

Defence scientists develop key tech for Jaguar aircraft

TIMES NEWS NETWORK

Hyderabad: The technology for a critical component of Jaguar aircraft has been developed by Indian defence scientists at the Defence Metallurgical Research Laboratory (DMRL), Hyderabad, in association with Mishra Dhatu Nigam Limited (Midhani), Hindustan Aeronautical Ltd (HAL) and Airworthiness Agencies.

According to the Defence Research and Development Organisation (DRDO), high pressure (HP) compressor disc forgings made of titanium alloy are the critical rotating parts of Adour aero engines used in the Jaguar aircraft. They need to be replaced after the specified period of operations or if unacceptable damages take place during or before expiry of their life.

“The annual requirements of HP compressor disc forgings are high and



MAKE IN INDIA: File photo of a Jaguar aircraft, for which indigenous technology has been developed by the scientists at Defence Metallurgical Research Laboratory

therefore warranted indigenization,” DRDO said. Defence scientists have now developed the technology to manufacture disc forgings of all the five stages.

The technology has been transferred to Midhani for bulk production. Midhani will use the isothermal forging facility at DMRL

(on cost basis) for production.

DMRL has long pursued intensive research and development on Rare Earth Permanent Magnet (REPM), which culminated in establishing process technologies for making three different classes of rare earth magnets. These magnets almost entirely cover the total spectrum of application engineering in strategic sectors, DRDO said.

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