

# Ahoy! Looking at the LCA Navy Mk.II



Even while the LCA Navy Mk.I prototype, flown by magnificent test pilots of the NFTC, is making headlines, the inimitable designers at ADA are working on the LCA Navy Mk.II, also referred to as the twin-engine deck based fighter (TEDBF).

Some twelve years from now, a twin engine variant of the Tejas LCA fighter could well start supplementing Russian-origin MiG-29K jets deployed on board the Indian Navy's aircraft carriers INS *Vikramaditya* and *Vikrant*, the latter yet to be commissioned.

Detailed concept drawings of the fighter, dubbed the *Twin Engine*

*Deck Based Fighter* (TEDBF), accessed by NDTV, are being studied by the Aeronautical Design Agency (ADA) and Hindustan Aeronautics Limited (HAL) which would eventually build the fighters if their development is funded by the government. In parallel, the design of an Air Force variant of the jet, the *Omni Role Combat Aircraft* (ORCA), with significant design differences, is also being studied. This variant would weigh a ton less than the Naval variant since it would not need heavy reinforced landing gear required for punishing operations from the deck of an aircraft carrier.

Sources involved with the project have indicated that the total design and development costs for developing the LCA Mk.II would be less than Rs.13,000 crores with each fighter for the Navy being in the range of Rs. 538 crores. The Indian Air Force variant of the fighter would cost between Rs 35 crore and Rs.71 crores less than the Navy variant. The development time-scale for the project has been forecast at six years from the time initial funding is provided.

Project designers say they could “very comfortably” develop the new twin engine LCA Navy Mk.II based on the experience they have gained in testing the Naval prototype of the Mk.I fighter, the prototype of which landed and took off from the deck of INS *Vikramaditya*, on 11 and 12 January 2019. The LCA Navy Mk.I is powered by a single US-origin General Electric F404-GE-IN20 turbofan engine which is however not powerful enough to justify serial manufacture of the Naval LCA in its present avatar other than in very limited numbers for further developmental testing. The significantly larger twin engine LCA Navy Mk.II now being proposed would

