

has been selected as the nodal agency for the development of a Global Positioning System for Indian applications.

BEL has several foreign collaborations: for updated SFM radar with Ericsson Radar Electronics of Sweden; for naval radars with Contraves of Switzerland; for airport surveillance radars and monopulse secondary surveillance radars with Westinghouse of the USA; for high performance antenna for line of sight microwave units with Siemens Comelit of Italy; and for high grade x-ray tubes with Comet of Switzerland.

In February 1993, BEL set up a joint venture company with Torn-EMI Electronics for marketing BEL-manufactured Cymbeline mortar locating radars to countries in Africa, South-east Asia, West Asia and South America.

TANEJA AEROSPACE & AVIATION LTD (TAAL)

TAAL has entered into technical agreement with Partenavia, a subsidiary to well-known Italian aerospace group Alenia, to build, under licence, a 7-seat twin engine piston aircraft and an 11-seat turbo prop aircraft (P-68 and Viator). Partenavia will initially supply two complete aircraft kits, one each of P-68 and VIATOR as prototypes, for assembly. The latter will have a maximum speed of 320 kmph and be capable of landing on a 500- metre unprepared strip. TAAL is building a factory and airstrip on an 120-acre site at Hosur (60 kms southeast of Bangalore). The cost of the project is Rs. 270 million.

The 7-seater will sell for Rs. 19 million, and the 11-seater will cost Rs. 42.5 million. Operating costs are as low as Rs. 4,500 per hour, inclusive of fuel, crew, maintenance and depreciation. TAAL plans to target the corporate market first, then look at the private air taxi market. Production capacity is planned to be 24 aircraft per year (breakeven is 2.5 aircraft per year). TAAL has already received enquiries from TELCO (Jamshedpur), Suman Motels, Kulkarni, Black and Decker, Garware Wallropes, Finolex, and Mardia Chemicals.

TAAL is also discussing a production agreement with NAL for the NAL-LA and may become a partner in NAL's LTA project.

GUJARAT COMMUNICATIONS AND ELECTRONICS LIMITED (GCEL)

This Gujuart State Government undertaking, based in Baroda, has recently won a National Airports Authority (NAA) tender valued at Rs. 150 million to supply 15 Distance Measuring Equipment (DME) units. GCEL is in the process of executing a previous order worth Rs. 170 million for Doppler VHF Omni Range (VOR) equipment. GCEL has established itself as a major Indian manufacturer supplying 23 instrument landing systems, 6 VOR, 27 low and high power DME, 40 direction finders and the Omega wind finding system, with a value of Rs. 500 million to the NAA, Navy and Airforce. In 1992-93, GCEL had a turnover of Rs. 820 million.

KIRLOSKAR GROUP

A large Indian industrial group which is interested and has the potential for diversifying into the aerospace field is the reputed private sector group, Kirloskar. Based in Pune, it has indicated a good deal of interest in the past but nothing has been heard of its definite plans. Kirloskar, in collaboration with a few other large industrial groups based in Pune, has an aviation department to operate and maintain a fleet of corporate aircraft. See Kirloskar under Corporate Aircraft in Appendix .

MAINTENANCE OF CIVIL AIRCRAFT

Keeping in view the rapid growth in comercial aviation in India, HAL has stepped up its involvement in this field. As military aviation the world over may not sustain the aerospace industry to the same extent as in the past, HAL has started looking at undertaking maintenance, repair and overhaul work for civil aviation. It now carries out in situ repair of aircraft for Air-India, Indian Airlines and Vayudoot, as well as undertaking sub-contracts from a few leading aircraft manufacturers in the world.

HAL is currently assisting Air-India in Section 41 modification of its Boeing 747-200 aircraft, which has recently been introduced by Boeing to improve the fatigue life of the aircraft. HAL and Air-India have jointly