

Ministry of Defence



MINISTRY OF DEFENCE - YEAR END REVIEW 2023

2023, a momentous year as giant strides made to realise PM Modi-led Govt's vision of a strong, secure, self-reliant & inclusive India

Record defence exports, all-time high production & increase in number of items in Positive Indigenisation Lists testament to Govt's unwavering commitment to make India a global manufacturing hub

From being deployed on world's highest battlefield to commanding combat units & Naval warships, Nari Shakti establishing a new dynamic to the military prowess

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2023 was a landmark year for Ministry of Defence (MoD) as giant strides were made towards realising the vision of the Government, led by Prime Minister Shri Narendra Modi, to create a strong, secure, self-reliant, and inclusive India. Efforts to achieve 'Aatmanirbharta' in defence and Armed Forces modernisation surged ahead with renewed thrust, with the country witnessing record defence exports and all-time high defence production. Strengthening border Infrastructure, utilising Nari Shakti and ensuring Ex-Servicemen Welfare have been at the core of the functioning of MoD under the guidance of Raksha Mantri Shri Rajnath Singh and these have moved forward with unprecedented pace and vigour.

Aatmanirbharta in Defence

- **Positive Indigenisation Lists:** Fifth Positive Indigenisation List (PIL) of Department of Military Affairs (DMA) comprising 98 items was released by Raksha Mantri Shri Rajnath Singh during the plenary session of 'Swavlamban 2.0'. The list includes Highly complex systems, sensors, weapons and ammunition have been included in the list. All these items will be procured from indigenous sources as per provisions given in Defence Acquisition Procedure 2020 in staggered timeline. The

DMA had earlier promulgated four PILs comprising 411 military items. Separately, the Department of Defence Production (DDP) has notified four PILs consisting of a total of 4,666 items, including Line Replacement Units/Sub-systems/Spares & Components for DPSUs. The fourth PIL of 928 items was released by DDP this year.

- **Record Defence Production:** The value of defence production in Financial Year (FY) 2022-23 crossed the figure of Rs one lakh crore for the first time ever. It was Rs 95,000 crore in FY 2021-22. The Government is continuously working with defence industries and their associations to remove the challenges faced by them and promote defence production in the country. A number of policy reforms have been taken to achieve the objective of ease of doing business, including the integration of MSMEs and start-ups into the supply chain. Due to these policies, the industries, including MSMEs and start-ups, are forthcoming in defence design, development & manufacturing and there is almost a 200% increase in the number of defence licenses issued to the industries in the last 7-8 years by the Government.
- **Record Defence Exports:** Through consistent policy initiatives of the Government and tremendous contribution of the defence industry, defence exports reached an all-time high of approx. Rs 16,000 crore in FY 2022-23, almost Rs 3,000 crore more than the previous financial year. It is a rise of over 10 times since 2016-17. India is now exporting to over 85 countries. Indian industry has shown its capability of design and development to the world, with 100 firms exporting defence products at present. Major platforms being exported include Dornier-228, 155 mm Advanced Towed Artillery Guns, Brahmos Missiles, Akash Missile System, Radars, Simulators, Mine Protected Vehicles, Armoured Vehicles, PINAKA Rockets & Launchers, Ammunitions, Thermal Imagers, Body Armours, besides Systems, Line Replaceable Units and Parts & components of Avionics and Small Arms. There is growing global demand of LCA-Tejas, Light Combat Helicopters, Aircraft Carrier, MRO activities etc.
- **Separate Budget for Domestic Industry:** Record 75 per cent (approx. Rs one lakh crore) of the defence capital procurement budget was earmarked for domestic industry in FY 2023-24, up from 68 per cent in 2022-23. This was announced by the Raksha Mantri during 14th Aero India in Bengaluru. In FY 2023-24, Ministry of Defence was allocated a total Budget of Rs 5.94 lakh crore, which is 13.18 per cent of the total budget (Rs 45.03 lakh crore). Capital outlay pertaining to modernisation and infrastructure development was increased to Rs 1.63 lakh crore.
- **HAL Helicopter Factory:** Hindustan Aeronautics Limited (HAL) Helicopter Factory was dedicated to the nation by Prime Minister Shri Narendra Modi at Tumakuru in Karnataka. The factory is India's largest helicopter manufacturing facility and will initially produce Light Utility Helicopters (LUHs). The LUH is an indigenously designed and developed three-ton class, single engine multipurpose utility helicopter with unique features of high manoeuvrability. Initially, the

factory will produce around 30 helicopters per year and can be enhanced to 60 and then 90 per year in a phased manner.

- **PM's Tejas Sortie:** In November, Prime Minister Shri Narendra Modi flew a sortie in 'Tejas' Twin-Seater Light Combat Fighter aircraft designed, developed and manufactured by Hindustan Aeronautics Limited (HAL) in Bengaluru. The sortie was carried out from the Aircraft Systems Testing Establishment, Bengaluru. During the 30-minute sortie, capabilities of Tejas were demonstrated to the Prime Minister. It was the first time an Indian Prime Minister flew a fighter aircraft sortie. The Prime Minister also visited the production facilities of LCA Tejas and was briefed about the technology intensive work being done at HAL towards realising the vision of 'Aatmanirbhar Bharat'.
- **LCA Tejas:** HAL handed over the first twin-seater Light Combat Aircraft 'Tejas' to the IAF in the presence of Raksha Rajya Mantri Shri Ajay Bhatt in Bengaluru. It is a light weight, all weather multi-role 4.5 generation aircraft, designed to support the training requirements of the IAF and augment itself to the role of a fighter in case of necessity. It is an amalgamation of contemporary concepts and technologies such as relaxed static-stability, quadruplex fly-by-wire flight control, carefree manoeuvring, advanced glass cockpit, integrated digital avionics systems and advanced composite materials for the airframe. The IAF placed an order for 83 LCAs with HAL.
- **C-295 Transport Aircraft:** First C-295 MW transport aircraft was formally inducted into the Indian Air Force in the presence of Raksha Mantri Shri Rajnath Singh. The aircraft are being inducted through a collaboration between Tata Advanced Systems Limited and Airbus Defence and Space S.A., Spain. Fifteen more aircraft will be delivered in flyaway condition and they are scheduled to be received till August 2025. Remaining forty will be manufactured at the C-295 transport aircraft manufacturing facility, the foundation stone of which was laid by the Prime Minister in Vadodara, Gujarat in October 2022. The first Made in India aircraft is expected from September 2026. This medium lift tactical aircraft, which is capable of taking off and landing from unprepared landing grounds, will replace the HS-748 Avro aircraft.

Defence Acquisition

- **Defence Acquisition Council:** In 2023, Defence Acquisition Council, chaired by Raksha Mantri Shri Rajnath Singh, approved in its meetings proposals worth a total of over Rs 3.50 lakh crore to enhance the operational preparedness of the Armed Forces.

(i) In a meeting held in November, the DAC accorded approval in respect of Acceptance of Necessity (AoNs) for various Capital Acquisition Proposals amounting to Rs 2.23 lakh crore, of which, acquisition worth Rs 2.20 lakh crore (98% of total AoN amount) will be sourced from domestic

industries. Procurement of Light Combat Helicopters & Light Combat Aircraft Mk 1A from HAL got a nod. The AoNs were also accorded by the DAC for upgradation of Su-30 MKI aircraft indigenously from HAL. Medium-Range Anti-Ship Missiles for surface platform of the Indian Navy was also accorded approval. Acquisition of Towed Gun System was cleared to replace Indian Field Gun.

(ii) In July, the DAC granted AoN for procurement of 26 Rafale Marine aircraft along with associated ancillary equipment, weapons, simulator, spares, documentation, crew training and logistic support for the Indian Navy from the French Government based on Inter-Governmental Agreement.

(iii) In June, the DAC, approved acquisition of 31 MQ-9B (16 Sky Guardian and 15 Sea Guardian) High Altitude Long Endurance (HALE) Remotely Piloted Aircraft Systems (RPAS) for Tri-Services from the USA through Foreign Military Sale (FMS) route. The AoN included the number of UAVs to be procured along with associated equipment.

(iv) In March, the DAC accorded AoN for capital acquisition amounting to over Rs 70,500 crore under Buy {Indian-IDDM (Indigenously Designed, Developed and Manufactured)}. BrahMos missiles, Shakti EW systems & Utility Helicopters-Maritime, valued at Rs 56,000 crore, were cleared for Indian Navy. Long Range Stand-Off Weapon for the Indian Air Force got the nod which will be integrated on SU-30 MKI aircraft. Procurement of 155mm/52 Caliber ATAGS, along with High Mobility & Gun Towing Vehicles, for the Indian Army were also approved. Acquisition of Advance Light Helicopters MK-III for Indian Coast Guard from HAL were also cleared.

(v) In September, the DAC approved AoN for nine capital acquisition proposals worth Rs 45,000 crore. Procurement of Light Armoured Multipurpose Vehicles, Integrated Surveillance & Targeting System and Next Generation Survey Vessels got the nod. Proposals for avionic upgradation of Dornier Aircraft; procurement of Dhruvastra Short Range Air-to-Surface Missile and 12 Su-30 MKI Aircraft were also cleared.

(vi) In January, two proposals for Indian Army and one for Indian Navy, amounting to Rs 4,276 crore, were cleared under the Buy (Indian-IDDM) category. The AoN was accorded for procurement of HELINA Anti-Tank Guided Missiles, launchers and associated support equipment which will be integrated to the Advanced Light Helicopter. Procurement of VSHORAD (IR Homing) missile system under design and development by DRDO was also cleared. The DAC also granted approval for procurement of Brahmos Launcher and Fire Control System for the Shivalik class of ships & Next Generation Missile Vessels for Indian Navy.

(vii) In August, DAC accorded AoN for capital acquisition proposals worth approximately Rs 7,800 crore. To enhance the efficiency of the IAF, DAC approved AoN for procurement and installation of Electronic Warfare Suite on Mi-17 V5 Helicopters under Buy (Indian-IDDM) category. The DAC has

also accorded AoN for procurement of Ground-Based Autonomous System for mechanised infantry and armoured regiments. Proposals for procurement of 7.62x51 mm Light Machine Gun and Bridge Laying Tank were also given go ahead.

- **Contracts with BEL:** Ministry of Defence signed a number of contracts with Bharat Electronics Limited (BEL), valued at a total cost of Rs 17,176 crore, to enhance the operational capabilities of the Armed Forces. The first contract, worth over Rs 2,800 crore, pertains to the supply of Medium Power Radars 'Arudhra' to the Indian Air Force. The second contract, at an overall cost of approx. Rs 950 crore, relates to 129 DR-118 Radar Warning Receivers. The third contract pertains to the procurement of two Integrated Electronic Warfare Systems 'Project Himshakti' at an overall cost of approximately Rs 3,000 crore. Another two contracts, worth Rs 2,400 crore, relate to procurement of Automated Air Defence Control & Reporting System 'Project Akashteer' for Indian Army and Sarang Electronic Support Measure systems for Indian Navy. Contract for 13 Lynx-U2 Fire Control Systems for Indian Navy at a total cost of over Rs 1,700 crore under Buy {Indian – IDMM} category was also inked with BEL. A contract for Weapon Locating Radars Swathi (Plains) for Indian Army was also signed with BEL at a cost of over Rs 990 crore. Another contract was signed with BEL for procurement of Electronic Fuzes for the Indian Army for a period of 10 years, at a total cost of Rs 5,336 crore. These essentially embody the spirit of 'Aatmanirbhar Bharat' and will help facilitate the realisation of the country's journey to achieve self-reliance in defence manufacturing.
- **HTT-40 Basic Trainer Aircraft:** The Ministry of Defence signed a contract with HAL for procurement of 70 HTT-40 Basic Trainer Aircraft for the Indian Air Force at a cost of Rs 6,828.36 crore. The aircraft will be supplied over a period of six years. The HTT-40 is a turbo prop aircraft and is designed to have good low speed handling qualities and provide better training effectiveness. It contains approx. 56% indigenous content which will progressively increase to over 60% through indigenisation of major components and subsystems. The HAL engages the domestic private industry, including MSMEs, in its supply chain. It has the potential to provide direct and indirect employment to thousands of people spread over more than 100 MSMEs.
- **Cadet Training Ships:** Ministry of Defence signed a contract with Larsen & Toubro Limited (L&T) for procurement of three Cadet Training Ships, worth over Rs 3,100 crore under Buy {Indian-IDDM (Indigenously Designed, Developed and Manufactured)} category in New Delhi. The ships will cater to the training of officer cadets, including women, at sea after their basic training to meet the future requirements of the Indian Navy. The ships can also be deployed for evacuation of people from distress areas, Search & Rescue and Humanitarian Assistance and Disaster Relief (HADR) operations. The delivery of ships is scheduled to commence from 2026. The project has the potential to generate an employment of 22.5 lakh man-days over a period of four-and-half years. This will encourage active participation of Indian shipbuilding and associated industries, including MSMEs.

- **Dornier-228 Aircraft:** Ministry of Defence signed a contract for procurement of six Dornier-228 aircraft for the Indian Air Force from HAL at a cost of Rs 667 crore. The aircraft was used by IAF for Route Transport Role and communication duties. Subsequently, it has also been used for training of transport pilots of the IAF. The present lot of six aircraft will be procured with an upgraded fuel-efficient engine coupled with a five bladed composite propeller.
- **Improved Akash Weapon System:** Ministry of Defence signed a contract with Bharat Dynamics Limited, worth over Rs 8,160 crore, for procurement of improved Akash Weapon System (AWS) for Indian Army. The contract was for procurement of AWS for 3rd & 4th Regiments of Army Air Defence, comprising live Missiles & Launchers with upgrades, Ground Support Equipment, Vehicles and Infrastructure. The AWS is a Short-Range Surface-to-Air Missile Air Defence System, indigenously designed and developed by DRDO. The project has overall indigenous content of 82% which will be increased to 93% by 2026-27.
- **Offshore Patrol Vessels & Missile Vessels:** In a huge boost to achieve 'Aatmanirbharta' in defence, Ministry of Defence signed contracts with Indian shipyards for acquisition of 11 Next Generation Offshore Patrol Vessels and six Next Generation Missile Vessels at an overall cost of approx. Rs 19,600 crore. The contract for acquisition of 11 Next Generation Offshore Patrol Vessels under Buy (Indian-IDDMM) category was signed with Goa Shipyard Ltd (GSL) and Garden Reach Shipbuilders and Engineers (GRSE), Kolkata. Of the 11 ships, seven will be indigenously designed, developed & manufactured by GSL and four by GRSE. The delivery of the ships is scheduled to commence from September 2026. The contract for acquisition of six Next Generation Missile Vessels was signed with Cochin Shipyard Limited at a cost of Rs 9,805 crore. The delivery of ships is scheduled to commence from March 2027. The NGMVs would be heavily armed war vessels incorporating stealth, high speed and offensive capability.
- **Fleet Support Ships:** Ministry of Defence signed a contract with Hindustan Shipyard Limited, Visakhapatnam for acquisition of five Fleet Support Ships (FSS) for the Indian Navy at an overall cost of approx Rs 19,000 crore. The FSS will be employed for replenishing ships at sea with fuel, water, ammunition and stores, enabling the Indian Naval Fleet to operate for prolonged periods without returning to harbour. They can also be deployed for evacuation of people and HADR operations. The ships of 44,000 Tons will be the first-of-its kind to be built in India by an Indian Shipyard. This project will generate employment of nearly 168.8 lakh mandays over a period of eight years.
- **Upgraded Super Rapid Gun Mount:** Ministry of Defence signed a contract with Bharat Heavy Electricals Limited, Haridwar for procurement of 16 Upgraded Super Rapid Gun Mount (SRGM) along with associated equipment for Indian Navy under Buy (Indian) category at a total cost of Rs 2,956.89 crore. The upgraded SRGM is a medium caliber anti-missile/anti-aircraft point defence

weapon system which provides a sustained rate of fire and high accuracy. The SRGMs will be installed onboard Indian Navy's in-service and newly-built ships by Mazagaon Dock and Shipbuilders Ltd., Mumbai, and Garden Reach Shipbuilders & Engineers, Kolkata.

- **INS Shankush Medium Refit with Life Certification:** Ministry of Defence signed a contract for Medium Refit with Life Certification of Sub-Surface Killer Class of Submarine 'INS Shankush' with Mazagon Dock Shipbuilders Limited, Mumbai at an overall cost of Rs 2,725 crore. The delivery of the submarine post MRLC will be in 2026. After completion of MRLC, INS Shankush will be combat ready and will join the active fleet of the Indian Navy with upgraded combat capability.
- **Radio Relay Communication equipment containers:** Giving a further boost to indigenous manufacturing of defence equipment, Ministry of Defence inked a contract with ICOMM Tele Limited, Hyderabad for the procurement of 1,035 numbers of 5/7.5 Ton Radio Relay Communication equipment containers. The value of the contract under Buy (Indian) Category is nearly Rs 500 crore. The delivery of the containers is scheduled to commence from the current Financial Year 2023-24.
- **Upgraded Dornier Aircraft for ICG:** Ministry of Defence signed a contract with HAL for procurement of two Dornier Aircraft for Indian Coast Guard along with associated Engineering Support package at an overall cost of Rs 458.87 crore. The aircraft will be procured under the Buy (Indian) Category. The aircraft will be fitted with a number of advanced equipment viz., Glass Cockpit, Maritime Patrol Radar, Electro Optic Infra-Red device, Mission Management System etc.
- **300th iDEX contract:** Innovations for Defence Excellence (iDEX), the flagship initiative of Ministry of Defence, reached a milestone with the signing of 300th contract. The contract, which was inked with Agnit Semiconductors Private Limited, relates to the design and development of advanced Gallium Nitride Semiconductors which is essential for the next generation of wireless transmitters in defence applications ranging from radars to Electronics Warfare jammers. This would significantly enhance the indigenous design and development capability, paving way for immense potential in the defence sector including exports.

Border Infrastructure

- **Infrastructure Projects:** 118 infrastructure projects of Border Roads Organisation (BRO) were dedication to the Nation by Raksha Mantri Shri Rajnath Singh this year. In September, he launched 90 infrastructure projects, worth over Rs 2,900 crore, spread across 11 States/Union Territories. The projects were inaugurated at an event in Jammu. These include Nechiphu Tunnel in Arunachal Pradesh; two airfields; two helipads; 22 roads and 63 bridges. Of these 90 projects, 36 are in

Arunachal Pradesh; 26 in Ladakh; 11 in Jammu & Kashmir; five in Mizoram; three in Himachal Pradesh; two each in Sikkim, Uttarakhand & West Bengal and one each in Nagaland, Rajasthan and Andaman & Nicobar Islands. The BRO has completed the construction of these strategically-important projects in record time; most of them in a single working season using state-of-the-art technology. In January, 28 infrastructure projects, worth Rs 724 crore, were launched during an event organised at Siyom Bridge on Along-Yinkiong Road in Arunachal Pradesh. The projects comprise 22 bridges, including Siyom bridge; three roads and three other projects in seven border States/Union Territories of Northern & North-Eastern regions. Eight of these projects are in Ladakh; five in Arunachal Pradesh; four in Jammu & Kashmir; three each in Sikkim, Punjab & Uttarakhand and two in Rajasthan. In addition, three telemedicine nodes - two in Ladakh & one in Mizoram – were inaugurated.

- **Budget:** The budget expenditure of BRO reached a record high of Rs 12,340 crore in FY 2022-23 with a 100% jump in the funds allocated under GS Capital Head over the preceding two years which now stands at Rs 5,000 crore.
- **Roads:** In the current year, 601 kms of roads have been completed. Considerable progress has been made on India-China Border Roads and all other Op-Critical Roads along the Northern Borders. Works on critical roads like Nimu-Padam Darcha Road, Gunji-Kutti-Jolingkong Road, Balipara- Chardwar-Tawang Road, TCC-Taksing Road, TCC-Maza Road etc are being undertaken at increased pace. BRO's work on Hapoli-Sarli-Huri Road for blacktopping for the first time since Independence, was commended by the Prime Minister.
- a. **Raqni-Ustad-Pharkiyani Gali Road (J&K):** Work on this 38.25 km road along the Shamshabari Ridge was completed. This road will provide lateral connectivity between Sadhna Pass and Pharkiyani Gali.
- b. **Srinagar-Baramulla-Uri Road (Pkg IV) (J&K).** Upgradation of NH-01 from NHDL to NHDL(PS) specification between Baramulla and Uri (44.10 kms) was sanctioned by Ministry of Road Transport and Highways.
- c. **Alternate Connectivity to DBO Road (Ladakh):**
 - **Road Sasoma-Saser La (52.4 kms):** In September, surfacing is in progress and will be completed in the next working season.
 - **Road Saser La - Saser Brangsa (16 kms):** Connectivity has been established and surfacing & permanent works are in progress.
 - **Road Saser Brangsa-Morqo (18 kms):** Work on this road is progressing well and connectivity was established in October 2022. Presently, 10.50 kms of black topping has been completed and balance surfacing is in progress.
 - **Road Saser Brangsa-Gapshan (41.97 kms):** Connectivity was achieved in October and formation, permanent & surfacing works are in progress.
- d. **Chushul-Dungti-Fukche-Demchok Road (Ladakh):** Work on this strategically important 114.5 km road has been undertaken under Engineering, Procurement & Construction (EPC) mode. 100.8 km formation has been completed and permanent works are in progress.
- e. **Gunji - Kutti - Jolingkong Road (Uttarakhand):** Work on this 36.3 km road will be completed soon with surfacing works underway in full swing. This road will pave the way for millions of

devotees to embark on a spiritual journey to Adi Kailash.

- f. **Road Ghatiabagarh-Lakhanpur-Lipulekh Pass (Uttarakhand):** DPR for improvement of 81.30 km long road from CI-9 (E) to NHDL with hard shoulder configuration under Bharatmala Pariyojna sanctioned and tendering action in progress.
- g. **Nyu Sobla - Tidang Road (Uttarakhand):** The Nyu-Sobla-Tidang Road of approx 46.58 kms has been entrusted to BRO for further development & maintenance by Ministry of Home Affairs (MHA). Most of the formation works have been completed.
- **MHA works:** Four roads of a total of 255 kms have been approved by MHA for construction in Arunachal Pradesh under Project Arunank.
- **PM's visit to Uttarakhand:** The Prime Minister visited Jollingkong and interacted with BRO personnel on 14 Oct 2023. He lauded the unwavering services of BRO personnel in challenging conditions.
- **Glacial Lake Outburst Flood in Sikkim:** In October, the southern bank of South Lhonak Lake in Sikkim was breached and large volume of water was released causing flash floods. The floods caused large scale devastation to the road infrastructure in North Sikkim. Approx 16 kms of stretches of seven roads and 15 bridges, being maintained by BRO, were damaged. BRO pressed all its resources to restore connectivity. The restoration works are being undertaken in a time bound, result oriented manner.

Tunnels:

- Currently, BRO is working on 20 tunnels with 10 under construction and 10 under planning stage. The 500 m long Nechiphu Tunnel on B-C-T Road (Arunachal Pradesh) was dedicated to the Nation by the Raksha Mantri in September. Further, the construction of 4.1 Km long Shinku La Tunnel is likely to commence soon, which will be the Highest Tunnel in the World at an altitude of 15,855 ft once completed.
- **Sela Tunnel:** This Project on Balipara-Charduar-Tawang Road in Arunachal Pradesh encompasses two tunnels of twin tube configuration. The alignment reduces the travel distance by more than eight kms and cuts down the travelling time by an hour while obviating the Sela Pass climb, providing all weather connectivity to Tawang. This tunnel is nearing completion and will be the longest Bi-Lane Highway Tunnel in the world at an altitude of 13,800 feet once completed.
- **Kandi Tunnel (J&K).** Breakthrough of 260m long Kandi Tunnel on NH-144A on Akhnoor to Poonch Road was achieved in October, despite adverse weather conditions. The work had commenced in March. This tunnel will reduce the length of the road by 2.5 kms and will play a vital role in enhancing connectivity from Jammu to Poonch.

Bridges:

- In the current year, 3,179m of bridges have been completed. Also, there has been a renewed impetus to bridges, with 22 bridges revived and completed in the last two years. MoU with GRSE for supply & launching of 60 Modular Double Lane Cl 70 Bridges was signed to enable faster replacement of old Bailey Bridges of lower load classification. 20 such Bridges have been completed till date. Further the following permanent Bridges have been completed and ready for opening to traffic.
- **Permanent Bridge over Shyok River (Ladakh)**: This 345.70m Bridge located at Saser Brangsa over River Shyok at an altitude of nearly 15,300 feet was planned & conceptualised in March. The construction was completed in October in a single working season, an unprecedented achievement at this altitude.
- **BRO works in Bhutan**: Two Double Lane Steel Modular Bridges - Tshaphel and Kana - on Chuzom-Haa in Bhutan were inaugurated by Minister of Infrastructure and Transport Mr Lyonpo Dorji Tshering in October. These bridges were constructed within just three months. In addition to this, a 24m-long RCC Double lane Permanent Bridge was also inaugurated by the Mayor of Trashigang on the road from Daranga to Trashigong.

Airfields: Barrackpore and Bagdogra airfields in West Bengal were dedicated to the Nation by the Raksha Mantri in September. The development works on the recently allotted Nyoma Airfield at Eastern Ladakh have commenced.

New Technologies: BRO has incorporated several new and innovative technologies & equipment to boost the pace of construction in border areas such as cementitious bases for surfacing works of roads, use of geo cells, use of M 50 inter locking concrete blocks, slope stabilisation using geo-synthetic materials and pre-cast concrete technology.

Early Opening of Passes: BRO also ensured extended and early opening of crucial passes on strategically important roads along the borders, thereby enhancing the defence preparedness.

Road Safety Audit: Road Safety Audit and Correction works for reduction of Black Spots is under way across all Projects of BRO. Till date, approx 17,265 kms of roads have been audited across the country. As part of the Capacity Building in Road Safety, five BRO Officers have successfully completed a 14 weeks long Advanced Road Safety Certification Course at IIT Delhi.

Green Initiatives: To be at the forefront of India's decarbonisation efforts, BRO is focusing on creating environment friendly infrastructure. Energy Efficient Habitats at Leh using Energy Conservation Building Code norms and Net Carbon Neutral Habitats for Casual Paid Labourers (CPLs) and BRO personnel at work site locations are some of the initiatives towards this direction.

Rescue Operations Effort of BRO at Silkiyara Tunnel (Uttarakhand): A section of Silkiyara tunnel which was being constructed by NHIDCL on NH-134 in the Uttarkashi district of Uttarakhand collapsed in November trapping 41 workers on site. As part of the national effort, BRO undertook a task of construction of an 1,150m Approach Road for employment of drilling equipment (Vertical Shaft). The approach road was completed in record time of 48 hours. The trapped workers were rescued in November itself.

Restoration of Amarnath Yatra Tracks: The second phase of upgradation of the Amarnath Yatra Tracks commenced in September. The Baltal Track has been realigned and BRO has successfully inducted a vehicle up till the Holy Cave through Sangam Base. Thus the track has now been sufficiently widened for induction of essential supplies. Also the work on upgradation of Kalimata Track is in progress and will be made operational for the move of essential vehicles before the Amarnath Yatra of 2024.

Extension of provisions for Mortal Remains: The Raksha Mantri approved the extension of existing provisions of 'Preservation and Transportation of the Mortal Remains', available for General Reserve Engineer Force personnel of the BRO to CPLs. He has also approved an increase in funeral expenditure for the CPLs to Rs 10,000 from Rs 1,000. This will be borne by the Government in the event of a death of any CPL while on Government bonafide duty at BRO projects, whose last rites are being performed at the worksite.

Training Complex: Raksha Rajya Mantri Shri Ajay Bhatt inaugurated the Border Roads Organisation (BRO) Technical Training Complex and an Automated Driving Track in Pune during 64th Raising Day of BRO. These facilities will enhance the training standards of the BRO personnel and help them to be better prepared for various challenges. BRO-centric software, developed as part of 'Digital India' initiative, were also launched. These software - Recruitment Management System, Electronic Measurement Book & Work Management System - have been developed to automate various aspects of functioning of the BRO for smoother & faster output and increased transparency. An MoU was signed between the BRO and GRSE for construction of indigenous Class 70R Double Lane Modular Bridges. These bridges will help in bolstering the operational preparedness of the Armed Forces.

Nari Shakti

- Shattering the glass ceiling, Captain Shiva Chauhan became the first woman officer to get operationally deployed in Kumar Post, Siachen Glacier in January. Siachen is the world's highest battlefield. In December, Captain Geetika Koul became the first woman medical officer to be deployed at Siachen after successfully completing the induction training at Siachen Battle School. Days later, Captain Fatima Wasim became the first woman medical officer to be deployed on an operational post on the Siachen Glacier.
- The command of units by Women Officers has commenced. This has tremendous potential and all efforts are on to ensure that this opportunity is capitalised by adequate guidance and support. Study on Induction of women as JCOs/OR in Arms & Services is underway.
- Lt Cdr Prerna Deosthalee was named as the first woman officer to command a Indian Naval Warship.
- The induction of Women Officers in the Regiment of Artillery is under progress. 10 Women officers were commissioned in the Regiment of Artillery during 2023

- The Indian Air Force deployed Group Captain Shaliza Dhami to take over the command of a frontline combat unit in the Western sector. She is the first woman to command any combat unit of IAF.
- Sqn Leader Manisha Padhi was named as India's first Woman Aide-De-Camp (ADC) to a Governor (Mizoram).
- Army Medical Corps Officer Col Sunita became the first woman to command Armed Forces Transfusion Centre, Delhi Cantt, the largest blood transfusion centre of the Armed Forces.
- Air Marshal Sadhna S Nair assumed the appointment of Director General Hospital Services (Armed Forces) in the office of DG Armed Forces Medical Services, becoming the first woman to hold the position.
- The process for induction of women officers in Remount and Veterinary Corps (RVC) commenced in March. Four have been inducted into RVC this year.
- 30 Army Girl Cadets are under training in National Defence Academy.
- Raksha Mantri approved a proposal for extension of rules for Maternity, Child Care and Child Adoption Leaves for women soldiers, sailors and air warriors in the Armed Forces at par with their officer counterparts.

Ex-servicemen Welfare

Major policy decisions, recent initiatives/achievements made during the year to bring about much required relief to the Ex-Servicemen and their dependents are as follows:

- The Government order for revision of pension of Armed Forces Pensioners/family pensioners under One Rank One Pension (OROP) w.e.f. July 01, 2019 has been issued on 04.01.2023. More than 25.13 lakh Armed Forces Pensioners/family pensioners have been benefitted. Estimated additional annual expenditure for implementation of the revision calculated as approx. Rs 8,450 crore @31% Dearness Relief. The benefit also extended to family pensioners, including war widows and disabled pensioners. Government of India had taken historic decision to implement One Rank One Pension (OROP) in November 2015 and issued orders on 7.11.2015 for implementation of OROP wef 1.07.2014. So far around Rs 93,000 crore has been additionally spent on this scheme in the last 9 years and this figure may exceed 1 lakh crore by end of this

financial year. OROP has increased the income of the veterans which has enhanced their purchasing power and ensured better quality of life.

- The Government on 21.09.2023 issued the Entitlement Rules (ER) - 2023 for Casualty Pension and Disability Compensation Awards for Armed Forces Personnel and Guide to Medical Officers. This has been done as per the direction issued by Cabinet in 2017 that the procedure and conditions for defining disability, assessing the degree of disability and determining the disability element of the pension shall be uniform across the civil and defence side, which shall also include similarly constituted Medical Boards.
- Enhancement of financial assistance made wef 11.08.2023 in respect of various welfare schemes funded out of the Armed Forces Flag Day Fund(AFFDF). The Vocational Training Grant for widows of ESM has been increased from Rs. 20,000/- to Rs. 50,000/-(one time). The Medical Grant for non-pensioner ESM/their widows has been increased from Rs. 30,000/- to Rs. 50,000/-. The Serious Disease Grant for non-pensioner ESM/their widows has been increased from Rs. 1,25,000/- to Rs. 1,50,000/-(one time).
- During the FY 2022-23, an amount of Rs 250 crore has been paid from Armed Forces Flag Day Fund (AFFDF) and a total of 2.35 lakh ESMs were benefitted through this initiative.
- An amount of Rs 52.54 crore was disbursed to 15,655 beneficiaries' during the FY 2022-23 under the Prime Minister Scholarship Scheme (PMSS).
- An amount of Rs 6,929.07 crore was allocated for the ECHS during the FY 2022-23. This is the highest budget allocation so far for the ECHS in any FY. This has helped clear major pendency of the bills of empanelled hospitals and individual claims.
- The Government vide its order dated 05.04.2023 decided to confirm the ECHS membership to the existing ECHS beneficiaries of Army Postal Service (APS) holding 16/32 kb ECHS card or temporary slip and joined ECHS prior to 17.11.2016.
- During the year 2023, a total of 39,380 Ex-Servicemen (ESM) have been given resettlement through Directorate General of Resettlement (DGR). Out of these, approximately 32,000 have been given employment in security agencies. This is projected to grow in the coming years. The aim is to facilitate re-employment of ESM in the corporate sector and provide jobs through schemes for self employment.
- A special incentive of a one-time grant of Rs.2 Lakhs, in addition to normal incentives (Rs.5 Lakhs @ 15% of monthly purchase) has been granted to Ex-Servicemen under Pradhan Mantri Bhartiya Jan Aushadhi Pariyojna (PMBJP) which aims at establishing nation-wide Generic Medicine pharmacies for providing cheaper medicines for the benefit of everyone. Ex-Servicemen can avail the same vide 'Eligibility Certificate' issued by DGR for the purpose.

Major Events

- The Seventh Armed Forces Veterans' Day was observed on January 14, 2023. This year, the celebrations were up-scaled and major events were held at nine locations with Raksha Mantri Shri Rajnath Singh presiding over the main function in Dehradun.
- A Seminar on 'Harnessing Partnership for Veterans Rehabilitation, Welfare & Medical Care' was organised on 13.2.2023 at Aero India Convention Hall, Bangalore. It was presided over by Raksha

- Rajya Mantri, Shri Ajay Bhatt and attended by around 130 delegates from Corporate, Public Sector Undertaking, foundations and other leading enterprises.
- The Board Meeting of Kendriya Sainik Board (KSB) was held on 11.04.2023 at Vigyan Bhawan, New Delhi under the chairmanship of Raksha Mantri. Post Lunch the meeting of Directors of Rajya Sainik Board (RSBs) was chaired by Secy (ESW).
 - An updated version of the 'Directory of Equation' published by Directorate General of Resettlement (DGR) was released by Secy ESW on 25.04.2023.
 - A day long "Chintan Shivir" was organised by the Department of Defence at New Delhi (DRDO Bhawan) on 06 July 2023 under the Chairmanship of Raksha Mantri. The points discussed include System for Pension Administration Raksha (SPARSH) for better pension services, Resettlement of veterans by improving employability and promotion of entrepreneurship for start of Micro Enterprises by veterans and improvement in the health services of the veterans.
 - DESW including its Attached Offices and their field establishments conducted cleanliness drive under Special Campaign on Disposal of Pending Matters (SCDPM 3.0) during the month of October 2023. The Campaign focussed on reduction of pendency, overall cleanliness of office and effective management of space.

Department of Defence Production

In continuous pursuit of self-reliance in defence manufacturing and to minimise imports by Defence Public Sector Undertakings (DPSUs) under 'Aatmanirbhar Bharat Abhiyan', DDP notified 4th PIL of 928 items on May 12, 2023, which includes LRUs/ Sub-systems/Assemblies/Sub-assemblies, raw material, low value critical spares and components of DPSUs for time-bound indigenisation. These items are to be indigenised within the timelines of December 2023 to December 2029. As compared to previous year, 4500+ items of Srijan Portal including 173 PIL items, have been indigenised in this year.

- To give fillip to the ongoing indigenisation portal (www.srijandefence.gov.in) was launched in August 2020 for DPSUs/Services with an industry interface to provide development support to MSMEs/Startups/Industry for import substitution.
- The MoD has successfully indigenised 10,451 items during the period of 3 years since the launch of Srijan Portal. More than 34,000 items were uploaded by the DPSUs and Service Headquarters on Srijan Portal for indigenisation by Industry. This includes the 4,666 items under PILs being notified by DDP.
- Standardisation of defence equipment/inventory is undertaken through 13 Standardisation Sub-Committees dealing with specialized equipment/ technologies. During 2023, a new Standardisation Sub-Committee namely, Marine Equipment Standardisation Sub-Committee, was formed to formulate Standards for Marine Equipment.
- During 2023, Training on Standardisation and Codification was imparted to 333 personnel of Tri-Services, Defence Public Sector Undertakings (DPSUs), Authority Holding Sealed Particulars (AHSPs), Ordnance Factories and civil industries, through two Training Institutes located at Pune and Badarpur (New Delhi).

- The 14th edition of Aero India-2023 was held from 13th–17th February at Bengaluru, Karnataka and has been the largest ever edition since its inception in 1996 with more than 100 countries, 809 exhibitors, first ever Fly past with 53 aircrafts showcasing our airpower to global attendees and a total footfall of 7+ lakh visitors over 05 days.
- Start-ups promotion was a focus area at Aero India-2023 with Indian Start-ups being showcased at an exclusive iDEX pavilion, India Pavilion and at the Chiefs of Air Staff Conclave. The Annual Start-up event 'Manthan' was also conducted. The maiden iDEX Investor Hub (iIH) was conducted with over Rs 200 crore pledged during iIH.
- A concerted effort was made towards forging B2B partnerships at the 'Bandhan' ceremony and more than 250 such partnerships with a total value of more than Rs 75,000 crore have been finalized. The partnerships are a step towards increasing traction for business, ToT and Joint development between the companies.

• Defence Exports:

Export leads received from various stakeholders are being disseminated to the registered Indian Defence Exporters through online portal. This facility helps the Indian defence exporters to quickly respond to export opportunities arising in other countries. The online portal has been upgraded with a feedback mechanism from Indian Industry for online monitoring/follow-up of the disseminated Export Leads. Total 245 leads have been disseminated through the portal since Jan' 2023.

- i. A coffee table book titled "Above Horizons: A Glimpse of Indian Aero Industry" was released by RM during Aero-India 2023 in Feb' 2023.
- ii. In order to boost defence exports, webinars are being organized with Friendly Foreign Countries (FFCs) under the aegis of DDP, MoD through Industry Associations. Total 26 webinars have been organised since Jan' 2023.
- iii. A scheme for financial assistance to Defence Attaches (DAs) for promotion of "Brand India" in defence is approved by RM in Nov' 2023. Under this scheme DAs have been mandated for export promotion of Indigenous defence products of both public and private sector through enhanced financial grants to the Indian Missions. For FY 2023-24, DAs of 64 countries have been allocated a total of Rs. 3.76 crores.
- iv. An institutional Support Mechanism has been created for facilitation and handholding of Indian Defence Companies for promoting the export of UN Contingent Owned Equipment (COE) to Troop Contributing Countries.
- v. In line with India's Defence Export Strategy to enhance defence exports, 1310 Export Authorisations were issued by this Department to 73 countries during the year, having value of Rs. 13345 crore.

During the year 101 winners of iDEX challenges were declared, 131 contracts were signed and 15 prototypes were developed. Three versions of Defence India Start-up Challenges (DISC) i.e., DISC 8, DISC 9 & DISC X were launched. Three versions of Open Challenges, i.e., OC 7, OC 8 & OC 9 were launched.

iDEX in partnership with US DoD conducted the India-U.S. Defence Acceleration Ecosystem (INDUX-X) Event in Washington DC, USA on 20-21 June 2023. The initiative will expand the strategic technology partnership and defence industrial cooperation between the start-up eco-system, businesses, and academic institutions.

iDEX Investor Hub (iIH) brought additional funding of INR 50 cr through ITI Growth Opportunities FUND (a venture capital fund of the Investment Trust of India group), raising the total iIH amount to INR 260 cr.

During SWAVLAMBAN 2023 event on 04.10.2023, Raksha Mantri has launched the following:

- i. Along with 76 Challenges of DISC X, 5 problem statements under iDEX 4 Fauji and first 2 challenges under 'INDUS-X Mutual Promotion of Advanced Collaborative Technologies' (IMPACT) were jointly launched by iDEX and United States Department of Defence (US, DoD).
- ii. iDEX- Navy Venture for Technology (iNVent): Naval Innovation and Indigenisation Organisation (NIIO) and Defence Innovation Organisation (DIO) entered into an MoU for jointly working on facilitating the infusion of Venture Capital into the defence ecosystem through the iDEX Investor Hub (iIH).

Indigenous Design & Development of Defence Systems has been undertaken through 'Make Procedure' provided under Defence Acquisition Procedure-2020. In the year 2023, 18 projects have been accorded 'Approval-in-principle' bringing the total tally to 149 projects. Also 11 projects have been accorded Accord of Necessity (AoN) this year, taking the number of AoN projects to 60.

Two Defence Industrial Corridors have been established at Uttar Pradesh and Tamil Nadu to boost Defence Manufacturing ecosystem in the country with intent to attract investment of Rs. 10,000 Crore in each DIC. In Uttar Pradesh Defence Industrial Corridor (UPDIC), Uttar Pradesh Expressways Industrial Development Authority (UPEIDA), the nodal agency, has signed 138 Memoranda of Understanding (MoUs) with industries etc. Actual investment of Rs. 2656 Crore have been made in UPDIC. In Tamil Nadu Defence Industrial Corridor (TNDIC), Tamil Nadu Industrial Development Corporation (TIDCO), the nodal agency, has made arrangements through 57 MoUs etc. Actual investment of Rs. 4085 Crore have been made in TNDIC.

Prime Minister Shri Narendra Modi dedicated HAL's New Helicopter factory in Tumkuru to the nation on 6th Feb '23. During the same event, Prime Minister unveiled HAL's indigenously designed and developed Light Utility Helicopter (LUH).

Raksha Mantri Shri Rajnath Singh inaugurated first overseas regional marketing office of HAL in Kuala Lumpur, Malaysia on 11th July '23.

HAL received the 'State Export Excellence Award' (for the years 2017-18, 2018-19 & 2019-20) from Department of Industries and Commerce, Govt. of Karnataka under the category of 'Govt. of India Undertaking Exporter' on 22nd Jul'23.

HAL played key role in success of Chandrayaan-3 including on-time delivery of 30 types of riveted structure, six types of welded structure and the satellite's bus structure Rover, Lander and Castings & Forgings, appreciation received.

ASTRA indigenous Beyond Visual Range (BVR) air-to-air missile, successfully fired from Light Combat Aircraft (LCA) LSP-7, off the coast of Goa on 23rd Aug'23. All the objectives of the test were met. This was a joint effort by ADA and HAL.

HAL received DGCA approval under 'CAR21 Subpart G' for series production of Hindustan 228 aircraft, indigenously built, as Make-in-India project and 'Maintenance Type Training Certificate' under CAR147 under category B1 and B2 for imparting AME type rated licence on Hindustan-228 aircraft.

Prime Minister Shri Narendra Modi visited HAL Bangalore on 25th Nov'23 and undertook a sortie on the LCA Tejas Twin Seater Aircraft. PM is the first Prime Minister of the Country who undertook a sortie in our home grown technology marvel-Tejas.

Indigenous Air Traffic Management System (ATMAS), jointly developed & installed by BEL and Airports Authority of India (AAI), was inaugurated & commissioned at Bhubaneswar airport on 27th Oct 2023.

Combat trial of indigenously developed Varunastra, a ship-launched anti-submarine heavy-weight torpedo (HWT) was successfully conducted on 6th June, 2023 by Indian Navy. The Torpedo was fired from a submarine and successfully hit an underwater target demonstrating the combat worthiness and capable of meeting the Navy's operational requirements. BDL has manufactured and supplied the torpedo and associated in integration, torpedo preparation for sea trials and firing onboard ship.

BDL has launched three new products i.e., Vertically Launch Short Range Surface to Air Missile (VL SRSAM), SAL Seeker ATGM for BMP II and Drone Delivered Missile (JISHNU) during the Bandhan event at Aero India held in Feb 2023.

BDL carried out field firing of 3rd Generation Fire and Forget Man Portable Anti-Tank Guided Missile named Amogha-III on 26.03.2023.

The i-ATS (Indigenous- Automatic Train Supervision) system, developed by BEL, was formally launched on the Red Line on 18th Feb 2023 from the Operations Control Centre (OCC), Shastri Park by Shri. Manoj Joshi, Secretary, Ministry of Housing and Urban Affairs & Chairman, Delhi Metro.

MIDHANI indigenously developed SNI C276 sheets, a premier corrosion-resistant material. Alloy C276, strengthened with nickel, molybdenum, chromium, and a touch of tungsten, excels in oxidizing and reducing environments used for flue gas purification. This achievement was appreciated at BHEL SAMVAAD 3.0 held at New Delhi on November 9, 2023. On the occasion, MIDHANI was felicitated by Dr. Mahendra Nath Pandey, Minister for Heavy Industries.

MIDHANI developed 1000th heat in the indigenously developed Vacuum Arc Remelting (VAR) furnace within 6 years. This milestone showcases MIDHANI's commitment to Aatma Nirbhar Bharat.

MIDHANI launched five newly developed products and signed 11 MoUs in the 14th edition of Aero Show 'Aero India 2023', organised by BEL along with HAL, held at Yelahanka, Bengaluru from 13-17 Feb 2023.

The 4th ship of Project-17A "Mahendragiri", built by MDL, was launched on 01 Sep 2023 by Dr. Sudesh Dhankar wife Vice President, Shri Jagdeep Dhankar.

On the occasion of 250th year of MDL, Defence Secretary, Shri Girdhar Armane, unveiled the Customised Corporate MDL stamps released by Indian Postal Services on 25th Sep 2023.

Goa Shipyard Limited (GSL) and Foundation for Science innovation and development, IISC Bengaluru signed MoU on 29 July 2023 towards fostering joint development and implementation of AI technologies in the field of Shipbuilding & Defence applications.

GSL & Kenya Shipyards Limited signed MoU in Capacity Building & for collaboration in Ship Design & Construction, during the Bilateral Meeting held between Defence Minister of India, Shri Rajnath Singh & Cabinet Secretary for Defence, H.E. Aden Bare Duale in New Delhi.

GSL has introduced Policy for Advance training of Ex Apprentices, contributing towards Kaushal Bharat and Aatmanirbhar Bharat initiatives of the Government of India by creating a pool of trained manpower for the shipbuilding industry of the nation.

Yard 'Infrastructure Augmentation Plan' worth Rs. 1393.55 Cr was executed in five phases & completed in all manners on 31 Mar 2023 by GSL.

Two Diving Support Vessels (DSV), indigenously designed by Hindustan Shipyard Limited (HSL), are being built for Indian Navy for the first time by an Indian yard.

HSL has received 03 Inmex Maritime Excellence Awards in categories of Best Ship Repair Company, Best Technology Innovation and Women Leadership Award.

The first edition of the annual Rajbhasha magazine "AVANI-PRAVAH" published by AVNL Corporate Office, Avadi has been awarded the second best magazine by the Town Official Language Implementation Committee (PSU), Chennai.

IOL has signed 13 MOUs valuing approx Rs 6,100 crore for cooperation in designing, development, manufacture, upgradation etc. Of new products/ technologies with different parties like M/s BEML Limited etc.

In pursuance of MoD's policy to promote 'Aatmanirbhar Bharat' Programmes, IOL has indigenised many ex-import components/sub-assemblies using Srijan portal. IOL has placed 101 Project sanction orders on Indian Manufacturers, under Make-II scheme of DAP-2020 and 8 RFPs/EOIs have also been published. IOL has 189 items in PIL1 and 47 items in PIL3 Lists, out of which 184 Items have already been indigenised. IOL has also sponsored 5 innovative technology projects under iDEX.

'Run For Unity' was conducted on 31 Oct 23 across all DPSUs, on the occasion of national Unity Day.

INDIAN ARMY

- **Operational Preparedness:** The Indian Army maintained high state of preparedness and ensured stability & dominance along all the frontiers including Line of Actual Control (LAC) and Line of Control (LC). Relentless Counter Terrorist operations were also carried out while maintaining high training standards and constantly reviewing emerging & future threats to national security.

- **Northern Borders.** As part of diplomatic and military efforts concerning ongoing standoff along the LAC, 20 rounds of Corps Commander Level Meetings and 14 related Working Mechanism for Consultation and Coordination (WMCC) Meetings have been held. Both sides have agreed to maintain the momentum of dialogue and negotiations through the relevant military and diplomatic mechanisms. Indian Army has exercised the established border mechanisms to maintain peace and tranquillity along the LAC in all sectors.
- **LoC & Counter-Terrorist Ops:** Post Directorate Generals Military Operation understanding of February 2021, situation along the Line of Control has significantly improved compared to pre-understanding violence levels. Relentless operations conducted in synergy with other agencies resulted in successful & incident-free conduct of international and national level events such as G-20 meetings and Amarnath Yatra with 4.45 Lakh yatris visiting the shrine. Jammu and Kashmir has recorded the arrival of more than two crore tourists up to November 2023, which is much beyond the number in year 2022. Synergised counter-terrorist operations also resulted in elimination of 34 terrorists and apprehension of four terrorists in the hinterland. 18 infiltration bids were eliminated on LC in which 36 terrorists were killed besides recovery of large war-like stores.
- **North East:** The balanced posture of firm & compassionate outlook by the Indian Army & Assam Rifles in militancy affected North Eastern part of the country is evident through both tangible & intangible outcomes. This is reflected by results in operations against militant groups, mainstreaming of militants and the critical decision of the Government of India to reduce areas under Armed Forces Special Powers Act (AFSPA-1958). Since January 01, 2023, synergised efforts by Army, Assam Rifles and State Police have resulted in neutralisation of three cadres, apprehension of 233 cadres, surrender by 186 cadres of various militant groups and recovery of 271 weapons of different types. Security Forces are also continuing with the earnest endeavour to reduce the drug menace in the region. Indian Army along with Assam Rifles, Police & Civil administration, have successfully recovered narcotics & contraband worth Rs 1,567.55 crore during the year in the hinterland as well as India-Myanmar Border.
- **Manipur:** Indian Army and Assam Rifles have played a key role in controlling the internal security situation in Manipur and saving precious lives, property and evacuating approximately 35,000 internally displaced population to safety. Security Forces have been assisting the civil administration and other security agencies with a neutral and transparent approach to restore peace and normalcy in the State.

Year of Transformation

- 2023 is the Year of Transformation for the Indian Army. The process of transformation hinges on the five pillars- 'Force Structuring & Optimisation', 'Modernisation & Technology Infusion', 'Systems, Processes & Functions', 'Human Resource Management' and 'Jointness & Integration'.

Force Restructuring & Optimisation.

- Efforts towards jointness and integration preceding Theaterisation are being made with renewed impetus.

- Reorganisation of Early Warfare (EW) and Electronic Intelligence units under EW Brigades is formalised. Raising of additional EW Battalions is under progress.
- Reorganisation of Surveillance and Target Acquisition (SATA) units is underway.
- Outsourcing of Non-Core Services is under progress to realign combat manpower for core tasks.

Modernisation & Technology Infusion: A roadmap has been put in place for Upgrades, New Acquisitions & infusion of Niche technology. The right balance between 'Conventional' and 'New' capabilities is being maintained. A focussed approach is being followed to ensure timely & pragmatic trials.

- **Conclusion of 85 Capital Contracts:** A total of 85 Capital Contracts worth Rs 12,343 crore have been concluded in current Financial Year. This will boost the Capability of Indian Army in the domain of mobilisation, firepower, communication/non communication, Intelligence, Surveillance & Reconnaissance (ISR) & Drone/Counter-Drone Systems.
- **Induction of Niche Technology through iDEX:** Four Projects worth Rs 70 crore have been contracted this year, thereby paving the way for the induction of Niche Tech in communication, ISR & stealth Technology. It is also a step towards providing impetus in developments favourable to defence eco system.
- **Exploiting 5G/6G and Artificial Intelligence:** Indian Army has collaborated with the Ministry of Electronics and Information Technology to develop advanced electronics and infrastructure, aligning with Digital India and Make in India initiatives. 5G laboratories have been established at various locations including Military College of Telecommunication Engineering (MCTE). In addition, Military grade 5G and 6G laboratories are being established at various locations. MCTE has been developed as a key Centre of Excellence for Artificial Intelligence.
- **Emergency Procurements:** The EP were utilised to augment capability along the Northern and Western Front besides catering for training aggregates. The equipment procured under the EP are being fully exploited by field formations to refine their operational philosophy, TTPs and maintenance support requirements. In Financial Years 2020-22, 68 projects, worth Rs 6,592 crore were procured while 73 projects, worth Rs 11,000 crore have been procured in the Financial Years 2022-24.
- **Impetus to Make in India:** Indian Army has given stimulus to Make in India initiatives and provided platforms to indigenous defence industries to showcase their capabilities to friendly foreign countries. Following efforts have been made: -

- A Mini Defence Expo was conducted in Tanzania in October 2023 during the visit of the COAS (19 Defence Industries participated).
- Defence Expo, Seminars and visit to Defence Industries were coordinated during multilateral engagements in India. 26 Indian defence Industries including start-ups participated in the equipment display exhibition conducted at Manekshaw Centre during IPACC in Sep 2023.
- Army-to-Army Staff Talks (AAST) are being conducted in Defence Industrial Hubs with the aim of showcasing the capabilities of indigenous Def Industries: -

- AAST with Vietnam was conducted in Pune in March 2023.
- AAST with Thailand was conducted in Secunderabad in September 2023.

System, Processes & Functions: The following has been achieved under the pillar of System, Processes & Functions:

- **Efforts have been focussed on Right-sizing and Ease of Doing Business:** Digital initiatives have been undertaken in a major way to effect improved efficiencies in domains of Operational Enablement.
- **National Logistics Policy & PM Gati Shakti National Master Plan:** The Indian Army has been an important partner in the Prime Minister Gati Shakti National Master Plan and formulation of NLP. Efforts have been made to align initiatives undertaken by the Indian Army to the national vision. 180 Officers have been trained on Integrated Government Online Training (iGOT) Karmayogi platform and additional training with BISAG-N is being planned. A Tri- Services Geographic Information System (GIS)-based Infrastructure Portal akin to PM Gati Shakti is being created under the aegis of Headquarters Integrated Defence Staff.
- **SPARSH:** As part of digitisation and making the benefits more accessible, SPARSH has been adopted by the new pensioners as approximately 95% of legacy pensioners have migrated to SPARSH. SPARSH is an internet-based fully automated project outsourced by CGDA for sanction, computation, revision and disbursement of pension. The objective of the project is 'Right Pension to Right Person at Right Time' through a single source i.e. PCDA(P) by delinking banks, Defence Pension Disbursing Offices and other pension disbursing agencies.

Human Resource Management:

- **Making Short Service Commission more attractive:** Given the global trends and rightsizing initiatives, the IA is attempting to make SSC more attractive. Draft Cabinet Note based on Tri-Services proposal to make SSC attractive has been prepared.
- **Women in Indian Army:** The Indian Army is completely committed towards promoting gender neutrality. Following have been the major achievements in this field:
 - The induction of Women Officers (WOs) in the Regiment of Artillery is under progress. 10 Women officers were commissioned in the Regiment of Artillery during 2023.
 - The process for induction of WOs in Remount and Veterinary Corps (RVC) commenced in March 2023. Four WOs have been inducted into RVC this year.
 - 30 Army Girl Cadets are under training in National Defence Academy.
 - Study on Induction of women as JCOs/ OR in Arms & Services is underway.
 - First Woman Officer got operationally deployed in Kumar Post, Siachen Glacier in January 2023.
- **Command by Women Officers:** The command of units by Women Officers has commenced. This has tremendous potential and all efforts are on to ensure that this opportunity is capitalised by

adequate guidance and support.

- **Participation by JCOs/NCOs in Foreign Courses:** As a new initiative, the participation of JCOs/ NCOs in foreign courses has been enhanced from erstwhile 2-3 vacancies to 13-14 vacancies now. The majority of these course vacancies are in the UK, Malaysia, Sri Lanka, Bangladesh, Nepal & Philippines. The focus has been on enhancing expertise and skills in Military Special Domain (Sniper, Jungle Warfare, Commando and Combat Training).
- **Agnipath Scheme.** First two batches (40,000) have completed their training and are under posting to allotted units. Agniveers (include 100 women) underwent training at 40 Regimental Centres & Training Centres in two groups. Training for 20,000 Agniveers of 3rd Batch commenced with effect from 1st November 23 and for 4th Batch will commence soon. The feedback of the first two batches is encouraging and the trainees have met the desired standards. To make Agniveers responsible citizens of the nation, apart from Personal Development Programme (PDP) basic foundation course and info tech has been included as part of Basic Military Training (BMT).
- **ECHS Network Expansion:** The ECHS has gained credibility with time and has grown both in size and stature with 30 Regional Centres and 433 Polyclinics pan India and 58 lakh beneficiaries, including Gorkha Domiciles for Nepal. Efforts are being made to enhance its efficacy and reach through the empanelment of more hospitals.
- **Veerangana Sewa Kendra:** VSK, operationalised in November 2022, was launched by IA as a proactive single window facility for info-dissemination, query response and grievances-redress for widows & Next of Kin. The project leverages digital technology in connecting various stakeholders on a common digital platform. The system provides Widows/ Next of Kin, multiple means for approaching VSK through tele call, SMS, WhatsApp, Post, e-mail and walk-ins to seek assistance. It has been a huge success.
- **Placements by Army Welfare Placement Organisation.** In the last five years, the Army Welfare Placement Organisation (AWPO) has successfully placed 1,439 officers, 15,332 JCOs & 74,982 Other Ranks in various education institutes, autonomous bodies and government/ semi-government organisations.
- **Jointness & Integration:** Jointness and integration was pursued by Indian Army in the right earnest in close coordination with Indian Air Force and Indian Navy.
- A Common Operational Planning Process has been initiated for synergised planning with operations.
- Cross-postings have commenced on a reciprocal basis.
- In Operational vacancies, 40 officers have been posted to Indian Air Force and Indian Navy establishments. 21 officers have been posted to Indian Air Force and 19 officers to Indian Navy billets.
- In Staff vacancies, two Brigadiers and eight Colonels have been posted to Indian Air Force & Indian Navy billets.
- In Instructional vacancies, nine officers are to be posted in Training Institute in the Indian Air Force (five) & Indian Navy (four).

- Cross-attachment of officers for a limited period with Station Headquarters and Command Headquarters of other services is being planned to understand the modalities of functioning of sister services.
- Common Annual Confidential Report for Major General and above rank officers have been instituted.
- Three Joint Logistic Nodes have been established and process to establish four more Nodes is under progress.
- Indian Army has offered sharing of seats for wards of Indian Air Force & Indian Navy in Indian Army Schools and Colleges.
- Initiatives for the development of Common Digital Maps & Geo-Ref System are underway.
- Process of establishing Joint Communication Structures has been initiated.
- Cross-utilisation of common station facilities is under progress. Process for common outsourcing is also being worked out in consultation with Indian Air Force & Indian Navy.

Defence Diplomacy

- **Cooperation activities:** In keeping with India's rising global stature in recent years, there has been a considerable increase in Defence Co-operation activities undertaken by the Indian Army. Accordingly, an increasing number of friendly countries have shown keen interest to engage with the Indian Army, which is the world's second-largest standing Army with extensive combat experience and exemplary training standards. As on date, Indian Army is engaging with 110 countries through defence cooperation activities.
- **Joint Exercises:** The Indian Army is participating in 39 exercises, out of which Indian Army is lead Service in 28 exercises. Keeping in mind the impetus on jointmanship and the impending theatre-isation, eight Indian Army lead exercises have been converted to Bi-Service & six to Tri-Services format.
- **IPACC, IPAMS & SELF:** Indian Army has undertaken efforts to enhance collective understanding of common challenges in Indo-Pacific Region, exchange ideas and development strong relationship built upon shared democratic values and growing convergences on bilateral, regional & global issues. Indian Army and US Army co-hosted the 13th Indo-Pacific Armies Chiefs Conference (IPACC), 47th Indo-Pacific Armies Management Seminar (IPAMS) and 9th Senior Enlisted Leaders Forum (SELF) in September. Thirty countries participated in the event and an unprecedented number of 18 countries were represented by Chiefs of their respective Armies and 12 countries were represented by Heads of Delegation.

Multilateral Engagements/ Activities: Indian Army has been playing a crucial role in promoting multilateralism. Some of the efforts undertaken in the past year include:

- Promote India's leadership for Global South and strategic Partnership with Africa.
- Conduct of Inaugural India- Africa Army Chiefs' Conclave (IACC) at Pune in Mar 2023 - participation by 31 countries.

- **Conduct of AFINDEX (2023)** themed on Humanitarian Mine Action & Peace Keeping Operations in Pune in March 2023 - 124 participants from 26 countries participated.

Shaping Strategic Environment: Indian Army is at the forefront in boosting defence diplomacy to shape the strategic environment. In the past one year, six high level visits were conducted to strategically important countries including Australia, Egypt, Bangladesh, UK, Tanzania and Republic of Korea. These visits have resulted in fruitful discussions and have provided an impetus to India's image. Bilateral meetings with senior leadership and military hierarchy of strategically important countries have assisted in pursuit of Defence Diplomacy objectives.

Reorganisation & Establishment of Additional Defence Wings: Aligning with the present strategic environment, reorganisation of Defence Wings has also been carried out. Post the completion of Study on Realignment of Defence Wings, four new Defence Wings are being establishment at Algeria, Ethiopia, Mozambique and Poland by end of 2024.

French Bastille Day Parade: Indian Army contingent led the Tri-Services marching contingent participating in the Bastille Day Parade 2023 at Paris in France. Contingent of Punjab Regiment along with band of Rajputana Rifles Centre participated in the event, which was witnessed by Prime Minister Shri Narendra Modi as the Chief Guest. This was the second representation of Indian Army in Bastille Day Parade after 2009.

Contribution in Nation Building

- **Mission Amrit Sarovar:** Indian Army is contributing towards the initiative of Mission Amrit Sarovar having created 450 ponds. 75 ponds are being created or resuscitated by each Regional Commands.
- **Adoption of Millets in Ration:** In consonance with declaration of 2023 as the International Year of Millets, Indian Army has taken measures to adopt millets in ration. Approval was accorded for issue of millet flour upto 25 percent (Bajra, Jowar & Ragi at 10:10:05 respectively) of Wheat Atta whole Meal/ Rice authorised in the existing scale of ration. Procurement has commenced and millets flour is now being issued to all ranks.
- **Vidyanjali Initiative:** 134 Army Public Schools have adopted at least one Government/ Government aided school in their vicinity that would be part of the mentor-mentee program. Total 160 schools have been adopted under this initiative. The areas in which assistance is being provided are as under:
 - Soft skill development including cross visit by teachers and volunteer parents.
 - Training of teachers, especially to develop foundation literacy and imbibe technology in teaching and learning processes.

- Exposure of staff and children of the adopted schools to various Army Welfare Education Society initiatives like Inclusive Education, Gifted Children Program, Building Scientific Temper (Atal Tinkering Labs, Space and Mathematics Laboratories) and Art Integration.
 - Joint participation in Sports, Debates and other Extra Co-curricular activities.
 - Exposure to Skill Integration, Project Based and Technology Aided Learning.
 - Share Best Practices and Hand Holding through use of Digital Resources.
- **Operation Dost**: Indian Army Field Hospital, comprising 99 persons including various Specialists and Paramedics, established a Disaster Relief Hospital at Iskenderun, Hatay Province, Turkey in February 2023. The hospital consisted of an Operation Theatre and Trauma Care Centre. The Specialists (Medical, Surgical, Anaesthetists, Ortho, Maxillofacial and Community Med) rendered medical assistance to earthquake victims. Beside this, a Woman Medical Officer was also sent to render medical care to female patients/ casualties. This HADR action by Indian Army earned huge positive sentiment enhancing our national image.
 - **HADR Operations**: Based on requisition received from civil administration, Indian Army deployed 107 columns (including 18 Engineer Task Forces) in 13 states of the country for Humanitarian Assistance & Disaster Relief till date in 2023. A total of 8,509 individuals were rescued in such operations. Details are as under:

<u>Ser No</u>	<u>Type of Aid</u>	<u>State</u>	<u>Columns Deployed</u>	<u>Civilian Rescued</u>	
(a)	Flood Relief Ops	Assam	02	160	
(b)		Uttarakhand	01	22	
(c)		West Bengal	01	69	
(d)		Maharashtra	01	36	
(e)		Himachal Pradesh	11	343	
(f)		Punjab	29	6989	
(g)		Haryana	05	324	
(h)		Gujarat	01	12	

(j)		J&K	Evacuation of 59 yatis		
(k)		Delhi	02	Asst at WHO Building & ITO Barrage	
(l)	Rescue of civilians trapped in debris of collapsed multi storey buildings, Lucknow	Uttar Pradesh	01	14	
(m)	Avalanche rescue ops	Sikkim	01	20	
(n)	Assistance to stranded tourists at Chungthang	Sikkim	02	393	
(o)	Cyclone Biporjoy	Gujarat	45	Restoration of essential service	
(p)	Cyclone Michaung	Tamil Nadu	02	232	

- **Project Udbhav:** A joint Indian Army and United Service Institution (USI) project for Study on Ancient Indian Strategy Thought & Culture is underway. The public launch of the event was carried out on 21st October 23. Numerous seminars, panel discussion and research presentations are being conducted as part of the Project. The Project will culminate with a national level event in January 2024 which will also include the release of numerous publications relevant to the topic.

INDIAN NAVY

- Indian Navy (*IN*) has constantly strived towards achieving ‘Self-Reliance through Indigenisation’ and synchronised the efforts in tandem with various flagship schemes of the Government viz., ‘Make’, ‘Technology Development Fund’ and ‘Innovation for Defence Excellence’, in addition to

procurements under the 'Revenue' route. *IN* has been the torch bearer amongst the three Services to leverage the distinct advantages of Govt schemes and has engaged actively with industry partners including MSMEs and Start-ups, to encourage their active participation in our Indigenisation Programmes.

- a. **Make Scheme:** *IN* is pursuing a total of 38 Make projects *iaw* Chapter III of DAP 2020. Presently, 26 projects are being steered under Make-II category, 10 projects under Make I category and two projects under Make III Category. In addition, Eight Make II joint projects are being steered with IA and IAF as lead services. Under Make II, AoN has been accorded for 12 projects. Prototype development contracts have been concluded for nine projects (for a cost of Rs 400.84 Cr) and 03 project are at EoI stage. Remaining 14 projects are under various stages of feasibility study/ AIP stage. Under Make I, AoN has been accorded for 02 projects, remaining 08 projects are under various stages of feasibility study/ AIP stage. Under Make III, there are two projects and presently both are at feasibility study stage.
- b. **Technology Development Fund:** In order to introduce cutting edge technology on board *IN* platforms, 25 projects are being pursued under the 'Technology Development Fund' scheme. Contract has been concluded for 10 projects at a cost of Rs 34.92 Cr. One project is at CNC stage, EOI evaluation is in progress for eight projects, and six projects are at pre-AoN stage.
- c. **Joint iDEX Challenges:** Exchange of various iDEX proposals by both India and US startups under 'India-US Defence Acceleration Ecosystem (*INDUS-X*)' initiative was commenced in July 2023. Two proposals pertaining to maritime domain were launched by Raksha Mantri in presence of US Ambassador to India Mr Eric Garcetti during the NIIO Seminar.
- d. **iDEX Scheme:** *IN* is progressing 41 problem statements under Defence India Startup Challenge (DISC) and Open Challenge (OC) categories through 59 startups.
- e. **Induction of Niche Technologies:** A wide range of niche technologies are being inducted to enhance long range precision attack capabilities. Loitering Munitions in land and sea based versions are being inducted to enhance the targeting capabilities. Additionally, containerised missile systems are being inducted to enhance the operational capability and to augment flexibility in operations.
- f. **'Swavlamban 2023':** Swavlamban 23 seminar was scheduled at Bharat Mandapa, Pragati Maidan from October 04 to 05, 2023. Day 2 of the seminar focused on interactive session on indigenisation and armament. A dedicated interaction session was scheduled in Session II on the theme, 'Discussion on Swavlamban 2.0 – Indian Navy's Indigenisation Roadmap'. The target audience was primarily manufacturer/ import/ export/ service industry in Defence sector. Nearly 300 industry partners participated in the aforementioned session.
- g. **Indigenisation:** Navy has transformed from a 'Buyers Navy' into a 'Builders Navy', with aircraft carrier, destroyers, stealth frigates, corvettes, submarines and other war vessels being constructed in our country. Today, of the 66 ships under construction 64 are being built in India. Further, AoN has been accorded for 24 ships and submarines that are all planned to be constructed in Indian Shipyards. At present, *IN* has achieved approximately 90% indigenisation in the Float segment, 60% in the Move segment, and 50% in the Fight segment. Indian Navy is committed to becoming a fully *Aatmanirbhar* Navy by 2047. As on date, we are on track towards this goal, and 80% of the

IN Capital Budget in CFY 2023-24 has been earmarked for domestic procurements in support of GoI vision of 'Aatmanirbhar Bharat'.

- h. **New Shipbuilding contracts in 2023**: Five shipbuilding contracts at a total value of Rs 41,742.37 Cr have been concluded with Indian shipyards. Conclusion of five shipbuilding contracts within span of six months is testimony to the importance being accorded to the Indian Navy by the Govt of India. Construction of 25 ships will generate a total employment of 346.30 lakh man-days over the next one decade and engage numerous MSMEs in the shipbuilding activity.

The ships/submarines which have been commissioned this year, as also the status of shipbuilding projects underway are highlighted below:-

Commissioning/ Delivery

- a. INS Vagir, fifth Submarine of Kalvari class, was commissioned on January 23, 2023 by the Chief of the Naval Staff.
- b. Maldivian CG Ship *Huravee*, a *Trinkat* Class Fast Attack Craft was returned to India by Maldives post handing over INS Tarmugli to Govt. of Maldives in May 2023. The ship, post refit, was re-commissioned into Indian Navy as INS Tarmugli on December 14, 2023.
- c. *Imphal*, the third Ship of Project-15B successfully completed her Sea Trials followed by Final Machinery Trials on August 25, 2023. The ship was delivered to the Indian Navy on October 20, 2023 by M/s MDL, Mumbai. The ship is planned to be commissioned on 26 December 2023.
- d. *Sandhayak* (Yard 3025), the first of the four Survey Vessel (Large) ships was delivered to Indian Navy by M/s GRSE on December 04, 2023. The ship would be commissioned in January 2024.

Launch of Ships

- a. The third GRSE ship of Project P17A Frigates, *Vindhyagiri* (Yard 3024), was launched on Aug 17, 2023 at GRSE, Kolkata, by the President of India Smt Droupadi Murmu.
- b. The fourth ship of Survey Vessel Large, i.e. *Sanshodhak* (Yard 3028) was launched on June 13, 2023 at M/s L&T Kattupalli by Chief Hydrographer to GoI.
- c. Two ASW Shallow Water Craft (ASW SWC) namely Androth (Yard 3035) and Anjadip (Yard 3030) were launched on March 21 and June 13, 2023 respectively at GRSE, Kolkata. Three more ASW SWC namely Mahe (Yard 523), Malvan (Yard 524) and Magrol (Yard 525) were concurrently launched on November 30, 2023 at CSL, Kochi.
- d. The last of the seven P17A ships, i.e. *Mahendragiri* (Yard 12654) was launched on September 01, 2023 at M/s MDL, Mumbai. The Vice President of India was the Chief Guest for the event.
- e. 1st Diving Support Craft A-20 (Yard-325) was launched on August 31, 2023 at M/s Titagarh Rail Systems Ltd, Kolkata.

- **Initial Operational Clearance of Indigenous Carrier, INS Vikrant:** Successful maiden landing of LCA (Navy) and MIG-29K aircraft was achieved onboard INS Vikrant as part of Aviation Integration trials on 06 Feb 23. Maiden day landing of indigenous LCA (Navy) demonstrated 'Aatmanirbharta' in India's capability to design, develop, construct and operate indigenous Aircraft Carrier with indigenous Fighter Aircraft. INS Vikrant completed Initial Operational Clearance (IOC) on May 31, 2023. With the IOC, the ship has proven the Aviation Facilities Complex, achieved day and night landing of MiG-29K, completed landing trials of all helicopters in the Naval inventory.

Gender Neutral Force

IN has taken remarkable steps for becoming a true gender-neutral and inclusive force, in letter and spirit. It has commenced the induction of women into all branches. Women have been appointed onboard warships commencing December 2020. In the last two decades, newer ships have been inducted into the Navy that cater for the gender-specific needs of women. Accordingly, towards becoming a gender-neutral and inclusive force, by respecting and facilitating gender-specific needs, all avenues for career progression are now available for women in the IN. Key highlights in this regard are as follows:

- a. **Induction of Women:** IN has commenced induction of women into all branches wef June 2023. With regards to NDA, entry of women cadets was commenced wef June 2022 and three vacancies were allocated to IN. Commencing Jan 24 batch, the number of vacancies for women cadets at NDA have been increased from three to 12. At Indian Naval Academy (INA), women cadets are now eligible to join through '10+2 B Tech' entry scheme. Applications for the same have been received and their training would commence wef January 2024. Also, women induction through 'UPSC/ NDA Entry' into INA would commence wef June 2024.
- b. **Permanent Commission to Women Officers:** SSC women officers in the Indian Navy are eligible for consideration for grant of Permanent Commission. As on date, 63 women officers (excluding Medical and Dental officers) have been granted PC.
- c. **Women Agniveers:** The first batch of Agniveers comprising 272 women candidates have completed their basic training at INS Chilka. Further, the interest of women candidates towards joining Indian Navy as Agniveers has been growing and a total of 454 women have been recruited in the second batch, who are presently undergoing training at INS Chilka. After the commencement of the training of the third Agniveer batch, more than 1000 women Agniveers have been inducted into the Navy.
- d. **Appointment to Frontline Combat Platforms:** Women officers of all seagoing specialisations are being appointed onboard warships at par with male officers. Further, in a historic move, IN has allowed women in the Navy to opt for MARCOS in a step towards opening all cadres in the IN for women. One Women Officer has also been appointed as the Commanding Officer, for the first time, of warship INS Trinkat.
- e. **Naval Air Operations (NAO) Officers on Helicopters:** Until 2019, women officers were being commissioned as Pilots and NAOO only for shore based aircraft. However, in order to employ women at par with male officers, women officers have also been streamed as specialist NAOO into helicopters commencing 2020, wherein they will operate from shipborne flights.

- f. **Provost Specialisation:** Commencing 2020, Provost Specialisation has been opened up for women officers and the first woman Provost Officer has joined the specialisation in March 2021 after successful completion of At- Arms course.
- g. **RPA Stream:** Women officers can join the Remotely Piloted Aircraft (RPA) stream and the first woman officer joined RPA squadron in March 2021.
- h. **Overseas Assignments:** Woman NAO officer are being deputed overseas as part of Dornier aircrew. Though the aircrew is being rotated after one year, at least one women officer has continued to figure in the selection merit. In addition, women officers are also deputed abroad for shorter durations as part of Mobile Training Teams and other foreign cooperation engagements.
- a. **Participation Outside Navy:** Women officers from IN participated in the following activities/ forums/ discussion panels:
 - Representation by five officers in News X panel discussion.
 - Participation by one officer in discussion on Women, Peace and Security in Peacekeeping Operations at USI, New Delhi.
 - Felicitation of one officer by CNBC TV 18 and two officers by India TV on the occasion of International Women's Day.
 - Felicitation of two officers during the International Women's Day awards.
 - Participation of 10 women officers during G20 discussions.
- **Adopting Gender-Neutral Language:** An institutional policy has been issued to adopt gender-neutral language in all verbal and non-verbal correspondence in the Service so as to weed out use of gender biased stereotypes. The adoption of gender-neutral language in all forms of correspondence is a vital step in IN's evolution process by reaffirming commitment to gender equality and inclusivity.

Operational Deployments

- *IN* undertook Mission Based Deployments in Areas of Interest in the Indian Ocean Region (IOR) to safeguard national maritime interests and maintain continuous/ near continuous presence in areas of significant maritime importance in the IOR. These deployments were in consonance with the Prime Minister's vision of 'Security And Growth for All in the Region (SAGAR)'. IN ships and aircraft were regularly deployed in the Gulf of Oman/ Persian Gulf, Gulf of Aden/ Red Sea, South and Central IOR, off Sunda Strait, Andaman Sea/ approaches to Malacca Strait and Northern Bay of Bengal. These deployments facilitated enhanced Maritime Domain Awareness, swift Humanitarian Assistance and Disaster Relief (HADR) assistance to IOR littorals, security to Indian and international maritime community and operational engagements with friendly navies through capability development and capacity building programmes.
- Anti-Piracy Patrol in Gulf of Aden commenced in 2008 to ensure safe passage of IFMVs. 107 *IN* ships have been deployed in the Gulf of Aden since commencement of patrols in 2008.

- Maritime Security Operation Code-named Op Sankalp in the Gulf Region commenced in 2019 to ensure safe passage of IFMVs transiting through the Strait of Hormuz. Since June 2019, *IN* has deployed 41 warships and escorted approximately 624 Lakh Tons of cargo onboard 503 IFMVs.
- In 2023, Indian Navy, has intercepted huge heroin shipments in the Arabian Sea. On May 10, 2023 an Anti-Narcotics Operation (ANO) lead to seizure of 2500 kg of contraband worth Rs. 12,000 Cr. Since April 2021, 12 such operations have been undertaken by the *IN*. Narcotics worth Rs. 29000 Cr (approx. 3.5 Bn Dollars) has been seized over six operations in last three years.
- P8I aircraft from INS Hansa, Goa was deployed in Northern Sector for surveillance on various occasions in support of Army/ Air Force tasking. Such deployments ensure seamless operability between all three forces and encourages jointmanship.
- A Naval Special Warfare exercise off Carnic, was conducted on September 21, 2023 which included twin Air Droppable Rigid Hull Inflatable Boats (ADR) drop in tandem with Combat Free Fall (CFF).
- The *IN* undertook its maiden operations with both the carriers in company off Goa in Early June 2023. The Western Naval Command enabled the embarkation of the largest number of carrier-borne aircraft, which included 20 helicopters of various types. These included the indigenously manufactured ALH MK III helicopters and the recently inducted, MH 60R. The event was a potent demonstration of *IN's* fast-growing blue water capability and gained considerable attention from national and international media.
- *IN* Submarine *Vagir*, was deployed for Long Range Deployment to Fremantle, Australia *wef* July 24, 2023. The submarine crew interacted with the Australian Naval representatives during OTRs at Fremantle (August 20 – 23, 2023 and August 25 – 28, 2023). The submarine returned to Visakhapatnam in early October 2023.
- The Test Vehicle Abort mission (TV-D1) was launched on October 21, 2023 from Satish Dhavan Space Centre (SDSC), Shriharikota. The aim of TV-D1 launch was to validate the efficiency of Crew Escape System (CES) during an emergency abort condition while the crew module is within atmospheric limits. Post launch and successful ejection, recovery of Crew Module and recording of the launch (as required by ISRO) was successfully undertaken by *IN*. INS Shakti recovered the crew module which was later disembarked at Chennai. The video of crew module decent phase was also live streamed to SDSC. Assets deployed for the mission included three *IN* ships (*Shakti*, *Gharial* and *Battimalv*), SCI Saraswati, one HALE UAV and a Chetak Helicopter.
- For International Day of Yoga 2023, partnered with Ministry of AYUSH, under the GoI initiative “Ocean Ring of Yoga” (symbolizing unity and solidarity) and Min of External Affairs, *IN* deployed nearly 3,500 Naval personnel onboard 19 Indian Naval ships, who travelled over 35,000 Km as ambassadors of Yoga in both National and International waters. This includes over 2400 personnel on 11 *IN* ships in foreign ports/ international waters.

S No	Date	Ship	Country
a.	June 16 – 19, 2023	Shivalik	Jakarta, Indonesia

S No	Date	Ship	Country
b.	June 19 – 22, 2023	Trishul	Toamasina, Madagascar
c.	June 19 – 22, 2023	Vagir	Colombo, Sri Lanka
d.	June 19 – 22, 2023	Tarkash	Muscat, Oman
e.	June 19 – 22, 2023	Kiltan	Chattogram, Bangladesh
f.	June 21 – 24, 2023	Deepak	Safaga, Egypt
g.	June 20 – 22, 2023	Chennai	Safaga, Egypt
h.	June 20 – 22, 2023	Brahmaputra	Dubai, UAE
a.	June 20 – 22, 2023	Sumitra	Phuket, Thailand
b.	June 20 – 23, 2023	Sunayna	Mombassa, Kenya
c.	June 20, 2023	Saryu	MALDEP

- *IN's* Theatre Readiness Operational Level Exercise (TROPEX), a major biennial exercise, was conducted across the Indian Ocean Region from January to February, 2023. Intense operations by more than 150 warships, submarines and aircraft, with significant participation of other Services, were conducted. The exercise culminated with a debrief at Kochi.
- Tri-Services Amphibious Exercise (AMPHEX 23) was conducted at Naval Enclave Kakinada, with Visakhapatnam as the mounting base. This edition of the exercise was the largest in terms of force levels from Indian Army, with over 800 troops (being the maximum participation till date). Further, loading of large number of A and B type vehicles was also undertaken, which was the highest thus far in any AMPHEX.
- *IN* Sailing Vessel *Tarini* was deployed for Open Sea Sailing Expedition *wef* 22 Nov 22 with a crew of five (including 02 Women Officers). *Tarini* successfully completed a 17,000 Nm trans-ocean inter-continental voyage to South Africa and South America (Cape to Rio Race). A grand Flag-in ceremony for the crew of *INSV Tarini* was conducted at *INS Mandovi* on May 23, 2023, with Shri Pramod Sawant, Chief Minister of Goa, as the Chief Guest. Smt Smriti Irani, the Union Minister of Women and Child Welfare, accompanied by CNS, also graced the occasion.

Exercises with Friendly Countries

- *IN* ships Kolkata, Sahyadri and P8I participated in the 31st edition of Exercise MALABAR 23 scheduled at/off Sydney, Australia from August 11 to 23, 2023, along with ships and aircraft from US Navy, JMSDF and RAN. MALABAR 23 was conducted in two phases *viz* the Harbour Phase (August 11-15, 2023) encompassing cross deck visit, pre-sail conferences and delegation visits, followed by the Sea Phase (August 16-21, 2023) comprising various surface, sub-surface and air exercises involving units from all participating countries. The ships also participated in the 77th Independence Day Celebrations at Sydney, Australia.
- *IN* ships Chennai and Teg, along with aircraft (MiG 29K, P8I, Dornier, ALH and Sea King), participated in the 21st edition of Exercise Varuna - 23 with French Navy Carrier Strike Group (comprising Charles De Gaulle, Forbin, Provence and Marne), alongwith maritime patrol aircraft Atlantique 2 off Goa from January 15 to 20, 2023. Subsequently, the FN ships Charles De Gaulle, Forbin and Provence entered Goa, while Marne entered Mumbai for the Harbour Phase of the Exercise. French aircraft Atlantique, A330 MRTT and A400M operated from INS Hansa, Goa.
- *IN* ships Sahyadri and Jyoti participated in the 3rd edition of the Multilateral Exercise La Perouse conducted in Southern Bay of Bengal from March 13 to 14, 2023. Eight warships from six countries (Australia, India, France, Japan, UK and USA) participated in the exercise.
- *Sea Dragon* is a multilateral Air ASW exercise conducted by US Navy. *IN* P8I aircraft participated in the 5th edition of Anti-Submarine Warfare (ASW) Theatre Exercise Sea Dragon 23 conducted at Guam, USA from March 15 to 29, 2023. Maritime Patrol Aircraft (MPA) from four countries (USA, Japan, Canada and South Korea) and USS Hampton (Los Angeles Class SSN) participated in the exercise.
- *IN* Ship Trishul and Dornier aircraft participated in the annual bilateral maritime exercise *Konkan* 23 with Royal Navy ship HMS Lancaster off Mumbai from March 20 to 22, 2023. Both ships undertook multiple maritime drills to enhance interoperability and imbibe best practices. The exercises covered all domains of maritime operations *viz* air, surface and sub-surface.
- *IN* ships Delhi and Satpura, alongwith P8I aircraft, participated in the maiden ASEAN India Maritime Exercise (AIME) and International Maritime Defence Exhibition (IMDEX) conducted at Singapore from May 02 to 08, 2023.
- INS Sumedha participated in Multilateral Tri-Services Exercise Bright Star 23 conducted in the Mediterranean Sea from 06 to 13 Sep 23. The Exercise was conducted in two phases, Harbour phase and Sea phase.
- *IN* and USN have been participating in a combined Salvage exercise since 2005. Seventh edition of *IN* - USN Diving, Salvage and EOD exercise (SALVEX) was conducted from June 26 to July 06, 2023 at Kochi. For the duration of the exercise, USNS Salvor (T-ARS 52) made port call at Kochi.
- *IN* Ships Savitri and Kiltan participated in India - Sri Lanka bilateral exercise SLINEX 23 with Sri Lankan Navy ships SLNS Vijaybahu and Samudura at/ off Colombo, Sri Lanka from April 03 to 08, 2023. *IN* SLN SF exercise was also conducted as part of SLINEX 23 from April 03 to 06, 2023 at Colombo, Sri Lanka.

- INS Kavaratti, along with one Dornier aircraft participated in the 4th edition of Exercise Samudra Shakti 23 conducted at Batam, Indonesia from May 15 to 19, 2023.
- *IN* ships Tarkash and Subhadra, alongwith one Dornier aircraft, participated in bilateral exercise Al-Mohed Al-Hindi conducted at Al Jubail, Saudi Arabia, from May 21 to 25, 2023. Royal Saudi Naval Forces (RSNF) ships Badr, Abdul Aziz and two HIS-32 FACs, one Maritime Patrol Aircraft (MPA), MH60R helicopter and Karayel UAV participated in the exercise.
- INS Tarkash participated in the maiden India - France - UAE trilateral exercise with FS Surcouf and Maritime Patrol Aircraft ex-UAE in Gulf of Oman from June 06 to 08, 2023.
- Maiden India - France - UAE trilateral PASSEX was conducted from June 07 to 08, 2023, off Gulf of Oman. INS Tarkash, FS Surcouf and UAE Navy helicopter (Panther) participated in the exercise.
- INS Satpura participated in the fourth edition of Multilateral Naval Exercise KOMODO - 23 conducted at Makassar, Indonesia, from June 04 to 08, 2023. The exercise saw the participation of navies from 36 countries and was conducted between Borneo and Sulawesi.
- The 5th edition of AUSINDEX was conducted from August 22 to 25, 2023 at/ off Sydney, Australia. *IN* Ships Sahyadri and Kolkata participated in the exercise, along with HMAS Choules and HMAS Brisbane from RAN. In addition to the ships and their integral helos, the exercise also witnessed participation of fighters and Maritime Patrol Aircraft (MPA) from Royal Australian Air Force (RAAF).
- *IN* ships Ranvijay and Kavaratti, alongwith submarine Sindhukesari and P8I aircraft, participated in the 30th edition of SIMBEX-23, with Singapore Navy ships Stalwart, Valour, submarine Invincible and Fokker aircraft at/ off Singapore from September 20 to 27, 2023.

Assistance to Foreign Govts

- INS Tarmugli was handed over to Maldives on May 02, 2023 towards capability building. The ship was re-commissioned into Maldivian Navy as MCGS Huravee. The handing over ceremony was attended by RM. Further one Landing Craft Assault (LCA) was also handed over to Maldives.
- INS Kirpan was decommissioned and handed over to Vietnam People's Navy (VPN) on July 22, 2023 at Cam Ranh, Vietnam in the presence of CNS and RAdm Pham Manh Hung, Deputy C-in-C & Chief of Staff, VPN. CNS also visited VPN Headquarters at Hai Phong for bilateral interaction with Vice Adm Tran Thanh Nghiem, C-in-C, VPN. The transfer of ex-*Kirpan* symbolises the status of *IN* as the 'Preferred Security Partner' in the IOR and would be a catalyst for enhancing the existing bilateral relations between the two navies.
- Towards providing assistance to friendly foreign nations, *IN* is undertaking refits of MCGS Victory from Mauritius. Further, INS Sharda undertook towing operation to tow MCGS Victory from Port Louis, Mauritius to Visakhapatnam.
- A Tri-Services Scoping Delegation was deputed to Suriname in Jul 23 to identify and evaluate the requirement of Surinamese Armed Forces. On the Naval front, technical assistance to undertake repairs of 06xPatrol Craft was highlighted by the Suriname side and accordingly, suitable technical team is planned to be deputed.

- A five member *IN* Technical Team was deputed to Sri Lanka in February 2023 to assess the existing Trials Team infrastructure of Sri Lankan Navy (*SLN*) and indicate measures in setting-up of Trials Unit of *SLN* akin to *IN* units. As a follow-up of the visit, *IN* is conducting customised courses for *SLN* in India, as per the request of *SLN*. Further, spares worth Rs. 1.7 Cr were gifted to *SLN*, towards ensuring optimal availability of GoI gifted ships.
- Indian Navy has progressed WSIE agreements with 25 countries and one multinational construct, till date. While such agreements with several other friendly foreign countries are being progressed, a WSIE agreement was concluded with Tanzania on October 09, 2023.
- *IN* ships Tir, Sujata and CGS Sarathi as part of 1st Training Squadron, whilst on overseas deployment, were utilised to provide assistance to foreign countries besides enhancing foreign cooperation as follows:-
 - a. Assistance to Mauritian Coast Guard towards removal of pollutants from a grounded fishing vessel on 09/10 March, 2023.
 - b. Joint EEZ surveillance off Mauritius (March 08 - 10 and March 14 – 16, 2023) and Mozambique (March 21-23, 2023).
 - c. Trans-shipment of two Dornier engines from Seychelles (Port Victoria) to India for maintenance/repairs at HAL, Bengaluru. Critical spares were handed over to Seychelles Coast Guard, in addition to foreign cooperation activities at Madagascar.

HADR & SAR operations

- ‘Operation Kaveri’ was executed towards evacuating Indian nationals from Sudan owing to military clashes between Sudanese Armed Forces (SAF) and Rapid Support Force (RSF). In order to contribute to the national effort for evacuating Indian nationals from Sudan, three mission deployed *IN* ships viz *Teg*, *Tarkash* and *Sumedha*, with HADR items and medical teams, were diverted to Red Sea. In a challenging mission, in the absence of any support infrastructure ashore, *Sumedha*, the first ship to arrive, valiantly entered the warzone and undertook Non-Combatant Evacuation Operations. This action showcased Indian Navy's maritime prowess to international milieu by being the first Navy to evacuate citizens from alongside, setting a precedence. Thereafter, various Multi National Forces including China, France, USA and UK also undertook alongside evacuation. *IN* also provided security cover by MARCOS during maiden landing of C 130 aircraft at Port Sudan airfield on April 25, 2023. A total of 1490 Indian nationals were evacuated by three *IN* Ships.
- In the aftermath of devastation caused by Severe Cyclonic Storm Mocha off Sittwe, Myanmar, on May 14, 2023, India launched Operation Karuna, as part of Mission SAGAR, to provide Humanitarian Assistance and Disaster Relief (HADR) material to Myanmar. Four *IN* ships namely *Shivalik*, *Kamorta*, *Savitri* and *Gharial*, were deployed to Yangon, Myanmar for transshipment of HADR items from May 18 to 20, 2023. The operation involved loading of Portable Containerised Medical Facility (PCMF), 10 HADR bricks, medications and a highly specialised team comprising Medical Officers, Specialist Officers and Nursing Staff. Apart from provision of immediate healthcare, the *IN* teams also organised and conducted lectures and exercises for trauma care, basic life support, first aid and transportation of patients.

- P8I aircraft was launched on a Benign mission on May 17 and 18, 2023 for search of Chinese fishing vessel Lu Peng Yuan Yu 028. P8I sighted the capsized CFV *Lu Peng Yuan Yu* 028 and a life raft. The positions were relayed to PLA(N) 44th APEF operating in the area. This was the first occasion in which an *IN* aircraft provided SAR assistance to a Chinese vessel. This has reaffirmed *IN*'s role as the first responder to crisis and Preferred Security Partner in the Indian Ocean Region.
- On March 02, 2023, a major fire broke out at the solid waste dumping yard in Brahmapuram, Kochi (21 Km from Naval Base, INS Venduruthy), which left residents suffocated due to toxic fumes. Based on the request from civil administration, *IN* assisted the local authorities in firefighting effort from March 02 to 14, 2023 by positioning *IN* firefighting teams, use of helicopters for Large Area Aerial Liquid Dispersal (LAALDE) operations and aerial surveillance.
- Based on a request from civil authorities, diving assistance was provided for search and recovery of fishermen in a sunken boat off Kanyakumari from October 05 to 07, 2023. INS Jamuna was deployed to undertake a search with her integral equipment, and after extensive search, the fishing vessel was detected. In a coordinated operation, INS Nireekshak conducted diving operations at a depth of 60 m and recovered mortal remains of one fisherman from the sunken boat, which was handed over to the locals.
- On July 10, 2023, based on request from District Administration, *IN* team of five divers was deployed for rendering SAR assistance off Muthala Pozhi Bridge, Trivandrum (approximately 190 Km South of Kochi), where a fishing vessel (with 04 personnel onboard) was reported sunk. Aerial search by *IN* Dornier ex- Garuda was also undertaken on Jul 11, 2023. The *IN* divers recovered mortal remains of two personnel from the river. Further, on Jul 17, 2023, an *IN* unit mission-deployed in the Bay of Bengal rescued and towed 03 Fishing Vessels (36 fishermen) from approximately 100 nm East of Chennai. The FVs were also taken under tow by the *IN* unit. The ship along with three Fishing Vessels arrived at Chennai PM Jul 28, 2023.
- On March 21, 2023, *IN* Ship Karuva whilst forward deployed near Indo-Pak IMBL received distress message regarding extensive damage and consequent flooding in the Engine Room compartment of Indian Fishing Vessel (IFV) Nilkanth. The ship responded swiftly to the distress call and arrived at the scene. Technical assistance was rendered by the ship to arrest the flooding and make the boat seaworthy and the distressed boat was later towed safely to harbour by another fishing vessel.

Other Major Events

- INS Dronacharya was awarded the President's Colour on March 16, 2023 by President Smt Droupadi Murmu, in recognition of its yeoman service to the Navy and the Nation.
- The President visited INS Vikrant on March 16, 2023.
- Vice President Shri Jagdeep Dhankar visited Eastern Naval Command on October 28, 2023. The Vice President reviewed a Ceremonial Guard of Honour at INS Dega and planted a sapling at the premises of Headquarters of ENC. He was also conducted in the harbor for familiarisation and briefed on the facilities at the Naval Dockyard.
- As part of Navy Day celebrations, an Operational Demo by frontline Naval ships/aircraft to demonstrate the credible Naval power and preparedness of the Indian Navy to deal with maritime

threats and challenges in the region was conducted at Sindhudurg, Maharashtra on December 04, 2023. The demo was conducted in consonance with the Government policy to celebrate respective Service Days of each Service in various cities apart from Delhi. Prime Minister Shri Narendra Modi graced the occasion.

- Raksha Mantri Shri Rajnath Singh reviewed the operational capabilities of the Indian Navy during the Naval Commanders' Conference held aboard India's first Indigenous Aircraft Carrier INS Vikrant in March. He interacted with the Naval Commanders and witnessed the operational demonstrations at sea, highlighting the Navy's capability to undertake multi-dimensional missions towards safeguarding the maritime interests of the country.
- In June, the Raksha Mantri visited the Survey ships at Kochi on the occasion of World Hydrography Day. On the 9th International Day of Yoga on June 21, 2023, the Raksha Mantri performed Yoga onboard Vikrant alongside Naval personnel.

Sports/Awards

- 15 *IN* sportsmen and two officials, the largest *IN* contingent in Asian Games ever, represented the country in Asian Games 2023 held from September 23 to October 08, 2023 at Hangzhou, China. The details of medal winners are as follows:-

<u>Ser</u>	<u>Name, Rank & P.No</u>	<u>Discipline</u>	<u>Remarks</u>
a.	MD Anas, CPO (RP), 242454-H	Athletics	1 Gold & 1 Silver Medal
b.	MD Ajmal, AG PO (GW), 256514-N	Athletics	1 Gold & 1 Silver Medal
c.	TPS Toor, CPO (PT), 195225-W	Athletics	Gold Medal
d.	Parminder Singh, AG PO (PT), 195244-N	Rowing	Bronze Medal
e.	Satnam Singh, AG PO (UW), 256518-Y		Bronze Medal

- Other major sports achievements during the year are tabulated below.

<u>Ser</u>	<u>Event</u>	<u>Date and Venue</u>	<u>Name</u>	<u>Rank</u>	<u>Remarks</u>
a.	Asian Junior U-23 Canoe Sprint and 3rd Asian Para - Canoe Championship 2023.	26 - 30 Apr 23 at Samarkand, Uzbekistan.	PH Gyaneshwar Singh	LOG II (STD)	Bronze
			N Ribason Singh	SSR/UT	Gold
b.	U-23 Asian Senior Wrestling Championship 2023.	14 - 18 Jun 23 at Bishkek, Kyrgyzstan.	Shubham	PO (US)	Bronze
c.	11th Asian Kabaddi Championship 2023.	25 Jun - 01 Jul 23 at Busan, Republic of Korea.	Surjeet	MCPO II (GW)	Gold
d.	25th Asian Athletics Championship 2023.	12 - 16 Jul 23 at Bangkok, Thailand.	Tajinderpal Singh Toor	CPO(PT)	Gold
			Vikash Singh	PO LOG (F &A)	Bronze
			MD Ajmal	Ag PO (GW)	Silver
e.	Commonwealth Weightlifting Championship 2023.	11 - 16 Jul 23 at Greater Noida, UP.	Lovepreet Singh	PO COM (TEL)	Silver
f.	U20 World Wrestling Championship 2023.	14 - 20 Aug 23 at Jordan, Amman, City.	Jaideep	COM II (TEL)	Bronze
g.	ION Cornianu and Iadislau Simon International Wrestling Tournament	18 - 20 Aug 23 at Romania.	Neeraj	PO (PT)	Bronze

<u>Ser</u>	<u>Event</u>	<u>Date and Venue</u>	<u>Name</u>	<u>Rank</u>	<u>Remarks</u>
h.	53rd ISSF World Championship 2023.	12 Aug - 01 Sep 23 at Baku, Azerbaijan	Niraj Kumar	PO LOG (MAT)	Gold

- Mohit, PO(GW) of the *IN* Polo & Equestrian Contingent, Delhi, was the Team Captain of the Indian Tent Pegging team, which won the Bronze (among nine participating countries) in the World Championship in August 2023, organised in South Africa under the aegis of International Tent Pegging Federation (ITPF). The sailor had also participated in the pre-cursor championship held in Moscow in July 2023 under the aegis of ITPF and was declared the 'Best Individual Tent Pegger'.
- The overall medal tally of Naval sportsmen in International and National events for the year 2023 is as follows: -

Event	Players Participated	Gold	Silver	Bronze
International	83	12	06	10
National	117	25	09	17

INDIAN AIR FORCE

'Aatmanirbharta'

The following measures have been instituted to support indigenisation of spares and systems:

- **Positive Indigenisation List**: In pursuance of India's endeavor for self-reliance, Ministry of Defence is promulgating 'Positive Indigenisation Lists' at periodic intervals. The fifth PIL was released in October with 98 items, out of which 13 pertain to IAF.
- **Srijan Defence Web Portal**: A list of 630 spares has been uploaded on www.srijandefence.gov.in website towards seeking feasibility for indigenous development. 78 companies have shown interest so far.
- **Inter Governmental Agreement**: An IGA was signed in September between India & Russia for enabling manufacture of Russian Origin Spares in India. A series of JVs have been signed by Indian companies towards fructification of the same.

- **Industry Outreach**: To bring together the users from the IAF and the Indian Defence industry representatives to discuss, identify and understand problem areas, Industry Outreach was planned by undertaking visits to IAF bases. Two Industry Outreach events were conducted at Air Force Station Bareilly and Air Force Station Pune in September and October respectively. The station authorities organized the visit, providing guided tours to various sections within the Station. Industry representatives were given the chance to engage in discussions and Q&A sessions with Air Force experts in their respective fields, facilitating knowledge exchange and networking.
- **Space Industry Outreach**: Of the total 29 DefSpace challenges pertaining to IAF (12 iDEX and 17 Make challenges), High Power Steering Committee (HPSC) meeting for 12 iDEX has been concluded. iDEX winners for eight DefSpace Challenges and one open challenge were announced in October. Selection of winners for the four iDEX DefSpace challenges is under progress at DIO. Feasibility study for the Make I and II DefSpace challenges are under progress. PDC for completion of Feasibility Study for all Make challenges is 31 Dec 23.
- **Signing of MoUs**: IAF entered into 21 MoUs with Academia, Educational Institutes and DRDO labs for cooperation and promotion of R&D in areas of mutual interest.
- **Indigenisation of CU of LLLWR**: To achieve self-reliance in the maintenance and upkeep of the IAF's Low Level Light Weight Radars, a contract for design and development of three critical components was signed with BEL. The high altitude field trial of one such component was completed successfully. The case for procurement of these is now under progress.
- **Indigenisation of Parachutes**: Almost 90-95% of pilot parachutes and brake parachutes in use by IAF have been indigenised by ADRDE within a timeframe of two years.
- **Indigenous 'Miniature Detonating Cord'**: The firing trials of the indigenous Miniature Detonating Cord (MDC) for the Hawk Aircraft Canopy Severance System were successfully completed in November. Airworthiness clearance for use on fleet is under progress. The effort will mitigate delays in supplies of imported MDC.
- **Modification of Electric Operating Fire Extinguisher Cartridges**: The modification was successfully completed through OF, Khamaria and AQAW(A), Khamaria to address quality issues of earlier design. The modified carts were inducted in service in July.
- **Development of Unexploded Ordnance Handling Robot**: Project on development of UXOR for disposal of UXOs with the technique of water cutting jet was pursued with R&DE (Engg), Pune. Three prototypes had been developed based on approved ASQRs. Procurement of UXOR was taken up through FTP route. Contract has been signed with Hi-Tech Robotics Systemz Ltd, Gurugram for UXORs in September.
- **MRSAM**: Five Firing Units and one training centre of MRSAM system have been commissioned in IAF in this year. System has been successfully deployed.
- **Project SAMAR**: IAF has successfully indigenised the prototype of ground based platform for firing Air-to-Air missile under project SAMAR. Fabrication of SAMAR Firing Units (FUs) have been successfully completed this year. SAMAR FUs were delivered to field units and firing is planned in Dec 23.
- **Self-Reliance Plans**: The Russia-Ukraine conflict has resulted in inability to send major aggregates like the aero-engines, critical avionics and specialist wpns abroad for Repairs and

Overhaul. To mitigate the situation, 44 shortlisted projects pertaining to Russian Fighter, Transport and Helicopters are being progressed through OCPP under the following categories:

- a. Life Extension.
- b. Development and execution of ROH technologies for Airframes, Electro-Mechanical rotables, avionics, EW systems of AN 32, Mi Series helicopters.
- c. Repair and refurbishment of Russian ALMs and Russian aero engines and avionics.
- d. Replacement of avionic aggregates.
- e. A comprehensive self-reliance plan to engage the Defence Industrial Corridors at Uttar Pradesh and Tamil Nadu has been chalked out. Regular interaction has been established with UPEIDA and feasibility to identify the domain specialists, academia and MSMEs/Industry partners is being explored. A meeting with Tier-I industries of TIDCO was conducted in September at Chennai to highlight the indigenisation projects under OCPP with the IAF team led by AOM. The industries were appraised in detail on the indigenisation requirements of IAF. The team visited Research Park at IIT Chennai on 13 Sep 23 and interacted with the potential Industry partners who could take on the task.

New Acquisitions and Trials

- **A-321 aircraft**: Pre-owned Airbus A-321 were acquired by DRDO from Air India for AEW&C role. They are available for utilisation by IAF before they are modified. Aircraft and aircrew were made operational at the earliest and IAF has commenced the Courier operations since May 2023. The A-321 scheduled flights to Srinagar, Guwahati and Bagdogra have augmented IA movement plan and the courier ops from Kolkata, Chennai and Port Blair has benefitted the ANC AoR. MoU for handling by Air India at all IAF and Non IAF bases has been signed.
- **C-295 aircraft**: First C-295 MW ac arrived in India on 20 Sep 23 and was inducted into the IAF on 25 Sep 23. The ageing Avro ac would be replaced by C-295 MW aircraft. With the delivery of remaining ac from May 24 onwards, the first unit is likely to be functional by end of year 2024. The induction of C-295 fleet will boost IAF's airlift capability and increase the versatility of ground forces.
- **LCA Mk1 Twin Seater Delivery**: Delivery of Twin Seaters, LCA Mk1 IOC and FOC contracts have commenced. PM flew in SPT-1 with Gp Capt D Mandal on 25 Nov 23. He was the first PM to fly a fighter aircraft.
- **HTT-40 Basic Trainer Aircraft**: HTT-40 is a basic trainer aircraft used for training of ab-initio pilots. The aircraft is indigenously designed and developed by Hindustan Aeronautics Limited (HAL). The contract for supply of HTT-40 was signed on 06 Mar 2023. As per contract, deliveries of the aircraft will start from Sep 2025.
- **Dornier-228 Aircraft**: Dornier-228 is light weight transport Aircraft utilized by IAF for communication, route transport and casualty evacuation. It is manufactured locally by Hindustan Aeronautics Limited (HAL). A contract for supply of Dornier-228 Aircraft and associated equipment was signed on 10 Mar 2023.

- **Digital Receiver-118 (DR-118) RWR for Su-30 MKI aircraft:** A contract for Digital Receiver-118 (DR-118) RWR for Su-30 ac along with associated equipment has been signed with M/s BEL, BC on 23 Mar 23.
- **VVIP Ops by B-777 ac:** IAF took over independent VVIP operations on B-777 ac wef 31 Mar 23. As a milestone achievement, IAF undertook nonstop flight from Delhi to New York with full cockpit complement by IAF and further on to Washington and Cairo. In addition to the aircrew, ground handling, catering uplift and engineering support services were also independently handled by IAF.
- **Para Trials & Ops:** ADRDE is developing HDS for C-130J and C-17 aircraft under Technology Demonstration mode. Post CEMILAC certification and fitment trials, out of total eight trials sorties approved for HDS (12 Ft Platform), seventh HDS trial was conducted on 17 Oct 23 at Mahajan Field Firing Range (MFFR). Trial was successful and load landed safely at the designated landing point.
- **ADR & CRCC Trials from C-17 ac:** Flight trials for Single/Twin ADR (Air Droppable Rigid Hull Inflatable Boat) and CRRC (Combat Rubberised Raiding Craft) were successfully completed on C-17 ac in the month of Sep 23, in coordination with Indian Navy and ISRO (Toroidal Buoy Equipment).
- **Akash Missile System:** Three squadrons of Akash missile system, employing advanced Rajendra Mk-II radars has been commissioned in the last one year. Additional Akash Sqns are likely to be inducted by Dec 23.
- **HERON MKII:** Heron Mk II RPA has been inducted and operationalised in Indian Air Force. The system is capable of undertaking SATCOM based operations along with advanced sensors and avionics suite. The payload is more capable and can locate targets in depth in enemy territory. The induction has boosted the IAF's capability to undertake ISR missions beyond Line of sight ranges at higher altitude of operations.
- **Bison (MiG 21 Upgrade) Drawdown Plan:** The drawdown plan has been approved and re-equipping of one operational squadron having this ac, with Su-30 MKI has commenced. Re-equipping of one more squadron with the ingenious Tejas LCA MK-IA, has been announced.
- **Integration of Weapons:** The New Generation Close Combat Missile was fired for the first time this year. Long Range SCALP missiles were also fired and validated. Apache Attack Helpters also carried out successful firing of Stinger Msl against an airborne slow moving target. IAF is working towards induction of indigenous Astra entire long range BVR missile, which is likely to commence shortly.
- **Long Range Mission:** Long Range Missions were undertaken deep into the IOR. These missions were flown along multiple axes to cover the IAF's area of interest to control the sea and dominate the air space.

Training and Exercises

The IAF continued to train hard this year exercising not only with sister services for enhancing jointness, but also with Air Forces of friendly foreign countries. Listed below are a few:

- **Ex Veer Guardian-23**: Held in the period 12-27 Jan 23, this was the first air exercise between India and Japan.
- **Ex PASSEX with France**: On 29 Jan 23, the IAF conducted 'Ex PASSEX' with French fighter aircraft sailing onboard the aircraft carrier 'Charles De Gaulle' in the IOR.
- **Ex Desert Flag-8 in UAE**: IAF participated in 'Ex Desert Flag-8' in Al-Dhafra, UAE from 24 Feb-20 Mar 23. This was the first ever participation by the Tejas in an international air exercise.
- **Ex Cobra Warrior-23**: IAF participated in multinational Air Exercise 'Ex Cobra Warrior-23' in UK from 06-24 Mar 23. This exercise saw IAF aircraft staging through Saudi Arabia for the first time.
- **Ex Cope India-23**: The USAF and the IAF participated in 'Ex Cope India-23' at AFS Kalaikunda (fighters) and Panagarh (transport aircraft) from 10-21 Apr 23. The Japan Air & Self Defence Force participated with one observer.
- **Ex Orion-23**: IAF participated in multinational exercise 'Ex Orion-23' in France from 17 Apr - 05 May 23. The exercise saw the IAF's Rafale aircraft ferrying directly from France to India.
- **Ex INIOCHOS-23**: IAF participated in a multinational exercise 'Ex Iniochos-23' in Greece from 24 Apr - 05 May 23. This was the first Air Exercise between India and Greece.
- **Ex Bright Star-23**: IAF took part in Ex Bright Star-23 with Egypt from 27 Aug -16 Sep 23. The IAF's MiG-29 fighters ferried directly from India to Egypt.

Integrated Exercises and Joint Training

The following training exercises were conducted with sister services, aimed at increasing joint capabilities:-

- Ex Kranti Mahotsav from 08 May 23 to 10 May 23 with 01 MLH.
- Exercise Ex Chakra Drishti-23 from 10 May 23 to 12 May 23 with Fighter, RPA and AEW&C.
- IAF participated in EWT of 33 Armd, 16 Rapid, 6(I) Armd Bde and 47 Engr Bde from 08 May 23 to 27 May 23 wherein IAF's Helicopters operated along with IA.
- Exercise Western Command Theatre Spl Ops validation from 10 May to 25 May 23 and Helicopters along with Transport aircraft. It also witnessed RPA and fighter operations.
- Exercise 2 Corps EWT on 23 – 24 May 23 with Su-30MKI.
- Exercise Long range Maritime strike over Western seaboard on 02 Jun 23 with fighters, transport and AWACS.
- *IN* carried out MiG-29K detachment at AFS Naliya from 22 Jul to 16 Aug 23 along with IAF.

IAF has also facilitated joint exercises through the ambit of Yojna plan which synergises joint training with sister services. These were aimed a practicing/ review of Air Strategy and Conops in joint environment. Options of joint application of aerospace power were practiced in these exercises. Few exercises carried out by IAF jointly with sister services are as given below:-

<u>Ser No</u>	<u>Exercise</u>	<u>Duration</u>
a.	Ex Tropex	22-24 Feb 23
b.	Ex Sanyukat Shakti Vinaash	07-11 Aug 23
c.	Ex Madad NSL	18-19 Sep 23
d.	EFORI	29 Sep-06 Oct 23
e.	WFORI	02-13 Oct 23
f.	Ex Maroon Strikes	20-21 Oct 23
g.	Ex Dakshin Avlokan	21-22 Oct 23
h.	Ex Sanyukta Sankalp	28 Oct -03 Nov 23
j.	Ex Tri Shakti Praharar	13-18 Nov 23

Humanitarian Assistance and Disaster Relief

• International HADR Ops.

- a. **Op Dost - HADR at Turkiye and Syria**: The Middle East nation of Turkiye and adjoining Syria were struck by a catastrophic earthquake on the morning of 06 Feb 23. The IAF was immediately alerted and a prompt aid and assistance was launched under 'Operation Dost'. The first C-17 aircraft got airborne from Hindan for Adana, Turkiye at the midnight of 07 Feb 23. Subsequently, four more C-17 aircraft followed suite, while one C-130J aircraft was tasked with 5.8 tons of medical load to Damascus, Syria. The operations continued with the final de-induction on 20 Feb 23. The IAF transport fleet flew 28 sorties (188 hrs) and carried 307 T of load, of which 278 T load was airlifted for Turkey and 29 T for Syria.
- b. **Op Kaveri - HADR at Sudan**: The break out of hostilities between Sudanese Armed Forces (SAF) and Rapid Support Force (RSF) in Sudan had resulted in stranding of approximately 4000 Indian nationals and PIOs. On extremely short notice, IAF air operations towards evacuation of Indian diaspora commenced on 19 Apr 23. C-130J and C-17 were tasked for the ops with Garud SF teams onboard, in the event of special ops if required. Initial rescue missions were flown from Jeddah to Port Sudan. Subsequently, on 27 Apr 23, in a daring night operation, IAF ac rescued 121 Indians from a small airstrip at Wadi Seyidna airport. While the crew used Electro Optical- Infra

Red to evade obstructions and inimical forces, ERO (Engine Running Ops) plan was carried out when Garud commandos operated on ground. The total flying effort by the IAF was 22 sorties (115 hrs), airlifting 2100 passengers from Sudan to Jeddah and 915 passengers from Jeddah to India, in addition to 58 Tonnes of critical load.

- c. **Op Ajay (Israel – Hamas Conflict)**: Towards Op Ajay, first IAF C-17 aircraft was launched on 22 Oct 23 in support of Palestinian citizens affected by the ongoing Israel-Hamas conflict. IAF C-17 airlifted 6.5 T of medical relief items and 32 T of disaster relief material including essential life-saving medicines, surgical items, tents, sleeping bags, tarpaulins, sanitary utilities and water purification tablets among other necessary items. The medical relief was delivered at Al-Arish, Egypt to the Red Crescent, for onward distribution in Gaza.
- d. **HADR Ops - Nepal**: On 03 Nov 23, a devastating earthquake struck Nepal, resulting in heavy loss of life and property. Relief aid was planned to be inducted close to the affected areas in Nepal, resulting in operations on short runway airfields like Nepalganj. IAF C-130J ac inducted NDRF relief equipment and HLL medicinal payload at Nepalganj on 05-06 Nov 23. As a first responder, essential medical cum hygiene supplies, tents, and other relief materials were provided for earthquake affected families. The IAF C-130J aircraft undertook day/ night operations at Nepalganj, and flew 02 sorties (07:55 hrs), airlifting 21 T of relief load.

• **Domestic HADR Ops.**

- a. **HADR Ops - UT of Ladakh**: In Feb 23, IAF heptrs served as a vital link in the UT of Ladakh when the roads saw a heavy blockage due to snow activity. Heptrs sprang into operations on 15 Feb 23 for airlift of stranded passengers from Zaskar to Leh. The task was carried out by Chinook and MI-17 1V heptrs wherein 200 Passengers were airlifted.
- b. **Disaster Relief Ops (Forest Fire) at Goa**: On 08 Mar 23 Govt of Goa requested IAF to provide aid towards dousing forest fires at far flung areas in the state. Mi-17 V5 Heptrs deployed for the task undertook massive ops. In 20 sorties, the heptrs dispensed 1, 40,000 litres of water by 14 Mar 23.
- c. **Disaster Relief Ops (Forest Fire) at Tamil Nadu**: On 15 Apr 23, Govt of Tamil Nadu requested IAF effort towards dousing forest fire in Madukkarai range of Coimbatore (Tamilnadu). MI-17 V5 Heptr deployed for the ops dispensed 22, 450 litres of water on 16 Apr 23.
- d. **Disaster Relief Ops (Flood Relief) at Himachal Pradesh**: In response to damages caused by monsoon triggered cloud bursts, flash floods and landslides in Himachal, IAF deployed Mi-17 V5 and Cheetal heptrs. Rescue ops were carried out in Chandratall and Samundar Tapu Axis. IAF inserted disaster relief crew and air dropped ration, medicines and essential supplies. IAF also flew the CM of Himachal and inter-ministerial teams for reccee and assessment of the scale of disaster. The relief operations which started on 11 Jul 23 continued till 30 Sep 23. 68 T of relief material and 1355 citizens were airlifted in 275 sorties (138 hrs).
- e. **Disaster Relief Ops (Flood Relief) at Ambala**: In the second week of Jul 23, several villages around Ambala (Punjab) were affected by severe floods. From 14 to 17 Jul 23, one Mi-17 heptr

- was tasked towards disaster relief operation, which carried out airdrop of critical sustenance ration to the affected citizens. 10 sorties were flown airlifting 10 T of relief material and 14 personnel.
- f. **Disaster Relief Ops (Flood Relief) at Yavatmal**: On 22 Jul 23, one MI-17 V5 heptr was launched from Raipur, which undertook five sorties towards rescue of villagers marooned in Yavatmal village of Maharashtra.
- g. **Disaster Relief Ops (Flood Relief) at Telangana**: From 27 to 30 Jul 23, two Chetak heptrs were deployed at Warangal for flood relief operations. While the heptrs rescued seven personnel, 25 sorties (22 hrs) were flown towards the ops.
- h. **Disaster Relief Ops (Flood Relief) at Sikkim**: Several districts of Sikkim were severely affected by the flash floods on 04 Oct 23. HADR operation centre was set up at Bagdogra. Heptrs were positioned as per the requirement projected by the State Govt. IAF deployed heptrs from almost all the fleets, including Chinook to undertake the disaster relief. The IAF heptrs undertook 287 sorties (125 hrs), airlifting 205 T of load. 3027 personnel were evacuated by the heptrs, which included foreign nationals from Thailand, Belgium, Russia, Bangladesh and America.
- a. **Tunnel Rescue Ops at Uttarakhand**: A portion of the under construction Silkyara tunnel in Uttarkashi district of Uttarakhand collapsed on 12 Nov 23 trapping 41 construction workers. On 15 Nov 23, IAF deployed three C-130J ac to airlift 27.5 tonnes of critical heavy equipment, rescue loads and rescue experts to Dharasu ALG that was not in use since 2013. Between 17 and 27 Nov 23, heavy Augur machinery from Indore, DRDO robots from Pune and drill bit and metal wire load from Mumbai were airlifted to Dehradun. On 29 Nov 23, Chinook helicopter airlifted all 41 rescued workers to AIIMS Rishikesh. The tasks were successfully carried out with minimal notice utilising C-130, C-17, Dornier, AN-32 and Chinook. The IAF aircraft operated over 79 hours lifting 104 T of load.

Nation Building & Internal Security

- **Manipur situation**: On the directions from MoD, IAF deployed its transport and helicopter assets towards airlift and deployment of CRPF, BSF, Indian Army and Assam rifles teams with load from Hindan, Ranchi, Kolkata, Agartala, Kumbhigram, Guwahati and Mohanbari to Imphal to assist in containing the situation in Manipur. The ops by IAF which started on 23 May 23 continued till 25 Sep 23. 10,120 troops and 652 T of relief material were airlifted in 605 sorties (399 hrs).
- **Haryana situation**: IAF deployed C-130, C-17 and IL-76 aircraft for airlift and deployment of CRPF and RAF troops to contain the situation in Nuh, Haryana. Overnight operations (18 sorties/18:30 hrs) achieved airlift and deployment of 824 troops (with 58 T load) from Jammu, Prayagraj and Hindan.
- **G-20 Task**: IAF helicopters were extensively utilised for various operational tasks towards G-20 summit in September. The assets were utilised for ORP duties, DIADC duty, CASEVAC / Emergency response and NSG tasks.
- **Elections-Chhattisgarh**: IAF was tasked to provide air effort to the election officials during the Chhattisgarh assembly elections held in November. IAF Mi-17 helicopters carried out 404 sorties

amounting to 194 hrs of air effort. 1,707 personnel and 15 T of load including polling parties and EVMs were airlifted.

- **PM Kedarnath Redevelopment Project**: Since 31 Oct 22, IAF has tasked one Chinook helicopter on regular operations towards “PM Kedarnath redevelopment project”. Till 31 Mar 23, under slung operations could result in airlift of 575 Ton of load against the initial projected load of 500 T. As on 12 Nov 23, 866 T has been airlifted towards the project.
- **RLV Trials**: IAF provided its helicopters to progress the scientific cause of ISRO. Chinook heptr flew 25 sorties towards ISRO RLV trials at Chitradurga for testing of load in under slung mode on 02 Apr 23.

Agnipath Scheme

IAF has successfully implemented the Agnipath Scheme and has been in the forefront in digitisation of the Agniveervayu related data. First batch of 2888 Agniveervayu comprising 2743 Agniveervayu and 145 Agniveervayu (Non Combatants) have completed specialised training and are posted to various AF bases. The second and third batch will pass out and report to units in Feb & Aug 24 respectively.

iDEX DISC and OC (Open Challenge)

Two DISC editions and two OC editions were launched in 2023. DISC 9 was launched by Raksha Mantri during Aero India 2023. This DISC edition was pertaining to Cyber Security. Four proposals were shortlisted in this edition by IAF. The tenth edition of DISC was launched by Raksha Mantri on 04 Oct 23 at Bharat Mandapam, New Delhi. 12 DISC challenges and 02 Prime Challenges were launched by IAF in tenth edition. Open Challenges from startups were shared with IAF in form of OC 8.0 and OC 9.0. Three proposals were shortlisted under OC 8.0 and shortlisting of proposals by User Dtes is currently underway for OC 9.0 and DISC 10.

Aero India 23

The 14th edition of Aero India 23 was held at AFS Yelahanka from 13 to 17 Feb 23. AF was tasked with provision of venue, conduct of Flying Display, Static Display, Security, Disaster Management within the Station, Medical Services and the fire prevention measures in coordination with State Govt. Fly past by 13 formations of IAF and indigenous aircraft (except P-81) flown by IAF, IA, ICG and *IN* was the signature event on the inaugural day. The multi directional fly-past added to the visual appeal and thrill of the event. Flying display was conducted only once during the business days and twice during public days.

Bharat Drone Shakti-2023

Bharat Drone Shakti 2023, a drone exhibition-cum-display event, jointly organized by the Indian Air Force and the Drone Federation of India (DFI) was inaugurated by the Raksha Mantri, at Air Force Station Hindon on 25 Sep 23. It was a two day event featuring over 75 drone start-ups from across the country that showcased the capabilities of the Indian drone industry through a series of aerial static demonstrations. The event is a key milestone in the Govt of India initiatives to make India a major drone hub by the year 2030. The drones featured can be employed in a variety of military and civil applications. By co-hosting this event, the IAF seeks to bolster the drone ecosphere in the country.

First Woman Commanding Officer of Combat Sqn

Gp Capt Shaliza Dhami, a helicopter pilot became the first woman from flying branch to command a combat unit in the IAF, on 27 Mar 23. She is also the first woman QFI in flying branch. She has a flying experience of over 2800 hours with 1935 hours on Chetak heptr.

Women Empowerment

As a step towards women empowerment, IAF for the first time has inducted women in other ranks as Women Agniveervayu. At present, 154 Women Agniveervayu are undergoing training at ATS Belagavi. 300 Women candidates are planned to be inducted as Agniveervayu in Intake 02/2023 batch.

Air Force Day 2023

Air Force Day Parade which was traditionally held at AF Stn Hindan was conducted this year at AF Stn Prayagraj. The event was open for civilian population in order to show case IAF might and motivate the youth of India (including prospective Agniveers) to join the IAF, a flight consisting of AgniveerVayu Women participated in the Air Force Day Parade 2023. The parade was commanded by Gp Capt Shaliza Dhami. The following events were conducted a part of Air Force Day 2023:-

- Aerial Display at Bhopal (over Bhojtal lake) on 30 Sep 23.
- Air Force Day Parade held at AF Station Prayagraj.
- Aerial Display at OD Fort, Triveni Sangam, Prayagraj.

A new IAF Ensign was unveiled by replacing the Union Jack with the Indian tricolour and the RAF roundels with the IAF tricolour roundel in the lower right canton. The new ensign better reflects the current values of the IAF by the inclusion of the IAF Crest in the top right corner of the Ensign, towards the fly side. The IAF Crest has the national symbol, the Ashoka lion on the top with the words “सत्यमेव

जयते” in Devanagari below it. Below the Ashoka lion is a Himalayan eagle with its wings spread, enclosed by a ring in light blue colour with the words “भारतीय वायु सेना”. The motto of the IAF “नभः स्पृशं दीप्तम्” is inscribed below the Himalayan Eagle in Devanagari. The IAF motto has been taken from Verse 24, Chapter 11 of the Bhagavad Gita and means “Radiant Thou Touchedst Heaven” or in other words “Touching the sky with Glory”.

Bastille Day Parade

Indian Air Force marching contingent participated during Bastille Day Parade 2023 at Paris on 14 Jul 23 as part of Tri Services contingent. The IAF marching contingent was commanded by Sqn Ldr Sindhu Vijay Kumar Reddy. The parade was witnessed by the Prime Minister of India, who was the chief guest for the event. IAF was also part of the flypast during the Bastille day over Paris, with three Rafale aircraft of 101 Sqn. This opportunity was also utilised by IAF to exhibit and practice its strategic reach capability, with the Rafales flying non-stop from India to France, with multiple mid-air refuelling, including utilising AAR ac of friendly foreign nations, hence concomitantly displaying the IAFs joint Ops capability with forces of these nations and operationalisation of various logistics agreements.

Dubai Air Show

IAF contingent comprising of 5 Sarang (ALH MK I) aircraft and 3 Tejas (LCA MK-I) aircraft participated in the Dubai Air Show from 13 to 17 Nov 23.

Special Campaign 3.0

Directions were received from GOI to conduct Special Campaign 3.0 for Swachhata in Govt Offices and disposal of pending matters from 02 to 31 Oct 23 on the lines of Special Campaign 1.0 & 2.0 held in 2021 & 2022. As per the feedback received from all Commands HQs through Special Campaign 3.0 pan IAF, 1712.09 tonnes of scrap was disposed-off.

Har Ghar Tiranga

The campaign was undertaken as part of Independence Day celebration from 13 to 15 Aug 23. The enthusiastic participation by air warriors and their families reflected the spirit of nationhood and commitment of taking our nation forward

Inclusion of Millets in Scale of Ration

Millets (Bajra/ Jowar/ Ragi) has been included as part substitute in the scale of ration in line with the vision of International Year of Millets.

Digitisation

- **Dedication of e-MMS:** In line with the Government's initiatives for digital transformation, IAF has migrated to digital workflows for recording of maintenance activities through e-Maintenance Management System. All maintenance activities of the IAF have been declared paperless by the Raksha Mantri in February during Aero India 2023. The IAF is also progressing cases for implementing e-MMS for nine fleets from the Indian Army, Navy & Coast Guard.
- **Digitisation of THD-1955 Radar:** THD-1955 radar has been the main stay AD Radar in IAF since 1976. To meet the operational commitment, the THD-1955 radar fleet is planned to be utilised in service till 2035. Presently, due to ageing of the fleet, obsolescence and depleting vendor supports, THD-1955 radar fleet is facing significant challenges towards its maintenance and sustenance for operations. To address these issue, BEL has come up with a proposal to digitise the Receiver and Transmitter cabinets along with upgrade of IFF systems of radar.
- **Bio-jet Fuel Trials on Do-228 Aircraft:** Post successful completion of ground run and test flight, RCMA (Kanpur) accorded FCN for Biojet fuel trials on 21 Sep 23. The first sortie for two hrs with 10% blended fuel on one engine was successfully flown on 22 Sep 23. Two sorties with 10% blended fuel on both engines was flown for four hrs on 26 Sep 23. Third sortie was flown on 27 Sep 23. The trials on Do-228 aircraft using 10:90 admixtures of Bio-jet fuel with ATF were successfully completed at 5 BRD on 28 Sep 23. Additional 6,000 Ltrs of Bio-jet fuel is under procurement which would be used in next phase of trials.
- **Development of Airfield at Nyoma, Ladakh:** To enhance the operational reach of IAF in the Northern Sector, Government sanction to develop a new Air Base at a cost of ₹219.39 Crore was accorded in March 2023. e-Shilanyas of the airfield was performed by RM on 12 Sep 23 from Jammu. Construction of runway is in progress and the works services are planned to be completed by April 2025.
- **Real Time Aircraft Tracking System (RTATS).** The feasibility of RTATS with the help of equipment provided by ISRO, using Navigation with Indian Constellation (NavIC) satellites is reaching fructification. Series modification on AN-32 will start soon. While trials on MLH are underway later to be followed by AVRO & Do-228 in due course.

INDIAN COAST GUARD

- **Digital Coast Guard:** In alignment with the Government's strategic vision for Digital Armed Forces, a contract was signed between Ministry of Defence and Telecommunications Consultants India Limited, worth at a total cost of Rs 588.68 crore, for the acquisition of Digital Coast Guard (DCG) project, under the Buy (Indian) category. The DCG Project will unfold a comprehensive narrative of technological progression, encompassing the construction of an advanced Data Centre,

the establishment of a robust Disaster Recovery Data Centre, amplification of connectivity across ICG sites, and the development of the ERP system. The project also leverages secured MPLS/VSAT connectivity, propelling itself to the forefront of cutting-edge defence technology. The project is estimated to generate about one and a half lakh man-days over a span of five years, fostering active participation from diverse sectors of Indian industries, thus significantly contributing to the Government's efforts to achieve 'Aatmanirbharta' in defence.

- **Coast Guard Fast Patrol Vessels:** Defence Secretary Shri Giridhar Aramane laid the keel of four Coast Guard Fast Patrol vessels at Goa Shipyard Limited (GSL). These vessels designed by GSL is a medium range weapon fitted surface vessel with length of 51.43 mtrs, and breadth 8 mtrs. The ship is propelled with twin engine and has maximum speed of 27 Knots. Displacement of the vessel is approx. 320 Tons, and it is capable of operating in rough sea conditions. These vessels will be fitted with most modern and technologically advanced machinery and computerized controls systems, making these state-of-the-art Fast Patrol Vessels.
- **Cyclonic Storm 'BIPORJOY':** Consequent to issuance of warning by IMD regarding Cyclonic Storm 'BIPORJOY' formed in Arabian Sea from 6th June, 2023, ICG initiated various proactive & preventive measures to ensure safety of fishermen. ICG ensured immediate evacuation of 50 crew from the rig 'Key Singapore'.
- **Cyclonic Storm Hamoon:** ICG assets, including aircraft, were deployed during Cyclonic Storm Hamoon for SAR and Disaster Response. ICG also monitored towing operation of distressed Research Vessel Samudra Kaustubh (25 crew including 06 Scientists). During the entire period, constant positive, liaison was maintained with all stakeholders including State administration.
- **MoU with Philippines:** Indian Coast Guard signed an MoU with Philippine Coast Guard (PCG) on enhanced maritime cooperation. The MoU seeks to enhance the professional linkage between the two Coast Guards in the domain of Maritime Law Enforcement. The PCG delegation visited GSL to witness India's ship design capabilities and ICG off shore patrol vessels Sujeet at Goa to familiarize with multi-role capabilities of ICG ships.
- **Rescue of pilgrims:** ICG undertook 15 sorties and rescued a total of 511 pilgrims from two ferry vessels (MV Lochamati and MV Agramati) in distress. Both the ferry vessels were reported to be aground near 01 nautical mile South off Ghoramara Island. ICG Hovercrafts from Haldia and Frazerganj were deployed immediately.
- **Seizure of Sea Cucumber:** ICG recovered a total of 2,266 kgs of sea cucumber from the various shores of Tamil Nadu. The combined estimated commercial value of the consignments is approximately Rs 11.3 crore.
- **Seizure of Gold:** ICG seized a combined total of 50.617 kgs of gold from the apprehension of IFB 'Star NS' & IFB 'Black Pearl'. The estimated commercial value of the consignments was approximately Rs 31 crore.
- **Seizure of Tendu Leaves:** ICG seized a total of 267 kgs of Tendu Leaves from suspicious packages. The combined estimated commercial value of the consignments is approximately Rs 19 lakh.
- **Seizure of Narcotics:** ICGS Meera Behn apprehended Iranian boat with five crew and seized 61 packets of suspected narcotics substance. Apprehended boat was subsequently brought to Okha harbour and handed over to Marine Police.

DEFENCE RESEARCH & DEVELOPMENT ORGANISATION

- **Akash-NG:** Flight trial of new generation Surface-to-Air Missile Akash-NG was conducted against a Banshee target from the Integrated Test Range, Chandipur, Odisha. It is meant for use by Indian Air Force with an aim of intercepting high manoeuvring low RCS aerial threats. The system has been developed with better deployability compared to other similar systems with canisterised launcher and much smaller ground system footprint.
- **ITCM Missile:** Indigenous Technology Cruise Missile is a new generation 'Long Range Land Attack Cruise Missile' being developed for land and sea platforms. Flight trial was conducted on 21st Feb 2023 from the Integrated Test Range, Balasore, Odisha.
- **Maiden test of ASTRA BVRAAM Missile on LCA Tejas:** ASTRA is a state-of-the-art BVR 'Air-to-Air missile' to engage and destroy highly manoeuvring supersonic aerial targets. Light Combat Aircraft (LCA) Tejas, successfully fired the ASTRA indigenous Beyond Visual Range (BVR) air-to-air missile.
- **Man-Portable Anti-Tank Guided Missile:** MPATGM is a 3rd generation ATGM with 'Fire & Forget' and 'Top Attack' capabilities with day and night operational capability. Flight Trials of MPATGM was conducted for a range of 2.5 Km at NOAR, Kurnool.
- **Very Short Range Air Defence System:** VSHORADS is a 4th generation Man Portable Air Defence System system, it employing state of art uncooled imaging infrared seeker. The missile was flight tested against high speed unmanned aerial targets, simulating approaching and receding aircraft from Integrated Test Range, Chandipur, off the coast of Odisha.
- **Medium Range Surface to Air Missile for Indian Navy:** MRSAM for the Indian Navy is a joint development programme of DRDO and Israeli Aero Space Industries, Israel. The weapon system provides a point and area defence for P15A ships of the Indian Navy against a vast variety of aerial threats including fighter aircrafts, subsonic and supersonic missiles, etc. The Indian Navy successfully flight tested MRSAM from Visakhapatnam.
- **Heavy Weight Torpedo:** Indigenously Designed and Developed Heavy Weight Torpedo 'Varunastra' was successfully test fired with a live warhead against an undersea target by Indian Navy. 'Varunastra' is a ship-launched anti-submarine torpedo having low drift navigational systems, acoustic homing, advanced acoustic counter measure features, autonomous guidance algorithms, insensitive munitions warhead and a GPS based recovery aid for practice torpedo.
- **Vertical Launch Short Range Surface to Air Missile:** VL-SRSAM is a vertical launch short range surface to air missile having a strike range upto 80 km for Fighters aircraft, helicopter, UAVs etc. The missile has been developed for the Indian Navy for neutralizing various aerial threats at close ranges including sea-skimming targets. The missile was flight tested from Integrated Test Range, Chandipur.
- **BrahMos:** BrahMos is a two stage precision strike supersonic cruise missile, operating on fire and forget principle, which can be launched from multiple platforms (at air, sea and ground) against land and sea targets. Indian Army test-fired land attack version of extended range BrahMos supersonic cruise missile. Indian Navy with DRDO test-fired two consecutive Sea attack version of extended range BrahMos supersonic cruise missile.

- **Solid Fuel Ducted Ramjet Technology for Air Launched Tactical Missiles:** The state-of-the-art air-to-air missile powered with 'SFDR' propulsion enables the missile to intercept aerial threats at very long range at supersonic speeds and is configured with nozzle-less booster, thrust modulation system and sustainer to deliver specific impulse in ramjet mode. The missile was flight tested this year.
- **Long Range – Anti Ship Missile:** DRDO is engaged in development of technologies required for Long Range Anti-Ship Missile weapon systems capable of engaging a warship with a long range. The missile was flight tested from Integrated Test Range.
- **Autonomous Flying Wing Technology Demonstrator:** DRDO has successfully carried out a flight trial of Autonomous Flying Wing Technology Demonstrator, an indigenous high-speed flying-wing Unmanned Aerial Vehicle (UAV) from the Aeronautical Test Range, Chitradurga in Karnataka. The successful flying demonstration of this autonomous stealth UAV is a testimony to maturity in the technology readiness levels in the country. With this flight in the tailless configuration, India has joined the elite club of countries to have mastered the controls for the flying wing technology. The aircraft prototype, with a complex arrowhead wing platform, is designed and manufactured with light-weight carbon prepreg composite material developed indigenously. Also, the composite structure, impregnated with fibre interrogators for health monitoring, is a showcase of 'Aatmanirbharta' in the aerospace technology.
- **Integrated Life Support System:** Indigenously designed and developed ILSS for pilot of LCA Tejas was flight-tested twice in February. The successful testing is an initial step to mark the country's presence in elite club of four nations possessing the complex ILSS technology.
- **Indigenous Power Take off Shaft:** Maiden successful flight test of Power Take Off (PTO) Shaft was conducted on LCA Tejas in Bengaluru. The PTO shaft is indigenously designed and developed by Combat Vehicle Research & Development Establishment, Chennai of DRDO. The PTO shaft, which is a critical component in the aircraft, will support the requirements of future fighter aircraft & their variants and offers competitive cost & reduced lead time.
- **Military Combat Parachute System:** A successful live parachute jump trial was conducted in April and September from 10,000 ft was successfully conducted at Drop Zone Malpura, on indigenously-designed Military Combat Parachute System 'HANS' (High Altitude parachute with Navigation & advanced Sub-assemblies)' to meet the military operational requirements of Indian Armed Forces. HANS enables Special Forces to undertake para jump along with all necessary combat sub-assemblies and will replace all existing systems for free fall operations and give fillip to the 'Aatmanirbhar Bharat'.
- **Air Droppable Container:** DRDO has designed and developed Air Droppable Container (ADC-150) with a pay load capacity of 150kg to enhance the naval operational logistic capabilities. ADC-150 will provide quick response to meet the requirement of critical engineering stores of ships under distress & far away from the coast. DRDO & Indian navy conducted the successful maiden test of ADC-150 dropped from IL38DF aircraft.
- **Crew Module Parachute System for Gaganyaan Programme:** CMPS was successfully demonstrated In-flight Abort Demonstration of Crew Escape System with the newly developed Test Vehicle followed by Crew Module Separation & safe recovery using parachute system developed by DRDO.

- **Naval Anti-Ship Missile – Short Range:** NASM-SR missile is powered by two stage solid propulsion system with an in-line ejectable booster and a long-burn sustainer. DRDO successfully flight tested the missile from ITR in November. The missile was tested for a range of 35 km, using an indigenous IR Seeker for its Terminal Guidance in ‘Lock-on after Launch’ mode.
- **Aero India 2023:** DRDO displayed a wide range of indigenously-developed products, technologies and systems during the 14th Aero India held in Bengaluru in February. It showcased numerous exhibits, flight displays and seminars, besides displaying its flagship products at the India Pavilion. The display showcased the recent advancements made by DRDO that contribute towards Aatmanirbharta in Defence. The DRDO Pavilion showcased over 330 products categorised into 12 zones namely Combat Aircraft & UAVs, Missiles & Strategic Systems, Engine & Propulsion Systems, Airborne Surveillance Systems, Sensors Electronic Warfare & Communication Systems, Parachute & Drop Systems, Artificial Intelligence Machine Learning & Cyber Systems, Materials, Land Systems & Munitions, Life Support Services, and Industry & Academia Outreach.
- **Corporate Initiatives:** DRDO has Grants-in-Aid Scheme for S&T projects under Extramural Research and under Research Boards. It also supports Exhibitions besides paid apprenticeship scheme, internship to B.Tech/ M.Tech/ M.Sc Students. These have been initiated by DRDO to generate interest in defence technologies among school and college students.
- **Technology Development Fund:** The TDF scheme encourages participation of public/private industries especially MSMEs and start-ups, so as to create an eco-system for enhancing cutting edge technology capability for defence application. Further, the Scheme funds industries up to an amount of Rs 50 crore per project for innovation, R&D of defence technologies in the field of defence and Aerospace.
- **TOTs:** DRDO has carried out more than 1,600 ToTs to Indian Industry including both Private and public. ToT is being carried out as per the policy and procedure approved by RM. DcPP/PA/DP of DRDO are given Technology free of cost i.e at “Nil ToT Fee”.
- **DRDO Patents:** DRDO has a Policy for Free Access of DRDO Patents by Indian industries. This is likely to increase the technological capabilities of industries and enhance their competitiveness in global supply chain. 1,700 IPRs have been opened to Indian Industries.
- **Dare to Dream Innovation Contest:** It aims to promote innovators and start-ups are being conducted. Three versions of contests have been concluded. Dare to Dream 4.0 was also launched in January for individual and Start-ups to unearth disruptive ideas and concepts in emerging technologies identified by DRDO for enhancing defence capabilities. Development cum Production Partner/Production Agency identified for more than 105 systems.
- **Partnership with industries:** DRDO has been partnering with industry for the realization of its systems. Collaborating with DRDO in the development of major weapon systems, the Indian industry has matured to a stage where they can develop systems on their own. Indian industry has progressed from a ‘build to print’ partner to ‘build to specification’ partner. DRDO test facilities have been opened to the industries for utilisation. Segments like Missiles, Bombs etc. have been opened to private industries for development.
- **Academia:** DRDO provides support to academia to carry out Directed Research in the identified research areas related to Defence application through DRDO Industry Academia - Centres of

Excellence to undertake translational projects by providing direction, technical interactions and project funding. So far, 15 DIA-CoEs have been established. They are at IIT BHU, IIT Jodhpur, IIT Kanpur, IIT Roorkee, IIT Kharagpur, IIT Hyderabad, Gujarat University, IISC Bengaluru, Jammu University, Mizoram University, IIT Delhi, IIT Bombay, IIT Madras, University of Hyderabad and Bharathiar University.

- **Fuel Cell-based Air Independent Propulsion system:** The system of DRDO's Naval Materials Research Laboratory will soon be fitted onboard INS Kalvari. An agreement was signed between senior officials of NMRL and Naval Group France to extend cooperation to enter into the detailed design phase for integration of indigenous AIP in the Kalvari class submarines. As part of the agreement, Naval Group France will certify the AIP design for integration in the submarines. The AIP has a force multiplier effect on lethality of a diesel electric submarine as it enhances the submerged endurance by several folds.
- **Special Campaign 3.0:** DRDO is committed to reduce pendency in terms of MP references, Public Grievances, PMO references during the SCDPM 3.0. The Campaign was held in October. Some of the major initiatives include:

- (i) Constitution of standing committee for prompt action on receipt of public grievances.
- (ii) Reviewing and Weeding out of Records.
- (iii) Microfilming & Digitization of Category A, B and C records.
- (iv) Disposal of Scraps.

NATIONAL CADET CORPS

- **NCC Integrated Software:** In a major step towards promoting digitisation and in sync with Digital India mission, Raksha Mantri Shri Rajnath Singh launched an NCC Integrated Software in July. The software, developed in partnership with Bhaskaracharya Institute for Space Applications and Geo Informatics, is a single window interactive software for Cadets, designed on the 'Entry to Exit Model'. It is based on Prime Minister Shri Narendra Modi's vision of 'Once a Cadet always a cadet', and will digitalise the entire process from the stage of enrolment as a cadet in NCC till exit registration as alumni. This will enable seamless issue of certificates, creation of an all India database of NCC cadets at the time of their employment. The NCC and State Bank of India (SBI) also signed an MoU in the presence of Raksha Mantri to open zero balance accounts of all NCC Cadets with debit card, chequebook & passbook facility under SBI's 'Pahli Udaan' scheme. About five lakh cadets will be benefitted by this MoU every year.
- **75th anniversary of NCC:** The National Cadet Corps (NCC), the largest uniformed youth organisation in the world raised in 1948, celebrated its 75th Anniversary on November 26, signifying a momentous chapter in its legacy of honing youth with core principles such as discipline, leadership, and unwavering patriotism. In solemn commemoration of this significant

milestone, Defence Secretary Shri Giridhar Aramane laid a wreath and paid homage to the fallen heroes on behalf of the entire NCC fraternity at National War Memorial, New Delhi. As an integral part of the event, band of 26 talented girls from the NCC Wing of Kamla Nehru College, New Delhi, played patriotic themes thereby adding vibrancy and patriotism to the solemn occasion.

- **NCC Mega Cyclothon:** A Veer Naari, Priyanka Nair, wife of late Lt Col Anand, a recipient of the Shaurya Chakra, flagged off a mega NCC Cyclothon from Kanyakumari in December. The all-Girl Cadets Cyclothon covering the whole country was organised to mark the 75th NCC Raising Day. It embarked on two distinct axes, one from Kanyakumari along the Western Coast, and the other, subsequently from Guwahati along the Eastern Axis, both culminating in New Delhi. Exceptionally trained Girl Cadets, symbolizing 'Nari Shakti' have undertaken this challenging route covering an approximate distance of 3,000 kilometres.
- **85th NCC Cadets Mountaineering Expedition:** Raksha Rajya Mantri Shri Ajay Bhatt flagged-off 85th NCC Cadets Mountaineering Expedition to Mt Yunum in Himachal Pradesh from New Delhi. The team constituted four Officers, 10 PI Staff and 18 NCC Cadets out of which 11 were girls. These cadets were selected from various NCC Directorates of the country.
- **NCC Republic Day Camp:** Vice President, Raksha Mantri, Raksha Rajya Mantri, Chief of Defence Staff and three Service Chiefs were among those who visited NCC Republic Day Camp at Delhi Cantt in January. During his visit, the Raksha Mantri gave away Raksha Mantri Padak & Commendation Cards to cadets for their exemplary performance and devotion to duty. The Raksha Mantri Padak was awarded to Under Officer Tinggeuchile Nriame of North Eastern Region Directorate and Cadet Avinash Jangir of Rajasthan Directorate. The Raksha Mantri Commendation Cards were awarded to Captain Pratap Keshari Harichandan of Odisha Directorate, Cadet Under Officer Jenny Francina Victor Anand of Tamil Nadu, Puducherry & Andaman & Nicobar Directorate, Cadet Fiza Shafi of Jammu & Kashmir & Ladakh Directorate and Cadet Sehwaq Rana of Uttarakhand Directorate.
- **All India Thal Sainik Camp:** All India Thal Sainik Camp took place at Delhi Cantt in September. Around 1,547 Cadets (867 Boys & 680 Girls), drawn from 17 NCC Directorates covering all the States and Union Territories participated in the camp. During the 12-day camp, the cadets competed in a number of disciplines like shooting, Obstacle Training, Map Reading & other professional training competitions.
- **Yoga Day:** National Cadet Corps (NCC) celebrated the 9th International Yoga Day on June 21 with full zeal and enthusiasm with the participation of 11 lakh NCC Cadets at different venues across India. The yoga sessions were conducted in parks, open grounds, schools & colleges throughout the length and breadth of the country from Leh in North to Kanyakumari in the South & Dwarka in the West to Tezu in the East.

SAINIK SCHOOLS

- **New Sainik Schools:** Raksha Mantri Shri Rajnath Singh approved the setting up of 23 New Sainik Schools in partnership mode, taking the tally of such schools functioning under Sainik School Society to 42. This number is apart from the existing 33 Sainik Schools already functioning under the erstwhile pattern. The objectives behind Prime Minister Shri Narendra Modi's vision of setting up of 100 new Sainik Schools is to provide quality education to the students in tune with National Education Policy and give them better career opportunities, including joining the Armed Forces. It also gives an opportunity to the private sector to work hand-in-hand with the Government towards nation building by refining today's youth to become responsible citizens of tomorrow.
- **Girls students in Sainik Schools:** Over 1,600 girls students are studying in Sainik Schools across the country. All 33 Sainik Schools in the country under the erstwhile pattern are co-educational. As far as new Sainik Schools in partnership mode with NGOs/Private/State Government School are concerned, there is no stipulation with respect to the school being set up exclusively for boys/girls/co-education basis. There is no restriction for setting up of an all-girls Sainik Schools. In this regard, one school *i.e.*, Samvid Gurukulam Senior Secondary School, Mathura in Uttar Pradesh has been approved as an all-girls Sainik School.
- **Initiatives to enhance performance of Sainik Schools:** The primary aim of Sainik Schools is to prepare cadets academically, physically and mentally for entry into the National Defence Academy. Various initiatives have been undertaken by Sainik Schools to instill a sense of civic responsibility and leadership among cadets as indicated below:
 - Prefectorial system is followed in all Sainik Schools where cadets are assigned with specific responsibilities to develop leadership qualities.
 - Cadets are encouraged to participate in various exchange programmes being organised among Sainik Schools and other Schools to make them understand about civic responsibilities and develop leadership qualities.
 - Sainik Schools undertake social work and community service projects including outreach programmes. Cadets are also involved in initiatives such as tree plantations drives, cleanliness campaigns, and volunteering at local community organisations. This help in fostering a sense of responsibility towards the society.
 - Educational tours and visits are arranged to expose the cadets to diverse environments and situations. These experiences help in developing adaptability, cultural understanding, and a sense of responsibility towards the larger community.
 - NCC is compulsory for both boys and girls cadets which help to develop qualities of character, courage and discipline among the cadets.
- **Online registration:** As part of the Government's initiative to set up 100 new Sainik Schools in partnership mode, Sainik School Society opened its portal <https://sainikschool.ncog.gov.in/> for registration of eligible interested applicant schools from September 27, 2023 till November 25, 2023.

ABB/Savvy

(Release ID: 1989502) Visitor Counter : 2624