## The Giant Leap: Ajeet to Tejas

In October 1991, a decade before maiden flight of the first LCA prototype, Air Marshal Chandrakant V. Gole, former DCAS, responded to a request by then Defence Minister Sharad Pawar to brief him on the background, status, problem areas and options concerning the Light Combat Aircraft (LCA) project. 30 years later, this document is shared along with pertinent images to explain the situation as pertained to the time.



n 1975-76, the Light Combat Aircraft (LCA) was perceived as a replacement Ifor the Gnat light fighter which was overdue for phasing-out, having served well for 15 years. An improved version of the Gnat, the Ajeet (in photo above) had not come upto the expectations and the fleet of Ajeets was due for progressive phasing out by the mid-eighties, proposed to be replaced by the LCA, six squadrons in all. A position paper prepared by Air HQ was discussed with HAL & R&D and a draft Air Staff Target (AST) was prepared by 1978-79. Over the next three years, however, the AST was uprated and what was envisaged as a light weight, low cost tactical aircraft requirement grew into a more sophisticated, high performance state-of-the-art aircraft.

This was partly owing to the additional requirement for a MiG-21 replacement and partly because of the trend or attraction of high technology. Whether the eventual LCA specifications were a result of purely operational considerations demanding such

high technology or of the attraction of high technology spurring the hunger for "the latest and the best" (regardless of pragmatic operational necessities) is a moot point. In 1982-83, a technical team of experts with Dr SR Valluri as the leader and the DCAS as the co-leader, visited well-known aircraft designers and manufacturers in Italy, Germany, France, UK and Sweden to explore possibilities of transfer of technology and joint collaborations. Italy was a total blank. The Germans had no requirements of their own, although MBB and Dornier showed willingness to take part in project, respectively based on their TKF-90 and ND-102 project definition studies.

The Air Forces of France, UK and Sweden had requirements for a new fighter in slightly more advanced class than the LCA. The French Rafale, British Experimental Aircraft Project (EAP), later to be known as the European Fighter Aircraft (EFA) and still later christened the Typhoon, as also the Swedish JAS 39 Gripen, emerged out of these requirements. However, a lighter, single-engined version of the British EAP/EFA, which had been studied by BAe (the P.106) seemed the closest to LCA requirements. A common feature of all these studies was the inevitable



Iconic photo of those who were charged with the LCA programme but were soon 'taken off' owing to extraneous reason, (left to right: Raj Mahindra, Dr Satish Dhawan, Dr SR Valluri)