

*INTERNATIONAL CIVIL AVIATION ORGANIZATION***TWENTY-SECOND MEETING OF THE  
ASIA/PACIFIC AIR NAVIGATION PLANNING AND  
IMPLEMENTATION REGIONAL GROUP (APANPIRG/22)****Bangkok, Thailand, 5-9 September 2011****Agenda Item 3: Performance Framework for Regional Air Navigation planning  
and Implementation****3.1 AOP****PROGRESS OF SMS & AERODROME LICENSING IN  
AIRPORTS AUTHORITY OF INDIA**

(Presented by India)

**SUMMARY**

This paper provides information in respect of Safety Management System activities in AAI and aerodrome licensing of AAI managed airports in India

**1. INTRODUCTION**

In March 2001, the International Civil Aviation Organization (ICAO) Council adopted a new Standard that requires States to certify their aerodromes used for international operations in accordance with the applicable specifications of Annex 14 to the Convention on International Civil Aviation and other ICAO specifications through an appropriate regulatory framework. This Standard became applicable from 27 November 2003 and applies to all aerodromes used for international operations.

In 2001, to provide guidance for States to establish a regulatory system for the certification of aerodromes, ICAO published Document 9774 “Manual on Certification of Aerodromes”, wherein it is stated that the most effective and transparent means of ensuring the safety, regularity and efficiency of aircraft operations at aerodromes are to:-

- establish a separate safety oversight entity and a well-defined safety oversight mechanism, supported by appropriate legislation, to carry out the functions of certification and safety regulation of aerodromes; and
- implement an aerodrome certification procedure whereby a State certifies an aerodrome through the approval/acceptance of an aerodrome manual submitted by the aerodrome operator.

Ministry of Civil Aviation, India had put into place the legislative, regulatory and organisational framework to affect aerodrome safety oversight, including certification, in a manner consistent with ICAO requirements by amending Aircraft Act 1934, which empowers the Ministry of Civil Aviation to make rules to give effect to the Chicago Convention and its Annexes. Section 5(b)

of Aircraft Act 1934 empowers Central Government to make rules for “the licensing, inspection and regulation of aerodromes, the conditions under which aerodromes may be maintained.”

In exercise of this power the Central Government of India in its 4<sup>th</sup> amendment of Aircraft Rules 1937 Part XI (Aerodromes) in 2004 included the provision of Aerodrome Licensing in Rule 78, thereby making the process more stringent than what is required for certification of aerodromes. On 14<sup>th</sup> March, 2005, Ministry of Civil Aviation through Gazette Notification took a step further ahead of ICAO requirement of not only licensing all aerodromes used for international operations but also licensing all aerodromes from where domestic schedule transport service operates.

In exercise of power of rule 133A of Aircraft Rules 1937, The Director General of Civil Aviation of India issued following Civil Aviation Requirements (CAR):-

1. CAR, Section 4, Series “F” Part I (16<sup>th</sup> October, 2006) – Requirements for Issue of Aerodrome Licence.
2. CAR, Section 4, Series “B” Part IV (20<sup>th</sup> Sept, 2006) – Exemption Procedures for non-compliance at Aerodromes.
3. CAR, Section 4, Series “B” Part I (31<sup>st</sup> July, 2006) – Aerodrome Design and Operations.
4. CAR, Section 1, Series “C” Part I (20<sup>th</sup> July, 2010) – Establishment of a Safety Management System (SMS).

The Director General of Civil Aviation of India also issued following Advisory Circulars:-

1. AD AC NO.1 of 2006 (dated 14<sup>th</sup> Sept, 2006) – Guidelines for preparation & maintenance of Aerodrome Manual.
2. AD AC No. 02 of 2009 (12<sup>th</sup> May, 2009) – Preparation of Action Plan for addressing non-compliance & inspection observations.
3. AD AC No. 03 of 2009 (1<sup>st</sup> June, 2009) – Equipment for aerodrome standardization personnel at licensed aerodrome.

## **2. DISCUSSION**

### **2.1 Aerodrome Licensing in AAI Airports**

Airports Authority of India being the major Aerodrome Operator in India had taken lead in this direction since year 2006-07, by initiating process of Aerodrome licensing in 56 airports where schedule air transport operation is in place.

There had been various technical difficulties and constraints in fulfilling the compliance requirements as prescribed by DGCA, India, as most of the AAI airports were constructed during the period of Second World War as non-instrument runway and in conformity with the requirements prevalent during those days and later AAI progressively continued development of these airports on the basis of operational need. In spite of various constraints AAI continued its endeavor of obtaining aerodrome license for its airports.

The aerodrome manual is a fundamental requirement of the certification process. It should contain all the pertinent information on the aerodrome site, facilities and services, equipment, operating procedures, organisation and management, including the aerodrome operator's Safety Management System (SMS). The manual should be written to demonstrate conformance with the applicable aerodrome standards and with the assurance that a sound system is in place to manage the safety of aircraft operations. The aerodrome manual serves as the reference document with regards to the setup, standards, provisions, conditions and level of airside services to be maintained at the aerodrome and for the safety oversight entity, it will form the basis for evaluating the fitness of an operator to hold an aerodrome certificate and for conducting surveillance audits to ensure continual compliance.

Having proper documentation for Aerodrome Licensing was a challenging task. Airports had to work for the consolidation and compilation of related aerodrome data and organisational information, as well as operational, maintenance and safety arrangements, into an *Aerodrome Manual & Station Safety Management Manual*.

In addition to these manuals, airport had to submit a compliance checklist w.r.t. National Regulation of Aerodrome Standard along with Action Taken Report on identified non-compliances, to DGCA as a component of its application for aerodrome certification. In preparing these documents, aerodrome inspections, operating methods and procedures, maintenance standards and setup, archival of safety records and follow-up action on safety observations had to be critically reviewed and properly coordinated so as to establish clear and systematic processes for all aerodrome operation staff to follow.

To streamline & standardize the process of aerodrome licensing a "Manual on Aerodrome Licensing of AAI Airports" was developed in May 2009. This manual provides guidance to the AAI Airports on applying for Aerodrome License; this also provides sample documents as attachments. A separate Aerodrome Licensing Directorate was also created for efficient working of this section.

## 2.2 Safety Management System in AAI

Aviation Safety Directorate (ASD) was established in 1998 to look after the safety aspects of the various activities of Airports Authority of India. During the initial years of formation, Aviation Safety Directorate was conducting Safety Audits of AAI owned aerodromes at regular intervals to identify systemic deficiencies & hazards and recommended suitable remedial actions wherever required. Its functions also included investigations of incidents.

In 2005, ASD was entrusted the responsibility of development and establishment of Safety Management System (SMS) in AAI. Accordingly, ASD developed its first Corporate Safety Management Manual in November 2005. This manual was developed on the basis of best industry practices and contained all the elements present in the draft Safety Management Manual of ICAO. The AAI Board in its 92<sup>nd</sup> Meeting suggested that the proposal of establishment of SMS in AAI may be discussed with Regulator (DGCA) and got vetted by it before bringing to the Board for approval.

The 2<sup>nd</sup> edition of Corporate Safety Management System Manual was prepared in 2009 according to ICAO SMS Framework as envisaged in ICAO Doc 9859 (Safety Management Manual). However, all the attachments to the first Safety Management Manual which contained useful information for implementing SMS practices and procedures remained unchanged in the 2<sup>nd</sup> edition. The revised Safety Policy along with Safety Targets and SMS Implementation Plan were approved by the AAI Board in its 130<sup>th</sup> Meeting. Later, The Corporate SMS Manual was also accepted by regulator (DGCA).

The DGCA issued a Civil Aviation Requirement Section I – General Series ‘C’ Part 1 dated July 20, 2010 on the establishment of a Safety Management System (SMS). This CAR applies to licensed Aerodromes and Air Traffic Service providers. It even applies to an applicant for aerodrome licensing. It details the various requirements that need to be fulfilled for establishing a SMS, in a time frame of three years from the date of its issue.

The first phase of SMS Implementation in AAI has been successfully completed. The majority work of second phase of SMS Implementation has been completed and the progress of the remaining work is in full swing. Most of the chapter of SMS Manual has been revised as per the guidelines contained in the national regulations on SMS. Safety accountabilities and responsibilities of top management of AAI have been defined, documented and included in the revised Safety Management Manual to be communicated throughout the organization.

The second phase of SMS Implementation requires that reactive processes should be put into practices and there is already a very well established procedure prevalent for incident reporting and investigation in our organization. The list of Mandatory Reportable Incidents is also being harmonized in coordination with Regulator (DGCA).

All the AAI owned aerodromes who have applied and obtained license from DGCA have submitted the Station Safety Management Manuals prepared in conformity with Corporate Safety Management System Manual and National regulations.

### 2.3 **Training in SMS & Aerodrome Licensing**

Staff training and competency is a critical element in Safety Management System and for ensuring uniform Aerodrome standards. To bring required level of competency, first and foremost requirement is to generate awareness about SMS and Aerodrome Licensing among all its personnel so that they become aware of its existence and develop a basic understanding of its concepts and practices. This awareness should not be confined to any particular discipline, but to the entire organisation.

Since 2005, we have conducted a series of workshops/seminars on ‘Safety Management System & Aerodrome Licensing’ for creating awareness about the subject among the field personnel and to assist them in preparation of Aerodrome Manual & Safety Management Manual for their aerodromes in line with the International and National Regulations. This awareness programme also included imparting of training on key SMS concepts and practices such as Hazard Identification, Risk Mitigation, Change Management and guidance on preparing documents, required to be submitted to DGCA, to obtain Aerodrome License.

Training to enhance and maintain the skills of operational and safety personnel is a continuous process and shall be continued through the all phases of SMS Implementation. It is also essential for complying Aerodrome Licensing requirements for its currency.

#### **Present Status**

Aerodrome Licensing- In India, 45 public airports and 16 private airports are licensed, of which 34 AAI airports are licensed under public category.

SMS - Most of the elements required to be developed for the second, third and fourth phase of SMS Implementation are already present in our system. However, certain elements like integration of Quality Management with Safety Management System shall be completed in the fourth phase of SMS Implementation.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to note the progress in respect of Safety Management and Aerodrome Licensing in Airports Authority of India.

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