International Civil Aviation Organization
North American, Central American and Caribbean Office

WORKING PAPER

CAR/DCA/OPSAN — WP/06 Rev.
17/02/14

Safety and Air Navigation Directors of the CAR Region Meeting (CAR/DCA/OPSAN)
Mexico City, Mexico, 18 to 19 February 2014

Agenda Item 4: **Regional Performance Indicators and Metrics for Implementation of Improvements in Safety and Air Navigation**
4.3 Aerodrome certification

AERODROME CERTIFICATION

(Presented by the Secretariat)

EXECUTIVE SUMMARY

This working paper identifies the proposed goals and performance indicators to be achieved in CAR Region aerodrome certification as follows:

- Increase the number of international certified aerodromes based on selected CAR Region aerodromes
- Provide training to personnel in charge of the various phases of aerodrome certification in the certification process and continuous monitoring tasks
- Develop and implement guidelines and verification checklists for aerodrome inspectors to conduct internal audits and aerodrome inspections

Action:	Action is presented in Section 5
Strategic Objective:	Safety
References:	• ICAO Annex 14 – *Aerodromes*, Vol. I – *Design and aerodrome operations, sixth edition*, July 2013 • Second Meeting of the Programme and Projects Review Committee (PPRC/2) • First edition of the revised ICAO *Global Aviation Safety Plan* (GASP) (Doc 10004; 2013)

1. Introduction

1.1 The requirement for ICAO aerodrome certification was promulgated on November 2001, which included the establishment of a Safety Management System (SMS) as a requirement for certified aerodromes. Since then, few States have certified or are in the process of aerodrome certification, which requires the establishment of a regulatory regime to effectively meet the specifications in Annex 14, Volume I. Currently there are States that do not even have a regulatory framework that includes the establishment of criteria and procedures for aerodrome certification.

1.2 The status of aerodrome certification in the CAR Region shows that of a total of 153 international aerodromes listed in Doc 8733 - *Air Navigation Plan for the CAR/SAM Regions*, only 43 aerodromes have been certified, representing only 28% of CAR Region international aerodromes. However, a number of CAR Region aerodromes have either started the certification process or plan to initiate the process in the short-term.

1.3 For better orientation of aerodrome operators and personnel in charge of aerodrome certification in the States, ICAO recognized the need to develop the *Procedures for Air Navigation Services - Airports (PANS-AGA)* document with procedures for operational management of aerodromes. Many of the difficulties currently faced at aerodromes are operational in nature, particularly where it is necessary to accommodate larger aircraft and/or development of an aerodrome is constrained. It is anticipated that the document will be published on 12 November 2015.

1.4 The proposed PANS-AGA document is basically oriented towards the procedures for all phases of aerodrome certification; content of the aerodrome manual; critical conditions of aerodrome certificates and change management; and creating a new section on aerodrome operations to conduct an assessment of aerodrome compatibility for type of traffic and type of operation for which they are intended.

2. Analysis and Challenges in Aerodrome Certification

2.1 In accordance with the information received from States and the various events organized by the ICAO NACC Regional Office related to aerodromes, CAR Region States continue to have problems with the certification of aerodromes related to:

- Aerodromes built long ago do not comply with the Standards and Recommended Practices (SARPs) of ICAO Annex 14, Volume I
- Lack of SMS implementation
- Lack of aerodrome regulations
- Lack of expertise in the aerodromes area
- Lack of guideline material for staff in charge of aerodrome certification
- Lack of training for aerodrome staff to comply with continuous monitoring mainly due to inspectors fulfilling two roles - Air Traffic Management (ATM) and Aerodromes and Ground Aids (AGA)

- Lack of training in highly specialized areas: aerodrome operations; rescue and fire-fighting; bird/wildlife management; aeronautical studies; risk assessment; visual aids; signage and lighting; obstacle evaluation; and SMS implementation.

2.2 While aerodrome certification status generally has not influence the decision of airlines to operate in non-certified aerodromes, there is a greater tendency now to restrict operations to non-certified aerodromes. Airlines have clearly recognized the negative impact that a serious incident or accident could have on the airline not just in the associated costs of an accident/incident, but to the image of the company.

2.3 With increasing air traffic in the CAR Region and the importance of ensuring safe operations, States have become increasingly aware of the importance of aerodrome certification and the provisions of Annex 15, publishing certified aerodrome conditions in the State´s Aeronautical information Publication (AIP). In order to increase the number of certified aerodromes in the Region, adoption of alternative or mitigative measures in operational management is required in the short and medium-terms.

3. Proposed Solutions for Short, Medium, and Long-Term

3.1 As a strategy to increase and support the process of aerodrome certification in the CAR Region, the *Aerodrome Certification Improvements Project* was proposed, which includes five phases of implementation: diagnosis and staff training with the related documentation; preparation of certification documentation; implementation of SMS at aerodromes; aerodrome certification inspection by the aviation authority; and issuance of aerodrome certificate.

3.2 In the short-term, the strategy for aerodrome certification began in 2011 with the identification of common problems in the certification process from information provided by participants during the regional workshop on *Overcoming the Challenges in Aerodrome Certification* and based on the results of ICAO USOAP audits. Following this task, several events have been conducted for training inspectors and personnel in charge of aerodrome certification.

3.3 In the short-term, the project is aimed at aerodrome certification that meets most of Annex 14, Volume I, SARPs but requires alternatives or mitigation measures. For the medium and long-term, the project will focus on those aerodromes that do not meet a number of Annex 14, Volume I, SARPs and require further evaluation and analysis for implementation of restrictive operational alternative measures without neglecting safety.

3.4 In 2012, the project continued its activities related to Phase 1 with two events on aerodrome inspection for both regulator and the operator inspectors. The first event was held in the Caribbean and the second in Mexico. In 2013, a workshop was conducted on aerodrome manual content related to Phase 2, and in 2014 a very important event will be held addressing SMS implementation corresponding to Phase 3.

3.4.1 For effective implementation of the short and medium-term proposed solutions, the following deadlines have been established:

- Short-term - now to 31 December 2016
- Medium-term - 1 January 2017 to 31 December 2019
- Long-term - 1 January 2020 to 31 December 2022

4. Performance Indicators, Proposed Goals, and Action Plans

Aerodrome certification

4.1 The performance indicator to be used is the percentage of certified aerodromes based on the designated international aerodromes in the *Air Navigation Plan* (Doc 8733). In the short and medium-term, certification of aerodromes is expected to increase to 60%. In the long-term, 80% of aerodromes are expected to be certified by civil aviation authorities in the CAR Region.

4.2 The project will focus primarily on training staff responsible for the certification of aerodromes as well as the aerodrome operator on all phases of the certification process.

5. Suggested Actions

The Meeting is invited to:

a) take note of the information presented in this working paper; and
b) support the activities of the Aerodrome Certification Improvements Project with the participation of AGA experts on ICAO events.

— END —