

CSIR-National Aerospace Laboratories

Bengaluru - 560 017





S.R. Valluri

Remembering The Man Who Built CSIR-NAL

An appreciation of Dr. SR Valluri, one of the titans of Indian Aeronautics



Dr. Sitaram Rao Valluri
Former Director, CSIR-NAL

The name of Dr. Sitaram Rao Valluri, whose centenary we are celebrating on 25 June 2024 is forever linked with the National Aerospace Laboratories (NAL). Dr. Valluri was the second Director of CSIR-NAL and had many stellar accomplishments in his distinguished career as NAL's Director for 19 long years (1965-1984).

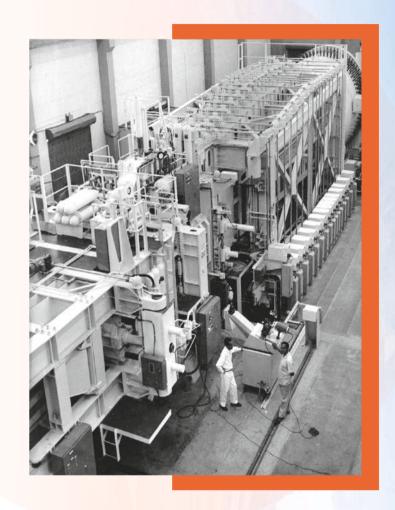
Valluri was born in Eluru in Andhra Pradesh on 25 June 1924. After completing his Engineering from Banaras Hindu University, he spent a few valuable years (1946-1949) at the Department of Aeronautical Engineering at the Indian Institute of Science (IISc). He obtained the Pauley Scholarship and joined the Guggenheim Aeronautical Laboratories at the California Institute of Technology (Caltech) in 1949. At Caltech, he had the opportunity to meet the aeronautics master and high priest Theodore von Karman and bond with the "extraordinary human being" Satish Dhawan. His Ph.D. adviser was Y C Fung; later Ernest E. Sechler went on to become a mentor of sorts and opened doors that allowed Valluri to work as a design consultant for Douglas Aircraft Company. Valluri established a considerable reputation as aircraft fatigue and fracture expert and won the coveted Wright Brothers Medal in 1963. He moved to his motherland and accepted a Senior Professor post at IIT Madras, and, after the sudden demise of NAL's Director P Nilakantan on 18 April 1964, he was appointed NAL's second Director when he was not yet 41.

Valluri officially took charge on 23 November 1965 and his first task as NAL Director was to complete Nilakantan's big unfinished task of the 4 ft trisonic wind tunnel. It was a very special moment for Indian aerospace when the roar of the tunnel's first blowdown reverberated on 29 May 1967.

Valluri then created the Materials Science and Structures R&D divisions at NAL. But arguably Valluri's biggest game-changer in his early years as Director was to introduce project accounting at NAL. He became an outstanding R&D leader and created processes and mindsets that significantly improved NAL's performance. Another remarkable facet of Valluri's leadership was his relentless resolve to attract the best talent to NAL.

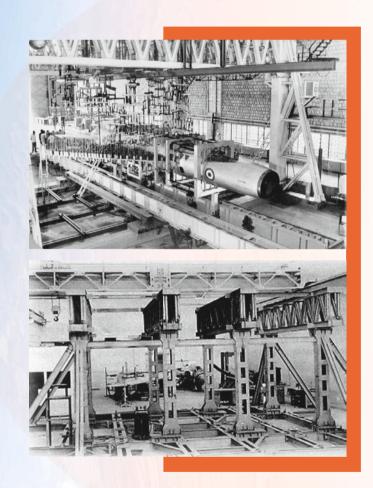
CSIR considered Valluri's evaluation model to be so effective that he was asked to draft the CSIR-wide New Recruitment and Assessment Scheme (NRAS), popularly known as Valluri Committee Recommendations, which came into effect from 1st February 1981.

His accomplishments were lauded by the then CSIR's Director-General, S Husain Zaheer, and the legendary JRD Tata, who was the Chairman of NAL's Executive Committee.



4 ft Trisonic Wind Tunnel





Full-scale Fatigue Testing Facility

Valluri designed and built NAL's new buildings with pleasing and comfortable architecture, functionality and aesthetics, formidable supporting infrastructure and flora. It seems so appropriate that NAL's biggest auditorium, conceived by Valluri, is today named after him. As NAL's Director, Valluri had an electric presence. He strongly connected with NAL's natural partners: IAF, HAL, IISc and DRDO and created the full-scale fatigue testing facility in the early 1970s. Even when Indian aeronautics was in a lull period, NAL continued to prosper. Valluri initiated the first moves to develop composite technologies, built the remarkable capability for failure analysis and accident investigations, created even more testing and modelling infrastructure, and mobilized funds so that NAL could develop its first small plane. Given Valluri's vantage position in Indian aeronautics, the Government invited him to head a high-level committee to make the final recommendation on the light combat aircraft (LCA) concept. A new entity, Aeronautical Development Agency (ADA), was created to fund, manage and monitor the LCA programme. Valluri became its Director-General on 2 July 1984, after receiving a fond and emotional farewell from NAL.

As Valluri grew in stature and success, awards and distinctions started coming his way. He was elected Fellow of the Indian Academy of Sciences and received the Padma Shri in 1974 and the Vasvik Award in 1978. All his life Valluri championed ethical professional practices and personal honesty. He left for his heavenly abode on 23rd January 2019. He truly made NAL the Kohinoor diamond in CSIR's crown. Let us all salute Dr. S R Valluri, a towering Indian on the occasion of his centenary celebrations.