

India can now quickly build bigger jets, says DRDO Chief

By Ajay Banerjee

Bangaluru: After the final operational clearance (FOC) of Light Combat Aircraft Tejas, India is now looking at a rapid multi-pronged effort to build the next class of fighter jets having more powerful engines and potent weaponry.

Dr G Sathesh Reddy, who is Secretary, Defence Research and Development, and also Chairman of DRDO, said, “The FOC for Tejas is a landmark for the country. From here on, we can produce faster (jets).” The design for the Medium Weight Fighter (MWF) is ready. The prototype will be ready by 2021-end,” the senior defence scientist added.

The Tejas weighs 6.5 tonnes and the MWF is the next class and targeted to weigh around 17 tonnes. The Aeronautical Development Agency and the Indian Air Force (IAF) have designed it as per the requirement of the IAF. It will have an engine of 98 Kilonewton (Kn) thrust.

Also, India is looking to take a technological leap. The DRDO is now in talks with an international partner to make a jet engine of 110 Kn power. So far, no such engine exists anywhere in the world. “We are open to working on this and are in talks with partners for joint development,” said Dr Reddy, adding this engine could be used on future jets.

On being asked about the Kaveri engine, Dr Reddy said it would be used on UAVs. “It is not being shelved.” Notably, Kaveri’s thrust is about 75 Kn and 90 Kn is desired to power a fighter jet.

The Ministry of Defence has already informed Parliament about the technological difficulties of engine-making, including non-availability of raw material/critical components and skilled manpower.

On the much-debated construction timeline for the variants of Tejas, Dr Reddy, who took over as DRDO Chairman in August last year, said the first 20 of the Initial Operational Clearance (IOC) version will be ending very soon. The production of 20 jets under the FOC version would start this year and would be done in two years. We are waiting for the IAF to place an order for 83 jets of the Mark 1A version. On the engine of the Arjun tank, so far imported from MTU Germany, Dr Reddy said, “A new engine is being developed and will be tested.”

<https://www.tribuneindia.com/news/nation/india-can-now-quickly-build-bigger-jets-says-drdo-chief/733937.html>

Design changes may delay ISRO's manned space mission

DRDO is involved in developing a few products for ISRO for the programme

By Akram Mohammed

Bangaluru: Even as the Indian Space Research Organisation (ISRO) is pushing for completion of the human space programme by the end of 2021, design changes required for the project might delay it further, say scientists at Defence Research and Development Organisation (DRDO).

DRDO is involved in developing a few products for ISRO for the programme. “While the initial proposal for India’s programme involved only two astronauts, the recent announcement indicates that three people will be involved in the programme. In order to accommodate one more person, several design adjustments will have to be made to ensure the success of the programme,” a DRDO scientist, under the condition of anonymity, said.

Another scientist added that one of the products of DRDO that will be used by ISRO will be the parachute for decelerating the crew module in which the astronauts will fly. “While the initial design of this was for two people inside the crew, now adjustments have to be made to ensure that the parachute is compatible with the new weight of the crew module. Several adjustments, such as increasing the diameters of the parachutes used or adding a new parachute, have to be made to ensure the crew module lands safely,” said a senior scientist at DRDO.

Other agencies involved in the programme will also have to alter the models they had developed for the human space programme in the past, which might result in slight delays in the implementation of the programme and its first flight.

However, ISRO is confident of completing the programme by 2021. ISRO chairman K Sivan had recently questioned why India couldn’t complete the manned space mission by 2021 in the 21st century, while Russia (or undivided USSR) had executed the same in four years in 1957.

HAL hands over 3 ALHs to Indian Army

Bangaluru:Hindustan Aeronautics Limited (HAL) handed over three Advanced Light Helicopter (ALH)-Mk III to the Indian Army in Bengaluru, on Friday. The three ALHs are part of an order to deliver 22 ALH Mk-III by the end of August this year. HAL entered into a follow-on contract with the Indian Army to supply 40 ALH Mk-III after it had delivered 159 ALHs-105 to the Army and 54 to the Indian Air Force.

Of the 40 aircrafts in the new contract, 22 will be the Mk-III version, while the remaining will be Mk-IV version. Of the 22, 19 have already been produced and will be delivered on a progressive basis, said GVS Bhaskar, CEO of HALs helicopter division. HAL also signed an Memorandum of Understanding (MoU) with the Central Public Works Department for taking up works for stage 2 of the Green Field Helicopter Factory in Tumakuru.

<http://www.newindianexpress.com/cities/bengaluru/2019/feb/23/design-changes-may-delay-isros-manned-space-mission-1942466.html>