



भारत 2023 INDIA

वसुधैव कुटुम्बकम्

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Hindustan Aeronautics Limited



60TH | ANNUAL REPORT 2022-23





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Vision

To be a global leader in the Aerospace
& Defence Industry



Mission

We are committed to deliver superior technology solutions to the customers by leveraging our infrastructure and Design, Manufacture & Service skills, for achieving business excellence



Chairman's Statement



Dear Shareholders,

It gives me immense pleasure to welcome you all for the 60th Annual General Meeting of Hindustan Aeronautics Limited.

I take this opportunity to share the performance highlights during the year and future outlook for the Company.

Financial and Performance Highlights of the Year

In the financial year 2022-23, your Company recorded the highest ever turnover of ₹ 26,36,056 Lakh, experiencing strong growth of 8% from the previous year's ₹ 24,36,166 Lakh. The Profit Before Tax (PBT) saw a growth of 24% from ₹ 5,23,115 Lakh to ₹ 6,49,294 Lakh while the Profit After Tax (PAT) increased by 14% from ₹ 5,08,650 Lakh to ₹ 5,81,117 Lakh. Our Order Book position stood healthy at ₹ 81,78,400 Lakh as on 31st March, 2023.

The Company has paid 1st & 2nd interim Dividend each of ₹ 20 per share of face value of ₹10 each for the Financial Year 2022-23, totalling to ₹1,33,755 Lakh. Further, the Board of Directors of the Company has recommended a final dividend of ₹ 15 per share of ₹10 each for approval of shareholders, with a cash outflow of ₹ 50,158 Lakh. On approval by the shareholders, the total cash outflow for payment of Dividend for the Financial Year 2022-23 would be ₹ 1,83,913 Lakh.

During the year, the Company has produced 22 numbers of new Aircraft and Helicopters, covering LCA Tejas, Dornier Do-228, ALH Dhruv, Light Combat Helicopter (LCH) and Light Utility Helicopter (LUH) in addition to the production of 51 New Engines and Accessories, at its various Divisions. The Company has also overhauled 216 Aircraft / Helicopters and 536 engines during the year.

Your Company has put in concerted effort on indigenisation of components, accessories and systems required to manufacture as well as repair & overhaul of aircraft, engine and associated accessories. Every year, the Company indigenizes various items/ components and systems of foreign origin fitted on HAL platforms through in-house capabilities or with the help of local vendors to reduce dependence on imports, savings in foreign exchange and manage obsolescence, thus fostering self-reliance through 'Make in India'.

During the year, in line with the Atmanirbhar Bharat Abhiyan of Govt. of India, the Company has placed orders worth ₹ 5,977 Lakh for indigenous development of 26 Line Replaceable Units (LRUs) under Make-I and Project Sanction Orders for additional 36 LRUs under Make II.





Significant Achievements

Your Company has witnessed several significant achievements during the year, some of which are highlighted as under:

- Hon'ble President of India, inaugurated HAL's state-of-the-art Integrated Cryogenic Engine Manufacturing Facility (ICMF) in Bengaluru on 27th September, 2022. The facility not only cater to the entire Rocket Engine Manufacturing under one roof for ISRO but also boost self-reliance in manufacturing of Hi-thrust Rocket engines.
- Hon'ble Prime Minister, Shri Narendra Modi unveiled HTT-40 the indigenous trainer aircraft designed and developed by HAL at the India Pavilion during DEFEXPO-2022 at Gandhinagar, Gujarat on 19th October, 2022.
- Hon'ble Prime Minister dedicated HAL's New Helicopter Factory in Tumakuru to the nation on 6th February, 2023. During the event, Hon'ble Prime Minister unveiled HAL's indigenously designed and developed Light Utility Helicopter (LUH).
- Hon'ble Raksha Mantri inducted Prachand - Light Combat Helicopters (LCH) in IAF on 3rd October, 2022.
- Successfully completed the production of 15 Light Combat Helicopters (LCH) ahead of contract schedule.
- The first flight of the LCA Mk1A prototype (LCA SP-25 modified for MK1A features) was conducted on 20th May, 2022, which is a major milestone towards LCA MK1A program.
- Delivered the first set of hardware for Gaganyaan mission (first unmanned mission) as well as the 150th HAL made Satellite Bus-structure to ISRO on 4th April, 2022.
- Mission Management System (MMS) for DO-228 aircraft was Indigenously Designed and Developed and 4 aircraft were upgraded and delivered to Indian Coast Guard (ICG).
- Solid State Flight Data Recorder (SSFDR) / Cockpit Voice Recorder (CVR) for Cheetah, Chetak and Cheetal helicopter was designed and developed. 'Type Approval' for this system has been accorded by CEMILAC. The 'Flight Clearance' for deployable Flight Data Recorder (FDR) and Interface Computer for DO-228 aircraft was also accorded by RCMA (Korwa).

New Initiatives

During the year, your Company has taken many new initiatives, which includes Design and Development of LUH Civil, Hindustan Lead in Fighter Trainer (HLFT-42), ALH WSI Phase-II program, Level D Full Flight Simulator for Hindustan-228, Full Mission Simulator for LUH, Indigenisation of Integrated Architecture & Display System (IADS) and Automatic Flight Control System

(AFCS) of ALH. HAL also received a Development cum Production Partner (DcPP)/ Production Agency (PA) certificate for ABHYAS - High Speed Expendable Aerial Target (HEAT) System from DRDO. Further, following significant MOUs have been signed by HAL:

- With Safran Helicopter Engines to create a new joint venture intended for design, development, production, sales and support of helicopter engines to meet not only the requirements of future helicopters programmes of Indian Defence including the 13-ton IMRH (Indian Multi-Role Helicopter), but also for the Global market.
- With Air Mauritius Limited for undertaking a feasibility study for enhancing / setting-up MRO facility by Air Mauritius towards maintenance and other associated works on HAL supplied Do-228 aircraft to Mauritius Air Squadron as well as other countries in the region.
- With Rolls Royce in July, 2022 to explore the potential opportunity of HAL to become in Country partner supplier for MT7 Marine Gas Turbine Package for sales within the Indian Market.
- With Heroux Devtek at Farnborough Airshow on 19th July, 2022, for design, development, manufacture, repair and overhaul of Landing gears of C-295 aircraft.
- With Honeywell International Inc. at Farnborough Airshow in July, 2022 for 'High Power Generation Equipment collaboration'.
- With Israel Aerospace Industries (IAI) Limited for leasing, operation and maintenance of fixed wing UAVs to the Indian Defence Forces.

Future Outlook

Indian Defence Sector which was so far contributing as strategic sector is gradually developing as an economic sector which is capable to contribute to the economic growth of the country. Under the Atmanirbhar Bharat initiative, Government is facilitating the development of the Indian industry to reduce the defence import as well as dependence on the foreign OEMs. Various initiatives of the GoI in recent days have given thrust on the indigenization and indigenous procurement of defence equipment. Over next 5 -10 years such reforms will equally help Defence PSUs and private industry to put a firm step towards achieving a self-sustaining Defence industry in the country.

As continuous efforts towards achieving self-reliance "Atmanirbharta" in the Aerospace & Defence industry in India, HAL will remain involved in supporting Startup Companies, SMEs/ MSMEs, Tier – II and III vendors. HAL will also keep handholding the vendors and suppliers in R&D, capability development and extended employment generation.





In near future, Indian Defence market will continue to be prime revenue source for HAL due to projects like LCA Mk1A, LCH, LUH and HTT-40. The company has taken various initiatives to make systems more agile, effective, cost efficient and to be competitive. Enhancement of HAL capability is being planned to cater above projects. New production line are being installed for HTT-40 and LCA Mk1A Production.

In medium term, we are also looking forward to diversify and increase our presence in UAV, Civil MRO & allied operations, Digital Solutions and new space segments as strategic initiatives. Also, we are focusing on strengthening marketing efforts, expanding geographical presence and collaboration with Indian Industry / Global OEMs to boost export sales.

Research and Development (R&D)

Your Company has continued its efforts towards the Design and Development of new platforms/ products / technologies and activities to enhance its capability with a view to bring technological superiority to its products and to cope up with the future technological challenges. These efforts have resulted in major achievements such as successful first flight of ALH with two segmented Main Rotor Blades and Pre-Cone Main Rotor Head developed to address the stringent stowage dimension requirement of Indian Navy, first Inverted Spin tests of HTT-40, first flight of LCA Mk1A and maiden arrested landing & ski-jump take-off by LCA Navy MK1 aircraft from the indigenous aircraft carrier INS Vikrant.

The futuristic projects such as LCA Mk II, Advance Medium Combat Aircraft (AMCA), Indian Multirole Helicopter (IMRH), Twin Engine Deck Based Fighter (TEDBF), Combat Air Teaming System (CATS) etc. will ensure technological lead of HAL in the years to come, due to significant design & development activities. This will provide good visibility for future platform orders.

During the year, the Company has incurred a total R&D expenditure of ₹2,49,433 Lakh, which is 9.46% of the Turnover. The Company has transferred a sum of ₹53,881 Lakh (15% of Operating PAT) to R&D corpus during the year 2022-23.

Corporate Governance

Your Company always strives to conduct the business with integrity, and in ethical & transparent manner and attain the highest standard of Corporate Governance practice. The Company has complied with the Guidelines on Corporate Governance framed by the Department of Public Enterprises (DPE) and SEBI Listing Regulations except for the appointment of the requisite number of Independent Directors. The Company has established Systems and Procedures to ensure that its Board of Directors is well informed about the Policies of

the Company, to enable them to discharge their responsibilities and to enhance the overall value of all stakeholders. We are periodically reviewing the Policies and Procedures of the Company and updating them to ensure transparency in all aspects of the Company's working. Your Company has been continuously rated 'Excellent' grade for its compliances with DPE Guidelines on Corporate Governance.

Corporate Social Responsibility and Sustainability Development

Your Company is committed to its social responsibility. In this endeavour, the Company has undertaken various CSR programmes and projects, towards integrating our social and business goals in a sustainable manner in line with schedule VII of the Companies Act, 2013. An amount of ₹ 10,328 Lakh has been spent under CSR in the Financial Year 2022-23 against the CSR budget/ obligation of ₹9,707 Lakh.

Acknowledgement

Your Company will continue to pursue global standards, and I am confident that the Company will achieve many milestones. We hope to attain all round success with the continued support and guidance of all our stakeholders.

I take this opportunity to extend my sincere gratitude to the Department of Defence Production, Defence Acquisition Council, Defence Finance, Department of Civil Aviation and our valuable customers viz., the Indian Air Force, Indian Army, Indian Navy, Indian Coast Guard, Border Security Force, ISRO and other Global Aviation Companies.

I also thank DGAQA, CEMILAC, Principal Controller of Defence Accounts, Principal Director of Commercial Audit, C&AG, Auditors, Bankers, Legal Advisors, Collaborators, Suppliers, Shareholders and other Agencies and acknowledge their contributions in our achievements.

I am grateful to the members on the Board for their valuable guidance and acknowledge the immense contribution and dedication of the employees of the Company at all levels.

JAI HIND



C.B. Ananthakrishnan

Director (Finance) & CFO

Chairman and Managing Director
(Additional Charge)

Place : Bengaluru
Date : July 19, 2023



Corporate Information

BOARD OF DIRECTORS

Shri C B Ananthakrishnan

Director (Finance) & CFO,
Chairman and Managing Director (Addl Charge)

Shri Jayadeva E P

Director (Operations)

Dr. D K Sunil

Director (Engineering and R&D)

Shri Atasi Baran Pradhan

Director (Human Resources)

Shri T. Natarajan

Additional Secretary (Defence Production)
Ministry of Defence
Govt. Nominee Director

Shri M Z Siddique

Distinguished Scientist (DS)
and Director General
(Aeronautical Systems), DRDO
Govt. Nominee Director

Dr. Divya Gupta

Independent Director

Shri Deepak Abasaheb Shinde

Independent Director

COMPANY SECRETARY

Shri Shailesh Bansal

Company Secretary





Bankers

State Bank of India
Punjab National Bank
Indian Bank
Indian Overseas Bank
Bank of Baroda
Canara Bank
Union Bank of India

Statutory Auditor

M/s. A John Moris & Co.,
Chartered Accountants, Bengaluru

Branch Auditors

M/s. S Srivastava & Co.,
Chartered Accountants, Lucknow

M/s. N G S & Co LLP
Chartered Accountants, Mumbai

M/s. K. Prahlada Rao & Co.,
Chartered Accountants, Hyderabad

M/s. D N Dokania & Associates
Chartered Accountants, Bengaluru

M/s. Rajesh K Jhunjhunwala & Co.,
Chartered Accountants, Cuttack

M/s. Abhijit Dutt & Associates
Chartered Accountants, Kolkata

M/s. P. L. Tandon & Co.,
Chartered Accountants, Kanpur

M/s. Ganesan and Company
Chartered Accountants, Bengaluru

M/s. R Bupathy & Co.,
Chartered Accountants, Bengaluru

M/s. Ishwar & Gopal
Chartered Accountants, Bengaluru

M/s. A. Sachdev & Co.,
Chartered Accountants, Lucknow

M/s. Vijay Panchappa & Co.,
Chartered Accountants, Bengaluru

M/s. S S B & Associates
Chartered Accountants, Bengaluru

M/s. P N R & Co.,
Chartered Accountants, Bengaluru

M/s. Panduranga Shenoy & Co.,
Chartered Accountants, Bengaluru

M/s. G R S M & Associates
Chartered Accountants, Bengaluru

M/s. S R R K Sharma Associates.,
Chartered Accountants, Bengaluru

Cost Auditor

M/s. GNV & Associates,
Cost & Management Accountants, Bengaluru

Legal Advisor

M/s. Sundaraswamy & Ramdas,
Advocates, Bengaluru

Tax Consultants

M/s. BSR & Co. LLP,
Chartered Accountants, Bengaluru

Credit Rating Agencies

M/s. ICRA Limited

M/s. CARE Ratings Limited





Board of Directors



Shri C B Ananthakrishnan

Director (Finance) & CFO,
Chairman and Managing Director
(Addl Charge)

Shri C.B. Ananthakrishnan is a Commerce Graduate and Post Graduate in Business Administration from Madras University and is a fellow member of Institute of Cost Accountants of India. He has also received management and leadership training from Indian Institute of Management, Ahmedabad and *Institut Aeronautique et. Spatiale* (IAS) Toulouse, France.

Shri C.B. Ananthakrishnan joined HAL in 2004 and has over 36 years of work experience in both public and private sectors with stints in merchant banking, pharmaceuticals, fertilizers and Aerospace Industries. He was appointed as Director (Finance) & CFO of the Company w.e.f. August 1, 2018. He has been entrusted with additional charge of Chairman and Managing Director (CMD) of the Company w.e.f August 1, 2022.

Prior to his appointment as Director (Finance), Shri Ananthakrishnan was holding the post of Executive Director (Finance) in Corporate Office of the Company and handling overall Financial Planning and strategy, treasury management and taxation. He led the disinvestment effort for HAL during 2018 and various financial efficiency improvement measures in the company such as Centralised Payment Processing Center, Central payroll processing Centre and Implementation of Ind AS. He was instrumental in conclusion of some high value Contracts aggregating Rs. 80,000 Crores including 83 LCA Mk 1A, 159 ALH, 73 ALH, 70 HTT-40 and Engine Contracts.

Consequent to entrusting of additional charge as Chairman and Managing Director, HAL, Shri Ananthakrishnan has steered various business strategy initiatives such as separate Marketing vertical, marketing offices abroad, Online Claim Bills Realization System (e-CBRS), Centralized Procurement, Customer Service Organization and provided impetus to prestigious R&D projects like IMRH/DBMRH, UH-M, HLFT-42, LCA MK2, ALH WSI Phase-II and LUH Civil, etc.

Shri Ananthakrishnan had taken various initiatives for enhancing the Capacity for production of HTT-40, LCA and Helicopters. He had also taken initiatives towards improving the Operational efficiency such as, implementation of Industry 4.0 concepts, Third-Party Inspection (TPI) model for inspection activities at vendor premises and Fleet-wise SPOCs as a single point of contact for customer issues, etc.

Under his leadership the Company achieved highest ever revenue of Rs 26,927 Crore during 2022-23, and has achieved market Capitalization of over ₹ 1 Lakh Crore.

Shri C.B. Ananthakrishnan is also currently the Chairman of the Aerospace and Aviation Sector Skill Council; Director, Defence Innovation Organization (DIO); Board Member, Indian National Space Promotion and Authorization Centre, Department of Space (IN-Space) and Member Governing Council, CSIR-NAL.



Shri Jayadeva E. P.

Director (Operations)

Shri Jayadeva E. P. was appointed as Director (Operations) of the Company w.e.f June 10, 2022. Prior to his appointment as Director (Operations), he was holding the post of General Manager, LCA Tejas Division, of the Company. He holds a bachelor's degree in Electrical Engineering from University Visvesvaraya College of Engineering, Bangalore and did Masters from IIT, Madras in Aircraft Production Engineering. Shri Jayadeva E P, has been entrusted with additional charge of Director (HR) of the Company from December 1, 2022 till the appointment of regular incumbent.

He joined HAL in 1987 as a Management Trainee, and has about 34 years of experience in the areas of Manufacturing, Assembly, Overhaul, Upgrades, Customer support, Indigenisation and other Management functions. He was instrumental in establishment of Repair & Overhaul and Upgrade facility for Kiran, Hawk and Mirage Aircraft at Overhaul Division. He has contributed in developing indigenous solutions, both in airborne applications and ground support requirements from Indian ecosystem.

He undertook the Product Quality enhancement initiatives and capacity augmentation process for Light Combat Aircraft (LCA) to double the rate of production to 16 aircraft per annum.



Dr. D. K. Sunil

Director (Engineering and R & D)

Dr. D. K. Sunil, was appointed as Director (Engineering and R & D) of the Company w.e.f September 29, 2022. He heads the 9 R&D Centres of the Company. Prior to taking over as Director (Engg and R & D), Dr. D. K. Sunil was holding the post of General Manager (SLRDC) in Hyderabad. He is a graduate in Electronics & Communication Engineering from Osmania University, Hyderabad and M. Tech in Aircraft Production Engg from IIT, Madras. He was awarded Ph.D in Electronics Science from University of Hyderabad in the year 2019.

He joined Hindustan Aeronautics Limited (HAL) in 1987 as a Management Trainee, and has about 35 years of experience in various key positions.

During his tenure in Mission Combat Systems R & D Centre, Bengaluru, he led teams working on Active ESA Radar, Automatic Flight Control System for LCH and Mission Computers for helicopter and fighter platforms.

Under his leadership new technologies were developed like High Power Radar Power supply, Voice Activated Control System, Combined Interrogator Transponder which have become new growth areas for the company. He also pioneered collaboration with IIT Kanpur for datalinks and IIIT, Hyderabad for voice recognition technologies

He has lead design projects at equipment level as well at system level for aircraft and helicopter. His experience covers the whole range of design activities pursued at HAL design centres from LRU to aircraft level.

He has published 7 papers in peer reviewed journals. He holds 9 copyrights related to wireless communication. He has been an member of DGCA external expert committee for certification of Hindustan - Dornier 228 Aircraft. He is a Vice President of Aeronautical Society of India (AeSI).



Shri Atasi Baran Pradhan

Director (Human Resources)

Shri Atasi Baran Pradhan, was appointed as Director (Human Resources) of the Company w.e.f July 19, 2023. Prior to his appointment as Director (HR) of the Company, Shri A B Pradhan, was holding the post of Executive Director (HR). He holds a Bachelor's Degree in Chemistry (Hons.) and PG Degree in Personnel Management & Labour Welfare from Utkal University, Bhubaneswar. He also holds Bachelor of Laws (LLB) degree from University Law College, Bhubaneswar.

Shri A B Pradhan, joined Hindustan Aeronautics Limited (HAL) in 2005 and has 35 years of rich and varied experience in HR function serving in both Public and Private Sectors with exposure to various industries dealing with Engineering, Metallurgy, Paper, Aerospace & Defence that are situated in various parts of India.

Shri A B Pradhan has wide exposure to whole gamut of HR functions like Industrial Relations, Corporate Social Responsibility (CSR), Wage Negotiation & Settlements, Statutory Compliance, HR Policy formulation, Manpower Planning, Recruitment & Career Development, Skill Development & Training, Performance Management, Facilities Management and Legal Affairs.