

Advisory Circular

CAA-AC- AGA004

February 2011

KENYA CIVIL AVIATION AUTHORITY

GUIDANCE ON INSPECTIONS AND INTERNAL AUDITING OF AERODROMES

1. PURPOSE

The purpose of this Advisory Circular (AC) is to provide guidance to aerodrome operators on conducting and maintaining a system of self inspection and internal auditing of the operational activities at an aerodrome.

2. REFERENCE

- 2.1 Civil Aviation (Aerodromes) Regulations
- 2.2 Manual of Aerodrome Standards
- 2.2 Manual on Certification of Aerodromes
- 2.4 Manual on Licensing of Aerodromes

3. INTRODUCTION

- 3.1 The holder of an aerodrome certificate or license has the ultimate responsibility for the safe operation of the aerodrome. By applying for and being granted an operating certificate or license from the regulatory authority, the aerodrome operator accepts responsibility for ensuring continued safety of the aerodrome and the associated facilities and installations. The scope of this responsibility varies depending on the complexity of the aerodrome. The aerodrome operator also has an obligation of ensuring that aerodrome users, service providers and contractors comply with safety and regulatory requirements.
- 3.2 The Manual of Aerodrome Standards require that a certified aerodrome operator shall implement a Safety Management System that as a minimum:
 - a) identifies safety hazards:
 - b) ensures necessary remedial action is taken to maintain an acceptable level of safety at the aerodrome;
 - c) provides for continuous monitoring of the safety levels;
 - d) aims for continuous improvement of the overall level of safety; and
 - e) assesses the status of safety risk controls.

3.3 Integral to the requirements of any SMS is the requirement to periodically monitor and inspect the movement area and aerodrome facilities.

4. FEATURES OF INSPECTIONS AND AUDITS

- 4.1 Inspections and audits are distinguishable exercises that an aerodrome operator shall undertake to ensure continued operational safety.
- 4.2 **Inspections** can be described as activities involving:
 - a) Confirmation that the aerodrome facilities, including work in progress areas continue to meet national, regulatory and organizational requirements;
 - b) Identification of new hazards including changes in runway/taxiway and apron area surface conditions;
 - c) Determination of additional resource requirements including maintenance needs.
- 4.3 **Audits** are intended to contribute to safety assurance and among other things cover:
 - a) Assessment of personnel, procedures and technological requirements
 - b) Assessment of the status of safety risk controls; and
 - c) Ensuring that the safety management structure is sound in terms of personnel, procedures and technology.

5. INSPECTIONS/AUDITS

- 5.1 Inspections fall into three distinct categories:
 - a) Periodic inspections
 - i. Daily
 - ii. Weekly
 - iii. Monthly
 - iv. Quarterly
 - b) Continuous surveillance
 - c) Special inspections
- 5.2 Audits on the other hand should be periodic. However special audits may be conducted if deemed necessary.
- 5.3 For inspection/audit system to function effectively, the aerodrome operator shall:
 - a) Prepare inspection/audit programmes;
 - b) Ensure inspection/audit processes are clearly defined;
 - c) Ensure inspection procedures are in place including procedures for recording results, correcting deficiencies and disseminating inspection information;

d) Ensure that personnel conducting inspection or audits are trained and qualified;

6. PERIODIC INSPECTIONS

- 6.1The aerodrome operator shall be required to conduct the periodic inspections in the following manner:
 - a) Three inspections per day as follows;
 - Dawn detailed inspection of the entire movement area
 - Afternoon same as morning inspection
 - Dusk bridging the gap between afternoon and the evening light inspection.
 - b) Afternoon inspection of runway, aprons and taxiways for (Foreign Object Debris) FOD and visual aids daily,
 - c) Night inspection of the airfield lighting system and FOD daily and weekly.
- 6.2 The following shall be covered during the periodic inspections:
 - a) Paved and unpaved areas;
 - b) Safety areas (Strips/RESA etc.);
 - c) Markings and signage, Lighting;
 - d) Navigational Aids (electronic and visual) As required by recommendations or specified by the manufacturer;
 - e) Obstructions;
 - f) Evidence of new hazards;
 - g) FOD, Weather related conditions storm, cyclone etc;
 - h) Security of the movement area;
 - i) Evidence of Wildlife;
 - j) Areas of suspicious activity

6. PERIODIC AUDITS

6.1 An aerodrome operator shall conduct internal audits of the aerodrome in order to identify areas of weaknesses within the aerodrome operations. The aerodrome operator has an obligation to ensure that personnel, procedures and aerodrome facilities meet set standard requirements and third party service providers including contractors at the aerodrome comply with safety rules and practices.

6.2 Internal audits conducted at the aerodrome shall take into account audit principles, procedures and processes. In conducting the audits, the aerodrome operator shall check that stipulated standard operating procedures for the aerodrome are being adhered to and that the aerodrome is being operated in accordance with expected standards and practices.

7. CONTINUOUS SURVEILLANCE

- 7.1 These are conducted on a continuous basis to ensure continuous monitoring approach is employed at the aerodrome. Continuous surveillance will enable the aerodrome operator to identify faults and omissions which need to be addressed to ensure compliance and overall safety posture. Aerodrome personnel should be trained to monitor the following airfield conditions anytime they are on the field:
 - a) Ramp/apron operations;
 - b) Ground vehicle operations;
 - c) Fueling;
 - d) Construction;
 - e) Security;
 - f) FOD;
 - g) Passenger loading/off-loading

8. SPECIAL INSPECTIONS

- 8.1 Where applicable and required by regulation and prevailing safety situation, an aerodrome operator may initiate special inspections as follows:
 - a) Inspections carried out after a complaint, such as from Air Traffic Control or an aircraft in relation to visual navigation aids;
 - b) Inspections carried out after a report, during continuous surveillance, such as FOD on a pavement;
 - c) Inspections carried out following an accident or incident;
 - d) Pavement evaluations, including friction measurement;
 - e) Inspections carried out during construction, or even daily maintenances, such as PAPI units being damaged or knocked out of alignment during grass cutting;
 - f) Weather related inspections that may raise risk levels, such as runways becoming contaminated in heavy rain, or dust-storms;
 - g) Wildlife inspections possibly by qualified wildlife contractor;
 - h) Obstruction surveys, possibly by qualified surveying contractor;
 - i) Airside security inspections (in coordination with the security agency, as appropriate)

- 8.2 Others special inspections may be conducted in the event of the following:
 - a) following an unusual event such as an aircraft accident or adverse weather conditions;
 - b) the need for flight checks by the appropriate agency/contractor; or
 - c) if there have been numerous deficiencies reported or found, either as oneoffs or as part of a noted trend.

9. INSPECTION/AUDIT PROCEDURE CONSIDERATIONS

In conducting inspections or audits, the aerodrome operator shall consider the following:

- a) Inspections/audits should be conducted when activities are at a relatively low operational level, as much as practicable. Some elements of Inspection/audits may also be considered during busier times in a way that does not raise net levels of safety risk, in order to identify critical systems weaknesses (e.g. slips, lapses and violation of Standard Operating Procedures (SOPs).
- b) Ensure that standard checklists are used and that the checklists are maintained for a set period of time following inspections or audits;
- c) Observe airside safety rules in order not to contribute to undesirable occurrences such as runway incursions;
- d) Adhere to the prevailing procedures prescribed for low visibility operations and vehicular movements restrictions;
- e) Adhere to communication procedures and listen out on the established communication channels;
- f) Use approved standard phraseologies and ensure positional awareness at all times;
- g) Coordinate with air traffic services and obtain permission before entering aircraft manoeuvring areas.

10. FOLLOW-UP AND CORRECTIVE ACTION

- 10.1 The inspection and audit processes should be linked to and coordinated with the aerodrome maintenance programme, to ensure correction of deficiencies noted during inspections and audits. It may be necessary to categorize the safety concerns in terms of the associated levels of risk.
- 10.2 A corrective action plan with activities and timeframes shall be developed for all identified deficiencies and shall be implemented with a view to resolve safety concerns within the shortest time possible.

10.3	The aerodrome operator shall ensure that there is a system of follow-up of corrective actions to establish that planned activities are being implemented as per the corrective action plan.
Civil A	Aviation Authority