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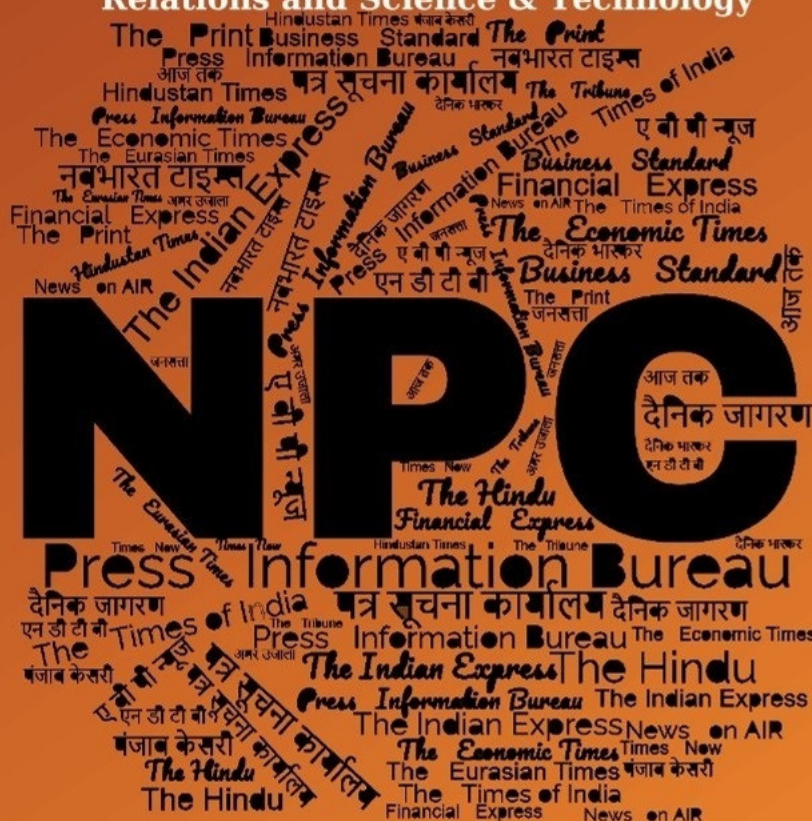
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समाचार पत्रों से चयनित अंश Newspapers Clippings

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

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Defence News

लद्दाख में वायुसेना को मिला दुनिया का सबसे ऊंचा फाइटर एयरबेस

Source: NavBharat Times, Dt. 13 Nov 2025

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■ नई दिल्ली: लद्दाख में इंडियन एयरफोर्स को चौथा एयरबेस मिल गया है। लाइन ऑफ एक्चुअल कंट्रोल से करीब 35 किलोमीटर दूर यह मुध-न्योमा (Mudh-Nyoma) एयरबेस 13700 फीट की ऊंचाई पर स्थित दुनिया का सबसे ऊंचा एक्टिव फाइटर एयरबेस बन गया है। इसके ऑपरेशनल हो जाने से एयरफोर्स की क्षमता में काफी इजाफा हुआ है।

बुधवार को एयरफोर्स चीफ एयर चीफ मार्शल ए.पी.सिंह C-130 J सुपर हरकुलस एयरक्राफ्ट में सवार होकर यहां पहुंचे। यह इसकी उद्घाटन लैंडिंग थी। एयरफोर्स का एक एयरबेस लेह में है जो ऑपरेशनल है। इसके अलावा करगिल और थॉइस (सियाचिन का बेस) में भी पूरी सुविधाओं वाला रनवे है। दौलत बेग ओल्डी में भी एक रनवे है लेकिन यह मिट्टी का बना रनवे है और पक्का नहीं है।

न्योमा लद्दाख में इंडस नदी के किनारे स्थित है

न्योमा लद्दाख में इंडस नदी के किनारे स्थित है और लेह से करीब 180 किलोमीटर दूर है। यहां पहले एक सामान्य लैंडिंग स्ट्रिप थी लेकिन अब यहां पर 2.7 किलोमीटर पक्का रनवे है, हैगर है और एयर ट्रैफिक कंट्रोल की सारी सुविधाएं हैं। 1962 के भारत-चीन युद्ध के दौरान यहां पर अडवांस लैंडिंग ग्राउंड बनाया गया था। बाद में मीडियम ट्रांसपोर्ट एयरक्राफ्ट एएन-32 के हिसाब से इसे तैयार किया गया। अब इसमें C-130 J और IL-76 जैसे बड़े एयरक्राफ्ट भी उतर सकते हैं। एयरफोर्स ने इस एयरबेस पर Su-30 MKI फाइटर जेट के ऑपरेशंस की मंजूरी दे दी है। इससे अब यहां कोई भी फाइटर जेट ऑपरेट कर सकते हैं। Su-30 MKI फाइटर जेट सबसे भारी फाइटर जेट है, जिस जगह से भारी फाइटर जेट उड़ान भर सकता है और लैंड कर सकता है वहां से उसके हल्के फाइटर जेट के ऑपरेट करने में कोई दिक्कत नहीं होगी।



एयरक्राफ्ट लंबे वक्त तक रुक भी सकते हैं

साल 2023 में जब रक्षा मंत्री राजनाथ सिंह ने न्योमा एयरबेस की वर्चुअल तरीके से आधारशिला रखी, तब उन्होंने कहा था कि यह एयरबेस चोर्डन बॉर्डर पर एयरफोर्स की क्षमता को बढ़ाएगा और यह सशस्त्र बलों के लिए पासा पलटने वाला साबित होगा। यह एयरबेस अब पूरी तरह ऑपरेशनल हो गया है। यहां से एयरक्राफ्ट उड़ान भर सकते हैं, लैंड कर सकते हैं और यहां छोटे स्तर पर मेंटनेंस का काम भी हो सकता है। इसका मतलब है कि एयरक्राफ्ट यहां लंबे वक्त तक ठहर भी सकते हैं।

■ फाइटर जेट

भी भर सकेंगे इस एयरबेस से उड़ान

■ बुधवार को

एयरफोर्स चीफ ने किया इसका शुभारंभ

■ एयर चीफ

ने C-130 J एयरक्राफ्ट से की यहां लैंडिंग

■ इस एयरबेस

से फाइटर जेट सुखोई-30 के संचालन की मंजूरी

■ सबसे भारी

फाइटर जेट है सुखोई-30

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IAF chief lands C-130J, inaugurates Nyoma airbase in Ladakh

Source: Hindustan Times, Dt. 13 Nov 2025

Chief of the Air Staff Air Chief Marshal AP Singh on Wednesday inaugurated the Mudh-Nyoma airbase in Ladakh by landing a C-130J special operations aircraft there, a shot in the arm for India's infrastructure push along its farthest frontiers, officials aware of the matter said. Singh was accompanied by Western Air Command chief Air Marshal Jeetendra Mishra, the officials said, asking not to be named. The Mudh-Nyoma air force station is located at a height of 13,700 feet

and is 23 km from the contested Line of Actual Control (LAC) with China. The ₹218-crore project was spearheaded by a crew of women officers from the Border Roads Organisation (BRO). Defence minister Rajnath Singh laid the foundation stone for the airbase in September 2023; he had then said it would be a “game-changer” for the armed forces.

The full-fledged airbase, with a 2.7-km runway, is capable of operating fighter jets, transport planes and helicopters. Allied infrastructure at the airbase includes hangars, the air traffic control building and hard standing (hard-surfaced areas for parking vehicles and aircraft). Work on upgrading the Nyoma airstrip to a full-fledged base for fighter operations was carried out by the BRO in the shadow of the military standoff with China along the LAC that began in April-May 2020 and was resolved last year.



The full-fledged airbase, with a 2.7-km runway, is capable of operating fighter jets, transport planes and helicopters.

The Indian Army resumed its patrolling activity in Demchok and Depsang in eastern Ladakh in 2024 after a gap of more than four years. This restored the ground situation in the two forward areas to what it was pre-April 2020, before the standoff began. With the breakthrough, the Indian Army and Chinese People’s Liberation Army (PLA) moved past a two-year impasse in negotiations -- the fourth and last round of disengagement from Patrolling Point-15 in the Gogra-Hot Springs area took place in September 2022 after which the talks were deadlocked.

BRO chief Lieutenant General Raghu Srinivasan had earlier described the Mudh-Nyoma airbase as one of the most important projects being executed by BRO in the Ladakh sector. After the standoff with China began, India built various roads, bridges, tunnels, airfields and helipads in its border areas to enhance military mobility and logistics support for deployed forces, and for civilian use. Infrastructure development also focussed on providing a better living experience and improved facilities to soldiers, and the conservation of modern weapons and equipment deployed in forward areas.

To be sure, China has constructed new airbases, missile sites, roads, bridges, reinforced bunkers, underground facilities to protect military assets from aerial strikes, accommodation for soldiers and ammunition depots. The Nyoma airstrip was out of use for decades after the 1962 India-China war before the Indian Air Force reactivated it in September 2009 and landed an AN-32 transport aircraft

there for the first time. India's border infrastructure push has been powered by the speedy execution of strategic projects to support military operations, increased spending, and focussed adoption of technology and techniques.

Nyoma is in a better and flatter valley than Leh and closer to LAC, and thus will prove to be a crucial airbase for the IAF for both fighter and transport operations, strategic affairs expert Air Marshal Anil Chopra (retd) had earlier said. "It will allow quicker launch of interdiction strikes, and troop and equipment insertion in the forward areas if needed."

In its 2024 year-end review, the defence ministry said the overall situation along LAC with China is "stable but sensitive." In June, India pushed for a permanent solution of border demarcation with China and underlined the need to solve complex issues through a structured roadmap of engagement and de-escalation, during talks between defence minister Rajnath Singh and his Chinese counterpart Admiral Dong Jun.

<https://www.hindustantimes.com/india-news/iaf-chief-lands-c-130j-inaugurates-nyoma-airbase-in-ladakh-101762952103449.html>

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Nyoma airbase underwent Rs. 230 crore upgrade

Source: The Times of India, Dt. 13 Nov 2025

IAF chief Air Chief Marshal A P Singh himself flew a C-130J 'Super Hercules' aircraft from Hindon on the outskirts of Delhi to the Mudh airfield at Nyoma, among the world's highest at an altitude of 13,710 feet, to formally inaugurate the strategically located airbase. He was accompanied by Western Air Command chief Air Marshal Jeetendra Mishra.

Located just about 35 km from the LAC, Nyoma has undergone an upgrade worth Rs 230 crore, which included extending the original airstrip into a 2.7-km 'rigid pavement' runway, a new ATC complex, hangars, crash bay and accommodation, as was earlier reported by TOI.

The Mudh airfield is now fully capable of handling and sus-



The airbase is 35 km from the LAC

taining operations by heavy-lift transport planes and fighter jets from both directions. Primarily, it will help quickly rush troops, weapons and supplies to areas such as Pangong Tso, Demchok and Depsang in eastern Ladakh.

The airfield will also be available for fighter operations by early 2026 though high altitude will be a limiting factor. China has assiduously upgraded all its airbases fac-

ing India over the last five years to offset the terrain constraints due to high-altitude and rarefied air, which limits the weapon and fuel-carrying capacity of aircraft.

China now has additional fighters, including advanced J-20 stealth fighters, as well as bombers, reconnaissance aircraft and drones deployed at its airfields like Hotan, Kashgar, Gargunsa, Shigatse, Bangda, Nyingchi and Heping. It has also built many new heliports all along the LAC.

In the far reaches of the Eastern Himalayas, thousands of soldiers from the 3 Spear Corps of the Indian Army, along with elements of IAF, ITBP and others, are now also engaged in the 'Poorvi Prachand Prahar' exercise in the high-altitude terrain of Mechuka and other areas of Arunachal Pradesh.

From airlift and force projection to mountain warfare manoeuvres and multi-domain integrated operations, the exercise aims at validating rapid mobilisation, operational logistics and precision-strike capabilities. "The right force must reach the right place at the right time during conflicts," an officer said.

While Nyoma will be another operational base for the IAF in Ladakh after Leh, Kargil and Thoise airfields and the Daulat Beg Oldie ALG (advanced landing ground), India has also progressively upgraded the infrastructure at ALGs like Pasighat, Mechuka, Walong, Tuting, Along and Ziro in Arunachal Pradesh. Similarly, civil ALGs in the middle sector (Uttarakhand, Himachal) of the LAC are also now being increasingly used for military purposes.

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Navy chief begins US visit to strengthen maritime cooperation, deepen defence ties

Source: Hindustan Times, Dt. 13 Nov 2025

Navy chief Admiral Dinesh K Tripathi on Wednesday began his week-long visit to the United States (US) to bolster the bilateral maritime relationship that serves as a key pillar of the India-US defence partnership, the Navy said.

“The visit by chief of naval staff underscores the Indian Navy’s commitment to deepening cooperation with the US Navy towards realising the vision of a free, open, inclusive, and rules-based Indo-Pacific,” a statement issued by the Navy said.

Both India and the US stand for a rules-based international order for peace, prosperity, and stability in the Indo-Pacific at a time when China is seeking to boost its influence in the vast region by setting up military bases, pushing countries to advance its maritime claims, and forcing strategic concessions from vulnerable states.

The Navy chief’s visit comes against the backdrop of India and the US signing a 10-year framework to deepen the bilateral defence relationship during a meeting between defence minister Rajnath Singh and his US counterpart Pete Hegseth in Kuala Lumpur on October 31.

The Framework for the US-India Major Defence Partnership 2025 was signed on the sidelines of the Association of Southeast Asian Nations (ASEAN) Defence Ministers’ Meeting Plus. The framework provides a unified vision and policy direction to deepen bilateral defence cooperation.

Tripathi is expected to hold talks with top officials, including Admiral Samuel J Paparo, Commander, United States Indo-Pacific Command, and Admiral Stephen T Koehler, Commander, United States Pacific Fleet, the Navy said.

“These interactions will provide an opportunity to review ongoing maritime cooperation, enhance operational-level linkages, and strengthen mechanisms for information sharing and maritime domain awareness between the two navies,” it said, adding that the two countries share a long-standing maritime partnership rooted in mutual trust and shared values.

The visit comes at a time when India is contending with an increasingly delicate balancing act — negotiating a trade deal, repairing ties with the US, and maintaining its relationship with Russia. The two sides have renewed contacts in recent weeks to revive negotiations on a trade deal.

Discussions on the trade deal resumed after US assistant trade representative Brendan Lynch held talks with Indian officials in New Delhi on September 16. This was followed by a visit by US ambassador-designate Sergio Gor, a close aide of Trump, who met Prime Minister Narendra Modi. The trade discussions also figured in recent visits to the US by external affairs minister S Jaishankar and commerce minister Piyush Goyal.

US President Donald Trump on Tuesday indicated that his administration could soon reduce the overall 50% tariff rate facing Indian exports, citing substantial reductions in India’s purchases of Russian oil, which has been an irritant for Washington, as reported by HT.

<https://www.hindustantimes.com/india-news/navy-chief-begins-us-visit-to-strengthen-maritime-cooperation-deepen-defence-ties-101762953424549.html>

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Ukraine war a ‘living lab’ for taking lessons for future conflicts, says Army chief

Source: Hindustan Times, Dt. 13 Nov 2025

Army chief General Upendra Dwivedi on Wednesday said that the army was tracking the developments in the Russia-Ukraine war closely as the battlefield was akin to a live laboratory in terms of the situation along India’s borders, a reference to the military confrontation with Pakistan

in May during Operation Sindoor. "The Ukrainian battlefield is a living lab in terms of the conditions what we are having along our borders...Drones are stalking the armoured columns, electronic warfare systems jamming the radios, precision fires reaching much beyond the 100-km range, info campaigns win wars even before a single shell lands...This is the situation we are facing," Dwivedi said in his address at the Delhi Defence Dialogue organised by Manohar Parrikar Institute for Defence Studies and Analyses.

"As far as the future battlefield is concerned, it is the era of jostling and competition. The long peace is declining, and comprehensive conflicts are on the rise," he said, referring to more than 50 ongoing conflicts involving over 100 nations.

Open source analysis and predictive analysis helped the Indian military a lot during Sindoor 1.0, he said. "A lot of volunteers came forward inside the country, the diaspora came forward and helped us. We were very much empowered as far as Sindoor 1.0 is concerned. We have learnt our lessons. Therefore, whether it is Sindoor 2.0 or any other battle thereafter, we are looking at it in a big way," he said. Operation Sindoor marked New Delhi's direct military response to the April 22 Pahalgam terror attack in which 26 people were killed. India launched the operation in the early hours of May 7 and struck terror and military installations in Pakistan and Pakistan-occupied Kashmir (PoK) before the May 10 ceasefire.

The clash involved fighter jets, missiles, armed drones, and a fierce artillery duel. The four-day military confrontation with Pakistan was a "compelling example" of modern warfare where precision strike capabilities were deployed in a tight time-frame, chief of defence staff General Anil Chauhan said on Tuesday.

"Operation Sindoor is a compelling example of modern warfare, where precision strike capabilities, network-centric operations, digitised intelligence, and multi-domain tactics were effectively deployed within a compressed time-frame," he said in his special address on Impact of Technology on Modern Warfare at the Delhi Defence Dialogue. The dialogue brings together policymakers, researchers, industry leaders, and academia to share insights on how new-age technologies can be effectively harnessed for enhancing India's defence capability.

<https://www.hindustantimes.com/india-news/ukraine-war-a-living-lab-for-taking-lessons-for-future-conflicts-says-army-chief-101762974618001.html>

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Predictive analysis will drive Op Sindoor 2.0 too, says Army chief

Source: The Economic Times, Dt. 13 Nov 2025

Open source analysis and predictive analysis helped the armed forces in a big way during Operation Sindoor and would be of use in further phases of the operation and other battles as well, India's army chief General Upendra Dwivedi said on Wednesday. Speaking at the Delhi Defence Dialogue, he said the armed forces had been adequately empowered during the strikes to take down terror targets in Pakistan, with outside resources also brought in to create models and analysis.

"Open source analysis and predictive analysis, in Sindoor 1.0, it helped us. A lot of volunteers came forward inside the country, the diaspora came forward and helped us... We were very much

empowered as far as Sindoor 1.0 is concerned; we have learnt our lessons. Therefore, whether it is Sindoor 2.0 or any other battle thereafter, we are looking at it in a big way on how to harness this initiative," Dwivedi said. Speaking to an audience of military leaders and defence experts, he said the armed forces are looking at outsourcing in a big way and the army has been empowered to hire about 75 interns in advanced fields of technology to help and assist in tackling the modern battlefield.

During Operation Sindoor 1.0, other government and semi government agencies helped the army immensely by providing support and equipment, he said and mentioned, in particular, the electronics and information technology ministry's department for providing graphics processing units that were used for predictive analysis.

The army chief also spoke about the new-age threats the armed forces are preparing for, saying that the battlefields of Ukraine are being closely watched to understand how warfare is evolving. "We are watching Ukraine battlefields closely because it is the living lab in terms of the conditions we are having along our borders. Drones are stalking the armoured columns, EW (electronic warfare) is jamming the radios, precision fires are reaching much beyond 100 km range, info-campaigns win wars even before a single shell lands," Dwivedi said.

<https://economictimes.indiatimes.com/news/defence/predictive-analysis-will-drive-op-sindoor-2-0-too-says-army-chief/articleshow/125282198.cms?from=mdr>

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ज्यादा उन्नत संस्करण होगा ऑपरेशन सिन्दूर 2.0: सेना प्रमुख

Source: Dainik Jagran, Dt. 13 Nov 2025

जागरण ब्यूरो, नई दिल्ली : सेना प्रमुख जनरल उपेंद्र द्विवेदी ने भविष्य की जरूरतों और चुनौतियों के मद्देनजर सेना को आर्टिफिशियल इंटेलिजेंस (एआइ) समेत नए दौर की तकनीकों से लैस करने की दिशा में तेजी से कदम बढ़ाने की बात कही। उन्होंने कहा कि आपरेशन सिंदूर 1.0 से मिले सबक के आधार पर हम सशक्त हुए हैं और यदि सिंदूर 2.0 या कोई अन्य लड़ाई होती है तो हम अधिक उन्नत और बेहतर तरीके से इनका लाभ उठा सकेंगे। जनरल द्विवेदी ने कहा कि भविष्य के लिए सेना विभिन्न प्रकार के अत्याधुनिक ड्रोन, क्वांटम मिशन, 6जी और स्पेस मिशन पर काम कर रही है।



नई दिल्ली में बुधवार को रक्षा संवाद को संबोधित करते सेनाध्यक्ष जनरल उपेंद्र द्विवेदी • एएनआइ

सेना प्रमुख ने रक्षा अध्ययन एवं विश्लेषण संस्थान (आइडीएसए) द्वारा आयोजित रक्षा संवाद में बुधवार को यह राय जाहिर की। जनरल द्विवेदी ने कहा- "सिंदूर

● जनरल द्विवेदी ने भविष्य के युद्ध की चुनौतियों के मद्देनजर पांचवी पीढ़ी के तकनीक-उपकरणों पर दिया जोर

● कहा - अत्याधुनिक ड्रोन, क्वांटम मिशन, 6जी, स्पेस मिशन आदि पर सेना तेजी से कर रही है काम

1.0 के लिए संभव (सिक्वोर आर्मी मोबाइल भारत संस्करण) का इस्तेमाल किया गया। अब हम दूसरे चरण की ओर बढ़ रहे हैं जो कहीं अधिक उन्नत संस्करण होगा।

सिंदूर 1.0 में ओपन सोर्स विश्लेषण और पूर्वानुमान विश्लेषण से हमें मदद मिली।" आधुनिक युद्ध में श्री 'डी' - डेमोक्रेटाइजेशन, डिफ्यूजन और डेमोग्राफी को देखते हुए जनरल द्विवेदी ने युद्ध के ग्रे जौन में एआइ, रोबोटिक्स व साइबर टूल्स के उपयोग की आवश्यकता बताई। जनरल द्विवेदी ने कहा कि हमें यह सुनिश्चित करना होगा कि जो भी तकनीक आ रही है, वह पांचवी पीढ़ी के युद्ध के लिए खुद को समायोजित करने में सक्षम हो। इसमें मोबाइल, कंप्यूटर, वीडियो गेम कंसोल और माइक्रोचिप्स के लिए 7 नैनोमिलियन तकनीक शामिल है। उन्होंने उद्योग 4.0 के अब उद्योग 5.0 में बदलने की बात की।

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Chicken's Neck: India's strategic reinforcement along the Eastern Frontier

Source: The Statesman, Dt. 13 Nov 2025

Attention has once again turned to the “Chicken’s Neck” — the narrow Siliguri Corridor that connects India’s northeast to the mainland — with the construction of three new military garrisons and an air power demonstration by the Indian Air Force in Guwahati. Given the evolving dynamics between China and India, particularly along the Line of Actual Control (LAC), India’s increased military presence along the eastern frontier is being viewed as a strategic response to China’s construction of missile silos and fortified villages near the border.

The Siliguri Corridor, which runs through West Bengal and borders Bangladesh, Nepal, China’s Chumbi Valley in Tibet, and the Kingdom of Bhutan, is just 17 kilometres wide at its narrowest point. As the sole land link between India and its eight northeastern states, the Siliguri Corridor — stretching from the Darjeeling, Jalpaiguri, and Terai regions of West Bengal towards the northeast — holds immense strategic importance.

Beijing is reportedly constructing at least two fortified air defence installations in the Tibet Autonomous Region, according to recent reports backed by satellite imagery and analysis from Planet Labs, a commercial geospatial intelligence company. Retractable roof shelters designed to conceal missile launch systems are being incorporated into these structures. By allowing launches from within, these shelters provide significant protection against detection and possible enemy strikes.

China’s increasing defence cooperation with Pakistan during Operation Sindoor has also raised concern among Indian defence planners. Speaking to the media, Lieutenant General Rahul R Singh, Deputy Chief of Army Staff (Capability Development and Sustenance), observed that the China–Pakistan defence partnership has advanced beyond traditional arms transfers. He expressed concern that Beijing appears to be using its close relationship with Islamabad as a testing ground for new technologies including advanced weapons platforms and surveillance systems in real-world combat situations.



“We have one border and two adversaries. Pakistan is at the front, and China provides every possible support. Nearly 81 per cent of Pakistan’s military hardware is Chinese. China is able to test its weapons against others — it’s like having a live laboratory. When DGMO-level talks were underway, Pakistan had real-time updates about our key vectors from China,” he said.

Army Chief General Upendra Dwivedi recently described the corridor, often called India’s “chokepoint” due to its critical position, as the nation’s “strongest defence corridor.” He remarked that the Indian Armed Forces now view the Siliguri Corridor through a renewed strategic lens, emphasizing that troops from West Bengal, Sikkim, and the Northeast can swiftly mobilize in the region in the event of an attack from the north.

Already home to Rafale fighter jets, BrahMos missile regiments, and S-400 air defence systems, the region has recently seen the establishment of three key military garrisons — at Bamuni (near Dhubri, Assam), Kishanganj (Bihar), and Chopra (North Dinajpur, West Bengal). The Lachit Barphukan Military Station in Bamuni will operate under the 4 Corps (Gajraj Corps), headquartered in Tezpur, Assam. The base will serve as a hub for technical intelligence, surveillance, area control, and counter-infiltration operations.

To enhance connectivity and operational readiness, two additional forward bases are being built. The Kishanganj base in Bihar will ensure rapid troop deployment and logistical support, while the Chopra base, under the Brahmastra Corps, will coordinate intelligence and response operations along the border.

After reviewing troop deployments at Chopra, Eastern Army Commander Lieutenant General R.C. Tiwari laid the foundation stone for the Bamuni station on November 7. These garrisons are expected to improve coordination with the Border Security Force (BSF) and fill critical gaps along the 4,096-kilometre India–Bangladesh border, thereby bolstering India’s defence posture in the east.

Highlighting the significance of the region’s growing military strength, Assam Chief Minister Himanta Biswa Sarma posted on X after the IAF’s Guwahati air show: “Thank you, Guwahati, for turning out in full strength to witness the spectacular @IAF_MCC #FlyingDisplay2025!

The Northeast’s first-ever air show was a breathtaking display of strength, skill, and spirit. Your overwhelming support for Bharat’s Air Warriors — so close to the Chicken’s Neck and four international borders — will give sleepless nights to our enemies.” Beyond its military importance, the Siliguri Corridor remains vital for trade, transportation, and regional development. It serves as the anchor of an intricate rail and road network linking West Bengal to Assam, Nagaland, Sikkim, and other northeastern states — and underpins India’s logistical infrastructure along the LAC.

Numerous routes extend from the New Jalpaiguri (NJP) railway station, a crucial junction in North Bengal. One main line leads to Guwahati in Assam, from which a road network connects to Tawang in Arunachal Pradesh, a strategically significant town near the Chinese border.

<https://www.thestatesman.com/india/chickens-neck-indias-strategic-reinforcement-along-the-eastern-frontier-1503510887.html>

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Indian Navy establishes new recruitment centre at Karwar

Source: Press Information Bureau, Dt. 12 Nov 2025

A new recruitment centre has been established by the Indian Navy at INS Kadamba in Karwar under Flag Officer Commanding Karnataka Naval Area. With the establishment of a new recruitment centre, INS Kadamba has become the tenth recruitment establishment pan-India for the Indian Navy. The maiden Stage-2 recruitment for 01/2026 Agniveer batch is being undertaken from 10 to 15 Nov 2025. Representatives of Personnel Branch/ Naval Headquarters at New Delhi and Western Naval Command at Mumbai were also present to mark the occasion.



To ensure the smooth and successful conduct of the recruitment drive, meticulous planning, comprehensive administrative arrangements including logistics and medical support have also been undertaken. Effective liaison and coordination with the local administration has been established in order to ensure incident-free conduct of the event. This is a key milestone as it adds another recruitment establishment on the Western Seaboard. In addition to strengthening the connect with the local populace, it also provides an avenue for youth of Karnataka, Southern Maharashtra and Goa to join the Indian Navy and serve the nation with pride and honour.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2189178>

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Defence Production Secretary highlights role of start-ups and MSMEs in driving self-reliance

Source: The Statesman, Dt. 13 Nov 2025

Secretary (Defence Production) Sanjeev Kumar has called for deeper collaboration with start-ups and innovators to strengthen the technological backbone of the country and achieve the goal of Aatmanirbharta in defence. Addressing the Delhi Defence Dialogue organised by Manohar Parrikar Institute for Defence Studies and Analyses here on Wednesday, he emphasised the importance of

working with young entrepreneurs and innovators to achieve advancements in new areas and strengthen the technological backbone of defence systems.



The Secretary (Defence Production) noted that the most modern capabilities are now driven by disruptive technologies such as Artificial Intelligence and Machine Learning, quantum computing etc. Therefore, he said, seamless exchange of ideas and information between stakeholders is essential for accelerating innovation and developing deployable solutions. Kumar emphasised the critical role of space technology in modern warfare preparedness and noted that initiatives such as Innovations for Defence Excellence (iDEX) and the Technology Development Fund (TDF) are empowering start-ups and MSMEs to drive innovation in new-age technologies, thereby strengthening India's path towards Aatmanirbharta in Defence.

The Delhi Defence Dialogue was organised on the theme 'Harnessing New-Age Technology for Defence Capability Development'. The two-day event brought together senior government officials, Armed Forces leadership, industry, and experts to discuss how emerging technologies such as AI, Quantum Computing, Robotics, and Unmanned Systems can enhance defence preparedness and foster an innovation-driven ecosystem.

<https://www.thestatesman.com/cities/defence-production-secretary-highlights-role-of-start-ups-and-msmes-in-driving-self-reliance-1503511037.html/amp>

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IAF's Sukhoi-30 MKI flies with US B-1 Lancer bomber

Source: The Tribune, Dt. 13 Nov 2025

In a unique air coordination exercise, Indian Air Force (IAF) fighter jets, including the Russian-origin Sukhoi-30 MKI, are operating with the US strategic bomber "B-1 Lancer" as part of a four-day drill being held from November 10 to 13. Though the Russian-made jet has earlier taken part in bilateral and multilateral exercises involving US platforms, this is the first time it is integrating and operating alongside a US strategic bomber — making it a first-of-its-kind engagement.

The IAF on Wednesday released pictures and details of the exercise underway in southern India. Along with the Sukhoi-30 MKI, French-origin Mirage-2000 fighters were also seen flying with the B-1 bomber in the images shared. The US Air Force has deployed only the B-1 Lancer for the exercise. "The Indian Air Force and United States Air Force are engaged in a bilateral exercise

from November 10-13, aimed at fostering mutual learning and enhancing interoperability. The US Air Force is participating with the B-1B Lancer,” the IAF posted on X. The exercise comes against the backdrop of recent strain in India-US ties over trade and tariff issues.



The US Air Force B-1 Bomber with Indian jets, the Sukhoi 30-MKI and Mirage-2000.

The B-1 Lancer is a long-range heavy bomber used by the US for deep-strike missions. It was last seen in India during the Aero India show in Bengaluru in February this year, and had also participated in the 2023 edition of the event. Unlike its earlier visits for the air show, this exercise marks an operational collaboration — underscoring the growing ability of the IAF and the US Air Force to coordinate and operate together. The US has designated India as its “Major Defence Partner”.

<https://www.tribuneindia.com/news/india/iafs-sukhoi-30-mki-flies-with-us-b-1-lancer-bomber/>

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India rising in multi-polar world, asserts Army Chief

Source: The Statesman, Dt. 13 Nov 2025

STATESMAN NEWS SERVICE
New Delhi, 12 November

Arrmy Chief General Upendra Dwivedi has observed that the world is undergoing a major geopolitical shift from a unipolar to a multipolar order, asserting that India is poised to emerge as one of its key power centres.

Speaking on the concluding day of the Delhi Defence Dialogue, the Army chief said: “We are also in an era where technological changes are so rapid that if you do not keep pace you are going to be outdated by the time you decide and develop. So, if we have to meet these emerging challenges, we have to look at different models or a model which is different from what we were employing.”

The COAS further highlighted the three “Ds” transforming warfare. “I’ll give out three



Ds, which are changing the war scenario today. Democratization, that is the newest technology, and it has already been shown that the platform alone is not relevant. It has to have a number of layers supported by this democratised phenomenon that is AI, quantum, robotics, auto system. DW that is energy weapons, cyber tools, especially in the grey zone. Diffuse geographic independence, but dependent. And Demography, you have

Citizen soldiers, guardian forces, and even merchants now play roles in conflicts, sometimes selling equipment to both sides,” he said.

He stressed: “The frontlines are no longer straight lines; threats now emerge from every direction and altitude.” Drawing insights from recent global conflicts, he underscored the need to develop advanced systems capable of detecting disrupting, and neutralising drones swarms before they can

cause damage. General Dwivedi underlined a clear objective: India must take the lead in shaping the next era of network-centric warfare.

Speaking on India’s own strategic priorities, he reiterated that geography continues to shape the nation’s defence posture. “Given the nature of our borders, land will always remain the ultimate determinant of victory,” he said.

He added: “Industry 4.0 has moved to Industry 5.0... 4.0 was when AI, quantum and all this were talked about. But 5.0 has realised that the rebalancing is required to bring in the human element. Technology is there not to replace humans, but to support them... Now, why is it important for us, especially for the Indian army... This industry, 5.0, is music to my ears because we are looking at human-centric technology adoption. We look at humans amplified by AI.”

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Science & Technology News

Quantum Diamond Microscopy unveiled at ESTIC can help neuroscience & materials research

Source: Press Information Bureau, Dt. 12 Nov 2025

Under the National Quantum Mission (NQM), of the Department of Science and Technology (DST), P- Quest Group at IIT Bombay has developed India's first indigenous Quantum Diamond Microscope (QDM) for dynamic magnetic field imaging — a breakthrough that marks a milestone in quantum sensing and has earned India its first patent in this domain.



The QDM which was formally announced on the sidelines of the recently concluded Emerging Science Technology and Innovation Conclave (ESTIC 2025) has promising potential in neuroscience and materials research. It is also poised to transform the non-destructive evaluation of semiconductor chips by mapping magnetic field in 3D layers within an encapsulated chip.

The announcement was made in the presence of Hon'ble Union Minister for Science and Technology, Dr. Jitendra Singh, Prof. Ajay K. Sood, Principal Scientific Adviser to the Government of India, Prof. Abhay Karandikar, Secretary Department of Science and Technology, and other officials. The QDM developed by the PQuest Group, led by Professor Kasturi Saha based on nitrogen-vacancy (NV) centers in diamond, represents a powerful platform for three-dimensional magnetic field imaging at the nanoscale.

NV centres—atomic-scale defects formed by a nitrogen atom adjacent to a vacancy—exhibit robust quantum coherence even at room temperature, making them exceptionally sensitive to magnetic, electric, and thermal variations. Their spin-dependent fluorescence, detected via optically detected magnetic resonance (ODMR), enables optical readout of local magnetic fields. By engineering a thin diamond layer with high NV density, QDM enables widefield imaging of dynamic magnetic activity, analogous to an optical microscope.

With the rise of 3D chip architectures in advanced electronics, cryogenic processors, and autonomous systems, conventional diagnostic tools fall short of visualizing buried current paths and multilayer charge flow. QDM offers a path toward direct, high-resolution 3D magnetic mapping of integrated circuits, batteries, and microelectronic devices.

Aligned with India's National Quantum Mission, Prof. Saha's team aims to develop a quantum imaging platform integrating QDM with AI/ML-based computational imaging, paving the way for advanced chip diagnostics, biological imaging, and geological magnetization studies—all rooted in precise, three-dimensional magnetic field visualization.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2189093>

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