

# **ANNUAL REPORT**

**2013 - 2014**



**HINDUSTAN AERONAUTICS LIMITED**



# TEJAS - LIGHT COMBAT AIRCRAFT

## PROGRAM MANAGEMENT

- Aeronautical Development Agency (ADA)

## DEVELOPMENT STATUS

- The first Technology Demonstrator (TD-1) made its maiden flight on 4th Jan 2001.
- Two Technology Demonstrators (TD), four Prototype Vehicles (PV) and seven Limited Series Production Aircraft (LSP) produced
- More than 2900 Sorties completed
- Initial Operation Clearance obtained & "Release to Service Document" handed over to Chief of Air Staff on 30th Dec 2013

## NAVAL VERSION

- Naval prototype was rolled out in the presence of Hon'ble Raksha Mantri and Chief of the Naval Staff on 6 July 2010
- First flight carried out on 27 April 2012

## DEVELOPMENT OF MK-II VERSION

- Programme launched in 2009







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## **VISION**

To become a significant global player in the aerospace industry

## **MISSION**

To achieve self reliance in design, development, manufacture, upgrade and maintenance of aerospace equipment, diversifying into related areas and managing the business in a climate of growing professional competence to achieve world-class performance standards for global competitiveness and growth in exports



## BOARD OF DIRECTORS



**Dr. R. K. Tyagi**  
Chairman

Dr. R. K. Tyagi is an Engineering graduate in Electronics and Telecommunication from IIT Roorkee (1975 batch) and holds a Masters in Business Administration. Dr. Tyagi took over as the Chairman of HAL with effect from 2nd March, 2012. Before joining HAL, he was Chairman cum Managing Director at Pawan Hans Helicopters Limited (PHHL) from May 2007 to February 2012.

Dr. Tyagi started his career with ONGC as a Graduate Trainee in 1976 and through assignments rose to the position of General Manager in the year 2003. He served at ONGC upto May 2007 (31 years). Dr. Tyagi has played an effective role in several development programmes related to Defence, Civil Aviation and Oil & Natural Gas Sectors.



**Shri Ashok Kumar Gupta**  
Additional Secretary (DP)

Shri A.K. Gupta, Additional Secretary (DP), Ministry of Defence was appointed as Part-Time Official Director of HAL with effect from 2nd July 2014.

An engineering graduate from Delhi University, Shri Gupta joined the Indian Administrative Services in September 1981. He holds a Master Degree in Defence and Strategic Studies from the University of Madras and an M.A. in Public Administration from Maxwell School of Syracuse University, USA.

Shri A.K. Gupta has more than 30 years of experience in Civil Services. He has held various important assignments, including as Assistant Collector, Mettur; Chairman & Managing Director, Tamil Nadu Steels; Director, Department of Small Scale Industries, Central Ministry; Director, Department of Heavy Industry; Joint Secretary, Industries; Additional Secretary, Prohibition & Excise; Joint Secretary, Department of Health, Central Ministry of Health & Family Welfare; Special Secretary, Finance; Chairman & Managing Director, Tamil Nadu Cements; Joint Secretary & Senior Directing Staff, National Defence College; Joint Secretary, Department of Defence, Central Ministry of Defence.



**Air Marshal S.B.P. Sinha,**  
**AVSM, VM**  
Deputy Chief of Air Staff

Air Marshal S.B.P. Sinha, DCAS, IAF was appointed as Part-Time Official Director of HAL with effect from 2nd July 2014. He is an alumnus of the National Defence Academy and a Graduate of the Defence Services Staff College (DSSC), Wellington. He was commissioned in the fighter stream on 15th June 1980. He has over 3700 hours of flying experience.

Air Marshal Sinha has held various important Command, Instructional and Staff appointments, including as Instructor at the Flying Instructors' School, Flight Commander of a Mirage 2000 squadron, Chief Flying Instructor of Basic Flying Training School, Commandant of Electronic Warfare Range, Air Officer Commanding of a premier Su-30 MKI base and Team Leader of the WASCS Project Team in Israel.

He has also held important Staff Appointments at the Air Headquarters, including as Deputy Director of Operations (Electronic Warfare), Principal Director of Plans, CISR and Acquisitions and Assistant Chief of Air Staff (Plans) at Air HQs.

He is the recipient of the Ati Vishista Seva Medal and the Vayu Sena Medal.





Air Marshal (Retd.) P.R. Sharma, PVSM, AVSM, Ex-Air Officer-in-Charge Personnel was commissioned in the Flying branch of the Indian Air Force in 1975 and has served in the IAF for 39 years, before his superannuation in February 2014. He was appointed as Part-Time Non-Official Director on the Board of HAL with effect from 5th May, 2014.

While posted at ASTE – Bangalore, Air HQs, Su-30 Project Team at Moscow and at Headquarters Strategic Force Command, Air Marshal Sharma interacted closely with organisations like DRDO, HAL & BEL. While at ASTE, Bangalore between 1984 to 1987, he made noteworthy contributions in Armament flight trials of indigenous RP bombs, 3 kg and 11.5 kg Practice Bombs, Modified Vikram (MiG-21 BIS) aircraft by HAL, Nasik Division, Indigenous integration of Russian R-60 missiles on various versions of MiG 21 aircraft, Flight Evaluation of indigenous avionics on MiG-21, MiG-23, MiG-29, Hawk, Alpha Jet advance jet trainer aircraft and Dornier aircraft.

Air Marshal (Retd.) P.R. Sharma was awarded Ati Vishishta Seva Medal for his distinguished service in 2010.



**Air Marshal (Retd.)  
Priya Ranjan Sharma**  
PVSM, AVSM  
Director

Shri P.S. Krishnan, a distinguished Scientist and former Director of Aeronautical Development Establishment (ADE), was appointed as Part-Time Non-Official Director on the Board of the Company with effect from 5th May, 2014. He graduated as a mechanical engineer from IIT, Madras and holds a Master Degree also from IIT, Madras.

Shri Krishnan has contributed substantially during his illustrious career spanning 37 years with Aeronautical Development Establishment (ADE), a premier Systems Establishment of DRDO, in various positions, particularly for development of Flight Control System for unmanned Air Vehicles and Light Combat Aircraft (LCA).

He also served DRDL Hyderabad between 1972-76 and worked on the development of the Gimbaled Inertial Navigation System, which was tested successfully in Avro Aircraft.

Shri Krishnan has published several technical papers and had been conferred with several awards viz., Performance Excellence Award 2010 for development of Nishant UAV and Award for path-breaking research for development of Fly By Wire FCS for Tejas in 2002, in recognition of his contributions.



**Shri P.S. Krishnan**  
Director

Prof. Pradipta Banerji, a Civil Engineer from IIT, Delhi, MS & Ph. D in Structural Engineering from University of California, Berkeley, USA, joined the HAL Board as an Part-Time Non Official Director with effect from 5th May, 2014.

Prof. Banerji started his career at the University of California as a teacher/Research Assistant in Civil Engineering from 1981 to 1987, and thereafter joined IIT, Bombay as Assistant Professor and spent more than 15 years as Faculty Member. Presently, he is Director at the Indian Institute of Technology, Roorkee.

Prof. Banerji was a visiting Research Professor at the University of Manitoba, Winnipeg, Canada and the Institute of Statics and Dynamics for Aerospace Structures at the University of Stuttgart, Germany. He was Advisor, Global Alliances, Intellectual Venture India Ltd, before taking over as Director, Indian Institute of Technology, Roorkee in October 2011. His areas of specialisation are Earthquake Engineering and Structural Health Monitoring.



**Prof. Pradipta Banerji**  
Director



## BOARD OF DIRECTORS



**Shri Gopabandhu Pattanaik**  
Director

Shri Gopabandhu Pattanaik a 1978 batch IAS officer of the UP cadre, retired as Principal Secretary to the Government of Uttar Pradesh on 31st March 2013. He is a science graduate with specialisation in Physics and also holds a Master Degree in Science (specialisation in Economics) from the University of Wales. He was appointed as Part-Time Non Official Director on the Board of HAL with effect from 5th May, 2014.

He has served for over 8 years as Secretary/Principal Secretary to Governor/Chancellor of State Universities. He is well conversant with the University System, and has been a member of several Search Committees for the appointment of Vice Chancellors.

Shri Pattanaik has wide experience in infrastructure and social sector. He has worked as Secretary, Home, Medical Education, Programme Implementation and Principal Secretary Agriculture, Energy during his illustrious career.

Shri Pattanaik was the Chairman of UP Power Corporation Ltd. During his tenure wide-scale reform initiatives were undertaken. He had successfully steered Garhwal Development Corporation, UP Cement Corporation and UP Power Corporation.

He has also served in the Ministry of Welfare and Ministry of Culture, Government of India.



**Dr. Arun Kumar Jain**  
Director

Dr. Arun Kumar Jain an eminent Professor of IIM Lucknow, was appointed as Part-Time Non Official Director on the Board of the Company with effect from 5th May, 2014.

Dr. Jain is an Engineering graduate from the MA National Institute of Technology, Bhopal and holds a Ph.D in Strategic Management and Business Policy from IIM, Ahmedabad. His areas of specialisation include Business & Public Policy, Strategy, International Business, Corporate Governance, Leadership, Technology & Innovation.

Dr. Jain has held several important positions as full time/ Honorary Chair professor in Indian as well as international management institutions. He was also a member of the high powered Primary Market Advisory Committee of SEBI.

Dr. Jain has contributed over 100 case studies and research papers on issues relating to corporate success, failures, globalisation and internationalisation, corporate governance and ethics, national and international economies, financial and banking innovations and delivered key note addresses and lectures in various international platforms.



**Air Vice Marshal (Retd.)  
D.K. Pande, AVSM, VSM**  
Director

AVM D.K. Pande, a graduate in Electrical Engineering and holds an M Tech in Satellite Communication from IIT, Kharagpur, in addition to PG from Defence Service Staff College, Wellington. He was appointed as Part-Time Non Official Director on the Board of the Company with effect from 5th May, 2014.

AVM D.K. Pande retired as Assistant Chief of Air Staff (Maintenance Plans) in October 2013. He had served in various commands of the IAF and possessed more than 36 years of experience in the maintenance of various types of aircraft in general and Russian equipment / platforms in particular.

Air Vice Marshal (Retd.) D.K. Pande was awarded the Vishishta Seva Medal in 2004 and Ati Vishisht Seva Medal in 2013. Besides, he has received commendations from Chief of the Air Staff in 1992 and 1995.





Shri V. M. Chamola holds a Masters Degree in Economics from Garhwal University, LLB from APS University and MBA(HRM) from IGNOU.

Shri Chamola served at NTPC and NJPC in various capacities before joining HAL in 1996 as Deputy General Manager (Personnel & Administration), Engine Division, Bangalore Complex. He was promoted as Additional General Manager (Personnel & Administration) and later joined the Corporate Office. He has also served as Chief General Manager, BEML.

Shri Chamola possesses rich experience in HRD and has contributed towards streamlining the HR systems with a view to provide a healthy environment.

He took over as Director (Human Resources) of the Company on 27th July, 2011.

Shri Chamola was conferred the "Chanakya Award" for Business Excellence in HR on 12th February, 2012 by the Public Relations Council of India (PRCI) during its Annual Conclave at Mumbai in February 2012. He also holds the additional charge of Managing Director (Accessories Complex), HAL for the Hyderabad and Korwa Divisions, since 1st August, 2013.



**Shri V. M. Chamola**

Director  
(Human Resources)

Shri K. Naresh Babu, an Electrical & Electronics Engineering graduate from the Indian Institute of Science, Bangalore joined HAL in 1976 as Management Trainee.

During his illustrious career, he has served in various capacities and has contributed to Airframe and Accessories repair / overhaul activities pertaining to Canberra, Marut, Devon, Packet, Ajeet, HT-2 aircraft.

He was General Manager of the Overhaul Division with effect from 1st July, 2008. He spearheaded Repair & Overhaul activities of aircraft like Jaguar, Kiran, Mirage among others. In December 2008, he was made General Manager (Planning) at the Corporate Office with the responsibility of monitoring the production and development activities of the Company.

Shri Naresh Babu was appointed as the Managing Director (Bangalore Complex) on 5th September, 2011. He also holds the additional charge of Director (Corporate Planning & Marketing) since 17th October, 2011.



**Shri K. Naresh Babu**

Managing Director  
(Bangalore Complex)

Dr. A.K. Mishra, a Law graduate and a Fellow Member of the Institute of Chartered Accountants of India, holds a Ph.D., in Finance. He is an alumnus of National Law School of India University, Bangalore.

During his long career spanning over 30 years, Dr. Mishra has served in Governments of Bihar, UP and PSUs viz., Indian Telephone Industries Ltd. (ITI) before joining HAL in November 1994 as Deputy General Manager (Finance) at Transport Aircraft Division, Kanpur. He later took over as General Manager (Finance) at HAL Accessories Complex, Lucknow.

In June 2007, Dr. Mishra was made Executive Director (Finance) in HAL Accessories Complex, Lucknow and later joined Corporate Office in 2008.

He has held important positions in Divisions and at Corporate Office and has provided proactive leadership in developing and utilising corporate resources to drive and deliver financial and business growth.

Dr. A. K. Mishra was appointed as Director (Finance) with effect from 28th October, 2011.



**Dr. A. K. Mishra**

Director (Finance)



## BOARD OF DIRECTORS



**Shri T. Suvarna Raju**

Director

(Design & Development)

Shri T. Suvarna Raju, is an Engineering Graduate with an MBA (Marketing), M. Phil in Defence Strategies Studies and Post Graduate Diploma in Intellectual Property Rights Laws.

Shri Raju joined HAL on 26th June, 1980 as Management Trainee XV Batch and has worked in different capacities in HAL Aircraft Division and Overhaul Division. He has contributed to the success of many important projects such as the establishment of repair / overhaul facilities of Jaguar, Mirage, LCA, HAWK, LRUs. Under his leadership the Company has successfully completed Mirage First Major inspection, License production of DARIN-II Jaguar Strike & Trainer aircraft and Jaguar aircraft upgrade. He established facilities for HAWK Mk-132 License manufacture.

Shri Raju is a recipient of Dr. Biren Roy Trust award for establishing new Technologies at HAL. He rose to the position of General Manager (Aircraft Division) and was appointed as Officiating Director (Design & Development) with effect from 4th January, 2012 and as regular Director (Design & Development) with effect from 1st February, 2012. He also holds the additional charge of Managing Director (Helicopter Complex), since 1st June, 2013.



**Shri S. Subrahmanyam**

Managing Director

(MiG Complex)

Shri S. Subrahmanyam, an Engineering Graduate in Mechanical Engineering and Post Graduate in Aircraft Production from IIT, Madras, joined HAL as Management Trainee, XIV Batch in August 1980.

He rose to the position of the Chief of Projects, Helicopter Division and was the Chief of Projects at Corporate Office prior to taking over as MD(M).

With extensive experience spanning 32 years, he has contributed immensely to the success of many important projects such as ROH for Cheetah/Chetak, manufacturing of Cheetal Helicopters, Project Planning and Productionisation of Advanced Light Helicopter, setting up of the Centre for Excellence for landing gear manufacture & Overhaul, setting up of a manufacturing facility for mega projects of Su-30 MKI Aircraft, development of supply chain and outsourcing of major structural work packages of flight control system.

Shri S. Subrahmanyam was appointed as Managing Director (MiG Complex) with effect from 1st December, 2012. He also holds the additional charge of Managing Director (Accessories Complex), HAL for Lucknow Division and TAD Kanpur, since 1st August, 2013.

