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ASSEMBLY — 37TH SESSION

TECHNICAL COMMISSION

Agenda Item 46: Other issues to be considered by the Technical Commission

REGULATORY BASIS OF THE SYSTEM FOR CERTIFICATION OF AERODROMES IN MEMBER STATES OF INTERSTATE AGREEMENT ON CIVIL AVIATION AND AIRSPACE USE

(Presented by the Interstate Aviation Committee²)

EXECUTIVE SUMMARY

In the region embracing twelve Member States of the Interstate Agreement on Civil Aviation and Airspace Use, the constantly evolving system for certification of aerodromes has been used for more than 30 years. It is based on the regulations enabling to achieve a high level of flight safety.

Action: The Assembly is invited to note the information provided below.

<i>Strategic Objectives:</i>	This information paper relates to Strategic Objectives to improve the flight safety level of the international civil aviation
<i>Financial implications:</i>	No financial implications
<i>References:</i>	Annex 14 — <i>Aerodromes</i> , Doc Doc 9774, <i>Manual on Certification of Aerodromes</i>

¹ Versions in Russian and English are presented by the Interstate Aviation Committee (IAC).

² Interstate Aviation Committee (IAC) is the executive body of the interstate Agreement on Civil Aviation and Airspace Use (international agreement, participants of which include Azerbaijan Republic, Republic of Armenia, Republic of Belarus, Georgia, Republic of Kazakhstan, Kyrgyz Republic, Republic of Moldova, the Russian Federation, Republic of Tajikistan, Turkmenistan, the Ukraine, Republic of Uzbekistan).

1. INTRODUCTION

1.1 In 1991, twelve independent States, the Republics of Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Tajikistan, Turkmenistan, Uzbekistan and Ukraine, signed the international agreement, the Interstate Agreement on Civil Aviation and Airspace Use (hereinafter referred to as the interstate Agreement), and instituted the Interstate Aviation Committee (IAC) as the executive body to the interstate Agreement.

1.2 Under the interstate Agreement, the IAC has developed Aviation Regulations containing criteria and procedures for the certification of aerodromes that ensure a common approach to their certification in the IAC Member States. These criteria and procedures were agreed on by the IAC Member States, approved by the Council on Aviation and Airspace Use, set up within the framework of the interstate Agreement and comprised of authorized representatives of the States, and accepted as the basis in developing national regulations and procedures, or entered into force in the IAC Member States as their national regulations.

1.3 Within the framework of the interstate Agreement, international aerodromes and aerodromes with precision approach runways, category I, II or III (above 80), have been certified by IAC with the issuance of relevant Certificates along with documents issued by the National Authorities.

2. PROCEDURES FOR AERODROME CERTIFICATION

2.1 The procedures for certification of the IAC Member States of the interstate Agreement aerodromes are set up in the Aviation Regulations, Part 139, Certification of Aerodromes, Vol. I, Procedures for Certification of Aerodromes.

2.2 The issues covered in the Procedures comply, in general, with those stipulated in ICAO Doc 9774, *Manual on Certification of Aerodromes*.

2.3 The documents used in practice in the majority of the IAC Member States, such as Rules of Terminal Procedures or Aerodrome Air Navigation Manual or Air Navigation Passport along with Emergency Aircraft Fire Fighting Procedures, replace the Aerodrome Manual. Like the Aerodrome Manual, these documents are to be approved prior to granting the aerodrome certificate. They are also subject to incorporating approved amendments in case of changes at the certified aerodrome.

2.4 The requirement of the Procedures for Certification of Aerodromes that only certified types of equipment be allowed for operation on aerodromes is the important factor of flight safety in IAC Member States' aerodromes.

3. PROCEDURE FOR CERTIFICATION OF AERODROME EQUIPMENT TYPE (TYPE DESIGN) AND EQUIPMENT MANUFACTURERS

3.1 The Procedures for equipment type design certification by IAC are defined in the Aviation Regulations, Part 170, Certification of Aerodrome and En-Route Equipment, Vol. I, Procedures for Certification of Aerodrome and En-Route Equipment.

3.2 The procedure for IAC certification of production of aerodrome and en-route equipment is defined in the Procedures for Certification of Aerodrome and En-Route Equipment Manufacturers. Equipment production certification is necessary to ensure conformity of production equipment to its certified type design.

3.3 Certification of aerodrome equipment type design and equipment manufacturers does not eliminate the necessity for minimum installation tests of each individual equipment, based on which the Service Clearance Report will be issued.

3.4 Certification of equipment and its production, along with equipment installation and operation in compliance with the IAC-approved operational documentation is important for ensuring flight safety when using the certificated equipment at a certain aerodrome site.

4. CRITERIA FOR CERTIFICATION OF AERODROMES

4.1 The criteria for certification of aerodromes (certification requirements) are based on a flight safety concept and are contained in a document of a direct application – the Aviation Regulations, Part 139, Certification of Aerodromes, Vol. II, Certification Requirements to Aerodromes, which enhances the effectiveness of the aerodrome certification system.

4.2 In the process of certification, an aerodrome is considered as a structure made up of numerous inter-related components, such as:

- a) aerodrome facilities (runways, taxiways, aprons, etc.);
- b) airspace around the aerodrome;
- c) aerodrome equipment and services encompassing visual and non-visual navigation aids, ATC and communication equipment, rescue and aircraft fire fighting services, electrical and meteorological equipment, etc;
- d) measures to ensure flight safety and secure aerodrome operation, as well as other components stipulated in the relevant ICAO SARPs and PANS.

Accordingly, the criteria for certification of aerodromes in Part 139, Vol. II, incorporate the requirements for the above mentioned components.

4.3 Requirements for the equipment, within the aerodrome certification criteria of Part 139, Vol. II, encompass its location at the aerodrome and specific aerodrome-related characteristics to be checked during commissioning and operation of equipment. Compliance with the flight safety requirements related to other aerodrome equipment parameters and characteristics shall be verified in the equipment type (type design) certification.

5. CRITERIA FOR CERTIFICATION OF AERODROME EQUIPMENT TYPE DESIGN AND EQUIPMENT MANUFACTURERS

5.1 The Aviation Regulations, Part 170, Certification of Aerodrome and En-Route Equipment, Vol. II, Certification Requirements for Aerodrome and En-Route Equipment, are intended to demonstrate compliance of the type design of aerodrome equipment with applicable ICAO, regional and industry requirements. The Certification Requirements also consider local climatic and environmental conditions, effect of aircraft, etc.

5.2 The Certification Requirements for Aerodrome and En-Route Equipment Manufacturers are related to production, supervising over production processes, types of product testing and inspections at the production facility, and account for international Quality Standards.

**6. ADVANCEMENT OF THE REGULATORY BASIS OF
THE SYSTEM FOR CERTIFICATION OF
AERODROMES**

6.1 The IAC has made significant progress in advancement of initially adopted criteria and procedures for certification of aerodromes. This resulted in the creation in 1994-1996 of the above mentioned in pp. 2 and 4 Aviation Regulations, Part 139. Over 1994-1998, the Aviation Regulations, Part 170, was created, to which were added, in 2000, the criteria and procedures for certification of manufacturers of aerodrome and en-route equipment (see pp. 3 and 5).

6.2 These Regulations are subject to incorporating amendments as a result of gaining the certification experience and in compliance with amendments to ICAO SARPs and PANS and other applicable regional and industry requirements.

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