

AAI inducts sophisticated support infrastructure

Managing airports entails significant groundwork in terms of having adequate and proper ground support/safety systems to ensure safe operation of aircraft. Due to ever-changing technology and as a result of new and larger airborne platforms in the skies, AAI as an airport operator has to keep itself abreast of the changing scenario. That demands constant monitoring of the facilities available in its inventory. Investments, therefore, have to be incurred by AAI to acquire world-class, specialised equipment and vehicles to maintain high safety standards. Some of these are:

Runway Surface Friction Testing Machine (ASFT)

The ASFT measures the friction value of the runway surface. A sophisticated computer controlled measuring device is connected to a special wheel through which the friction value is instantly measured while the vehicle cruises at a constant speed of 95 kmph. AAI has imported nine ASFTs — each costing Rs 80 lakhs — from Sweden and deployed at various locations.

Runway Rubber Removal Machine

This sophisticated high pressure (2,500 bar) water jet machine removes deposited rubber from the runway to restore the friction value without causing damage to the surface. The



ALL FOR SAFETY: (Top) A Runway Surface Friction Testing Machine at work; (right from top to bottom) Runway Rubber Removal Machine; Runway Marking Machine; Airfield Fire Fighting and Rescue Vehicle; and, Runway Mechanical Sweeper.



machine can remove rubber upto 800 sq mt area in one hour. The removed rubber is sucked in to a storage tank to avoid runway contamination. AAI has imported two machines from Germany each costing Rs 2.35 cr.

Runway Marking Machine

Busy airports require restoration of various markings on runways, taxiways and aprons in a very limited time. This sophisticated marking machine capable of marking lines upto 100 cm width at speeds varying from 4-20

kmph, can do such jobs with speed and accuracy. AAI has two of these machines, each costing Rs 80 lakhs imported from Germany, in operation and five more are being inducted.

Airfield Fire Fighting and Rescue Vehicle (AFFRV or ACFT)

Fire services at the airport play a vital role in aviation safety and the AFFRV is its backbone. This vehicle carries 10,000-12,000 litres of water and 1,500 litres of foam and is capable of achieving 0-80 kmph speed in less than 30 seconds. It can throw extinguishing media at 4,500 litres per minute upto a distance of 90 meters. AAI inducted 15 such vehicles in 2007-08 and 40 more AFFRVs will be inducted by May 2010. These Austrian-built vehicle costs Rs 3.35 cr each.

AAI is also going to induct five SFFRVs with High Reach Extendable Turret (HRET) capable of delivering extinguishing media upto a height of 15 meters for precise delivery of media in difficult locations of aircraft. These AFFRVs with HRET will be placed at major airports and each would cost about Rs 5 cr.

Runway Mechanical Sweeper

Foreign Object Debris (FODs) is a potential threat to the operation of aircraft on ground, as its entry in to the engine causes damages. Effective and speedy removal of FODs is ensured by these machines. AAI is inducting five such machines in 2010. This machine, costing about Rs 2.70 cr can sweep up to 90,000 sq mt in one hour at a speed of 40 kmph.

The induction of such specialised equipment is a clear testimony of AAI's commitment and efforts to ensure that safety is provided and maintained at all its airports.