International Civil Aviation Organization

Middle East Air Navigation Planning and Implementation Regional Group

Fifteenth Meeting (MIDANPIRG/15)
(Bahrain, 8 – 11 June 2015)

Agenda Item 3: Global and Regional Developments

SAFE INTEGRETION OF UNMANNED AIRCRAFT SYSTEMS INTO NON-SEGREGATED AIRSPACE

(Presented by the United States)

SUMMARY

Unmanned aircraft systems (UAS) are inherently different from manned aircraft. Integrating UAS into non-segregated airspace is challenging for civil aviation authorities, air navigation service providers and the aviation community. The Federal Aviation Administration (FAA) is taking an incremental risk-based approach toward integrating UAS/RPAS into the U.S. airspace system in a safe, efficient, and timely manner. Integration into our airspace system will require a clear understanding of potential operational and technical issues associated with unmanned aircraft flight. The following, provides information on a proposed rule that will integrate UAS aircraft weighing less than 55 pounds into the U.S. airspace system.

Action by the meeting is at paragraph 3.

1. INTRODUCTION

1.1 Integration of UAS into the global aerospace system will need to be safe, efficient and timely. The FAA's primary mission is safety, and the agency is committed to ensuring an efficient, and reliable system is maintained. We believe this new technology, has significant safety and economic benefits that may help achieve these goals. The FAA, in taking an incremental approach to safe UAS integration, will consider issues such as training requirements, operational specifications, and technology considerations.

2. DISCUSSION

2.1 Since 1990, the FAA has allowed limited use of UAS for specific public missions such as disaster relief, search and rescue, law enforcement, border patrol, scientific research, and testing and evaluation. In addition, the FAA has authorized some non-recreational UAS operations in controlled, low-risk situations. UAS operations may range from ground level to above 50,000 feet, depending on the specific type of aircraft. Flying model aircraft for a hobby or recreational purpose does not require FAA approval, but all model aircraft operators must abide by industry safety operating standards.

2.2 In February 2015, the U.S. Department of Transportation and the FAA released a proposed set of regulations that will pave the way for small UAS – those under 55 pounds – to enter the mainstream of U.S. civil aviation. The rule will allow routine use of small UAS in today's aviation system, and is flexible enough to accommodate future technological innovations. The proposal offers safety rules addressing non-recreational small UAS operations, and for model aircraft operations that do not meet the criteria contained in Section 336 of Public Law 112-95. The rule would limit small UAS to daylight flights and visual-line-of-sight operations. The proposed rule also addresses issues such as height restrictions, operator certification, optional use of a visual observer, aircraft registration and marking, and operational limits. The proposed rule also includes extensive discussion of a possible "micro" classification for UAS under 4.4 pounds. The FAA is asking the public to comment on whether it should include this option as part of a final rule.

2.3 Integrating UAS into the U.S. airspace system presents both opportunities and challenges, but the focus remains on ensuring safety. New policies, procedures, and approval processes are necessary, to adequately respond to the increasing number of requests by civilian operators, to conduct UAS operations. In order to develop and implement the necessary new standards and guidance, the United States encourages ICAO and other Member States to consider this methodology as they work to integrate UAS into their own airspace systems. The U.S. also encourages further State participation in global/regional forums that will increase the understanding of UAS matters.

3. RECOMMENDED ACTIONS

3.1 The meeting is invited to:

a) take note of the work underway to establish rules for small RPAS/UAS in paragraph 2.2;

b) review the material identified in **Appendix A** and provide comments; and

c) support the work of the ICAO RPAS Panel as they work to integrate RPAS/UAS into international airspace systems.

APPENDIX A

For more information on the FAA's UAS program, please visit: http://www.faa.gov/uas/ and the following websites:

The FAA encourages new operators to visit: http://www.knowbeforeyoufly.org

An overview of the Small UAS rule can be viewed at:
http://www.faa.gov/regulations_policies/rulemaking/media/021515_sUAS_Summary.pdf

You can view the UAS fact sheet at:
http://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=18297

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