Chapter 7

Safety Infrastructure

7.1 Safety requirements

ICAO's Universal Safety Oversight Audit Programme is mandatory for all contracting states. In view of the ICAO requirements, the Authority created the Directorate of Aviation Safety and made Safety Audit mandatory for all operational airports once a year and for all other airports once in two years.

7.2 Requirement of Crash Fire Tenders

The Authority follows the Standards and Recommended Practices issued by ICAO with regard to deployment of rescue and fire fighting facilities at the airports. Accordingly, the airports were divided into various categories for providing crash fire tenders (CFT). A minimum number of CFTs for each category of airport had to be provided.

7.2.1 Delay in decision making and non replacement of CFTs

The Authority approved (October 2001) a proposal for procurement of 148 CFTs* at a cost of Rs.287.26 crore and forwarded (May 2002) it to the Ministry for approval by the Project The Ministry asked (December 2002) the Authority to review the Investment Board. conditions of the existing CFTs and examine the possibility of refurbishment of the same. It was then proposed that refurbishment of these could be done at a cost of Rs.38 lakh each with a saving of Rs.1.60 crore per CFT. Based on the Ministry's observations, the proposal was reviewed (January 2004) and administrative approval and sanction was accorded by the Board for refurbishing 104 CFTs for NAD airports at a cost of Rs.44.26 crore. Subsequently, and after opening the tender and selection of the tenderer, the Board again decided (August 2004) to approach the Ministry for pursuing the earlier proposal for procurement of the CFTs. The Ministry directed (March 2005) the Authority to examine the whole issue of procurement/replacement/overhaul and refurbishment of the CFTs with regard to costs and reliability. The Board, after reviewing the matter again reversed (September 2005) its decision of August 2004 and consented to the proposal for refurbishment through calling of tenders. The NIT was issued in November 2005 but was withheld due to certain complaints received by the CVC. The Management stated (August 2006) that clearance had since been received from the CVC and work order for overhauling and refurbishing 75 CFTs was awarded during May 2006. It was ascertained in Audit (January 2007) that 12 CFTs had been refurbished and for 63 CFTs, work was in progress. Further, order for refurbishment of 19 CFTs had been placed on 22 January 2007. The delay in taking the decision to procure or refurbish by over five years resulted in many airports being equipped with old CFTs. The Safety Audit Reports of different airports had also raised concerns on the performance of these CFTs and recommended that the CFTs required immediate rectification or replacement as the vehicles were old.

^{*} For replacement of 126 existing CFTs and additional requirement of 22 CFTs in some airports

7.3 Non upgradation of fire safety infrastructure at international airports

ICAO recommended that from January 2005, the level of protection provided at an airport for rescue and fire fighting should be equal to the airport category. Accordingly the level of protection at the five IAD airports at Delhi, Mumbai, Kolkata, Chennai and Thiruvananthapuram should be equal to that of a Category IX airport. While the airports at Delhi, Mumbai and Chennai were provided with Airfield Fire Fighting and Rescue Vehicles (AFFRV) suitable for Category IX airport, those at Kolkata and Thiruvananthapuram were provided with AFFRV suitable only for a Category VIII airport. These two airports were thus not meeting the ICAO requirements.

Audit in this connection observed that the Authority accorded (September 2002) approval for procurement of 25 AFFRV for the international airports. Global tender was invited during January 2003 which was subsequently cancelled for review of technical specifications. Based on the revised technical specifications, sanction was again accorded (April 2005). Global tenders were once again invited in July 2005 but the tender finalisation process was not yet complete (March 2006).

7.4 Fire fighting facilities rendered idle

At Kolkata, the work relating to construction of underground water storage tank was completed in October 2003 at a cost of Rs.61.13 lakh. But the related works like provision of sprinkler, fire hydrant, electrical works including pump and motors were not taken up as the international terminal building (ITB) in which these were to be installed was still under construction (September 2006), with the result that the expenditure of Rs.61.13 lakh incurred on the construction of the tank remained idle since October 2003. The Management stated (January 2007) that the remaining works relating to underground water tank would be taken up on the completion of proposed construction of international departure hall of ITB.

7.5 Underutilisation of friction tester machine

Adequate runway friction is required for three distinct purposes, viz. maintenance of directional control during the ground roll, on take off or landing, wheel spin at touch down and deceleration of the aircraft after landing or rejected take off. For runway testing of all the airports under North Eastern region, an airport surface friction tester (ASFT) valuing Rs.61.91 lakh was positioned at Guwahati in 1996. The equipment was used for the first time only during February/March 2005. The ASFT remained unserviceable most of the time due to non availability of spares and absence of trained personnel. The tester was out of order from January 2001 to March 2002 and again from January 2003 to February 2004. The need to conduct periodical friction testing could not be met as required.

As the reliability of the equipment was extremely poor, the region opposed (July 2004), the placement of any further new equipment at the region. Despite being aware of the fact regarding non utilisation of the existing ASFT, equipment valuing Rs.80 lakh was procured for Imphal which was received in Guwahati in July 2005. The Management stated (August

2006) that a policy decision was taken to place a second ASFT at sub regional workshops of all regions including Imphal. However, the decision to procure an additional ASFT, when the existing one could not be utilised properly and was found unreliable, lacked justification. It was also ascertained in Audit (January 2007) that the newly procured ASFT could not be sent to Imphal and was lying in unused condition in Guwahati (December 2006).

7.6 Absence of RESA due to non availability of land

ICAO guidelines prescribe the general standards for provision of Runway End Safety Area (RESA) in aerodromes. RESA should be provided at each end of a runway strip and should extend from the end of runway strip to a distance of at least 90 metres and should as far as practicable extend to a distance of 240/120 metres. Audit observed from a test check of Safety Audit Reports that RESA was either not available or available only for a shorter length than desired at Amritsar, Bhuntar, Kolkata, Kangra, Khajuraho, Ludhiana, Mangalore, Pantnagar, Shimla and Udaipur airports. The Management noted (September 2006) Audit's observation in this regard.

Recommendations

- Adequate number of CFTs/AFFRVs should be maintained at the airports in good working condition according to requirements.
- RESA may be provided at all the airports at the earliest.