



**Thirty Fifth Regional Aviation Safety Group — Pan America Executive Steering Committee Meeting
(RASG-PA ESC/35)**

Lima, Peru, 19 to 20 November 2020

Agenda Item 4: Other business

AIG Project on Collaboration with the RASG-PA
(Presented by the ARCM)

| EXECUTIVE SUMMARY | |
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| This Working Paper presents a proposal from the South American AIG Regional Cooperation Mechanism (ARCM) to support RASG-PA through the improvement of the SAM Region AIG Effective Implementation (EI). | |
| Action: | To take note of the WP and project submitted. |
| <i>Strategic Objectives:</i> | <ul style="list-style-type: none"> • Safety |
| <i>References:</i> | <ul style="list-style-type: none"> • ARCM Organization and Functions Manual. • 2021-2025 SAM Strategic Plan for Accident Investigation Management. • Annex 13 – Aircraft Accident and Incident Investigation. |

1. Introduction

1.1 The South American Regional Cooperation Mechanism (ARCM) was established in 2015 with the support of the SAM Regional Office, with the objective of establishing a horizontal cooperation mechanism between the States to address their deficiencies in AIG, and develop their competences.

1.2 In order for the investigation of an accident to fulfill its preventive function, it is essential that it be carried out in compliance with international standards, by duly qualified personnel and using the tools, procedures and best practices appropriate for this purpose.

1.3 The ARCM, in addition to generating efficiencies by avoiding unnecessary duplication of efforts and investments, seeks to ensure that experts and tools are always available, while identifying opportunities to level the level of competencies throughout the region.

1.4 The SAM region has capable and prestigious accident investigation authorities, and a significant number of qualified personnel, both to carry out accident investigations, as well as to provide technical assistance to the States for the improvement of their processes, training, and for skills development. Compliance with these activities has a direct effect on the level of effective implementation of the region in the AIG area.

1.5 Although some states have very high levels of effective implementation in AIG, the Regional average EI AIG is just 68.5%, the lowest of all audit areas. This situation negatively affects the level of general effective implementation of the Pan American region and affects the EI goals for 2022.

1.6 During 2019, the SAM Regional Office got special financial support to train AIG specialists from its States with higher levels of effective implementation, to support States with lower levels of effective application, to resolve their deficiencies. All specialists are part of the ARCM. In this context, ARCM supports the region by coordinating assistance, developing guidance and orientation material, and harmonizing training programs to ensure that they comply with ICAO guidelines.

2. GRIAA Participation

2.1 In the same way, the Regional Group for the Investigation of Aviation Accidents of Central America - GRIAA, has been working with greater intensity since 2018 in the Central American Region, until today, it has become a Management Unit of the Central American Corporation of Navigation Services Air (COCESNA) whose objective is to assist and support the AIG authorities of the Central American States to develop and acquire capabilities in accident investigation. This Management Unit is currently in the process of approving its strategic plan.

2.2 Considering the fact that the level of effective application of AIG in the Central American region is higher than in the SAM region as a whole, the GRIAA could benefit from accompanying the ARCM during the execution of the project, to learn about its processes and best practices, to be adapted and applied later, in their own region.

2.3 Once the Accident Investigation Management Unit within COCESNA has its strategic plan approved, and has developed its own AIG project adapted to the Central American region, it could join this initiative and contribute to promoting the improvement of the effective AIG implementation in its region.

3. Common objectives in the AIG Area in the Pan-American Region and RASG-PA

3.1 Given the fact that the RASG-PA is the regional organization in charge of monitoring and promoting the implementation of the GASP and the RASPs in the Pan American region, and that the activities carried out by the ARCM to promote the regional improvement strategy for the effective implementation in AIG, through the activities described in the previous section, the ARCM has developed the attached project, in order to support the objectives of the RASG-PA, by improving the EI of SAM States through the prosecution of the following targets:

- 1) Improvement of the average AIG effective implementation in the SAM region;
- 2) Improvement of the percentage of official notification of accidents and serious incidents to ICAO by the States (Annex 13, Chapter 4) *; and
- 3) Improvement of the percentage of integration of the databases of the accident investigation authorities, with the State Safety Programmes (SSP) of the States.

**Note.- (2) Refers to the obligation of the State of Occurrence to forward a notification of an accident or serious incident, with a minimum of delay and by the most suitable and quickest means available, to ICAO, when the aircraft involved is of a maximum mass of over 2 250 kg or is a turbojet-powered aeroplane.*

3. Conclusions

3.1 The improvement of the capacity to investigate aviation accidents in the States of the SAM region will improve the quality of reactive information available to prevent future accidents and to identify hazards and mitigate their associated risks.

3.2 The ARCM project is aligned with the objectives of the RASG-PA, and its satisfactory execution will favor the overall level of effective implementation of the SAM Region and consequently of the Pan-American Region.

4. Suggested Actions

4.1 The RASG-PA Executive Committee is invited to:

- a) take note and comment on the information provided in this working paper;
- b) analyze the project presented in **Attachment A**; and
- c) approve the execution of the project by the ARCM.
- d) consider the participation of GRIAA in this initiative once its AIG project for Central America is ready and available.

ATTACHMENT A

- 1. Name of the project: “Improvement of the Effective Implementation (EI) in the AIG Area of the SAM and CA Region”**
- 2. Description of the Initiative/Project**

The initiative proposed by the ARCM is designed with the commitment of the AIG organizations of the States that are part of the ARCM cooperation mechanisms, which have the possibility and wish to offer specialists in different areas as well as technical means to conduct the activities planned to achieve the different proposed objectives. In order to address the planned activities, the specialists will have to undergo a process of updates and consolidation of training in several areas in line with the activities to be developed. In this sense, the necessary technical equipment will be subject to update and implementation.

Once the specialist team has been prepared, the support and assistance activities to the AIG organizations that need them will begin. The priority is to those organizations whose effective implementation (EI) is less than 60% for the SAM Region or any other organization that request the support in order to find a solution to specific concerns of PQs. The assistance is expected to be conducted virtually or in situ according to the scope and complexity of the assistance to be provided.

The shortcomings in the PQs are expected to be identified in the first assistance to AIG organizations. An assistance plan for improvement will be developed for each of them considering the characteristics of the organizations and their corresponding States. Thus, the support and assistance will be customized, and priority will be given to those organizations where the efforts are fruitful and achievements could happen at medium and long term. In this regard, we have learned from experience that those differences or weaknesses whose solution are in a higher level of the State are very difficult to solve if they are only addressed from the technical point of view.

- 3. Identified Problems to Be Resolved**

According to the last results achieved in the framework of the activities of the ICAO’s Universal Safety Oversight Audit Programme (USOAP), one of the audit areas with less effective implementation (EI) related to the safety surveillance capacities of the SAM and CAM States continues to be the accident and incident investigation (AIG). In this area, it was especially noted that the subgroups dealing with investigation policies and procedures; development, completion and dissemination of the final report; organisation, staffing and training of the accident investigation authority; development, dissemination and recording of safety

recommendations; and accident/incident data reporting procedures (ADREP) have the largest number of unsatisfactory protocol questions (PQ) as overall average among the States.

4. Strategy to Address the Project

First Stage

- ✓ Training of specialists:

1st Step: To train the designated specialists of the AIG organizations that will carry out the assistance tasks to the States whose EI is less than 60% in the SAM Region in the exact interpretation of the AIG protocol questions and their implementation.

In this stage, it is very important to have the support of the ICAO SAM and NACC Regional Offices for the training of the designated personnel to assist the States that need it and the States that require it.

Second Stage

- ✓ Individual diagnosis of the AIAs of the SAM and Central American Regions:

2nd Step: To designate specialists to support each State pursuant to the compliance criteria of the EI for each region.

The support and assistance will imply face-to-face missions (depending on the scale of the tasks), diagnosis and follow-up, as well as remote support.

The specialists will have to make a detailed diagnosis of the situation of every AIA taking into account its characteristics, dependency, organization, regulatory framework, and to submit a project on realistic EI improvement based on those PQs that can be improved by the AIA, or a higher level such as CAA and ministries. The diagnosis and approach are relevant for the States to have an effective result.

3rd Step: To designate specialists to support the other States requesting assistance.

The assistance can be provided remotely and/or by present missions. A specialist will be designated to support and assist each State. The specialists will have to make a detailed diagnosis of the situation of each AIA and submit a realistic project of EI improvement according to the PQs that can be improved by the AIA, and by the CAA and ministries in a higher level. The diagnosis and approach are relevant for the States to have an effective result.

In this stage, it is very important to have the support of the ICAO SAM and NACC Regional Offices for the assistance, follow-up and monitoring of the specialists' tasks and compliance with the work schedule. The adjustments made to the work schedule for better achievement of the objectives will be defined together with the ARCM or GRIAA regional mechanisms.

Third Stage

- ✓ Implementation of improvements and progress assessment:

4th Step: To submit a customized improvement project and an implementation schedule proposal to the AIG organizations.

5th Step: To designate specialists (remote or present advisors) to support the development of the tasks.

6th Step: To periodically measure the progress of the indexes based on the proposed schedule.

5. Objectives to Be Achieved by Each Region

5. General Objectives

A) General objective of the SAM Region

✓ Medium-term objective - 2023

a) To support and assist the investigation agencies of the South American States that have an effective implementation (EI) less than 60%, so that the AIAs achieve or surpass 60% of EI at the medium term of implementation of the project.

✓ Long-term objective - 2025

a) To support and assist the investigation agencies of the South American States so that the effective implementation average in the AIG area of the South American region is a minimum of 70% in the medium term and 80% or more in the long term.

In relation to the general objective, it is worth mentioning that the increase of effective implementation in each AIA will directly translate into an improvement in the established standards of the ICAO Annex 13 regarding accident and incident investigation and in the States' contribution to safety management of each State pursuant to Annex 19 and, comprehensively, to the PANAM region.

5.2 Specific Objectives of the SAM Region

A comprehensive improvement in the effective implementation in the AIAs will translate into an adaptation and implementation of:

- a) investigation policies and procedures;
- b) organization, staffing of personnel of the accident investigation authority;
- c) development, completion and publication of the final report;
- d) development, dissemination and recording of safety recommendations;

- e) occurrence notification procedures (Annex 13, Chapter 4) and preliminary report and accident and incident data report (Annex 13, Chapter 7); and
- f) development of an AIG database integrated with the aeronautical authority's database.

6. Expected Benefits of the Solution Implementation (including the expected result in one or more RASG-PA SPIs)

6.1 Performance Key Indicators and Goals of the SAM Region

Main goal: Achievement of an effective implementation in the AIG area of 60% or more by 31 December 2023 by all the South American States and a regional average of 80% or more in the AIG area by 2025.

7. Person Responsible to Implement the Project, Activity or Initiative before the ESC

President of the ARCM Executive Committee

8. Building of the Team of the Project, Activity or Initiative Team

Team group: "Specific objective 1 – To increase the EI of the SAM Region"

Leader of the group: to be defined

Specialists: to be defined

Team group: "Specific objective 2 – To integrate the AIG activities with the planned scheme of SSP implementation in the SAM Region"

Leader of the group: to be defined

Specialists: to be defined

Team group: "Specific objective 3 – Reduction in the percentage of informal accident and incident notifications"

Leader of the group: to be designated

Specialists: to be defined

Note: The leaders of the group, e.g. the specialist in charge of carrying out the tasks, will be designated in the next ARCM EC meeting. Once the designation has been completed, it will be communicated to the RASG-PA Executive Committee.
