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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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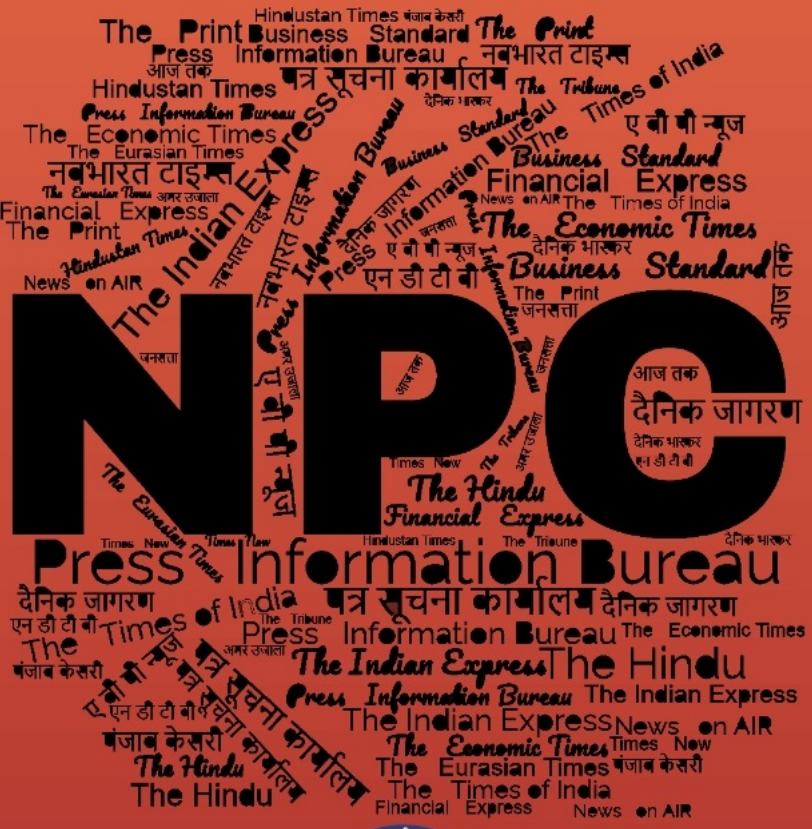

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Defence News

Centre considering ₹3.25 L-cr deal for 114 Rafale jets

Source: Hindustan Times, Dt. 15 Jan 2026

The defence ministry is considering an Indian Air Force proposal to buy 114 French-origin Rafale jets to boost its combat readiness at a time it is grappling with a worrying shortage of fighter squadrons, and discussions on the potential deal with France are progressing satisfactorily, officials aware of the matter said on Wednesday.

The capability boost is expected to cost around ₹3.25 lakh crore, the officials said, asking not to be named, adding that an actual deal is still a long way off. Under the model being considered, the Rafales will be made in India by French plane maker Dassault Aviation and a local partner.

“Ongoing talks are focused on localisation of the Rafales to be made in India,” said one of the officials cited above. The fighter jets are expected to have an indigenous content ranging between 30% and 60%, Hindustan Times has learnt.

Quicker induction of fighter jets, mid-air refuellers and airborne early warning and control (AEW&C) systems tops the recommendations made by an empowered committee last year for capability enhancement of the IAF. The air force has around 30 fighter squadrons compared to an authorised strength of 42.5.

Under the model under consideration, France will supply 18 Rafale jets in fly-away condition while the remaining 96 will be made in India, said another official. The defence ministry is likely to accord its acceptance of necessity (AoN) for the new fighters later this year, the officials said. Under India’s defence procurement rules, AoN by the ministry’s defence acquisition council is the first step towards buying military equipment.

The IAF already operates 36 Rafale fighter jets bought from France at a cost of ₹59,000 crore. Some of the air force’s Rafales were among the fighter jets used during Operation Sindoor in early May 2025 --- India’s strikes on terror and military installations in Pakistan and Pakistan-occupied Kashmir following the Pahalgam terror attack in which 26 people were killed.

India also ordered 26 Rafale Marine fighter jets from France in April 2025 for the navy which will operate them from its two aircraft carriers. The first deliveries of the Rafale Ms under the ₹63,000-crore contract will take place in 2029 and be completed by 2031.

In June 2025, Dassault Aviation and Tata Advanced Systems Limited (TASL) announced their partnership to build the Rafale fuselage at a facility being set up in Hyderabad; a big leap for the government’s wide-ranging Make-in-India initiative --- the main body of future Rafale fighter jets will be produced outside France for the first time, in India.

The Hyderabad facility will supply the fuselages for India and other international markets 2028 onwards. Some of the 26 Rafale M fighters ordered by India will come with locally produced fuselages.Last October, IAF chief Air Chief Marshal AP Singh made a strong case for swifter induction of new military hardware in the air force, including fighter jets.

He said the Rafale was one of the options to shore up the air force's combat fleet, speaking in the context of the need for 114 multi-role fighter aircraft to be made in India by a foreign original equipment manufacturer and a local partner.

https://www.hindustantimes.com/india-news/centre-considering-3-25-l-cr-deal-for-114-rafale-jets-101768416264143.html

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Army gets Centre's approval to set up Integrated Battle Groups

Source: The Tribune, Dt. 15 Jan 2026

Army Chief General Upendra Dwivedi has said the government has approved the long-pending proposal for setting up Integrated Battle Groups (IBGs). The first such unit is planned to come up under the China-focused 17 Mountain Strike Corps. This is part of the reorganisation of the Army's battle architecture. The Army's restructuring was launched after the 2020 border crisis with China and Operation Sindoor last year.

Addressing the media at his annual press conference on Tuesday, General Dwivedi said, "A large number of government sanction letters for organisational changes have been approved over the past 14-15 months, including the path-breaking IBG of 17 Corps and the raising of aviation brigades."

As per the plan, the two division-size formations of the Mountain Strike Corps would be converted into four IBGs to be headed by a Major General-rank officer, the Army Chief said. The IBGs are envisioned as agile, brigade-sized combat formations having integrated elements of all arms depending on the operational terrain it is set up for.

In case of conflict, the IBGs will be capable of launching swift operations against the enemy. As per the earlier plan, each IBG will have a strength of around 5,000-plus personnel, which will be larger than a brigade (3,000-3,500 troops) but smaller than a division (10,000-12,000 troops). The IBGs will have elements from the infantry, artillery, armoured units, engineers, signals, air defence, and other arms and services and can launch an operation within 48 hours when tasked.

Explaining the restructuring, General Dwivedi said the focus was on reviewing organisational structures to enhance multi-domain combat potency. Already the Army has restructured and set up Rudra Brigades for high-tempo multi-domain operations. Light commando battalions — Bhairav Battalions — have also been raised.

Also the Army is in the process of raising Shaktibaan Regiments and Divyastra Batteries of artillery. The 'Shaktibaan' regiment will use loitering ammunition and swarm drones and will be pre-positioned at specific locations along the western frontier with Pakistan and the northern front with China. The Divyaastra batteries will carry long-range artillery guns, surveillance drones and anti-drone systems backed by AI-based fusion centres collating real-time data.

https://www.tribuneindia.com/news/india/army-gets-centres-approval-to-set-up-integrated-battle-groups/

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China-Pak pact on Shaksgam Valley is illegal: Army Chief

Source: The Times of India, Dt. 15 Jan 2026

Army chief General Upendra Dwivedi on Tuesday said that the situation along the Northern front (with China) “remains stable but needs constant vigil”. Apex-level interactions, including at military, diplomatic and ministerial levels, renewed contact and confidence-building measures are contributing to the “gradual normalisation” of the situation. These have also enabled grazing, hydrotherapy camps and other activities along the northern borders, he said.

“With our continued strategic orientation on this front, our deployment along the LAC remains balanced and robust. Concurrently, capability development and infrastructure enhancement are progressing through a whole-of-govt approach,” he added. Gen Dwivedi said that since May 10 last year, the situation along the northwestern front and J&K “remains sensitive but firmly under control”.

Gen Dwivedi also reiterated India’s long-standing position that the 1963 agreement between Pakistan and China on the Shaksgam Valley is illegal. Speaking on the issue, he said India has never recognised the so-called agreement under which Pakistan ceded territory to China. “On Shaksgam Valley, India considers the 1963 agreement between Pakistan and China illegal. We do not accept it,” he said, underlining New Delhi’s consistent stance on the matter.

The Army chief also spoke of a security grid comprising Assam Rifles, Army and home ministry working to insulate the Northeast from the “spillover effects” of events unfolding in Myanmar. As regards Manipur, Gen Dwivedi said the situation in the state has witnessed “marked improvement” due to proactive govt initiatives. “Peaceful conduct of the Durand Cup, resumption of cultural festivals and renewal of suspension of operations, that is SoO, with Kuki insurgent groups in Sept 2025, have been key markers of stability,” he said.

The General said the Army had operated across two neighbouring countries and 10 states for Humanitarian Assistance and Disaster Relief (HADR) and rescued over 30,000 people.

https://timesofindia.indiatimes.com/defence/news/china-pak-pact-on-shaksgam-valley-is-illegal-situation-along-china-front-stable-but-needs-vigil-army-chief/articleshow/126522486.cms

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Army Chief hails India’s resolve and restraint in Op Sindoor

Source: The Pioneer, Dt. 15 Jan 2026

Army Chief General Upendra Dwivedi on Wednesday said Operation Sindoor was a “defining demonstration” of India’s resolve and restraint, and a reflection of the moral strength and professional excellence of the country’s armed forces and the youth alike. The operation was carried out by the Indian armed forces in the early hours of May 7 last year, eliminating at least 100 terrorists in response to the horrific Pahalgam terror attack of April that killed 26 innocent civilians.

Addressing a gathering of cadets at the National Cadet Corps’ (NCC) Republic Day Camp here, General Dwivedi said, “Operation Sindoor was a defining demonstration of India’s resolve and restraint, a reflection of the moral strength and professional excellence of our armed forces, and our youth alike.”

A day earlier, he sent a firm message to Pakistan, saying Operation Sindoor "remains ongoing and any misadventure by the adversary will be resolutely responded to". On January 13, the Indian Army held its annual press conference, where the Army chief said the decisive operation helped in resetting strategic assumptions as the Indian military struck deep to dismantle terror infrastructure, puncturing Islamabad's "longstanding nuclear rhetoric".

At the event on Wednesday, the Army chief recalled the contribution of the NCC during the decisive military action last May. During the operation, over 75,000 NCC cadets volunteered across the country, working tirelessly in civil defence, hospital management, disaster relief and community services, the Army chief said.

"Recent events have shown what Indian youths are capable of. You are the most powerful and maximum population of Generation Z. Our youths are a reservoir of strength that must be channelised with discipline, purpose and national commitment," he said. The Corps remains a sought-after pathway for youths to join the armed forces, the general asserted. The future demands "civilisational atmanirbharta", self-reliance in thought, technology, innovation and character, he said.

Initiatives such as Army cells at IITs, technology clusters and the Army internship programme 2025 and 2026 are to foster that spirit, the Army chief said. "We invite you to actively participate in national security, innovation and development initiatives." In his address, General Dwivedi also told the gathering that the vision of Viksit Bharat at 2047 - a developed, secure, self-reliant India - will not be achieved by the Government alone.

"It will be achieved by young leaders, NCC cadets, innovators, teachers, engineers, doctors, soldiers, and responsible citizens like you," the Army chief said. "So, let's ride with confidence, march with discipline, innovate with integrity, and serve with India, and be the future leaders we are looking for. Together we shall build a strong, self-reliant, united and developed India," he added.

https://dailypioneer.com/news/army-chief-hails-indias-resolve-and-restraint-in-op-sindoor

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भारतीय सेना की मेजर स्वाति को संयुक्त राष्ट्र वैश्विक सम्मान

Source: Jansatta, Dt. 15 Jan 2026

दक्षिण सूडान में तैनात एक भारतीय महिला शांति सैनिक को लैंगिक समावेशन पर आधारित एक परियोजना के लिए संयुक्त राष्ट्र का पुरस्कार प्रदान किया गया है। संयुक्त राष्ट्र दक्षिण सूडान मिशन (यूएनएमआइएसएस) में सेवारत 31 वर्षीय मेजर स्वाति शांति कुमार को उनकी परियोजना 'इक्वल पार्टनर्स, लास्टिंग पीस' में लैंगिक समावेशी दृष्टिकोण के लिए संयुक्त राष्ट्र महासचिव पुरस्कार से सम्मानित किया गया है।

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Major Swathi bags UN award

Source: The Tribune, Dt. 15 Jan 2026

Indian Army's Major Swathi Shantha Kumar, posted to the United Nations Mission in the Republic of South Sudan (UNMISS), has been awarded the UN Secretary-General's Award-2025 for her outstanding contribution to gender-inclusive peacekeeping.

The award is given to recognise significant performance of UN secretariat personnel who initiate and implement projects with great impact and innovative potential. Maj Kumar has been awarded for the project 'Equal Partners, Lasting Peace: Gender-Inclusive Approach in UNMISS, South Sudan.'

https://www.tribuneindia.com/news/india/maj-or-swathi-bags-un-award/

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22nd High-level meeting between Indian Coast Guard and Japan Coast Guard held in New Delhi

Source: Press Information Bureau, Dt. 14 Jan 2026

The 22nd High-Level Meeting between the Indian Coast Guard (ICG) and the Japan Coast Guard (JCG) was held in New Delhi on January 14, 2026, reaffirming the strong and enduring maritime partnership between both the nations. The meeting was co-chaired by Director General Paramesh Sivamani, Director General, Indian Coast Guard, and Admiral Yoshio Saguchi, Commandant, Japan Coast Guard, who is on an official visit to India from January 13 to 17, 2026, leading a nine-member delegation.

The High-Level Meeting provided an opportunity for both sides to review the existing framework of bilateral cooperation for further strengthening operational engagement. Discussions focused on enhancing collaboration in key areas such as Maritime Search and Rescue (SAR), Marine Pollution Response (MPR), Maritime Law Enforcement (MLE), and capacity building. Both sides emphasised the importance of sharing best practices, enhancing interoperability and sustaining structured engagements under the existing Memorandum of Cooperation between the two Coast Guards.

The discussion also covered cooperation in emerging and future-oriented areas, including the use of technology, information sharing mechanisms, training initiatives, and personnel exchanges. Both delegations expressed satisfaction over the steady progress achieved since the previous high-level meeting and reaffirmed their commitment to maintaining regular engagements at multiple levels.

India's current Presidency of the Coast Guard Global Summit (CGGS) and its upcoming hosting of the 5th CGGS along with the International Coast Guard Fleet Review (ICGFR) also featured prominently in the discussions. In this context, both sides explored avenues for enhanced engagement and cooperation in multilateral maritime forums.

The JCG conveyed its assurance of participation in the ICGFR through the deployment of its ship and aircraft, reflecting the depth of bilateral maritime cooperation and the importance attached to these engagements. The meeting also took note of the India–Japan Joint Declaration issued in August 2025, which reaffirmed the shared commitment of both countries to a free, open, inclusive, and rules-based maritime order. The discussions highlighted the crucial role of the ICG and the JCG in translating the strategic vision outlined in the Joint Declaration into tangible and practical co-operation at sea.

As part of the visit programme, the JCG delegation will visit Mumbai from January 16 to 17, 2026, where they are scheduled to undertake an industrial visit to Mazagon Dock Shipbuilders Limited and participate in professional interactions aimed at strengthening maritime industrial and operational linkages. Additionally, a Japan Coast Guard National Strike Team (NST) is also visiting Mumbai and will conduct a joint exercise with the ICG pollution response team, focusing on Hazardous and Noxious Substances spill response. The exercise is aimed at enhancing preparedness, operational coordination, and mutual understanding in responding to complex marine pollution incidents.

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2214755&reg=3&lang=1

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Science & Technology News

Role of magnetic fields in the birth of a young star traced

Source: Press Information Bureau, Dt. 14 Jan 2026

Seven hundred light years away, astronomers studying molecular clouds that give birth to stars, have traced new clues about how magnetic fields guide the birth of stars. Their results, reveal that magnetic fields remain remarkably connected across these enormous changes in scale, and may play a decisive role in determining whether a star forms at all.

Molecular clouds, the birthplaces of stars, are characterized by their low temperatures (below 40 K, colder than liquid nitrogen) and relatively high densities (103–104 particles per cubic cm). The complex interplay between three key forces, namely gravity, magnetic fields, and turbulence, determines how these clouds collapse to form stars. Hence, the dynamics of the gas and dust

needs to be studied from the scale of the molecular cloud down to the scale of the collapsing core for this purpose.

A new study, led by astronomers at the Indian Institute of Astrophysics (IIA), an autonomous institution under the Department of Science and Technology (DST), Government of India, focussed on the L328 molecular cloud, located around 700 light years away, to map the magnetic fields at multiple scales. They have unveiled critical new observational evidence linking magnetic fields from the scale of molecular clouds down to the scale of dense star-forming cores using polarisation studies.

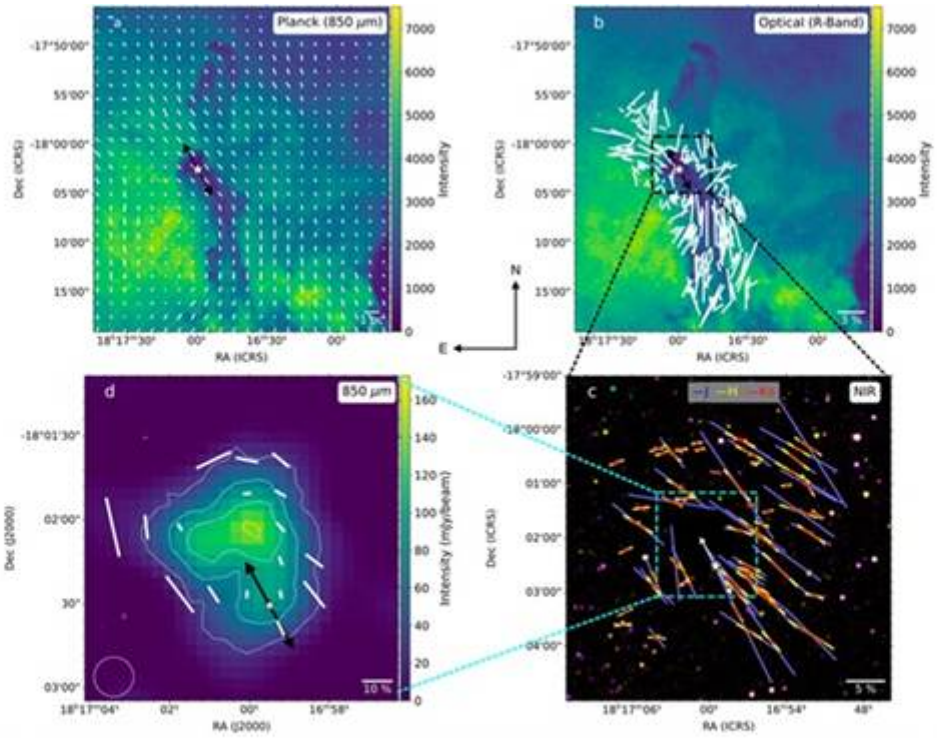

Fig: *Magnetic fields mapped in L328: (a) very large-scale field vectors on continuum image, (b) field vectors on a cloud scale, (c) field vectors (different NIR bands in different colours) on an envelope scale, (d) field vectors in the central core.*

"We chose to investigate the S2 sub-core in L328, since it is a Very Low Luminosity Object (VeLLO)", explained Shivani Gupta of IIA, the first author of the study. S2 hosts a protostar, or a star in the making, with low luminosity and weak bipolar outflows. "These weak outflows cause minimal turbulence in their surroundings, making them ideal laboratories for studying primordial magnetic fields that existed before star formation began", Gupta added.

To investigate the magnetic field structure in the L328 core, the team used polarimetric data from POL-2 on the James Clerk Maxwell Telescope in Hawai'i. Pol-2 observes polarised emission from dust grains at a wavelength of 850 microns. By analysing the directions of polarisation of light from various parts of the core, the researchers were able to map the morphology of the magnetic fields.

Archana Soam, a co-author and faculty member at IIA explains, "earlier studies of L328 had mapped the large-scale magnetic fields (over light years scale) using Planck satellite data, optical, and near-infrared (NIR) polarimetry. This work adds a new layer by zooming in to the core scale (sub-light year), where the star formation is actually taking place".

The magnetic fields were found to be ordered and well-connected from the cloud down to the small-scale core, by showing an overall orientation in the Northeast–Southwest direction. Estimations of the core-scale B-field strength indicates that B-fields are getting stronger on smaller (sub-light year) scales.

“A comparison of gravitational, magnetic, turbulence, and thermal energy for the L328 core revealed that the former three are comparable with each other and about 10 times stronger than the thermal energy”, said Maheswar Gopinathan, a faculty member at IIA and a co-author. This implies that magnetic fields and turbulence likely play a significant role in resisting gravity and influencing the core’s collapse into a star.

Interestingly, a comparison between starless but chemically evolved cores and those containing VeLLOs but less chemically evolved reveals that magnetic criticality—the balance between magnetic pressure and gravitational pull—could play a decisive role in star formation. “In cases where a core is sub-critical, meaning magnetic support is stronger than gravity, the core may remain starless”, added Shivani Gupta from IIA and Pondicherry University.

The research published in Monthly Notices of the Royal Astronomical Society also has Janik Karoly from University College London and the University of Central Lancashire, UK and Chang Won Lee from the Korea Astronomy and Space Science Institute as coauthors.

Publication link: https://doi.org/10.1093/mnras/stae2783

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2214591&reg=3&lang=1

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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

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The Asian Age

The Pioneer