

India's \$7 Billion AMCA Engine Deal with SAFRAN Ignites Fierce Debate on Technology Transfer



A recently announced \$7 billion agreement between India and French aerospace giant SAFRAN for the co-development of a 120-kilonewton (kN) thrust engine for the Advanced Medium Combat Aircraft (AMCA) program has sparked a vigorous debate within India's defense community. While proponents highlight the strategic partnership and SAFRAN's commitment to full technology transfer and Intellectual Property Rights (IPR), critics recall past disappointments regarding the timely and comprehensive sharing of critical technologies.

This monumental deal, valued at approximately ₹61,000 crore, is central to India's ambitious project to develop a fifth-generation stealth fighter, a cornerstone of its "Atmanirbhar Bharat" (self-reliant India) defense initiative. The proposed engine is not only intended for the AMCA but is also expected to power other indigenous platforms like the Light Utility Helicopter (LUH) and Light Combat Helicopter (LCH), indicating a projected demand for hundreds of units.

Supporters of the SAFRAN deal point to the French firm's established presence in India and its successful collaboration with Hindustan Aeronautics Limited (HAL) on the Shakti/Ardiden-1H1 engine, which powers the Advanced Light Helicopter (ALH-Dhruv) and other rotary-wing aircraft. This partnership has seen over 350 units produced in Bengaluru, demonstrating SAFRAN's reliability as a partner in India's helicopter programs. Furthermore, the explicit offer of 100% Technology Transfer (ToT) and IPR ownership for the AMCA engine is seen as a significant win, potentially addressing historical grievances.

However, a segment of the defense community remains skeptical, citing SAFRAN's past record. Critics recall significant delays, reportedly nearly two decades, in the full transfer of technology

for the Shakti engine to HAL. This delay, they argue, forced India to rely on imported components, escalating costs, and logistical dependencies. Such historical precedents raise concerns about whether the current promises of full and timely ToT for the AMCA engine will materialize as expected. This skepticism is deeply rooted in India's broader goal of achieving self-reliance, a goal often complicated by the complexities of foreign technology acquisition and transfer.

The AMCA program is a flagship project for India's aerospace aspirations. Any significant delays or limitations in technology transfer could hinder the Gas Turbine Research Establishment (GTRE) and HAL's ability to develop a truly indigenous engine ecosystem. While leveraging foreign expertise is a pragmatic approach for India to fast-track its advanced capabilities, the success of this multi-billion-dollar venture will ultimately hinge on SAFRAN's commitment to delivering on its promises, thereby enabling India to achieve its long-held ambition of mastering advanced jet engine technology.