

# **STRATEGIC FOCUS**

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## WE ENTER 11<sup>TH</sup> YEAR IN SERVICE

The IADN is a leading Independent defence and strategic news and information-providing website. It is a 'Not-for-profit' 'self-sustaining' 'non-partisan' 'knowledge building' website providing exclusive, non-partisan in-depth news and analysis on leading defence strategic and security-related issues about India.

The IADN was founded in March 2012 by Mr Shantanu K. Bansal. It can be called a unique venture that has played an instrumental role in presenting defence and strategic issues to a wider audience. Before IADN, the issues related to defence and security were limited to the interest of some scholars and government, the IADN took the initiative to enlighten the public about the prevailing security situation of the country hence assisting the much-needed 'strategic culture.' Having been inspired by IADN many such news and analysis platforms mushroomed across the open domain.

With extreme efforts, the IADN was able to transform itself into an open information & knowledge sharing platform. Time and again through its unique way of reporting, it has touched upon minds worldwide, providing a way for better policy orientation in the sector it serves. Today IADN is backed by a strong, ever-growing community of more than 5 lakh followers hence having a prominent say on the leading issues of National Interest.

The IADN has a spotless record, it has the intact quality of reporting as it should be. The team of editors, content writers and graphic designers from various backgrounds, represents every region of India- North, South, West and East reflecting the true spirit of India. Our serving/veteran team members have got the opportunity to associate with leading companies, institutions and government organisations.

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# NEW ACQUISITION AND PROCUREMENT

Acquisition of New Weapons,  
Parts and Collaborative  
Developments



## ORDNANCE FACTORY MEDAK TO ROLL OUT COMMAND POST TRACKED VEHICLE

Ordnance Factory Medak to roll out Carrier Command Post Tracked (CCPT) vehicles on Oct 30. These are capable of accomplishing all tactical/technical fire control functions to achieve effective deployment of Self Propelled (SP) Artillery guns. The CCPT is designed and developed to carry out all tactical and technical fire control functions, enabling the effective deployment of self-propelled artillery guns.

## SAFRAN, HAL INK PACT FOR COMMERCIAL ENGINES

The Aviation major Hindustan Aeronautics Limited (HAL) and Safran Aircraft Engines, a French aerospace engine manufacturer, have entered into a Memorandum of Understanding (MoU) to establish industrial collaboration in the production of forged components for commercial engines.

## INDIA PREPARES TO DEPLOY TRAINED 'CYBER COMMANDOS' FOR CYBER DEFENCE



As India braces for the increasing sophistication of cyber threats, the central government is taking proactive measures by creating a dedicated unit of 'cyber commandos' sourced from police forces across states, Union Territories, and central police organizations. The Ministry of Home Affairs (MHA) has recently communicated its directive to all states and UTs, urging them to identify ten suitable candidates for this specialized unit.

## INDIAN ARMY INSTALLS FIRST VERTICAL WIND TUNNEL

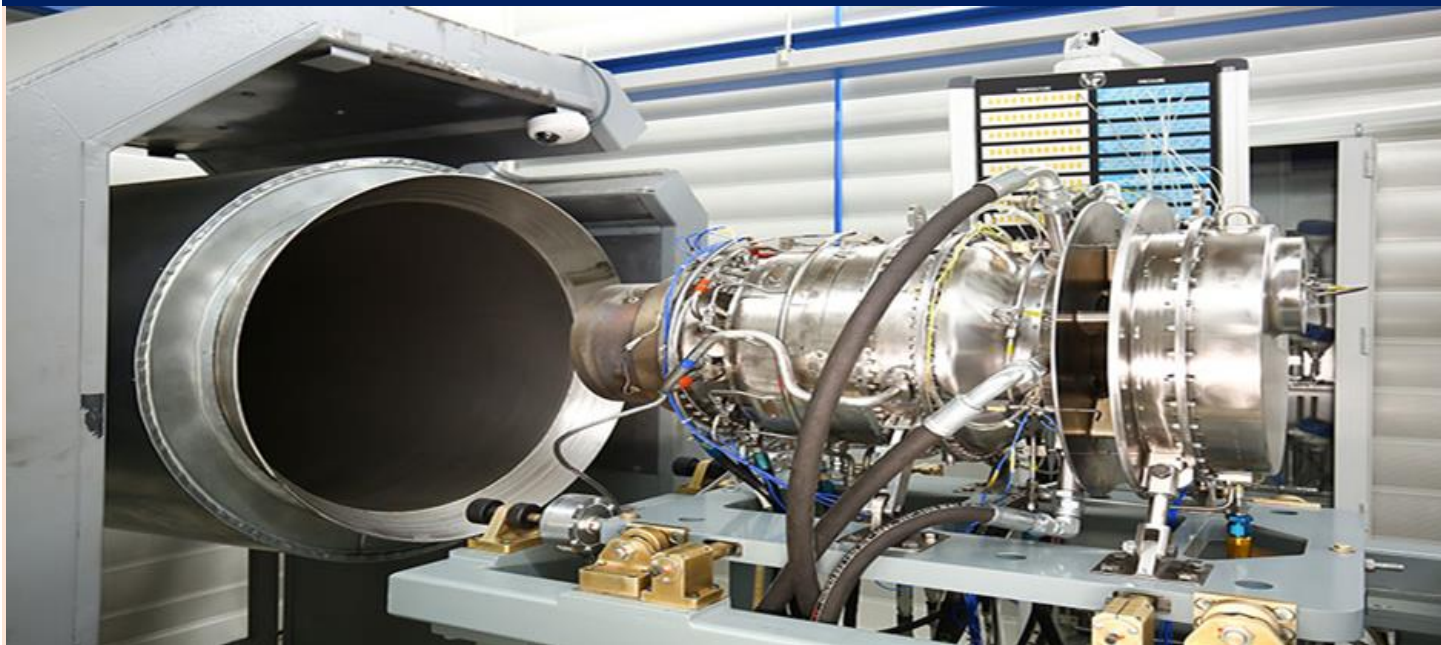


The Indian Army has inaugurated its first Vertical Wind Tunnel (VWT) at a training school in Himachal Pradesh. The state-of-the-art wind tunnel creates a controlled environment for military trainees to enhance their skills in simulating real-life free-fall conditions. The VWT will refine the Combat Free Fall (CFF) skills of armed forces personnel by offering a controlled environment that simulates different CFF scenarios.

## RS 1,800 CRORE ORDER BOOK: ASTRA MICROWAVE EXECUTES AN AGREEMENT WITH NSIL AND IN-SPACE

Astra Microwave Products Ltd informed that the company executed a License - Cum - Transfer of Technology (ToT) agreement between NewSpace India Limited (NSIL), Bengaluru and Indian National Space Promotion and Authorization Centre (IN-SPACe), Department of Space (DOS), Ahmedabad to utilize the know-how relating to MiniSAR: X band Airborne SAR.

## **HAL-SAFRAN JOINT VENTURE TO START DEVELOPING NEW-GENERATION TURBOSHAFT ENGINE FOR IMRH AND DB-MRH NEXT MONTH**



Hindustan Aeronautics Limited (HAL) and French engine-maker Safran's joint venture (JV) will commence the development of the Indian Multi-Role Helicopter (IMRH) and Deck-based Multi-Role Helicopter (DB-MRH) next month.

## **INDIAN ARMY ARMOUR TO GET MAJOR UPGRADE**

The Indian Army approved the Acceptance of Necessity (AoN) for the procurement of 118 Integrated Surveillance and Targeting Systems (ISAT-S) for its mechanised fleet on October 17. This advanced system, as per the released AoN, will 'revolutionise' the way the Army's armoured divisions conduct surveillance operations, enhancing its operational and tactical capabilities. The system will not only have a defensive role but also an offensive one, with its four integrated kamikaze drones.

## INDIA'S INDIGENOUS DESTROYER DELIVERY MARKS STRIDE TOWARDS NAVAL SELF-RELIANCE



The crest of Yard 12706 (*Imphal*), the third amongst the four Project 15B stealth guided missile destroyers, was unveiled by Raksha Mantri Shri Rajnath Singh, in the presence of Manipur Chief Minister Shri N Biren Singh, in New Delhi on November 28, 2023. In a milestone for indigenous shipbuilding, the Indian Navy received the Project 15B guided missile destroyer, *Imphal*, today, showcasing the nation's commitment to 'Aatmanirbhar Bharat' and bolstering its maritime capabilities in the Indian Ocean region.

## DRAFT NATIONAL STRATEGY ON ROBOTICS RELEASED FOR PUBLIC CONSULTATION

The Draft National Strategy on Robotics is released for public consultation and feedback can be submitted through the MyGov platform by October 31,

2023. The strategy will present significant opportunities for the manufacturing sector, Industry 4.0 and cyber-physical systems among others

## **ARTIFICIAL INTELLIGENCE IS SHAPING INDIA'S DEFENCE LANDSCAPE; DEPLOYS AI SURVEILLANCE SYSTEMS AT LOC AND LAC**



With one eye on enhancing its operational capabilities, the Indian Army has been deploying Artificial Intelligence (AI) surveillance systems along its borders with Pakistan and China. Officials pointed out that the army has deployed 140 AI-based surveillance systems, which include high-resolution cameras, sensors, unmanned aerial vehicle (UAV) feed and radar feed. These are then collected and applied through AI, all in the name of detecting intrusions at borders while classifying targets reports DW.

## SECON ENGINEERING DELIVERS MISSILE CUM AMMUNITION (MCA) BARGE TO INDIAN NAVY



Contract for construction and delivery of 08 x Missile Cum Ammunition (MCA) Barge was concluded with SECON Engineering Projects Pvt Ltd, Visakhapatnam, a MSME, in consonance with “Aatmanirbhar Bharat” initiatives of the Government of India. Second Barge of the series LSAM 8 (Yard 76) has been delivered to Indian Navy on 19 Oct 23.

## INDIA CHOOSES U.S. FIRM CUMMINS FOR ENGINES OF INDIGENOUS LIGHT TANK FOR INDIAN ARMY



India has taken a significant step to bolster its defence capabilities by selecting the American company Cummins to supply engines crucial for its indigenous light tanks. These light tanks are urgently required to counter Chinese deployments in high-altitude regions reported TOI.

## **‘ANGAD’, ‘UTTAM’ TO REPLACE IMPORTED SYSTEMS IN INDIGENOUS TEJAS FIGHTER JETS**



In a significant development amid the ongoing push for indigenisation of military weapon systems, the made-in-India TEJAS MK-1A would be fitted with the ‘Uttam’ radar and the ‘Angad’ electronic warfare suite, replacing the imported systems installed previously reported ANI.

## INDIA TO GET 3 ISTAR AIRCRAFT UNDER ₹6,000-CRORE INDIGENOUS PROJECT



The decision to go for an indigenous ISTAR comes after the air force cleared the acquisition of more indigenous 'Netra' early warning and control aircraft to its fleet. As reported, six additional aircraft are planned to be acquired by the air force as part of a \$1 billion plan to add force multipliers in the air force reported Economic Times.

## AMID INDIA-CHINA STANDOFF, ARMED FORCES INKED RS 23,500 CRORE CONTRACTS FOR EMERGENCY PROCUREMENTS IN LAST ONE YEAR

In response to the prolonged military standoff with China in eastern Ladakh, India has escalated its emergency capital procurements, inking contracts valued at around Rs 23,500 crore over the past year, according to reports by The Times of India.

## **BHEL ISSUES EXPRESSION OF INTEREST FOR TECHNOLOGY TIE-UP FOR FUTURISTIC INFANTRY COMBAT VEHICLE (TRACKED)**

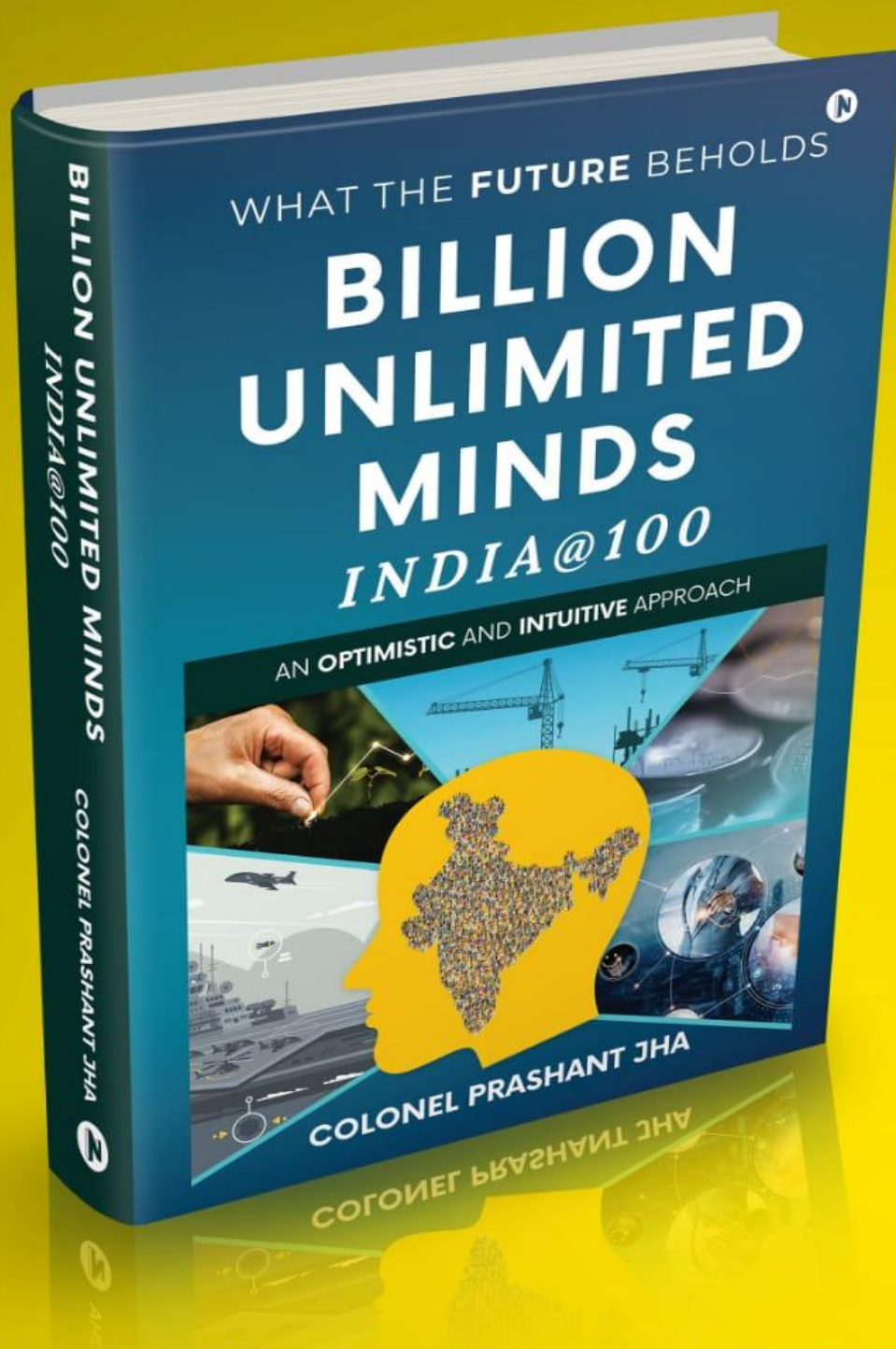


BHEL is seeking Expression of Interest(s) from Prospective Collaborator(s) for Technology Collaboration Agreement (TCA) for joint development of Futuristic Infantry Combat Vehicle (Tracked) Gun Version for Indian Army. The TCA shall enable BHEL to Design, Engineer, Manufacture, Assemble, Test, Supply, Field Install, Commission, Repair, Service and Retrofit Futuristic Infantry Combat Vehicle (Tracked) Gun Version for Indian Army.

## **PUNE DEFENCE START-UP TO PROVIDE ‘UNMANNED’ WEAPONISED BOATS, UNDERSEA DRONES TO ARMED FORCES TO COUNTER CHINESE FORAYS**



In a bid to bolster security measures along the Indian coastline and the strategically significant Pangong Tso Lake in Eastern Ladakh, where tensions between Indian and Chinese forces have persisted since 2020, the Indian security forces are all set to deploy state-of-the-art unmanned weaponized marine boats and undersea drones' swarms for comprehensive above and below water threat detection.



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## Meet The Author



Colonel Prashant Jha is a keen development enthusiast and a compulsive optimist. An alumnus of the Army War College and Defence Services Staff College, he commanded an Air Defence Regiment in the western sector.

Colonel Jha helps entrepreneurs, learners and individuals with opportunities in India. He writes extensively on India's development, sustainability and geopolitics. He is passionate about artificial intelligence, microeconomics, sustainability solutions and new age technologies to solve problems of mankind.

**Let's Work Together To  
Build A Brighter Future,**



**The Opportunities for  
India Are Endless,**



**And Our Growth Is Sure  
To Be Phenomenal!**



### What the Future Beholds



This book provides an in-depth look at the current state of India and the steps that can be taken to ensure its future success. It covers a wide range of subjects, from economics, sustainability to political reforms and social change.



The book talks about India's needs to harness its billion unlimited minds and take the next leap of faith. The book is an invaluable resource for anyone interested in India and its potential to becoming a natural leader in the world order.



It provides invaluable insights into the strategies necessary for India to become a world leader in the years to come. This book is an essential read for anyone interested in India's future over next two decades and beyond.



# SPECIAL MESSAGE FROM H.E. YOGI PURANIK FOR IADN



**H.E. YOGI PURANIK**

*Reflecting upon the journey that has brought me to this moment, I am humbled and honoured to introduce the special Independence Month edition of the Indian Aerospace Defence News (IADN) magazine. This edition holds a significant place in my heart, as it beautifully encapsulates the spirit of Indo-Japan friendship, a bond that has enriched the lives of countless individuals and fostered collaboration between the two nations. My own journey, from Mumbai, India to being the first-ever Asia-origin assembly member in Japan, then the first Indian-origin gazetted officer in the country and eventually serving as its first foreign-origin principal of a public school, has been one defined by both personal aspirations and the profound potential that blossoms through cross-cultural understanding*

*The theme of this edition resonates deeply with me, as it mirrors the trajectory of my own experiences. The Indo-Japan friendship, nurtured through shared values, common goals, and a steadfast commitment to progress, embodies the very essence of what can be achieved when nations come together.*

*I am deeply moved by the graciousness of the IADN team in seeking my wishes and support for this momentous edition. It is heartening to see how IADN has become a trusted source of information for both government and private entities, playing a vital role in matters of national security and international relations. The magazine's commitment to providing accurate and insightful analysis is truly commendable and aligns perfectly with the principles that underpin the Indo-Japan relationship. Within the pages that follow, you will find not just stories and articles, but a tapestry of shared experiences, aspirations, and the unwavering resolve to create a better world. My own journey, in the context of this edition, symbolizes the bridge between India and Japan, a bridge that continues to strengthen with each passing day.*

*I am deeply honoured to share my journey and thoughts in a special message within this edition. As you read these words, I hope you will find inspiration to embrace diversity, foster understanding, and contribute to the growth of the Indo-Japan friendship. Together, we can pave the way for a future where collaboration knows no bounds and where the spirit of unity prevails. I extend my heartfelt gratitude to the IADN team led by Mr. Shantanu K. Bansal for their dedication and passion in bringing this edition to life. It is my wish and hope that this magazine will serve as a catalyst for further strengthening the ties that bind our two great nations. [END]*



# CALL FOR CHAPTERS

## THEME

INTELLIGENCE REVOLUTION: ROLE OF MILITARY INTELLIGENCE  
AND CORPORATE INFLUENCE IN THE FUTURE CONFLICT



In the rapidly changing landscape of contemporary warfare, the role of intelligence agencies and corporate entities has become pivotal in shaping the future of conflicts worldwide. The proposed co-edited book, "Intelligence Revolution: Role of Military Intelligence and Corporate Influence in the Future Conflict," seeks to explore and analyze this crucial intersection. This book aims to provide an in-depth examination of the evolving dynamics of military intelligence, the influence of private corporations on national security, and their collective impact on the global security landscape. In the 21st century, the nature of warfare has transformed significantly, with intelligence agencies and corporate entities playing increasingly prominent roles. This co-edited book addresses the pressing need to understand the intricate relationship between military intelligence and corporate influence in shaping the future of conflicts. As technological advancements, economic interests, and political agendas converge, the implications for global security are profound. This book serves as a platform to explore the multifaceted dimensions of this intelligence revolution and its relevance in contemporary times.

## EDITORS

Dr Monojit Das, executive editor of IADN having over 6 years of research experience as an M.Phil and Ph.D. researcher with co-authored articles and books published on security and international relations. Experience in liaising with civil government to promote India's cultural diversity globally and developing a mechanism to initiate academic exchanges between institutes to promote Indian education and strengthen bilateral relations with friendly nations. My co-authored two books on national security included in curriculum of multiple institutions and invited a BOS member to develop a cyberpsychology program at CIIPS-SCBC, RRU, Institute of National Importance, Gol.

Mr Shantanu K. Bansal, Founder of IADN, he has more than 10 years of experience in research and analysis. An award-winning researcher, he writes for the leading defence and security journals, think tanks and in-service publications. He has worked with the Army Training Command (ARTRAC), Helicopter Training School (HTS), Defence Services Staff College (DSSC) and Institutions alike. He has written two in-service books which include "75 Stratagems of India" of the Indian Army and "60 years of Chetak" of the Indian Air Force (IAF). With hands-on experience in the information warfare domain he has been in the forefront of all national-level dialogues, symposiums.



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# UNVEILING OF EDGEFORCE ASTRO





## EDGEFORCE ASTRO MADE IN INDIA MULTI-MISSION UGV

Last year on the occasion of 75th Independence Day, Col. P Hani and Mr Ramachandran Andayi from Edgeforce India took upon the initiative to unveil an Unmanned Ground Vehicle named "ASTRO" meaning Autonomous Surveillance and Tracking Rover. The ASTRO is a wheeled UGV that works in both teleoperated and autonomous modes for performing surveillance duties. With the ability to integrate various types of surveillance equipment and perform numerous duties in all-weather, semi-amphibious, all-day conditions the ASTRO UGV has been developed keeping in mind the security needs of the country, over a year **the product has been updated** based on the real-threat scenario.

The vehicle is a multipurpose and modular platform which is fully powered with an electric drive train. The vehicle can be configured with switchable 4x4 and 6x6 drives in real-time. The vehicle is purely software-defined and works in 6 operation modes (Manual, Beacon Autonomous Head to Base, Safe and tune/learn). The vehicle operates in 3 autonomous modes (Day, Night and Hybrid). It has an autonomous range of 20kms and is modular with multiple set of payloads mainly Logistics, CASEVAC, RCWS, Surveillance and custom. The vehicle uses encrypted communication using FHSS and has advanced features including DSM support and AR Copilots. The vehicle can be configured for satellite and LTE control.

Command and Control Station powered with Edge FHSS GCS and autonomous intelligence powered with our OP Mission Planning Framework. Vehicles starting from the basic design to the drivetrain, electronics, Embedded logic, GCS, Diagnostics autonomous algorithm to the entire software-defined architecture fully indigenously made in Hyderabad. Not outsourced to anyone. The Edgeforce India is showcasing the updated ASTRO UGV this 24th and 25th December 2023 at Indian Army MCEME Seminar at Secunderabad.

The product has been developed keeping in mind the versatile requirements of the armed forces, Central Armed Police Forces (CAPF), National Disaster Relief Force (NDRF), all India police forces, and other agencies and services employed towards the security and welfare of the country. The Edgeforce ASTRO is capable of performing both indoor and outdoor mapping and surveillance duties at manufacturing plants, refineries, OFBs, military bases, and all other sorts of commercial and strategic installations.

The UGV is a strategic requirement of India. The UGVs safely and effectively perform a variety of dangerous missions. The ASTRO UGV comes in handy for the land-based surveillance requirements besides assisting the forces to do day-to-day duties with fewer man-in-the-loop scenarios. Experts will agree that the future of the world's security sector will heavily be influenced by an autonomous system like the ASTRO UGV. Keeping in view the larger requirements of the UGV in the forces, the company is working on developing an even bigger UGVs.

The Edgeforce Team is committed to meet its customer requirements. The company employs autonomous vehicle experts which can help the client services to select and integrate payloads and configurations based on their requirements. The Edgeforce ASTRO team is plug-and-play compatible with their wide range of UGV accessories and system integrators to deliver a fully integrated turn-key UGV. Hence, the company does extensive field-study for providing a full-fledged surveillance solution. The Edgeforce ASTRO comes with a basic wheeled chassis. For ASTRO chassis can be custom built as wheeled/Tracked based on the field study the company team does for assessing surveillance requirements. As an advancement for the AI surveillance system implemented by Indian army, recently, the

Edgeforce ASTRO being a fully wheeled system act as a force multiplier for accurate tracking requirements of the forces.

The Edgeforce ASTRO is a medium-sized UGV. Its large payload capacity and power systems accommodate an extensive variety of payloads, customised to meet research needs which include stereo cameras, LIDAR, GPS, IMUs, manipulators and more can be added to the UGV by the company integration experts. The Edgeforce ASTRO's rugged construction and high-torque drivetrain give it an edge over other such systems in the market.



For more information: [ramachandran@edgeforce.in](mailto:ramachandran@edgeforce.in) or visit [www.edgeforce.in](http://www.edgeforce.in)

# TECHNOLOGY FOCUS

Technologies Which Are  
Changing the Battlefield In  
India and Beyond



## **DRDO DEVELOPING LIQUID METAL BASED RECONFIGURABLE ANTENNA FOR SHARED APERTURE**

The reconfigurability feature in antennas is generally implemented using high-frequency switching and other similar techniques to vary their frequency of operation, its pattern, and polarization without integrating multiple antennas within the same device. This tech can use in radar, communications, and electronic warfare.

## **STERLITE TECHNOLOGIES DEVELOPS WORLD'S SLIMMEST 160-MICRON FIBRE**



The tech innovation has been conceptualised and developed indigenously at STL's Centre of Excellence in Maharashtra, making it the first company globally to develop and patent this technology. The optical fibre was unveiled at the 7th edition of India Mobile Congress (IMC) 2023 by Union Minister Ashwini Vaishnaw.

## **CHENNAI BASED HAWKING DEFENCE DEVELOPS WEARABLE ANTI DRONE SOLUTION**



Hawking Defence Services (HDS) is a Chennai-based tech start-up that provides cost-effective solutions to the Indian military. HDS's wearable anti-drone system is a compact and portable system that can detect and neutralize multiple drone threats. It can detect and mitigate remote controlled drones at long ranges, often before the drone takes off.

## **IIT-MADRAS-INCUBATED STARTUP LAUNCHES HYBRID VERTICAL TAKE-OFF AND LANDING DRONE FOR CARGO**



The drone with 10X faster flight time, unmatched battery performance, multi-hop capabilities and diverse payload options can also be used for surveillance purposes. The efficiency of fixed-wing flight makes Atva an invaluable asset for numerous applications, and its modular airframe with detachable wings, wholly produced in-house, is in sync with the government's 'Made-in-India' initiative.

## **IIT-DELHI RESEARCHERS ACHIEVE SECURE QUANTUM COMMUNICATION FOR 380 KM IN STANDARD TELECOM FIBRE**

“It paves ways for more secure long distance communication useful for strategic areas such as defence and online banking, making digital transactions safer in the near future.” IIT-Delhi researchers have achieved an experimental breakthrough on secure quantum communication up to a distance of 380 kilometres in standard telecom fibre with a very low error rate that can be helpful in securing financial transactions and secret codes.

# SPACE

From The Field of Space And  
Space Technologies



## **MANGALYAAN-2 MISSION: ISRO TO DEPLOY POWERFUL PAYLOADS**

India is gearing up for another significant milestone in space exploration with the upcoming Mars Orbiter Mission-2, also known as Mangalyaan-2. It will be equipped with a diverse array of scientific payloads, each in various stages of development. These payloads include the Mars Orbit Dust Experiment (MODEX), the Radio Occultation (RO) experiment, the Energetic Ion Spectrometer (EIS), Langmuir Probe and the Electric Field Experiment (LPEX).

## **AIRBUS, IIT-KANPUR JOIN HANDS TO DEVELOP SPACE PROJECTS**

Airbus and Indian Institute of Technology, Kanpur have signed a memorandum of understanding (MoU) to facilitate increased collaboration in developing education programs to foster talent development in the Indian aerospace sector, said the European aerospace company in a statement.

## **ISRO ROLLS OUT TEST LAUNCH VEHICLE FOR INDIA'S FIRST HUMAN SPACEFLIGHT**



ISRO has rolled out the Test Launch Vehicle for the first launch of Abort Demonstration of Crew Escape System (CES). “In-flight Abort Demonstration of Crew Escape System (CES)” at Mach number 1.2 with

the newly developed Test Vehicle followed by Crew Module separation & safe recovery.

## **ISRO TO USE LIFI FOR SATELLITE COMMUNICATION**

The Indian Space Research Organization (ISRO) has entered into a partnership with Nav Wireless Technologies to employ LiFi (Light Fidelity) technology for satellite communication in space. This collaboration represents a significant shift in space communication technology, leveraging optical wireless technologies over traditional Radio Frequency (RF) systems.

## **ISRO SUCCESSFULLY CONDUCTS ENHANCED CE20-E13 ENGINE HOT TEST FOR 22T THRUST QUALIFICATION**



CE20 engine is the first indigenously developed cryogenic engine that powers the upper stage (C25) of LVM3 rocket. The engine was already qualified to operate at a thrust level of 19 tons and performed successfully in 6 successive LVM3 missions, including the Chandrayaan-2, Chandrayaan-3 and two commercial OneWeb missions.

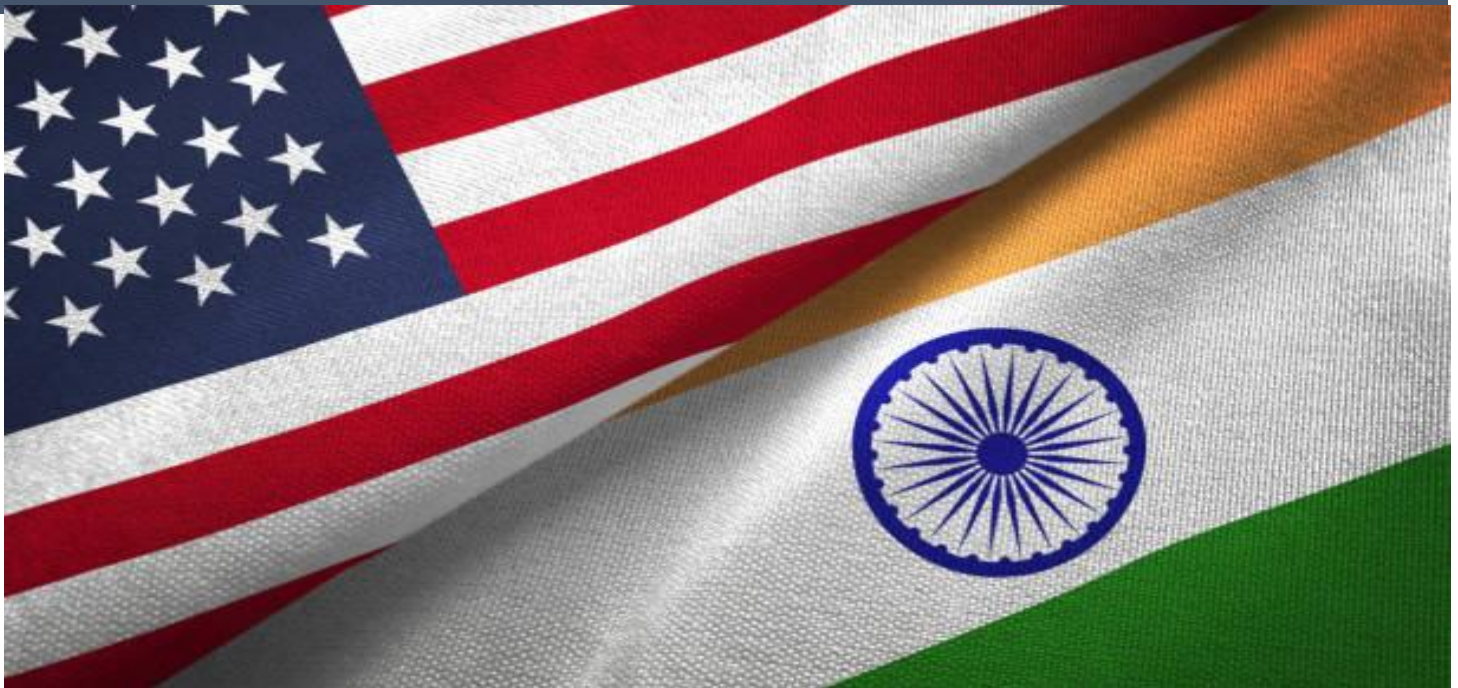
## **INDIA-MADE IMAGE DATA PROCESSING TECH AIDS UNRAVEL COSMIC SECRETS**

As ISRO burns the midnight oil on Earth, waiting to hear again from Chandrayaan-3 lander (Vikram) and rover (Pragyan), principal investigators of instruments on the two have begun sifting through data for new findings reported TOI.

# INTERNATIONAL RELATIONS

Covering International and  
Geopolitical Matters

## ASIA AND PACIFIC REGION



## USA AND INDIA'S UNBALANCED DIPLOMACY OVER PANNUN

John Kirby, spokesperson for the White House, affirmed the commitment of the US to enhance and fortify its strategic alliance with India despite the Pannun incident. He emphasized, "Simultaneously, we are deeply attentive to these accusations and this ongoing investigation." An Indian national, Nikhil Gupta, has been charged by the United States for purportedly participating in a plot to assassinate Gurpatwant Singh Pannun, the

designated terrorist and founder of Sikhs for Justice (SFJ), within the U.S. borders. The Ministry of External Affairs has expressed apprehension regarding this case, emphasizing that further steps will be determined based on the inquiry committee's discoveries.

## **CHINA'S RAMPED-UP BUILDING OF NUCLEAR REACTORS**

Over the last decade, China has increased its nuclear reactors by 37, totalling 55, as reported by the International Atomic Energy Agency, a United Nations organization. In contrast, during the same period, the United States, leading with 93 reactors globally, only added two. China plans to approve six to eight new nuclear power units annually in the foreseeable future, according to a statement by an official from the China Nuclear Energy Association (CNEA). China aims to bolster its nuclear power industry as part of a broader initiative focused on renewable energy and domestic energy security. The expectation is for nuclear energy to contribute around 10% to the country's power generation by 2035 and 18% by 2060, reaching a total generation capacity of 400 gigawatts (GW) by 2060.

## **SOUTH KOREA LAUNCHES ITS FIRST SPY SATELLITE**

South Korea declared its intention to deploy its inaugural military reconnaissance satellite aboard a SpaceX rocket, intensifying the space competition on the Korean Peninsula following Pyongyang's recent launch of its first military surveillance satellite. A source from the defence ministry briefed reporters stating that Seoul's surveillance satellite, scheduled for launch via one of Elon Musk's SpaceX Falcon 9 rockets, is set to lift off from the Vandenberg US Space Force Base in California at 0319 Seoul time (GMT 1819).

## **ISRAEL-HAMAS CONFLICT CONTINUES WITH BLOOD BATH, HUMANITARIAN MEASURES FAILED TO END THE VIOLENCE**

United Nations (UN) has recently expressed the Israel-Hamas situation as “Hell on Earth” as humanitarian assistance failed to calm down the conflict. The safety of the citizens of Gaza concerned the United Nations, yet, several International efforts failed to bring the peace. The aggression of big powers have jeopardized the lives of people living in the region. People are fleeing from the region to search a haven. The skirmishes have taken hundreds of innocent lives.

## **RUSSIA WILL SOON BOOST ITS NUMBER OF TROOPS IN UKRAINE**

Russian President Vladimir Putin has approved a decree that will result in a 15% increase in the number of Russian troops. Around 170,000 personnel will be gradually added, raising the total to 1,320,000 serving members. The defence ministry stated that this action was prompted by growing threats, particularly stemming from the expansion of NATO. Despite not disclosing specific figures, Russia is believed to have incurred substantial losses during the extended conflict in Ukraine spanning over a year and a half.

## **AMERICA (NORTH AND SOUTH)**

### **USA TO SHELL UP UKRAINE'S AMMUNITION STOCK**

Reportedly, the United States is extensively working on replenishing Ukraine's major artillery ammunition, which is running low. Discussions between the U.S. and Greek governments involve the purchase of 75,000 artillery rounds, intended for transfer to Ukraine. This proposed \$47-million

deal encompasses 50,000 105-millimetre shells, 20,000 155-millimetre shells, and 5,000 203-millimetre shells. Of particular significance are the largest shells, as they would play a crucial role in sustaining the operational capabilities of Ukraine's substantial 2S7 self-propelled howitzers for an extended duration.

## **BRAZIL TO JOIN OPEC+ ALLIANCE**

Brazil, as confirmed by Brazilian Energy Minister Alexandre Silveira, is set to become a member of the influential OPEC+ oil coalition, aligning with some of the world's largest crude-producing nations. This announcement was unveiled during a rescheduled OPEC+ meeting aimed at deliberating on the oil output strategy for 2024. This discussion occurred amidst persistently low oil prices affected by tentative demand recovery in China, geopolitical risks, and uncertainty surrounding oil supplies from OPEC members Iran and Venezuela under U.S. sanctions.

## **INDIA RESUMES VENEZUELAN OIL IMPORT**

Indian refineries have restarted their acquisition of Venezuelan oil through intermediaries. Reliance is scheduled to hold discussions with executives from the state-owned firm PDVSA next week to explore direct sales, following the relaxation of U.S. sanctions on Venezuela. The revival of trade between the OPEC producer and its former second-largest oil purchaser comes after the temporary lifting of sanctions by Washington in October, which led to a surge in ad-hoc sales of crude and fuel through brokers and traders, predominantly to China. However, Venezuela's oil production has been erratic, constraining its export capacity. India's previous import of Venezuelan crude was in 2020. Access to Venezuela's

heavy oil could help limit import expenses for India, a significant buyer of Russian oil, and further decrease its dependence on the Middle East.

## **INDIA EYES ON PERU FOR LITHIUM RESERVES**

Peru has become a significant focal point for India's trade interests within the Latin American and Caribbean (LAC) region. This newfound importance stems from India's status as one of the largest global importers of lithium batteries, a crucial component crafted from a vital mineral that Peru, despite being a relatively small South American nation, possesses in abundance. Lithium, classified as a non-ferrous metal, holds critical significance alongside copper, nickel, cobalt, and rare earth elements. These minerals are deemed essential due to their widespread applications, spanning from mobile phones to electric vehicles, solar panels, semiconductors, and wind turbines—all pivotal components of contemporary technology. Additionally, these minerals play indispensable roles in transportation and defence sectors.

## **CHILE SUFFERS SHARP FALL IN COPPER PRODUCTION**

As per Chile's National Institute of Statistics (INE), the industrial production index (IPI) in the country exhibited a 1.1% year-on-year increase in October 2023. This growth was propelled by advancements in Chile's manufacturing, electricity, gas, and water sectors, while the mining sector experienced a decline. The domestic mining sector, as indicated by the IPMin index, witnessed a 6.8% year-on-year decrease in October 2023. This decline primarily resulted from reduced activity in the metallic mining subsector within the country, which contracted by 7.8% due to lowered copper mining and processing. The report highlights that Chile, recognized as the world's largest copper producer, extracted 464,311 tonnes of the red

metal in October 2023, reflecting a 4.4% decrease compared to the 485,447 tonnes mined in October 2022.

## EUROPE



### **GERMANY TO CONVERT ITS EUROFIGHTER TYPHOON FIGHTER JETS INTO ELECTRONIC WARFARE AIRCRAFT**

Germany plans to substitute its Tornado electronic combat/reconnaissance (ECR) aircraft with the Eurofighter Typhoon Elektronischer Kampf (EK), specifically designed for executing missions focused on suppressing enemy air defense (SEAD). Designated as the Eurofighter Typhoon EK, this aircraft will be outfitted with Northrop Grumman/MBDA's AGM-88E Advanced Anti-Radiation Guided Missile (AARGM), a missionized pod, and Saab's Alexis Electronic Warfare (EW) suite, along with its supersonic, medium-range, air-launched tactical capabilities.

## **FRANCE URGES G7 NATIONS TO PUT AN END TO FOSSIL FUEL CONSUMPTION BY 2030**

French President Emmanuel Macron urged the G7 nations during the UN climate talks on Friday to lead by example and "commit to phasing out coal" by 2030. Addressing COP28 in Dubai, Macron emphasized that investing in coal was "truly nonsensical." He outlined a plan designed to tackle the climate crisis while ensuring France's continued competitiveness in agriculture and industry. Macron stated, "France is diminishing our reliance on what are known as fossil fuels—coal, petrol, and gas—upon which we no longer have domestic production but continue to rely." He further articulated the goal to reduce this dependency to 40% by 2030.

## **NATO CHIEF URGES TURKEY TO LET SWEDEN JOIN THE ALLIANCE**

NATO Secretary-General Jens Stoltenberg conveyed to Turkey's president the importance of allowing Sweden to join the military alliance. Currently, Turkey and Hungary stand as the only NATO countries yet to formally endorse Sweden's bid for accession. During his meeting with President Recep Tayyip Erdogan on the sidelines of the COP28 climate summit in Dubai, Stoltenberg informed The Associated Press that he urged Turkey to expedite the approval process. Turkey has postponed ratification for over a year, citing concerns that Sweden isn't adequately addressing Turkey's security interests, particularly concerning its efforts against Kurdish militants and other groups Ankara perceives as security threats.

## **HUNGARY WILL BLOCK THE EU'S ASSISTANCE TO UKRAINE MEMBERSHIP**

Hungary is set to obstruct a potential EU proposal regarding Ukraine's accession to the European Union. Gergely Gulyas, chief of staff to Hungarian Prime Minister Viktor Orban, expressed during a press briefing that the initiation of discussions to formally integrate Ukraine into the EU was deemed "premature." Gulyas emphasized, "We are facing an entirely premature proposition," and stated that Hungary cannot support a collective decision on commencing Ukraine's journey toward EU membership.

### **ITALY TO 100 MILLION EUROES TO COP28 FUNDS**

Italy has committed to allocating 100 million euros (\$108.91 million) toward a fresh fund intended to assist impoverished nations in managing the "loss and damage" incurred from climate change. Prime Minister Giorgia Meloni revealed that 70% of her country's 4.2-billion euro Climate Fund would be directed towards initiatives in Africa. Speaking at an event during the COP28 climate conference in Dubai, she stated, "We are contributing 100 million euros to the loss and damage fund to support the objectives of this COP28."

## **AFRICA**

### **PLATINUM MINE IN SOUTH AFRICA CLAIMS MANY LIVES**

A tragedy at a South African platinum mine has resulted in the loss of 11 workers' lives and injuries to 75 others, as reported by the mine's operator. Nico Muller, the chief executive of Impala Platinum, referred to the incident as the company's most tragic day. The company explained that the accident occurred with a winding rope connected to a cage-style lift used for transporting workers up and down the mine shaft. Unexpectedly, the lift began descending, leading to the accident. South Africa hosts some of the deepest mines globally.

## **FLOOD IN AFRICA DISPLACES MORE THAN 2 MILLION**

Torrential rains and flooding in the Horn of Africa have resulted in over two million individuals being displaced from their homes, as per an AFP compilation of government and UN data released on Thursday. Somalia, Kenya, and Ethiopia collectively mourn nearly 300 casualties amidst this latest calamitous climate event. This intense rainfall, attributed to the El Nino weather pattern, has hit the region as it strives to recover from the most severe drought in four decades, which plunged millions into starvation. Describing the situation as dire, the humanitarian organization Action Against Hunger released a statement late Wednesday, just before the commencement of the COP28 climate summit in Dubai.

## **MILITANT GROUP IN MALI CLAIMS THE SEIZE OF MILITARY BASE**

Al-Qaeda-affiliated Islamists claimed to have taken control of a military facility in northern Mali, severely wounding the armed forces of the nation. However, the army of Mali claimed to have repelled raids on its bases in the Timbuktu region. Using a suicide bomb vehicle, Jama'at Nusrat al-Islam wal Muslimeen (JNIM) captured the Niafounke camp on Friday, the group announced on its Al-Zallaqa Foundation media platform. SITE, a US organization that tracks extremist organizations, confirmed that claim on Saturday. According to JNIM, the combat took the lives of tens of soldiers, wounded two, and captured one.

## **UN FEARS ANOTHER VIOLENCE IN SUDAN**

The UN expressed concern over a surge in interethnic conflict in Sudan, citing credible reports indicating deliberate attacks against the Masalit

ethnic group. "We are in the process of verifying reliable information we've received concerning significant acts of violence targeting members of the Masalit community in Darfur," explained Stephane Dujarric, the spokesperson for the UN Secretary-General, during a briefing for journalists. The UN's data specifies "violence reportedly carried out by Arab militia groups" between November 4-6, potentially involving the Rapid Support Forces (RSF), a paramilitary entity engaged in conflict with the Sudanese army since mid-April.

# MILITARY EXERCISES

India participating in international and bilateral military exercises



## INDIA-INDONESIA-AUSTRALIA EXERCISE

The ships of First Training Squadron (1TS) - INS Tir, INS Sujata, Sail Training Ship Sudarshini and CGS Sarathi were deployed on a long Range training deployment to South East Asia. The deployment was a part of the ongoing afloat training of the 105th Integrated Officers' Training Course. During the deployment, the ships visited Thailand, Malaysia, Singapore, Indonesia and Vietnam. Various training activities, professional interactions and Joint Maritime Partnership Ex were conducted with the host navies and maritime forces during the visit.

## INDIA-INDONESIA-AUSTRALIA EXERCISE



Indian Navy's indigenously built warship INS Sahyadri, mission deployed in Indo-Pacific, participated in the maiden trilateral Maritime Partnership Exercise with the ships and aircraft from the Royal Australian Navy (RAN) and Indonesian Navy from 20 - 21 Sep 2023.

The trilateral exercise provided an opportunity for the three maritime nations to strengthen their partnership and improve their collective capability to support a stable, peaceful and secure Indo-Pacific region. The exercise also provided the opportunity for the participating navies to benefit from each other's experience and expertise. Complex tactical and manoeuvring exercises, cross-deck visits and cross-deck landings of integral helicopters were conducted for training of crew and enhancement of interoperability.

## DIVE TRAINING EXERCISE IN SRI LANKA



Indian Navy's Diving Support and Submarine Rescue Vessel, INS Nireekshak departed Trincomalee on 21 Sep 23 after a week long Dive Training exercise with the Sri Lanka Navy. Diving teams of both the Navies undertook extensive harbour as well as sea dives. In addition, several interactions including cross training of personnel on various aspects of mutual interest were held between the ship's crew and SLN personnel. Officers from Junior Command & Staff College, Trincomalee visited the ship who were briefed on the Saturation Diving capability of the ship.

Apart from training activities, a social outreach activity was held at a school of underprivileged children in Trincomalee. A joint beach cleanup drive was undertaken at Dutch Beach on the occasion of International Coastal Cleanup Day. In a display of unity and wellness, a joint yoga session and friendly basketball match were held with Sri Lankan Naval personnel. The ship was open to visitors and more than 1500 personnel visited the ship.

## SIMBEX-23



Indian Naval Ships Ranvijay and Kavaratti and submarine INS Sindhukesari arrived in Singapore to participate in the 30th edition of the Singapore India Maritime Bilateral Exercise (SIMBEX), an annual bilateral Naval exercise between the Indian Navy and Republic of Singapore Navy (RSN), which is being conducted since 1994. SIMBEX holds the distinction of being the longest continuous naval exercise that the Indian Navy has with any other country.

SIMBEX-2023 was conducted in two phases - Harbour Phase at Singapore from 21 to 24 September 2023, followed by a Sea Phase. Besides Ranvijay, Kavaratti and Sindhukesari, Long-Range Maritime Patrol Aircraft P8I is also participating in the exercise.

The Harbour Phase witnessed a wide range of professional interactions, cross-deck visits, Subject Matter Expert Exchanges (SMEE) and sports fixtures, aimed at enhancing interoperability and mutual understanding between the two navies.

The Sea Phase of SIMBEX 23 involved complex and advanced air defence exercises, gunnery firings, tactical manoeuvres, anti-submarine exercises and other maritime operations.

## INDIAN COAST GUARD ON ASEAN DEPLOYMENT



INS The Indian Coast Guard Ship Samudra Prahari, a specialized Pollution Control Vessel, is currently on an overseas deployment to ASEAN countries from 11 Sep to 14 Oct 2023. This deployment is part of India's ASEAN initiatives for Marine Pollution Response, showcasing the Pollution Response capabilities of the Indian Coast Guard (ICG) and its commitment to addressing marine pollution issues and enhancing capacity in the region.

The ship is equipped with a Chetak Helicopter in Pollution Response configuration, enhancing its capabilities in this area. As part of an overseas exchange program, the ship had embarked 13 NCC cadets to participate in "Puneet Sagar Abhiyan," an international outreach program focused on beach clean-ups and similar activities in coordination with partner nations.

This visit holds significant importance in strengthening bilateral relationships with key maritime agencies, including the Thai Maritime Enforcement Command Centre and BAKAMLA (Indonesia Maritime Security Agency). These relationships have evolved over the years to ensure the safety, security, and cleanliness of the seas in the region. Engagements with senior officials and personnel from these agencies during the visit has further enhanced regional safety and security.

The visit's agenda included professional exchanges, cross-deck visits, planning and tabletop exercises, joint exercises, as well as official and social engagements including visits to capacity-building facilities.

## INDIAN NAVY IN MAURITIUS



INS Sharda, Indian Navy's Offshore Patrol Vessel visited Port Louis, Mauritius 13 – 15 Sep 23. Prior to entering Port Louis the ship had carried out joint EEZ surveillance with Mauritius National Coast Guard (MNCG).

On arrival, the ship was accorded a warm welcome by the Mauritius Coast Guard Dornier and Mauritius Police Force Band. During the visit, the ship engaged in several professional interactions and cross training visits. A guided tour of the ship was provided to MNCG personnel who were familiarised with the ship's role and capabilities.

During the ship's stay, personnel from the Indian Navy and MNCG were engaged in professional and training interactions and deck visits. The ship conducted lecture cum training sessions on various aspects of firefighting, damage control and small arms handling. A combined yoga was organised onboard the ship with the MNCG personnel.

On departure, on 15 Sep, INS Sharda undertook joint EEZ surveillance with Mauritius National Coast Guard (MNCG) units enhancing maritime cooperation between the two countries.

## INDIAN NAVY IN SEYCHELLES



INS Sunayna, a ship based at Southern Naval Command, Kochi, visited Port Victoria, Seychelles from 03- 06 Sep 23. During the port visit, the ship participated in a variety of activities which included professional and social interactions, cross deck visits and joint yoga sessions. A familiarisation tour of the ship was conducted for personnel of Seychelles Coast Guard and the ship was open for visitors.

The Commanding Officer, INS Sunayna called on Shri Kartik Pandey, High Commissioner of India and interacted with Brig Michael Rosette, Chief of Seychelles Defence Forces along with senior leadership of SDF. As part of the Indian Navy's community outreach programme, the ship's crew visited Anse Royale Old Age Home and donated essentials and provisions. The visit reinforced India-Seychelles defence ties.

## INDIAN NAVY IN EGYPT



INS Sumedha arrived at Port Alexandria, Egypt on 06 September 2023 to participate in 'Exercise BRIGHT STAR- 23'. Ex Bright Star 23 was scheduled to be conducted in two phases. The Harbour Phase involved wide-ranging activities such as cross-deck visits, professional exchanges, sports fixtures and interactions for planning and conducting of the Sea Phase. The Sea Phase included complex and high intensity exercises

encompassing cross deck flying, anti-surface and anti-air exercises including live weapon firing drills. The exercise provided an opportunity to the Indian Navy to enhance and demonstrate interoperability and also gain from the best practices in maritime security operations from its partner nations.

This was the maiden participation of the Indian Navy in Ex Bright Star, which also saw participation of Naval ships from other Friendly Foreign Navies. The exercises spanned over two weeks with intense operations and training, aimed at reaffirming the ability of the participating navies to operate together as an integrated force and to highlight their shared commitment to maritime security and global stability through collaborative training and mutual understanding.

INS Sumedha, commanded by Commander MC Chandee, is the third ship of the indigenously built Saryu class Naval Offshore Patrol Vessels (NOPV) that possess long endurance, are fitted with requisite weapons, sensors, and capable of embarking an integral helicopter. A highly potent platform that can be deployed for a variety of operational missions, INS Sumedha bears testimony to the capabilities of the Indian shipbuilding industry which underscores the vision of 'Aatmanirbhar Bharat'.

## INDIAN NAVY IN SRI LANKA



INS Delhi, the first guided missile destroyer planned and built by the Indian Navy, arrived at Colombo on September 1, 2023. The ship was in Sri Lanka for two days at the same time as the visit of the Hon'ble Raksha Mantri Shri Rajnath Singh.

As part of India's "Arogya Maitri " initiative to help friendly countries get good medical supplies, the ship will also give away state-of-the-art medical bricks made in India as part of project BHISHM (Bharat Health Initiative for Sahyog Hita and Maitri). The ceremony will take place on the INS Delhi.

The visit of the ship was meant to improve ties between the two navies and to build up the Bridges of Friendship with India's friendly neighbor. The crew of INS Delhi worked closely with people from the Sri Lanka Navy. They conducted professional activities to improve interoperability and activities like a yoga class and a beach clean-up drive to raise knowledge about health and the environment. The ship also stayed open for school kids and other people from the area.



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