

India's first home-made engine in HAL Museum

What a memorable day it was!!!! All the stalwarts of Engine design Bureau (EDB, present ETBRDC), Hindustan Aeronautics Limited, had gathered for the long awaited day.

Ex-chiefs of EDB were all present at the HAL Heritage Centre and Museum, to recollect and cherish the achievements which culminated into an aero engine of 2500 lb thrust.

A ceremonial event to celebrate the achievements of EDB and to showcase the aero engine design and development capability of EDB, which has been its forte since early 60s, was organised recently at the Dr. V.M. Ghatage convention centre, Bangalore. The event marked the handover of the first ever indigenously designed, developed, tested and validated Turbojet engine in the country, the HJE 2500, to HAL Heritage centre and Museum.

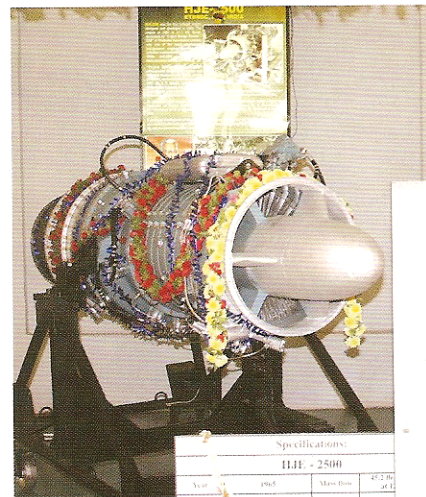
The Team from ETBRDC (Engine and Test Bed Research & Design Centre) led by General Manager R K Bharti was thrilled to welcome their ex-chiefs and other distinguished dignitaries. Mr T V Vareed, the "the father of aero engine design in India", who was the first chief of Engine Design Bureau and the chief guest of the occasion, was beaming with joy to see his contemporaries.

To greet him, R Ramakrishnan and V Govindan, his trusted deputies of the time, were also present. Also present were P V Mustafa, G Hari Krishnan, P R Nagasubramanian and M N Manjunatha, recruited by Vareed and who all grew to become some of the best recognised faces in engine design in India. Vareed unveiled the engine at the Heritage Centre to a thunderous sound of claps that broke the silence in the hall, as flashing cameras captured the magic moments.

Ramakrishnan, the second General Manager of EDB gave a brief account on the conceptualisation and the design of HJE-2500 engine. He expatiated on the availability of the funds and mentioned that an amount of Rs 46 lakh sanctioned for the design and development programme, which was meagre by even the standards of yesteryear.



Mr. T V Vareed, the first chief of Engine Design Bureau addressing the gathering.



ETBRDC (Engine and Test Bed Research & Design Centre) General Manager R K Bharti addressing the gathering.

He further stated that because of the paucity of funds, no component testing was done and that the parts were directly used on the engine. The unveiled engine was thus the same one which was tested and proven over 50 years earlier!

Vareed was felicitated by N C Agrawal, Director (Design & development), HAL and the 'Chief' as his team used to affectionately call him, shared his vision pertaining to the development of Aeronautics in India.

The platform was also chosen to felicitate two project teams who brought laurels to ETBRDC at national level. The coveted Dr V M Ghatage award, instituted by AeSI, was awarded for the development of Cartridge starting system for PTAE-7 engine, catapulting the division into the group of elite design hubs.

The new PTAE-7 engine has in-flight starting capabilities and is best suited as an accelerated solution to the country's search for subsonic missile engines. The

engine has a proven track record and caters to the requirement for strategic military application, a denied regime.

The design and development of a radial turbine for an Air Turbine Starter unit won the Indigenisation of Aeronautical Equipment award, again instituted by AeSI. The air turbine wheel was aerodynamically designed and optimised further for life and weight. The new design produced 2% higher torque and has a service life twice that of the OEM equipment. Design, development, testing, validation and certification of the air turbine wheel were carried out in six months time, adding another feather to ETBRDC's crown.

Top executives of major aeronautical bodies including Dr K Tamil Mani, CE (CEMILAC), Mr T Mohana Rao, Director (GTRE), Mr G Gouda, GD (P) CEMILAC, Sq. Ldr. (Retd.) Mr Baldev Singh, Chief Test Pilot (Fixed Wing), HAL and Mr. H. Siddesha, Project Director (PS & LCA Mk II), also graced the occasion.

*Dear Mr. T V Vareed,
Sir,
Hope that all are fine.*