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

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# Tenth North American, Central American and Caribbean Directors of Civil Aviation Meeting (NACC/DCA/10)

Martinique, France, 21 to 23 June 2022

Agenda Item 3: Status of Aviation Recovery and 2022 and new 2023-2025 Triennium Priorities for the NAM/CAR Regions

# CONTRIBUTION OF COCESNA/ICCAE TO THE TRAINING OF CIVIL AVIATION PERSONNEL IN THE REGION DURING COVID-19 PANDEMIC PERIOD

(Presented by Belize, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua, member states of the Central American Corporation for Air Navigation Services [COCESNA])

EXECUTIVE SUMMARY	
The purpose of this working paper is to present the contributions and efforts made by COCESNA/ICCAE, in the continuity of the training processes under the competency-based approach for professionals involved in the development of civil aviation in North America, Central America and the Caribbean, in order to proactively mitigate safety risks that could arise due to the prolonged interruption of face-to-face training caused by the COVID-19 pandemic.	
Action:	The meeting is requested to propose to ICAO, assistance and guidance to States to: a) Design contingency measures to anticipate a long-term suspension, focusing efforts on ensuring the continuity of training and the validity of the competencies of professionals involved in civil aviation. b) Document and share the experiences of the different Civil Aviation Training Centers regarding how they overcame the limitations presented by the Covid-19 pandemic. c) Promote the option of virtual training for those courses that allow it and maintain the face-to-face modality, prioritizing recurrences, complying with the established biosafety protocols.
Strategic Objectives:	Safety
References:	<ul> <li>Procedures for Air Navigation Services - Instruction, ICAO document 9868, third edition, 2020.</li> <li>Guide for the preparation of training programs - Competency-based training methodology, ICAO document 9941, first edition, 2011.</li> <li>Training development guide competency-based training methodology - Guide to</li> </ul>
	online course development, first edition, 2019.

### 1. Introduction

- 1.1 The Central American Institute of Aeronautical Training ICCAE -, as an integral part of COCESNA, is constituted as the aeronautical instruction center with the largest presence in the Central American region and beyond our borders. It has achieved great leadership and national and international recognition for the high quality of the instruction services it offers, as well as the continuous contribution to the Aeronautical Community through different innovative initiatives with high development potential.
- 1.2 Occupational health and safety has been an essential part of the objectives of COCESNA and the ICCAE Training Institute since its creation and through different pronouncements. It has been emphasized that having safe and healthy environments is essential to contribute to efficient training processes, thus enabling the continuity of operations related to the development of the air transportation industry in the event of any adverse scenario or major emergency that may arise.
- 1.3 In order to play a responsible role in preventing and avoiding the spread of SARS-CoV-2, COCESNA/ICCAE began an analysis process of the academic offerings, infrastructure and facilities, as well as logistics aspects associated with face-to-face courses, to determine the level of risk and the possibility of continuing with the training of personnel linked to the air transport industry in the Central American region and beyond. The result was that it was not prepared for a disruption on such a scale and that investments were required in order to resume operations at ICCAE.

## 2. Analysis

- 2.1 The closures, as a measure to contain the COVID-19 pandemic, led the various Civil Aviation Instruction Centers (CIAC's) around the world to an accelerated deployment of distance learning solutions to provide continuity of training. The obstacles were multiple, ranging from low connectivity, lack of virtual content aligned with the instructional design of the courses, to a staff of trainers unprepared to face this "new normal". It was in that sense that COCESNA/ICCAE, carried out activities to determine a feasible way to overcome the challenges of the pandemic period, on how to resume teaching and learning in a dramatically different context.
- 2.2 The lack of references to similar crises in the past makes it difficult to predict what may happen in the immediate future. Logically, the present effects are easily documented, but those that will leave their mark on the various stakeholders in the medium and long term are more subject to debate. In order to elaborate the analysis, we initially verified compliance with the variables required by ICCAE in the training process:

- a) Availability of a technological infrastructure.
- b) Broadband Internet connection.
- c) Learning Management System (LMS) available to integrate didactic information of the courses.
- d) Cyber security scheme integrated to the organization's network.
- e) Trainers trained to teach courses in both face-to-face and virtual modalities.
- f) Conventional or standardized courses available for virtual delivery.
- g) Local and international mobility restrictions.
- h) Regulations of the Directorate General of Civil Aviation (DGAC) that recognize instruction in virtual mode.
- j) To have a biosafety protocol approved by the Directorate General of Civil Aviation (DGAC).

### 3. General Description

- 3.1 As a result, it was determined that most of the variables were covered, but the availability of didactic material and instructors to teach courses in different modalities needed to be expanded. It was in this sense that, taking advantage of the quarantine period, a significant number of trainers were trained to develop instructional competencies for virtual learning environments. The selection of facilitators was based on the prioritization of courses identified in the detection of training needs in the Member States.
- 3.2 Conventional and standardized courses were also subjected to a competency analysis to determine if they were eligible for the didactic content to be adapted for distance learning. It is in this sense that the trend of designing, producing and delivering virtual training programs for the Member States of the Central American region was adopted.
- 3.3 COCESNA-ICCAE was working with the Civil Aviation Authority of El Salvador to allow the reopening of on-site classes in safe conditions. The first step was to develop reopening guidelines based on best practices observed worldwide. In addition, it was determined that the stay of the participants would be within the CAA lodging, including food and educational rooms adequate to the biosafety protocol, achieving with these actions a bubble of protection against Covid-19, which has been 100% effective.

- 3.4 In the context of face-to-face courses, factors such as maintaining social distance in classrooms and simulators, the possibility of staggering class shifts, reducing the degree of face-to-face interaction of external parties with participants, the inclusion of remote classes, administrative control provisions, as well as the geographical isolation of the place of accommodation, are considered. Each course began with an awareness talk for the participants, generating a culture of prevention and self-care during their stay at the institute.
- 3.5. Classroom courses focused on initial and recurrent training for the areas of Air Navigation, Aviation Safety and Airports, and was prioritized according to the training needs of the Member States, as well as particular conditions regarding the use of simulators, equipment, software applications, among other criteria.

#### 4. Conclusions

Aviation training cannot stop during an emergency, as it is an essential part of crisis recovery: it provides normality, a sense of routine, knowledge and skills necessary for on-the-job development. ICCAE continues to move forward with a clear and defined course to make the process of distance and face-to-face classes inclusive and accessible in all its phases without long term suspension.

### 5. Suggested actions

- 5.1 The meeting is requested to propose to ICAO, assistance and guidance to States to:
  - a) Design contingency measures to anticipate a long-term suspension, focusing efforts on ensuring the continuity of training and the validity of the competencies of professionals involved in civil aviation.
  - b) Document and share the experiences of the different Civil Aviation Training Centers regarding how they overcame the limitations presented by the COVID-19 pandemic.
  - c) Promote the option of virtual training for those courses that allow it and maintain the face-to-face modality, prioritizing recurrences, complying with the established biosafety protocols.