

INDIA BUILDING NEW FIGHTER JET

Relevant for: Science & Technology | Topic: Defence related developments

A file photo of LCA Tejas practising for an air show. The new jet and the LCA Mk-2 variant will share the GE-414 engine.

The Advanced Medium Combat Aircraft (AMCA), India's next indigenous fighter, is expected to make its first flight by 2032. Development work on the jet is under way.

"The AMCA will feature geometric stealth and will initially fly with two GE-414 engines. Once we develop our own engine, it can be replaced with that. We expect the first flight in 2032," a defence source said.

"There are two major ways of making a military platform stealthier. One is geometric stealth and other is material stealth. In geometric stealth, the shape of the aircraft is designed at such angles so as to deflect away maximum radar waves thereby minimising its radar cross section. In material stealth, radar-absorbing materials are used in making the aircraft which will absorb the radio waves thus reducing the radar footprint. The AMCA will initially be based on geometric stealth, we can look at material stealth at a later stage," the source said.

The Indian Air Force has given land to the Defence Research and Development Organisation to set up facilities for the project.

The plan is to build on the capabilities and expertise developed during the development of the light combat aircraft (LCA) and produce a medium fifth generation fighter aircraft.

"Apart from the technologies developed from the LCA project, the new fighter programme is important as technologies coming in through that will flow into the AMCA project," another official source said.

The aircraft will be powered by the same GE-414 engine on the LCA Mk-2 variant which is in the design phase.

This is India's only fifth generation aircraft programme following the decision not to go ahead with the fifth generation project with Russia.

Sign up to receive our newsletter in your inbox every day!

Please enter a valid email address.

Our existing notification subscribers need to choose this option to keep getting the alerts.

END

Downloaded from crackIAS.com

© **Zuccess App** by crackIAS.com