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International Civil Aviation Organization
North American, Central American and Caribbean Office

WORKING PAPER

CARAIO — WP/05
15/02/17

First Meeting for the Establishment of Caribbean Regional AIG Organization (CARAIO)

Mexico City, Mexico, ICAO NACC Regional Office, 21 to 22 February 2017

Agenda Item 2: Overview of Accident Investigation and Prevention (AIG) Status in Central America and in the Caribbean Region

ACCIDENT AND INCIDENT INVESTIGATION (AIG) COMPLIANCE STATUS IN CASSOS MEMBERS STATES

(Presented by Secretariat)

EXECUTIVE SUMMARY	
This paper provides an overview of the actions and agreements made for organizing the CARAIO initiative and the projected next actions to be considered on the joint development of CARAIO and GRIAA	
Action:	See section 3
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety
<i>References:</i>	<ul style="list-style-type: none">• Sixth Meeting of the North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/06), Nassau, Bahamas, 10-12 May 2016• CARAIO Teleconferences• CASSOS Board of Directors Meeting, 18th and 19th.

1. Introduction

1.1 During the NACC/DCA/6 Meeting, the NACC Directors noted that AGA, ANS and AIG areas are with the lowest USOAP effective implementation rate in the region. The Directors highlighted that States need more efforts to put in place robust and sustainable safety oversight systems and to progressively evolve them into more sophisticated means to managing safety.

1.2 The NACC/DCA/6 Meeting recognized that AIG EI improvements are a State Challenge and a need to work on, agreeing that a regional solution to this matter is the development and organization of a Regional Accident and Incident Investigation Organization (RAIO). The RAIO will allow an economy of scale Solution through the sharing of the necessary financial and human resources under the NACC “No Country Left Behind” Strategy. Similarly the Meeting recalled that CASSOS has requested ICAO and other related entities like COCESNA/ *Grupo Regional de Investigación de Accidentes Aéreos* (GRIAA) assistance for a regional solution on improving AIG oversight and investigations. ICAO supported this agreement with P/06 (**Appendix A** to this paper), highlighting:

- the Annex 13 requirements for the State of Occurrence to institute an investigation into the circumstances of the accident and be responsible for the conduct of the investigation, or may delegate the whole or any part of the conducting of such investigation to another State or a regional accident and incident investigation organization by mutual arrangement and consent and on the Annex 19 State Safety Programme (SSP) requirements for the State to maintain the independence of the accident and incident investigation organization from other State's aviation organizations
- guidance of ICAO Doc 9946 - Manual on Regional Accident and Incident Investigation Organization (RAIO)
- Practical implementation of a RAIO with GRIAA the led by COCESNA/ACSA

1.3 Based on the above, the Meeting agreed on the establishment of a RAIO for CASSOS Member States that will allow CASSOS Member States to comply with their investigation obligations as established by ICAO SARPs in order to contribute to a safer international air transportation system; and enhance a CAR Regional Cooperation Mechanism, increasing the maturity level of the States on the implementation of the ICAO SARPs. In this regard, the Meeting formulated the following conclusion:

CONCLUSION

NACC/DCA/6/5

ESTABLISHMENT OF A RAIO IN THE CAR REGION

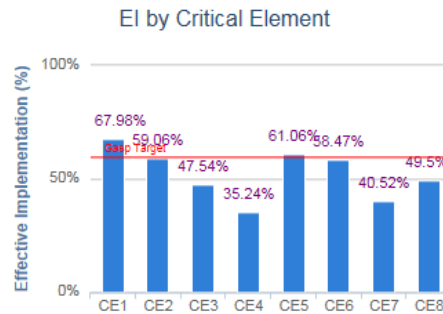
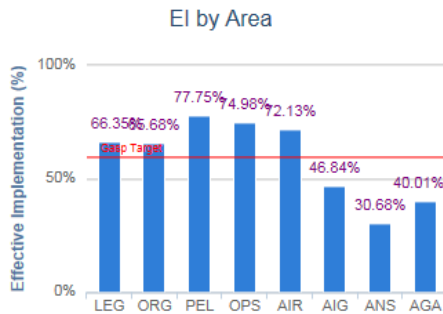
That, in order to foster the improvement in the Effective Implementation in the AIG matters in the CAR Region and enhance regional collaboration under the NACC NCLB Strategy through the establishment of a RAIO for CASSOS Member States and other CAR States as required, CAR States, led by ICAO NACC Office:

- a) designate a PoC for this action by 31 May 2016;
- b) develop and implement an action plan including as a minimum the Project areas detailed in Appendix C; and
- c) present the progress accomplished from item b) by the NACC/DCA/7 meeting.

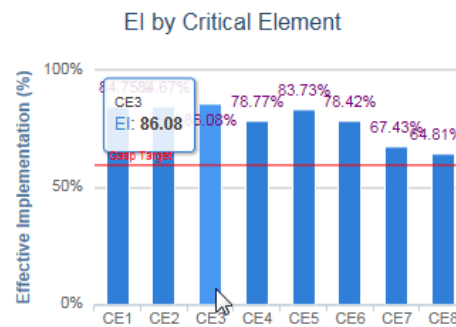
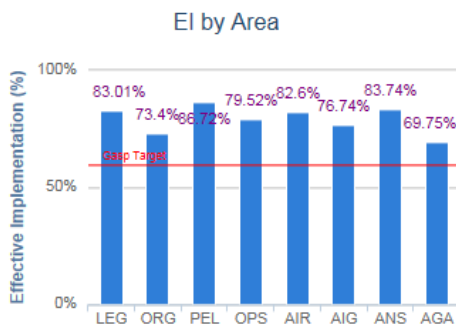
2. Discussion

2.1 The establishment of a RAIO will also support the decrease of aircrafts accidents and incidents rate in the Region.

The current EI performance of CASSOS is:



The current USOAP EI performance of GRIAA Members States is:



2.2 From the analysis of the less effectively implemented PQs in USOAP AIG, the areas of concern are related to investigation policies and procedures; development, completion and release of the final report; organization and personnel staffing and training; development, issuance, and recording of safety recommendations and accident/incident data reporting (ADREP).

2.3 Following the mandate given in the NACC/DCA/6 Conclusion 6/5 - *ESTABLISHMENT OF A RAIIO IN THE CAR REGION*, the following actions were conducted:

- a) From the 18th Meeting of the Caribbean Aviation Safety and Security Oversight System (CASSOS) Board of Directors (Kingston, Jamaica, May-1st June 2016), it was agreed with CASSOS Members States on the Projects proposals formulated by the NACC/DCA/6 Meeting, with the designation of the PoCs for their implementation for the Establishment of a RAIIO for CASSOS and the agreement on attendance to ICAO 39th Assembly session with specific papers like a Paper on CASSOS activities and the projects ongoing to enhance safety and security among their Members States;
- b) Two teleconferences were carried out for the establishment of CASSOS Regional AIG organization (CARAIO), one in 7 June 2016 and the other in 26 October 2016 (**Appendix B** to this paper);
- c) ICAO NACC RO has invited and coordinated with AIG related supporting entities like NTSB, Boeing, Airbus, among others;

- d) ICAO NACC RO presented a proposal for the establishment of CARAIO to the ICAO Safe Fund, which was finally granted in October 2016, to start the activities of the first phase of the project; and
- e) ICAO and CASSOS had a follow-up on the CARAIO Project as presented during the 19th Meeting of the CASSOS Board of Directors (Hyatt Regency Trinidad, Port of Spain, Trinidad and Tobago, 2-4 November 2016)

2.4 Under the establishment of the CARAIO and the joint support for the development of the GRIAA, several items need to be defined and work out by the members:

- a) The necessary set of regulations and documents to be elaborated in accordance with ICAO documents guidelines, in order that the investigation organizations of the Region adopt or harmonise it. This will allow standardising procedures for carrying out accidents and incidents investigations in the region within a common and harmonised framework;
- b) revision of AIG protocol questions (PQ) and the impact of CARAIO in resolving these;
- c) AIG authorities of the CARAIO/ GRIAA States to signed an AIG cooperation agreement for regional cooperation and for the use of the following resources previous agreement between the parts:
 - ✓ Investigators or other specialists related to the field of AIG;
 - ✓ technical installations;
 - ✓ equipment related to accidents and serious incidents investigations;
 - ✓ training, including on-the-job training (OJT);
 - ✓ reading of flight data recorders and cockpit voice recorders;
 - ✓ material and fluids trials; and
 - ✓ elaboration of documents and other publications.
- d) the establishment of a webpage where all the documents and activities developed by CARAIO shall be posted;
- e) establishment a safety data collection and processing system to guarantee the collection, storage and management of accidents and incidents data of member States. This system will permit establishing the necessary preventive measures to improve safety in the region; and
- f) consider in the annual activities programme the harmonization of regulations, activities with multinational teams to facilitate AIG assistance, training activities and workshops, AIG meetings, implementation of ADREP/ECCAIRS systems in all the States of the region, and the implementation of safety data collection and processing system at a regional level.

3. Suggested Actions

3.1 The Meeting is invited to take note of:

- a) the actions and agreements made for organizing the CARAIO as a regional AIG Solution;
- b) based on the progress of the CARAIO establishment, agreed on an action to report this progress to the NACC/DCA/7 Meeting;
- c) review the items identified defined to work out by the members (paragraph 2.4); and
- d) take any action as deem necessary:



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APPENDIX A

Regional Accident and Incident Investigation Organization - RAIO CAR Regional Approach

NACC/DCA/6 – P/06

NACC/DCA/6

Nassau, Bahamas, 10-12 April 2016

Agenda Item 4.5



Introduction

- ✈ Annex 13 establishes that the State of Occurrence shall institute an investigation into the circumstances of the accident and be responsible for the conduct of the investigation, but it may delegate the whole or any part of the conducting of such investigation to another State or a regional accident and incident investigation organization by mutual arrangement and consent
- ✈ Annex 19 under State Safety Programme (SSP) establishes that States maintain the independence of the accident and incident investigation organization from other State's aviation organizations



Introduction cont.

CASSOS Member States ICAO USOAP-CMA shows:

✈️ AIG EI: 43.06%

✈️ CE-3 EI: 44.07%

✈️ CE-4 EI: 33.49%

✈️ Lack of independence of the aircraft accident and incident investigation organization from the CAAs



Introduction cont.

- ✈ ICAO DOC 9946 *Manual on Regional Accident and Incident Investigation Organization* (RAIO) presents guidance to States on how to establish and manage an accident and incident investigation systems
- ✈ ICAO encourages States to implement an adequately funded, professionally trained accident investigation authority
- ✈ Central America established GRIAA (*Grupo Regional de Investigación de Accidentes Aéreos*)
 - ✈ Supported by RASG-PA and lead by COCESNA/ACSA



Proposal

The establishment of a RAIO for CASSOS Member States by providing economies of scale through the sharing of the necessary financial and human resources under “No Country Left Behind” Strategy



Objectives

- ✈ CASSOS Member States to comply with their investigation obligations as established by ICAO SARPs in order to contribute to a safer international air transportation system
- ✈ Enhance a CAR Regional Cooperation Mechanism, increasing the maturity level of the States on the implementation of the ICAO SARPs



Project Areas

1. **CASSOS Regional Accident and Incident Investigation Organization (RAIO)**
 - a. Conduct a feasibility study for the establishment of the RAIO in coordination with ICAO HQ AIG Section, COCESNA/ACSA, and other accident investigation agencies
2. **CASSOS Member States AIG Capacity Building Assistance Programme**
 - a. Conduct study to determine existing capabilities (both human and material) of individual States to carry out their investigation responsibilities, such as number of qualified personnel, research and analysis institutions, and facilities to carry out flight data recorder readout and analysis
 - b. Develop a regional training programme in coordination with ICAO GAT, NAM/ CAR Training Centers, etc.
3. **CASSOS Member States Technical Assistance Programme**
 - a. Develop an action plan for improving AIG area under USOAP-CMA
 - b. Develop an action plan for effective implementation of a RAIO



Expected Outcome

1. Foster regional training, cooperation and safety information exchange among CASSOS Member States for AIG activities and other CAR States
2. Enhance accident and incident investigation rate and quality
3. Enhance reporting of occurrences
4. Reduce fatality risk
5. Improve USOAP-CMA results



Action by the Meeting

Consider the establishment of a RAIO for CASSOS Member States by providing economies of scale through the sharing of the necessary financial and human resources



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When replying please quote:

Ref.: NT-NE31-3 — **E.OSG - NACC63802**

18 November 2016

To: Mr. Nari Williams-Singh
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Mr. Andre de Kock, ICAO Headquarters
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Subject: **Minute on the Second Teleconference on the Establishment of CASSOS Regional
AIG Organization (CARAIO)**
26 October 2016

Action

Required: **Note the agreed actions and confirm your availability for the follow-up
teleconference: 8 December 2016**

Sir,

Please find attached hereto the Minute on the Second Teleconference on the
Establishment of CASSOS Regional AIG Organization (CARAIO), held on 26 October 2016.

... / 2

Accept, Sir, the assurances of my highest consideration.



for
Melvin Cintron
Regional Director
North American, Central American and
Caribbean (NACC) Regional Office

Enclosure:

As indicated

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*Minute on the Second Teleconference on the
Establishment of CASSOS Regional AIG Organization (CARAIO)
(26 October 2016)*

Purpose: Exchange ideas and agree on actions to be conducted for the establishment of the Regional Accident and Incident Investigation Organization (RAIO) in the CASSOS States: Initial review of the CARAIO Project

References:

- First CARAIO Teleconference (7 June 2016)
- Sixth Meeting of the North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/06) RAIO discussion matters – *Conclusion NACC/DCA/6/4 – Establishment of a RAIO in the CAR Region*
- ICAO Safe Fund (SAFE) “CARAIO” Project
- CASSOS Draft AIG Protocol
- Terms of Reference of CASSOS AIG Outstanding Committee
- CARAIO Initial Action Plan

Participants

- ICAO NACC Regional Director (RD): Melvin Cintron
- ICAO NACC Deputy Regional Director (DRD): Julio Siu
- CASSOS Office Manager: Cleo Williams
- ICAO NACC, Regional Officer, Flight Safety (RO/FS): Eduardo Chacin
- ICAO Headquarters: Andre de Kock — Cargo
- ICAO NACC, Regional Officer, Flight Safety (FS/2): Gilbert Ordoñez

Agenda

1. Presentation of Participants
2. Follow-up to previous CARAIO actions
3. Other matters

Discussion

1. Presentation of Participants

1.1 ICAO thanked all participants for joining the teleconference and commented that Mr. Gail Robertson from the National Transportation Safety Board (NTSB) from United States excused their absence at the teleconference and regretted ACSA/GRIAA absence.

2. Follow-up to previous CARAIO Actions

2.1 RD informed that the National Transportation Safety Board (NTSB) from United States can support the CARAIO project by means of in-kind support. Also, he has been coordinating with another organization in order that they provide funds for the project and this organization is waiting for the costs. RD mentioned that it is very important to have a well-defined project and that it has to be divided into phases so that the funding can be obtained by phases. Therefore, is important to have the project proposal to present it to the possible donors.

2.2 DRD mentioned that the ICAO NACC Regional Office counts with US\$30K from HQs Safety Fund (SAFE) to start the activities of the first phase of the project. CASSOS commented on their Outstanding AIG Committee and its Terms of Reference (ToRs). The Rapporteur of the CASSOS AIG Committee is Captain Kirkcaldy.

2.3 CASSOS informed that they have submitted the Action Plan to ICAO. However, the actions and dates are outdated. Cap. Kirkcaldy is CASSOS Point of Contact (PoC) for the CARAIO.

2.4 Moreover, CASSOS commented that the draft agreement (protocol) is being reviewed by its members for approval. RD requested that the draft protocol agreement be sent to ICAO HQs, as is important to receive their feedback, so that Member States can meet the requirements of audits, based on the established system. Mr. Andre de Kock mentioned that it is important that the investigation authority be included.

Action 1: ICAO HQs to review and comment Draft AIG Protocol by next teleconference.

2.5 CASSOS requested ICAO to review the ToRs and advise if there is something to be added or deleted. ICAO commented that ToRs are to be developed for the CARAIO Project (pending action from the first teleconference).

2.6 DRD asked CASSOS if they were going to review the protocol, and they said that CASSOS will review all the pending deliverables.

2.7 RD requested CASSOS to crosscheck the GANDD deficiencies with the Protocol Questions and CASSOS said that they would ask for the deficiencies to do the crosscheck. Also, RD requested Mr. de Kock the Accident Investigation PQs and Mr. de Kock said he would ask Mr. Jean Paul de Villeneuve from HQs for the PQs.

2.8 RD said that Mr. de Kock will be the Point of Contact (PoC) from HQs.

2.9 DRD mentioned that it is important to schedule the kick-off meeting for the first phase. ICAO will provide dates for the meeting.

Action 2: ICAO NACC to provide dates for the first meeting by next teleconference.

2.10 RD expressed that his vision is to have a multiregional accident investigation group, but his first goal is to reinforce the Central American group and that CASSOS become an efficient and effective mechanism with the Central American group, once these groups are mature. Mr. de Kock said that it is better that each group is mature so that they can become an organization and it would be great to join their forces.

2.12 DRD stated that is important to have all the necessary information for the first CARAIO meeting, CASSOS will request the CASSOS AIG Standing Committee to collect all the information. Also, DRD requested to receive more information before the year ends. CASSOS said that they would work the pending items.

Action 3: CASSOS to provide the following information prior to the next teleconference:

- **Conduct study to determine existing capabilities (both human and material) of individual States to carry out their investigation responsibilities, such as number of qualified personnel, research and analysis institutions, and facilities to carry out flight data recorder readout and analysis**

- Existing or planned regional training programme
- Status of implementation of an independent AIG organization in each State

Action 4: ICAO identifies to provide by next teleconference the USOAP AIG status per each CASSOS Member.

6. Other matters

6.1 No other matters were discussed.

Next teleconference: 8 December 2016.
