

KEMPEGOWDA INTERNATIONAL AIRPORT GETS A TASTE OF MODI'S MAKE IN INDIA WITH NAL'S DRISHTI: VISION ACCOMPLISHED

By Kumaran P, Bangalore Mirror Bureau | Updated: Jan 24, 2018, 04:00 AM IST



Kempegowda International Airport becomes the second airport in state to install the NAL-developed Drishti transmissometer, which accurately measures runway visibility

Flights taking off and landing at Kempegowda International Airport (KIA) will now be able to read visibility levels using the indigenously made Drishti transmissometer Runway Visual Range (RVR) that was installed recently on the runway by the India Meteorological Department (IMD). This transmissometer, which is developed by NAL and installed by IMD, will assess runway visibility to help Air Traffic Control (ATC) take an informed decision on whether or not a take-off or landing is safe.

During this winter season, several flights were delayed at the KIA due to bad weather conditions and especially because of the intense fog on the runway. This newly commissioned system, officials say, will help the ATC take better decisions.

Drishti is a highly accurate visibility measuring system that is already being used at 12 international airports (including military) across the country. According to officials, another 47 Drishti systems will be installed at 22 civilian international airports across India.

Sundar M Metri, director and scientist at IMD, Bengaluru, told BM: “This system will be helpful for pilots during landing and take-off.” Metri explained that the pilot will be able to get the visibility reading, showing whether or not it is safe to operate a flight at a certain runway.

“If the RVR reading is less than 400 metres and when this has been communicated to the pilots, there will be no take off. If the reading is above 400 metres, it can go ahead. For safe landing, the reading has to be over 550 mt.” Transmissometers are mandatory at all airports. The indigenous Drishti is not the first of its kind in Bengaluru. “Mangaluru airport was the first in Karnataka to install Drishti. KIA becomes the second,” said Metri.

Earlier, KIA was using another transmissometer to determine runway visibility and according to sources, it has been updated now. “Drishti is an indigenous instrument developed by National Aerospace Laboratories (NAL), Bengaluru,” said Metri.

He said the instrument had been installed on the runway and the display will be kept in three places at the airport, including the ATC tower.



At present, the airport has a precision approach runway CAT I intended for operation of aircraft using instrument approach procedures. The precision approach runway of CAT I at the airport is intended for visibility of 550 mtrs. In a couple of years, flight operations during winter is set to get a bit more smoother as the second runway, which will come up in 2019, will be CAT III B ILS compliant. CAT III B allows flights to operate in visibility of up to 50 metres.



Desi Drishti vs. imported vision

Airports in cities with fog have instrument-aided landing systems, or ILS, which helps pilots make an informed decision about takeoff or landing. It has various categories – from Category I to Cat III B (which is deployed at IGIA, Delhi). Cat III B can help pilots land even when the visibility is down to about 30 m. Airports, such as the one in Bengaluru, do not need such stringent requirements as the fog here is not that dense. NAL's Drishti helps pilots land when Runway Visual Range (RVR) is above 400 m. In Delhi, Drishti transmissometers help aircraft navigate their way when visibility is as low as 25 m. A Drishti transmissometer comes for around Rs 20-25 lakh, about a third of what an imported one costs.