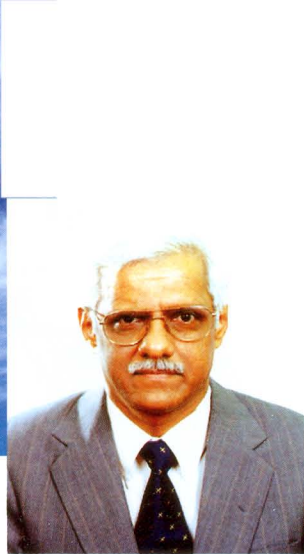




National Aerospace Laboratories (NAL), a constituent of the Council of Scientific and Industrial Research (CSIR), India, is the only civilian aerospace R&D laboratory in India. Started on June one, 1959 in Delhi, it moved to Bangalore in 1960 and later to its own two campuses (Kodihalli and Belur) in Bangalore.

is a high-tech oriented institution focusing on advanced topics in aerospace and related disciplines and has a mandate to develop aerospace technologies with a strong science content, design and build small and medium-size civil aircraft and support all national aerospace programmes.

Originally started as National Aeronautical Laboratory in 1959, it was renamed National Aerospace Laboratories in April 1993 to



Dr A R Upadhyaya
Director, NAL

reflect its growing involvement in the Indian space programme, its multidisciplinary activities and global positioning.

NAL's committed efforts over the last five decades have resulted in achieving expertise and core competencies in most, if not all, of the disciplines of aeronautics. NAL has always accepted challenges and delivered results and is the preferred destination of mission mode aerospace programmes when faced with technology problems. It would not be improper to say that LCA Tejas

development would have been difficult without NAL's contributions and that every major (aeronautics related) programme of DRDO and ISRO has some contribution from NAL.

NAL's development work in certain strategic areas has helped the country in getting over the technology denial regimes and put it in a better bargaining position when import of technology was considered appropriate. Additionally it has helped protecting confidentiality of strategic data and enhancing national prestige.

Key technology successes of NAL include carbon fibre composite airframe components and flight control law design for the Tejas programme, nano-coatings, sunshield mirrors for satellites, high speed combustor design and related test facilities for hypersonic vehicles, failure analysis and accident investigation for airlines, defence and other organisations, runway visibility assessor for airports.

NAL has made significant contributions in the area of manufacture of smart materials and their applications to many aerospace

