



# **AERODROME CERTIFICATION - Regulatory Challenges / Experiences**

*Presentation by: Kenya CAA*



## Outline

- Background on the State's obligations
- Regulatory framework
- Challenges & Experiences in AD Certification
- Way forward



## Background

- Safety oversight ensures that the national aviation industry complies with the applicable safety-related legal framework to provide a level of safety equal to, or better than, that defined by the ICAO SARPs.
- A lack of appropriate safety oversight threatens the health of civil aircraft operations.



## Background

- Article 37 of the Chicago Convention (ICAO Doc. 7300) specifies that “each contracting State undertakes to collaborate in securing the highest practical degree of uniformity in regulations, standards, procedures and organization in relation to aircraft, personnel, airways and auxiliary services in all matters in which such uniformity will facilitate and improve air navigation”.





## Regulatory Framework

- Aerodrome certification is undertaken in accordance with the ICAO specifications through an appropriate regulatory framework.
- In the Kenyan context the AD certification is guided by the following framework:
  - a) The Civil Aviation Act No. 21/2013 as amended;
  - b) The Civil Aviation (Aerodrome) Regulations 2013;
  - c) The Civil Aviation (Certification, Licensing and Registration of Aerodromes) Regulations 2018;
  - d) The Manual of Aerodrome Standards (Vol I and II)



# Regulatory Framework

- a) The Civil Aviation Act No. 21/2013;
- Section 7: Functions of the Authority....(x) licensing, certification, registration and surveillance of aerodromes;
  - Section 39: Inspection of aerodromes, premises and aircraft (1) The Authority shall inspect any aerodrome used for civil aviation operations..... (2) The Authority's inspectors shall have unhindered access to aerodromes, premises.....;
  - The Authority's inspectors shall, where they find that an aerodrome operator, is in violation of this Act or regulations made hereunder, issue an infringement notice to such licence holder;



# Regulatory Framework

- a) The Civil Aviation Act No. 21/2013;
  - Section 56. Restriction of building in declared areas
  - Section 57. Control of structures, etc., on or near aerodromes
  
- b) The Civil Aviation (Aerodrome) Regulations 2013;
  - Has provisions on the construction of aerodromes, licensing, certification and Registration, obligations of the AD operator, obstacle restriction and removal, visual aids etc;



## Regulatory Framework

Annex 14 Vol 1: 1.4.2 Recommendation.— 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.

c) The Civil Aviation (Certification, Licensing and Registration of Aerodromes) Regulations 2018;

- Provides for the certification, licensing and Registration of aerodromes;
  - Certification – Aerodromes used for Int'l operations
  - Licensing – Category B and C Aerodromes
  - Registration – domestic aerodromes available for use only by domestic air traffic of MTOM not exceeding 5,700Kg,
- Provisions on issuance, validity, renewal and surrender of certificate.



## Regulatory Framework

- c) Guidance material published by the CAA;
- advisory circulars on various areas;
  - checklists
  - forms
  - orders
  - Aerodrome Inspector's Handbook



## Certification Status of Kenyan Aerodromes

Aerodrome	Status
JKIA	Certified
Moi	Certified
Kisumu	Phase 4
Eldoret	Phase 3 ( on site visit Scheduled for 16 <sup>th</sup> to 20 <sup>th</sup> May 2022)
Wilson	Phase 2



## Certification Challenges

- The Authority's Aerodrome Certification Process is undertaken in 5 phases
- Most of the Regulatory challenges are at the third phase of the certification process (assessment of aerodrome facilities and equipment ) and continuous compliance for the retention of the granted certificate ;
- These may include:-
  - a) state of Movement area (runway, taxiway and Aprons);
  - b) Lighting
  - c) Markings & Signage
  - d) Apron Management;
  - e) Rescue and fire fighting





## Certification Challenges

- f) Technical Personnel
- g) SMS implementation;
- h) Emergence planning
- i) Resolution of Safety Issues

## Certification Challenges

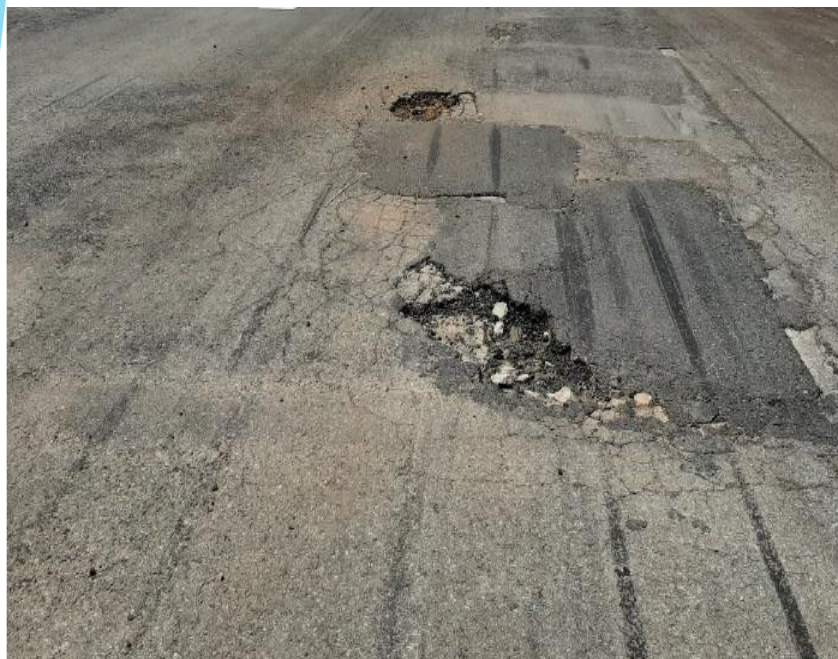
### a) State of Movement area (runways, taxiways and Aprons);

- ✈ Maintenance programme implementation;
- ✈ Rubber accumulation
- ✈ Friction testing
- ✈ Pavement failures

*The aerodrome operator ought to maintain facilities in a condition which does not impair the safety, regularity or efficiency of air navigation.*

## Certification Challenges

- a) **State of Movement area (runways, taxiways and Aprons);**  
✈ Maintenance





## Certification Challenges

- a) **State of Movement area (runways, taxiways and Aprons);**
- ✈ Shoulders (where applicable) and strips that are not well graded, prepared or constructed so as to minimize any hazard to an aeroplane running off the runway, taxiway or stopway.
  - ✈ AD operator takes time to resolve the identified issues due various reasons.



## Certification Challenges

- a) State of Movement area (runways, taxiways and Aprons);



## Certification Challenges

### b) Lighting

- ✓ Non-compliant lighting schemes
- ✓ Presence of non-aeronautical ground lights at or near aerodromes
- ✓ Location and serviceability of edge lights;
- ✓ Extended delays in completion of rehabilitation works (some CAPs issued in May 2021 are due on 30<sup>th</sup> June 2022);

# Certification Challenges

## c) Markings & Signage

- ✓ Aerodromes signs that are not well maintained;
- ✓ Not lit at night
- ✓ Obscured by overgrown grass/bushes
- ✓ Faded or missing markings





## Certification Challenges

### d) Apron Management;

- ✓ vehicle movement and control;
- ✓ Aircraft parking stands
- ✓ Marshallers workload / schedules and competency
- ✓ Stop bars placement;
- ✓ Apron edge makings;



## Certification Challenges

### e) Rescue and fire fighting

- ✓ Inadequate equipment;
- ✓ Staff shortage due to natural attrition
- ✓ Training programmes and plans;
- ✓ Final incidents investigation reports and actions undertaken not shared with the Authority.

Note: The Aerodrome operator should consider purchase of an extra foam tender (to avoid the tendency meeting the bare minimum requirements)



## Certification Challenges

### f) Qualified Technical Personnel

- ✓ Number of personnel hired in various competency areas i.e. safety, civil/electrical engineering, WHM etc
- ✓ Lack of training programmes and plans for the various cadres
- ✓ Inadequate continuous/recurrent training

## Certification Challenges

### g) SMS implementation;

- ✓ Training of personnel;
- ✓ Hazard identification and risk assessment;
- ✓ Implementation and periodical monitoring the effectiveness of the identified mitigation measures
- ✓ Safety performance indicators/ targets
- ✓ Safety culture- voluntary reporting
- ✓ Data collection and analysis



## Certification Challenges

### h) Aerodrome emergency planning

- ✓ provides for the coordination of the actions to be taken in an emergency
- ✓ the plan coordinates the response or participation of all existing agencies;

#### issues

- Emergency operations Centre that are not well equipped;
- Failure to conduct a full scale aerodrome emergency exercise at required intervals;
- Lack of appropriate coordination with specialist rescue services

## Certification Challenges

- i) **Implementation of corrective action plans**
- ✓ Delayed or complete failure to originate corrective action plans;
  - ✓ Poorly crafted CAPs resulting to a never-ending exchange between the service provider and the regulator;
  - ✓ Inadequate resource allocation to resolve the identified safety issues;
  - ✓ failure to timely update on the implementation status;

## Positive observations on the KAA

- Improvement in level of consultations and engagements;
- Timely feedback when information is sought
- Improvement in the quality of manuals that are submitted and great change of attitude to learn;
- top management commitment to resolve safety concerns;
- Recruitment and deployment of 35 new fire offices;
- Adoption for the use of the Jet 6 form – an improvement





## Way Forward

- Aerodrome certification is a concerted effort that needs to be supported by the top management in resource allocation and timely interventions where necessary;
- Compliance to the regulatory requirements is key to progression from one phase to another during the certification process;
- conditional grant of certificates with a timeline for resolution of pending issues that should be honoured;
- Aeronautical studies/safety assessments need to be undertaken to resolve non-compliant actions already undertaken;
- Submission of direct appeals to the office of the DG or other offices may not be of help.
- KAA to commence the process to certify or license the other 16 airports under it's jurisdiction.

THANK YOU