAST	Commercial Aviation Safety Team
CFIT	Controlled Flight Into Terrain
CST	Collaborative Safety Team
FDX	Flight Data eXchange
GASP	Global Aviation Safety Plan
GTE	GREPECAS Scrutiny Working Group
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IFALPA	International Federation of Air Line Pilots' Associations
LOC-I	Loss of Control In-flight
MCAST	Mexican Collaborative Safety Team
RSA	RASG-PA Safety Advisory
RE	Runway Excursion
TCAS	Traffic Collision Avoidance System

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Summary of discussions

1. Opening remarks and agenda approval

1.1 Julie Mailhot IATA's Regional Director, Operations, Safety & Security for the Americas, gave a welcome speech and highlighted the work of PA-RAST, especially its products and the potential benefits for operational safety in the region.

1.2 The meeting then proceeded to review the agenda, which was approved unanimously. It was agreed, however, that it would be advisable to review the data on runway incursions, to determine if there is anything that PA-RAST should do about.

2. Industry Session

American Airlines Presentation

2.1 American Airlines gave a presentation on safety events related to "incorrect altimeter settings", and its safety implications on approaches other than an ILS approach. The airline shared some best practices and mitigation actions.

2.2 Following the presentation, the meeting held an interesting discussion on the topic. It was mentioned that it would be good to try to incorporate IFATCA into the PA-RAST meetings, given the importance of the work of air traffic controllers.

2.3 It was also commented that it is essential to monitor the problem of language proficiency in the region. In this regard, it was recalled that there is already a project approved by the ESC and financed by the RASG-PA to mitigate the risks associated with language proficiency. The Secretariat offered to present a project status report during PA-RAST/63 in Lima.

2.4 Finally, it was agreed that PA-RAST would prepare a Safety Alert on the subject, to alert airlines and air navigation service providers about the risks associated with incorrect altimeter setting. A working group led by the USA was formed.

2.5 Finally, IATA was requested to review the information on wrong altimeter setting in FDX and present comments at the next meeting.

3. Discussions on Turbulence

PA-RAST Actions on Turbulence

3.1 During the RASG-PA/13 Meeting, and in consideration of the outcome of the RASG-PA Safety Day, the Plenary Meeting entrusted PA-RAST with the development of a work plan on this topic for the year 2024.

3.2 In this sense, it was agreed to create a working group led by IFALPA, with the participation of Airbus, ALTA, Boeing, and COCESNA.

3.3 The meeting defined that the first deliverable related to Turbulence risk mitigation will be the development of an awareness video, inspired by a similar product prepared by American Airlines.

3.4 The working group will present the progress of this task during the next meeting.

IATA Turbulence Aware

3.5 IATA presented a demonstration of its Turbulence Aware platform, which is available to its partners, and emphasized that to obtain more accurate data, it is necessary that more airlines are part of this program.

4. CST Status

4.1 The US CAST is in a process of transformation; however its essence will not be affected. An important approach with the BCAST of Brazil allowed the identification of good practices.

4.2 In Peru, the conditions are in place to establish the CST before the end of March 2024. There is strong commitment from service providers and State organizations. The Terms of Reference are currently being reviewed for its operation.

4.3 In Chile, the Chilean Cooperation Group was established in November 2023.

4.4 The Mexican SSP operational Safety Committee had its first meeting in January 2024 with a total of 255 participants.

4.5 In Colombia the ANSP is carrying out risk analysis activities, but these are disconnected from the State SSP.

4.6 Canada's CAG has made steady progress over the last year and a half. It is currently working on mitigating risks associated with unruly passengers, with the collaboration of airlines, law enforcement, TC enforcement program, Canadian Airport Council, and other stakeholders. Additionally, necessity for legislative changes related to data protection continue to be a sensitive issue for airlines.

4.7 In Central America, COCESNA was trying to implement a regional CST in 6 States, under the name PASOC. Costa Rica, for its part, is working on the reactivation of its CST.

4.8 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. HRCs and other projects status review

CFIT (Champion: FAA)

5.1 The CFIT Working Group reported that after publishing the second version of CFIT RSA, the next steps is for the group to issue the second survey to RASG-PA States and Operators in September 2024.

5.2 These surveys will help assess how the RSAs are being implemented in the region. The States and Operators must return the surveys by March 2025.

5.3 In the meantime, the CFIT Working Group will explore the prevalence of altimeter discrepancies as it relates to CFIT risk specially at airports with RNAV approaches and no ILS approaches.

5.4 RASG-PA States representatives are requested to identify airports that fit this description and provide them to the CFIT Working Group champion. Additionally, States and Operators are requested to share their MSAW alerts (States) and TAWS alerts (operators) at these airports to assist the working group with the issue risk assessment.

LOC-I (Champion: Boeing)

5.5 RSA-10 (Manual Flight Operations - MFO): the RSA was revised and is pending ESC reapproval. Next steps: Send the RSA for ESC approval (ICAO SAM), advertise the revised RSA to the airlines in the region (IATA/ALTA).

5.6 UPRT Workshop: it was informed that the FAA has a one-day, no-cost workshop available to the CAAs. It is mostly academics but can also provide flight simulation maneuvers if a flight simulator can be made available. ATR offered to host the event in Miami and provide simulator slots to the workshop in late August, early September. Manufacturers agreed to provide UPRT related presentations in the following 1-2 days. Next steps: Contact FAA to check calendar availability and start planning the agenda (Boeing, ATR, Airbus).

5.7 CAST SE 236 (Improving pilot go-around decision making and outcomes) and SE 237 (Improving Pilot-Controller Communications Within the Constructs of Go-Arounds) study to understand if those initiatives are applicable in the region.

5.8 An Airline Survey was developed to assess how UPRT, Manual Flight Operations (RSA-10) and Automation Policy (RSA-09) is evolving in the region. Next steps: IATA/ALTA to deploy the survey to the airlines after the release of the revised RSA-10.

Runway Safety (Champion: ALTA)

5.8 ALTA presented the current stage of GAPPRI's work.

- Volume I – Recommendations was released in December 2023 and was made available to everyone. There are 127 recommendations distributed by different stakeholders:
    - Aerodrome Operators
    - Air Navigation Service Providers

- Aircraft Operators
- Manufactures
- States and Regulators
- R&D recommendations for States, international organizations, and the industry

- The Volume II is under construction.

5.9 The GAPPRI Volume II aims to provide guidance and explanatory materials (GEMs), and related best practices for the recommendations listed in Vol I. The production process for GAPPRI Volume II will involve two review cycles and two plenary meetings to consolidate the reviews. The plenary meetings are scheduled on 22 & 23 February in Istanbul and on 14, 14 May in Sofia.

5.10 All stakeholders are strongly recommended to carry out a gap analysis based on the recommendations.

5.11 The complete GAPPRI is expected to be released in June 2024.

5.12 The BCAST Safety Enhancement related to Runway Excursion (Veer-off) is expected to be ready for PA-RAST comments by end of March 2024.

5.13 ALTA invited all attendees to participate in the ALTA Aviation Safety, Flight Ops & Training Summit to be held in Lima, Peru, on June 18-20, 2024.

MAC (Champion: IATA)

5.14 The main indicator for the Mid-Air Collision (MAC) project team, is the Traffic Collision Avoidance System – Resolution Advisory (TCAS-RA). The focus of the data reviewed/monitored is on High Altitude TCAS-RA events which showed an increase of events recorded above FL290 in some of the regions FIR's compared to the last 3yrs analysis from the Global Aviation Data Management (GADM) program and data presented from the Aviation Systems Information Analysis and Sharing (ASIAS) system which also showed high altitude events.

5.15 The MAC group on behalf of Regional Aviation Safety Team – Pan America (RASG-PA) aims to continue its collaboration with the GREPECAS Scrutiny Group (GTE) as part of the joint coordination group efforts to identify trends and propose mechanisms to review/analyze data which includes Large Height Deviation (LHD's) events in RVSM airspace and non-RVSM airspace to address the risk of Mid-Air Collision in the region's airspace.

5.16 The Joint coordination (ANS Safety/Regional Safety) group will aim to develop a schedule of meetings that will have a combination of virtual meetings and 2 in-person meetings to be held at the regional ICAO offices with the request from the group that GTE and PA-RAST members actively participate in dedicated sessions of the regional groups scheduled regular meetings.

5.17 The meeting was informed that the anticipated outcome of the 2 in-person meeting will be a deeper dive into the TCAS-RA and LHD information/data while the group works during virtual

meetings to develop and deliver the key deliverables for the year which include, working papers on GTE/PA-RAST coordination, RASG-PA Safety Advisory (RSA) and Safety bulletin/best practice guide.

5.18 Next steps:

- Review and feedback on RSA in March and anticipated approval in April 2024.
- Development and review of Safety Bulletin/Best Practice Guide in March with anticipated discussion on approval by April 2024.

Translation Project

5.19 The champions of each project presented their list of documents to be included in the translation project. The secretariat will present the final list, along with the draft project during the PA-RAST/63 meeting for acceptance, and subsequent sending to the ESC for approval and execution.

RASG-PA Safety Partners Program

5.20 The program has been submitted to the RASGPA ESC and is awaiting approval. Once approved, the PA-RAST (PA-RAST/63) must define a promotion strategy to recruit airlines.

PA-RAST TORs Update

5.21 The PA-RAST Terms of Reference (ToR) Ad-hoc group that was created during PA-RAST/61 completed an in-depth update of the PA-RAST ToRs and content was shared with PA-RAST members ahead of PA-RAST/62. All updates developed by the PA-RAST ToR Ad-hoc group were reviewed and discussed during the meeting. The revised ToRs were approved, with minor changes to be implemented. Once the changes discussed are reflected in the document, the new PA-RAST ToRs will be submitted to RASG-PA ESC for awareness and approval.

Runway Safety Teams

5.22 It was recalled that there is a current RASG-PA project on RST run by the NACC and SAM Offices. The Secretariat offered to provide a progress report during the next meeting.

5.23 ACI-LAC, for its part, mentioned that there is a problem of "acceptance" by regulators, in the sense that the management of this equipment should be in charge of the AAC, when in reality it is expected to be in charge of the operator of the aerodrome. Some proposals were also presented to be considered by the upcoming AGA meeting.

5.24 In relation to issues related to wildlife, it was commented that the current reporting structure is not effective, and that it is mainly concentrated on impacts with birds. Likewise, the proposals that will be brought to the AGA meeting were mentioned.

5.25 Finally, ACI LAC reported on other elements that will be discussed at the next AGA meeting, among them, the promotion of aerodrome certification, the promotion of the GRF and the publication of ACR/PCR.

6. RASG-PA Safety Day

6.1 The meeting commented on the success of the 2023 RASG-PA Safety Day and agreed on the need to make an event at least as relevant. The participants agreed to maintain the format of addressing a single topic in depth. The meeting agreed that RASG-PA Safety Day 2024 will be based on Mid Air Collision, based on the results of the data analysis.

6.2 A commission led by Boeing, and supported by USA, IATA, Airbus and ALTA, was created to identify potential topics and presenters.

7. Safety Data Review

CAST Presentation

7.1 The US CAST representative provided an update from the ASIAS program that covered aggregated safety data for the period from November 2018 to October 2023 of US commercial operators in the Pan American airports and airspace. This data update included information related to Loss of Control in Flight (LOC-I), Unstable Approaches, Controlled Flight Into Terrain (CFIT) and Midair Collision (MAC).

7.2 For LOC-I, an event involving a maneuvering stall warning was reviewed. Based on the information provided, it seemed that the aircraft stall protection may have not activated as expected and it was suggested that when events such as this occur, aircraft should be inspected for equipment malfunction.

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 descend is the parameter that is exceeded the most when crews elect to land. However, there are multiple parameters exceeded and these vary by altitudes when crews elect to go around. While the rate of unstable approaches that land seem flat for the 5 year period, the trend for 2023 shows an increasing trend between 1000ft-500ft and decreasing trend below 500ft.

7.4 During the meeting, we identified the top 5 airports with the highest rate in 2023 and analyzed the parameters that were exceeded the most at each of those airports. To provide more granularity, ASIAS will breakdown the unstable approach rates by runways at airports of interest.

7.5 During the CFIT data review it was noted that there were no GPWS Mode 1, Mode 2 or EGPWS alerts in 2023.

7.6 For MAC, the data showed that the rate of TCAS RA at takeoff and landing remains low. The rate of TCAS RA above FL is higher compared to the rate of RA in FL180 - FL290 altitude band.

Further segregating the data, the rate of RA above 10,000 ft is higher than the rate of arrivals and departures below 10,000 ft.

IATA FDX Presentation

7.7 IATA presented aggregate, deidentified flight safety information from the Flight Data Exchange (FDX) program. It included information on CFIT, LOC-I, MAC, UA, Turbulence, and GPS signal loss. The information presented compared rates in the region with worldwide rates for the three year period from January 2021 through November 2024.

7.8 CFIT: The information shows that GPWS activation events in the region are low (approximately one per thousand flights) but slightly higher than the world average.

7.9 LOC-I: All indicators for LOC-I precursors (pitch and roll events) are extremely low in the region with similar rates to the world average. Most events recorded in this time period were attributed to corporate jet operations, with no regional jet, narrowbody or widebody events.

7.10 MAC: TCAS RA rates in the region are higher than the world average at all flight levels. Most events occurred during descent, below FL100.

7.11 UA: Regional unstable approach rates are higher than the world average, with attitude and speed deviations being the primary triggers of unstable approaches, followed by ILS deviation, descent rate, and airplane configuration.

7.12: Turbulence: This is a new metric in FDX, available for a shorter period than the others, from July 2021 through November 2023. Event rates per thousand flights fluctuate between 0.1 and 0.3 and are similar to the world average.

7.13 GPS signal loss: Events were recorded between July 2021 and November 2023. The event rate reached its peak during the third quarter of 2022 and show a significant decline after June of 2023. They are currently lower than the world average.

8. Administrative aspects

8.1 Location and dates for the next meetings are as follows:

PA-RAST/63	Lima, Peru	23 to 25 April 2024
PA-RAST/64	Montreal, CA	13 to 15 August 2024
PA-RAST/65	Mexico City, Mexico	8 to 1o October 2024
PA-RAST/66	Miami, USA	11 to 13 February 2025
PA-RAST/67	Lima, Peru	22 to 24 April 2025

Appendix A – Action Items derived from PA-RAST/61 and past PA-RAST Meetings

Action	Meeting	What	When	Who	Status
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	Valid
07/2024	RAST/62	Secretariat to send the translation project to the ESC	By ESC/39	ICAO	Valid
06/2024	RAST/62	MAC team to develop and review of Safety Bulletin/Best Practice Guide by April 2024.	By April 2024	IATA	Valid
05/2024	RAST/62	MAC Team to review and get feedback on RSA in March 2024 and anticipated approval in April 2024	By April 2024	IATA	Valid
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	Valid
03/2024	RAST/62	IFALPA led team to work on the production of a turbulence related video	By the RASG-PA Safety Day 2024	IFALPA	Valid
02/2024	RAST/62	USA led team to develop a Safety Alert on wrong altimeter setting	By PA-RAST/63	USA	Valid
01/2024	RAST/62	Secretariat to present un update on the Language Proficiency Project	By PA-RAST/63	ICAO	Valid
25/2023	RAST/61	Secretariat to present RASG-PA Safety Partners Program Termos of Reference for comments.	Before PA-RAST/62	ICAO	Due
24/2023	RAST/61	Secretariat to coordinate with Project Champions a list of documents to be translated.	Before PA-RAST/62	ICAO	Completed
23/2023	RAST/61	IATA to provide a draft RASG-PA RSA with recommendations to mitigate MAC risk.	By the end of 2023	IATA	Completed
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	USA	Valid
21/2023	RAST/61	Boeing to coordinate with SRVSOP/SAM possible demand for a cost-free FAA workshop on UPRT.	By September 2024	Boeing	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.		IATA	Valid
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. *	After reviewed RSA10 is published	Boeing	Valid
18/2023	RAST/61	Develop a survey to the airlines to understand if they are adopting this automation policy (RSA-09) *		Boeing	Valid
17/2023	RAST/60	MAC/GTE to begin work on the development of a Safety Bulletin	September 2024	IATA	Valid
16/2023	RAST/60	Adapt BCAST Safety Enhancement to prevent veer offs and turn it into an RSA	As soon as BCAST doc is available	ALTA	Valid
15/2023	RAST/60	Get BCAST approval to translate adverse weather Safety Bulletin and turn it into a RSA	October 2023	Boeing	Valid
14/2023	RAST/60	Determine feasibility of converting CAST SEs 236 and 237 into an RSA	December 2023	Boeing	Valid
13/2023	RAST/60	Conduct a simulator survey to verify if they can support the new UPRT requirements	December 2023	Boeing	Valid

12/2023	RAST/60	Conduct an airline survey to understand if they are adopting an automation policy	December 2023	Boeing	Valid
11/2023	RAST/60	Identify available WX data that can be analyzed to develop a proposal for an Adverse Weather Project	By PA-RAST/61	IATA/Dom. Rep.	Complete
10/2023	RAST/60	Publish PA-RAST 101 presentation on website	As soon as it is avail.	ICAO	Complete
09/2023	RAST/60	Translate PA-RAST 101 presentation to Spanish	30 Sep 2023	IFALPA	Complete

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