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# Eleventh North American, Central American and Caribbean Directors of Civil Aviation Meeting (NACC/DCA/11)

Varadero, Cuba, 28-30 June 2023

Agenda Item 4: NAM/CAR Regional Safety/Air Navigation Implementation

- 4.1 Safety Implementation Matters
- 4.2 Air Navigation Implementation Matters

# PROGRESS ON THE DEPLOYMENT OF UNMANNED AIRCRAFT SYSTEMS (UAS)/REMOTELY PILOTED AIRCRAFT SYSTEMS (RPAS)

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
This working paper summarizes the work undertaken by the ICAO NACC Office to support the	
integration of unmanned aircraft operations in the CAR region.	
Action:	Suggested actions are listed in section 3.
Strategic	Strategic Objective 1 - Safety
Objectives:	Strategic Objective 2 - Air Navigation Capacity and Efficiency
	Strategic Objective 4 - Economic Development of Air Transport
References:	GREPECAS ePPRC/04, April 2022.

#### 1. Introduction

- 1.1 Unmanned Aircraft Systems (UAS) are increasingly used worldwide to support emergency and rescue missions, urban fires, wildfires, floods and earthquakes. UA operations help firefighters, police and paramedics/medics. During the COVID-19 pandemic we have seen their applications in many activities, from socialization, sanitation, delivery of medical drugs, etc.
- 1.2 Unmanned aircraft operations and the services they provide are growing exponentially, and one of the fundamental concerns is that States are not prepared for these operations and everything they entail. One of the biggest challenges that States face is the establishment of a regulatory framework for Unmanned Aircraft Operations that integrates state regulation and civil aeronautics regulation, especially when it comes to the establishment of the regulation and requirements of RPAS and UAs operations, as well as the preparation and capacity building of national inspectors.

- 1.3 ICAO has developed a series of documentation to support States in the process of developing their regulations and procedures, among others, for the integration of these operations in their airspace. This documentation supports States in the establishment of harmonization in the development of their regulation, the establishment of safety for the integration of unmanned aircraft operations, and, above all, the said documentation sets out how States should take this issue and, in accordance with ICAO documentation, integrate the requirements and regulations for their operations.
- 1.4 ICAO has established the following documentation for the operation of unmanned aircraft:

### Categorization:

- 1. Open category and specific categories: ICAO model for UAS Part-101 and Part-102 regulations, which is an example for ICAO Member States to establish a regulation on unmanned aircraft operations. Link to document: https://bit.ly/3e46ayN
- **2.** Certified category: All ICAO annexes apply.
- **3.** Aviation Organization Approval (AAO): For unmanned aircraft operators, example for regulation development: ICAO Model for UAS Regulations Part-149: <a href="https://bit.ly/3RqPaB4">https://bit.ly/3RqPaB4</a>
- **4.** In addition to information and guides that ICAO has developed to support States in dealing with the operation of unmanned aircraft due to the diversity of applications.
- **1.5** All ICAO Annexes are affected by these operations; therefore, when developing national regulations, procedures and others, these requirements must be integrated and their applicability must be analyzed according to the type of operation.

#### 2. Discussion

- 2.1 ICAO has developed Volume VI for the establishment of ground-to-ground communications which was communicated to States through Official Letter Ref.: AN 7/67.2-21/18 of March 31, 2021 and States have been requested to notify compliance and any differences therewith by October 26, 2026. The first issue of Volume VI of Annex 10 was developed by the thirteenth meeting of the Remotely Piloted Aircraft Systems Panel (RPASP/13). The proposal includes "C2 Link Procedures" and "C2 Link Systems". These standards should be adopted for communications between remote aircraft and ground.
- 2.2 Additionally, other documentation is available for States to begin the process of developing and incorporating unmanned aircraft into their airspace operations, such as:
  - 1. Unmanned Aerial Systems (UAS) for Humanitarian Aid and Emergency Response (U-AID): https://www.icao.int/safety/UA/UAID/Documents/ICAO%20U-AID%20Guidance%20Material.pdf

- 2. ICAO's Practical Guides for Supporting UAS Operations: <a href="https://www.icao.int/safety/UA/UASToolkit/Pages/Toolkit-Operations">https://www.icao.int/safety/UA/UASToolkit/Pages/Toolkit-Operations</a> es.aspx
- 3. Furthermore, Member States' effective regulations, including CAR States, can be found here: https://www.icao.int/safety/UA/UASToolkit/Pages/State-Regulations\_es.aspx
- 2.3 States are required to assign personnel to review, oversee and establish statistics on their unmanned aircraft operations, and, thus, put in place the necessary mechanisms to establish/update the regulations governing their operations in order to implement safety mechanisms and the correct integration of these aircraft into their airspace.

### 3. Suggested actions:

- 3.1 The meeting is invited to:
  - a) Evaluate the information presented in this working paper;
  - b) Establish the necessary mechanisms to update/develop regional regulatory processes;
  - c) Respond to the adoption of ICAO Annex 10 Volume VI; and
  - d) Any other action required.