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Press Brief

An Initiative by AAI Towards Safer Skies in North Eastern Region

New Delhi, 23rd June 2017: Guwahati Airport is getting state-of-the-art Surveillance ATC Radar system. The upcoming RADAR system is going to cover almost entire North Eastern Sky. Airports Authority of India has undertaken the project of replacing twenty year old Radar system with the new state-of –the- art technology. It is a part AAI's continuing endeavor of modernizing Air Navigation Services (ANS) with new Radars, ADS-B (Automatic Dependent Surveillance – Broadcasting) equipment and ATS automation systems at various locations in India. The data from the new radar will be integrated with the INDRA ATS Automation system of the local Approach Control and Area Control Centers at Guwahati. The same data will also be provided and integrated with other Automation systems for providing satisfactory Radar coverage at the required redundancy levels, over the North Eastern Air Space.

The upcoming Radar system is from Czech Republic based ELDIS Company. The RADAR is of high resolution and extensive digital signal processing capability. The software used in the new primary RADAR is complex and gives excellent monitoring of the various types of aircrafts in the north east sky.

The RADAR is of world's latest technology. The message processing technique gives detailed information of all aircrafts, where aircrafts can give high precision information to give high resolution and smooth flow of Air Traffic hence gives new standards and high quality Air Traffic Control over entire North East Sky.

Use of RADAR in ATC

One of the objectives of ATS is to prevent collision between aircrafts. ATCOs achieve this objective by providing standard separation, either in the vertical plane or in the horizontal plane, between all aircraft under their jurisdiction. Radar is a tool used by ATCOs to provide standard separation between aircraft. Aircrafts are separated by a distance of 10 NM (reduced to 5 NM within 60 NM from radar station) if they are identified on Radar. In the absence of ATC radar, this separation will increase substantially, sometimes as high as 80 NM, which will reduce the efficiency of the ATS system.

Use of Radar in ATS will improve the airspace capacity, reduce delays and thus the fuel burn and will also present ATCOs with real-time update of the position of aircraft. Advanced radar systems like the one which is being installed at Guwahati airport have the capability of exchanging digital data between ATC and the Pilot. The new Radar system will be commissioned by the end of September 2017.



Installation of the state-of-the-art Surveillance ATC Radar system at Guwahati Airport by Airports Authority of India for almost entire North Eastern Sky