Advisory Circular
[AC/AD-016]

GUIDANCE MATERIALS

ON

TRAINING OF

AERODROME REPORTING OFFICERS AND

WORKS SAFETY OFFICERS

First Edition
2018

CIVIL AVIATION AUTHORITY OF NEPAL

LIST OF EFECTIVE PAGES

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List of effective pages	II	0.00	2018
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RECORD OF AMENDMENTS

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REVISION HISTORY

Edition No	Date	Chapter/ Section	Details
001	2018	All	Advisory Circular : Training of Aerodrome Reporting Officers and Work Safety Officers

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FOREWORD

Nepal as a Contracting State to the Convention on International Civil Aviation has an obligation to the international community to ensure that civil aviation activities under its jurisdiction are carried out in strict compliance with the Standards and Recommended Practices contained in the nineteen Annexes to the Convention on International Civil Aviation in order to maintain the required aviation standards.

As per the standards of the Annex 14 to the Convention, Aerodromes used for International Civil Aviation are required to be certified by the State. In addition as per the Civil Aviation Requirements (CAR-14 Part- I) & Airport Certificate Regulation – 2061 (2004) amended at 2073 (2016).

1) An operator of an aerodrome intended for international operations shall be in possession of an aerodrome certificate.
2) An operator of an aerodrome intended for domestic operation for public use in accordance with the national requirements, an Aerodrome Certificate shall be obtained if the maximum passenger seating capacity of the aircraft employed in the operation exceeds 30 seats.
3) An operator of an aerodrome for which an Aerodrome Certificate is not required may, nevertheless, apply for an aerodrome certificate. However, such aerodromes shall be registered with the CAAN

Issue of an Aerodrome Certificate by the Director General of Civil Aviation Authority of Nepal to an aerodrome operator seeking such certificate is a requirement as per CAAN Airport Certificate Regulation, 2061 (2004), if the aerodrome operator satisfies the Rules specified in that Regulation. Hence, certification of an aerodrome is a vital role in the regulatory system.

The regulatory Rules to be satisfied by the Aerodrome Operators for the certification of an aerodrome are specified in the CAAN Airport Certificate Regulation (ACR), 2061 (2004).

The Rule 3 of CAAN ACR 2004 states that *"any matter pertaining to the setting standards of the airport as mentioned here in shall be deemed to be remained as the part of the Standards and Recommended Practices as mentioned in Annex 14 of the Convention on International Civil Aviation (as Amended) . These matters shall remain as the parts of the national rules and practices enforced in Nepal and amended from time to time".*

This Advisory Circular provides guidance to aerodrome operator(s) to meet the above mentioned minimum standards and recommended practices of CAR-14, Part 1/ICAO Annex 14, Volume I in order to demonstrate aerodrome operators capability to retain the existing/or obtain new aerodrome certificate or renew the existing one under the CAAN ACR 2004.

Users of this Advisory Circular are reminded that the provisions of the *Civil Aviation Authority Act 1996 (2053), CAAN Airport Certificate Regulations 2004 (2061) and other applicable regulatory documentation*, rather than this Advisory Circular, determine the requirements of, and the obligations imposed by or under, the civil aviation legislation. Users should refer to the applicable provisions when any doubt arises.

It is expected that the Aerodrome Operator will be benefited by this Advisory Circular as it

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explains the trainings for Aerodrome Reporting Officers and Work Safety Officers. It also explains that aerodrome physical facilities, equipment and aerodrome operating procedures shall meet the SARPs of CAR-14 Part I as officers.

This Authority may, without any prior notice, change the content of this Advisory Circular as appropriate.

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Director General
Civil Aviation Authority of Nepal
Babar Mahal, Kathmandu, Nepal   2018

ACRONYMS

ARO – Aerodrome Reporting Officer
AQTF – Aerodrome Quality Training Framework
CAR – Civil Aviation Regulations
MOS – Manual of Standards
MOWP – Method of Working Plan
NOTAM – Notice to Airmen
OLS – Obstacle Limitation Surface
RPT – Regular Public Transport
RTO – Registered Training Organization
SMS – Safety Management System
WSO – Works Safety Officer
ASSD-Aerodrome Safety Standard Department
CAAN- Civil Aviation Authority of Nepal

1. PURPOSE

The purpose of this publication is to inform industry of the minimum level of training deemed to be necessary for Aerodrome Reporting Officers (AROs) and Work Safety Officers (WSOs) to be considered appropriately trained as required by the ACR, 2004 and Civil Aviation Requirements (CAR-14 Part I).

2. STATUS OF THIS ADVISORY CIRCULAR

This is the first AC to be written on the subject of training of Aerodrome reporting Officer and Work safety Officers.

3. DEFINITIONS

For the purposes of this document:

Aerodrome Reporting Officer means: An aerodrome employee who has successfully completed an Aerodrome Operations training course and/or has demonstrated an understanding of and the ability to safely undertake the tasks of an ARO as detailed in this document.

Works Safety Officer means: An aerodrome employee who has successfully completed an Aerodrome Operations training course, and/or has demonstrated an understanding of and the ability to safely undertake the tasks of a WSO as detailed in this document.

Registered Training Organization means: An organization formally registered by a State or ICAO approved training organizations.

4. THE RULES

4.1 Rule 43 of ACR 2004 requires Aerodrome operators have to prepare qualified and efficient employees for safe and efficient airport operations.

4.2 *Guidance material on Human Factors principles in the* Human Factors Training Manual (Doc 9683) *and* Airport Services Manual *(Doc 9137), Part 8.*

5. FUNCTIONS OF AERODROME REPORTING OFFICERS AND WORKS SAFETY OFFICERS

5.1 Persons whose duties are directly related to aerodrome safety include:

- those that carry out the routine serviceability inspections of the aerodrome movement area, aerodrome lights and Obstacle Limitation Surfaces (OLS);
- those that are authorized to make reports of aerodrome reportable changes to the Notice to Airmen (NOTAM) office; and
- those appointed for the purpose of ensuring the safety of aerodrome works.

5.2 Aerodrome Reporting Officer

5.2.1   Serviceability inspections and the reporting of changes in aerodrome conditions are often related functions. For the purpose of this publication, an ARO is deemed to be the person who performs both the inspection and reporting functions.

5.2.2   Serviceability inspections are a core function of the ARO.

5.2.3   Depending on the size of the aerodrome, the serviceability inspection and reporting functions may be assigned to different persons. At a small aerodrome, the same person may have to carry out all the functions. At larger aerodromes, the serviceability inspections and the reporting functions become more complex, often involving more people.

5.2.4   At smaller aerodromes, inspecting, reporting and managing aerodrome works safety (ARO and WSO roles) may be undertaken by the same person and would typically cover:

- an inspection of the movement area to check its surface condition (including for the presence of foreign objects);
- an inspection of aerodrome markers and markings, lighting, wind direction indicators and ground signals;
- an inspection for any obstacles infringing the take-off, approach and transitional surfaces;
- an inspection for any birds or animals on or near the movement area;
- an inspection of any measures to control the inadvertent entry of persons or animals into the movement area (including aerodrome fencing);
- an empirical assessment of the bearing strength of unrated runway pavements;
- an empirical assessment of the runway strip or each runway strip where the runway concerned is not marked and the whole runway strip may be used for aircraft operations;
- a check of the aerodrome's frequency confirmation system (if any);
- a check of whether any NOTAMS for the aerodrome are current and accurate.

5.2.5   Each of these functions will potentially vary in complexity from aerodrome to aerodrome, and not always in direct relationship with aerodrome size and traffic.

5.3 Works Safety Officer

5.3.1   An important requirement is that a WSO must be present "at all times" whilst the aerodrome is open to aircraft operations. The functions of a WSO include (but are not limited to):

- having sound knowledge of the MOWP and ensuring that the works are conducted in accordance with the MOWP;
- where applicable, ensuring timely issue of NOTAM as set out in the MOWP;

- where applicable, liaising with air traffic and ground control personnel on a regular basis when work is in progress;

- liaising with the works organization, on a regular basis, regarding any matters necessary to ensure the safety of aircraft operations and aerodrome personnel;

- ensuring unserviceable areas, temporary obstructions and the limits of the works area are correctly marked and lit in accordance with the applicable MOWP;

- ensuring that vehicles, plant and equipment are properly marked and lit;

- ensuring that access routes to works areas as set out in the MOWP are clearly marked and lit;

- ensuring that excavation is carried out in accordance with the MOWP, and in particular, so as to avoid damage or loss of calibration to any underground power or control cable associated with a precision approach and landing system or navigation aid;

- immediately reporting to the NOTAM Office any incident or damage to facilities likely to affect the safety of aircraft;

- ensuring that the movement area is safe for normal aircraft operations following removal of vehicles, plant equipment and personnel from the works area; and

- Ensuring that floodlighting or any other lighting required for carrying out the works is shielded so as not to present a hazard to aircraft operations.

5.3.2 It is important to note that on large sites where two or more work areas are established, there needs to be a WSO appointed to each site. It is generally not possible, or safe, for a WSO to supervise two or more sites when those sites may be kilometers apart on an operational aerodrome.

5.3.3 Where proposed aerodrome works exceed the experience of the local WSO, the aerodrome operator should consider a temporary closure of the aerodrome, or the employment of a more experienced WSO for the duration of the works to assist the local WSO.

5.3.4 The above is not an exhaustive list of responsibilities, but it does illustrate the wide range of competencies required of a person appointed as a WSO.

6. AERODROME OPERATORS' SAFETY ROLE

- ACR 2004 requires that any certified aerodrome or an aerodrome used for international transport operations must incorporate a Safety Management System (SMS) approach in the management, operation and maintenance of the aerodrome.
- While not mandatory, other categories of aerodromes are encouraged to include an SMS in their aerodrome procedures and documentation.
- An SMS demonstrates the aerodrome operator's commitment to safety. Providing suitable training for employees is an essential element of any safety program.
- Besides ensuring that the aerodrome facilities and environment provide adequate aircraft safety, an important element of the aerodrome SMS is to ensure that persons and equipment on the movement area operate in a safe manner.

7. TRAINING FOR AERODROME REPORTING OFFICERS AND WORKS SAFETY OFFICERS

- Aerodrome operator should train their ARO and WSO by an organization formally registered by a State or ICAO approved training organizations.
- It is important that a person appointed to carry out a particular function on an aerodrome possesses the competency and skills that are commensurate with, and appropriate to, the complexity of the function that the person is required to perform.

8. COMPETENCY STANDARDS FOR ARO'S AND WSO'S

8.1 ASSD, CAAN's primary concern is to ensure that AROs and WSOs possess the ability to perform particular tasks and duties to the standard of performance expected at an aerodrome.

8.2 Competency can be achieved and or demonstrated in a number of ways including, but not limited to:

- training and assessment provided by an RTO;
- Training and assessment provided by Certificated Trainer who has experience in Aerodrome Operations;
- being supervised "on the job" (e.g. traineeship) and being assessed by the aerodrome operator as being competent; or
- any combination of the above.

8.3 ASSD, CAAN recommends that persons currently employed as AROs and WSOs who have been trained on the job have their skills and knowledge assessed against the competency standards by an RTO or Certificated Trainer. Additional training may be needed if there are gaps identified in an individual's required skills and knowledge.

9. REGISTERED TRAINING ORGANISATION (RTO) COURSE

9.1 While a course complying with the training requirements detailed below and delivered by a RTO, will be considered by ASSD, CAAN as an acceptable means of compliance for the training of AROs and WSOs it is not the only option available. Each aerodrome operator will need to assess the level of training required for their employees and choose a training organization that best meets their needs.

9.2 A Registered Training Organization (RTO) is an organization registered by a state ICAO approved training organizations.

9.3 Core areas of competency as descried are:

- A sound knowledge of the physical characteristics of an aerodrome movement area
- Aerodrome Obstacle Limitation Surfaces
- Aerodrome Markings

- Aerodrome Lighting and ground signals
- Essential Aerodrome Safety Equipment
- Understanding of aerodrome information contained in AIP
- An ability to carry out a serviceability inspection of an aerodrome
- Knowledge of aerodrome emergency procedures
- Knowledge of the NOTAM system
- Ability to carry out aerodrome reporting procedures

9.4   Training for employees of registered aerodrome may take less time due to the less complex nature of registered aerodromes; however aerodrome operators will need to review the training requirements for their staff in order to ensure their staff receives the level of training required.

9.5   Training providers should ensure that airside competency checks are conducted for each unit studied.

9.6   **Course Delivery**

9.6.1   Instruction may be delivered via face to face, correspondence or computer based training methods. It is highly desirable that the instruction is delivered face to face, however due to remoteness this method may not be practicable. Where training is provided via correspondence or computer training methods, the RTO must be satisfied that any results from such training are an accurate indication of the candidates understanding of the subject matter.

9.6.2   As previously stated, candidates with no prior aerodrome operations experience should have practical field experience at a registered or certified aerodrome. Distance education students should supply to the RTO written evidence that the candidate attended and successfully demonstrated to an ARO or WSO at a nearby registered or certified aerodrome, an understanding of the operations of the aerodrome and the functions of an ARO and WSO.

9.7   **Refresher Training**

9.7.1   After initial training, recurrent or 'refresher' training should be considered from the date of the initial training. This training should be specifically designed to refresh knowledge and update employees on technical, regulatory or procedural changes since the employee was last trained.

9.7.2   A competency assessment may be required prior to course commencement to determine the level of training required for individuals so that remedial training can be tailored to the students' need.