



International Civil Aviation Organization

CAR/SAM Regional Planning and Implementation Group (GREPECAS)

Eighteenth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/18)

Punta Cana, Dominican Republic, 9 to 14 April 2018

GREPECAS/18 - WP/41

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Agenda Item 2: Review of coordination activities between GREPECAS and Regional Aviation Safety Group – Pan America (RASG-PA)

2.2 Coordination activities between GREPECAS and RASG-PA

Improving Runway Safety by Increasing the Number of ICAO Runway Safety Go-Team (RST) Missions in the Caribbean/South America (CAR/SAM) Region

(Presented by the United States)

SUMMARY

The ICAO Runway Safety Program (RSP) promotes the establishment of RSTs at aerodromes as an effective means to reduce runway related accidents and serious incidents. An ICAO RST can help implement effective RSPs to improve runway safety by providing international assistance from ICAO and RSP partner organizations. Of the 23 RST missions conducted worldwide, only five (5) have occurred in the CAR/SAM Region. This working paper requests that GREPECAS, in cooperation with the RASG-PA and industry stakeholders, use a data-driven and risk-based methodology to implement RSTs in the region.

References:

- ICAO Runway Safety Action Plan
- ICAO Runway Safety Team Handbook
- ICAO Runway Safety i-Kit
- Manual on the Prevention of Runway Incursions (ICAO Doc 9870)
- Safety Management Manual (ICAO Doc 9859, 3rd edition)
- ACI Runway Safety Handbook 2014
- CANSO Runway Safety Maturity Checklist
- IATA RERR Toolkit
- FAA Runway Safety Action Team (RSAT) Tool Kit v2.0

1. Background

- 1.1 To date, the ICAO RSP has conducted 23 ICAO RST missions throughout the world. However, only five (5) of the RST missions have been conducted in the ICAO CAR/SAM Region – an area encompassing over 254 international aerodromes (149 in the CAR and 104 in the SAM). To remedy this imbalance, this working paper proposes the implementation of RSTs in the CAR/SAM region, using a risk-based decision-making methodology, including the airline and aerodrome data collected and analyzed by the RRASG-PA, to identify potential locations for the missions.

2. ICAO Runway Safety Program

- 2.1 Runway Safety is a global safety priority. The ICAO RSP promotes the establishment of RSTs at aerodromes as an effective means to reduce runway related accidents and serious incidents. The action for aerodromes to establish an RST is one of the main outcomes of the ICAO Global Runway Safety Symposium (GRSS/1) held in Montreal, Canada, in May 2011, and the GRSS/2 in Lima, Peru, in November 2017. This was included as part of the Global Runway Safety Action Plan as a runway safety recommended action for aerodrome operators and is recognized as a means of compliance for a systems approach strategy to runway safety, which is addressed in the ICAO Universal Safety Oversight Audit Program (USOAP) Continuous Monitoring Approach (CMA).
- 2.2 The ICAO RST provides international assistance from ICAO and RSP partner organizations to implement effective RSTs to improve runway safety. The RST is a voluntary, multi-disciplinary assistance visit to an aerodrome; it is not an ICAO audit, validation, inspection, or certification.
- 2.3 An RST assists States and aerodromes in establishing a local RST by providing technical assistance in support of the implementation stage, including: training, assessments and gap analysis, expert advice and guidance based on best practices.

3. Runway Safety Go-Teams in the CAR/SAM Region

- 3.1 The following RST missions have occurred in the region:
- Toncontin International Airport (MHTG), Tegucigalpa, Honduras, March 10-14, 2014;
 - La Aurora International Airport (MGGT), Guatemala City, Guatemala, April 13-17, 2015;
 - Jose Marti International Airport (MUHA), La Habana, Cuba, October 13-15, 2015;
 - V.C. Bird International Airport (TAPA), Antigua, Antigua and Barbuda, November 8-11, 2016; and
 - Queen Beatrix International Airport (TNCA), Oranjestad, Aruba (Netherlands), June 14-16, 2017

4. Establishing a Runway Safety Go-Team

- 4.1 An RST is established based on several actions, including: a recommendation from the RASG; an ICAO proposal; or a request received by ICAO - from a State or aerodrome. RSP partner organizations are informed of RST plans and are invited to participate in the process.
- 4.2 When ICAO receives a request for an RST from an aerodrome, it coordinates with the Airport Council International (ACI) organization, particularly in relation to the Airport Excellence (APEX) in Safety Program, to ensure the necessary coordination to avoid any potential duplication of activities. The ACI APEX in Safety program is designed to help aerodromes identify and mitigate aviation safety vulnerabilities through peer review missions, education, mentoring, and best practice guidance. These peer review missions involve 1 – 2 weeks on site, depending on the complexity of the aerodrome. The visit team, which usually includes an ICAO member, works with the host aerodrome to cover airside operations on the runways, taxiways and aprons, as well as infrastructure, including lights, markings, signage, rescue and firefighting. The team also reviews documentation and systems such as safety management. The output of the

APEX review is a report containing recommendations, mitigation strategies, and suggestions for industry resources that might be called upon to provide assistance.

- 4.3 It is important to note that while the APEX team will address RS and RSTs, the team will focus on ensuring that an RST is put in place following ICAO and ACI best practices; if not, the APEX team will help create the framework to facilitate an RST to improve operational safety. The ICAO RST missions' focus is primarily limited in scope to RS, with up to three (3) days on site. ICAO and ACI coordinate these complementary RST programs to ensure there is no duplication of activities at any aerodrome being considered for both an APEX safety review and RST.

5. Runway Safety Go-Team Mission Phases

- 5.1 Part 1. Preparation. The coordination of the RST preparation will be led by the aerodrome's respective ICAO Regional Office.

- Phase I includes the selection of a candidate State and aerodrome (at least twelve weeks prior to the mission);
- Phase II – Data collection, including the identification of potential stakeholders and existing aerodrome and runway safety data.; and
- Phase III – Coordination with State and RST members on the mission program, including logistics (at least three weeks before the mission).

- 5.2 Part 2. On-site activities (suggested: four (4) days). The RST focuses on establishing an effective RST, ensuring that its members clearly understand what they should do and how to do it, based on their roles and responsibilities. Activities will be, to the maximum extent possible, in accordance with the procedures detailed in the ICAO RST Handbook and references in the ICAO Runway Safety i-Kit.

- Phase IV – RST deployment. Two (2) days of a preparation briefing (knowledge transfer and sharing of best practices), and a two-day aerodrome visit and de-briefing (following local RST framework and proceedings).
- Phase V – Report, Action Plan and Recommendations (responsible: local RST). Preparing a technical report, including observations and recommended mitigation actions, as well as other recommendations as may be required.

- 5.3 Part 3. Implementation and follow-up

- Phase VI – Implementation (responsible: local RST)
- Phase VII – Follow-up. The respective ICAO Regional Office performs the continuous monitoring of progress, within the RASG framework as reported by the State.

6. Proposed Plan for the CAR/SAM Region

- 6.1 The GREPECAS and RASG-PA organizations both work to improve aerodrome and runway safety in the CAR/SAM region. Historically, GREPECAS has focused on the aerodromes operational and infrastructure elements of the runway safety issue (via Projects: F1 – Improving Aerodrome Certification; and F2 – Improving Runway Safety). RASG-PA has likewise focused on runway safety from multiple perspectives, including operators and States. For example, RASG-PA collects information on unstable approaches and identifies safety mitigation strategies to address the risk. A new and more proactive approach to address RS in the region could

therefore involve closer collaboration between GREPECAS and RASG-PA, by bringing together experts and utilizing each group's expertise in the areas of aerodrome operations and infrastructure and airline operations.

- 6.2 To initiate the establishment of RSTs in the CAR/SAM region, it is recommended that the GREPECAS Aerodromes (AGA) Programme "Project F" develop an interface to collaborate with RASG-PA, interested industry stakeholders and Member States in order to consider a data-driven approach to the prioritization of RST missions. As recommended in the Global Runway Safety Action Plan, RASG-PA would evaluate several data types and sources in order to determine potential mission locations. These data types and sources include, but are not limited to:

- a) GREPECAS aerodrome certification, operations, and infrastructure data;
- b) RASG-PA-collected aerodrome and operations data on safety 'hot spots' or other trends, such as an increasing number of unstable approach events (presented in a manner that preserves confidentiality);
- c) State or aerodrome request;
- d) USOAP audit results (e.g., non-existence of an RST);
- e) Outcome from RASG activities (e.g., regional concerns based on data, safety enhancements);
- f) Identified runway safety hazards/risks (runway incursions or excursions);
- g) High number of runway safety incidents/accidents;
- h) Aerodrome operations (e.g. increase in traffic volume, rate of growth);
- i) Aerodrome infrastructure (overall size, geometry changes, layout complexity); and
- j) Proposal by a safety stakeholder/partner, etc.

- 6.3 After an analysis and joint GREPECAS/RASG-PA agreement of the proposed mission locations, a designated project representative would initiate communication with the ICAO North America, Central America and Caribbean (NACC) and South America (SAM) Regional Offices to organize the potential mission as indicated in paragraph 5.1 of this working paper. This would enable Member States to be informed of the activity and assist as desired, such as providing experts to participate in the RST mission.

7. Conclusion

- 7.1 Consistent with the recommended actions for State Civil Aviation Authorities set forth in the 2017 Global Runway Safety Action Plan, aerodromes and industry partners should collaborate on the use of a data-driven, risk-based decision-making methodology to enhance RS in the region. This approach provides a systemic view of safety, which places more value on discovering why adverse safety events happen and on identifying risks, in order to take proactive runway safety actions. By collecting and analysing aerodrome and industry data, and using that information to implement RSTs, GREPECAS and RASG-PA can take an important step in improving runway safety in the CAR/SAM Region.

8. Suggested Actions by the Meeting

8.1 The Meeting is invited to:

- a) Enhance runway safety by creating a link between the GREPECAS AGA Program, RASG-PA and industry stakeholders to implement a data analysis process for implementing RSTs in the CAR/SAM Regions; and,
- b) Support the proposed plan contained in paragraph 6 of this working paper, and commit to establishing the necessary mechanism by which RSTs can begin operation as soon as feasible.

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