



**Eleventh Plenary Meeting of the Regional Aviation Safety Group — Pan America
(RASG-PA/11)**

Online, 28 October 2021 and 4 to 5 November 2021

Agenda Item 1: Aspects of Coordination between RASG-PA and GREPECAS

GREPECAS – RASG-PA ACTIVITIES, PROJECTS AND COORDINATION PROPOSALS

(Presented by the GREPECAS and RASG-PA Secretariats)

EXECUTIVE SUMMARY

In compliance with the generic Terms of Reference (ToR) of the Planning and Implementation Regional Groups (PIRGs) and the Regional Aviation Safety Groups (RASGs), reviewed and approved by the ICAO Council, this joint meeting is being held between the Nineteenth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/19) and the Eleventh Plenary Meeting of the Regional Aviation Safety Group – Pan America (RASG-PA/11) to address the joint developed activities and those others that could be related to the work programme of both regional groups in order to report to the ICAO Council, and also to present for consideration several collaboration proposals and the dates to hold the GREPECAS and RASG-PA meetings in the next triennium.

Action:	Presented in section 4.1
Strategic Objectives:	<ul style="list-style-type: none">• Safety Air Navigation Capacity and Efficiency
References:	<ul style="list-style-type: none">• <i>Global Air Navigation Plan (GANP)</i> (Doc 9750)• <i>Global Aviation Safety Plan (GASP)</i> (Doc 1004)• Generic Terms of Reference (ToRs) of the Planning and Implementation Regional Groups (PIRGs) and Regional Aviation Safety Groups (RASGs)

1. Introduction

1.1 The ICAO Council through the Air Navigation Commission (ANC), has established PIRGs and RASGs to identify regional priorities, implementation objectives and the indicators related to air navigation and aviation safety for the regional implementation of the Global Air Navigation Plan (GANP) (Doc 9750) and the Global Aviation Safety Plan (GASP) (Doc 10004), in order to provide practical recommendations to the aforementioned Council.

1.2 The key challenges faced currently by the aforementioned ANC include maintaining and improving air navigation efficiency and aviation safety, while integrating an improvement in the existing aviation infrastructure, introducing new advanced systems, proactively identifying risks and designing mitigation measures in accordance with the GANP and GASP.

1.3 As part of this improvement, in 2019 new generic ToRs were approved for the PIRGs and RASGs, with the purpose to clarify the roles of stakeholders and promote partnership among them, harmonize working methods, and improve the presentation of regional reports through more frequent meetings. Furthermore, it was agreed that the option to further expand the ToRs to meet the regions needs will ensure the flexibility of work and will set the bases for a more efficient meeting and reporting model.

1.4 The previously mentioned ToRs establish that the RASG and PIRG meetings must be held back-to-back or jointly to facilitate the coordination and ensure the efficient use of resources in order to notify the Council of ICAO through the ANC, and with the support of the ICAO Secretariat on the matter, it is for this reason that this meeting is being held in compliance with the provisions of the mentioned ToRs.

2. Coordination matters between RASG-PA and GREPECAS

2.1 The coordination matters for this year (2021) between both regional Groups are described below:

- a) Coordination meeting between the GREPECAS and RASG-PA Technical Teams held on 25 March 2021, with the purpose of preparing a coordinated and participating work between both regional groups through the aforementioned technical teams;
- b) Cooperation between the GREPECAS Scrutiny Working Group (GTE) and the RASG-PA Pan America Regional Aviation Safety Team (PA-RAST), currently being carried out to promote the data exchange process to improve safety in the CAR/SAM regions airspace.

- c) Implementation of Performance-Based Navigation (PBN) approach in visual runway, a current project that aims to improve safety and also air navigation capacity and efficiency;
- d) Global Reporting Format for Runway Surface Conditions (GRF), with the purpose to invite GREPECAS and RASG-PA to urge States to make efforts to ensure the implementation of the GRF as soon as possible;
- e) Implementation of Part I of the *Aeronautical Information Service (AIS) Manual*, to promote the responsibility compliance of all involved parties in the Aeronautical Information Management (AIM).

2.2 A description of each of the issues described above, as well as their progress, conclusions, and/or proposals are presented in the **Appendix**.

3. GREPECAS and RASG-PA Meetings for the Next Triennium

3.1 In regards to what is set forth in the PIRG and RASG ToRs previously mentioned in regards to the frequency of the plenary meetings (each year), and in order to improve the planning and coordination of the activities of States, Territories, International Organizations, Industry, and stakeholders from both regional groups, the GREPECAS and RASG-PA Secretariats propose the following provisional meeting schedule for the next triennium (2022 – 2025) for discussion and approval:

That,

- a) during the first semester of each year of the 2022 – 2025 period, a meeting at the executive level be carried out of the GREPECAS Programmes and Projects Review Committee (PPRC) and the RASG-PA Executive Steering Committee (ESC) where GREPECAS-RASG-PA coordination matters continue to be addressed in their respective agendas; and
- b) plenary meetings of both regional groups be held back-to-back during the second week of November, the GREPECAS and RASG-PA Secretariats will coordinate on which days of that week each plenary meeting and the joint meeting will be carried out, as well as the development of the corresponding agendas.

3.2 Due to the previously mentioned, the following draft decision is submitted for consideration of both plenary meetings for approval:

DRAFT DECISION/XX		APPROVAL OF THE PROVISIONAL MEETINGS SCHEDULE OF GREPECAS AND RASG-PA FOR THE TRIENNIUM 2022-2024	
<p>What:</p> <p>That,</p> <p>a) the GREPECAS Secretariat plan and carry out the Programmes and Projects Review Committee (PPRC) meetings in the following periods:</p> <ul style="list-style-type: none"> • ePPRC/4 – 23 and 24 April 2022 • ePPRC/5 – 11 and 12 April 2023 • ePPRC/6 – 24 and 25 April 2024 <p>b) the RASG-PA Secretariat plan and carry out the Executive Steering Committee (ESC) meetings in the following periods:</p> <ul style="list-style-type: none"> • ESC/37 – 25 and 26 May 2022 • ESC/38 – 24 and 25 May 2023 • ESC/39 – 29 and 30 May 2024; and <p>c) the GREPECAS and RASG-PA Secretariats plan and carry out the following plenary meetings and coordinate that they are held Back-to-Back in the following periods:</p> <ul style="list-style-type: none"> • GREPECAS/20 and RASG-PA/12 – 14 to 18 November 2022 • GREPECAS/21 and RASG-PA/13 – 13 to 17 November 2023 • GREPECAS/22 and RASG-PA/14 – 10 to 14 November 2024. 		<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input checked="" type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Operational/Technical</p>	
<p>Why:</p> <p>To comply with the contents of the Generic Terms of Reference (ToRs) issued by the ICAO Council for PIRGs and RASGs.</p>			
<p>When:</p> <p>The complete Agendas will have to be available for approval 30 days prior to the PPRC and ESC meetings and 60 days before the plenary meetings.</p>		<p>Status: <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed</p>	
<p>Who:</p> <p><input type="checkbox"/> States <input checked="" type="checkbox"/> ICAO</p> <p><input checked="" type="checkbox"/> NACC Office (GREPECAS Secretariat) and SAM Office (RASG-PA Secretariat)</p>		<p>Responsible: NACC and SAM Regional Offices</p>	

4. Suggested Actions

4.1 Both Plenary Meetings are invited to:

- a) review and comment the content of this working paper and its appendix in which several progress, conclusions, and/or proposals of the current coordination matters between GREPECAS and RASG-PA; and
- b) comment and approve the proposed decision in 3.2 of this working paper.

APPENDIX
COORDINATION ACTIVITIES AND MATTERS BETWEEN GREPECAS AND RASG-PA

1. Coordination Meeting between the GREPECAS AND RASG-PA Technical Teams

1.1 This meeting was carried out with the objective to identify more collaboration opportunities and data exchange between GREPECAS and RASG-PA that can benefit decision-making and coordination for capacity and efficiency in air navigation and safety purposes at a regional level, as well as making efficient use of available resources and avoiding duplication of efforts between both regional groups.

1.2 That is why, in compliance with *Conclusion eCRPP/02/05*, from the Second GREPECAS Programmes and Projects Review Committee Meeting (ePPRC/2), and *Decision ESC/35/D6*, from the Thirty Fifth RASG-PA Executive Steering Committee (ESC/35), (both held in the second semester of 2020), it was agreed that in order to achieve a timely participation and preparation in the coordinated work between GREPECAS and RASG-PA, the holding of a coordination meeting between their technical teams would be approved; such meeting was held online on 25 March 2021.

1.3 The meeting was attended by representatives of the following GREPECAS technical teams:

- a) Latin American and Caribbean Association of Airfield Pavements (ALACPA);
- b) CAR/SAM Regional Bird/Wildlife Hazard Prevention Committee (CARSAMPAF);
- c) Scrutiny Working Group (GTE); and
- e) Data Analysis Working Group (DAWG)

1.4 Moreover, by representatives from the following RASG-PA technical teams:

- a) Pan America Regional Aviation Safety Team (PA-RAST); and
- b) Safety Monitoring and Report Team (SMRT).

1.5 At the end of the meeting, it was concluded that each team had a better understanding of the organization, the deliverables, and the activities of the other teams, as well as the role they play and the objectives within their respective regional group. There was clarity of the information resources and the type of data that each team uses, concluding that the organized coordination of these teams is essential for the success of collaboration and information exchange between GREPECAS and RASG-PA. The report of the meeting and presentations are available at the following link: <https://www.icao.int/NACC/Pages/meetings-2021-grpragpa.aspx>

2. Cooperation between the GTE and PA-RAST

2.1 In compliance with the ICAO Council determination that the cooperation between PIRGs and RASGs arise from the results optimization of the working groups and from the avoidance of duplication of efforts, recently, despite the restrictions imposed by COVID-19, a closer collaboration has been achieved between the GREPECAS GTE and the RASG-PA PA-RAST. Such cooperation aims at promoting the data exchange process to improve safety in the CAR/SAM Regions airspace, preserving the mandate of data conservation in accordance with an applicable confidentiality framework and bearing in mind that this joint work is currently in its preliminary stage.

2.2 Therefore, considering that the GTE and PA-RAST are technical teams that are in charge of data analysis as one of their main tasks, and also recognizing that cooperation between the GTE and PA-RAST can improve safety and efficiency in the CAR/SAM regions through data exchange in order to improve the process and the results of both regional groups, during the Twentieth Meeting of the GREPECAS Scrutiny Working Group (GTE/20), carried out virtually, from 9 to 11 November 2020, the GTE and PA-RAST presented a proposal concluding that:

- a) the GTE and PA-RAST will work jointly to develop a framework that includes a mechanism and process for the exchange and analysis of data between these two teams, aiming the identification of safety opportunities and the development and implementation of applicable improvement initiatives; and
- b) the GTE will identify how that exchanged data may be used to benefit in a better way the analysis of safety in the CAR/SAM Reduced Vertical Separation Minimum (RVSM) of the CAR/SAM regions airspace.

2.3 Following-up these conclusions, during the Twenty First Meeting of the GREPECAS Scrutiny Working Group (GTE/21), held online, from 23 to 26 August 2021, the GTE and PA-RAST presented their considerations consisting in the fact that the data processed by the CAR/SAM monitoring Agency (CARSAMMA) and validated by the GTE continue to show that the contributing factors for the 95% of the Large Height Deviations (LHDs) in the CAR/SAM regions are due to the coordination errors between Air Traffic Control (ATC) Units. Therefore, the importance of this collaborative effort highlights the safety opportunities related with Traffic Collision and Avoidance System-Resolution Advisory (TCAS RA) events.

2.4 That is why when reviewing LHDs events, especially TCAS RA events, data shows fewer TCAS RA events captured in the analysis, with the understanding that the LHD report is primarily focused on RVSM airspace. Hence, States are encouraged to report through the safety groups or the applicable mechanism, the TCAS RA events that are captured in their airspace as part of this process to allow a better data/information correlation.

2.5 The GTE/21 meeting final report and the documentation on this cooperation is available in the following link: <https://www.icao.int/SAM/Pages/MeetingsDocumentation.aspx?m=2021-GTE21>

2.6 Due to the aforementioned, both plenary meetings are invited to support the strategy on data/information exchange between the GTE and PA-RAST, and encourage States to report TCAS RA events, in and outside the RVSM airspace, because working together, as part of GREPECAS and RASG-PA, the benefit of this type of exchange will allow a deeper review of data/information applicable to improve the decision-making and the monitoring processes.

3. Implementation of Performance-Based Navigation (PBN) Approach in Visual Runway

3.1 The provision of PBN procedures supports stabilized approaches and prescribe initial – intermediate – final missed approach segments with proper obstacles protection, contributes to safety since it affects the reduction of Controlled Flight into Terrain (CFIT), Loss of Control - In Flight (LOC-I), and Runway Excursion (RE).

3.2 During the Thirty-First Meeting of the RASG-PA Executive Steering Committee (ESC/31) held in Buenos Aires, Argentina, from 8 to 9 November 2018, the European company ATR made a presentation on PBN approaches and their benefits for safety and efficiency. Also, in this meeting a reference was made to the ICAO mandate of implementing PBN in all runways with Instrument Flight Rules (IFR); however, it was concluded that it would be more beneficial to boost PBN implementation on runways with Visual Flight Rules (VFR), and that conversion of VRF runways to IFR is much cheaper today with PBN availability compared to conventional IFR. The meeting issued *Decision ESC/31/D/7* authorizing ATR and the Secretariat to develop the project.

3.3 Therefore, ATR made a proposal to work together with the RASG-PA Secretariat in order to present a project to the Thirty-Second Meeting of the Executive Steering Committee (ESC/32), which was held in Mexico City, Mexico, from 19 to 20 March 2019, to demonstrate the benefits of converting VFR to IFR using PBN, with the purpose to develop a proposal to ICAO to expand the scope of PBN implementation.

3.4 During the ESC/32 meeting, Brazil, United States and the Civil Air Navigation Services Organization (CANSO) expressed their interest in getting involved in the project and the possibility to contribute with resources. Finally, during the Thirty-Third Meeting of the Executive Steering Committee (ESC/33) carried out in Lima, Peru, from 11 to 12 September 2019, it was informed that Brazil and Colombia confirmed their intention to begin the PBN implementation in visual runway as part of a RASG-PA project for 2019 and 2020.

3.5 Due to the aforementioned, a first pilot implementation exercise was done at the Guapi Airport (SKGP) in Colombia, and as result of these activities, PBN instruments procedures were developed, tested, and published in the Colombia Aeronautical information Publication (AIP). Currently several activities are being carried out in which at the end a cost-benefit analysis will be elaborated and published.

3.6 The successful execution of this project is thanks to the participation and collaboration of *Autoridad de Aviación Civil de Colombia* (UAEAC), Colombian Air Force, Flight Safety Foundation, International Air Transport Association (IATA), ICAO and the companies ATR, Satena and Thales. Therefore, GREPECAS is informed on the current project because if it is addressed within a safety improvement scope it will also have a significant benefit in improving the air navigation capacity and efficiency. In the following link the meeting will be able to deepen on this project:
<https://www.icao.int/SAM/Documents/2021-ESC36/ESC36IP02%20-%20RASG-PA%20eng.pdf>

3.7 Additionally, to address this issue, Subgroup 2 of the Study Group and Implementation of the SAM Airspace (GESEA) technical group of the SAM/IG, carried out seven virtual meetings within 6 August and 22 October 2020. The Group deliverable was named “*Regional Guide on the Implementation of PBN Visual Runway Procedures*”, which was analysed and approved by the Twenty-Fifth Workshop Meeting on the ICAO SAM Implementation (SAMIG/25) meeting (Online, from 2 to 4 November 2020). The analysis of the matter and the previously mentioned Regional Guide is presented in this meeting report, in the following link: https://www.icao.int/SAM/Pages/ES/MeetingsDocumentation_ES.aspx?m=2020-RLA06901-SAMIG25&t=1

3.8 The purpose of the Regional Guide is to provide a set of harmonized guidelines to guide States in the PBN implementation procedures for visual runways, addressed to aircraft operators, PANS-OPS service providers and ATS service providers. Finally, during the SAMIG/26 meeting (Online, from 20 to 23 September 2021) a follow-up of the Regional implementation was made and the table on States planning was updated. An invitation is made to see the details in this meeting report in the following link: https://www.icao.int/SAM/Pages/ES/MeetingsDocumentation_ES.aspx?m=2021-RLA06901-SAMIG26&t=1

4. Global Report Format (GRF) Implementation

4.1 Safety matters are addressed at a regional level mainly by RASG-PA, however, GREPECAS has a role to guarantee that navigation facilities and services have the necessary conditions to carry out a safe operation, in accordance with the ICAO Standards and Recommended Practices (SARPs). The provision of services by the air navigation service providers and aerodrome operators are fundamental for an efficient and safe operation.

4.2 The new ICAO methodology for assessing and reporting runway surface conditions, commonly known as GRF, enables the harmonized assessment and reporting of runway surface conditions and a correspondingly improved flight crew assessment of take-off and landing performance.

4.3 Under State Letter 20/73, the Secretariat reported the adoption by the ICAO Council of the change of implementation dates of the SARPs and Procedures for Air Navigation Services (PANS) related to the improved global reporting format to assess and report the runway condition as consequence of the COVID-19 pandemic to 4 November 2021. Therefore, both ICAO Regional Offices (NACC and SAM) have initiated efforts to encourage their corresponding States to have a GRF implementation plan. However, the progress and commitment of the States in regards to this implementation has been uneven, also it has been identified that some States in which air navigation services providers are not duly informed and involved in the implementation efforts creates a risk.

4.4 That is why, during the Third GREPECAS Programmes and Projects Review Committee Meeting (ePPRC/3), carried out from 31 August to 1 September 2021, the GREPECAS Secretariat presented the progress and challenges of the GRF implementation in the CAR and SAR Regions, which (as previously informed) has an implementation deadline established by the ICAO Council for 4 November 2021.

4.5 With the purpose of encouraging States on this regard, it was proposed to the mentioned meeting to coordinate with RASG-PA, so States can be urged to make efforts to ensure the GRF implementation as soon as possible. Moreover, in order States that have not yet sent their implementation plan to their corresponding Regional Office do it as soon as possible away; as well as to urge those States that are still in the process to redouble efforts to achieve the mentioned implementation.

4.6 Due to the previously mentioned, the GREPECAS and RASG-PA Plenary Meetings are invited to intercede in order to urge (from both fora) States to make efforts to guarantee the GRF implementation before the applicability date (4 November 2021) by updating their implementation plan, which was sent in a timely manner to both regions and sending them to the respective Regional Office, considering the impact that it has on safety, hence the capacity and efficiency of air transport.

4.7 In this regard, ICAO has prepared guidance material on this issue and can be found in the following link: <https://www.icao.int/safety/Pages/GRF.aspx>.

5. Implementation of Part I of AIS Manual

5.1 The continued aviation growth has increased the demands on airspace capacity and efficiency in the services provision, so it emphasizes the need for greater equity in the access to airspace, a better access to timely information and meaningful for the support to decisions and more autonomy in decision-making.

5.2 An important step towards this goal and to a global integrated and receptive Air Traffic Management (ATM) system is based in the migration of paper-based and product-focused Aeronautical Information Services (AIS) to digital and data-based AIM. In order to facilitate this transition, the provisions in *Annex 15 – Aeronautical Information Management* were restructured and amended with the purpose to clear its scope, the function, the main functions, the products and AIM services, as well as the associated updating mechanisms.

5.3 The *Procedures for Air Navigation Services — Aeronautical Information Management — (PANS-AIM, Doc 10066)* contain operational practices that are very detailed for their inclusion in *Annex 15*. PANS-AIM provide a mean for a greater harmonization in the field of aeronautical information and it is adapted to the emerging technical requirements.

5.4 Similarly, the *AIS Manual* (Doc 8126), 7th Edition, which has also been restructured into five parts with the objective to provide a guide for the successful AIM implementation (currently is in a disclaimer version). This document explains the provisions contained in *Annex 15* and *PANS-AIM*, basic information on certain specifications, helps to illustrate its meaning, and gives examples of the means by which these specifications can be met.

5.5 The restructuration of the *AIS Manual* includes five parts. The first, named “*Part I - Regulatory Framework for Aeronautical Information Services*”, explains the AIS responsibilities and functions and provides an orientation for the AIS organizational development. In this part of the Manual are included issues related to:

- a) Responsibility of the Regulatory Authority;
- b) Responsibility of the AIS/AIM Provider;
- c) Responsibilities of the Data Originator;
- d) AIM/AIS Personnel Competencies Framework, as well as for the Regulator and the service provider

5.6 The main objective of this first part of the *AIS Manual* is to provide a Guidance for the establishment and management of an effective and sustainable state safety oversight system of the AIS. Due to the aforementioned, GREPECAS and RASG-PA could urge States to publicize Part I of the AIS Manual in order to promote compliance of the responsibilities of all parties involved in the AIM and that implement the AIM/AIS Personnel Competencies Framework, as well as the Regulator and the Service Provider.