

Kaveri Engine

December 27, 2024 • vajiramandravi.com



VAJIRAM & RAVI
Institute for IAS Examination

KAVERI ENGINE HAS BEEN CLEARED FOR INFLIGHT TESTING



About Kaveri Engine:

- The Kaveri engine project began in the late 1980s with the goal of powering the Light Combat Aircraft (LCA) Tejas.
- It is developed **by the Gas Turbine Research Establishment** under the Defence Research and Development Organisation.
- **Features**
 - The current dry version of the Kaveri engine produces **approximately 49-51 kN of thrust**.
 - This thrust level is suitable for UAV applications like the Ghatak, India's stealth UCAV program. The DRDO plans to integrate an afterburner to increase the thrust to 73-75 kN for more demanding scenarios.
 - The Kaveri engine has undergone extensive ground testing, modifications, and enhancements over the years.
 - It has been **tested in high-altitude simulations in Russia** and ground trials in India. These tests demonstrated promising results in reliability, thrust output, and operational stability, meeting the required performance metrics for inflight testing.

- **Significance:** This signifies a major step for India's self-reliance in aero-engine technology, particularly for unmanned aerial vehicles (UAVs) like the Ghatak stealth UCAV program.
-

Q1: What is the Defence Research and Development Organisation (DRDO)?

It is the R&D wing of Ministry of Defence, Govt of India, with a vision to empower India with cutting-edge defence technologies and a mission to achieve self-reliance in critical defence technologies and systems, while equipping our armed forces with state-of-the-art weapon systems and equipment in accordance with requirements laid down by the three Services.

News: Kaveri engine approved for inflight testing: A breakthrough in Indian aerospace

Source: <https://vajiramandravi.com/current-affairs/kaveri-engine/>

© Vajiram & Ravi. For personal use only.