Aerodrome Certification – Applicable provisions

ICAO MID Seminar on Aerodrome Operational Procedures
(PANS-Aerodromes)
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Agenda

The Chicago convention

Annex 14 (Aerodromes)

Doc 9774 (Manual on Certification of Aerodromes)

PANS-Aerodromes (doc. 9981)

Other supporting provisions

The Chicago Convention (Doc 7300)

➢ **Signed on 7 December 1944.**

➢ **Currently 191 States ratified – one of world's most widely accepted international treaties.**

➢ **Only global set of principles/rules governing all aspects of the international civil aviation.**

➢ **Contains 96 Articles in 22 Chapters.**

➢ **Provides for the establishment of the ICAO.**

THE CHICAGO CONVENTION – Cont'd

STATES "OBLIGATIONS":

➢ **Article 28** - Each State agrees to provide airports and air traffic services in conformance with standards and practices established under the Convention.

➢ **Article 37** - Each State agrees to implement in their national regulations the International Standards and Recommended Practices (SARPs) **and Procedures** adopted by ICAO in order to ensure the highest practicable degree of uniformity.

THE CHICAGO CONVENTION – Cont'd

STATES "OBLIGATIONS":

➤ **Article 38** - Each State is required to notify ICAO immediately if it finds it impracticable to comply in all respects with any International Standard or Procedure ("filing of differences").

Certification of Aerodromes – The Tools

- **Annex 14 Volume I – Aerodromes**

- **PANS-Aerodromes** (Doc 9981)

- **Doc 9774 – Manual on certification of Aerodromes**

And, more than 20 associated Guidance Materials, including:

- Airport Services Manual (Doc 9137 – 8 parts)

- Aerodrome Design Manual (Doc 9157 – 6 parts)

- Airport Planning Manual (Doc 9184 – 3 parts)

- Safety Management Manual (Doc 9859)

Standard

"Any specification for physical characteristics, configuration, material, performance, personnel or procedure, the <u>uniform application</u> of which is recognized as <u>necessary</u> for the <u>safety</u> or <u>regularity</u> of int'l air navigation and to which Contracting State <u>will conform</u> in accordance with the Convention; in the event of impossibility of compliance, notification to the Council is <u>compulsory</u> under Article 38."

Recommended Practice

"Any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognized as <u>desirable</u> in the interest of <u>safety</u>, <u>regularity</u> or <u>efficiency</u> of int'l air navigation and to which Contracting State <u>will endeavor</u> to con-form in accordance with the Convention."

Annex 14 – Aerodromes

Volume I – Aerodrome Design and Operations

Volume II – Heliports

A14 Vol. I, Chapter 1, section 1.4 - Certification of Aerodromes:

Standard (1.4.1) – "*States shall certify aerodromes used for international operations in accordance with the specifications contained in this Annex as well as other relevant ICAO specifications through an appropriate regulatory framework.*"

Annex 14 – Aerodromes

A14 Vol. I, Chapter 1, section 1.4 - Certification of Aerodromes:

Recommendation (1.4.2) – *"States should certify aerodromes open to public use in accordance with these specifications as well as other relevant ICAO specifications through an appropriate regulatory framework."*

Note to section 1.4.1 ("States shall certify aerodromes…"):

"Note.— Specific procedures on the stages of certifying an aerodrome are given in the PANS-AERODROMES (Doc 9981)".

Note to section 1.4 clarifying intent of aerodrome certification:

"...When an aerodrome is granted a certificate, it signifies to aircraft operators and other organizations operating on the aerodrome that, at the time of certification, the aerodrome meets the specifications regarding the facility and its operation, and that it has, according to the certifying authority, the capability to maintain these specifications for the period of validity of the certificate. The certification process also establishes the baseline for continued monitoring of compliance with the specifications..."

1.4.3 The regulatory framework shall include the establishment of criteria and procedures for the certification of aerodromes.

Note.— Guidance on a regulatory framework is given in the Manual on Certification of Aerodromes *(Doc 9774).*

Doc 9774 - Manual on Certification of Aerodromes

Developed for adoption or adaptation by States, in order to effectively implement the critical elements of safety oversight system in accordance with Annex 14 Vol I and other relevant ICAO specifications.

Contents:

1. Introduction

2. The Aerodrome Certification regulatory system

3. Aerodrome certification model regulations

4. Aerodrome certification procedures

5. Regulatory Authority

Doc 9774 – Contents (cont'd):

Appendices dealing with (among others):

- *Aerodrome Manual*

- *Aeronautical studies*

- *Safety Management System*

- *Sample Forms…*

Some of the topics addressed by doc 9774:

➢ **General expression of intent of certification**

➢ **Submission of application & aerodrome manual**

➢ **Assessing applicant's capability & adequacy of airport infrastructure**

Some of the topics addressed by doc 9774 – cont'd:

➢ **Validity of a certificate**

➢ **Aerodrome operator's obligations**

➢**Surrender/transfer/revocation of certificate**

➢ **Exemptions**

➢ **Assistance to States in carrying-out regulatory activities.**

Introduction to the PANS-Aerodromes (doc. 9981)

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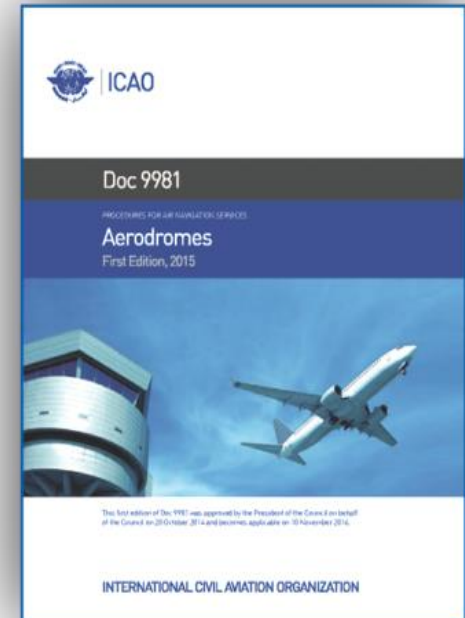# PANS-Aerodromes - background

- PANS (Procedures for Air Navigation Services)
  Sits below Annexes but above Manuals.

- The PANS-Aerodromes are complementary to the
  SARPs contained in Annex 14, Volume I;
  Specifies in greater detail than SARPs, operational
  procedures to be applied by aerodrome operators
  to ensure aerodrome operational safety.

- Annex 14, Volume I is considered primarily a design document; Many
  challenges that aerodromes face today are of an operational nature.
  Those challenges are addressed in many different ways or not at all…

Background – cont'd:

- 2009 - Decision to develop a PANS-Aerodromes document, to complement the SARP's detailed in Annex 14, Volume I.

- 2009 - Establishment of the PANS-Aerodromes Study Group (PASG), with the objective of developing **procedures that provide for standardization in the way aerodromes overcome the operational challenges;** And procedures for the management of aerodrome operational issues.

- The PASG reported to the Secretariat (coordination with the ADOP); Among the PASG members – U.K, U.S, Brazil, France, Germany, Spain, EASA, IFALPA, IATA, ACI (through Aerodrome operators), and ICCAIA.

Scope and status

- The implementation of procedures is the responsibility of Member States; they are applicable to actual operations only in so far as States have enforced them;
  However, with a view to facilitating their processing towards implementation by States, they have been prepared in a language that will permit direct use by aerodrome and State personnel to certify, oversee and manage the operational activities of aerodromes.

- PANS do not fall under the obligation imposed by Article 38 of the Convention to notify differences in the event of non-implementation.

Scope and status – cont'd

- States are required (according to Annex 15 — *Aeronautical Information Services)* to publish in their aeronautical information publication (AIP) any significant differences between their procedures and the related ICAO procedures Status. *(guidance - AIS manual (doc 8126), section 5.8)*

- **Appendices** are comprised of material grouped separately for convenience but form part of the Procedures; **Attachments** are comprised of material supplementary to the Procedures or included as a guide to their application.

The PANS-Aerodromes contains two parts:

Part I — *ADR certification, safety assessments and compatibility*

Contains the first edition of the document and provides the basic guidelines to States, and those operators and organizations certificating and managing aerodromes.

Part II — *Aerodrome operational management*

The requirements contained in this part may be applicable to the aerodrome operator and/or other relevant entities operating on the aerodrome. The procedures contained in this part provide an overall framework to allow for a standardized approach to aerodrome operations.

- 2015 – publication of the **first edition** (**Part I of the doc**) focused on priority areas revealed by the Universal Safety *Oversight Audit Programme (USOAP) audits - **aerodrome certification**, **conduct of safety assessments** and **compatibility studies.** (applicable 2016)

- 2016 – approval and publication of the **second edition** (**Part II**) – introduction of a new chapter on the new **Global reporting Format for assessing and reporting runway surface conditions** (GRF). (applicable 2020)

Contents of the 1st edition (Part I):

Chapter 1 — Definitions

Chapter 2 — Certification of aerodromes

Chapter 3 — Safety assessments for aerodromes

Chapter 4 — Aerodrome compatibility

3 Appendices

10 Attachments

Contents of the 2nd edition:

All the contents of the 1st edition (Part I) and in addition:

Chapter 1 (Part II) — Reporting format using standard runway condition report.

Attachment — Methods of assessing runway surface condition

Third edition – 2019 (applicable 2020)

Following three years of development , the following chapters are being prepared for preliminary review by the ICAO Air Navigation Commission in Q1/2018:

1. TRAINING

3. INSPECTIONS OF THE MOVEMENT AREA

4. WORK IN PROGRESS (WIP)

5. FOREIGN OBJECT DEBRIS (FOD)

6. WILDLIFE MANAGEMENT

7. APRON SAFETY

8. RUNWAY SAFETY

9. AERODROME DRIVER PERMIT SCHEME AND VEHICLE/EQUIPMENT SAFETY REQUIREMENT

PANS-Aerodrome - future work program (not an exhaustive list):

- **Obstacle control and management**

- **Aerodrome movement area maintenance**

- **Aerodrome emergency preparedness and contingency planning**

- **Rescue and Fire Fighting**

- **Disabled aircraft removal**

- **Apron Management**

- **Airport planning**

- **A-CDM**

Thank You