



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

Thirty First Pan America — Regional Aviation Safety Team Meeting

(PA-RAST/31)

Summary of Discussions

Miami, United States, 20 to 22 February 2017

Prepared by the Secretariat

February 2017

Thirty First Pan America — Regional Aviation Safety Team Meeting (PA-RAST/31)

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Date

20 to 22 February 2018

Location

Miami International Airport Auditorium, Miami, United States

Meeting Opening

The Meeting was attended by 29 participants from 7 States/Territories, and 10 International Organizations and industry. (**Appendix A** refers).

The Meeting participants were welcomed by Mr. David Zwegers, Regional Safety Director Latin America & Caribbean, Airbus Industries, and Mr. Daniel Vieira Soares, Superintendent of Flight Standards, Brazil, whom co-chaired the Meeting, representing International Organizations and Industry and Member States, respectively.

Mr. Julio Siu, Regional Deputy Director, from the ICAO NACC Regional Office, acted as Secretary of the Meeting, and extended appreciation to ALTA and IATA on behalf of RASG-PA Secretariat, for hosting the Meeting. Mr. Roberto Sosa, Regional Officer, Air Traffic Management, from the ICAO South American Regional Office, also assisted the PA-RAST Secretariat.

Discussion Items

Agenda Item 1:

Approval of the Provisional Agenda

- 1.1 Mr. Aband Floyd, IATA, presented the meeting logistics. Mr. David Zwegers informed the Meeting that Mr. Gabriel Acosta, IATA would be the new PA-RAST Co-Chairperson representing industry for the next Meeting. Mr. Daniel Vieira Soares will continue his role as PA-RAST Co-Chairperson representing States.
- 1.2 Under WP/01 and IP/01, the Meeting approved the agenda and the tentative work programme for the PA-RAST/31 Meeting.

Agenda Item 2:

Review of PA-RAST Action Items

2.1 Under WP/02, the Secretariat updated the Meeting on the PA-RAST and Executive Steering Committee (ESC) valid conclusions and decisions, with the completion of LOC-I and CFIT Detailed Implementation Plans (DIPs) highlighting the following outcomes:

The PA-RAST:.

- distributed the Runway Excursion Risk Reduction (RERR) Toolkit to operators and States
- conducted surveys on go-around policies and unstable approach mitigation
- provided advanced maneuvers manual to all operators
- developed RASG-PA aviation safety workshop

- developed and delivered Pilot Monitoring Toolkit to industry
- provided guidance for runway maintenance in accordance with Annex 14
- · compiled and Published aviation safety tools and materials
- standardized CFIT training across operators
- developed Safety Recommendation (RSR) Process
- provided En-Route Surveillance Radar (RSR) on mode awareness and energy management training
- The ICAO NACC Regional Office participated in the first Runway Safety Team (RST) meeting in Mexico City, Mexico, on 30 January 2018 and 2 February 2018
- 2.2 The Meeting updated/followed-up the valid PA-RAST Conclusions/Action Items as presented in **Appendix B**, where six Actions Items still remain valid (PA-RAST/20/A1, PA-RAST/26 paragraph 8.3, PA-RAST/27/A1, PA-RAST/30/2, PA-RAST/30/3 and PA-RAST/30/4). The Meeting also mentioned the PA-RAST 2018-2019 activity Plan:
 - assist RASG-PA to align the work programme with the Global Aviation Safety Plan (GASP)
 - mitigate Runway Excursions (RE) and Mid Air Collision (MAC)
 - monitor Regional safety issues
 - coordinate work with Regional Safety Oversight Organizations (RSOOs)
 - increase participation of States and stakeholders
 - collect safety information for ICAO
- 2.3 Action Item PA-RAST/28/2 was superseded by:

PA-RAST/31/01 ACTION ITEM

GLOBAL AVIATION SAFETY PLAN (GASP) COMPLIANCE BY PA-RAST

IATA will review by the RASG-PA ESC/31 meeting, the GASP Safety Performance Indicators (SPIs) and will propose a GASP-related response of RASG-PA data-driven analysis and the GASP SPIs.

2.4 The Meeting followed-on to the ESC valid conclusions, as reported in **Appendix C.**

Agenda Item 3:

Information from Other Regional Aviation Safety Groups (RASGs) Meetings of Interest to the PA-RAST

Programa de Análisis de Sucesos Operacionales Centroamericanos **(PASOC)**Initiative

3.1 Under NE/04, COCESNA provided an update on "Programa de Acción para la Seguridad Operacional" (PASO). PASO is currently part of the PASOC that is also part of the Central American Safety Regional Plan (RSP). PASO continues to hold its bi-monthly meetings, while the RSP and PASOC are still in the implementation phase.

- 3.2 The launching of PASOC for all States is planned for the second semester so that they can have a system that collects, processes and analyzes the Safety Data Collection and Processing System (SDCPS), as well as a unified programme for the notification of deficiencies.
- 3.3 The Meeting took note of the progress and highlights of the PASOC Initiative:
 - PASOC adopts the European Coordination Centre for Accident and Incident Reporting System (ECCAIRS) together with the Accident/Incident Data Reporting System (ADREP) taxonomy, as the standardized software and taxonomy used for the classification of hazards/safety events
 - A unified programme will be implemented for the notification of deficiencies, hazards or safety occurrences/events and a policy in order they are accordingly notified, without reprisals. In addition, all the data collected through PASOC, will also serve to analyse the events from a regional point of view
 - Signature of the Memorandum of Understanding (MoU) with IATA, for the data performance of its Flight Data eXchange (FDX) and the Global Aviation Data Management (GADM) Elaboration of PASOC Regulations and Procedures
 - elaboration of a possible agreement for data protection of the informant
 - Training for the establishment of a system for the occurrences treatment (SORA-SENASA)
 - Installation of the latest version of ECCAIRS
 - Training regarding the evaluation of the severity/risk
 - FRMS Workshop
- 3.4 The Meeting congratulated the progress achieved by COCESNA and recognized this accomplishment as an excellent reference for safety implementation. In this regard, the Meeting reiterated the importance of counting with an other Regional Safety Oversight Organization (RSOOs) in RASG-PA like CASSOS, and agreed the following action:

PA-RAST/31/02 ACTION ITEM

RASG-PA INVITATION FOR CASSOS PARTICIPATION

That, in order to ensure more participation of the Caribbean, the RASG-PA Secretariat will:

- a) present the benefits of participating in the PA-RAST events, by providing a presentation to CASSOS in coordination with the PA-RAST Co-Chair;
- b) support, together with United States, IATA's proposal on safety-data sharing/FDX MoU for CASSOS States signature; and
- c) provide outcomes to the upcoming CASSOS meeting.

"Grupo Regional de Investigación de Accidentes Aéreos" (GRIAA) Initiative

3.5 The Regional Accident and Incident Investigation Organization for Central America (GRIAA) has been operated since its beginning by COCESNA; however, the management and operation of GRIAA is under discussion between Belize and Nicaragua; as such, the activities are on hold until GRIAA's Headquarters is defined. The last recent investigation supported by GRIAA was conducted in Punta Islita, Costa Rica.

Caribbean Regional Accident and Incident Investigation Organization (RAIOC) Initiative

3.6 IP/03 provided an update on the progress and actions achieved by the RAIOC.

Runway Safety Teams

3.7 Under IP/04, the Meeting was informed of the current RSTs implemented in the CAR Region and the interaction with these groups for further safety improvements.

Agenda Item 4:

Review of Aviation Safety Information - Analysis/Review and Discussion

4.1 The Meeting was informed on the status and situation of the Traffic Collision and Avoidance Systems (TCAs) and Ground Proximity Warning System (GPWS) hot Spots, for all Panamerica, using the Flight Data Exchange (FDX)/Aviation Safety Information Analysis and Sharing System (ASIAS) Data and its graphic interface based on Google earth.

- 4.2 IATA commented that safety data availability and its analysis results can be shared with States and other third Parties for the respective mitigation actions due to the data exchanged through the IATA MoU with each party: Canada, Chile, Colombia and COCESNA have the MoU already signed and implemented, Argentina is still on-going, pending of signature and Mexico is pending of implementation. The Meeting identified the need to continue checking with Argentina and Mexico the implementation of this data sharing and enhance the actions to mitigate and improve safety.
- 4.3 The Meeting was informed that ASIAS data is available with recent information up to October 2017. Similarly, the Meeting was informed about an example of safety improvement achieved by the States, such as Cuba that restructured one of its Air Traffic Services (ATS) route (UG448) to enhance capacity and seeked to reduce Traffic Collision and Avoidance System-Resolution Advisories (TCAS-RAs). Other mitigations actions are expected, such as Panama; who is redesigning its airspace Action to be followed by PA-RAST.
- 4.4 The Meeting noted that no major concerns were observed in the SAM Region; however, it was also noted that few data from Latin America aircraft carriers has been received. Boliviana of Aviation is one of the latest carrier to have joined the programme. No major reports on TCAS RAs were reported for Canada: no data is shown, as currently only two carriers are providing data. Canada signed the ASIAS agreement.
- 4.5 After, reviewing the available data, several actions for the PA-RAST were proposed:
 - segregate hot spot data per flight level
 - work by data source providers in order to fusioning pilot reports
 - seek to conduct tracking of the mitigation actions impact to the current status of hot spots; following an specific mitigation, as in the case of Brazil and Cuba

PA-RAST 31/03 ACTION ITEM

PA-RAST DATA ANALYSIS

That, in order to improve the data analysis presentation and seek to identify potential causes of safety matters, by PA-RAST/33 the PA-RAST will:

- segregate hot-spot data per flight level
- •
- work by data source providers in order to fusioning pilot reports
- seek to conduct tracking of the impact of mitigation actions to present the status of hot spots following a specific mitigation as in the case of Brazil and Cuba.

4.6 The Meeting took note of the major safety hot spots identified in the region. Finally, the Meeting noted the data graphs, trends and relevant explanation to follow-up safety mitigation actions.

Agenda Item 5: Participant Presentations (Topics of Interest to the Meeting)

GASP Safety Performance indicator

5.1 Under WP/03, the Meeting was briefed on the GASP and its purpose of harmonizing and guiding State/industry actions for the timely implementation of the safety roadmaps and the proper measuring of safety performance using State's safety performance indicators. The Meeting also noted this information and the agreed PA-RAST 31/01 Action Item.

Second Global Runway Safety Symposium

- 5.2 Under WP/05 the Secretariat presented the results of the Second Global Runway Safety Symposium, held in Lima, Peru, from 20 to 22 November 2017, with a participation of over 152 delegates, representing 27 States and several international organisations, regional civil aviation agencies and industry. The symposium provided participants the opportunity to exchange information on the best practices in improving runway safety through the use of effective and innovative strategies, tools, technologies, and practices. The objectives of this symposium were the following:
 - Review global achievements in improving runway safety since GRSS in 2011
 - ii. Improve runway safety worldwide through global collaboration and exchange of strategies and best practices
 - iii. Review causes of runway accidents and incidents
 - iv. Obtain endorsement of the Runway Safety Programme action plan for
 - v. supporting and strengthening runway safety initiatives
 - vi. Promote the participation of stakeholders in regional initiatives related to runway safety
- vii. Increase the number and improve the effectiveness of airport Runway Safety
- viii. Create Teams (RSTs) under a risk-based approach and understand the relationship with the airport SMS
- 5.3 One of the most important outcomes of the GRSS/2 was the release of the ICAO-led collaborative Runway Safety Programme Global Runway Safety Action Plan (GRSAP) for the future, with recommendations for implementation of runway safety improvement initiatives and their links to the GASP. The ICAO Secretary General exposed that although there has been significant progress in reducing fatalities in runways accidents, the number of events are still high, and it is necessary to continue focusing efforts on this work area; including the exchange of information that allows a data-driven decision process.

AIG Regional Cooperation Mechanism (ARCM) Operational Safety information analysis

- 5.4 Under WP/06, the Meeting analyzed the information presented regarding the analysis results of the ARCM Safety Data Collection and Processing System (SDCPS) on safety, concerning accidents, serious incidents, and incidents in the SAM Region carried out by the AIG Regional Cooperation Mechanism (ARCM), in 2016-2017.
- 5.5 The information included the results of accidents and serious incidents reported by the South American States part of the regional mechanism of accident investigation. During the presentation it was possible to identify that the aviation sector with aircraft with less than 2500 Kg MTOW has a higher accident rate, therefore, this topic should be addressed by RASG-PA.

PA-RAST 31/04 ACTION ITEM

GENERAL AVIATION ACCIDENTS SAFETY ENHANCEMENT INITIATIVE

Considering the high accident rate observed in general aviation (aviation sector of aircraft with less than 2500 Kg MTOW), the PA-RAST will analyze the potential general aviation accidents as a Safety Enhancement Initiative (SEI) by the PA-RAST/32 Meeting.

5.6 Under IP/05, the Meeting noted the preliminary outcomes of the forum held during the Second Global Air Navigation Industry Symposium (GANIS/2) and First Safety and Air Navigation Implementation Symposium (SANIS/1), held from 11 to 15 December 2017, in ICAO Headquarters. The meeting outcome is shown as Appendix to IP/05.

Agenda Item 6:

Update from the Detailed implementation Plans (DIPs) Champions

- 6.1 Following *Conclusion RASG-PA ESC/29/4 PA-RAST DELIVERABLES,* to make available and visible the deliverables accomplished by the RASG-PA PA-RAST; the following actions were taken:
 - Organization of DIPs actions and deliverables
 - Update of DIPs work programme
 - Analysis of RASG-PA website structrure and suggest updates of out-ofdate links and files
- 6.2 The PA-RAST Co-Chair provided the Secretariat the DIP information on Runway Excursions (RE) (RE/4, RE/8, RE/9, RE/11), Loss of Control In flight (LOC-I) (LOC-I/6, LOC-I-7 and LOC-I/9), and Controlled Flight into Terrain (CFIT) DIPs (CFIT/02, CFIT/04) accomplished and completed by 2014; the DIP information for LOC-I (192, 196, 197, 198, 199) and CFIT/03 approved by the ESC and were completed since 2016. Further actions to load this information, its deliverables and presentation were agreed as follows:

PARAST 31/05 ACTION ITEM

SAFETY ENHANCE INITIATIVE - DETAILED IMPLEMENTATION PLAN (DIP)

That, in order to ensure the proper and accurate information to be loaded into the RASG-PA website, Brazil, IATA, and ICAO will review and collect all necessary DIP information to update the RASG-PA webpage by the PA-RAST/32 meeting.

PARAST 31/06 ACTION ITEM

DIP PRESENTATION TO ESC AND OTHER DC MEETINGS

To follow the ESC mandate in order to clearly present the PA-RAST DIPs progress and deliverables, the PA-RAST shall prepare information packages on the accomplishments of PA-RAST DIPs for States' awareness, as well as for the Directors of Civil Aviation Meetings and Safety Directors Meetings, starting with the RASG-PA/ESC/30, the NACC/DCA, and SAM/DCA meetings through a working paper for each meeting.

- 6.3 In this regard, the C-FIT Team completed its activites and remains available for further work. The RE DIP Team has accomplished and is working as follows:
 - shared data and coordinate it with the Regional Safety Oversight Cooperation System (SRVSOP).
 - is evaluating the feedback received from AIRBUS and plans to discuss RE issues at upcoming workshops
 - is still working on producing guidance material for RE
 - is examining the possibility of RE prevention workshops with pilots and controllers that would provide interactive simulations, using flight and tracon simulators
 - reported that lighting and marking documentation had been completed
 - reported having implemented a survey for pilots at identified airports that have gaps in runway issues
- 6.4 The LOC-I Team informed the following:
 - it is working towards a repository on IATA website to do all Upset Prevention and Recovery Training (UPRT) and other related training
 - it is working on a website with IATA providing technical assistance for web design and upload of information

- 6.5 The Mid Air Collision (MAC) Team informed that:
 - work is ongoing for three of the six originally planned activities, covering translation of Eurocontrol's toolkits, a survey on the current state of awareness of AC90-48D from the Federal Aviation Administration in the pilot community and the design of a callsign confusion avoidance strategy for the region
 - cooperation between the MAC SET with the Scrutiny Group (GTE) of GREPECAS started formally in the breakout sessions, with discussions on the integration of Large Height Deviation (LHD) data in the SET analysis and a proposal of a common work plan

Agenda Item 7:

Breakout Sessions: Controlled Flight Into Terrain (CFIT), Loss of Control-Inflight (LOC-I), Runway Excursion (RE), and Mid-Air Collision (MAC)

7.1 Project manager work programme to be presented by every DIP. Deliverable to be provided and made available.

MAC DIP

- 7.2 As part of the MAC Team work, a teleconference was held with the GREPECAS GTE rapporteur, Mr. Julio Lewis to analyze the possibility of carrying out joint tasks between the PA-RAST and the GTE, recognizing that the coordinated work between these teams would allow obtaining better results in risk reduction in the Pan-American airspace.
- 7.3 Among the topics addressed during the teleconference was the possibility of using data from both PA-RAST and CAR/SAM monitoring agency (CARSAMMA)/GTE for the analysis, with the purpose of identifying common areas of attention for the development of activities that help reducing risks in the airspace. One agreed action was to evaluate the survey for air traffic controllers, as well as the current pilot survey, with the purpose that both documents are jointly designed. A first draft of the survey topics was designed. As a result of the teleconference, the following was agreed:

PA-RAST 31/07

MAC AND GTE JOINT ANALYSIS

That, in order to optimize the joint work by GREPECAS GTE and the RASG-PA MAC DIP, both groups work to:

- a). carry out a teleconference on 22 March 2018 to identify the data that could be exchanged between both teams (CARSAMMA/GTE –PA-RAST);
- b). identify areas of joint work that could be addressed between both teams;
- c). prepare a working paper to be presented at the GREPECAS/18 meeting regarding the work that will be carried out by both groups (CARSAMMA/GTE –PA-RAST); and
- d). prepare a paper for the ESC identity meeting to present the work that will be carried out by both teams (CARSAMMA/ GTE -PARAST)
- 7.4 Regarding the pilot survey on the awareness of the contents of AC90-48D from United States, IATA provided an update on the number of answers received. It was considered that few answers had been received (30 in English, 15 in Portuguese and only one in Spanish). The Team agreed to push for more communication through IATA and IFALPA. The Team also agreed to keep the survey online until 30 April 2018 and begin working on the evaluation of results to have a preliminary report for the next PA-RAST meeting.

RE DIP

7.5 The RE DIP work is almost completed. A facilitated training session between pilots and controllers, simulated flight execution is being organized in Panama.

Agenda Item 8:

Final Update from DIPs Champions

- 8.1 The MAC Team has officially established an initial agenda with the GREPECAS GTE, and will present a working paper to both RASG-PA ESC and the GREPECAS meeting on the specific action items, which will include data sharing and the design of an evaluation of the current state of MAC and the best practices among air traffic controllers. Regarding the presentation of other candidate MAC DIPs topics, the Team received contributing material from Canada and CANSO. The Team also informed that it will review the MAC DIPs already designed and will format them according to the standard PA-RAST documentation.
- 8.2 The RE DIP CoChair will prepare all the necessary updates for the next PA-RAST/32 Meeting, for its loading and presentation.

Agenda Item 9:

Topics for the Good of the PA-RAST

PARAST Terms of Reference

- 9.1. The Meeting reviewed the pending administrative matters of the PA-RAST, including:
 - a) PA-RAST Terms of Reference and Goteam Concept completion as shown in Appendix E.

PARAST 31/08

ACTION ITEM ESC APPROVAL OF PA-RAST TERNS OF REFERENCE (TORS)

In order to define the PA-RAST functions and responsibilities, the PA-RAST requests the ESC the approval of its Terms of Reference as presented in Appendix E (RASG-PA Handbook Apendix B).

- b) RASG-PA website improvements: The Meeting reviewed RASG-PA website and its content identifying the following improvements:
- update links to documents and meetings
- need to update DIP information and work programme
- revamp the news section, raising it to the front page and top of the left-side menu
- include a current list of DIPs, in a similar way to that of Skybrary
- identify and remove dead links
- include a link to all products, including information on data issued, current status (valid, surpassed, etc.), and other relevant remarks
- create a MAC SET area, together with the other SETs
- update the list of resources, including links to collaborative safety initiatives (CAST, BCAST, etc.)
- 9.2 In this regard the Meeting agreed on the following action:

PARAST 31/09 ACTION ITEM

RASG-PA WEBSITE IMPROVEMENTS

In order to improve the content and facilitate the use of the website for communicating RASG-PA deliverables so that it can be used by all RASG-PA members, ICAO in coordination with IATA, will implement the improvements identified under 9.1 item b) by RASG-PA ESC/31 meeting.

RASG-PA Communication Plan

- 9.3 Under IP/02, the Secretariat informed on the progress to develop the RASGPA Communication Plan, where the main areas for improvement in the management of the group that will be impacted by the implementation of the Communication Plan were mentioned:
 - i. to increase the participation of the NAM/CAR and SAM States Improve the results obtained from RASG-PA products and activities: Although a considerable number of products has been developed, such as circulars, information kits, bulletins and other tools for safety improvement the Secretariat has identified some stakeholders that have not reached these RASG-PA advances. It is necessary to improve the communication strategy to increase the impact of RASG-PA developments.
 - ii. Improve communication with stakeholders for preparation and RASG-PA meetings development: It is essential to strengthen communication among internal and external stakeholders, before, during and after RASG-PA meetings to enhance their results.
 - iii. Improvement in the follow-up on the activities progress by the task forces: one of the primary roles of the Secretariat is to follow-up their progress, it is necessary to improve communication to strengthen the monitoring from the Secretariat to obtain better results in the tasks development.
 - iv. Establishment of a process to measure the stakeholder satisfaction to receive feedback: the measurement of the satisfaction will allow the identification of strength areas and improvement areas.
 - v. Strengthening the image of RASG-PA in Pan-America: through the use of existing electronic tools such as professional networks, and the participation of RASG-PA representatives in safety events and other activities to increase the exposure of the group to strengthen the image.
- 9.4 Finally, the Secretariat informed that the goal is to present the final draft version of the Communication Plan to be approved by the RASG-PA ESC/30 meeting.

Risk Based Surveillance

9.5 As part of the issues addressed during the meeting, under IP/06, the Risk Based Surveillance (RBS) approach was discussed. This paper detailed the concepts and principles of RBS and the basic framework for its implementation, as an alternate approach to surveillance and surveillance planning, based on individual service provider risk profiles, as part of State Safety Program (SSP).

9.6 The application of the RBS principles to surveillance planning, execution, and follow-up, will provide a mechanism for applying limited resources where they are most required. Those States in the process of implementing SSP and that are still applying prescriptive methods as the only mean to determine the type and number of inspections required to be performed in a given period are encouraged to consider SSP implementation.

Agenda Item 10:

Other Business

- 10.1 ALTA informed that due to some changes in its current administration, ALTA will not be able to no longer take the lead on technical matters; Therefore, the RE DIP chairmanship will be taken over by IATA.
- 10.2 United States invited all the PA-RAST participants and other States to join their InfoShare event to be conducted from 19 to 21 March 2018, in Baltimore, United States, inmediatedly before the RASG-PA/ESC/30 meeting. Due to the importance of the event, ICAO agreed to promote this event and shall invite all States to the event.
- 10.3 The Meeting was reminded that the PA-RAST/32 meeting, will be kindly hosted by Canada, in Ottawa, Canada, from 8 to 10 May 2018, in Ottawa, Canada.

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APPENDIX A

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APPENDIX B

Reference	Action/deliverable	Follow-up action	Status
PA-RAST/17/A1	The flight simulation video project has been suspended due to financial considerations	Note- lack of resources	Completed
PA-RAST/20/A1	Loss of Control - In flight (LOC-I) workshops have been placed on hold due to pending coordination of dates with States and operators	New target date for PA-RAST/32 Meeting	Valid
PA-RAST/27/A1	The PA-RAST will develop data sets for small operators, and encourage the implementation of sound safety management practices for their fleets.	New target date for PA-RAST/32 Meeting	Valid
PA-RAST-27	IATA will work with the PA-RAST for dedicating a small team for the analysis of "hot spots", once a new data analysis tool is developed.	Analysis of Hot Spots will be done every two PARAST meetings for follow-up. PA-RAST/31 meeting included this analysis	Completed
PA-RAST-28/1	to provide recommendations and possible proposals on a RASG-PA Tactical Go-Team Concept	A new proposal was reviewed and approved by PARAST/31 meeting	Completed
PA-RAST-28/2	to discuss, review and analyze the global and regional Safety target information contained in RASG-PA/ESC/28 WP/12, Regional Safety Targets.	The PA-RAST should retain its strict analysis function, and steer clear of the implementation/governance issues better left for the ESC and other bodies (Regional Office). It was also noted that there should be an expanded use of the Aviation Safety Report Team (ASRT) for data analysis on safety performance and that it will possibly be included in the next version of the ASR.	Superseded by PARAST/31/01
PA-RAST-30/1	RASG-PA Tactical Go-Team Concept	Analysis of Hot Spots will be done every two PA-RAST Meetings for follow-up. PA-RAST/31 included this analysis	Completed
PA-RAST-30/2	Assist CANSO with Strategic Review	On-going On-going	Valid
PA-RAST-30/3	Coordination of RE Activity with the SRVSOP	On-going task. Will also be coordinated with NACC RSTs	Valid
PA-RAST-30/4	Evaluation of Flight Safety Foundation Go-Around Decision Making and Execution Project	Ongoing	Valid
PA-RAST-26 (paragraph 8.3, no action item in report)	Incorporate AC90-48D (Pilot's Role in Collision Avoidance) contents into the flight crew training programmes. Launch a dedicated survey regarding the guidance material awareness among pilots.	Survey launched by IATA in January 2018. It will remain open until 30 April 2018.	Valid

APPENDIX C

Follow-up to RASG-PA ESC Conclusions

No. Conclusion	Description	Follow-up action
CONCLUSION RASG-PA-ESC/29/1	ENHANCEMENT OF SAFETY DATA ANALYSIS BY GREPECAS AND RASG-PA	PA-RAST MAC Group and the GREPECAS GTE met and worked on the break-out sessions during PA-RAST/31 meeting. An
	That, in order to enhance the safety performance analysis in the CAR/SAM Regions, and considering the existing work conducted by the PA-RAST MAC Group and the GREPECAS GTE; and to strengthen the coordination between RASG-PA and GREPECAS:	initial common agenda was designed and a Working Paper will be presented for the ESC.
	a) the Secretariat coordinate with both groups to ensure a review of the data analysis work being conducted by each of them, identifying synergies and strengthening their work programme and outcomes; and	
	b) report the results and findings to the RASG-PA ESC/30 Meeting.	
CONCLUSION RASG-PA-ESC/29/2	FLIGHT DATA ANALYSIS PROGRAMME (FDMP)/ FLIGHT DATA ANALYSIS PROGRAMME FDAP IMPLEMENTATION IN THE NACC AND SAM REGIONS	Note was taken.
	That, in order to broaden FDMP/FDAP throughout the NACC and SAM Regions:	
	a) States take note of the results of the CBA developed by RASG-PA FDAP Ad hoc working group for the implementation of FDAP on airplanes over 5 700 kg;	
	b) States and RSOOs encourage operator's review of the CBA document for them to decide their own implementation	
	c) States and RSOOs analyze the aviation safety benefits if an amendment to the aviation regulations is incorporated to request FDAP on aeroplanes above 5,700 Mass Take-off Weight (MTOW); and	
	d) RASG-PA request the ICAO ANC to take note of the results of the CBA document and consider an amendment to Annex 6 Part I, FDAP Recommendation 3.3.1 and Standard 3.3.2 of Section 3.3	

No. Conclusion	Description	Follow-up action
CONCLUSION RASG-PA/ESC/29/3	ENHANCEMENT OF DATA COLLECTION	FSF to be informed.
, , , , , ,	That, in order to enhance data collection, the Flight Safety Foundation:	
	a) work with the PA-RAST co-chairs to determine the gaps in data collection that will serve the PA-RAST processes,	
	b) identify and prioritize desired information to be shared for effective safety improvements, and	
	c) report the results of this task to the RASG-PA/ESC/31 Meeting.	
CONCLUSION RASG-PA ESC/29/4	PA-RAST DELIVERABLES	Requested actions done in the PA-RAST/31 Meeting.
, ,	That, in order to make available and visible the deliverables accomplished by the RASG-PA PA-RAST:	, 0
	a) the PA-RAST shall prepare information packages on the accomplishments of PA-RAST DIPs for States awareness, as well as for DCA Meetings and Safety Directors Meetings;	
	b) the PA-RAST to follow-up on the actions agreed by the ESC, as detailed in paragraph 5.6;	
	c) the Secretariat shall publish all PA-RAST deliverables and DIP information in the RASG-PA website, and	
	d) PA-RAST and Secretariat to report the results of these tasks to the RASG-PA/ESC/30 meeting.	

No. Conclusion	Description	Follow-up action
CONCLUSION RASG-PA/ESC/29/05	FEEDBACK ON THE IMPLEMENTATION OF GLOBAL AVIATION SAFETY PLAN GASP AND RASG-PA	On-going by ICAO Secretariat.
	That, in order to seek feedback from States and Industry to identify actionable gaps in the implementation of ICAO Global Plans, following a more client-oriented and performance-based approach by the RASG-PA, the RASG-PA Secretariat (NACC and SAM Regional ICAO Offices):	
	a) conduct a survey on the level of satisfaction and the performance results provided by RASG-PA;	
	b) in consultation and agreement with the ESC Members, develop an action plan based on the survey results; and	
	c) present the survey results and respective action plan to the RASG-PA Members by 30 June 2018 and inform them to the ICAO ANC.	
CONCLUSION RASG-PA ESC/29/6	RASG-PA PREPARATION FOR PIRG-RASG MEETING That, in order to organize a common position and ideas for the RASG-PIRG coordination Meeting on 13 December, the PIRG-RASG Preparation Ad-hoc Group (Brazil, Canada, United States, IATA and ICAO (NACC and SVRSOP) prepare a paper to include RASG-PA's achievements, evolution/strengths and Coordination with GREPECAS, for the RASG-PA representative to present at the meeting by 7 December 2017.	Support provided to Co-chairs. An IP was presented in the PA-RAST/31 meeting to show the conclusions of the PIRG-RASG Forum.

APPENDIX D

DIP Status as reported in the ESC/29 Meeting

No. DIP/ Status	Deliverable	
	Oriented to	Status: Benefits / impact
LOC-I: 196	Air carriers	Available: conduct effective UPRT in realistic scenarios, and using qualified flight simulator training devices- checklists.
Completed		
LOC-I: 197	Air carriers	Available: emphasize the importance of establishing controlled and stabilized flight as the primary consideration during non-normal
Completed		situations, prior to troubleshooting or execution of checklists.
LOC-I: 198	Air carriers	Available: conduct effective, scenario-based go-around training that matches realistic situations checklists.
Completed		
LOC-I: 199		Available: enhance acceptance, utilization and effectiveness of Crew Resource Management (CRM) principles on the flight deck by revising
Completed	providers as well as regulators	curriculum content and delivery. These principles should provide clear, unambiguous roles for the Pilot Flying (PF) and Pilot Monitoring (PM) in normal and non-normal operations checklists.
CFIT: Completed		Available only for LAR: Survey States to know if GPWS is a Regulatory Requirement.
Completed		Included in LAR 121 .850, LAR 135.450.
CFIT: Completed		Produce a Checklist for CAA Inspectors to make sure Airlines comply with CFIT Regulations, training, SOPs and software and database updates.
		SVRVOP: AIR Inspector Manual Part 4, Volume I , Chap 8 .3.8 (Certification); and Volume II Chap 8 .3.5 (surveillance).

No. DIP/ Status	Deliverable		
	Oriented to	Status: Benefits / impact	
CFIT: pending	States	Vertical Guidance to replace circle to land approaches SAM IG: responded NAM/CAR: pending.	
CFIT: pending	States	Update Airport Obstacle Charts in accordance with WGS-84 SAM: LAR 154/ 204 NAM/CAR: pending.	
CFIT: Pending	States	Survey States to know Obstacle and Terrain Implementation Area 1, 3 and 4 Status NAM/CAR: pending SAM: pending.	
RE: Pending for 2018	States	RE Programme Session/ A facilitated training session between Pilots and Controllers, simulated flight execution.	
MAC: Pending translation to Spanish - Publish to RASG-PA Web site and work on marketing strategy	States	Incorporate Eurocontrol's Level Bust Toolkit ACTION ESC/29 agreed: ICAO Secretary will coordinate translation. MAC Team will provide updated information on the documents.	

No. DIP/ Status	Deliverable		
	Oriented to	Status: Benefits / impact	
MAC:	States	Update designation rules according to regional best practices to	
		prevent communication flaws.	
Pending			
		ACTION ESC/29 agreed: ICAO NACC/SAM ATM to coordinate with MAC	
		DIP for this update, which will get additional information from the	
		BCAST MAC Team.	
MAC:	Airlines- operators	FAA AC 980-48D: Deliverable: Incorporate into the flight crew	
	*	training programmes	
Pending			
		Status: Survey launched in January 2018. Further work with IFALPA	
		and IATA to "spread the word". Survey will remain open until 30	
		April 2018, and a preliminary report will be prepared to the next	
		PA-RAST Meeting.	

APPENDIX E

PAN AMERICA — REGIONAL AVIATION SAFETY TEAM (PA-RAST) TERMS OF REFERENCE (TORs)

Purpose of the Regional Aviation Safety Team:

- 1. The PA-RAST will utilize appropriate available data sources (reactive, proactive and predictive) to pursue a data driven safety process.
- 2. Recommend to the RASG-PA Executive Steering Committee (ESC) strategic objectives, priorities, indicators, and the setting of measurable targets that address safety-related deficiencies in the Pan-American Region, while ensuring consistency of action and coordination of efforts on behalf of the different regions and ICAO Member States represented.
- 3. Identify tactical safety issues for action or follow up and to inform ESC for executive decisions making. Any outputs from the PA-RAST will be in a de-identified format.
- 4. Recommend establishment of achievable projects based on prioritized mitigation measures with well-defined deliverables (including metrics to assess the effectiveness of the proposed mitigation actions) and clear time-frames established, to the ESC for further action.
- 5. PA-RAST may propose to the ESC, thru an expedite method (teleconference/fast track) the establishment of Working Groups, Committees and Safety Enhancement Teams as required to support the development, implementation and prioritization of its activities, consistent with the ESC Procedural Handbook that establishes RASG-PA working groups.

Data Protection:

- 1. All data contributors and PA-RAST members will execute and be bound by the provisions of the Memorandum of Understanding between that data contributor and RASG-PA (see MOUs Attached)
- 2. All safety data utilized by the PA-RAST will be protected from public disclosure

Membership:

- 1. The PA-RAST will consist of subject matter experts designated by RASG-PA members.
- 2. At a minimum, members will be drawn from stakeholders representing States; international organizations; aircraft manufacturers; ICAO and aviation industry associations.
- 3. Observers/guests will be approved by the PA-RAST Co-Chairs in coordination with the Secretariat, prior to the start of each meeting.

Structure:

- 1. Co-Chairs of PA-RAST will be composed of:
 - a. One Co-Chairperson from PA-RAST member States/Territories
 - b. One Co-Chairperson from PA-RAST member international organizations/industry/associations/aircraft manufacturers
- 2. Co-Chairs will be elected by their respective PA-RAST members by simple majority, and will serve for a period of three years and may be re-elected, but may not serve for more than two consecutive terms.
- 3. The Secretariat will provide coordination of logistics and support, in accordance with the RASG-PA Procedural Handbook.

Roles and Responsibilities:

- 1. Co-Chairs
 - a. Conduct PA-RAST meetings
 - b. Coordinate with the Secretariat on the preparation and submit for ESC consideration the Annual Working Program at the last ESC meeting of the calendar year.
 - c. Represent the PA-RAST in front of the ESC and RASG-PA

Safety Enhancement Teams (SETs)

- 1. PA-RAST, in accordance with the procedures established in the ESC Procedural Handbook, may propose to the ESC the creation of SETs as Ad-Hoc Teams to prepare and develop Detailed Implementation Plans (DIPs) for the focus areas as determined by RASG-PA.
- 2. Membership:
 - 1. A team leader will be designated to coordinate the work and to report to the PA-RAST the progress made.
- 3. Safety Enhancement Team Methodology (7 Step Process):
 - 1. Review and analysis of accident risk
 - 2. Review of applicable safety enhancements
 - 3. Start preparing DIPs
 - 4. Review DIPs with PA-RAST
 - 5. Present DIPs to ESC for information
 - 6. Coordinate DIP implementation at PA-RAST
 - 7. Monitor progress
