

# CSIR-NAL banking on Saras

The Secretary Department of Scientific and Industrial Research (DSIR), Shekar C.Mande today visited the CSIR-National Aerospace Laboratories stall at Aero India 2019 and expressed satisfaction at some of the work that is going on to do with Saras aircraft for military and civilian purposes and also on the regional transport aircraft (RTA) which it has been talking about for quite some time.

Saras which was successfully test flown for the second time last year has been part of the Aero India aerial display. As on date, Saras PT1N has completed the first block of flights and few more flights are expected to take place by March 2019, before the design for improved version of Saras (Mk2) is finalized. The improved version has considerable drag/weight reduction with unique features like high cruise speed, lower fuel consumption, short landing and take-off distance, low cabin noise, operable from high & hot airfield, with pressurized cabin, operable from



semi prepared airfield and low acquisition and maintenance cost.

CSIR-NAL has done a study to configure the aircraft from 14 seats to 19 seats, sufficing all regulatory requirements of a light transport aircraft. Final configurations with variable 17-19 seats with minimal or no change in basic airframe configuration were analysed. With over 70 per

cent indigenous content, Saras is expected to be cheaper by 20 to 25 per cent than any imported aircraft in the same category as indigenous systems will be serviced, including spares within the country. NAL said that the aircraft presently available in the international market are of 1970s technology, such as Beechcraft 19000D, Dornier 228, Embraer EMB

110 which have higher fuel consumption, lower speeds, unpressurised cabin and higher operating costs.  
**Regional Transport Aircraft**

CSIR-NAL has carried out studies regarding RTA and said there was need for about 300 aircraft in India over 20 year demand forecast and over 7,000 RTA class in the global market. The suggested model by the High Power Committee is technology development funding by government and equipping/manufacturing in a joint venture or special purpose vehicle mode. The programme is proposed in three phases – project definition, full scale engineering and design phase and establishing production facility to achieve production rate of 36 aircraft per year by private sector. Presently, CSIR-NAL is contemplating on Phase 1. A concept note for initiating Phase 1 and creating SPV with participation from CSIR-NAL, HAL & DRDO-ADA has been submitted to the Ministry of Civil Aviation. ■

- R.Chandranth