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### **Assam: Training Conducted on ‘DRDO Water Testing’ for Armed Forces**

The Defence Research Laboratory (DRL) Tezpur, one of the premier labs of the Defence Research and Development Organisation (DRDO) took proactive steps to conduct training on “DRDO Water Testing Kit” on Tuesday to Army personnel under 4 Corps.

Director DRL, Dr DV Kamboj interacted with all the participants and encouraged them to learn the necessary skills to detect contaminants from water using the DRDO water testing kit.

The army personnel deployed in remote and forward areas of North East India face challenges related to the assessment of drinking water in field conditions.

The training provided by DRL Tezpur would help them to address the issue effectively as water may look very clear but may contain many contaminants like fluoride, arsenic, bacteria, etc which are harmful to human health and it is difficult to detect these contaminants by the naked eyes.

DRL-DRDO has developed a kit that can detect 11 different parameters including some very dangerous contaminants, the officials said.

In this training elaborate demonstration was given to armed personnel to detect the contaminants present in water using the ‘DRDO Water Testing Kit’.

This kit is also suitable for use even in field conditions, which would make it easier for Army personnel to conduct water testing in remote areas where laboratory facilities may not be available, the officials said.

Army personnel from 16 different forward units attended the training programme followed by the distribution of the training certificates.

<https://theprint.in/india/assam-training-conducted-on-drdo-water-testing-for-armed-forces/1512742/>

## **'Work with us': DRDO Chief Sameer V Kamat Seeks Private Sector Support on Spacotech**

The head of the Defence Research Development Organisation (DRDO), the country's leading defence research agency, Dr Sameer V Kamat, has sought enhanced outside support to work on the space tech ecosystem. "If there are any academics, startups, micro, small, medium enterprises (MSMEs) or large companies here, my request to you is please work with us closely so that we can help our country achieve such capabilities faster than what we have been able to do for all our other systems," DRDO chairman Dr. Samir V Kamat said on Tuesday.

Dr. Kamat was speaking at the opening session of the three-day 'Indian DefSpace Symposium' organised by the apex industry body Indian Space Association (ISpA) in New Delhi. "Over the past few years, DRDO has started increasing its focus on this very critical domain. We are looking at space-based surveillance, space situational awareness and also protecting our space-based assets. Our capabilities are improving in all these areas but a lot more needs to be done!" he said.

Kamat reiterated that DRDO was looking at developing new models of development to build capabilities. "Earlier, most of the development used to happen in the laboratory and then we would look out to transfer the system to the industry. But in space and, going forward, in other technologies, we are now looking at working very closely with the industry as well as the academia right from the development stage," said Dr. Kamat.

The DRDO chief said the agency had initiated 15 DRDO Industry Academia Centres of Excellence at the Indian Institutes of Technology (IITs) and Indian Institutes of Sciences (IISCs). "In all those centres of excellence, some technologies or others relevant to this domain are going to be the focus areas," he said.

In response to Dr. Kamat's call, the director general of ISpA, Lt. Gen (Retd) Anil Kumar Bhatt assured the Indian industry was ready to contribute and play its part.

<https://www.businesstoday.in/latest/story/work-with-us-drdo-chief-sameer-v-kamat-seeks-private-sector-support-on-spacotech-377001-2023-04-11>

## DRDO on Twitter

 **DRDO** ✓  
@DRDO\_India

#DRDOUpdates | Hon'ble Raksha Rajya Mantri Shri Ajay Bhatt visited DIBER, Haldwani today and reviewed the various scientific activity especially off grid energy solutions for armed forces deployed in the high altitude areas.  
[@SpokespersonMoD](#)  
[@AjaybhattBJP4UK](#)



7:17 PM · Apr 11, 2023 · 6,736 Views

25 Retweets 196 Likes

    

 **DRDO** ✓ @DRDO\_India · 14h

Hon'ble RRM also appreciated DRDO efforts for developing technologies for societal benefits like high Curcumin turmeric variety, application of DRONE technology for agriculture and export oriented exotic vegetables and phytomedicines.

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## Defence News

### Defence Strategic : National/International



Press Information Bureau  
Government of India

Ministry of Defence

*Tue, 11 Apr 2023*

### **Indian Navy's Naval Aviation Industry Outreach Programme at Kolkata**

A Naval Aviation Industry Outreach Programme in collaboration with Confederation of Indian Industry, Eastern Region, CII(ER) was conducted on 11 Apr 23 at Kolkata. The event was organised by the Naval Liaison Cell, Barrackpore under the aegis of HQENC. VAdm Sanjay Mahindru, Deputy Chief of Naval Staff (DCNS), presided over the inaugural session with senior functionaries of tri services, Coast Guard, DRDO and CII(ER) sharing their perspectives on Indigenisation. The event aimed at fostering an eco system conducive to 'Innovate-Integrate-Indigenise' witnessed active participation of over 100 industry partners operating in and around Kolkata. During the event, the second edition of Manual for Indigenisation of Air Stores (MINAS) which has undergone a comprehensive review after its initial publication in 2010 was released by the DCNS. This contemporary edition of the guiding document for Naval Indigenisation agencies also included simplified procedures for fast-tracking indigenisation and avenues to effectively utilise extant financial regulation. The Technical sessions by Indian Naval agencies and Industry partners that followed the inaugural session were reviewed by RAdm Deepak Bansal, ACNS (Air Materiel).

<https://pib.gov.in/PressReleasePage.aspx?PRID=1915690>



Press Information Bureau  
Government of India

Ministry of Defence

*Tue, 11 Apr 2023*

### **Raksha Mantri Shri Rajnath Singh to Inaugurate Three-day International Conference on Defence Finance & Economics in New Delhi on 12th April**

Raksha Mantri Shri Rajnath Singh will inaugurate the three-day International Conference on Defence Finance & Economics in New Delhi on April 12, 2023. The conference, organised by

Ministry of Defence (Finance), will provide a platform for eminent policy makers, academics and government officials from within the country and abroad to share their insights and experiences on Defence Finance and Economics in the context of evolving security challenges and policies globally. Delegates from USA, UK, Japan, Australia, Sri Lanka, Bangladesh and Kenya will participate in the conference.

The conference aims to foster dialogue and collaboration among the participants and contribute to the country's defence readiness with optimum financial resources and effective implementation of the Defence Budget. It aims to participate in global discussions on Defence Finance & Economics and propose a sustainable blueprint on the subject.

The objective behind the conference is to disseminate the best practices, experiences and expertise of various countries and align processes in Indian context with international standards. It also hopes to facilitate collaborations with foreign governments, international institutions and global leaders in the domain of Defence Finance and Economics to support the Government's ongoing efforts on indigenisation and self-reliance in the Defence sector, and to advance transformative reforms. The topics of discussion will include current challenges and opportunities in the areas of Defence Finance and Economics, such as how to allocate and use resources efficiently & effectively and how to manage logistics in a cost-conscious way. The participants will also deliberate upon different models and practices of finance and economics related to Defence Acquisition around the world as well as the latest developments and innovations in Defence Research and Development.

In addition, the discussions will address best practices on managing human resources in Defence, including issues related to pay, pensions and welfare of Defence Personnel and the role & functions of oversight mechanisms within defence ecosystems. More details on the conference can be viewed on the website: <https://cgda.nic.in/ICDFE>

<https://pib.gov.in/PressReleasePage.aspx?PRID=1915589>



*Tue, 11 Apr 2023*

## **India must Miniaturise Satellites, Develop Re-usable Launch Vehicles: Chief of Defence Staff**

India must work on expanding its existing navigation with the Indian Constellation ('NavIC') series of satellites, provide space-based Intelligence Surveillance and Reconnaissance (ISR) and ensure secure satellite-assisted communications, said Chief of Defence Staff, Gen Anil Chauhan.

India's highest-ranking military officer was speaking at the 'Indian DefSpace Symposium 2023', organised by the Indian Space Association and the Defence Research and Development Organization (DRDO).

Speaking on the occasion, Lt Gen AK Bhatt (Retd.), Director General, Indian Space Association, said, "the symposium will pave the way forward of how we leverage international space cooperation and also the policy and strategy for building an overall comprehensive defence space strategy." At the event aimed at enhancing collaboration between India's Space and Defence

sectors, Gen Chauhan emphasised on the need to develop dual-use(utilised for civilian and military purposes) platforms with special focus towards incorporating cutting-edge technology.

Touching upon what was expected from the Indian space sector, he said that India needed to focus on miniaturisation of satellites, reusable launch vehicles and similar cost-effective solutions. He also mentioned the need to safeguard India's space assets with counter-space capabilities(anti-satellite weapons).

India's NavIC series of navigation satellites presently provide coverage throughout the Indian landmass and up to 1500 kms further from India's frontiers. WION has learnt that the Indian Space agency ISRO is likely to launch the next-generation of NavIC satellite 'NVS-01' in May, on-board a GSLV rocket. This will be the first of the series of NavIC satellites with L1 frequency band and will offer greater security. While India does have more than 50 satellites orbiting the earth and performing various functions, most of them are large and expensive ones.

Developing low-cost and highly-efficient nano satellites that can be built and deployed rapidly are an area that requires attention, in India. While India operates four types of launch vehicles of varying sizes and payload capacities, all of them are expendable. India is working on reusable rocket technology.

Speaking at the event, Dr Samir V Kamat, Chairman, Defence Research and Development Organisation (DRDO), mentioned how the premier defence lab has started increasing focus on space-based surveillance, space situational awareness, protecting space-based assets.

"We are now looking at working very closely with industry as well as academia right from the development stage and have started DRDO industry-academia Centers of excellence in about 15 institutions mostly within the country. We request academia, startups, MSMEs and larger companies to work with us closely so we can help our country achieve these capabilities much faster than what we have been able to do for all other systems," he said.

<https://www.wionews.com/india-news/india-must-miniaturise-satellites-develop-re-usable-launch-vehicles-chief-of-defence-staff-581369>



*Tue, 11 Apr 2023*

## **We are Seeing Militarisation of Space, Steady Progress towards Weaponisation: Chief of Defence Staff**

The very nature of warfare is on the cusp of major transformation and what is being witnessed is militarisation of space and steady progress towards weaponisation, Chief of Defence Staff (CDS) General Anil Chauhan said on April 11, 2023, while stating that space is being used to enhance combat capabilities in land, sea and cyber domains. "The aim for all of us should be towards developing dual-use platforms with special focus towards incorporating cutting-edge technology and we must expand our NAVIC constellation, provide agile space-based Intelligence, Surveillance and Reconnaissance (ISR) and ensure secure satellite-assisted communications," he said at the Indian DefSpace Symposium organised by the Indian Space Association (ISpA) in association with the Defence Research and Development Organisation (DRDO).



Referring to the development of new kinetic weapons resulting in war in space “becoming a reality”, Gen. Chauhan gave examples of recent tests by Russia and China, and stressed the need to build India’s own offensive and defensive means in this domain.

The event is part of deliberations under ‘Mission Def-Space’, under which 75 challenges have been identified for development by the industry, said Lt. Gen. A. K. Bhatt (retd), Director-General, IspA, an industry association of space and satellite companies.

At DefExpo last October, Prime Minister Narendra Modi launched ‘Mission Def-Space’, an ambitious effort to develop innovative solutions for the three Services in the space domain through the Indian industry and start-ups.

Gen. Chauhan also stressed the need to explore the field of miniaturisation of satellites and reusable launch platforms to mitigate cost, challenges and accelerate the pace of augmenting India’s space-based capabilities. “The populating of space domain and the emergence of dynamic threat environment to our space assets also demands that we enhance our space situational awareness capability. There’s also a requirement to safeguard our assets with counter space capabilities. We must build resilience and redundancy in a space-based infrastructure.”

DRDO chief Samir V. Kamat said they have started increasing their focus on the very critical space domain with focus on space-based surveillance, space situational awareness, protecting our space-based assets. “We are now looking at working very closely with industry as well as academia right from the development stage and have started DRDO industry-academia centres of excellence in about 15 institutions mostly within the country,” he said.

Creation of defence space challenges was an outcome of the Ministry of Defence, the three Services and the Defence Space Agency (DSA) coordinating with the industry and seeing what the industry can do in future for the armed forces, explained Lt. Gen. Bhatt. “The interaction went on for several months and was then vetted by ISRO and DRDO to create these 75 challenges which cover all requirements upstream, mid-stream and down-stream,” he told The Hindu. The challenges are now being implemented in batches and the process is under way.

<https://www.thehindu.com/news/national/we-are-witnessing-militarisation-of-space-and-steady-progress-towards-weaponisation-cds/article66725336.ece>



*Tue, 11 Apr 2023*

## **Future-Ready Defence against Cyberattacks: NeGD Trains CISOs across Govt Departments**

The National e-Governance Division (NeGD) has recently organized the 35th Chief Information Security Officers (CISO) Deep-Dive training programme under the initiative Cyber Surakshit Bharat. The programme, being held from April 10-14, 2023, aims to spread awareness about cyber-crime and build the capacity of CISOs and frontline IT officials across all government departments.

Designed for CISOs from subordinate agencies, public sector banks and insurance companies, technical wings of police and security forces, CTOs, and members of technical/PMU teams, the 5-day intensive training programme delved into the latest technologies of safeguarding digital infrastructure and preparing for cyber-attacks.

### **Bringing Experts Together**

The training programme brought together subject matter experts from industry, academia, and government to speak on key domain issues of cybersecurity, including governance risk and compliance, cybersecurity products in India, end-point and digital workplace security, network security, application and data security, CCMP and incident response, mobile security, cryptography, cybersecurity testing and audit, cybersecurity related provisions of IT Act and ISMS standards, and security logging and operation & monitoring of security operation centre.

### **Empowering CISOs to understand Cyber-Attacks**

The deep-dive training aims to educate and enable CISOs to understand cyber-attacks comprehensively and thoroughly, translate the benefits of a resilient e-infrastructure to individual organizations and citizens at large, provide a holistic view of legal provisions, and enable CISOs to formulate policies in the domain of cybersecurity and build concrete cyber crisis management plans.

### **First-of-its-kind partnership**

Launched in 2018, the CISO training programme is a first-of-its-kind partnership between the government and industry consortium under the Public Private Partnership (PPP) model. Since June 2018 until April 2023, NeGD has conducted 35 batches of CISO deep-dive training programmes, empowering over 1,397 CISOs and frontline IT officials.

The programme highlights the government's commitment to building cybersecurity capacities, defending digital infrastructure, and becoming future-ready in tackling cyber-attacks. By spreading awareness and building capacity among CISOs and frontline IT officials, Cyber Surakshit Bharat aims to ensure adequate safety measures to combat the growing menace of cybercrime across all government departments.

<https://newsonair.com/2023/04/11/future-ready-defence-against-cyberattacks-negd-trains-cisos-across-govt-departments/>

## **अमरउजाला**

*Tue, 11 Apr 2023*

### **रूस-यूक्रेन युद्ध ने समझाई रक्षा विनिर्माण के स्वदेशीकरण की जरूरत, नौसेना अधिकारी ने की अहम टिप्पणी**

नौसेना के उप प्रमुख वाइस एडमिरल संजय महेंद्रु ने भारत में सैन्य हथियारों के निर्माण पर जोर दिया है। उन्होंने मंगलवार को कहा कि रूस-यूक्रेन युद्ध ने रक्षा विनिर्माण के स्वदेशीकरण की भारत की आवश्यकता को रेखांकित किया है। दोनों देशों के बीच एक साल से भी जारी युद्ध

के कारण रूस से मंगाए जाने वाले महत्वपूर्ण उपकरणों की उपलब्धता में देरी हो रही है। ऐसे में हमें इनके स्वदेशीकरण की अहमियत समझनी चाहिए।

### **भारत में हथियारों की उपलब्धता पर रूस-यूक्रेन युद्ध का असर**

कोलकाता में नौसैनिक उड्डयन उद्योग के स्वदेशीकरण के लिए एक कार्यक्रम में बोलते हुए उन्होंने ये बयान दिए। संजय महेंद्र ने कहा कि रूस और यूक्रेन के बीच जारी जंग का हानिकारक प्रभाव हमारे हथियारों के लिए उपकरणों की उपलब्धता पर पड़ा है। इसके अलावा, देश की सुरक्षा को अपने सर्वोच्च स्तर पर बनाए रखने के लिए हमारी कई योजनाएं इस अभूतपूर्व स्थिति के कारण बाधित या विलंबित हुई हैं। अपने संबोधन के दौरान नौसेना के उप प्रमुख वाइस एडमिरल संजय महिंद्रा ने अमेरिका के नेतृत्व में पश्चिमी देशों द्वारा रूस पर लगाए गए प्रतिबंधों का भी जिक्र किया। उन्होंने कहा कि इन प्रतिबंधों के कारण भारतीय रक्षा बलों के लिए हथियार और उपकरणों की अनउपलब्धता को और बढ़ा दिया है।

### **भारत दुनिया के सबसे बड़े रक्षा आयातकों में**

अपने संबोधन के दौरान उन्होंने यह भी कहा कि भारत दुनिया के सबसे बड़े रक्षा आयातकों में से एक है। रूस और यूक्रेन की जंग से पहले ही हम अपने देश में हथियार और उपकरणों के निर्माण में लगे थे। बीते सात से आठ सालों से हम अपने आवश्यकताओं के अनुसार उपकरण बनाने के लिए विकास योजनाएं चला रहे हैं।

### **नौसेना लगातार इस क्षेत्र में कर रही काम**

स्वदेशी हथियारों के निर्माण में नौसेना के कामों के बारे में चर्चा करते हुए उन्होंने कहा कि नौसेना जहाज और पनडुब्बी निर्माण में कई दशकों से स्वदेशीकरण में सबसे आगे रही है। भारतीय उद्योग परिसंघ (सीआईआई) द्वारा आयोजित कार्यक्रम में उन्होंने कहा कि स्वदेशी हथियारों और उपकरणों के निर्माण के लिए नौसेना शिपयार्ड और उद्योगों के लगातार संपर्क में है। साथ ही सैन्य उद्योग की जरूरतों को लेकर और इस क्षेत्र में विचारों के आदान-प्रदान के लिए भी देश के विभिन्न हिस्सों में संवेदीकरण कार्यक्रम आयोजित कर रहे हैं।

### **स्वदेशी सैन्य तकनीक पर डीआरडीओ का जोर**

इस कार्यक्रम में डीआरडीओ की वैज्ञानिक और प्रौद्योगिकी विकास कोष योजना (टीडीएफ) की निदेशक निधि बंसल भी शामिल थी। उन्होंने कार्यक्रम में बोलते हुए कहा कि अगर भविष्य में भारतीय सेना को कोई युद्ध लड़ना है तो यह महत्वपूर्ण है कि यह स्वदेशी सैन्य तकनीक से लड़ा जाए।

<https://www.amarujala.com/india-news/vice-admiral-sanjay-mahindru-says-russia-ukraine-war-underscored-need-for-indigenisation-of-defence-mfg-2023-04-11>

## Indian Navy Carries out SLINEX Maritime Operations with Sri Lanka Navy

Indian Navy Ships INS Kiltan and INS Savitri participated in multifaceted maritime operations with Sri Lanka Navy Ships SLNS Samudura and SLNS Vijayabahu from April 6 to April 8 as part of the SLINEX Sea Phase. Highlights of the operations included tactical manoeuvres, helicopter operations, Maritime Interdiction Ops, Joint Special Forces operations, gunnery firing exercises, and a Search and Rescue exercise.

The Sea Phase ended with a customary steam past with the ships bidding farewell to each other.

The successful completion of SLINEX-23 further reinforced the deep engagement and strong ties between the two navies.

On April 5, Sri Lanka's State Minister of Defence Premitha Bandara Tennakoon and India's High Commissioner to Sri Lanka Gopal Baglay visited Indian Navy ships amid the ongoing maritime bilateral exercise SLINEX 2023. During the visit, Tennakoon and Baglay were briefed about the indigenous capabilities of the Indian ships. The 10th edition of India-Sri Lanka bilateral maritime exercise SLINEX-23 is ongoing in Sri Lanka.

High Commission of India in Colombo tweeted, "Bridges of Friendship!!! SLINEX 2023: Day 3. High Commissioner and Hon'ble Minister @PremiTennakoon visited @indiannavy ships yesterday. They were briefed about the indigenous capabilities of these ships."

Indian Navy and Sri Lankan Navy organized a Yoga session at Galle Face. A cultural performance was organized at Viharmahadevi Park. The Indian Crew paid their respect at Sudarshanaramaya Temple, Pannipitiya on the auspicious Poya Day and gave donations for Temples and Schools in Sri Lanka.

High Commission of India in Colombo tweeted, "@indiannavy and @srilanka\_navy organized a Yoga Session at Galle Face and Cultural Performance at Viharmahadevi Park. The ships were specially open for School Children."

In another tweet, the High Commission of India in Colombo wrote, "The Indian crew paid their respects at Sri Sudarshanaramaya Temple, Pannipitiya on the auspicious Poya Day, and gave donations for Temples and Schools in #SriLanka on behalf of @indiannavy." The Indian Ministry of Defence in a press release said, "SLINEX aims at enhancing interoperability, improving mutual understanding and exchanging best practices while jointly undertaking multifaceted maritime operations." It further said, "Professional, cultural and sporting events, as also social exchanges are planned during the harbour phase to further bolster the bonds of friendship and camaraderie between both the navies."

<https://economictimes.indiatimes.com/news/defence/indian-navy-carries-out-slinex-maritime-operations-with-sri-lanka-navy/articleshow/99412944.cms>

## Hyderabad Varsity Develops Defence Imaging System for Detecting Concealed Hidden Objects

A research team at the University of Hyderabad (UoH) has designed and developed an indigenous Terahertz (THz) pulsed imaging system capable of detecting and identifying concealed metallic, explosives and drugs samples within a paper envelope.

THz imaging technique acts as a perfect tool for the detection of concealed (hidden) metallic objects like arms and ammunition which may be potential threats, thus making it a suitable tool for defence and homeland security applications.

THz radiation also known as T-ray lies between the microwave (electronics) and optical region of the electromagnetic spectrum which is extended between 100 GHz to 10 THz frequency or 3 mm to 30 micrometre wavelength range.

The research team led by A.K. Chaudhary and P. Naveen Kumar (senior research scholar), ACRHEM, School of Physics, University of Hyderabad, achieved success in designing and developing an indigenous THz pulsed imaging systems between 0.1 to 2.0 THz range.

The system provides five numbers of real time images of the given object.

"We have used an optical fibre-coupled femtosecond laser, a voice coil-driven corner mirror with a position sensor and InGaAs/InAlAs photoconductive antennas for THz generation and detection," Chaudhary said. The work has also been published in the March 2023 issue of In.J. of Physics. THz radiation has the capability to interrogate a wide variety of materials such as semiconductors, gases, polymers, pharmaceutical drugs, chemical mixtures, biological and environment pollutants and helped in determining the optical properties of many dielectrics and non-metallic materials. THz ray can penetrate through most of the non-metallic materials such as plastic, paper, wood, rubber and ceramics which are opaque in the visible and infrared region.

One of the major applications of THz spectroscopy and imaging is in non-invasive detection of materials composition and retrieval of complex surface topography of objects in the form of 2D/3D hyper spectral images.

THz-TDS imaging can be carried in transmission and reflection geometries. In transmission geometry, the temporal profile of the electric field transmitted through the investigated sample is measured and compared with a reference spectrum obtained from the free path.

However, many samples possess significantly high absorption properties in the THz range or are highly reflective situations that limit or completely impede the use of THz imaging in transmission geometry. The project is funded by the DRDO, Ministry of Defence, Indian government, ACRHEM-Phase-3.

<https://economictimes.indiatimes.com/news/defence/hyderabad-varsity-develops-defence-imaging-system-for-detecting-concealed-hidden-objects/articleshow/99413117.cms>

# नवभारत टाइम्स

Wed, 12 Apr 2023

## इंडियन नेवी

- 2 एयरक्राफ्ट कैरियर
- 16 पनडुब्बियां
- 1 परमाणु पनडुब्बी
- 11 बड़े युद्धपोत
- 13 मध्यम श्रेणी के युद्धपोत
- 23 छोटे युद्धपोत
- 4 टैंकर
- 7 सर्वे पोत
- 9 लैंडिंग शिप
- 1 ट्रांसपोर्ट शिप
- 7 सात ट्रेनिंग शिप
- 1 रिसर्च पोत
- अन्य कई छोटे पोत और बोट
- 270 एयरक्राफ्ट और हेलीकॉप्टर

## चीन का नौसेना बड़ा

- 3 एयरक्राफ्ट कैरियर
- 3 हेलीकॉप्टर लैंडिंग डॉक
- 79 पनडुब्बियां
- 12 परमाणु पनडुब्बियां
- 32 लैंडिंग शिप
- 8 ट्रांसपोर्ट
- 51 बड़े युद्धपोत
- 49 मध्यम श्रेणी के युद्धपोत
- 70 छोटे पोत
- 109 मिसाइल बोट्स
- 750 एयरक्राफ्ट और हेलीकॉप्टर

## पाकिस्तानी नेवी

- 2 बड़े युद्धपोत
- 6 मध्यम श्रेणी के युद्धपोत
- 2 छोटे युद्धपोत
- 8 पनडुब्बियां
- 8 हमलावर बोट्स
- 48 पेट्रोलिंग और हाई स्पीड बोट्स

# नेवी की चिंता, सुस्ती से कैसे होगा मुकाबला

चीन हर साल अपनी नेवी में 14 नए युद्धपोत शामिल कर रहा है, जबकि इंडियन नेवी चार ही शामिल कर पाती है। 355 युद्धपोतों के साथ अमेरिका को पछाड़ चीन की नौसेना दुनिया में नंबर-1 बन चुकी है। चीन पाकिस्तान की नेवी की भी मदद कर रहा है। उसका टारगेट है कि 2030 तक पाक नेवी को 50% तक बढ़ा दे। वहीं भारत का टारगेट 200 जंगी जहाजों का बेड़ा बनाने का था, मगर रफ्तार इतनी सुस्त है कि 160 ही बन जाएं तो बहुत हैं। इंडियन नेवी ने संसद की स्थायी समिति को सौंपी अपनी रिपोर्ट में कई जरूरी चीजें बताई हैं।

## बदलेंगे समीकरण

भारत ने पिछले सात साल में मेक इन इंडिया के तहत 28 युद्धपोत और पनडुब्बियां शामिल कीं। नौसेना के बजट में कटौती से पिछले पांच सालों में विस्तार की योजनाएं प्रभावित हुईं। जैसे पिछले दो साल से नौसेना के बजट में 14 फीसदी की बढ़ोतरी हुई है, जिससे इंटिग्रेटेड कैपेबिलिटी डिवेलपमेंट प्लान (ICDP) के 2027 तक तय लक्ष्यों को 2032 तक पूरा किया जाएगा।

कंटेंट : अरुणेश पटानिया  
ग्राफिक्स : अर्जुन सिंह



क्या हैं नेवी के प्रोग्रेस और क्या होते हैं डिस्टॉयर्स? इस पर लेख पढ़ने के लिए यहां स्केन करें और [navbharatgold.com](http://navbharatgold.com) पर जाएं

नेवी की रिपोर्ट ने यह रेखांकित किया है कि भारत और चीन की नेवी में अंतर बढ़ रहा है। इससे निपटने के लिए न सिर्फ नेवी को ज्यादा रिसोर्स देने होंगे, बल्कि ताकतवर नेवी वाले देशों के साथ नजदीकियां बढ़ानी होंगी। - **हर्य वी. पंत, डिफेंस एक्सपर्ट**



## भारत की चिंता

- 2030 तक चीन के पास दो और विमान वाहक युद्धपोत होंगे।
- अगले पांच वर्ष में चीन के पास होंगे 555 युद्धपोत।
- हिंद महासागर में चीन के 5 से 9 युद्धपोत हर समय मौजूद।
- शोध और खोजबीन युद्धपोत कर रहे भारत की जासूसी।

## भारत की स्थिति

- 2027 तक दो सौ युद्धपोत का लक्ष्य 2032 तक होगा पूरा।
- 43 युद्धपोत और पनडुब्बियों का निर्माण विभिन्न शिपयार्ड में हो रहा।
- सैन्य सर्वेक्षण और परिवहन के लिए विमानों-हेलीकॉप्टरों की कमी।
- विदेशों से खरीद है पेचीदा, लगता है ज्यादा समय। इसे आसान बनाएं।
- एक नए विमान वाहक युद्धपोत का निर्माण समय से काफी पीछे।

## समिति को बताई अपनी जरूरतें

- भारतीय नौसेना की क्षमता बढ़ाना बेहद जरूरी।
- संभावित खतरों का जवाब देने के लिए नए नौसेना विस्तार जरूरी।
- सरकार को करनी होगी सतत और सुनिश्चित फंडिंग।
- IOR से हो रहे कारोबार में वृद्धि का रक्षा मंत्रालय मूल्यांकन करे।
- 2008 से चीन ने हिंद महासागर में डाकुओं को रोकने के बहाने हर साल बढ़ाई ताकत, इस पर नजर रखनी होगी।

## **Brahmos, Rafale & More: How India is Fortifying Chicken's Neck Area Amid Chinese Threat**

India has deployed its Rafale fighter jets and Brahmos missiles in forward areas in North Bengal. The Chinese and Indian forces have been in a border standoff since May 2020. Both the weapons systems are deployed to strengthen and prepare the armed forces to counter Chinese threats.

India has deployed a lot of advanced equipment to counter the Chinese threat like the Brahmos missile, Rafale fighter jets, S400 air defence systems and the MR SAM air defence systems. India and China were engaged in a border standoff, between India, China and Bhutan, where China attempted to construct the road. The road construction would have allowed the Chinese to Jampheri ridge, from where the Siliguri corridor would be threatened.

### **Weapon system deployed by India to counter China**

#### **Dassault Rafale**

It is a 4.5 generation aircraft which is manufactured by Dassault aviation. It is a french multi role fighter aircraft. The Indian air force has ordered a total of 36 of these aircrafts. Indian air force has inducted a squadron of 18 fighter jets at Hasimara air base in West Bengal.

#### **Brahmos missile system**

It is a supersonic land attack cruise missile, which was jointly manufactured by India and Russia. The name is derived from Brahmaputra river of India and the Moskava river of Russia. The missile has a maximum speed of 2.9 mach and can destroy enemy targets at a range of more than 290 kilometres.

#### **MR SAM air defence system**

MR SAM (Medium Range Surface to Air missile) is an air defence system that India's DRDO jointly developed with Israel. It can detect aerial targets from ranges above 70 km. Army's 33 corps inducted it in early February.

#### **S400 missile defence system**

India and Russia signed a deal worth over Rs 35,000 crore. The system has a range of upto 400 km. The deliveries of the systems are expected to be by the end of 2023-24. It has already participated in many exercises and the Indian system is superior to the Chinese system. These systems are already deployed near the China border.

For ballistic targets, its range is 200km. It has a speed of 4800 m/s and and RCS of 0.4 sq meters, for a target with an RCS of 4 sq meters, the range is 390 km for targeting strategic bomber sized types its range is 400 km. It can perform the functions of command post for the battalions of the S400 defence system.

<https://www.republicworld.com/india-news/general-news/brahmos-rafael-and-more-how-india-is-fortifying-chickens-neck-area-amid-chinese-threat-articleshow.html>

## India Strongly Rejects China's Objection to Amit Shah's Visit to Arunachal Pradesh

India on Tuesday firmly rejected China's objection to Home Minister Amit Shah's visit to Arunachal Pradesh and asserted that the state "was, is and will" always remain an integral and inalienable part of India. External Affairs Ministry spokesperson Arindam Bagchi said objecting to such visits does not stand to reason and will not change the reality.

The home minister visited Arunachal Pradesh on Monday during which he launched the ambitious 'Vibrant Villages Programme' that is aimed at improving the standard of living of the people in villages in frontier areas.

"We completely reject the comments made by the Chinese official spokesperson. Indian leaders routinely travel to the state of Arunachal Pradesh as they do to any other state of India," Bagchi said. "Arunachal Pradesh was, is and will always remain an integral and inalienable part of India. Objecting to such visits does not stand to reason and will not change the above reality," he said.

Bagchi was responding to media queries on the Chinese reaction to Shah's visit to Arunachal Pradesh. From a border village in Arunachal Pradesh, Shah, in a clear message to China, on Monday said that no one can dare cast an evil eye on India's territorial integrity and encroach even an "inch of our land".

He said the era when anyone could encroach the borderlands of India was over.

The home minister's statement came days after Beijing announced Chinese names for 11 places in Arunachal Pradesh which the neighbouring country claims as the "southern part of Tibet."

Responding to a question on Shah's visit, Chinese Foreign Ministry spokesman Wang Wenbin said, "Zangnan (the Chinese name for Arunachal Pradesh) is part of China's territory".

"The activity of the senior Indian official in Zangnan violates China's territorial sovereignty and is not conducive to peace and tranquillity in the border areas. We are firmly against this," he told a media briefing in Beijing.

<https://economictimes.indiatimes.com/news/defence/india-strongly-rejects-chinas-objection-to-amit-shahs-visit-to-arunachal-pradesh/articleshow/99413261.cms>



## China Renames Five Seabed Features in Indian Ocean Region

The People's Liberation Army's navy (PLAN) in late March named five seabed features in the Indian Ocean region (IOR) after Chinese musical instruments, taking the total number of names



it has given to undersea topographies in the maritime area to nine, in a move, which, according to a PLA officer, is an example of the country's "soft power".

The new names given by PLAN have been included in a database maintained in an international register. While China has earlier declared renaming undersea features in other maritime regions, it is the first time that the Chinese navy has made public that it has done so in the IOR.

"The PLA Navy has completed work on naming five seabed places in the international waters of the Indian Ocean, making a total of nine seabed place names in the international waters of the Indian Ocean," national broadcaster CCTV's military channel reported late March.

"Huapengu (Flowerpot drum) sea knoll, Tang drum sea knoll, fishing drum sea knoll, waist drum seamount... are all names given by the information centre of the (PLA's) Naval Staff Department to submarine geographical entities in the international waters of the Indian Ocean," the report added.

A seamount is a large underwater volcanic mountain while sea knolls are smaller volcanic mountains.

"Although the correlation between oceanic seabed place names and sovereignty ownership is not very strong, it reflects our national soft power," Xu Jinde, an engineer at PLAN's Navy Staff Department of Information, told CCTV.

The state media article did not share the precise locations of the seabed features. It's also not known where the remaining four features are.

"...these submarine names with elements of China's unique musical instruments have been included in the international database of undersea names."

The latest move by the PLA navy – the largest in the world – will be closely tracked by the Indian navy, which has had to monitor and track the increasing presence of Chinese vessels including submarines and large, tech-heavy survey ships in the region.

"Also, it has a very important role in marine scientific research, engineering exploration, scientific research and so on," engineer Xu said.

At present, China has 238 undersea place names included in the international list of undersea names.

"This year, the PLA Navy will use traditional Chinese colours for (more) undersea place names, and if the proposals are approved, ancient Chinese names such as Plum Dye, Rouge and Moon White will be forever marked in the Western Indian Ocean waters," Xu said.

PLAN has been actively involved in the naming of seabed features in international waters since 2014, "...using Chinese national totems, words and phrases from the poetic scriptures and the Chinese lunar calendar months as special names for geographic entities on the seabed, highlighting the profound heritage and distinctive characteristics of Chinese culture."

At present, the Naval Staff Department's information centre has 30 names for seabed features, which have been approved by the International Sub-Committee on Undersea Feature Names (SCUFN) as world undersea geographical names, the CCTV article said. Though the names of seabed features in the IOR are in the international waters, China has a history of naming undersea features in disputed maritime regions like in the South China Sea (SCS).

In 2018, Chinese authorities released standard names for 25 islands and reefs as well as 55 undersea geographic entities in the SCS “...in a move that Chinese experts praised for reaffirming China’s sovereignty in the region”, according to the state-run Global Times tabloid.

At that time, the Chinese ministries of civil affairs and natural resources released the names, longitudes and latitudes of these places.

“After the establishment of the People’s Republic of China in 1949, related authorities released standardised names of 287 islands in the region in April 1983, a move that Chinese experts said indicated China’s improving precision and regulation of the nomenclature and location of islands and reefs in the SCS,” the tabloid reported.

In April, 2020, China named 80 features in disputed areas of the South China Sea region including 25 islands and reefs, and 55 undersea mountains and ridges.

The PLA has renamed places three times in Arunachal Pradesh, which it claims as South Tibet, a move that has been heavily criticised by New Delhi.

<https://www.hindustantimes.com/india-news/chinese-navy-names-five-undersea-features-in-indian-ocean-after-musical-instruments-101681238321842.html>

## THE ECONOMIC TIMES

*Tue, 11 Apr 2023*

### **Wary of China, Vietnam Bonds with India in Indo-Pacific Waters**

Signalling its desire to have a less intertwined future with China, Vietnam has vowed to deepen the Comprehensive Strategic Partnership with New Delhi to maintain peace, prosperity and stability in the Indo-Pacific region and beyond.

Leading a high-ranking delegation to New Delhi at the invitation of National Security Advisor (NSA) Ajit Doval, Vietnam's Minister of Public Security General To Lam spent two days in the Indian capital at the start of this week, jointly mapping out the future defence and security cooperation between the two countries.

At the talks, NSA Doval and General To Lam, who is also the Politburo Member of Vietnam's Communist Party, worked on a detailed plan to enhance the linkages on strategic, security and defence matters.

The Vietnamese minister suggested that in the coming time, the two sides continue to strengthen comprehensive cooperation in the fields of defence, security, economy, digital transformation, green economy and creating favourable conditions for people-to-people exchanges.

With India being the current chair of the world's leading group of developed and emerging economies (G20), General To Lam said that Vietnam wants New Delhi to play a bigger role in the international arena, especially in the United Nations. He also thanked India for always supporting Vietnam's role in the Association of Southeast Asian Nations (ASEAN).

Both leaders further reaffirmed the importance of maintaining and promoting peace, stability, maritime safety and security and freedom of navigation and overflight in the Indo-Pacific

Region. India, which has expressed concerns about actions and incidents in the South China Sea that erode trust in the region, stressed the importance of the UN Convention on the Law of the Sea (UNCLOS) and reaffirmed that any differences must be resolved peacefully by respecting international law, without resorting to threats, aggression or the unilateral or forceful change in the status quo.

In subsequent meetings with Vice President Jagdeep Dhankhar and Minister of State of Home Affairs Nityanand Rai, General To Lam asserted that India and Vietnam should strengthen cooperation to deal with many 'complicated' traditional and non-traditional security challenges in the region. Vietnam remains an important pillar of India's Act East Policy and a key partner of its Indo-Pacific Vision underlined by Prime Minister Modi's Security and Growth for All in the Region (SAGAR) initiative.

India and Vietnam have shared a Comprehensive Strategic Partnership since 2016 and defence cooperation remains a key pillar of this partnership.

Last June, during his visit to Hanoi at the invitation of his Vietnamese counterpart General Phan Van Giang, Defence Minister Rajnath Singh spotlighted that both countries share a rich history of civilisational and cultural linkages spanning over 2,000 years.

The two countries signed a 'Joint Vision Statement on India-Vietnam Defence Partnership towards 2030' which significantly enhances the scope and scale of existing bilateral defence cooperation.

During Singh's visit, a Memorandum of Understanding (MoU) on Mutual Logistics Support was also inked which is a major step towards simplifying procedures for mutually beneficial logistic support and is the first such major agreement which Vietnam has signed with any country.

At the same time, bilateral defence engagements continue to expand through Defence Policy Dialogues, military-to-military exchanges, high-level visits, capacity building and training programmes, cooperation in UN Peacekeeping, ship visits and bilateral exercises.

Handing over 12 High-Speed Guard Boats to the Southeast Asian country during his visit to Hong Ha Shipyard in Hai Phong last year, Singh invited Vietnam to become a part of India's defence industrial transformation through enhanced cooperation which will take forward PM Modi's vision of 'Make in India, Make for the World'.

<https://economictimes.indiatimes.com/news/defence/wary-of-china-vietnam-bonds-with-india-in-indo-pacific-waters/articleshow/99413365.cms>



*Tue, 11 Apr 2023*

## **LAAD 2023: Brazil's Defence and Security Sector Takes Centerstage; Indian Companies Showcase Various Platforms**

LAAD, one of South America's foremost defence and security shows, returns with a resounding impact in 2023, following a four-year hiatus precipitated by the global pandemic.

With a record-breaking number of exhibitors representing the world's most renowned brands in the industry, LAAD 2023 in Brazil is poised to set new trends and benchmarks. The event boasts an impressive roster of 250 exhibitors and 400 brands, including global industry giants, with an expected turnout of 45,000 visitors and 160 official delegations from across the globe.

What distinguishes LAAD 2023 is its unequivocal reflection of Brazil's immense potential and leadership in the defence and security sectors. The country's dynamic and rapidly expanding defence industrial base has made significant waves, as attested by a recent study conducted by the Federal Institute of Economic Research (Fipe) and the National Confederation of Industry (CNI). The study revealed that the defence sector's contribution to the national GDP witnessed a remarkable growth of over 8 percent in 2019-2020, surpassing traditional sectors such as civil construction, agriculture, and oil extraction in 2020.

The formidable presence of top Brazilian companies, including Embraer, Iveco, Helibras, and CBC Taurus, alongside representatives from the Armed Forces, state security agencies, and various Brazilian municipalities, unequivocally cements Brazil's position as a global reference for suppliers and key stakeholders in the defence and security sectors.

### **Other countries from the region**

However, it is not just Brazil that is making waves at LAAD 2023. Latin America as a whole is poised to make a significant mark, with delegations from countries such as Argentina, Bolivia, Colombia, Ecuador, Guatemala, Honduras, Panama, Paraguay, and Peru, further amplifying the region's prominence in the global defence and security landscape.

As LAAD continues its trajectory of growth and solidifies its position as the largest defence and security show in Latin America and one of the premier events worldwide, it leaves a lasting legacy of placing Brazil at the vanguard of the global defence and security sectors. With its robust defence industrial base, dynamic companies, and burgeoning global influence, Brazil is undoubtedly taking centre stage at LAAD 2023, making it an event of utmost significance for industry professionals and stakeholders alike.

### **International Participation**

Besides India other global defence manufacturers are also participating from countries including Canada, South Korea, Egypt, Slovakia, Slovenia, Spain, United States, Ethiopia, Philippines, Finland, France, Ghana, French Guiana, Guinea Bissau, Haiti, the UK, Germany, Bahrain, Barbados, Belize, Cape Verde, Cameroon, Netherlands, Honduras, Italy, Jordan, Nigeria, Portugal and others.

### **India's participation**

In March during the visit of Chief of Air Staff Air Chief Marshal VR Chaudhari to the South American nation the decision to participate in one of the biggest defence expo in the region was announced. Also present during the meeting with Minister of Defense, José Mucio Monteiro Filho, was Ambassador of India to Brazil, Suresh K Reddy. The focus was on various topics including deepening of military cooperation between the two countries, setting up of facilities for aircraft maintenance as well as development in the Space Sector.

Brazil has also expressed interest in buying radars from India not only to protect its borders but also the Amazon, sources confirmed to Financial Express Online.

The show which is organized by Brazil's Ministry of Defense, is opening today in the presence of the Minister of Defense, José Múcio Monteiro Filho, Force Commanders: Admiral Marcos Sampaio Olsen (Navy), Lieutenant Brigadier Marcelo Kanitz Damasceno (Aeronautics) and General Júlio Cesar de Arruda (Army), the head of the Joint Chiefs of Staff of the Armed Forces of the Ministry of Defense. From India Ambassador Reddy, Achal Malhotra, Director, DEO, Ministry of Defence, leading a delegation of representatives of Defence Research Development Organisation (DRDO), Bharat Dynamics Ltd., Yantra India Ltd., Bharat Electronics and Mazagon Dock Shipbuilders Ltd. Also present will be officials of Indo-Russian joint venture BrahMos and Kanpur based MKU Ltd.

### **What is DRDO displaying?**

DRDO officials told Financial Express Online that systems which are ready to be exported are being displayed at India Pavilion in the form of posters, translit and scale down models. These include: LCA-Tejas; LCA-mid-air refuelling system; AEWG; Rustom-I & II; Akash Missile; Astra Missile; MBRL-Pinaka; WhAP; LFDS-X; Advanced Torpedo Defence System-Maareech; Bullet Proof Jacket, Helmet and Boot for Anti-mine Infantry; Advanced Driver Night Sight (A-DNS) for BMS; Advanced Integrated Multi-Function Sight (AIMFS).

<https://www.financialexpress.com/business/defence/laad-2023-brazils-defence-and-security-sector-takes-centerstage-indian-companies-showcase-various-platforms/3041982/>



*Tue, 11 Apr 2023*

## **Embraer and SAAB to Showcase State-of-Art Defence Solutions at LAAD Defense & Security 2023**

Embraer, a globally recognised leader in aerospace and defence solutions of Brazil, and SAAB, a renowned defence and security technology company of Sweden are gearing up to participate in the prestigious LAAD Defense & Security 2023 event, scheduled to be held from April 11-14, 2023.

This marks Embraer's return to LAAD after a four-year hiatus caused by the pandemic and is poised to be a remarkable platform for unveiling their latest achievements in the defence and security sectors.

A key highlight of Embraer's participation at LAAD will be the recent attainment of the Final Type Certificate (FOC) for the C-390 Millennium multi-mission jet program, signifying its Full Operational Capability. This certification validates that the C-390 aircraft adheres to all the requirements outlined by the Brazilian Air Force (FAB) and is fully equipped to perform all the missions for which it was designed. The C-390 has already gained international recognition with orders from Portugal, Hungary, and most recently, the Netherlands, solidifying its success in the global defense market.

Embraer Defense & Security, armed with its extensive portfolio of innovative products and solutions, including the C-390 Millennium and the A-29 Super Tucano light attack and training

aircraft, will be showcasing its capabilities in the air, land, maritime, space, and cyber domains at LAAD. Additionally, Embraer will also unveil its radar and ground systems, featuring the cutting-edge M200 VIGILANTE radar for surveillance and early warning, along with the M20 radars for ground surveillance and the SABER M60 for low-altitude air defence applications.

Complementing Embraer's presence at LAAD will be the participation of its group companies, Atech, Visiona Tecnologia Espacial, and Tempest Security Intelligence, which together offer a comprehensive solutions portfolio in the defence and security sectors.

SAAB of Sweden, renowned for its state-of-the-art defence and security technologies, will also be a prominent participant at LAAD. With a strong partnership with the Brazilian Armed Forces and a steadfast commitment to expanding its strategic activities in the region, SAAB will be showcasing a wide range of advanced air, land, and naval solutions during the event.

A key highlight of SAAB's participation at LAAD is the Gripen E multi-mission fighter, designated as F-39 Gripen by the Brazilian Air Force (FAB). The Gripen E, symbolising the largest technology transfer program from Sweden to Brazil, has already made a significant contribution to the development of the national defence industry, with the first four fighters already in operation in the country.

SAAB will also showcase the Mobile Short-Range Air Defence (MSHORAD) mobile anti-air defence system, renowned for its high mobility and ability to accompany mechanised and armored troops on the move, making it a valuable asset in combat situations.

In addition to these cutting-edge solutions, SAAB will also unveil its ground combat systems, such as the Carl-Gustaf M4, a portable and multifunctional weapon used for protecting troops and installations in combat, and the NLAW, an anti-tank missile system, both of which are widely deployed in NATO countries for their operations. For the naval sector, SAAB will showcase advanced solutions for maritime defence, including the Mining Countermeasure Ship (MCMV) that detects threats from underwater mines and employs unmanned autonomous vehicles for mine clearance and defusing.

<https://www.financialexpress.com/business/defence-embraer-and-saab-to-showcase-state-of-art-defence-solutions-at-laad-defense-amp-security-2023-3042012/>



*Wed, 12 Apr 2023*

## **US, Philippines Kick Off Largest-Ever Joint Military Exercise in Defence of South China Sea**

The United States on Tuesday promised to defend the Philippines in the dispute-rife South China Sea as the allies launched their largest-ever joint exercises in the face of Beijing's growing assertiveness in the region. Nearly 18,000 troops are taking part in the annual exercises dubbed Balikatan, or "shoulder to shoulder" in Filipino, which for the first time will include a live-fire drill in the South China Sea, which Beijing claims almost entirely.

The drills follow Monday's conclusion of a three-day Chinese military exercise that simulated targeted strikes and a blockade of self-ruled, democratic Taiwan, which Beijing considers part of its territory.

In rare joint talks in Washington with their Philippine counterparts, Secretary of State Antony Blinken and Defense Secretary Lloyd Austin discussed a deal reached last week for US forces to use a growing number of bases in the Philippines, including one near Taiwan.

Blinken said the United States affirmed its "unwavering commitment to standing with the Philippines against any intimidation or coercion, including in the South China Sea."

The mutual defense treaty, signed in 1951 after the Philippines' independence from Washington, "applies to armed attacks on either of our armed forces, our aircraft or public vessels, including our Coast Guard, anywhere in the South China Sea," Austin told a joint news conference.

The United States and the Philippines plan new exercises in the South China Sea later in the year that will include other countries, Austin said.

He said the United States is allocating more than \$100 million to the bases in the current fiscal year and that the United States would provide new military equipment to the Philippines including drones and air defenses.

Asked if the Philippines worried about China's reaction, acting defense chief Carlito Galvez said, "We don't expect any violent reaction considering that this exercise is intended for our collective defense."

News of the expanded base access had prompted China to accuse the United States of "endangering regional peace and stability."

"Countries in this part of the world must uphold strategic independence and firmly resist the Cold War mentality and bloc confrontation," China's ambassador to Manila, Huang Xilian, said last week.

### **Exercises in tense waters**

Balikatan will include military helicopters landing on a Philippine island off the northern tip of the main island of Luzon, nearly 300 kilometers (180 miles) from Taiwan, and the retaking of another island by amphibious forces.

It will be the first time the exercises have been held under President Ferdinand Marcos, who has sought to strengthen ties with the United States after his predecessor Rodrigo Duterte trashed the alliance.

"In order for us to protect our sovereign territory, we really have to drill and exercise how we are going to retake an island that's been taken away from us," Philippine exercises spokesman Colonel Michael Logico told reporters after the opening ceremony at a military camp in Manila.

About 12,200 American, 5,400 Filipino and just over 100 Australian soldiers will participate in the two weeks of Balikatan exercises — about twice as many as last year.

The Americans will also use their Patriot missiles, considered one of the best air defence systems in the world, and the HIMARS precision rocket system, which has helped Ukrainian forces fighting the Russian invaders. The two armies originally planned to fire live rounds at sea off the

northern province of Ilocos Norte, about 355 kilometers from Taiwan's south coast, but moved it farther down the South China Sea, Philippine Army Major-General Marvin Licudine said.

The original site was "not sufficiently prepared" for unloading the needed equipment, he said.

The new venue is less than 300 kilometers east of the Chinese-held Scarborough Shoal.

The exercises will enhance "tactics, techniques and procedures across a wide range of military operations," said Philippine military spokesman Colonel Medel Aguilar.

About 50 leftwing protesters staged a rally outside the opening ceremony venue, calling on the Philippine government to scrap the exercises.

<https://www.news18.com/world/us-philippines-kick-off-largest-ever-joint-military-exercise-in-defence-of-south-china-sea-7524037.html>

## THE ECONOMIC TIMES

*Tue, 11 Apr 2023*

### **Britain Names MI5 Deputy as First Female Cyber Spy Boss**

Britain named Anne Keast-Butler as the first female director of its intelligence communications agency GCHQ on Tuesday, tasked with protecting the country from terrorists, cyber-criminals and malign foreign powers.

She will take over the role in May, succeeding Jeremy Fleming who is stepping down after a six-year tenure.

Foreign Secretary James Cleverly, who made the appointment, said Keast-Butler had an impressive track record at the heart of Britain's national security network. "Anne will use her vast experience to help keep the British public safe," he said.

She is currently deputy director general at Britain's domestic intelligence agency, known as MI5.

GCHQ is Britain's main eavesdropping agency and has a close relationship with the U.S. National Security Agency as well as with counterparts in Canada, Australia and New Zealand in a consortium called "Five Eyes".

GCHQ, which traces its roots back to the early 20th century after the outbreak of World War One, follows MI5, three decades later, in appointing a female head.

Stella Rimington became the first woman to lead MI5 in 1992 and was said to have inspired the casting of Judi Dench in the role of "M", head of Britain's foreign intelligence service known as MI6, in the James Bond movies a couple of years later.

GCHQ provided a rare statement on its offensive cyber work earlier this month, revealing that its hackers had launched operations against militants, state-backed disinformation campaigns and attempts to interfere in elections.

The group also works with MI6, MI5, police, the government's defence department and overseas partners, and in the private sector and academia.

<https://economictimes.indiatimes.com/news/defence/britain-names-mi5-deputy-as-first-female-cyber-spy-boss/articleshow/99413524.cms>





*Tue, 11 Apr 2023*

## **Egypt Planned to Secretly Supply 40,000 Rockets to Russia: Report**

Egypt planned to secretly produce and ship about 40,000 rockets to Russia to augment its depleted supply of ammunition during the ongoing Russia-Ukraine war, according to leaked US intelligence documents obtained by Washington Post. The outlet also said that Egyptian President Abdel Fattah El-Sisi held a meeting with his top military officials in which they discussed also providing artillery rounds and gunpowder to Russia. El-Sisi asked the officials to keep the entire plane under wraps "to avoid problem with the West".

The classified document is dated February 17, according to Washington Post.

The development has stunned American officials and politicians.

"If it's true that Sisi is covertly building rockets for Russia that could be used in Ukraine, we need to have a serious reckoning about the state of our relationship," junior senator from Connecticut Chris Murphy told the outlet.

Fox News said National Security Council spokesperson John Kirby has declined to confirm the validity of the documents, but warned that the material is not for public consumption.

It can impact America's relationship with Egypt, one of its closest allies in the Middle East and North Africa.

US Secretary of State Antony Blinken met with El-Sisi in late January in Cairo, after which the State Department issued a statement which said Mr Blinken "expressed the United States' solidarity with Egypt as it contends with the economic impact of Russia's brutal war in Ukraine."

US President Joe Biden also travelled to Egypt in November last year and met with El-Sisi. He had commended the Egyptian President for his country's stance on the war.

Egypt decided to help Russia to repay Moscow's "unspecified help earlier", according to an official named Mohamed Salah al-Din, the minister of state for military production.

The nature of that help is unclear. However, Egypt increased its reliance on Russian wheat last year amid disruptions to the global market stemming from Russia's war in Ukraine, according to news agency Reuters.

<https://www.ndtv.com/world-news/egypt-planned-to-secretly-supply-40-000-rockets-to-russia-report-3937725>

Tue, 11 Apr 2023

### **Researchers to Conduct Trials on Ayurveda-based Anti-Cancer Drug; Here are the details**

The National Institute of Ayurveda (NIA) under the AYUSH ministry, Tata Memorial Hospital, Mumbai, the Directorate General of Ayush, Jammu and Kashmir and AIMIL Pharma have joined hands to conduct clinical trials of an ayurvedic based anti-cancer drug to test its efficacy.

Developed by the NIA experts, the formula ‘V2S2’ is prepared from hydro-alcoholic extracts of several medicinal plants, as per a report by news agency PTI.

Its anti-carcinogenic properties have already been confirmed in laboratory tests so far, Jaipur-based NIA Vice Chancellor Dr Sanjeev Sharma said as quoted by PTI.

It has also been found to be effective in increasing immunity and inhibiting the growth of cancer cells. Now this agreement has been made for its formal in-vivo testing, he said. Sharma said the trials of medicine on animals will be started soon.

“These tests will be conducted at Tata Memorial Hospital, Mumbai in a period spanning 9-12 months. Depending on the results, trials on humans will be done by NIA and Jammu and Kashmir Ayush Department. The task of manufacturing the drug for the trial has been entrusted to AIMIL Pharmaceuticals which will then launch it in the market for public consumption,” he stated. Describing this agreement as a milestone in the direction of cancer drug research, Dr Sanchit Sharma, Executive Director, AIMIL Pharmaceuticals said in the next two-three years, Ayurveda will be able to provide effective cancer treatment options to the patients in the country as in the world. He further said the initial results of the drug were very encouraging, showing that it increases the immunity of humans and slows down the growth of cancer cells. Apart from Sanjeev Sharma; Vice Chairman of AIMIL Pharma, Dr Anil Sharma; Dr Sandeep Charak of the Directorate General of AYUSH, Jammu and Kashmir were present on the occasion at NIA Jaipur. From Tata Memorial’s Advance Center for Treatment, Research and Education (ACTREC), Dr Jyoti Kode, principal researcher, joined virtually. This is not the first time that AIMIL Pharmaceuticals has been associated with the premier research institutes to work on evidence-based research.

In the past, it has successfully launched anti-diabetic drug BGR-34 developed by the Council of Scientific and Industrial Research (CSIR), while Lukoskin, a drug developed by DRDO for vitiligo, has benefitted millions of people. It is the effort of the government that the medicines developed by its laboratories come out of the lab and reach the people. For this, partnership with the private sector is being increased, said Dr Anil Sharma.

<https://www.financialexpress.com/healthcare/wellness/researchers-to-conduct-trials-on-ayurveda-based-anti-cancer-drug-here-are-the-details/3042630/>

## क्या हमें वाकई ChatGPT से डरना चाहिए

ChatGPT स बड़ पमान पर नाकारया जाने का खतरा जताया जा रहा है, लेकिन क्या सिर्फ इसी वजह से हमें नई तकनीक को नहीं अपनाना चाहिए?

कॉमन रूम



विनीत नायर

इस वक्त टेक्नॉलजी की दुनिया में एक शब्द सबसे ज्यादा सुना जा रहा है- चैटजीपीटी (ChatGPT)। इसे हमारा भविष्य बताया जा रहा है। लेकिन, चैटजीपीटी के असल महत्व को समझने के लिए हमें इतिहास पर एक नजर डालनी होगी। 19वीं सदी के आखिर की बात है। टाइपराइटर अचानक लोकप्रिय हुए, क्योंकि यह हाथ से लिखने के मुकाबले काफी बेहतर थे। टाइपिस्टों ने उन कर्मचारियों की जगह लेनी शुरू कर दी, जो पत्र लिखने या हाथ से रेकॉर्ड दर्ज करने जैसे काम कर रहे थे।

फिर जब कंप्यूटर लोकप्रिय हुए तो उस पर टाइप करने वालों की संख्या तेजी से बढ़ी। वहीं, टाइपराइटर गायब होने लगे। इसी तरह, एक्सेल शीट के आने से कैलकुलेटर का उपयोग काफी कम हो गया। गुजरे जमाने की ये मिसालें बताती हैं कि यह नौकरियां खत्म होने का मामला नहीं था। यह असल में मामला था स्किल बदलने का। नौकरी के मौके खत्म नहीं हुए, बल्कि कुछ खास किस्म की स्किल की जरूरत खत्म हुई।

इतिहास में जब भी कोई प्रोडक्टिविटी टूल आया, तो एक खास समूह की नौकरियां चली गईं। यानी अगर आपके पास नई स्किल नहीं, तो नौकरी छूट जाएगी। आइए अब समझते हैं कि चैटजीपीटी का मामला क्या है? मैकिन्से ग्लोबल इंस्टिट्यूट की एक रिपोर्ट बताती है कि दुनियाभर में 2030 तक 40 से 80 करोड़ लोगों को नई नौकरी ढूंढनी

पड़ेगी क्योंकि ऑटोमेशन से इनका काम खत्म हो जाएगा। कई लोगों को अपना पेशा बदलना पड़ सकता है। अभी हर 10 में 6 पेशे में ऑटोमेशन 30 फीसदी से अधिक है। इनमें कुछ ऐसे काम भी हैं, जहां ऑटोमेशन के बावजूद रोजगार कम नहीं हुआ है। लोग वहीं दूसरे काम करने लगे हैं।

अब सवाल उठता है कि चैटजीपीटी से किस तरह स्किल की मांग बढ़ेगी? मैंने कई जानकारों से पूछा कि चैटजीपीटी किस तरह की नई नौकरियां पैदा करेगा? जवाब मिला कि यह अपने दम पर रोजगार नहीं पैदा कर सकता। लेकिन, इसकी तैनाती और इस्तेमाल से नैचुरल लैंग्वेज प्रॉसेसिंग (NLP), आर्टिफिशल इंटेलिजेंस (AI) डिवेलपमेंट और कस्टमर सर्विसेज जैसे कई क्षेत्रों में रोजगार के नए मौके बन सकते हैं।

एक और महत्वपूर्ण सवाल है कि क्या चैटजीपीटी से ग्रोथ में तेजी आएगी? मेरा मानना है कि चैटजीपीटी जैसे इंटेलिजेंस इंजन का भविष्य में काफी बड़ा प्रभाव होगा। खासकर, डिवेलपमेंट प्रोग्राम और एप्लिकेशन में। इनमें 80 फीसदी कोडिंग AI से होगी। इसानी दिमाग के जिम्मे सिर्फ 20 फीसदी काम बचेगा, यानी लाखों कोडर या आईटी प्रफेशनल्स की नौकरी छिन जाएगी और उनकी जगह मशीन लर्निंग ले लेगी।

मैं आपको इसका मतलब समझाने की कोशिश करता हूँ। अभी ग्लोबल बिजनेस में पेंडिंग आईटी प्रॉजेक्ट्स की वैल्यू 5 से 6 सौ अरब डॉलर के बीच है। फर्ज कीजिए कि इन सभी लंबी अवधि वाले प्रॉजेक्ट्स को AI जैसे कि चैटजीपीटी या

फिर गूगल बार्ड की मदद से एक साल के भीतर समेट दिया जाए। ऐसे में ऑर्गनाइजेशंस और जल्दी-जल्दी काम देंगे और फिर ग्रोथ में तेजी आएगी। इससे मुनाफा बढ़ेगा। जब ज्यादा मुनाफा होगा, तो यह तकनीकी निवेश के रूप में वापस भी आएगा। इससे यह तेज ग्रोथ साइकल बन जाएगी।

ChatGPT जाहिर तौर उन लोगों के लिए खतरा है, जो अपनी स्किल को बेहतर नहीं करते। लेकिन, अच्छी बात यह है कि जो नए टैलेंट आएंगे, उन्हें पुराने कामकाजी तरीकों में फंसने की जरूरत नहीं होगी। वे सीधे नई टेक्नॉलजी के साथ काम करने लगेंगे। ChatGPT या भविष्य में इसके अधिक उन्नत संस्करण के आने के साथ प्रफेशनल्स की नई जेनरेशन काम करने के पुराने तरीके को बाईपास कर देगी। इसलिए अब इंडस्ट्री और प्रफेशनल्स को विश्लेषण करना चाहिए कि क्या वे काम करने के पुराने दौर में फंसे रहना चाहते हैं या उनका इरादा नई संभावनाओं की ओर देखने का है।

आज ChatGPT है, कल को कोई इससे और भी बेहतर टूल होगा। इसका असल महत्व यही है कि यह मानव जाति का अधिक एफिशिएंसी और प्रोडक्टिविटी को ओर बढ़ा कदम है। कभी टाइपराइटर का जमाना था, कंप्यूटर का जमाना था और अब चैटजीपीटी का जमाना है!

(लेखक HCL टेक्नॉलजीज के पूर्व सीईओ हैं)

