



THIRTEENTH AIR NAVIGATION CONFERENCE

Montréal, Canada, 9 to 19 October 2018

COMMITTEE B

Agenda Item 7: Operational safety risks

7.1: Facilitation of data-driven decision-making in support of safety intelligence to support safety risk management

PROGRESS STATUS OF THE CENTRAL AMERICAN SAFETY EVENTS ANALYSIS PROGRAM (PASOC)

(Presented by Belize, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua)

EXECUTIVE SUMMARY

This working paper shows the initiative of the **Central American States in conjoint with Central American Corporation for Air Navigation Services (COCESNA), through the Central American Aviation Safety Agency (ACSA)**, in relation to the implementation of the Central American Safety Events Analysis Program (PASOC safety acronym in Spanish), and its reach in safety and data record and further analysis.

Action: The Conference is invited to:

- a) take note of the information provided by Central American States with COCESNA/ACSA on the Central American Safety Events Analysis Program (PASOC); and
- b) promote regional strategies of coordination for the State safety programme (SSP) implementation, in order to take advantage of and optimize regional resources and efforts for the maturity of aviation systems grounded on critical elements, to be a solid base that can support the SSP implementation and reach as a region, strong results in safety.

1. INTRODUCTION

1.1 During the first RASG-PA/01 global meeting held in Puntarenas, Costa Rica in 2009, it was discussed and approved that **COCESNA/ACSA** would coordinate the implementation of a pilot program for sharing data generated by aircraft computers. In the case of AIRBUS, this is known as flight operational quality assurance (FOQA), a voluntary safety program created to improve aviation safety through the proactive and predictive use of recorded flight data. The program is called Safety Action Program (PASO, for its acronym in Spanish). So far, PASO has conducted forty-one face-to-face meetings and attended a series of international meetings where worksheets and working papers were presented.

¹ English and Spanish versions provided by COCESNA.

1.2 The Central American States in conjoint with COCESNA, have made efforts to evolve PASO program until becoming it in a regional program called PASOC, which stands for Central American Safety Events Analysis Program. As of the second semester of 2018, it has started to collect information related to the occurrence of events or incidents in the Central American region. This expansion to the initial mission of PASO, which is still in force, implies the existence of a coordinating body and a liaison between the different civil aviation authorities, their corresponding SSP, and the sources of information of these events. In this regard, the member States of COCESNA agree that the ACSA should assume this role of liaison and coordination as a protector of information sources. Incidentally, this last role will build the trust these programs need.

2. DEVELOPMENT

2.1 Consequently, we proposed the creation of PASOC aligned with the initiative of the regional safety program (RSP), through the chairmanship of the Technical Committee of COCESNA, which is integrated by General Directors of Central American Aviation Authorities. The PASOC consists of a series of actions that allow compiling, analyzing and reporting on regional trends in the occurrence of events/incidents; and thus, it aims to avoid duplication of efforts by improving the efficiency in managing and mitigation of safety risks in Central America. PASOC works using the basic principles of safety management, addressing aviation systems in all areas of aeronautical activity, including flight schools, air operators, approved maintenance organizations (AMOs), aerodromes and air traffic services.

2.2 Considering the progress in effective implementation of Standards and Recommended Practices (SARPs) on Central American States and the alignment of COCESNA's strategic objectives to this progress, the Agency as a regional safety oversight organization (RSOO) leads the implementation of this program. It also considers that the contribution to the Member States in terms of its safety programs will be extremely valuable, in compliance with the Strategic Objectives of COCESNA.

2.3 The RSP and PASOC, were approved by the Honorable Board of Directors of COCESNA through resolution ROCD 2017/203.2.4 in October 2017. The PASOC counts with the support from the Directors Board of COCESNA, which permits that the implementation resulting from the approval mentioned above, become strengthened in 2018.

2.4 PASOC will allow that Central American States as a region, to have a safety data collection and processing system (SDCPS), a requirement incorporated in Annexes 13 — *Aircraft Accident and Incident Investigation* and 19 — *Safety Management*, which comprises a fundamental part of the SSPs. PASOC has become a practical solution for the Member States. By having a regional mechanism for the notification of deficiencies, dangers, events, or safety incidents, and a policy for their proper notification, strengthening regulatory systems of each Central American State considering the maturity of these new demands. Also, PASOC points that through all data collected with PASOC, we shall analyze safety events from a regional point of view.

2.4.1 As of the second semester of 2018, Central American States will take a step forward in conjoint with the Agency (ACSA), to set up the necessary infrastructure in all the Member States of COCESNA to collect and store data or information related to events or incidents. In addition, to develop workshops and training to standardize the use of European Co-ordination Centre for Aviation Incident Reporting System (ECCAIRS) and the Accident/Incident Data Reporting (ADREP) taxonomy. This standardization will further favor the analysis and presentation of trends in the occurrences at the regional level.

2.4.2 The effort in the standardization and easiness for the collection of information has led Central American States through the Agency, to seek the use of analysis tools such as bow tie and ECCAIRS. This effort was implemented during the last quarter of 2017 with the support of Spanish experts, who have already implemented collection and analysis processes for some years. In addition, the personnel in charge of State SSP and ACSA comprise a network of information sharing under the precepts presented herein. This network will strengthen the management by having the infrastructure (servers), and a web page that enables the collection of information and links the efforts, so we invite you to visit pasoc.cocesna.org.

2.4.3 During the PASOC implementation process, alliances have been built, such as the International Air Transport Association's (IATA) willingness to share information with PASOC. This information comes from the flight data exchange program (FDX), and is expected to further strengthen the work of the program. The availability of information constitutes another key element in safety management.

2.4.4 The work of PASOC as a region will yield results through the delivery to the member States of the annual report and the data collected after the first quarter of 2019 in compliance with the proposed PASOC implementation plan. A series of activities completed as of the date of submission of this working paper is listed below.

2.5 Completed PASOC activities:

- a) the signing of a Memorandum of Understanding (MOU) with IATA for data sharing of its FDX and the global aviation data management (GADM) programs;
- b) preparation of PASOC regulations and procedures;
- c) preparation of an agreement for data and reporters' protection;
- d) training for the establishment of a system for the treatment of events (SORA-SENASA);
- e) purchase of the bow tie license and training;
- f) seminar/workshop addressed to legal experts to review the primary aviation legislation of the States and incorporate the protection of information sources and a suitable protection framework for informants and the information itself;
- g) training at the ECCAIRS;
- h) installation of the latest version of ECCAIRS;
- i) training on severity/risk assessment;
- j) workshop on fatigue risk management system (FRMS); and
- k) acquisition of six servers, computers and a physical space for the PASOC operation.

2.6 PASOC activities in progress:

- a) acquisition of IATA software called Integrated Management Solutions (IMX). The IMX will allow to efficiently handling all the basic elements of safety management

for information processing and analysis on a single platform. Similarly, the tool provides connection compatibility with the ECCAIRS computer software;

- b) the dissemination and training on PASOC rules and procedures, as well as notification will be provided to each member State of COCESNA and PASOC;
- c) testing of the web page (pasoc.cocesna.org) with the purpose of implementing one of the mechanisms for data capture;
- d) training in the operation and analysis of the computer system to the team of specialists;
- e) visit from SENASA specialists for on-the-job training (OJT) to the PASOC work team;
- f) incorporation of PASOC into the SIAR Evolution System of COCESNA/ACSA; and
- g) launch of PASOC to the public.

3. CONCLUSION

3.1 With the implementation of PASOC, the Central American States will meet the following objectives:

- a) have an organized system for the treatment of safety information from events or incidents reported regionally;
- b) strengthen the SSP of States to have more and better data quality;
- c) improve the collection and processing of safety information from voluntary reports;
- d) comply with the requirement of Appendix B of Annex 19 in terms of having an SDCPS;
- e) comply with the requirement of Appendix E of Annex 13 in terms of having a system to protect data on safety risk events and the reporters;
- f) have the knowledge to be able to monitor the safety hazards that affect our countries and the Region;
- g) share with ICAO and other regions the experiences acquired in the implementation of this program; and
- h) the States will prepare and improve the annual oversight plans based the evidence provided by the safety data obtained.

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