International Civil Aviation Organization
Regional Aviation Safety Group - Pan America (RASG-PA)

WORKING PAPER

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25/08/26

Forty First Regional Aviation Safety Group — Pan America Executive Steering Committee Meeting (RASG-PA ESC/41)
Mexico City, Mexico, 2 to 3 September 2026

Agenda Item 5: Regional Safety Performance and Implementation Support

STRENGTHENING THE STRATEGIC ENGAGEMENT OF STATES IN PA-RAST AND RASG-PA TO IMPROVE REGIONAL SAFETY RISK MANAGEMENT

(Presented by ALTA-IATA)

EXECUTIVE SUMMARY

The RASG-PA governance model is based on effective collaboration between States, industry and ICAO to identify risks, analyze safety information and develop mitigation measures aimed at reducing operational risk in the Pan American Region.

Analysis of the last six PA-RAST meetings shows that the regional system continues to rely on a small group of States that are recurrently involved in technical activities. At the same time, the industry maintains a sustained effort through the contribution of operational data, technical experts, risk studies, specialized resources and leadership of multiple regional initiatives.

While state participation has evolved positively in recent years, it still does not fully reflect the operational diversity, volume of air operations and distribution of priority risks identified by RASG-PA.

This working paper proposes that ICAO drive a regional strategy aimed at strengthening States' sustained technical engagement in PA-RAST and RASG-PA, promoting representation more aligned with regional operational risks, GASP objectives, and data-driven security initiatives.

Action:	The Meeting is invited to: (a) request the Secretariat to develop a strategy to strengthen the participation of States in PA-RAST and RASG-PA; b) develop a monitoring matrix that relates state participation, priority regional risks, and implementation support needs; y (c) submit a progress report to ESC/42.
Strategic Goals 2026-2050:	• Every Flight is Safe and Secure • Aviation Delivers Seamless, Accessible, and Reliable Mobility for All • No Country Left Behind
References:	• Report PA-RAST/70 – Santo Domingo. • Final Report RASG-PA/15. • Participation reports PA-RAST/66 to PA-RAST/71.

1. Introduction

1.1 The Regional Aviation Safety Group – Pan America (RASG-PA) was established to support the regional implementation of the Global Aviation Safety Plan (GASP), promoting an integrated, data-driven strategy for risk management and continuous safety improvement.

1.2 The Pan America Regional Aviation Safety Team (PA-RAST) is RASG-PA's primary technical mechanism for:

- analyze operational safety information;
- identify regional risks;
- review emerging trends;
- develop mitigation initiatives; and
- support the implementation of regional and global safety priorities.

1.3 The effectiveness of this model depends on the balanced participation of States, industry and ICAO. In particular, many of the actions needed to address the identified risks require regulatory decisions, oversight activities, SSP implementation, accident investigation, safety information sharing, and institutional strengthening by States.

2. Evolution of State Participation in PA-RAST

2.1 Recent participation:

Meeting	Participating States/Territories
PA-RAST/66 – Miami (February 2025)	Aruba, Brazil, Canada, Colombia, Costa Rica, Dominican Republic, United States
PA-RAST/67 – Lima (April 2025)	Aruba, Barbados, Brazil, Canada, Costa Rica, Dominican Republic, El Salvador, Peru, United States
PA-RAST/68 – Bogotá (August 2025)	Aruba, Canada, Colombia, Costa Rica, Dominican Republic, Panama, United States
PA-RAST/69 – Mexico City (October 2025)	Aruba, Brazil, Canada, Colombia, Costa Rica, Dominican Republic, El Salvador, Mexico, Panama, Venezuela
PA-RAST/70 – Santo Domingo (February 2026)	Aruba, Barbados, Brazil, Canada, Costa Rica, Curacao, Dominican Republic, El Salvador, Cayman Islands, Panama, Paraguay, United States
PA-RAST/71 – São Paulo (August 2026)	Aruba, Bahamas, Bolivia, Brazil, Canada, Costa Rica, Dominican Republic, Ecuador, Honduras, Panama, United States, Venezuela

2.2 Observed trends

2.2.1 Analysis of the last six meetings shows that State participation ranges from seven to twelve States/Territories per meeting.

2.2.2 It also demonstrates that the technical functioning of PA-RAST depends mainly on a limited set of aeronautical authorities that participate in a sustained manner.

2.2.3 **Recurring participation (5 or more meetings)**

Status	Participations
Aruba	6
Canada	6
Costa Rica	6
Dominican Republic	6
United States	5
Brazil	5

2.2.4 **Intermediate participation**

Status	Participations
Panama	4
Colombia	3
El Salvador	3
Venezuela	2
Barbados	2

2.2.5 **Occasional participation**

2.2.5.1 Bahamas, Bolivia, Curaçao, Ecuador, Honduras, Cayman Islands, Mexico, Paraguay and Peru participated in a single meeting during the period under review.

3. State participation and regional risks

3.1 Recent RASG-PA meetings have identified priority regional challenges related to:

- Effective implementation of SSP
- NASP
- Exchange of safety data
- Risk-based surveillance (RBS)
- Accident and incident investigation
- Fair culture and reporting systems
- Runway Safety
- Bird Strike
- CFIT
- LOCI
- MAC
- GNSS interference

- Large height deviations (LHD)
- Collaborative Safety Teams (CST)

3.2 Many of these risks are associated with complex operational environments, large regional hubs, high-traffic density FIR, intensive international operations and advanced safety management systems.

3.3 Consequently, the participation of States in PA-RAST is not only a requirement of regional governance, but also a technical necessity to ensure that the regional analysis adequately reflects the operational reality of the Pan American Region.

4. Consequences of limited participation

4.1 Modern safety management requires diverse, representative, and data-driven information. When States with responsibilities for large volumes of operations, international airports, complex FIRs or specific risks do not regularly participate in PA-RAST technical activities, limitations may arise that affect the quality of regional analysis.

4.2 Among the main consequences are:

a) less representativeness of regional analyses;
b) reduced availability of information from state systems for the collection and processing of safety data;
c) difficulty in validating trends identified by other sources of information;
d) reduced ability to identify specific contributing factors;
e) delays in the implementation of regional mitigations;
f) less alignment between regional and national priorities;
g) less sharing of good practices and capacity building.

4.3 The analysis of the six most recent meetings of PA-RAST shows that a significant proportion of the accumulated state participations correspond to a small number of aeronautical authorities that continuously support the technical functioning of the regional system.

4.4 While this commitment demonstrates leadership and willingness to cooperate, it also creates a significant reliance on a limited group of states to validate data, analyze trends, lead projects, and support regional initiatives.

4.5 Therefore, strengthening the participation of a greater number of States represents an opportunity to improve regional representativeness and increase the effectiveness of the mitigation measures developed by PA-RAST and RASG-PA.

5. Industry Commitment and Contribution

5.1 Over the past few years, industry has played a key role in the operation of the regional safety system.

5.2 Airlines, manufacturers, international associations and other strategic partners continue to contribute:

- operational data;
- specialized technical resources;
- security experts;
- trend studies;
- regional risk analysis;
- leadership of working groups;
- support for the development of regional initiatives.

5.3 This commitment is particularly reflected in areas such as:

- exchange of security information;
- promotion of a just culture;
- development and implementation of CSTs;
- safety on the track;
- CFIT, LCI, and MAC mitigation;
- risk-based surveillance;
- analysis of impacts with birds;
- risks associated with GNSS;
- accident investigation initiatives.

5.4 The continuity of these efforts demonstrates the industry's conviction regarding the strategic value of the collaborative model promoted by RASG-PA.

5.5 However, the value generated by these initiatives can only be fully realized through the equally active participation of States, given that many of the corrective actions and mitigations identified require national implementation, regulatory decisions, and institutional strengthening.

6. Proposal

6.1 It is proposed that the ICAO Secretariat:

a) Develop a regional strategy to strengthen the participation of States in PA-RAST and RASG-PA;
b) Develop a regional matrix that allows for the relationship:
   - participation in PA-RAST;
   - participation in RASG-PA;
   - existence of CSTs or other collaborative mechanisms;
   - implementation support needs;
c) Submit a progress report for consideration by ESC/42

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APPENDIX A
CUMULATIVE PARTICIPATION IN PARAST/66 – PARAST/71

- Aruba ▇▇▇▇▇▇ 6
- Canada ▇▇▇▇▇▇ 6
- Costa Rica ▇▇▇▇▇▇ 6
- Dominican Republic ▇▇▇▇▇▇ 6
- United States ▇▇▇▇▇▇ 5
- Brazil ▇▇▇▇▇ 5
- Panama ▇▇▇▇ 4
- Colombia ▇▇▇ 3
- El Salvador ▇▇▇ 3
- Barbados ▇▇ 2
- Venezuela ▇▇ 2
- Bahamas ▇ 1
- Bolivia ▇ 1
- Curaçao ▇ 1
- Ecuador ▇ 1
- Honduras ▇ 1
- Cayman Islands ▇ 1
- Mexico ▇ 1
- Paraguay ▇ 1
- Peru ▇ 1

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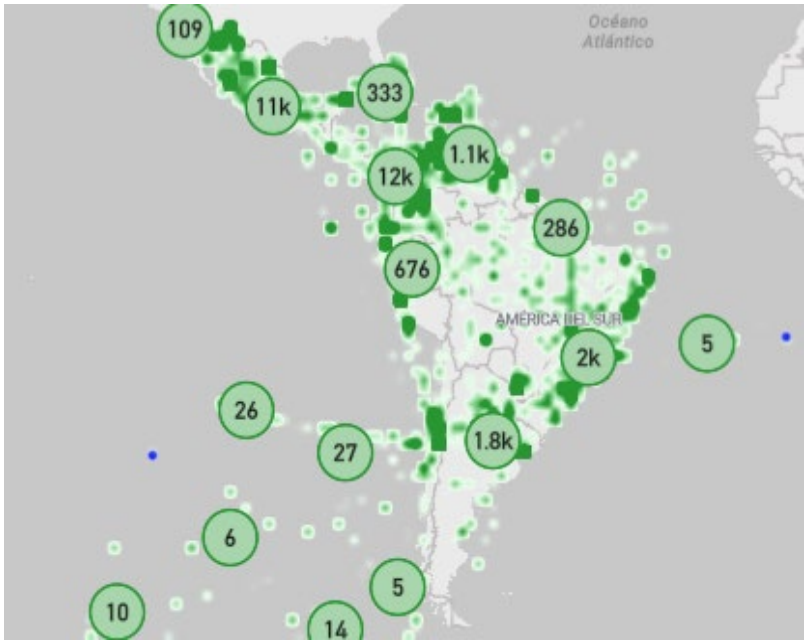
APPENDIX B
PRIORITY REGIONAL RISKS ASSOCIATED WITH THE NEED FOR STATE PARTICIPATION

1.1 The information presented below is based on data from the industry's GADM (FDX-IDX) system, where events are recorded from January 2025 to June 2026:

1.2 GPS signal loss (Jamming-Spoofing)

1.3 In the Region, 27,473 GPS signal loss events (Jamming-Spoofing) were recorded from 1,555,328 flights, equivalent to 17.66%. The events represent a concern for the industry, considering that the design of arrival, approach, takeoff and navigation procedures are increasingly based on satellite systems (PBN).

1.4 The most relevant hot spots based on the data are in the airspaces of Mexico, Panama and Colombia.



SPI Category	GPS Signal Loss
All Operators FDX Rate	17,66
All Operators FDX Flights	1.555.328
All Operators FDX Events	27.473

Event Location Country	Panama
All Operators FDX Rate	84,96
All Operators FDX Flights	113.988
All Operators FDX Events	9.684

Event Location Country	Mexico
All Operators FDX Rate	30,52
All Operators FDX Flights	354.866
All Operators FDX Events	10.830

Event Location Country	Colombia
All Operators FDX Rate	6,04
All Operators FDX Flights	278.130
All Operators FDX Events	1.681

2. TCAS-RA:

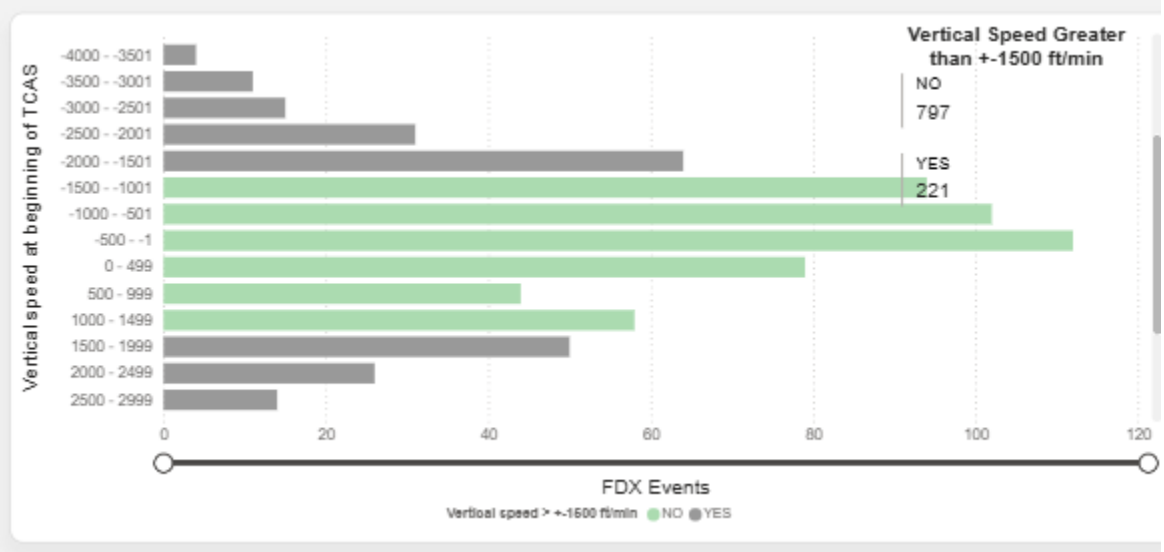
2.1 In the Region, 1,599,242 TCAS-RA events are registered, mainly in airspaces of Mexico, Colombia and Brazil.

LATAM/CAR Mexico MMFR
FDX Events count 106
FDX Events count 106
All Operators FDX Flights 354.866
FDX Events Rate 0,30

LATAM/CAR Colombia SKED
FDX Events count 103
FDX Events count 103
All Operators FDX Flights 262.882
FDX Events Rate 0,39

LATAM/CAR Brazil SBBS
FDX Events count 59
FDX Events count 59
All Operators FDX Flights 473.289
FDX Events Rate 0,12

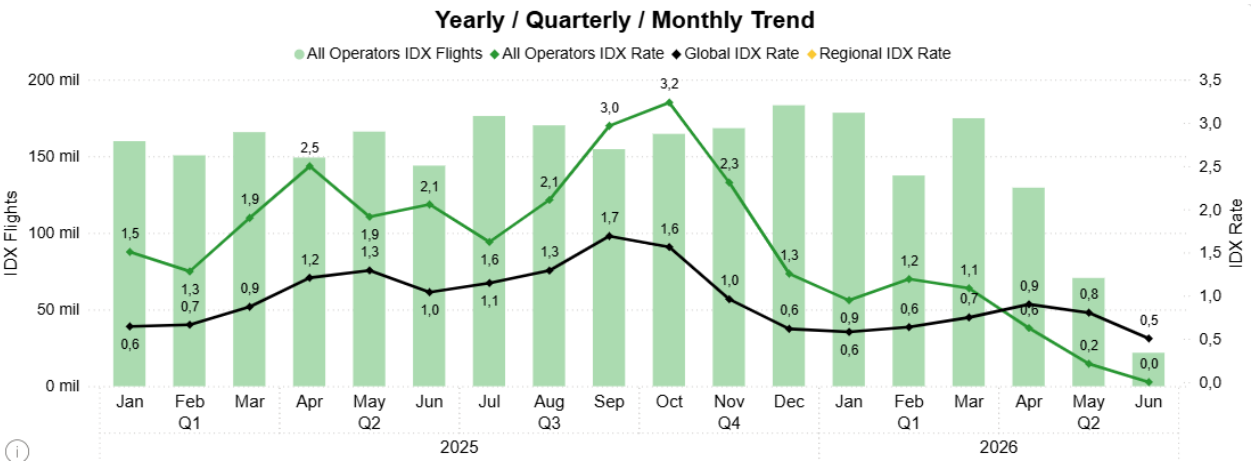
2.1 The main possible precursors are vertical rats (ascent-descent) greater than 1500 feet per minute close to the decision height.



3. Bird-Strike

3.1 In the Region, 4,611 bird strike events are recorded with aircraft of 2,666,467 flights, equivalent to 1.73%. The events represent a concern for the industry, considering that the severity of damage that may be caused depending on the size of the animal and the place of impact (power plant, flight controls, etc.) may affect the safety of air operations.

3.2 The data shows that the times of the year where the greatest number of bird impacts are evident occur in the migratory seasons (April and October)



IDX Bird Strike Event Count	Number of IDX Bird Strike Events with Aircraft Damage reported
4.611	378

3.3 The hottest spots for bird strikes in the region, considering the number of operations, the location of the airport and the ideal conditions for birds in their migratory processes, are in the countries of Panama, Colombia and Chile:

Panamá

All Operators IDX Rate	2,54
All Operators IDX Flights	105.250
All Operators IDX Events	267

Colombia

All Operators IDX Rate	3,89
All Operators IDX Flights	392.681
All Operators IDX Events	1.529

Chile

All Operators IDX Rate	2,49
All Operators IDX Flights	100.057
All Operators IDX Events	249

3.4 The success of the regional safety model depends on the ability to transform data into action. To this end, it is essential that States with significant operational responsibilities actively participate in technical spaces where risks are identified, experiences are shared and regional mitigation strategies are developed.

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