AFI Plan Aerodromes Certification Project Workshop for ESAF Region
(Nairobi, Kenya, 23 - 26 August 2016)

Aerodromes Certification- ICAO Requirements

Arthemon Ndikumana
RO/AGA, Nairobi

Objective

At the end of this presentation, participants will be able to understand and clearly describe the ICAO requirements and guidance for aerodrome certification, and comprehend the regulator's duties and responsibilities on aerodrome certification, including the granting of exemptions
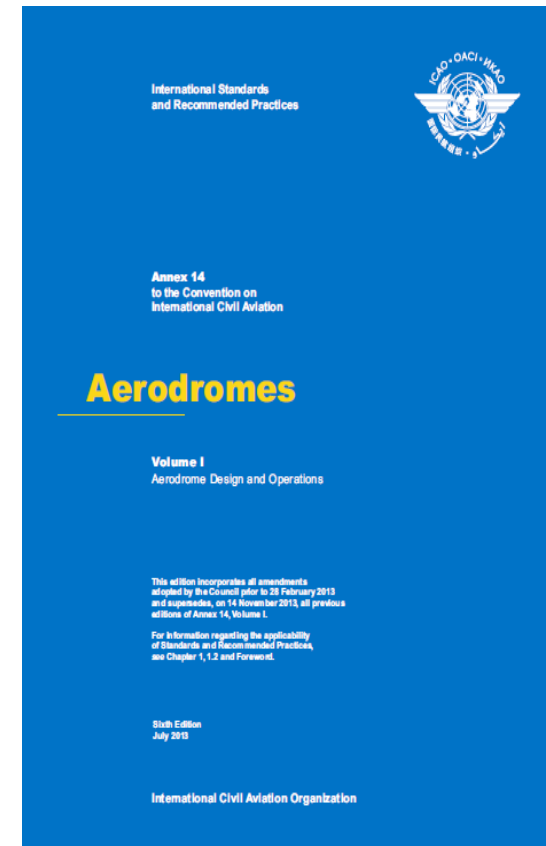
Outline

- ICAO requirements and guidance for aerodrome certification

- Aerodrome certification regulations

- Regulator's duties and responsibilities on aerodrome certification

- Exemptions in aerodrome certification

- Questions and answers

- Points to remember

Requirements and Guidance
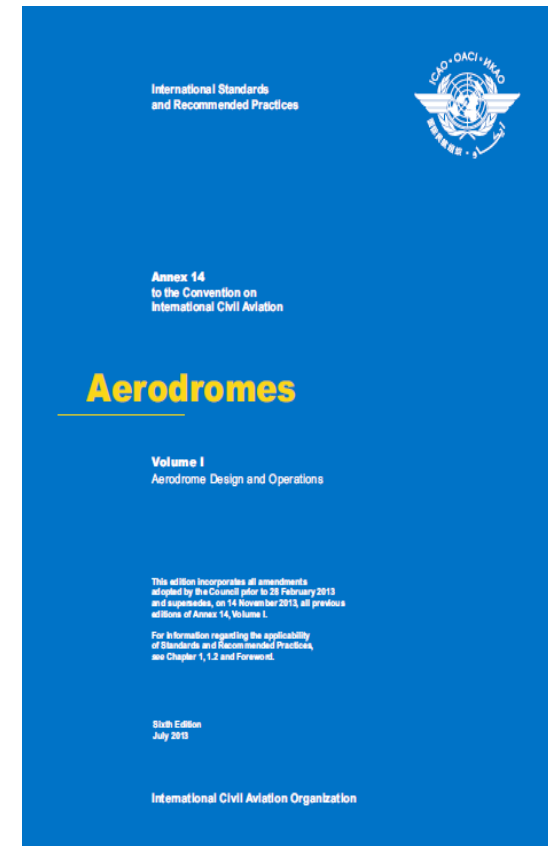
1.4 - Certification of aerodromes

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**.

International Standards
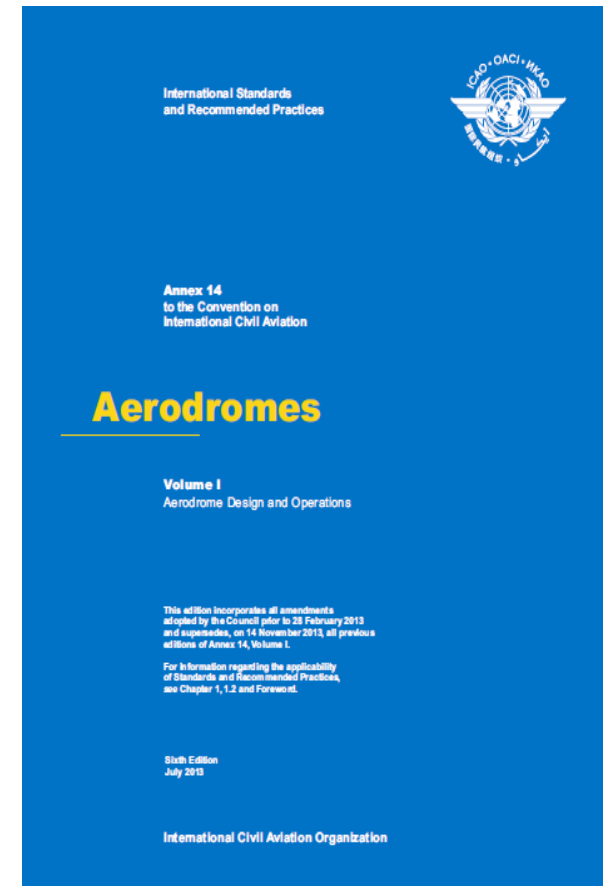and Recommended Practices

Annex 14
to the Convention on
International Civil Aviation

Aerodromes

Volume I
Aerodrome Design and Operations

This edition incorporates all amendments
adopted by the Council prior to 28 February 2013
and supersedes, on 14 November 2013, all previous
editions of Annex 14, Volume I.

For information regarding the applicability
of Standards and Recommended Practices,
see Chapter 1, 1.2 and Foreword.

Sixth Edition
July 2013

International Civil Aviation Organization

Requirements and Guidance

The regulatory framework shall include the establishment of criteria for the certification of aerodromes

International Standards
and Recommended Practices

Annex 14
to the Convention on
International Civil Aviation

Aerodromes

Volume I
Aerodrome Design and Operations

This edition incorporates all amendments
adopted by the Council prior to 28 February 2013
and supersedes, on 14 November 2013, all previous
editions of Annex 14, Volume I.

For information regarding the applicability
of Standards and Recommended Practices,
see Chapter 1, 1.2 and Foreword.

Sixth Edition
July 2013

International Civil Aviation Organization
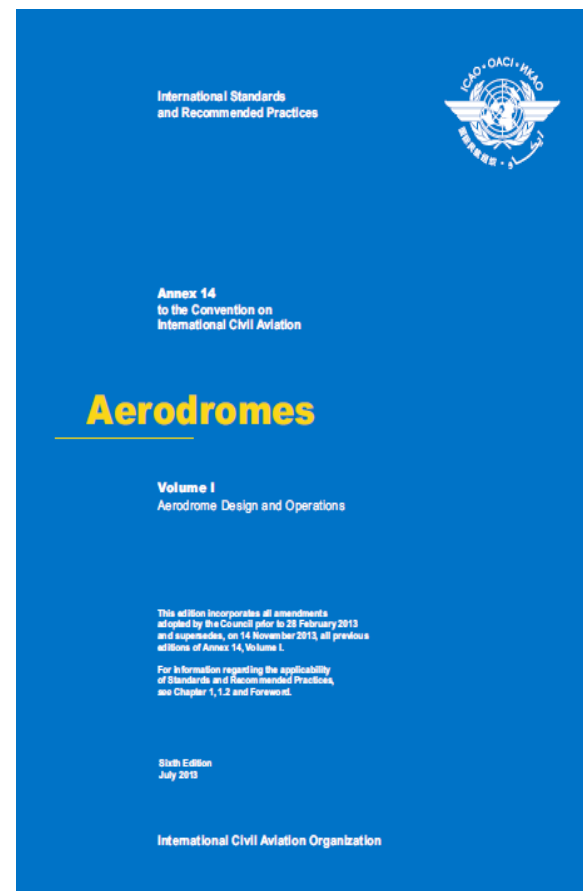
Requirements and Guidance

As part of the certification process, States shall ensure that an aerodrome manual which will include all pertinent information on the aerodrome site, facilities, services, equipment, operating procedures, organization and management including a safety management system, is submitted…

International Standards and Recommended Practices

Annex 14 to the Convention on International Civil Aviation

Aerodromes

Volume I
Aerodrome Design and Operations

This edition incorporates all amendments adopted by the Council prior to 28 February 2013 and supersedes, on 14 November 2013, all previous editions of Annex 14, Volume I.

For information regarding the applicability of Standards and Recommended Practices, see Chapter 1, 1.2 and Foreword.

Sixth Edition
July 2013

International Civil Aviation Organization

Requirements and Guidance

States should certify aerodromes open to public use in accordance with these specifications…

International Standards
and Recommended Practices

Annex 14
to the Convention on
International Civil Aviation

Aerodromes

Volume I
Aerodrome Design and Operations

This edition incorporates all amendments
adopted by the Council prior to 28 February 2013
and supersedes, on 14 November 2013, all previous
editions of Annex 14, Volume I.

For information regarding the applicability
of Standards and Recommended Practices,
see Chapter 1, 1.2 and Foreword.

Sixth Edition
July 2013

International Civil Aviation Organization

Requirements and Guidance

DOC 9774 - ICAO Manual on Aerodrome certification provides guidance to States on the:

❑ establishment of regulatory framework for aerodrome safety oversight;

❑ aerodrome certification procedures;

❑ subsequent compliance and enforcement of the aerodrome operator's obligations , and

❑ the organizational aspects of the regulatory authority

Requirements and Guidance

States shall require, as part of their **Safety Programme**, that a certified aerodrome operator implements a **Safety Management System** (SMS) acceptable to the State that, as a minimum:

❑ identifies safety hazards;

❑ ensures the implementation of remedial action necessary to maintain agreed safety performance

❑ provides for continuous monitoring and regular assessment of the safety performance; and

❑ aims at a continuous improvement of the overall performance of the SMS

Requirements and Guidance

Annex 19 and DOC 9859 on Safety Management provide States with:

❑ knowledge of safety management concepts, ICAO Standards and Recommended Practices (SARPs) on safety management, and related guidance material;

❑ guidance on how to accept and oversee the implementation an SMS; and

❑ guidance on how to develop and implement an SSP.

Aerodrome regulations

Prerequisites for the introduction of the aerodrome certification regulatory system:

❑ provisions in the basic aviation laws for the development and promulgation of aerodrome regulations; and

❑ establishment of a State entity responsible for aviation, empowered to ensure compliance with established regulations.

Develop an aerodrome certification regulatory framework providing for:

❑ certification requirement;

❑ criteria, procedures and technical specifications;

❑ guidance material.

Aerodrome regulations

Basic principles for aerodrome certification regulations:

❑ The mandatory requirement for certification in accordance with established criteria [i.e. which aerodromes are subject to certification];

❑ The certification procedure;

❑ The duties and responsibilities of aerodrome operators;

❑ Safety audits, inspections and testing;

❑ The imposition of operating restrictions and sanctions;

❑ The use of military aerodromes by civil aircraft.

Aerodrome regulations

✓ Requirement for an aerodrome certificate;

✓ Application for an aerodrome certificate;

✓ Grant of an aerodrome certificate;

✓ Endorsement of conditions on an aerodrome certificate;

✓ Duration of an aerodrome certificate;

✓ Surrender of an aerodrome certificate;

✓ Transfer of an aerodrome certificate;

✓ Interim aerodrome certificate;

✓ Amendment of an aerodrome certificate.

Responsibilities of stakeholders

Regulators (CAAs)

Aerodrome operators

Regulators (CAAs):
- Regulatory framework
- Organization and staff
- Guidelines and tools
- Certification, including SMS acceptance
- Surveillance activities
- Enforcement actions
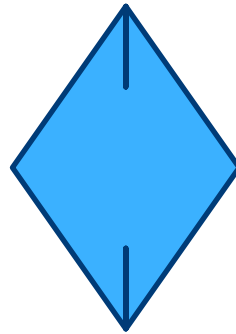
Aerodrome operators:
- Organization and staff
- Documentation including SOPs
- Aerodrome manual
- Compliance of facilities, equipment and services
- Implementation of SMS
- Runway safety programme

Regulator's Responsibilities

- ✓ Legislative provisions related to aerodromes
- ✓ Aerodrome regulations, including provisions for aerodromes certification
- ✓ Organizational structure of the entity in charge of aerodromes oversight, including definition of functions and responsibilities
- ✓ Qualification and experience of the technical personnel covering core aerodrome areas

Regulator's Responsibilities

✓ When determining certification criteria…remember, Annex 14 says that all aerodromes used for international operations shall be certified and that all those open to public should be certified.

Regulator's Responsibilities

- Technical guidance material for the inspectors

- Guidelines on the implementation of applicable regulations, instructions and directives, for the industry

- Convenient facilities and adequate office space, modern equipment, Aerodromes inspection tools and instruments, ICAO documents,…

Regulator's Responsibilities

- ✓ Initial inspection by the regulatory authority
- ✓ Periodic inspections by the regulatory authority
- ✓ Evaluation of Aerodrome manual
- ✓ Aerodrome compliance with standards and practices
- ✓ Enforcement
- ✓ …

Regulator's Responsibilities

✓ Ensure that the service providers have appropriate safety measures in place (including SMS);

✓ Establish procedures and parameters for the conduct of aeronautical studies;

✓ Approve/accept aeronautical studies;

✓ Use aeronautical studies to evaluate and grant exemptions.

Exemptions

✓ The CAA may exempt, in writing, an aerodrome operator from complying with specific provisions of the aerodrome certification regulations;

✓ When an aerodrome does not meet the requirement of a standard or practice specified in the aerodrome certification regulation, the CAA may determine, after carrying out aeronautical studies (only if and where permitted by the standards and practices) the conditions and procedures that are necessary to ensure a level of equivalent safety to that established by the relevant standard or practice.

Exemptions

✓ Deviation from a standard or practice and the conditions and procedures shall be set out in an endorsement on the aerodrome certificate;

✓ The conditions and procedures required as part of the exemption must ensure a level of safety equivalent to that established by the relevant standard or practice;

❖ If an equivalent level of safety cannot be guaranteed, an exemption cannot be granted.

Aerodrome operators

Dealing with the expression of interest

- Provide documentation for the flight operations assessment, to ensure that the operation of the aerodrome and the location specifies does not endanger the safety of aircraft operation

- Refer to other State entities, such as environmental authorities for their clearance

Aerodrome certification phases

| Dealing with the expression of interest | Assessing the formal application | Assessing the aerodrome facilities, equipment and services | Issuing or refusing an aerodrome certificate | Promulgating the certified status of an aerodrome |

Aerodrome operators

Assessment of the formal application

- Provide the aerodrome manual and its related SOPs/documents, including sources of data published in the AIP

- Provide information related to organizational competence and level of resources of the aerodrome operator

- Provide information related to competences and experience of the aerodrome staff

- Provide the SMS manual and its related documentation

Aerodrome operators

Assessment of the aerodrome facilities, equipment and services

- On-site verification of the particulars of the aerodrome to be published in the AIP
- On-site assessment of the physical characteristics, facilities and equipment
- On-site verification of the provision and monitoring of required visual aids, including availability of essential power supply systems
- Evaluation of aerodrome operating procedures including maintenance services and coordination with other aerodrome entities such as ATS and AIS

Aerodrome operators

Issuing/refusing of certificate

- If the assessment is satisfactorily, the applicant is granted the aerodrome certificate with the conditions incorporated as applicable and the certificate register and aerodrome register are updated accordingly

- If the assessment is not satisfactorily, the CAA notifies the applicant of the rejection and may request additional information or action from the applicant

Aerodrome operators

Aerodrome Manual

Ensure that :

- Structure, content and format conform to the requirement
- Manual accurately describe the facilities, equipment and services at the aerodrome
- Information and date are accurate and comply with applicable regulations
- Safety procedures for aerodrome operations are acceptable and will enable proper implementation of the applicable regulations

Aerodrome operators

Safety Management System (SMS)

To be certified, aerodrome should have in place an SMS which include :

- Safety policy and objectives (*management commitment and responsibility – safety accountabilities – appointment of key personnel – coordination of emergency response planning – SMS documentation*)

- Safety risk management (*hazard identification – safety risk assessment and mitigation*)

- Safety assurance (*safety performance monitoring and measurement – management of change – continuous improvement of SMS*)

- Safety promotion (*training and education – safety communication*)

Other stakeholders (ANSPs, Handling, Etc.)

- Comply with the requirements laid down by the aerodrome operator with regard to safety at the aerodrome.

- Cooperate in the programme to promote safety at, and the safe use of, the aerodrome by immediately informing it of any accidents, incidents, defects and faults which have a bearing on safety.

- Comply with the external audit and inspection programme established by the aerodrome operator, for evaluating other users, working at the aerodrome

THANK YOU