

INTERNATIONAL CIVIL AVIATION ORGANIZATION

TWENTY NINTH MEETING OF THE ASIA/PACIFIC AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP (APANPIRG/29)

Bangkok, Thailand, 3 to 5 September 2018

Agenda Item 2: Global and Inter Regional Activities

UAS INTEGRATION PILOT PROGRAM

(Presented by the United States)

SUMMARY

This paper provides information about the Unmanned Aircraft Systems Integration Pilot Program in the United States.

Strategic Objectives:

- A: Safety Enhance global civil aviation safety
- B: Air Navigation Capacity and Efficiency—Increase the capacity and improve the efficiency of the global aviation system

1. INTRODUCTION

- 1.1 In October 2017, the White House Office of Science and Technology announced the establishment of an Unmanned Aircraft Systems (UAS) Integration Pilot Program (IPP) under the Department of Transportation (DOT) and managed by the Federal Aviation Administration (FAA). This initiative will allow for the safe testing and validation of advanced UAS operations in partnership with state, local, and tribal governments in select jurisdictions across the United States.
- 1.2 The IPP will help tackle the most significant challenges in integrating UAS into the U.S. national airspace while reducing risks to public safety and security. In particular, the IPP is expected to foster a meaningful dialogue on the balance between local and national interests related to UAS integration.
- 1.3 The IPP will also help the FAA develop a regulatory framework that will allow more complex low-altitude operations; improve the FAA's understanding of local, state, and tribal concerns; address security and privacy risks; and accelerate the approval of operations that currently require special authorizations.

2. DISCUSSION

2.1 The IPP is an opportunity for state, local, and tribal governments to partner with private sector entities, such as UAS operators or manufacturers, to accelerate safe UAS integration. These partnerships will support IPP objectives to test and evaluate various models of local involvement in the development and enforcement of national regulations for UAS operations; and encourage UAS owners and operators to develop and safely test new and innovative UAS concepts of operations.

- A goal of the IPP is to help accelerate the standardization of low-altitude UAS operations into U.S. national airspace, which will help the FAA update the current process for authorizing operations that require special permissions. The program will provide immediate opportunities to accelerate commercial-use concepts of operations such as emergency management, precision agriculture, and infrastructure inspections.
- 2.3 The FAA established a rigorous process for the submission and review of applications for participation in the program. Applicants were required to provide a concept overview describing their proposed project(s), a description of the areas where they planned to conduct operations, some of the key objectives of the operations, identify team members and experience, and indicate which infrastructure tools would be available to support their operations.
- 2.4 In May 2018, the Secretary of Transportation announced the IPP awardees. The FAA is currently working with each of the participants to refine their concepts of operations, and expects them to begin operations under the program by August of this year.
- 2.5 The IPP Lead Participants include: The Cities of San Diego, California and Reno, Nevada; the Departments of Transportation in Kansas, North Dakota and North Carolina; the Choctaw Nation of Oklahoma; the Lee County Mosquito Control District in Florida; the University of Alaska-Fairbanks; the Innovation and Entrepreneurship Investment Authority of Virginia; and the Memphis-Shelby Airport Authority in Tennessee.
- 2.6 The IPP projects will evaluate a variety of operational concepts, including night operations, flights over people, flights beyond the pilot's line of sight, package delivery, detect-and-avoid technologies, counter-UAS security operations, and the reliability and security of data links between pilot and aircraft. More information about the IPP awardees and their projects is available on the FAA's IPP website.
- 2.7 In developing the IPP, DOT and the FAA recognize that UAS integration will require private-sector cooperation and the involvement of state, local, and tribal governments in national efforts to develop and enforce regulations on UAS operations in their jurisdictions. A coordinated effort between the private sector and among these governments will provide certainty and stability to UAS owners and operators, maximize the benefits of UAS technologies for the public, and mitigate risks to public safety and security.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the content of the paper and visit the FAA's IPP website for more detailed information.