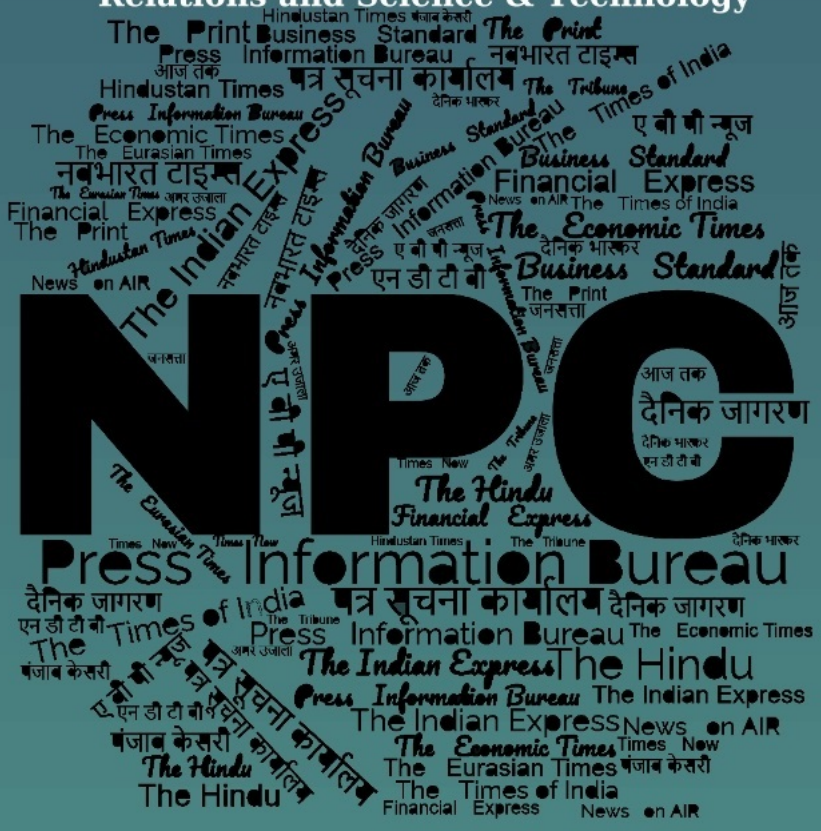
मई
May
2026

खंड/Vol. : 51 अंक/Issue :081
01-04/05/2026

समाचार पत्रों से चयनित अंश
Newspapers Clippings

डीआरडीओ समुदाय को डीआरडीओ प्रौद्योगिकियों, रक्षा प्रौद्योगिकियों, रक्षा नीतियों, अंतर्राष्ट्रीय संबंधों और विज्ञान एवं प्रौद्योगिकी की नूतन जानकारी से अवगत कराने हेतु दैनिक सेवा

A Daily service to keep DRDO Fraternity abreast with DRDO Technologies, Defence Technologies, Defence Policies, International Relations and Science & Technology



रक्षा विज्ञान पुस्तकालय
Defence Science Library
रक्षा वैज्ञानिक सूचना एवं प्रलेखन केंद्र
Defence Scientific Information & Documentation Centre
मेटकॉफ हाउस, दिल्ली - 110 054
Metcalfe House, Delhi - 110 054

CONTENTS

DRDO News

अंतरमहाद्वीपीय बैलिस्टिक मिसाइल 'अग्नि 6' के लिए तैयार हैं हम: डीआरडीओ प्रमुख

Source: Dainik Jagran, Dt. 01 May 2026

पश्चिम एशिया के संघर्ष और रूस-यूक्रेन युद्ध के अनुभवों ने आधुनिक युद्ध में मिसाइलों और ड्रोन की बढ़ती भूमिका को रेखांकित किया है। इसी परिप्रेक्ष्य में भारत भी लंबी, मध्यम व छोटी दूरी की मिसाइलों और ड्रोन क्षमताओं को मजबूत करने पर जोर दे रहा है। इसी क्रम में रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) ने कहा कि वह अंतरमहाद्वीपीय बैलिस्टिक मिसाइल (आइसीबीएम) 'अग्नि-6' के विकास के लिए पूरी तरह तैयार है। डीआरडीओ प्रमुख समीर वी कामत ने गुरुवार को कहा कि यह कार्यक्रम केंद्र सरकार के निर्णय पर निर्भर है और मंजूरी मिलते ही संगठन इसे आगे बढ़ाने के लिए तैयार है।

बता दें कि भारत वर्तमान में अग्नि-5 को तैनात कर चुका है, जो 5000 किमी से अधिककी रेंज वाली मिसाइल है। वहीं अग्नि 6 की मारक क्षमता 10000 किमी से ज्यादा होगी। इसकी जद में चीन के अहम ठिकाने होंगे। समाचार एजेंसी एएनआइ के राष्ट्रीय सुरक्षा शिखर सम्मेलन 2.0 में डीआरडीओ प्रमुख कामत ने कहा कि अग्नि-6 एक उन्नत आइसीबीएम होगी।

एंटी शिप मिसाइल पर भी चल रहा काम

सम्मेलन में डीआरडीओ अध्यक्ष कामत ने यह भी उल्लेख किया था कि भारत का एलआर-एएसएचएम (लांग रेंज-एंटी शिप हाइपरसोनिक मिसाइल) हाइपरसोनिक ग्लाइड मिसाइल कार्यक्रम भी उन्नत चरण में पहुंच गया है, जल्द ही प्रारंभिक परीक्षण होने की उम्मीद है। कामत ने कहा कि भारत हाइपरसोनिक ग्लाइड व हाइपरसोनिक क्रूज मिसाइल, दोनों प्रणालियों पर काम कर रहा है, जिसमें ग्लाइड संस्करण वर्तमान में विकास के मामले में आगे है। कामत ने दोनों प्रणालियों में अंतर समझाते हुए कहा कि हाइपरसोनिक क्रूज मिसाइल में स्क्रैमजेट इंजन होता है और उड़ान के दौरान इसे ऊर्जा मिलती है। हाइपरसोनिक ग्लाइड मिसाइल प्रारंभिक वेग प्राप्त करने के लिए बूस्टर का उपयोग करती है और फिर बिना किसी ऊर्जा के ही ग्लाइड करती है।

एकीकृत रक्षा स्टाफ के प्रमुख एयर मार्शल आशुतोष दीक्षित ने कहा, भविष्य के युद्ध में सिर्फ ड्रोन, मिसाइलों जैसे "सस्ते" विकल्पों पर निर्भर रहना पर्याप्त नहीं होगा। कहा कि लंबी अवधि में लड़ाकू विमान कई बार अधिक किफायती साबित होते हैं, क्योंकि वे बार-बार उड़ान भर सकते हैं और उनसे इस्तेमाल होने वाले हथियार अपेक्षाकृत सस्ते होता है।

*

हेलिकॉप्टर से लॉन्च की गई एंटी शिप मिसाइल

Source: NavBharat Times, Dt. 01 May 2026

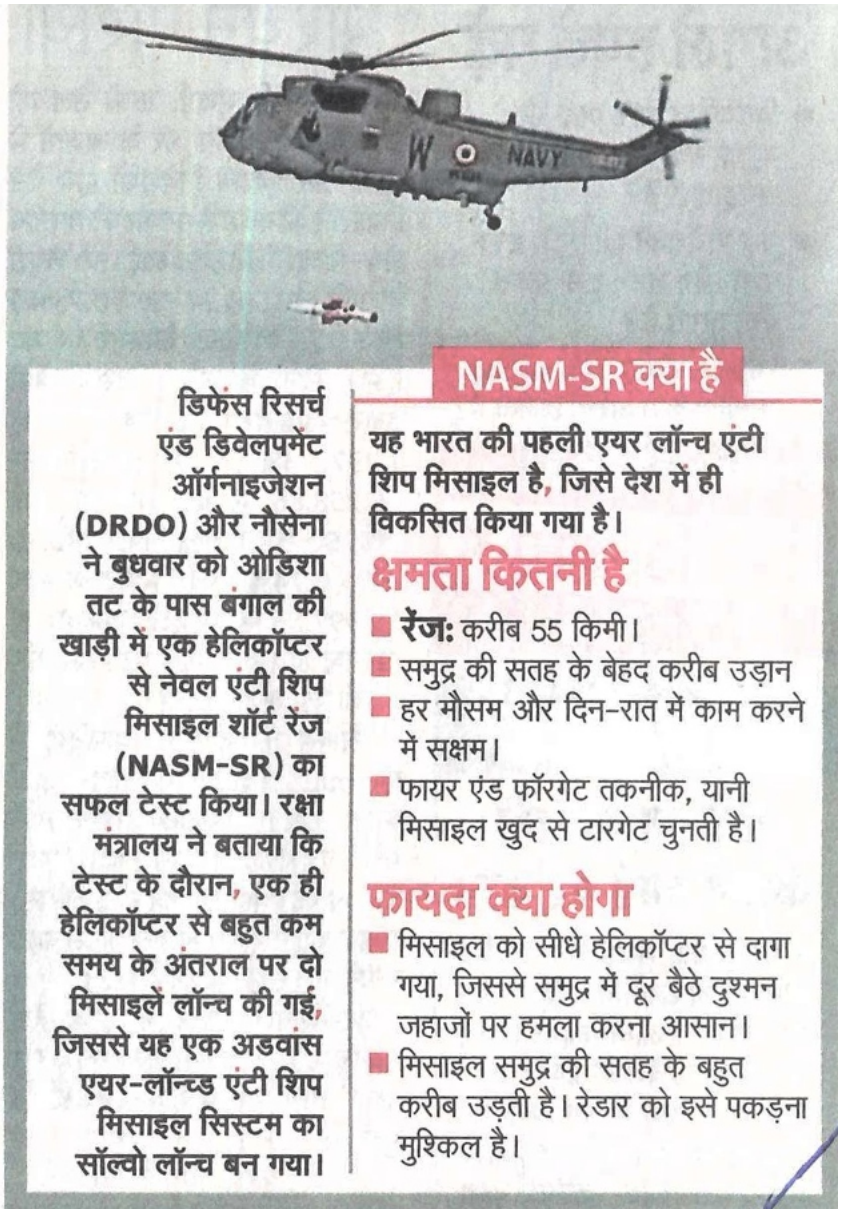


Fig: *हेलिकॉप्टर से लॉन्च की गई एंटी शिप मिसाइल*

*

India successfully conducts 2nd test of long-range hypersonic anti-ship missile with 1500 Km range

Source: The Times of India, Dt. 03 May 2026

In a big boost for the country's maritime defence, India has successfully conducted the second flight test of DRDO-developed long-range hypersonic anti-ship missile (LR-AShM). The test was conducted off Odisha coast on Friday, sources told TOI. With its impressive strike range of above 1,500 km that extends India's maritime defensive reach into deep ocean and speed of Mach 10 (10 times speed of sound), the missile is bound to raise concerns for India's rivals like China and Pakistan. The second test focused on a two-stage hypersonic glide vehicle design.

Fig: *DRDO-developed long-range hypersonic anti-ship missile (LR-AShM)*

Though DRDO and defence ministry are mum over the test, BJP on Saturday posted on its official X account a video of the missile test with the text: “India's hypersonic edge just got sharper. DRDO’s LR-AShM Phase-II test off the Odisha coast signals a new era. Reflecting the vision of PM Modi for a self-reliant, future-ready India, it marks a powerful leap in indigenous defence innovation.

”While designed to reach a maximum speed of Mach 10, the missile can maintain an average speed of around Mach 5.0 during its glide phase. With this speed, the missile can evade modern ship-based interception and radar systems.

LR-AShM is designed to carry various payloads for ranges greater than 1,500 km for armed forces. It features a hypersonic glide vehicle on a two-stage solid rocket, delivering a “carrier-killer” capability, the defence ministry had said during the missile’s first test on Nov 14, 2024.

Besides unmatched speed, it boasts unpredictable skipping trajectories and low-altitude, radar-evading flight paths. It can engage both static and moving targets (such as aircraft carriers) using indigenously developed sensors for high precision in the terminal phase. The missile was on display for the first time during the Republic Day parade on Jan 26 this year.

The missile represents a major achievement towards self-reliance in advanced defence technologies as it has been developed by laboratories of Dr APJ Abdul Kalam Missile complex, Hyderabad, along with various other DRDO laboratories and industry partners.

https://timesofindia.indiatimes.com/defence/news/india-successfully-conducts-2nd-test-of-long-range-hypersonic-anti-ship-missile-with-1500km-range-10-mach-speed-off-odisha-coast/articleshow/130724007.cms

*

They hit different: Inside ‘salvo test’ of India’s new chopper-launched naval missile

Source: The Indian Express, Dt. 04 May 2026

Earlier this week, the Defence Research and Development Organisation (DRDO) and the Indian Navy successfully test-launched a salvo of short-range anti-ship missiles from a helicopter off the Odisha coast. These indigenously developed missiles, called the Naval Anti-Ship Missile Short Range (NASM-SR), are meant to be deployed from ship-borne helicopters.

During the test on Wednesday (April 29), two such missiles were launched in quick succession from the same chopper, marking the platform's first successful salvo test. While the Navy already has helicopter-launched missiles, the NASM-SR offers a potential upgrade over them. They also have two unique features —"man-in-loop" and "waterline hit". What are these two features? Why does a salvo launch matter? And, more importantly, why are helicopter-launched missiles important for the Navy? We explain.

First, what's the role of helicopter-launched missiles

A helicopter-launched system, such as NASM-SR, allows a navy to engage hostile vessels and ships from a safe distance — that is, without exposing their own ships to direct danger. This is an important factor during naval warfare, anti-surface operations and sea control missions. The Indian Navy already possesses the British-origin Sea Eagle anti-ship missile, which it has equipped its Sea King 42B helicopters with.

Fig: *An NASM-MR missile is tested on Wednesday.*

Simply put, these helicopters, which are stationed on ships, can take off, strike a target from a relatively close range, and then return to the ship. This capability is, therefore, especially useful in highly contested maritime environments.

So why was the need for a new missile felt?

The Sea Eagles are 1980s-era missiles, lacking many modern capabilities. One of its key issues was its weight. A single missile weighs around 580 kg. So, in the early 2010s, the DRDO began the development process of a lighter, modern and homegrown missile that could be carried in higher numbers in helicopters.

Also part of the development process were premier DRDO labs such as the Hyderabad-based Research Centre Imarat and Defence Research and Development Laboratory, Pune's High Energy Materials Research Laboratory and Chandigarh's Terminal Ballistics Research Laboratory. The NASM-SR's first successful flight test was conducted in May 2022. Wednesday's launches were a salvo test — multiple launches in quick succession. The NASM-SR missiles are currently being produced by private sector partners with the help of MSMEs, start-ups and others.

Anatomy of the missile

The NASM-SR uses a solid propulsion booster rocket that gives the missile its first thrust and a long-burn sustainer engine that keeps it flying for longer. One of its key subsystems include the

seeker — a sensor that detects and tracks the target. It also has a radio altimeter device that measures height from the ground or sea. Another critical component is a high-bandwidth two-way data link system that allows real-time communication between the missile and operator sitting in the helicopter, the DRDO said..

A single NASM-SR missile weighs around 380 kg — 200 kg lighter than the Sea Eagle. This means more of them can be carried in helicopters. Its 55-km range, however, is lower than the Sea Eagle's 110 km. When the NASM-SR missile is within a certain distance of its target, a radio proximity fuse detonates its explosive device.

The two key features: 'Man-in-loop' features and 'waterline hit'

Many modern navies have helicopter-launched missiles that have these two features: 'man-in-loop' and 'waterline hit'. Let's take a look at the first one. Very simply put, 'man-in-loop' means that a human operator can change the missile's path, if required, even when it's mid-flight. In a crowded maritime environment, for instance, this feature reduces the risk of hitting non-combatants.

The 'man-in-loop' feature is implemented through the two-way data link that we mentioned above. The link transmits real-time data from the missile to the operator, who can then update the target. This also makes the missile more adaptable against evasive or moving targets — cases where automated guidance alone may fall short. In contrast, the Sea Eagles are "fire-and-forget" missiles. The Navy and DRDO successfully tested this feature in February 2025.

Now, let's come to the second term. A waterline hit means the missile strikes a ship at or just above the line where the hull meets the water. This is one of the most vulnerable parts of a vessel. Damage here can cause devastating structural damage, causing water to rapidly flood the vessel and disable or sink it. The Sea Eagle has no specific waterline hit capabilities.

The salvo demonstration

The tests conducted earlier this week included a salvo launch of two missiles fired back to back from a single helicopter. Demonstrating a salvo launch shows the ability to overwhelm shipborne defence systems. Such precision is achieved through advanced terminal guidance systems, including the seeker and low-altitude flight aided by the radio altimeter, which help the missile maintain a sea-skimming trajectory and accurately lock onto the most vulnerable part of the target. This combination enhances both lethality and survivability in real combat scenarios.

After the latest test, the Defence Ministry said that "users' representatives from the Indian Navy and the Indian Air Force" witnessed the test. This indicates that the IAF, too, may also induct the missile in the coming years for its helicopter platforms.

https://indianexpress.com/article/explained/naval-missile-salvo-test-explained-10667504/

*

Defence News

छठी पीढ़ी के युद्धक विमानों के लिए साझेदारी पर विचार कर रहा भारत

Source: Dainik Jagran, Dt. 01 May 2026

रक्षा सचिव राजेश कुमार सिंह ने गुरुवार को संकेत दिया कि भारत छठी पीढ़ी के लड़ाकू विमानों को विकसित करने के लिए साझेदारियों की भी तलाश कर रहा है, क्योंकि इसके लिए बहुत बढ़े पैमाने पर निवेश की आवश्यकता होगी। एएनआइ नेशनल सिक्योरिटी समिट 2 .0 में रक्षा सचिव ने बताया कि पांचवीं पीढ़ी का एडवांस्ड मीडियम कांबैट एयरक्राफ्ट (एएमसीए) कार्यक्रम आगे बढ़ रहा है और उम्मीद है कि टेंडर जारी होने के बाद इसमें और तेजी आएगी। सिंह ने यह भी भरोसा जताया कि भारत 2029 तक 50,000 करोड़ रुपये के रक्षा निर्यात के लक्ष्य को आसानी से पार कर लेगा।

*

Govt to invite bids for 5th-generation fighter aircraft

Source: The Tribune, Dt. 01 May 2026

Defence Secretary Rajesh Kumar Singh on Thursday said the procurement process for India's advanced medium combat aircraft (AMCA) was progressing and a request for proposal (RFP) likely to be issued soon to shortlisted private sector players. Speaking at a security summit here, Singh said "the procurement process is on (for the fifth-generation AMCA programme), the RFP hopefully would be released soon to the shortlisted bidders who happen to be from the private sector and hopefully that will then pick up pace".

In June last year, the Aeronautical Development Agency, under the Defence Research and Development Organisation, invited expressions of interest from Indian companies to develop and then produce the AMCA. The shortlisted entity needs to possess the capability of setting up manufacturing facility for series production. Singh said India was also exploring partnerships for developing sixth-generation aircraft.

https://www.tribuneindia.com/news/india/govt-to-invite-bids-for-5th-generation-fighter-aircraft/

*

भारत और इटली मिलकर बनाएंगे हथियार

Source: Dainik Jagran, Dt. 01 May 2026

भारत व इटली मिलकर हथियारों का निर्माण करेंगे। दोनों में रक्षा औररणनीतिक सहयोग को बढ़ाने को लेकर यह निर्णय रक्षा मंत्री राजनाथ सिंह और उनके इतालवी समकक्ष गुइडो क्रोसेटो की गुरुवार को नई दिल्ली में हुई वार्ता में हुआ है। दोनों पक्षों ने द्विपक्षीय सैन्य सहयोग योजना (एमसीपी) 2026-27 के तहत दोनों देशों की सेनाओं में सहयोग को बढ़ावा देने पर भी सहमति व्यक्त की।

*

India, Italy exchange Bilateral Military Cooperation Plan

Source: The Tribune, Dt. 01 May 2026

India and Italy on Thursday took a step forward in strengthening their defence partnership and exchanged a bilateral military cooperation plan (MCP) for 2026-27. This happened at a meeting that Defence Minister Rajnath Singh had with his Italian counterpart Guido Crosetto in New Delhi.

According to the Ministry of Defence (MoD), the newly exchanged MCP outlines a roadmap for structured military interactions between the armed forces of both nations over the next year. The meeting focused on enhancing military engagements and expanding defence industrial cooperation between the two countries. Both ministers reaffirmed that the India-Italy Strategic Partnership is rooted in shared values of peace, stability, freedom and mutual respect. In a post on X, Singh said, “Happy to have welcomed my Italian counterpart Guido Crosetto and held extensive talks with him in Delhi today. We discussed a wide range of regional and global issues, including the current situation in West Asia.

“We also discussed the avenues to further develop mutually beneficial defence industrial cooperation under India’s Atmanirbhar Bharat programme and Italy’s defence cooperation initiative. A bilateral military cooperation plan (MCP) 2026-27 was also exchanged regarding military engagements between the armed forces of both countries,” he added. Earlier in the day, Crosetto paid tributes to fallen soldiers by laying a wreath at the National War Memorial. He was also accorded a ceremonial tri-service guard of honour at the Manekshaw Centre in Delhi Cantt. Meanwhile, the Indian Coast Guard –- a force under the MoD -- hosted an Italian delegation, including senior representatives from Italian shipbuilder Fincantieri, at Coast Guard Headquarters.

Discussions focused on collaboration with Indian shipyards for future projects, highlighting advanced design features such as resilient hulls and hybrid/electric propulsion. The dialogue also explored modular ship design to enable versatile, multi-role platforms with rapid operational adaptability. Both sides deliberated on indigenous development and co-development of niche technologies, including dynamic positioning systems, AI-enabled decision support, counter-unmanned aerial systems (C-UAS)/anti-drone defence and next-generation green propulsion, in alignment with the vision of Atmanirbhar Bharat.

https://www.tribuneindia.com/news/world/india-italy-exchange-bilateral-military-cooperation-plan-for-2026-27-strengthen-maritime-information-sharing-via-gurugram-fusion-centre/

*

India warns Italy: No defence tech for Pakistan

Source: The Economic Times, Dt. 01 May 2026

While opening doors for co-development and production of next-generation weapon systems, India firmly told Italy that defence technology must not be shared with Pakistan, citing its support for terrorism.

At a bilateral meeting between Defence Minister Rajnath Singh and his Italian counterpart Guido Crosetto, both sides explored defence industrial cooperation, with Italy indicating willingness to co-develop systems exclusively with Indian partners. Regional and global issues, including the situation in West Asia, were also discussed.

Sources said India flagged past instances of Italian defence supplies to Pakistan. Italian firms have provided platforms, components and systems - particularly in the naval domain - along with helicopters, drones and surface-to-air missiles.

Italy's largest defence firm, Leonardo, had faced restrictions from the Indian defence ministry for nearly a decade after the VVIP helicopter scandal. Those curbs have now been lifted, and the company is pursuing major contracts, including naval helicopters in partnership with Adani Defence and Aerospace.

Italy is also eyeing supply of trainer aircraft, advanced naval guns and torpedoes. Sources said the Indian Navy's recent purchase of heavyweight torpedoes from WASS came up during talks, along with the possibility of setting up a production line in India with technology transfer.

"We also discussed avenues to further develop mutually beneficial defence industrial cooperation under India's Atmanirbhar Bharat programme and Italy's defence cooperation initiative," Singh said in a post on X.

An Italian defence industry delegation accompanied the visiting minister and held talks with stakeholders, including the Indian Coast Guard. Officials said a Bilateral Military Cooperation Plan (MCP) 2026-27 was also exchanged to guide future military engagements.

https://economictimes.indiatimes.com/news/defence/india-warns-italy-no-defence-tech-for-pakistan/articleshow/130649119.cms?from=mdr

*

Rajnath Singh to inaugurate North Tech Symposium in Prayagraj

Source: The Pioneer, Dt. 04 May 2026

Defence Minister Rajnath Singh on Monday will inaugurate a North Tech Symposium, on the theme ‘Raksha Triveni Sangam - Where Technology, Industry & Soldiering Converge’, in Prayagraj, Uttar Pradesh.

The three-day event is being jointly organised by the Northern Command and Central Command of the Indian Army and the Society of Indian Defence Manufacturers (SIDM), the defence ministry said on Sunday.

Giving details, officials said this symposium will serve as a vibrant platform to showcase and integrate state-of-the-art indigenous technologies to overcome operational challenges. The exhibition will feature an array of participants, including MSMEs, private Defence Tech firms, startups and innovators in uniform from across the country. 284 companies are setting up stalls showcasing their latest innovations and technologies.

The event aims to identify technologies suited for field deployment, maintenance processes and streamline procurement to promote a sustainable and self-reliant defence ecosystem for the Indian Army.

The Indian Army has been highlighting the operational relevance of cutting-edge technologies and the need for continuous innovation to address the evolving security challenges.

*

Indian Army contingent departs for joint exercise in Cambodia

Source: The Pioneer, Dt. 04 May 2026

An Indian Army contingent on Sunday departed for the second edition of India – Cambodia Bilateral Military Exercise CINBAX-II 2026. The exercise is scheduled to be conducted at Techo Sen Phnom Thom Mreas Prov Royal Cambodian Air Force Training Centre (Camp Basil), Kampong Speu Province, Kingdom of Cambodia, from May 04-17, the defence ministry here said.

Giving details, officials said, as part of India's ongoing Defence Cooperation with friendly foreign countries, the bilateral exercise CINBAX-II with Cambodia holds significance in the backdrop of evolving global security challenges.

The exercise will be conducted under the framework of Chapter VII of the UN Mandate, showcasing company-level joint training for the conduct of operations in a sub-conventional environment.

The Indian Army contingent comprises 120 personnel, mainly from a battalion of the Maratha Light Infantry Regiment. The Cambodian contingent comprises 160 personnel from the Royal Cambodian Army.

The Joint exercise will be aligned with the current dynamics of Counter-Terrorism operations encountered by the peacekeeping forces during the UN peacekeeping operation. This aim will be achieved through various practical and comprehensive discussions as well as tactical exercises, leading to a comprehensive validation exercise.

Special skill training, including that of Drone operations, mortar, and sniper tactics, will be practised as part of the exercise. The primary objective is to enhance interoperability, coordination and operational synergy between the contingents of both nations.

The exercise will not only showcase the capability of both nations towards maintaining global peace, but will also facilitate in exchanging best practices and the sharing of operational experiences gained during various operations against hostile forces in a semi-urban environment.

*

President Murmu visits ARTRAC, lauds Army preparedness

Source: The Pioneer, Dt. 02 May 2026

President Droupadi Murmu on Friday exhorted the Army Training Command (ARTRAC) to continue to work with fervour to enhance the operational preparedness of the Indian Army. President Murmu, who visited the ARTRAC headquarters in Shimla before winding up her five-day visit to Himachal Pradesh, said in a statement.

The Supreme Commander of the Armed Forces, who was briefed about the evolution of ARTRAC by Lieutenant General Devendra Sharma, GOC-in-C, ARTRAC, complimented all ranks of ARTRAC and defence civilians for the stellar work being done, and urged them to continue working with enhanced zeal and fervour, the defence ministry said. Murmu was received at ARTRAC headquarters by Himachal Pradesh Governor Kavinder Gupta and Lt General Devendra Sharma.

Fig: *President Murmu visited the ARTRAC headquarters in Shimla*

“Elaborating on the novel initiatives of the ARTRAC, Lt General Sharma brought out the impetus provided towards drone training, steps taken to absorb niche technologies, introduction of the concept of ‘Red Teaming’ and initiatives towards digitisation and automation in the Indian Army,” the ministry said in a statement.

The President acknowledged the fact that ARTRAC has an all-encompassing role of designing concepts of warfare, resource development for the Indian Army and widespread engagements with friendly foreign countries and sister Services, it added.

It is a critical gear in the path to military glory, Atmanirbharta and Viksit Bharat. The ARTRAC, through its 32 premier training establishments, vitalises the domain of professionalism in the Indian Army, which gives it a unique perspective into the art and science of warfighting, the statement said.

Later, President Murmu was accorded a warm sendoff at Annandale Helipad in Shimla, where Governor Kavinder Gupta, Chief Minister Thakur Sukhvinder Singh Sukhu, Panchayati Raj and Rural Development Minister Anirudh Singh, Chief Secretary Sanjay Gupta, DGP Ashok Tiwari and other senior civil, police and army officers were also present on the occasion. President Murmu’s itinerary had several programmes, but due to inclement weather conditions, she remained confined to Shimla.

https://dailypioneer.com/news/president-murmu-visits-artrac-lauds-army-preparedness

*

Ravi K takes charge as 22nd Chairman and MD of HAL

Source: The Pioneer, Dt. 02 May 2026

State-run aerospace conglomerate Hindustan Aeronautics Limited (HAL) on Friday said Ravi K has assumed charge as the 22nd Chairman and Managing Director of the company. He succeeded DK Sunil, who superannuated on April 30. Ravi brings over 30 years of experience across various sectors such as A&D, manufacturing and electronics, the Hindustan Aeronautics Limited (HAL) said in a release. Prior to this, he was the Director (Operations) at HAL, where he led strategic planning and played a key role in securing HAL’s Maharatna status.

“My vision is to transform HAL into a globally competitive aerospace and defence enterprise, driven by innovation, Artificial Intelligence (AI), operational excellence, and people,” Ravi said. He has held key leadership roles, including Executive Director and General Manager of the LCA Tejas Division, as well as Executive Director (Corporate Planning). During his tenure, he concluded various big-ticket contracts for HAL, such as the contract to supply 180 LCA Tejas to the Indian Air Force, 156 LCH Prachand to the Indian Army and Indian Air Force and is credited with the operationalisation of the LCA Tejas fleet in IAF, the company said.

Fig: *Ravi K, 22nd Chairman and Managing Director of HAL*

He boosted fleet serviceability through various customer-centric initiatives, established seamless data communication with IAF bases and created a Single Point of Contact (SPOC) for timely customer support, it said. Ravi has been a driving force in strengthening indigenous capabilities within the LCA Tejas programme by increasing local content and expanding production capacity in Nasik, the company further said.

He also played a pivotal role in developing a robust manufacturing ecosystem by outsourcing major fuselage assemblies to private sector partners, a strategy that is now delivering tangible results through ongoing deliveries.

His initiatives have diversified HAL into Civil manufacturing and Maintenance, Repair and Overhaul (MRO), creating new revenue streams and expanding HAL’s market presence, it added. A Mechanical Engineering graduate from Malnad College of Engineering, Karnataka, Ravi is an alumnus of IIM Ahmedabad and IAS, Toulouse, France. He is also a Nominee Director on the board of Multi-Role Transport Aircraft Ltd.

https://dailypioneer.com/news/ravi-k-takes-charge-22nd-chairman-md-hal

*

महेंद्रगिरि युद्धपोत शक्तिशाली हथियार प्रणाली के साथ नौसेना में शामिल

Source: Dainik Jagran, Dt. 02 May 2026

स्वदेशी स्टेल्थ फ्रिगेट महेंद्रगिरि को भारतीय नौसेना को सौंपा गया है। नीलगिरि-क्लास (प्रोजेक्ट 47ए) का यह छठा खुफिया युद्धपोत 30 अप्रैल को मझगांव डाक शिपबिल्डर्स लिमिटेड (एमडीएसएल), मुंबई में सौंपा गया। यह ब्रह्मोस सुपरसोनिक मिसाइल, अत्याधुनिक सोनार' और स्टील्थ तकनीक से लैस है, जो दुश्मन के रडार को चकमा दे सकता है। अधिकारियों के अनुसार, यह डिलीवरी युद्धपोत डिजाइन और निर्माण में आत्मनिर्भरता प्राप्त करने में एक "महत्वपूर्ण मील का पत्थर" है।

रक्षा मंत्रालय ने शुक्रवार को कहा, "प्रोजेक्ट 17ए फ्रिगेट बहुउपयोगी मिशन प्लेटफार्म है, जिन्हें समुद्री क्षेत्र में वर्तमान और उभरती चुनौतियों का सामना करने के लिए डिजाइन किया गया है। यह अत्याधुनिक फ्रिगेट नौसेना के डिजाइन, स्टेल्थ, अग्निशक्ति, स्वचालन और जीवित रहने की क्षमता में गुणात्मक छलांग को दर्शाता है और युद्धपोत निर्माण में आत्मनिर्भरता का प्रशंसनीय प्रतीक है।" अधिकारियों ने कहा कि महेंद्रगिरि (यार्ड 2654) इस श्रेणी का चौथा जहाज है जो एमडीएसएल में निर्मित किया गया है। पी17ए फ्रिगेट स्वदेशी जहाज डिजाइन, स्टेल्थ, जीवित रहने की क्षमता और युद्ध क्षमता में एक "पीढ़ीगत छलांग" को दर्शाते हैं। पी17ए जहाजों को पी17 (शिवालिक-क्लास) की तुलना में एक उन्नत हथियार और सेंसर सूट से लैस किया गया है। ये जहाज संयुक्त डीजल या गैस (सीओडीओजी) प्रोपल्शन प्लांट से कांफिगर किए गए हैं, जिसमें एक डीजल इंजन और एक गैस टरबाइन शामिल है जो प्रत्येक शाफ्ट पर कंट्रोल करने योग्य पिच प्रोपेलर (सीपीपी) को संचालित करता है और एक अत्याधुनिक इंटीग्रेटेड प्लेटफार्म मैनेजमेंट सिस्टम (आइपीएमएस) है। शक्तिशाली हथियार और सेंसर सूट में सतह-रोधी, वायु-रोधी और पनडुब्बी युद्ध प्रणाली शामिल हैं।

नौसेना को 7 महीने से कम समय में सौंपा

महेंद्रगिरि छठा पी17ए जहाज है जिसे नौसेना को 77 महीनों से कम समय में सौंपा गया। महेंद्रगिरि की डिलीवरी देश की डिजाइन, जहाज निर्माण और इंजीनियरिंग क्षमता को प्रदर्शित करती है। 75 प्रतिशत स्वदेशी सामग्री के साथ प्रोजेक्ट में एमडीएसएल में 200 से अधिक एमएसएमई शामिल हैं और यह 4000 व्यक्तियों कोसीधे और 10,000 से अधिक व्यक्तियों को अप्रत्यक्ष रूप से रोजगार प्रदान करने में सक्षम बना है।

*

Stealth frigate Mahendragiri delivered to Indian Navy

Source: The Pioneer, Dt. 02 May 2026

Indigenous stealth frigate Mahendragiri, endowed with a potent weapon system and cutting-edge sensor suite, has been delivered to the Indian Navy, officials said on Friday. The sixth ship of the Nilgiri-class (Project 17A) was delivered on April 30 at Mazagon Dock Shipbuilders Limited (MDSL), Mumbai.

Fig: *Indigenous stealth frigate Mahendragiri*

The delivery marks a “significant milestone” in achieving self-reliance in warship design and construction, the officials said. “Project 17A frigates are versatile multi-mission platforms designed to address current and emerging challenges in the maritime domain. This State-of-the-art frigate reflects a quantum leap in naval design, stealth, firepower, automation, and survivability, and stands as an admirable symbol of Aatmanirbharta in warship building,” the defence ministry said in a statement. Mahendragiri - Yard 12654 - is the fourth ship of this class built at MDSL.

Designed by the Warship Design Bureau (WDB) and overseen by the Warship Overseeing Team (Mumbai), P17A frigates reflect a “generational leap” in indigenous ship design, stealth, survivability, and combat capability. Driven by the philosophy of integrated construction, the ship was built and delivered within the envisaged timelines, the officials said. P17A ships are fitted with an advanced weapon and sensor suite as compared to the P17 (Shivalik-class), they said.

“These ships are configured with Combined Diesel or Gas (CODOG) propulsion plants, comprising a diesel engine and a gas turbine that drive a Controllable Pitch Propeller (CPP) on each shaft, and a State-of-the-art Integrated Platform Management System (IPMS). The potent weapon and sensor suite comprises anti-surface, anti-air, and anti-submarine warfare systems,” the statement said. Mahendragiri is the sixth P17A ship to be delivered to the Navy in the span of less than 17 months from the delivery of the first P17A frigate (Nilgiri) by MDSL on December 20, 2024.

https://dailypioneer.com/news/stealth-frigate-mahendragiri-delivered-indian-navy

*

Interaction between Indian Coast Guard and M/S Fincantieri (Italy)

Source: Press Information Bureau, Dt. 30 Apr 2026

The Indian Coast Guard hosted an Italian delegation, including senior representatives from M/S Fincantieri, at Coast Guard Headquarters, New Delhi, on 30 April 2026. Discussions focused on collaboration with Indian shipyards for future projects, highlighting advanced design features such as resilient hulls for higher sea states, enhanced bollard pull, integrated firefighting systems, and hybrid/electric propulsion. The dialogue also explored modular ship design to enable versatile, multi-role platforms with rapid operational adaptability.

Both sides deliberated on the indigenous development and co-development of niche technologies, including dynamic positioning systems, advanced thrusters, AI-enabled decision support, counter-unmanned aerial systems (C-UAS)/anti-drone defence, and next-generation green propulsion, in alignment with the vision of Aatmanirbhar Bharat.

The interaction served as a forward-looking platform to advance cooperation in shipbuilding, maritime technology, and capability development aligned with India’s maritime security priorities. The delegation called on Director General Indian Coast Guard DG Paramesh Sivamani. It included Counselor Anna Ruffino, Head of the Economics and Innovation Department, Embassy of Italy, and Mr. Eugenio Santagata, Head of the Military Naval Vessel Division, Fincantieri.

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2257043&reg=3&lang=1

*

Op Sindoor demonstrated a shift from old mindset of issuing diplomatic statements on terror attacks, it showcased PM Modi-led Govt's unwavering commitment through decisive action: Raksha Mantri

Source: Press Information Bureau, Dt. 30 Apr 2026

"Operation Sindoor conveyed an unequivocal global message that India is no longer bound by the old mindset of merely issuing diplomatic statements when terror attacks are perpetrated on its soil, and that Prime Minister Shri Narendra Modi-led Government has moved beyond mere intent and rhetoric by demonstrating its unwavering commitment through decisive action," said Raksha Mantri Shri Rajnath Singh as he addressed a National Security Summit in New Delhi on April 30, 2026. He asserted that the Government has maintained a firm stance that any act of terrorism, under any circumstances, will not be tolerated. He described the surgical strikes, air strikes, and Operation Sindoor as a manifestation of the Government's resolute stance against the menace.

"Terrorism emanates from a distorted and perverse mindset. It casts a dark stain on humanity. The battle against terrorism is not merely a matter of national security; it is, fundamentally, a battle to safeguard the core values of humanity. It is a fight against a barbaric ideology that stands in direct opposition to every human value. We have articulated this Indian perspective, both within the country and abroad," said Shri Rajnath Singh.

Raksha Mantri added that as long as terrorism exists, it will continue to challenge collective peace, development, and prosperity. "Attempts are made to justify terrorism by giving it a religious colour or linking it to a violent ideology such as Naxalism. This is extremely dangerous and, in a way, provides cover fire to terrorists so they can slowly advance toward their goal. Terrorism is not just an anti-national act; it has multiple dimensions - operational, ideological, and political. It can only be dealt with if we tackle all these dimensions," he said.

On Pakistan's continuous support to terrorism, Shri Rajnath Singh said: "Both, India and Pakistan attained independence at the same time. However, today India is recognised globally for IT i.e., 'Information Technology', while Pakistan is regarded as the epicenter of a different IT i.e., 'International Terrorism'".

Shri Rajnath Singh termed Operation Sindoor as a shining example of jointness and synergy of the Indian Defence Forces. He stated that the Indian Army, Indian Navy, and Indian Air Force acted in concert and under a unified plan, demonstrating conclusively that India's military might no longer operates in silos; instead, it has emerged as a joint, integrated, and global power.

Raksha Mantri added that India executed Operation Sindoor on its own terms and at a time of its own choosing, and halted it strictly on its own terms. "During the course of the operation, we targeted, with absolute precision, only those who had perpetrated the attack against us. We did not halt the operation because our capabilities had been exhausted or diminished. We halted it entirely on our own terms. We were fully prepared to sustain a prolonged conflict. We possess the requisite surge capacity, and the inherent strength to rapidly scale up our capabilities in moments of sudden crisis," he said.

Shri Rajnath Singh underlined the fact that India's military-industrial complex has consistently demonstrated, time and again, that it stands ready to meet not only the requirements of peacetime, but also the demands for rapid supply and logistics during times of war. He asserted that, during

that period, India did not fall for the bluff or a threat of a nuclear strike and accomplished the set objectives. “This is the ‘New World Order’; the ‘New India’ of this new global era. This is an India which makes no distinction between terrorism and those who sponsor it. This is the unequivocal policy of our Prime Minister, which has transformed India amidst the shifting global landscape,” he said.

Describing Operation Sindoor as an embodiment of deterrence, Raksha Mantri stated that although the operation was concluded within a span of just 72 hours, the preparatory work preceding it was extensive and protracted. He pointed out that India’s surge capacity and its ability to rapidly mobilise resources, strategic stockpiles, and the proven credibility of indigenously-developed weaponry have all become integral components of deterrence posture.

Shri Rajnath Singh added that a remarkable shift in global perception and a positive attitude towards the reliability of indigenous weapons and defence products are being witnessed, as a direct result of Operation Sindoor. “Numerous nations have expressed keen interest in procuring weapons and defence equipment from India. The figures say it all. In the Financial Year 2025-26, defence exports reached a record high of Rs 38,424 crore, a staggering surge of 62.66% compared to the previous fiscal year. We remain steadfastly committed to further advancing our efforts to surpass these benchmarks,” he said.

On his recent visit to Germany, Raksha Mantri stated that major companies across Europe are keen to collaborate with our private defence firms and Public Sector Units, terming it as a testament to India’s growing credibility. India’s formidable standing in the world has been bolstered not only by its military prowess, but also the capacity to establish deterrence, he added.

Highlighting the rapid transformation in the nature of deterrence, Shri Rajnath Singh stated that the cyber domain, space warfare, and information technology have emerged as integral components, and Artificial Intelligence (AI) is at the epicenter of this paradigm shift. “From state-of-the-art missile systems like BrahMos used during Operation Sindoor to various surveillance platforms, AI has been deployed with great effectiveness across the board. It has elevated our precision and strike capabilities. While information on major operations often reaches the public domain, there are countless smaller operations and processes that activate preemptively to neutralise threats before they even materialise. AI is utilised extensively in all such instances,” he said.

Underscoring the practicality of the application of AI, Raksha Mantri stated that it serves as a vital aid in locating terrorists and delivering a decisive response. “AI also stands for ‘Augmented Infantry’. It is significantly enhancing the capabilities of our troops. In keeping with the demands of modern warfare, we are rapidly advancing toward transforming our military into a technology-driven, integrated fighting machine. To this end, the Army has established agile, self-sufficient combat units such as the ‘Rudra’ Brigades, ‘Bhairav’ Battalions, ‘Shaktibaan’ Artillery Regiments, and ‘Divyastra’ Batteries, capable of delivering an immediate and robust response to modern hybrid threats,” he said.

Shri Rajnath Singh added that AI has emerged as a powerful instrument for transforming the working culture, ensuring the welfare of our soldiers, and elevating their standard of living. He mentioned the SPARSH portal developed for defence pensioners and veterans. Through AI-enabled chatbots, pension-related processes have significantly been simplified, he said, adding that from grievance redressal to medical records monitoring, all aspects are being managed through an AI-driven system. Furthermore, AI-based tools are being utilised to ensure that the families of soldiers never lag behind in terms of education and healthcare, he said.

Stressing that AI is becoming an indispensable component of India's strategic preparedness in this new global order, Raksha Mantri said the Government has not confined this initiative solely to the military, but has formulated a comprehensive strategy for skill development and research across the entire nation. "Through the 'IndiaAI' Mission, we're actively democratising computing infrastructure across the country, thereby enabling the youth in even the smallest of towns to contribute to AI. 10,000+ GPU capacity, initiatives such as the FutureSkills program, and the establishment of Data and AI Labs serve as a testament to our resolve not to be left behind in this era of technological revolution. We recently successfully hosted India AI Impact Summit 2026, where Heads of State from over 20 nations, along with 89 countries and organisations, endorsed our AI Manifesto. Today, India plays a leading role in shaping global AI standards. We are guided by the mantra of 'AI for All,' ensuring that its benefits are not confined to a select few nations but extend to the Global South as well," he said.

Shri Rajnath Singh, however, emphasised that AI cannot be viewed through a purely rosy lens, as deepfakes, cyber warfare, and autonomous weapon systems pose new & formidable challenges. "We must keep these challenges firmly in mind as they are bound to intensify further in the times to come. If AI were to spiral out of control, the very tool we created for our protection could ultimately become the instrument of destruction. Therefore, our endeavor must be to ensure that AI becomes a force that guides us, rather than one that leads us astray. Through collective efforts and international cooperation can we effectively harness the power of AI," he said.

Raksha Mantri asserted that the role of AI across various domains, ranging from battlefield surveillance and autonomous systems to logistics optimization and command decision support is being meticulously studied. "Sudarshan Air Defence system is a massive project that serves as a prime example of the exemplary application of AI. By leveraging AI, Machine Learning, and Big Data Science, our Defence Forces have formulated a roadmap to bolster their capabilities in response to emerging AI-based challenges. This strategy will prove instrumental in making them even more adaptable and responsive in the future. Through such new and emerging technologies, our nation will not only become more secure but also grow stronger and more prosperous," he said.

Defence Secretary Shri Rajesh Kumar Singh, Secretary, Department of Defence R&D and Chairman DRDO Dr Samir V Kamat and Chief of Integrated Defence Staff Air Marshal Ashutosh Dixit attended the event.

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2256883&reg=3&lang=1

*

Ammunition production review meeting : A step forward towards Atamnirbharta

Source: Press Information Bureau, Dt. 30 Apr 2026

The Annual Ammunition Production Review Meeting (APRM)–2026 between the Indian Navy and Munitions India Limited (MIL), Pune, was conducted on 30 Apr 2026 in Pune. The meeting was jointly chaired by Shri Sanjay Hazari, Chairman and Managing Director (CMD), MIL, and Shri BP Singh, Director General of Naval Armament (DGONA). The Meeting was attended by officers from DGONA, DGNAI, MIL, Naval Armament Depots (NADs), and various Ordnance Factories.

Key issues related to the production and supply of ammunition to the Indian Navy were discussed in detail. DGONA underscored the pivotal role of MIL in meeting the Navy's evolving operational requirements. He also emphasised the need for a focused approach to ensure a robust and resilient supply chain, particularly in the context of the current geopolitical environment and the national objective of Aatmanirbhar Bharat. The CMD, MIL, reaffirmed the organisation's commitment to quality, innovation, and timely delivery. The meeting featured constructive deliberations, leading to the identification of actionable outcomes.

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2257177&reg=3&lang=1

*

Unmatched valour of soldiers marked Op Sindoor as a golden chapter in India's military history: Raksha Mantri at Shaurya

Source: Press Information Bureau, Dt. 02 May 2026

Raksha Mantri Shri Rajnath Singh has paid humble tributes to the Indian Defence Forces whose unmatched valour & indomitable spirit marked Operation Sindoor as a golden chapter in India's military history. Addressing an event 'Shaurya' organised in New Delhi on May 02, 2026 in the run-up to the first anniversary of Operation Sindoor, he stated that the operation underscored Prime Minister Shri Narendra Modi-led Government's unwavering resolve to eliminate terrorism through decisive action.

Raksha Mantri commended the valour, dedication and patriotism of the soldiers, and stated that their ethos of Nation First & Service Before Self have defined India's military traditions from ancient times to contemporary operations such as Op Sindoor. He added that the valour of the Defence Forces extends beyond the battlefield as they provide humanitarian assistance as first responders during natural disasters within the country & abroad. "Our soldiers use weapons to protect their people, and deliver food & medicines to those in need during the times of crises. This is the defining characteristic of our Defence Forces," he said.

The event was a unique confluence of art and valour with top defence officials, hundreds of personnel and noted artists such as Padma Shri awardees Shri Anup Jalota & Shri Kailash Kher, Smt Harshdeep Kaur and Shri Manoj Muntashir in attendance. Shri Rajnath Singh highlighted that valour and art are often viewed as opposites, but they, in fact, complement each other. He described them as powerful expressions emanating from human emotions.

Raksha Mantri underlined that the marching songs by military bands unify soldiers, with music transforming individual identity into collective strength. This sentiment, he said, is deeply embedded in the ethos of the Defence Forces.

Chief of Defence Staff General Anil Chauhan, Chief of the Air Staff Air Chief Marshal AP Singh, Delhi Chief Minister Smt Rekha Gupta, Defence Secretary Shri Rajesh Kumar Singh and Vice Chief of the Army Staff Lieutenant General Dhiraj Seth attended the event.

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2257574&reg=3&lang=1

*

Indian Navy Chief Admiral Dinesh K Tripathi in Myanmar to boost maritime ties

Source: The Tribune, Dt. 04 May 2026

Admiral Dinesh K Tripathi, Chief of the Indian Navy, who is on a four-day visit (May 2-5) to Myanmar, on Sunday held discussions with Rear Admiral Aung Aung Naing, Commander, Central Naval Command, Myanmar Navy.

The two sides discussed strengthening navy-to-navy cooperation, bolstering the existing defence partnership, augmenting operational engagements, maritime security and promoting shared goals for a stable and secure maritime environment.

Admiral Tripathi also met Rear Admiral Khun Aung Kyaw, Commander, Naval Training Command. Discussions focused on enhancing training cooperation and exploring future avenues of collaboration, with emphasis on improving interoperability and expanding training exchange programmes.

At the Naval Training Command, the Navy Chief was briefed on Myanmar Navy's training infrastructure and ongoing initiatives between the two navies, including the effectiveness of the mobile training team, reaffirming India's commitment to capacity building and professional exchanges.

Admiral Tripathi also formally handed over projects executed with the Government of India's assistance, including a containerised small arms simulator and a rigid inflatable boat, aimed at augmenting maritime security in the Bay of Bengal region.

Earlier, the Navy Chief was received at the Central Naval Command Headquarters in Yangon with a ceremonial Guard of Honour. During the visit, Admiral Tripathi is scheduled to hold bilateral discussions with General Ye Win Oo, Commander-in-Chief of the Myanmar Armed Forces; Myanmar Defence Minister General U Htun Aung; and Admiral Htein Win, Commander-in-Chief of the Myanmar Navy, along with other senior officials.

The Indian Navy regularly engages with the Myanmar Navy through defence cooperation meetings, training exchanges and operational interactions, including the India-Myanmar Naval Exercise (IMNEX), Indo-Myanmar Coordinated Patrol (IMCOR), port visits and hydrographic surveys.

https://www.tribuneindia.com/news/india/navy-chief-in-myanmar-to-boost-maritime-ties/

*

Army seeks industry solutions for tech gaps in combat systems

Source: The Tribune, Dt. 04 May 2026

After Operation Sindoor, two key Army commands — tasked with China and Pakistan — have joined hands with domestic industry to develop technology solutions in drones, AI, satellite communication, robotics and navigation systems. A three-day North Tech Symposium will open in Prayagraj on Monday, focusing on sustaining troops and inducting the latest technologies. Defence Minister Rajnath Singh will inaugurate the event. The Northern Command, headquartered in

Udhampur, and the Central Command, headquartered in Lucknow, along with the Society of Indian Defence Manufacturers (SIDM), are hosting it.

The Ministry of Defence said 284 industry vendors were expected to participate. The domestic industry will present possible solutions to 87 specific needs of the Army. These requirements have been prepared by eight Army teams, and the industry was informed in advance. Existing technology gaps have been assessed, along with lessons from contemporary conflicts.

A key focus of the event will be drones, which have emerged as a potent warfare tool. The two Army Commands have asked industry to propose options for 'kamikaze' systems; vertically launched anti-tank loitering munitions; high-altitude drones with satellite communication capability; drone-based radar capable of penetrating tree cover; high-altitude, long-endurance surveillance swarms; and drone systems capable of neutralising radars.

Industry has also been asked to provide solutions using AI for decoding and translating intercepted enemy communications; AI-enabled real-time drone threat detection systems; AI-based counter-drone electronic warfare systems; AI systems for detecting camouflaged and concealed military assets; AI-enabled autonomous signal interception sensors; and AI-assisted automated combat communication systems.

The two commands are also seeking aerial and ground robotic mission systems, including robots equipped with assault rifles and all-terrain remotely operated dozers. The Northern Command is dual-tasked — handling Pakistan in Jammu and Kashmir and China along the Line of Actual Control (LAC) in eastern Ladakh. The Central Command is responsible for the LAC in Himachal Pradesh and Uttarakhand.

The Ministry of Defence said, "The symposium is expected to serve as a bridge between defence forces, scientists, industry leaders and the academic community." It is centred on the theme "Convergence of Technology, Industry and Soldiering" and aims to provide a collaborative platform for the armed forces, industry, innovators and academia to address operational challenges through technology-driven solutions.

https://www.tribuneindia.com/news/india/army-seeks-industry-solutions-for-tech-gaps-in-combat-systems/

*

अपनी शर्तों पर आपरेशन सिंदूर रोक दिया, लंबी लडाई के लिए तैयार थे: राजनाथ

Source: Dainik Jagran, Dt. 01 May 2026

रक्षा मंत्री राजनाथ सिंह ने कहा है कि आपरेशन सिंदूर ने वैश्विक स्तर पर स्पष्ट संदेश दिया है कि भारत आतंकी हमला होने की स्थिति में अब केवल कूटनीतिक बयान जारी करने की पुरानी मानसिकता से बंधा नहीं है। मोदी सरकार ने आगे बढ़कर निर्णायक कार्रवाई के जरिये आतंकवाद के खिलाफ अपनी अटूट प्रतिबद्धता प्रदर्शित की है। सरकार का दृढ़ रुख है कि किसी भी परिस्थिति में आतंकवाद बर्दाश्त नहीं किया जाएगा। रक्षा मंत्री ने सर्जिकल स्ट्राइक, बालाकोट एयर स्ट्राक्क और आपरेशन सिंदूर को आतंकवाद के खिलाफ सरकार की दृढ़ता का प्रमाण बताते हुए कहा कि आतंकवाद को धार्मिक रंग देकर या माओवाद जैसी हिंसक विचारधारा से जोड़कर इसे जायज ठहराने की कोशिश की जाती है, जो बेहद खतरनाक है।

रक्षा मंत्री ने गुरुवार को राष्ट्रीय सुरक्षा शिखर सम्मेलन 02 के उद्घाटन सत्र को संबोधित करते हुए कहा कि आपरेशन सिंदूर को हमने अपनी शर्तों और अपने चुने हुए समय पर न केवल अंजाम दिया, बल्कि अपनी शर्तों पर ही इसे रोका। हम लंबे समय तक चलने वाले संघर्ष को जारी रखने के लिए पूरी तरह तैयार थे। इस दौरान भारत ने छल या परमाणु हमले की धमकी के आगे घुटने नहीं टेके और निर्धारित लक्ष्यों को प्राप्त किया। राजनाथ ने कहा कि आधुनिक युद्ध की मांगों को ध्यान में रखते हुए हम अपनी सेना को प्रौद्योगिकी-संचालित और एकीकृत युद्धक प्रणाली में बदलने की दिशा में तेजी से आगे बढ़ रहे हैं। सेना ने 'रुद्र' ब्रिगेड, भैरव" बटालियन, 'शक्तिबाण" तोपखाना रेजिमेंट और "दिव्यास्त्र' बैटरी जैसी चुस्त और आत्मनिर्भर लड़ाकू इकाइयां इसी मकसद से स्थापित की हैं, जो आधुनिक हाइब्रिड खतरों का तत्काल और सशक्त जवाब देने में सक्षम हैं। उन्होंने एआइ के उपयोग की तुलना "भस्मासुर' से करते हुए रक्षा मंत्री ने यह भी कहा कि अगर यह तकनीक गलत हाथों में पड़ जाए, तो कई क्षेत्रों को प्रभावित कर सकती है। आज डीप फेक, साइबर युद्ध और स्वायत्त हथियार प्रणालियां नई चुनौतियां पेश कर रही हैं।

*

India was ready to prolong Op Sindoor, halted it on own terms: Rajnath Singh

Source: The Tribune, Dt. 01 May 2026

Defence Minister Rajnath Singh today said India was fully prepared to sustain a 'prolonged conflict' during 'Operation Sindoor' last year and had halted it on "our own terms". "India did not halt the operation because capabilities had been exhausted or diminished. We halted it entirely on our own terms. We were fully prepared to sustain a prolonged conflict," said the minister as he looked to refute claims of the US intervention. Addressing a National Security Summit in New Delhi, he said Operation Sindoor (May 7-10, 2025) has conveyed an unequivocal global message that India was no longer bound by the old mindset of merely issuing diplomatic statements against terror attacks on its soil.

"Prime Minister Narendra Modi-led government has moved beyond mere intent and rhetoric by demonstrating its unwavering commitment through decisive action," said Rajnath Singh adding that during that period, India had not fallen for the bluff or a threat of a nuclear strike and had accomplished the set objectives. "This is the 'New World Order'; the 'New India' of this new global era. This is an India which makes no distinction between terrorism and those who sponsor it. This is the unequivocal policy of our Prime Minister, which has transformed India amidst the shifting global landscape," he said. The government had maintained a firm stance that any act of terrorism, under any circumstances, would not be tolerated, he said, describing the surgical strikes, air strikes and Operation Sindoor as a manifestation of the government's resolute stance against the menace.

Terrorism, he said, emanated from a distorted and perverse mindset. It cast a dark stain on humanity. "It is a fight against a barbaric ideology that stands in direct opposition to every human value…attempts are made to justify terrorism by giving it a religious colour or linking it to a violent ideology." On Pakistan's continuous support to terrorism, Rajnath said: "Both India and Pakistan attained independence at the same time. However, today India is recognised globally for IT, i.e. 'Information Technology', while Pakistan is regarded as the epicenter of a different IT, i.e. 'International Terrorism'."

On the military front, Operation Sindoor was a shining example of jointness and synergy of the Indian defence forces. He said the Army, Navy, and the Indian Air Force acted in concert and under a unified plan, demonstrating conclusively that India's military might no longer operated in silos; instead, it had emerged as a joint, integrated global power.

https://www.tribuneindia.com/news/top-headlines/india-was-ready-to-prolong-op-sindoor-halted-it-on-own-terms-rajnath/

*

Army releases list of 7 Pak terror camps hit during Op Sindoor

Source: The Tribune, Dt. 02 May 2026

A week ahead of the anniversary of the strikes on Pakistan under Operation Sindoor, the Army has released a list of terror camps it targeted on May 7 last year. The Army has identified seven locations and has begun sequentially posting satellite images showing damage at each site. The locations listed are Kotli Gulpur, Mehmoona Joya, Syedna Bilal, Bhimber, Swani Nala and Sarjal.

These were among the targets assigned to the Army by military headquarters, while the Indian Air Force (IAF) was tasked with two additional locations. The strikes were carried out around 1 am on May 7. Following the initial strikes, India and Pakistan were engaged in a military skirmish from May 7 to May 10.

The Army's targets were located 40-60 km inside Pakistan, while the IAF struck deeper targets. The May 7 strikes involved some of the latest precision weapons in India's arsenal, with specific buildings or clusters identified as targets. The IAF hit camps at Muridke and Bahawalpur, while the Army struck the remaining locations. The Army used the US-made M777 howitzer to fire Excalibur artillery shell rounds — precision-guided munitions capable of hitting targets up to 40 km away with high accuracy.

The Army also deployed loitering munitions, commonly referred to as "kamikaze drones", which can hover over an area before striking designated targets. Both imported and indigenous systems were used, sources said. Following the skirmish with Pakistan, India has replenished its stock of Excalibur rounds. New Delhi procured 216 Excalibur projectiles under a $47.1 million deal approved by the US.

https://www.tribuneindia.com/news/india/army-releases-list-of-7-pak-terror-camps-hit-during-op-sindoor/

*

US goes ahead with radar upgrade for Pakistan's F-16 fleet, move a worry for India

Source: The Times of India, Dt. 04 May 2026

In a decision that will raise India's concerns, the US is going ahead with a radar upgrade programme for Pakistan's F16 fleet, which comprises 75 to 85 fighter jets. In a $488 mn deal, American defence major Northrop Grumman Systems Corp has been contracted to provide

engineering and technical support for F-16 radar systems under the United States Air Force (USAF)'s foreign military sales programme for Pakistan and other beneficiary countries.

The April 2026 contract was announced amid heightened tensions in the region following India's Operation Sindoor which saw missile strikes on Pakistan terror hubs and military assets, including air bases. The F16 upgrade programme also comes at a time when Pakistan has been hosting US and Iran delegations in Islamabad for peace negotiations to end the West Asia conflict.

The radar upgrade work is expected to be completed by March 31, 2036. Pakistan's F16 upgrade plan will be noted with concern by India as Indian Air Force's aircraft squadron numbers have dipped to an alarming 29, as against the minimum sanctioned strength of 42 required to fight a two-front war with China and Pakistan.

The development comes months after a separate US notification in Dec 2025 when the Defence Security Cooperation Agency (DSCA) had informed Congress of a proposed $686 million package to upgrade and support Pakistan's F-16 fleet.Besides Pakistan, the April 2026 contract involves military sales to countries that include Bahrain, Egypt, Indonesia, Iraq, Israel, Jordan, Korea, Oman, Poland and Türkiye.

https://timesofindia.indiatimes.com/defence/international/us-goes-ahead-with-radar-upgrade-for-pakistans-f-16-fleet-move-a-worry-for-india/articleshow/130739508.cms

*

Pakistan navy gets new Chinese submarine

Source: The Pioneer, Dt. 01 May 2026

The Pakistan Navy on Thursday commissioned its first Hangor-class submarine, armed with state-of-the-art weapons and advanced sensors, at a ceremony held in Sanya, China.

"The commissioning of the first Hangor-class submarine marks another chapter in the time-tested and enriching friendship between Pakistan and China, "the army said in a statement. President Asif Ali Zardari, who is on a visit to China, attended the event as the chief guest. Chief of the Naval Staff Admiral Naveed Ashraf and senior officials from the Pakistan Navy and People's Liberation Army (Navy) were also present on the occasion.

President Zardari termed the commissioning a "historic milestone "in Pakistan Navy's modernisation, reaffirming his country's resolve to maintain a robust, balanced and credible defence posture.

https://dailypioneer.com/news/pakistan-navy-commissions-first-hangor-class-chinese-submarine

*

Science & Technology News

भारत के लिए गेम चेंजर साबित होगा मिशन 'दृष्टि', मिलेंगी सटीक तस्वीरें

Source: Dainik Jagran, Dt. 04 May 2026

भारत की सुरक्षा के लिहाज से बेंगलुरु आधारित भारतीय स्टार्टअप गैलेक्सआई का आप्टोसर उपग्रह मिशन दृष्टि एक "गेम चेंजर" माना जा रहा है। पाकिस्तान और चीन जैसे पड़ोसी देशों के साथ तनाव के बीच, यह उपग्रह सेना को रात के अंधेरे और खराब मौसम में भी सीमा पार की सटीक जानकारी देगा। यह दुनिया का पहला अपनी तरह का उपग्रह है और अभी ये ताकत सिर्फ भारत के पास है। इस उपग्रह से जमीन पर डेढ़ मीटर के दायरे में दुश्मन की छोटी से छोटी हरकत की सटीक जानकारी रियल टाइम में मिल सकेगी।

आपरेशन सिंदूर में नहीं मिल पाई थीं सटीक तस्वीरें

बता दें कि पिछले साल पहलगाम हमले की प्रतिक्रिया स्वरूप शुरू किए गए आपरेशन सिंदूर में भारत ने पाकिस्तान में स्थित तमाम आतंकी अड्डों कोतहस नहस कर डाला था। हालांकि, इस दौरान पाकिस्तान में नुकसान की सटीक तस्वीरें सामने नहीं आ सकी थीं और जो देर से मिलीं भी, वे अमेरिकी अंतरिक्ष कंपनी वेंटोर, जिसे पहले मैक्सर कहा जाता था, के जरिये ही मिल सकी थीं। हालांकि, अमेरिका ने भारत-पाक सैन्य संघर्ष से जुड़ी तस्वीरें साझा करने से कंपनी को रोक दिया था। लेकिन भारतीय स्टार्टअप गैलेक्सआई के ऐतिहासिक आप्टोसार उपग्रह के होते अब ऐसा नहीं हो सकेगा क्योंकि भारत को ऐसी ताकत मिल चुकी है, जिसके चलते सेना बादलों और अंधेरे को चीरते हुए हालात की साफ तस्वीर पा सकेगी।

अंतरिक्ष कार्यक्रम से जुड़ा ये देश का पहला स्टार्टअप

एएनआइ के अनुसार, गैलेक्सआई की स्थापना 2021 में आइआइटी मद्रास के छात्रों ने की थी। इसके संस्थापक और सीईओ सुयश सिंह ने बताया कि अंतरिक्ष कार्यक्रम से जुड़ा ये देश का पहला स्टार्टअप है, जिसने अपनी स्थापना के पांच साल के भीतर दुनिया का पहला अनोखा उपग्रह लांच करने में सफलता हासिल की।

अब विदेशी वाणिज्यिक उपग्रहों पर निर्भर रहने की जरूरत नहीं रहेगी

भारत जैसे उष्णकटिबंधीय देशों में अक्सर घने बादल छाए रहते हैं, जिससे सामान्य कैमरे काम नहीं कर पाते। मिशन दृष्टि उपग्रह का रडार सिस्टम बादलों और अंधेरे के बावजूद जमीन की साफ तस्वीरें ले सकता है। उन्होंने बताया कि पाकिस्तान और चीन जैसे देशों की सीमा की निगरानी और सटीक बम क्षति आकलन के लिए अब विदेशी वाणिज्यिक उपग्रहों पर निर्भर रहने की जरूरत नहीं रहेगी।

*

First-of-its-kind satellite by Indian start-up flies on SpaceX rocket

Source: The Indian Express, Dt. 04 May 2026

An Indian start-up, GalaxEye, rode on a SpaceX rocket this morning to launch a first of its kind satellite that is meant to fill a long-standing gap in space imaging. The satellite, aptly called Drishti, is equipped to take optical images, very much like a normal camera, as well as radar-generated images of the same place at the same time, something that has not been tried before. The optical images ensure clarity and intuitiveness, while radar images, through a Synthetic Aperture Radar (SAR), brings all-weather reliability. For this reason, the company is describing its innovation as Opto-SAR technology.

“Imaging satellites are generally equipped to take multi-spectral or hyper-spectral (optical) images, or they use SAR. Both of these kinds of satellite data are used extensively. But very often they need to be fused together to get correct information because each one of them has limitations. Multi-spectral images are clear and easy to understand, but they are not effective during cloudy weather or night time, for instance. SAR signals can penetrate clouds and take continuous images, but they are not intuitive. Like X-ray images, they need experts to glean the information. The uniqueness of Drishti is that it has both the sensors that will enable simultaneous imaging,” GalaxEye founder Suyash Singh had told The Indian Express in an earlier interview.

Drishti is the first satellite of GalaxEye, a company started by alumni of IIT Madras. It rode on a Falcon 9 rocket by SpaceX from the Vandenberg Space Force Base in California, United States, as one of the 45 payloads on the CAS500-2 mission. The launch happened at 1230 pm India time.

Drishti, a built-in-India satellite, seeks to solve a familiar problem in space imaging. Users need clear and intuitive images from space that is available at all times. As of now, they often have to use data from multiple satellites, optical data for clarity, and SAR data for continuity and all-weather availability. While the super-imposition of these two datasets often does the needful, it is not without challenges. The two satellites are not watching the same place at the same time, and the angles at which they are watching over a place on Earth can be very different.

“What we are trying to do is to make space imagery available all the time, and understandable to all kinds of users,” Suyash Singh, an alumni of IIT Madras, said. “When the optical sensors are unable to take images because of clouds or other similar reasons, we are using artificial intelligence to regenerate optical-like images from the SAR,” he said.

GalaxEye is one among several Indian space start-ups that are beginning to make their presence felt. Agnikul Cosmos, another start-up from IIT Madras, has built the world’s first 3-D printed rocket engine, while Skyroot has tested India’s first privately built rocket. Companies like Pixxel, Dhruva Space and Bellatrix have been demonstrating impressing innovations in satellite technologies. GalaxEye had to make important technological innovations to ensure that both the imaging sensors are put on the same satellite and operate in sync with each other to produce simultaneous imaging of the same place.

“SAR and optical sensors are designed in different ways. They look at the Earth at different angles. So, if they are placed side by side, for example, the optical sensor might be looking at Bengaluru while SAR is capturing Dubai at that instant. So we have come up with a technology stack that synchronises the functionalities of these two technologies, enabling them to look at the same

location at the same time. This is our proprietary technology. This does away with the need of the users to manually align the datasets from two different satellites," Singh said.

Singh said one of the reasons no one else built a satellite like Drishti was that this is primarily a problem in the tropical countries. "Most of the satellite companies have traditionally been based in the western countries, and cater to the demands of those countries. Weather is relatively more predictable, and the skies are relatively cleaner and clearer. They don't have the same kind of issues with clouds that we in India face. We are trying to solve for problems in our part of the world," he said. The data produced by the satellite will be useful for civilian as well as military purposes, he said.

https://indianexpress.com/article/india/galaxeye-drishti-satellite-spacex-launch-opto-sar-technology-explained-10669686/

*

भारतीय खगोल विज्ञान की विरासत को मिलेगा नया जीवन

Source: Punjab Kesari, Dt. 01 May 2026

दिल्ली के ऐतिहासिक जंतर-मंतर परिसर में स्थित प्राचीन खगोलीय राम यंत्र अब अपने जीर्णोद्धार कीओर बढ़ रहा है। सदियों पुराना यह उपकरण भारतीय खगोल विज्ञान की समृद्ध परंपरा और वैज्ञानिक सोच का जीवंत प्रतीक माना जाता है। सूर्य कीछाया के आधार पर समय, दिशा ओर आकाशीय पिंडों की स्थिति का सटीक अनुमान लगाने वाला यह यंत्र बिना किसी आधुनिक तकनीक या बिजली के काम करता था। अब भारतीय पुरातत्व सर्वेक्षण (एएसआई) ने इसके संरक्षण और पनर्स्थापन की जिम्मेदारी को लेकर कार्य करेगी। विभागका उद्देश्य इस ऐतिहासिक धरोहर को उसके मूल स्वरूप में वापस लाकर आने वाली पीढ़ियों के लिए संरक्षित करना है। अधिकारियों के अनुसार, यह केवल एक स्थापत्य संरचना नहीं, बल्कि भारत की प्राचीन ज्ञानिक उपलब्धियों का महत्वपूर्ण प्रमाण है। राम यंत्र का निर्माण 8वीं शताब्दी में महाराजा सवाई ' जयसिंह द्वितीय ने कराया था। इसका नाम अपने दादा राजा राम सिंह की स्मृति में रखा। यह यंत्र हलक रूप से खगोलीय पिंडों की ऊंचाई और दिशा बे मापने के लिए बनाया गया था। उस समय यह खगोलविदों के लिए आकाशीय घटेनाओं को समझने का एक अत्यंत उपयोगी साधन था।

बड़ी अनोखी संरचना है जंतर-मंतर के राम यंत्र की

इसकी संरचना बेहद अनोखी है। यह दो विशाल गोलाकार खुले ढांचों से मिलकर बना है, जिनके केंद्र में ऊंचे स्तंभ स्थित हैं। सूर्य की किरणें जब इन स्तंभों पर पढ़ती थीं, तो उनकी छाया मापांकित दीवारों और फर्श पर पड़ती थी, जिससे खगोलीय गणनाएं की जाती थीं। राम यंत्र कीआंतरिक दीवार लगभग 7.5 मीटर ऊंची है, जबकि इसका व्यास करीब 6.6 मीटर है। केंद्र का स्तंभ भी लंगभग इसी ऊंचाई "का है, जिससे सटीक मापन संभव होता था। पत्थर से बने त्रिज्यीय खंडों पर अंकित निशान समय, कोण और दिशा की गणना में सहायता करते थे। इसकी खुली संरचना खगोलविदों को आकाश का विभिन्न कोणों से अवलोकन करने की सुविधा देती थी।

*

The Tribune
The Statesman
पंजाब केसरी जनसत्ता
The Hindu
The Economic Times
Press Information Bureau
The Indian Express
The Times of India
Hindustan Times
नवभारत टाइम्स
दैनिक जागरण
The Asian Age
The Pioneer