International Civil Aviation Organization

Aerodrome Certification Implementation Task Force (ADCI TF/1)

First Meeting
(Cairo, Egypt, 15 - 17 October 2012)

Agenda Item 4:   **Certification Process and Implementation Issues**

AERODROME SAFETY INSPECTORS' COMPETENCY

(Presented by Jordan)

SUMMARY

The aim of this working paper is to identify the key areas of formal; recurrent and OTJ to maintain the competence of the Aerodrome Safety Inspectors in the MID Region and to ensure that the regional CAA managements are conscious of these requirements and take appropriate measures to assure that qualified persons are available and qualified to conduct the National Certification Programmes without interruptions caused by the lack of such persons.

Action by the meeting is at paragraph 3.

REFERENCE

- AOP SG/7 & 8

- ICAO Doc 9774(5.5): Manual on Certification of Aerodromes

1.   INTRODUCTION

1.1   Historically, Aerodrome Safety Inspectors have demonstrated that their overall level of competence in operational safety matters has been met without the need of a published Formal Training Program. This was possible because the large majority of aerodrome inspectors had gained considerable experience in the aviation industry, mainly through operational roles.

1.2   More recently, the advent of privatization combined with the separation between the regulatory body(s) (Aerodrome Certification) and operational body(s) and the consequent commercially oriented approach to the management of airports has created significant change: business driven objectives have assumed a higher priority and management structures and skills have shifted towards a more business focused culture.

1.3   It is of crucial importance to ensure that as these commercial and other pressures increased there would be no reduction in the priority attached to safety, nor any dilution of the skills available in Aerodrome Safety Inspectors.

2. DISCUSSION

2.1 An aerodrome inspection program should operate on the principle that the aerodrome certificate holder's internal audit program is of primary importance and that the Aerodrome Safety Inspectors (ASI) inspections are conducted to review and evaluate that program and, in addition, to independently check and verify the particulars of the aerodrome notified in the AIP, as well as the aerodrome operating procedures, safety measures, facilities and equipment.

2.2 Training in the appropriate elements of aerodrome engineering relevant to aerodrome inspection should be an essential requirement. Adequate on-the-job training should be provided before entrusting the whole spectrum of aerodrome inspection duties to an inspector. The typical duties of an aerodrome inspector are attached to **Appendix A** to this working paper.

2.3 The training objective is to provide the ASI with a basic knowledge of airport operations which will enable him/her to administer the regulatory Airport Certification Program. The knowledge is acquired through a combination of formal training courses and on-the-job training

2.4 The ASI's credentials will identify the bearer as an accredited representative of the CAA authorized to perform aerodrome Inspections and to discharge those duties as provided for by ICAO Doc. 9774. In order to obtain the credentials, individuals must qualify by meeting certain specific requirements. In order to retain the credentials, the ASI must maintain recurrent training.

2.5 The minimum standard training that must be completed prior to issuance of an Airport Safety Inspector's ASI's credential is attached to **Appendix B** to this working paper. Credentials are issued to qualified persons who are assigned the duties of ASI and meet the following criteria:

    a. have a background/experience related to aviation or airport design and operation;
    b. have completed the training requirements; and
    c. receive a recommendation from the Director of Airport Safety and Standards.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

    a) note the information contained in this working paper;

    b) agree to the proposal to urge the MID Region States to develop a formal training program documents , and Adequate on-the-job training should be provided before entrusting the whole spectrum of aerodrome inspection duties to an inspector; and

    c) request the ICAO MID Office to consider forming regional a house of expertise's data base to assist in the Implementation of the Certification Program and the SMS at the regional level.

APPENDIX A

The typical duties of an aerodrome inspector should include but not be limited to:

A)   Verification of the aerodrome data in the aerodrome manual including details of:

      1)   the location of the aerodrome;

      2)   the name and address of the aerodrome operator;

      3)   the movement area;

      4)   the runway declared distances available;

      5)   aeronautical ground lighting;

      6)   ground services; and

      7)   notices of special conditions and procedures, if any.

B)   On-site verification and audits of aerodrome operating procedures including:

      1)   the overall aerodrome safety management system;

      2)   the aerodrome emergency plan and periodic aerodrome emergency exercises;

      3)   rescue and fire-fighting;

      4)   inspection and maintenance of aeronautical ground lighting;

      5)   promulgation of changes to published aerodrome information;

      6)   the prevention of unauthorized entry to the aerodrome, particularly the movement area and protection of the public against jet or propeller blast;

      7)   the operator's daily inspection of the aerodrome;

      8)   the planning and carrying out of aerodrome construction and maintenance work including compliance with construction safety requirements;

      9)   apron management and parking control;

      10)   the control of vehicles operating on or in the vicinity of the movement area;

      11)   wildlife hazard management;

      12)   the monitoring of obstacle limitation surfaces and notification;

      13)   the removal of disabled aircraft;

      14)   hazardous materials, including aviation fuel;

      15)   the protection of radar and navigational aids; and

      16)   low-visibility operations.

C)   On-site checking and testing of aerodrome facilities and equipment including:

  1)   the dimensions and surface conditions of runways, taxiways, stopways, runway end safety areas, runway and taxiway strips, shoulders and aprons;

  2)   aeronautical ground lighting systems including flight check;

  3)   standby power;

  4)   landing direction indicators and wind direction indicators, aerodrome markings and markers;

  5)   guidance signs and warning signs in the movement area;

  6)   aerodrome maintenance equipment;

  7)   disabled aircraft removal plan;

  8)   wildlife control equipment;

  9)   the presence of obstacles in obstacle limitation surfaces;

  10)   runway visual range measuring equipment;

  11)   the presence of dangerous lights;

  12)   rescue and fire-fighting equipment;

  13)   fuelling facilities; and

  14)   runway surface friction measuring equipment.

D)   Flying assessments and aeronautical studies at aerodromes: In cooperation with the Flight Operations Unit of the CAA and other specialists as required, organize flying assessments at aerodromes and conduct aeronautical studies, if and where permitted by the standards and practices.

E)   General duties: All other functions relating to the certification of aerodromes including receiving and processing of expressions of interest and applications for aerodrome certificates; processing requests for the amendment, transfer or surrender of certificates or requests for interim certificates; reporting to AIS; initiating NOTAMs and determining appropriate enforcement action in the event of non-compliance with the regulations.

APPENDIX B

<u>The Minimum Standard Training That Must be Completed Prior to Issuance of an Airport Safety Inspector's ASI's Credential Includes the Following:</u>

(1)   ICAO Annex 14 Volume I Requirements and Application.(Recurrent Training Once Every Three Years).

(2)   Airport Certification. .(Recurrent Training Once Every Three Years).

(3)   Quality Assurance and Auditing Techniques (Basic).

(4)   Auditing Techniques for Aerodrome.

(5)   Safety Management System. .(Recurrent Training Once Every Three Years).

(6)   State Safety Program Implementation. .(Recurrent Training Once Every Three Years).

(7)   Airport Operations.

(8)   Safety Oversight Inspectors (Aerodrome)./(Recurrent Training Once Every Three Years).

(9)   Human Factors in Aviation.

(10) Airport Apron Safety.

(11) Aircraft Accident –Incident Investigation.

(13) ARFF Operation Course.(Recurrent Training Once Every Three Years).

(14) European Co-ordination Center for Aviation Incident Reporting System (ECCAIRS).

(15) Airport Emergency Planning.

(16) Airfield Lighting System.

(17) Technical Reports Writing.

(18) A minimum of two inspection at a certified airport under the supervision of a credentialed ASI.

<u>Specific Technical Training per Post/Function / Doc 9774 Typical Organizational Structure (DASS):</u>

<u>Head of Airport Standards Division:</u>

 (1)   Airport Engineering

<u>Airport Design Officer:</u>

 (1)   Airport Design and Construction.
 (2)   Airport Master Planning.

Engineering Specifications Officer:

(1) Airport Pavement Design

(2) Airport Pavement Maintenance

(3) Airport Pavement Maintenance

(4) Non-Destructive Testing Audit Oversight.

Aviation Environment Officer:

(1) Aviation and Environment.

(2) Environment Management System.

(3) Environmental Impact Assessment.

(4) Wildlife Management and Control.

(5) Noise Compatibility Planning.

Head of Airport Safety Division:

(1) Airport System and Planning.

(2) Aviation Quality Management System

(3) Aircraft Accident and Incident Report Writing.

(4) Aviation Fire-Fighting Foam Evaluation

Certification Officer:

(1) Airport Maintenance

(2) Regulatory Auditing Techniques

(3) Aviation Weather Risk Management

(4) Advanced Aeronautical Information Services.

Compliance and Enforcement Officer:

(1) Introduction to Air Law

(2) Legal Principle for Aviation Regulators

(3) Enforcement Policy.

Technical Library and Safety Data Officer:

(1) Record Keeping.

(2) Safety Risk Assessment.

(3) Safety Data Analysis

(4) Integrated Safety Management System with (Recurrent Training Once   Every Three Years).

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