AMCA: An Indian Fifth Generation Story; an update



Medium Combat Aircraft from 2009

The Advanced Medium Combat Aircraft, or AMCA, is an indigenous attempt to develop a fifth generation fighter aircraft, the most ambitious indigenous project to reshape the Indian Air Force (IAF). It was in 2008 when, for the first time, a plan to develop a twin engine "Medium Combat Aircraft" was publicly announced. That was a different era. Mirage 2000 and Jaguar were to be phased out by 2015. Two squadrons of Tejas Mk.1 were to be followed by only four squadrons of Tejas Mk.2. India was gearing up for the MMRCA (Medium Multi–role Combat Aircraft) to equip six squadrons. And talks with Russia just started regarding the FGFA.

The IAF approached ADA (Aeronautical Development Agency) for the development of a 20 ton platform with stealth features. Initially, an amount of Rs 90 crore was released for the preparation of the feasibility studies. The entire project cost at that time was estimated at \$2 billion with the commencement of the first flight by 2017! The programme was to see two technology demonstrators followed by seven prototypes. It was expected to be powered by a new variant of the indigenous "Kaveri" engine developed by the GTRE (Gas Turbine Research Establishment). Even there was a plan of potential cooperation with Snecma. The project soon would be renamed as the "Next Generation Fighter Aircraft" and ultimately AMCA.

A five member team was set up in 2009, led by Ashish Kumar Ghosh. They were provided the operational requirements of the IAF by VCAS N.A.K. Browne. The first drift of a feasible configuration was completed by 2013. The first known model was named 3B–01, which