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2025

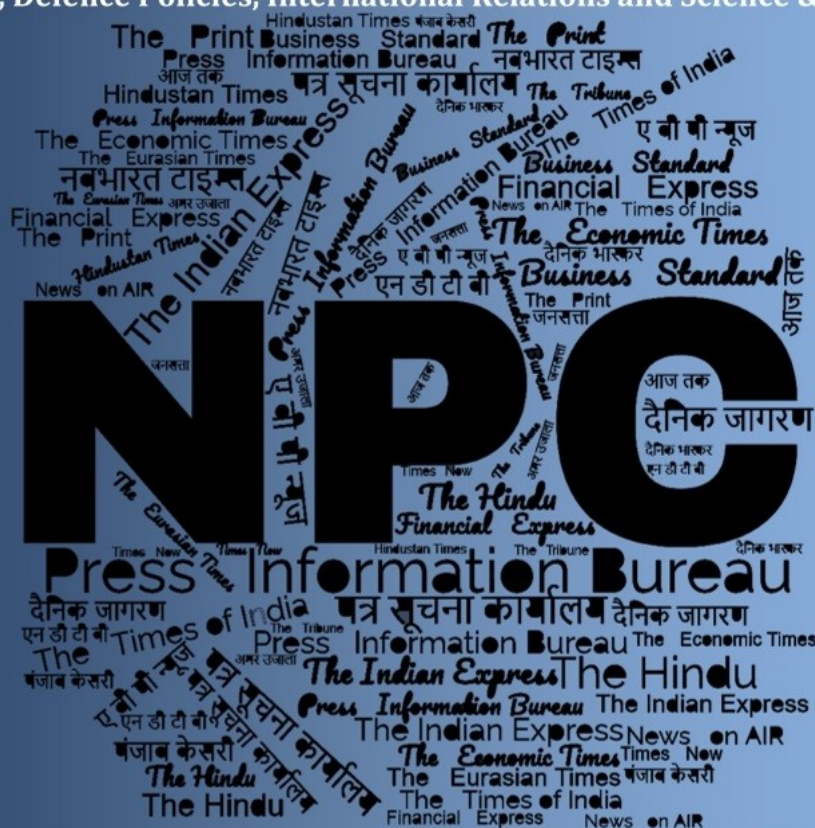
खंड/Vol. : 50 अंक/Issue : 102

05 /06/2025

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

Tri-Services All-Women Sailing Expedition team returns home after completing two-month-long 1,800-nautical-mile voyage to Seychelles

Source: Press Information Bureau, Dt. 04 Jun 2025

The Tri-Services All-Women Sailing Expedition team returned home on June 04, 2025, after completing a ground-breaking 1,800-nautical-mile international voyage to Seychelles. The historic expedition, launched on April 07, 2025, marks the first-ever international open-sea sailing mission by an all-women team from the Indian Armed Forces. The expedition was ceremonially flagged-in by Commandant, College of Military Engineering Lieutenant General AK Ramesh in Mumbai. He hailed the mission as a milestone in the journey of gender-inclusive operational excellence. Applauding the courage and determination of the team, he emphasised the growing role of women as key contributors to the Armed Forces' operational strength.

Aboard the indigenously-built Indian Armed Services Vessel 'Triveni', a 56-foot sailing yacht, the team of 11 women officers from the Army, Navy and Air Force navigated nearly two months of challenging open-sea conditions. Enduring tropical squalls, rough sea states, and extended fatigue, the crew demonstrated exceptional endurance & unflinching resolve. The crew included:

- **Indian Army** - Lt Col Anuja, Maj Karamjeet, Maj Tanyah, Capt Omita, Capt Dauli and Capt Prajakta
- **Indian Navy** - Lt Cdr Priyanka
- **Indian Air Force** - Sqn Ldr Vibha, Sqn Ldr Shraddha, Sqn Ldr Aruvi and Sqn Ldr Vaishali

During its stopover in Seychelles, the crew participated in a series of high-level defence and diplomatic engagements, including formal interactions with the Seychellois Minister of Foreign Affairs, the Chief of Combined Defence Staff, and the High Commissioner of India to Seychelles. These events served to strengthen maritime diplomacy and further India's strategic partnership with the Indian Ocean Island nation.

This initiative represents more than a naval feat—it is a celebration of 'Nari Shakti' in the Indian Armed Forces. It also stands as a shining example of Tri-services synergy. As India continues to expand its maritime footprint and capabilities, the successful completion of this voyage serves as a symbol of the Armed Forces' commitment to excellence, equality, and strategic vision - led proudly by its women warriors on the high seas.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2133942>

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ऑपरेशन सिंदूर के बाद पहली मंत्रिपरिषद मीटिंग, पीएम मोदी ने बैठक में स्वदेशी हथियारों की ताकत पर दिया जोर

Source: Dainik Jagran, Dt. 05 Jun 2025

ऑपरेशन सिंदूर के बाद केंद्रीय मंत्रिपरिषद की पहली बैठक की अध्यक्षता करते हुए प्रधानमंत्री नरेन्द्र मोदी ने कहा कि स्वदेशी हथियारों ने इस आपरेशन में अपनी ताकत एवं क्षमता साबित की और यह दिखाया कि वे किसी से कम नहीं हैं।



इस बैठक में रणनीतिक एजेंडे की रूपरेखा तय की गई

इस बैठक में राष्ट्रीय सुरक्षा, जल नीति और जन-सम्पर्क सहित सरकार के तात्कालिक और दीर्घकालिक रणनीतिक एजेंडे की रूपरेखा तय की गई।

पीएम मोदी ने दिया यह आदेश

बुधवार को मोदी ने बैठक में मंत्रिपरिषद से उंचे लक्ष्य रखने और लक्ष्यों को प्राप्त करने के लिए तेजी से काम करने को कहा। इस दौरान ऑपरेशन सिंदूर पर एक प्रस्तुति भी दी गई।

सूत्रों ने बताया कि इस बात पर भी प्रकाश डाला गया कि पाकिस्तान ने खुद स्वीकार किया है कि आपरेशन के दौरान उसे भारी नुकसान हुआ है। विभिन्न मंत्रालयों की उल्लेखनीय उपलब्धियों पर एक प्रस्तुति भी दी गई।

राजनाथ सिंह ने भी अपने विचार व्यक्त किए

नौ जून से मोदी सरकार के तीसरे कार्यकाल की पहली वर्षगांठ के अवसर पर आयोजित होने वाले समारोहों के दौरान वे अपनी पांच मुख्य सफलताओं को जनता के बीच उजागर करने के लिए पहुंचेंगे।

सूत्रों ने बताया कि रक्षा मंत्री राजनाथ सिंह ने ऑपरेशन सिंदूर पर अपने विचार व्यक्त करते हुए सत्र की शुरुआत की। इसके बाद चीफ आफ डिफेंस स्टाफ (सीडीएस) जनरल अनिल चौहान ने इसके क्रियान्वयन और रणनीतिक प्रभाव पर एक व्यापक प्रस्तुति दी।

बैठक में विकास परियोजनाओं से जुड़े अहम मुद्दों की भी समीक्षा की गई

बैठक में सरकार ने विकास परियोजनाओं से जुड़े अहम मुद्दों की भी समीक्षा की। जल शक्ति मंत्रालय ने भारत की जल प्रबंधन रणनीति पर विस्तृत प्रस्तुति दी, जिसमें सिंधु जल संधि और अन्य प्रमुख बुनियादी ढांचा परियोजनाओं की स्थिति की जानकारी भी शामिल थी।

<https://www.jagran.com/news/national-pm-modi-chairs-meeting-of-union-council-of-ministers-23956153.html>

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India's actions in Op Sindoor measured: Rajnath

Source: Hindustan Times, Dt. 05 Jun 2025

India on Wednesday told Australia that its actions against Pakistan during the recent four-day military confrontation under Operation Sindoor were “measured, non-escalatory, proportionate and responsible”, during talks between defence minister Rajnath Singh and his Australian counterpart Richard Marles, who is also the deputy prime minister of that country and is on a two-day visit to India.

Singh underscored India's right to respond in self-defence against cross-border terror, and the two leaders agreed to work together to combat terrorism. The meeting came at a critical moment as India is taking steps to isolate Islamabad globally following the April 22 Pahalgam terror attack. India sent seven multi-party delegations to 33 countries to explain its new approach to combating Pakistan-sponsored terrorism and the rationale behind Operation Sindoor --- India's strikes on terror and military installations in Pakistan and Pakistan-occupied Kashmir (PoK) following the Pahalgam terror strike in which 26 people were shot dead.

The delegations have underlined the need to hold Pakistan and its military establishment accountable for supporting terror groups.

Both ministers strongly condemned the terror attack in Pahalgam and expressed deepest condolences to the families of the victims, the defence ministry said.

“India thanks Australia for its unequivocal support to India's resolute response against the barbaric act of terror in Pahalgam,” Singh wrote on X, adding that the two leaders reviewed the full range of the India-Australia defence partnership.

Pakistan's Operation Bunyan-um-Marsoos, which was mounted in response to Operation Sindoor, “folded in eight hours” on May 10 belying Islamabad's ambitious target of bringing India to its knees in 48 hours, chief of defence staff General Anil Chauhan said on Tuesday.

Between the launch of the operation in the early hours of May 7 and the ceasefire on the evening of May 10, Indian forces bombed nine terror camps in Pakistan and PoK and killed at least 100 terrorists, and the Indian Air Force struck targets at 13 Pakistani air bases and military installations.

On Tuesday, it emerged that India's targeting of locations within Pakistan during the May 7-10 clash was more extensive than was previously known, with a Pakistani document acknowledging that Indian drones had struck locations ranging from Peshawar in the northwest to Hyderabad in the south.

Marles' personal commitment and leadership in strengthening bilateral defence cooperation has emerged as an important pillar of the India-Australia Comprehensive Strategic Partnership, Singh said.

“The two ministers agreed to intensify and diversify defence industry collaboration, and further defence science and technology collaboration projects when they meet in Australia later this year for the third India-Australia 2+2 ministerial meeting. They also reviewed the progress made since the last 2+2 ministerial dialogue in November 2023,” the defence ministry said in a statement.

On the fifth anniversary of the signing of India-Australia Comprehensive Strategic Partnership, both sides noted that the defence sector has emerged as a key pillar of the collaboration.

The two leaders expressed satisfaction at the growing strategic convergence between the two countries and agreed to work together to further the shared objectives of peace, prosperity, stability and progress in the Indian Ocean region, and the larger Indo-Pacific.

During the second India-Australia 2+2 foreign and defence ministerial dialogue in 2023, leaders from the two countries held talks centred around deepening military cooperation in critical areas including anti-submarine warfare and air-to-air refuelling, security in the Indo-Pacific region amid China's rising influence, hydrography cooperation and strengthening ties in sectors such as critical minerals, science and technology, space and education.

India has 2+2 ministerial dialogues with only a handful of countries, including the US, Japan and Russia. Last year, India and Australia signed an agreement to enable their air forces to conduct air-to-air refuelling, a move aimed at boosting inter-operability between the two sides.

<https://www.hindustantimes.com/india-news/indias-actions-in-op-sindoor-measuredrajnath-101749062847828.html>

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India, Australia to boost defence, tech ties

Source: The Tribune, Dt. 05 Jun 2025

India and Australia on Wednesday agreed to expand and diversify their defence industry collaboration, and explore joint projects in defence, science and technology, the Ministry of Defence (MoD) said after a meeting between Defence Minister Rajnath Singh and his Australian counterpart Richard Marles, Australian Deputy Prime Minister, in New Delhi.



The two leaders are expected to meet again in Australia later this year for the third edition of the India-Australia 2+2 dialogue, which brings together the foreign and defence ministers of both countries.

The MoD said discussions covered a broad range of issues, including strategic cooperation, cybersecurity, counter-terrorism, maritime and hydrographic security and collaboration on emerging technologies. The two Quad partners also reaffirmed their commitment to a free and open Indo-Pacific and Pacific Islands region.

Singh, in the meeting, underlined India's right to act in self-defence against cross-border terrorism, describing the recent Operation Sindoor as "measured, non-escalatory, proportionate and responsible".

Wednesday also marked five years of the India-Australia Comprehensive Strategic Partnership. Both sides welcomed the progress made and recognised defence as a key pillar of the growing bilateral relationship.

The Australian High Commission in New Delhi issued a statement highlighting the "extraordinary growth" in ties over the past five years, including the signing of an Economic Cooperation and Trade Agreement, deepening of defence cooperation and a transformative shift in education ties — with nearly 1.4 lakh Indian students attending Australian universities in 2024.

It also noted progress in the renewable energy partnership under which Australian expertise will support India's goal of installing 10 million solar rooftops by 2030.

"Our partnership spans science and technology, defence, education, clean energy, agriculture and culture," the statement said. Australian High Commissioner Philip Green added: "We've been drawn together by strategic alignment, economic complementarity and people-to-people connections. We have even bigger ambitions for the next five years."

Earlier in the day, Marles was accorded a ceremonial welcome with a Tri-Services Guard of Honour and laid a wreath at the National War Memorial.

External Affairs Minister S Jaishankar on Wednesday reaffirmed India's commitment to strengthening its partnership with Australia, identifying critical minerals, cybersecurity, technology, space and sports as emerging areas of collaboration.

Speaking at an event at the Australian High Commission in New Delhi to mark five years of the India-Australia Comprehensive Strategic Partnership, Jaishankar highlighted the "enormous deepening and diversification" of bilateral cooperation over the past half-decade.

He reiterated India's support for mechanisms involving Australia, including the Quad, the Indian Ocean Rim Association, the United Nations and the India-Australia-France trilateral.

Marles arrived in Delhi on Tuesday night as part of a high-level regional visit to the Maldives, Sri Lanka, Indonesia and India from June 2 to 5, according to an official Australian Defence release.

<https://www.tribuneindia.com/news/india/india-australia-to-boost-defence-tech-ties/>

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Operation Sindoor: Manoeuvre over attrition

-by Lt Gen SS Mehta (Retd)

Source: The Tribune, Dt. 05 Jun 2025

IN the swirl of claims and counterclaims after Operation Sindoor, the truth was quietly sidelined. Pakistan trumpeted tales of downed Indian aircraft and heroic resistance. Its military-run media machine — an expert in psychological optics — spun a victory narrative. Then came the grand

spectacle: Gen Asim Munir was promoted to Field Marshal. His reward for green-lighting the Pahalgam attack. Now he shoulders it.

But here's the core reality:

This was a campaign of manoeuvre, not attrition, aimed squarely at the enemy's will. Pakistan sued for peace before it truly began. Every time its terror gambit faces consequences, Pakistan retreats into spectacle — missiles dodged, jets downed, heroic last stands. These are illusions crafted for a public long held captive by a military-first state. An army with a nation.

What happened instead:

Assaults on Indian territory repulsed to a nick. The joint air defence show was a masterclass — calculated, cohesive and coordinated. A message that should be comprehensively etched by those who dream of aerial mischief.

Wars are not won by trending hashtags or by giving state funerals to terrorists draped in military honour. They are won when the enemy's core infrastructure is struck — when 11 airfields go dark in one precise operation. That's when backchannels flare to life. Not out of strength, but out of the fear of 'what next?'

As the CDS observed, there was no nuclear sabre-rattling, no call, no warning.

— No civilian casualties.

— No escalation into population centres.

— Yet, airfields, logistics hubs and launch pads were struck with precision.

Then Pakistan's DGMO reached out — not under global pressure, but because India changed the rules.

A military doctrine in motion

A military truism: No plan survives first contact with the enemy. Op Sindoor was no different. But what followed was more telling. Tactical adjustments were immediate. Operational responses required coordination across commands. Strategic recalibration demanded clarity and speed. Op Sindoor demonstrated all three. From the frontline to airbases to the highest military echelons, each platform and level of command acted with coherence and control. It was professionalism in motion across the full chain of command. An early glitch, observed and corrected, became a turning point.

Yet, even as India recalibrated in real time, adversaries rushed to declare victory — triumphalism based on partial facts, amplified by platforms that never asked what happened next. Within hours of claiming dominance, Pakistan lost operational use of 11 airfields. Silence replaced bluster. Propaganda gave way to paralysis. Op Sindoor demonstrated what 21st-century military doctrine must aim for: low-cost, high-impact outcomes that preempt escalation. The operation became a lesson in calibrated deterrence — timed, targeted and entirely within the thresholds of responsible force.

Conflict termination: The Indian model

Across the modern battlefield, wars begin easily — but rarely end. Vietnam lingered. Iraq fractured. Afghanistan collapsed. Russia-Ukraine drags on. Gaza remains a wound with no closure. Great powers dominate airspace — but fail at ending wars. India has done it twice.

In 1971, 30,000 entrenched Pakistani soldiers in Dhaka surrendered to 3,000 Indian troops on the move. The ratio was 10:1. In all, Pakistan capitulated in 13 days. Ninety thousand PoWs. It was victory of mind over matter — manoeuvre over attrition. Not conquest, but conclusion.

Now in 2025, Operation Sindoor — executed in 88 hours — had a conflict-terminating objective: Dominate the escalatory space. India enforced consequences, then chose restraint. In both cases, India didn't just fight well — it ended well. That is the rarest art in strategy.

Why did India control escalation? Because Pakistan's instability is manufactured — not accidental. The world knows it. Neighbours definitely do. Yet the myth continues — sustained by fear, denial and spectacle. Nations do not rise on martyrdom or manipulated memories. They rise when people refuse to be misled. When the public ceases to serve the lie, truth finds its place. Until then, silence fuels the cycle.

Instability as leverage: The real game around Pakistan

For years, Pakistan's volatility has been treated not as a threat — but as a tool. China, Pakistan's long-time patron, benefits from an India constantly drawn into reactive postures. A distracted India suits Beijing's strategic aims — from Ladakh to the Indian Ocean.

The United States, despite long acknowledging Pakistan's duplicity, still sees its military as a useful conduit — whether for regional optics, minerals or access to Afghanistan. Even multilateral institutions and segments of the Western press hedge their bets. Pakistan's military curates victimhood while incubating instability — and the world, knowingly, plays along. In this global theatre, Pakistan has become a proxy — not just for terror, but for transactional diplomacy. And India, for too long, bore the cost alone.

Op Sindoor changed that. Not by shouting, but by showing.

India cannot talk to proxies. But the people of Pakistan can choose not to be used. Upright, clean governance begins not with outsiders — but with a nation's own citizens telling their Army: "Serve, do not rule. Integrate, do not destroy." Because a puppet on a string may entertain the world, but it only dances for the puppeteer. When the show ends, it is the people who pay the price.

The Indian doctrine: Clarity, not conquest

India's strategic posture has evolved. We are no longer reactive. We respond — precisely, proportionally and with purpose. Operation Sindoor reflects a mature doctrine — no overkill, yet enough to alter behaviour. No spectacle, yet enough to jolt Rawalpindi.

A war won before it escalated. India doesn't need to destroy Pakistan to deter it. We only need to show we can — but choose not to. This is strength with conscience. This clarity, this blend of capability and restraint, makes India's calibrated deterrence credible in ways brute force never could. When adversaries cannot predict you, and allies cannot second-guess you, a new equilibrium emerges — one in which India is assertive, yet aligned with its values.

The war before the war

Op Sindoor wasn't about platforms or payloads. It was about clarity, initiative and control. In a world where wars drag on — inflicting brutal costs on civilian men, women and children — India has offered a different model: Manoeuvre over attrition. Where others fight to exhaust, we act to conclude.

Where others escalate into chaos, we calibrate for stability. And just like Dhaka, the enemy blinked — not after the war began, but before it could. Let the record show: India won the war before the war — while the nations of the world watched. Some nervously. Others knowingly. But all, now, undeniably aware.

<https://www.tribuneindia.com/news/comment/operation-sindoor-manoevre-over-attribution/>

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New details emerge on Operation Sindoor

Source: The Pioneer, Dt. 05 June 2025

Operation Sindoor destroyed at least nine aircraft including six Pakistan Air Force (PAF) fighter jets, two surveillance aircraft, ten armed drones and a C-130 Hercules transport aircraft, it was learnt. Moreover, the Indian military strikes inflicted heavy damage to Pakistan's aerial and ground military assets.

India launched Operation Sindoor early May in retaliation to the Pahalgam terror attack on April 22 in which 26 innocents were killed. The military strikes were carried out in Pakistan and Pakistan Occupied Kashmir (POK). The destruction of Pakistani jets, according to sources, was confirmed via radar tracking and thermal signatures captured by Indian ground-based missile systems and airborne early warning assets.

One of the crucial hits during the four-day engagement was the destruction of a high-value airborne surveillance platform. According to sources, the target was either an electronic countermeasure (ECM) platform or an Airborne Early Warning and Control (AEW and C) aircraft, neutralised at an estimated range of 300 kilometres using India's long-range strike asset. Another AEW and C aircraft of Swedish origin, reportedly stationed at Pakistan's Bholari airbase, was destroyed during a subsequent air-to-surface cruise missile strike.

In a separate operation, a PAF C-130 Hercules was destroyed during a targeted drone strike over Pakistani Punjab. The C-130 was being used for logistical support and was parked at a forward operating base near Multan when the drone strike occurred, sources said.

The IAF also undertook precision strikes against unmanned systems. A hangar housing multiple Chinese-origin Wing Loong series medium-altitude, long-endurance drones was destroyed. According to sources, over ten UCAVs were destroyed in this single strike. Also, Indian air defence units intercepted and downed several Pakistani UCAVs over Indian airspace during the conflict, particularly over sectors in Jammu and Kashmir and Rajasthan.

Reports referring to Pakistani military dossier on Operation Bunyan un Marsoos, Islamabad's codename for its military operation revealed that India struck at least seven more targets than acknowledged in official Indian statements. According to maps and data in the dossier, Indian airstrikes targeted facilities in Peshawar, Jhang, Hyderabad (Sindh), Gujrat (Punjab), Bahawalnagar, Attock, and Chor.

The additional strike locations, all of which host key Pakistani military or dual-use infrastructure, confirm that Indian air operations reached far deeper into Pakistani territory than previously known.

Operation Sindoor commenced on the night of May 6-7 with coordinated strikes on terror infrastructure in Pakistani Punjab and Pakistan-occupied Kashmir. Nine key targets were identified,

including the Jaish-e-Mohammed headquarters in Bahawalpur, Lashkar-e-Taiba's camp in Muridke, and facilities in Muzaffarabad, Kotli, Rawalakot, Bhimber, and Chakwal.

<https://www.dailypioneer.com/2025/page1/new-details-emerge-on-operation-sindoor.html>

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Prez honours 92 with top service decorations

Source: *The Asian Age*, Dt. 05 June 2025



President Droupadi Murmu presents Ati Vishisht Seva Medal to Lt. Gen. Sadhna S. Nair during the second defence investiture ceremony at Rashtrapati Bhavan in New Delhi on Wednesday.

— PTI

Prez honours 92 with top service decorations

New Delhi, June 4: President Droupadi Murmu on Wednesday conferred distinguished service decorations on several top-ranking officers of the armed forces and other personnel drawn from the Indian Coast Guard and the Border Roads Organisation for rendering service of "exceptional order".

Lt. Gen. Manoj Kumar Katiyar and Lt. Gen. Dhiraj Seth, currently serving as the commanders of the Army's Western Command and Southern Command, respectively, received the Param Vishisht Seva Medal (PVSM) during the defence investiture ceremony 2025 (phase-II) held at the Rashtrapati Bhavan here.

Director General of

Military Operations (DGMO) Lt. Gen. Rajiv Ghai, a prominent face in military briefings on the recent Operation Sindoor, was conferred with the Uttam Yudh Seva Medal (UYSM).

Lt. Gen. Bhavnish Kumar, who was the Parade Commander in the 2025 Republic Day Parade on Kartavya Path, received the Ati Vishisht Seva Medal (AVSM).

President Murmu conferred distinguished service decorations on a total of 92 personnel drawn from the armed forces, the Indian Coast Guard and the Border Roads Organisation for rendering service of "exceptional order", the defence ministry said in a statement.

It also shared the list of awardees.

— PTI

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Science & Technology News

“TDB Supports Indigenous Development of Multi-Spectral Camouflage Systems for Defence by M/s Meta Tattva Systems Pvt. Ltd.”

Source: Press Information Bureau, Dt. 04 Jun 2025

The Technology Development Board (TDB), Department of Science and Technology (DST), Government of India, has extended financial assistance to M/s Meta Tattva Systems Pvt. Ltd., New Delhi, for the establishment of an Industrial Meta Tattva Facility to fabricate Multi-Spectral Camouflage (MSC) Materials and Shelters for strategic defence applications.



(Picture- Sh. Rajesh Kumar Pathak, Secretary, TDB with Air Vice Marshal Praveen Bhatt (Retd.), Promoter – Meta Tattva Systems Pvt. Ltd.; Col. Rajesh Jain (Retd.), Director, TDB; Sh. Kapil Tripathi, Scientist F and Cdr. Smriti Tripathi (Retd.), Under Secretary along with officials from TDB)

The primary objective of the project is to commercialize the Metamaterial Surface Cloaking System (MSCS)—a critical technological advancement aimed at masking vital defence assets such as tanks, aircraft, and mobile command posts from detection across visual, ultraviolet (UV), and infrared (IR) spectrums. The system significantly reduces the visibility of assets to sensors and surveillance platforms, offering a transformative advantage in battlefield concealment.

The MSCS is based on a patented technology developed by IIT Kanpur and will be entirely processed in-house at the new facility supported by TDB. Its sandwiched structural design imparts high tensile and shear strength while also being water and fire-resistant. The materials are lightweight and rapidly deployable, making them suitable for applications like Rapid Erect Sun Shelters (RESS) for quick field deployment.

What sets Meta Tattva's solution apart is its tailor-made MSCS suite, which provides asset-specific masking and meets the stringent MIL PRF standards. The camouflage system has been field-tested and validated by various end users in the defence domain, including the Indian Air Force Headquarters, which has acknowledged successful trials and approved the procurement of the product for operational use.

Given the secretive and sensitive nature of multi-spectral camouflage technologies, such solutions are extremely hard to import. Meta Tattva's initiative addresses this strategic void by offering an SQR-compliant, indigenous alternative that enhances India's self-reliance in counter-surveillance

technologies. The company also holds a Sales & Marketing Agreement with Bharat Dynamics Limited (BDL), ensuring seamless market access within the defence supply chain.

The presence of a senior civil servant, senior scientist, and decorated veterans from all three arms of India's defence forces—Army, Navy, and Air Force—at the signing ceremony highlighted the project's strategic significance and its alignment with national priorities. This confluence of expertise from governance, science, and defence exemplifies how cross-sectoral collaboration can drive indigenous innovation. The promoter of the company, an Air Vice Marshal (Retd.), brings decades of operational flying experience and a deep understanding of defence requirements, further reinforcing the project's credibility and mission-oriented relevance. Speaking on the occasion, Sh. Rajesh Kumar Pathak, Secretary, TDB, remarked:

"India's strategic strength lies not just in advanced weaponry, but also in how effectively we can conceal and protect our critical assets. TDB is proud to support Meta Tattva's breakthrough in metamaterial camouflage—a solution that elevates both our technological edge and national security posture. This initiative is a stellar example of translating deep-tech academic research into mission-critical defence innovation."

Thanking on the support, Air Vice Marshal Praveen Bhatt (Retd.), Founder & CEO, M/s Meta Tattva Systems Pvt. Ltd. said: "With TDB's vital support, we are transforming a cutting-edge concept into an industrial reality. Our focus is on delivering world-class, combat-ready, and fully indigenous multi-spectral camouflage systems that empower the Indian Armed Forces and allied partners with decisive operational advantages."

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NITI Aayog Advances R&D Reforms in Second Consultative Meeting on Ease of Doing R&D at CSIR – Indian Institute of Petroleum (CSIR-IIP), Dehradun

Source: Press Information Bureau, Dt. 04 Jun 2025

The Second National Consultative Meeting on reforming India's Research and Development (R&D) ecosystem commenced today at the CSIR – Indian Institute of Petroleum (CSIR-IIP), Dehradun, Uttarakhand. Organized under the Chairpersonship of Dr. V.K. Saraswat, Member, NITI Aayog, the two-day meeting builds upon the outcomes of the first consultative dialogue held in May 2025 at Raj Bhawan, Lucknow, and marks the second installment in a series of regional meetings planned to address systemic challenges in India's research and development ecosystem. This ongoing initiative by NITI Aayog aims to enable a forward-looking, innovation-driven, and resilient research ecosystem in the country, with a particular focus on strengthening the capacities of government-funded R&D institutions and laboratories.

The Dehradun meeting was inaugurated in the presence of eminent dignitaries, including Dr. N. Kalaiselvi, Director General, CSIR and Secretary, DSIR; Prof. Ashutosh Sharma, President, Indian National Science Academy (INSA); Dr. Harender Singh Bisht, Director, CSIR-IIP; and other senior representatives from key scientific ministries and departments. Prof. Vivek Kumar Singh, Senior Adviser, NITI Aayog, opened the day's deliberations by setting a thematic framework centered on institutional agility, innovation-centric governance, and enhanced industry-academia collaboration.

During the inaugural session of the consultative meeting, Dr. V.K. Saraswat, Member, NITI Aayog, emphasized the critical need to transform India's government-funded R&D institutions into dynamic, autonomous, and mission-driven ecosystems. He stressed that scientific research must be unshackled from bureaucratic delays and rigid hierarchies and instead be empowered through decentralized decision-making, timely funding, and performance-based accountability. Dr. Saraswat also reiterated NITI Aayog's commitment to driving systemic reform through continuous engagement with stakeholders and evidence-based policy recommendations.



Dr. N. Kalaiselvi, Director General, CSIR & Secretary, DSIR, commended NITI Aayog's leadership in convening this much-needed dialogue and emphasized the importance of collaborative governance in resolving long-standing structural issues. She highlighted the need to rejuvenate R&D infrastructure, particularly in tier 2 and tier 3 institutions, and to strengthen industry-academia partnerships to foster impactful translational research. Dr. Kalaiselvi also spoke about the significance of aligning national scientific efforts with local innovation needs. Prof. Ashutosh Sharma, President, Indian National Science Academy (INSA), drew attention to the human dimension of science, calling for greater trust in researchers, reduced micromanagement, and the creation of flexible pathways for scientific careers. He underscored the urgency of retaining young talent in Indian institutions through better opportunities, mentorship, and global exposure. The meeting, currently underway, will continue on 4th June 2025 with focused discussions on themes such as institutional governance, researcher mobility, translational research, and enhancing public-private collaboration.

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