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Agenda Item 24: Aviation Safety and Air Navigation Priority Initiatives

THE ACTIVITY OF THE INTERSTATE AVIATION COMMITTEE IN THE FIELD OF ENSURING AVIATION SAFETY OF REMOTELY PILOTED AIRCRAFT

(Presented by the Interstate Aviation Committee (IAC))

EXECUTIVE SUMMARY

Currently, the use of remotely piloted aircraft (RPA) is experiencing significant growth. They are being actively used in industry, agriculture, logistics, construction and the public sector to solve various problems. The lack of sufficient experience in the operation of the remotely piloted aircraft systems (RPAS) requires the unification and the implementation of a regulatory framework, which requires efforts from all industry stakeholders. In order to simplify the implementation of the legislative documents, the Interstate Aviation Committee (IAC) is conducting the work described in this working paper.

<i>Strategic Goals:</i>	This working paper relates to the Strategic Goals <i>Every flight is safe and secure; and Aviation Delivers Seamless, Accessible and Reliable Mobility for All.</i>
<i>Financial implications:</i>	Not applicable.
<i>References:</i>	No references.

1. INTRODUCTION

1.1 The development remotely piloted aircraft systems (RPAS) in modern times has passed its way from the first experimental models to widely used devices in various fields. Over time, owing to the advanced technologies, remotely piloted aircraft (RPA) became more sophisticated, compact and multifunctional, and widely used in the civilian sector.

1.2 Currently, RPAs are being even more used for civilian purposes, including: infrastructure facilities monitoring, cargo delivery, agriculture and forestry, construction, energy sector, aerial photography, search and rescue operations, etc.

¹ English and Russian versions provided by IAC.

1.3 RPA expand the opportunities of the civil aviation industry. The development of the unmanned aviation industry is accompanied by a number of new aviation safety risks that require careful and comprehensive analysis, primarily the risk of collision with manned aircraft and ground infrastructure. Aviation security risks, cyberattacks on control systems and the use of RPAS for acts of illegal interference in civil aviation activities are accompanied by other risks.

1.4 Presently, the regulations adopted by the States differ significantly from each other and from the ICAO SARPs. In this regard, IAC as the regional aviation safety organization believes that in order to minimize aviation safety and aviation security risks a comprehensive approach is necessary, including immediate and drastic measures to unify and harmonize regulatory norms and rules.

2. DISCUSSION

2.1 On 3 and 4 June 2025, the international conference “Unmanned Aviation: Status, Challenges and Development Perspectives” was held in the Interstate Aviation Committee with the participation of the representatives of the civil aviation authorities (CAAs) from the States of the region, ICAO, International Air Transport Association (IATA), designers, training centers, and RPAS operators.

2.2 Among the main problems of the RPAS industry, the following were identified: peculiarities of the aviation safety risks estimation and consideration for the external pilot's fatigue risk, new cybersecurity risks, receiving specialized education, training of external pilots and engineers in the field of RPAS, investigation of aviation accidents involving RPA.

2.3 The conference resolution included the issues that require attention and a coordinated approach, such as:

- a) mitigation of medical requirements for external remote pilots and engineers in order to enable people with limited mobility to be integrated in the RPAS operation process;
- b) increasing airspace capacity and ensuring general awareness of the airspace situation. Implementation of the principles of digital airspace, automation, artificial intelligence and real-time data exchange to integrate RPAS into the common airspace;
- c) development and implementation of a regulatory framework that defines the responsibility of all the participants in the RPAS operation process and airspace users, RPAS certification based on a risk-oriented approach;
- d) maintaining an acceptable level of aviation safety by implementing unified aviation safety and security requirements and rules, as well as by monitoring the maintenance of an appropriate level of safety and aviation (cyber) security; and
- e) implementation of safety management system (SMS) for RPAS.

2.4 The participants of the conference approved the need for the further development of the issue of creating and implementing digital integration tools for airspace management, including RPA flights.

3. **CONCLUSION**

3.1 IAC notes the active work and efforts of ICAO in addressing the issues related to RPAS, including through the Remotely Piloted Aircraft Systems Panel (RPASP) and Advanced Air Mobility Study Group (AAM SG) working groups, and its support for the IAC activities in this area.

3.2 IAC calls on the States and ICAO to continue their work on the coordinated support for the development of the RPAS sector through international cooperation, including the use of approaches described in this paper, and to support efforts in personnel training, sharing best practices and information with the support of the industry stakeholders and the States that can share their practical experience.

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