



## Prof. Prodyut Das mulls over the Falcon, Gripen, Tejas “Opportunities in Crisis”

Ceremonial IOCs apart, the date of the effective IOC (sic) of the LCA Tejas continues to be uncertain. The current bets are on for June 2017 but only the congenitally gullible will believe this. Worn out by overuse, these occasions usually mark not progress but the retirement of someone who had joined the project as a young man. The latest date for the LCA Mk.1A given by the DRDO Chief is of significance. The Mark 1A's first flight is given as 2018 with completion of testing by 2021 and production starting from 2022. These dates, normal for a new project, indicates comprehensive redesign is required to make a Mk.1 into a Mk.1A.

New readers are referred to *Vayu II/2015*.

Going entirely by common sense, the Tejas Mk.1 aircraft seems unfit for induction. The truth is that this project has done more to reduce the frontline strength of the IAF than the two attempts by the Pakistan Air Force. Precisely for this reason if the LCA Mk.1 was even half decent, the IAF would be glad to have the forty Mk.1s if only to work out its SOPs whilst waiting for the Mk.1A. This was what the RAF

did with the less than satisfactory Hunter Mk.1. This has not happened. The *official* rumour, as Sir Humphrey Appleby of *Yes Minister* would say, is that the production is constrained by supply of composite parts produced by NAL. It will be noted that three limited *series* (italics mine) production aircraft, LSPs 3, 4 and 5 were turned out within a period of six months in 2010. So if the IOC 1 was not merely ceremonial we should have had at least 36 aircraft by now, admittedly hand built and admittedly below par, but it would have given us something better than the Hawk as a close support aircraft in an emergency. The fact that five years after an IOC, the production rate is one aircraft per year and dates continue to remain uncertain indicates that :

- ❖ The IOCs etc are *Nautankis*, a form of rural folk drama usually noted for unpredictable outcomes and non-following of scripts.
- ❖ The aircraft has severe technical flaws and is unfit for service. No one can clear it for mass production.

- ❖ Aircraft debugging is not some form of black magic. Is the problem cultural? I mention this because I have noticed this in the CAD/CAE industry. When things do not come out right, the people know what needs to be done but lack the faith and the energy to put it right on the actual product.

- ❖ Or worst, were the delays condoned so that things slid to the imports route ?

Below is my unkind but perhaps not unreasonable assessment of the situation.

### The Prognosis

The story is told of a RAF twin engine light bomber of WWII whose engine speed governor required “a look at” every fifteen hours. Unfortunately the cowling had for aerodynamic reasons not been provided with a suitable access panel and it was in one piece so the entire cowling had to be taken off. To take it off, the propeller had to be taken off first. In the LCA where the customer was kept at arm's length to “fast track the project” (official ‘pomp’ in the ‘90s, if I remember right) serviceability related issues would be quite likely.