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Engine development: India in danger of being left behind

By Akhil Kadidal

The Indian aircraft engine programme is in danger of being set back by decades if it is not provided by adequate funding or support, warned a former DRDO official.

T Mohan Rao, the former head of the Defense Research and Development Agency's (DRDO) Gas Turbine Research Organization (GTRE) who held a press conference in Bengaluru on Thursday to announce a workshop on the design and development of gas turbine engines, said that official disinterest, coupled with a shortfall in funding, would freeze fledgeling Indian engine developments for four decades if the country did not elicit the help of international partners.

Rao was famously known for being involved in the Kaveri jet engine project to power HAL's Light Combat Aircraft (LCA), before his ouster from the GTRE following his arrest in a high-end massage parlour in 2011. He defended the engine as a significant milestone for Indian engineering.

"We have nearly 40 aircraft manufacturers in the world, but only five countries are successful in engine design - the United States with GE Aviation and Pratt & Whitney, the UK with Rolls-Royce, France with Safran, and Russia with NPO Saturn. India with the GTRE aspires to join this elite club, but the reality is that it takes 25 years for engine technology to mature," he said.

According to a source, the engine, development of which first started in 1989 and despite accruing a cost of Rs 2,000 crore, has attracted little attention by the armed forces, leading to the GTRE to now consider its employment in ships. In spite of a November 2016 agreement by the DRDO and the French engine company, Safran to revive the engine as part of the offsets deal for the 36 Rafale multirole fighters purchased by the Indian Air Force, the source added that the armed forces has shown little interest in the type.

"The railways is now considering using it for long-haul cargo trains," the source added.

When asked why despite India, despite receiving aircraft engines from the "big five" manufacturers, is still unable to replicate engine technology in an indigenous fashion as the Chinese armaments industry has done, A Muthukumaraswamy, the former chief of projects of HAL's Engine Division, said that a great deal of modern engine technology has been absorbed by the DRDO and HAL, but that the composition of components is hard to replicate.

"We are also not like China, we respect the intellectual property of other countries," he added.

<https://www.deccanherald.com/state/top-karnataka-stories/engine-developmentindia-in-danger-of-being-left-behind-749691.html>

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Defence forces carry out table top space warfare exercise

New Delhi: The three services today started their first table-top space warfare exercise to develop a doctrine in this regard.