Performance study of Drishti transmissometer at CAT III B airport


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ABSTRACT. Drishti transmissometer – A visibility measuring system, an Indigenous development from CSIR-National Aerospace Laboratories (CSIR-NAL), has been installed at Indira Gandhi International (IGI) airport, New Delhi for precise measurements of visibility and runway visual range (RVR). Visibility information is critical under poor visibility conditions for all categories of airports viz., CAT I, CAT II, CAT III A & B. In CAT III B Airports the pilot’s have to land with as low a visibility as 50 meters during dense fog. Drishti system with 30 meters baseline is first of its kind installed at any airport in the country. In this paper we report visibility measurements of Drishti during different weather conditions viz., dust storm, rainfall and dense fog at IGI Airport, New Delhi. Drishti data has been compared with other imported transmissometers which have been situated in the Airport either parallel to Drishti or installed few kms away. It has been observed that Drishti measures visibility very accurately. Remote health monitoring of the system through Web-enabling, fast and easy field maintenance through modular electronics are some of the salient features of the system. IGI Airport is the first airport in the country to have Indigenous systems in all its three runways.

Key words – Drishti Transmissometer, Runway Visual Range (RVR).