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Newspapers Clippings

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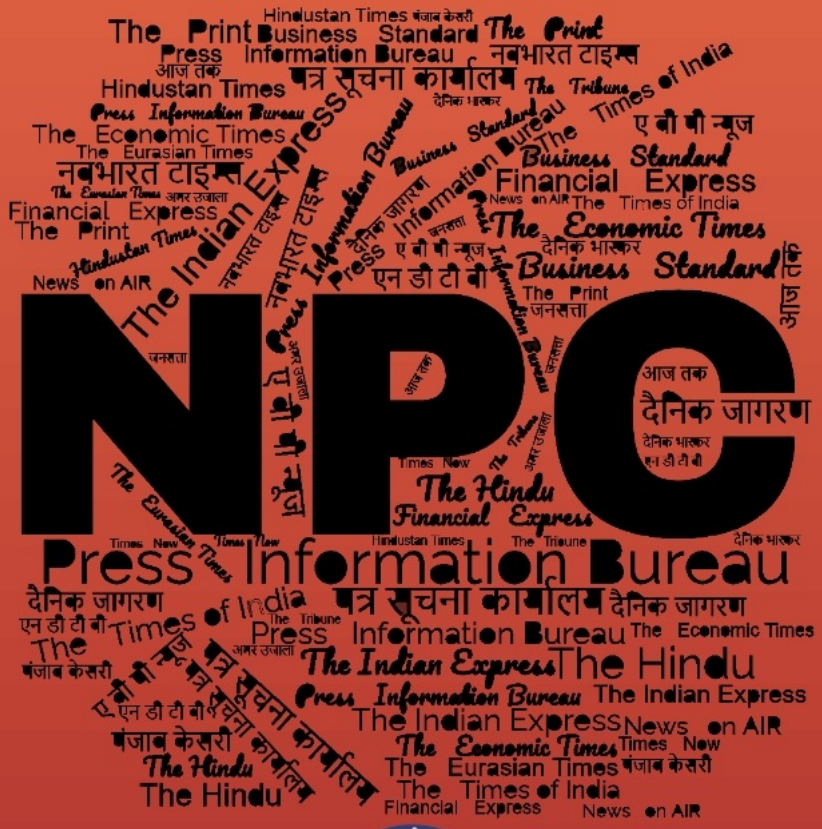

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CONTENTS

DRDO News

INS SAGARDHWANI FLAGS OFF FOR SAGAR MAITRI V

Source: PIB , Dt. 18 Jan 2026

INS Sagardhwani, India's oceanographic research vessel under the Naval Physical and Oceanographic Laboratory (NPOL) of DRDO, was flagged off for the fifth edition of the Sagar Maitri (SM-5) initiative from Southern Naval Command, Kochi on 17 Jan 2026.

The vessel was flagged off by Shri Radha Mohan Singh, Honourable Member of Parliament and Chairperson, Parliamentary Standing Committee on Defence, in the presence of honourable Members of the Parliamentary Standing Committee on Defence, Dr Samir V Kamat, Secretary, Department of Defence R&D and Chairman DRDO; RAdm Upal Kundu, Chief of Staff, Southern Naval Command; Dr R. V. Hara Prasad, Director General (Naval Systems & Materials); and Dr Duvvuri Seshagiri, Director, NPOL, along with senior officials from the Indian Navy and DRDO.

Sagar Maitri is a flagship collaborative initiative of the Indian Navy and DRDO, aligned with the Government of India's vision of 'Mutual and Holistic Advancement for Security and Growth Across Regions (MAHASAGAR)'. The initiative aims to promote closer cooperation in socio-economic aspects and greater scientific interaction, especially in ocean research, among Indian Ocean Rim (IOR) countries.

Naval Physical and Oceanographic Laboratory (NPOL), Kochi has been conducting oceanographic missions under the Sagar Maitri programme with the objective of strengthening scientific cooperation and capacity building among IOR nations. Under the aegis of this programme, DRDO initiated a scientific component titled 'MAITRI (Marine & Allied Interdisciplinary Training and Research Initiative)' to establish long-term collaboration with IOR countries in the field of ocean research and development.

Under the Sagar Maitri programme, INS Sagardhwani will retrace the historic routes of INS Kistna, which participated in the International Indian Ocean Expedition during 1962–65. The initiative seeks to build sustained scientific collaboration with eight IOR countries, namely Oman, Maldives, Sri Lanka, Thailand, Malaysia, Singapore, Indonesia, and Myanmar. The ongoing mission marks the initiation of collaborative oceanographic studies with Maldives, enabling joint research and professional exchange among scientists of IOR nations. Sagar Maitri represents the centrepiece of DRDO's efforts towards achieving relevant Underwater Domain Awareness (UDA) for the Indian Navy. During these missions, oceanographic and acoustic data of importance are collected along designated observational tracks by DRDO research vessel INS Sagardhwani, aligned with planned scientific objectives relevant to UDA.

INS Sagardhwani is a specialised marine acoustic research vessel designed by NPOL and built by Garden Reach Shipbuilders & Engineers (GRSE). Commissioned in Jul 1994, the ship has served as a key platform for ocean observations and marine research for over three decades, contributing significantly to India's maritime scientific capabilities.

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Defence News

150 years of Vande Mataram to be the theme of Republic Day Parade 2026 at Kartavya Path

Source: PIB, Dt. 16 Jan 2026

President of the European Council & President of the European Commission to be the Chief Guests

A Battle Array Format to be showcased by the Indian Army for the first time

10,000 people from different walks of life to witness the parade as Special Guests; 2,500 artists to perform as part of the cultural performance

A total of 30 Tableaux to roll down Kartavya Path

The Republic Day Celebrations 2026 at Kartavya Path on January 26, 2026, will be unique blend of 150 years of the national song 'Vande Mataram', India's military might and cultural diversity. Addressing a press conference in New Delhi on January 16, 2026, Defence Secretary Shri Rajesh Kumar Singh spelt out the broad contours of the unique activities being planned for this year's celebrations.

Chief Guest for Republic Day Parade

President of the European Council Mr Antonio Costa and President of the European Commission Ursula von der Leyen will be the Chief Guests for the Republic Day Parade (RDP) 2026.

150 years of Vande Mataram

- 150 years of Vande Mataram will be the theme of the parade. A series of paintings created by Shri Tejendra Kumar Mitra in 1923, illustrating the verses of 'Vande Mataram' and published in the 'Bande Mataram Album' (1923), will be displayed as view-cutters along Kartavya Path during RDP 2026.
- A banner depicting 'वंदेमातरम्' will be unveiled along with the release of rubber balloons at the conclusion of the parade.
- Pan-India band performances on the theme 'Vande Mataram' will be organised from January 19 to 26, 2026 by the Indian Army, Indian Navy, Indian Air Force, Indian Coast Guard, and other CAPFs. The performance venues will also include the ancestral home and birthplace of Rishi Bankim Chandra Chattopadhyay at Kanthalpara, Naihati, North 24 Parganas District, West Bengal, presently known as 'Bankim Bhawan Gaveshana Kendra' (also referred to as Rishi Bankim Chandra Chattopadhyay's Residence and Museum or Bankim Sangrahashala).
- Floral decorations in front of the rostrum/dais will be executed based on the Vande Mataram theme.
- The invitation card/tickets for RDP–2026 has been designed on the theme of Vande Mataram.
- Videos on Vande Mataram will be played on screen at Kartavya Path.
- Tableaux will be presented under the broader themes "स्वतंत्रता का मंत्र – वंदे मातरम" and "समृद्धि का मंत्र – आत्मनिर्भर भारत".

- As in previous years, Various competitions, contests, and quizzes have been conducted on the MyGov and My Bharat portals on the theme of 'Vande Mataram' and 'Aatmnirbhar Bharat', which received a total participation of 1,61,224. In addition to cash prizes for the top 30 winners, the top 200 winners have been invited to witness RDC 2026.

Phased Battle Array Display

The Indian Army will be represented by a Mounted Column of 61 Cavalry & Battle Array Formation (first time), Seven marching contingents. HMRV (High Mobility Recce Veh – BFSR & ATGM) and Dhruv Heptr, T-90, Main Battle Tank Arjun, BMP-II & NAMIS-II Nag Missile System, IOC (Integrated Operational Centre), UGVs, ATV (All Terrain Veh), LSV (Light Strike Veh) with Trailer (Robotic Mules & UGV), Shaktiban, ATAGS and Dhanush, URLS and Brahmos, Akash & MRSAM, Drone Shakti and Glacier ATV will be the main attractions in the mechanized columns.

A total of Seven marching contingents of the Army, including animal contingent comprising of Zansker ponies, Bacterian camel and dogs with Handlers Contingent, SCOUTS Contingent, RAJPUT Contingent, ASSAM Contingent, JAK LI Contingent, ARTY Contingent, BHAIRAV Contingent in 'Uncha Kadam taal' and Ladakh Scouts will march post the saluting dais.

Total 18 Marching Contingents and 13 bands will take part in the RDC-2026. The flypast will showcase Rafale, Su-30, P8i, C-295, Mig-29, Apache, LCH, ALH, Mi-17 in different formations.

Another highlight of the parade will be veterans' Tableau by Indian Air Force. It will provide a glimpse of veterans' contributions for the Nation.

Special Guests

Around 10,000 people from all walks of the society have been invited to witness the RDP 2026 at Kartavya Path as Special Guests this year. People with exemplary work in connection with income and employment generation, technology, innovation, start-ups, Self Help Groups, best performers under key government initiatives have been identified with help of departments concerned and invited to witness the ceremony.

Sl. No.	Category
1.	Winners of World Athletic Para Championship
2.	Farmers practicing natural farming
3.	Best performing farmers who received subsidies for cultivating pulses, oil seeds & maize under "Pulses Self-Reliance Mission".
4.	Transgender and beggar rehabilitated under PM SMILE scheme

5.	Beneficiaries of DAJGUA scheme
6.	Trained MAITRI (Multipurpose AI Technician in Rural India) individuals providing animal husbandry services to farmers and improving cattle breeding services
7.	Heads/CEOs of companies who received incentives for Hydrogen production and Electrolyser manufacturing under the SIGHT (Strategic Intervention for Green Hydrogen Transition) program in National Green Hydrogen Mission
8.	Best performing Scientists/Technical persons involved in recent ISRO missions like Gaganyaan, Chandrayaan etc.
9.	Best Researchers/Innovators in the field of Isotope production for medical, industrial & agricultural applications
10.	Researchers/Scientists under Deep Ocean Mission
11.	Best performing Students trained in Atal Tinkering Laboratories under Atal Innovation Mission
12.	Winners of different international sports tournaments
13.	Women producer groups provided training, loans and market linkages for dairy or organic farming under PM Dhan Dhaanya Krishi Yojana
14.	Best performing artisans trained under Khadi Vikas Yojana
15.	Beneficiaries of PM JANMAN scheme

16.	Adi Karmayogi, Adi Sahyogi & Adi Saathi engaged to empower tribal citizens by providing knowledge and awareness in various fields like health, innovation, education etc.
17.	Individuals, Private Companies, FPO, MSME etc. which got loan from Animal Husbandry Infrastructure Development Fund
18.	Best performing Startups/MSME under Semicon India Programme
19.	Best performing Scientists/Technical persons from DRDO working in key projects

20.	Best performing Biotech Startups/Entrepreneurs under Bio E3 Policy	
21.	Best performing MSMEs that received capital from Self Reliant India (SRI) Fund	
22.	Unorganized sector workers receiving pension under PM Shramyogi Maandhan Yojana	
23.	FPO (Farmer Producer Organizations) benefitted from Agri Market Infrastructure Fund	
24.	Women entrepreneur, Divyaang, SC & STs, ex-serviceman who received special incentives to open Janaushadhi Kendras under Pradhan Mantri Janaushadhi Pariyojana	
25.	Best performing shopkeepers/traders/MSMEs who have transferred GST 2.0 benefits to the customers	
26.	Best performing Start-ups in the field of Innovation, Space, Medical etc.	

27.	Winners of Veer Gatha project	
28.	Sarpanches of Panchayats which achieved saturation in Central Govt. Schemes	
29.	Rural people who received pucca house under PM Awaas Yojana Grameen scheme	
30.	Farmers provided financial protection against crop loss due to natural disaster, pests & diseases under Pradhan Mantri Fasal Bima Yojana	
31.	Best performing Women artisans trained under Mahila Coir Yojana	
32.	Best performing Anganwadi workers of Mission Saksham Anganwadi & Poshan 2.0	
33.	Street vendors benefitted from PM SVANidhi (Street Vendor's AtmaNirbhar Nidhi) scheme	
34.	Best performing Artisans, sportspersons, tribal people, entrepreneurs, singers, dancers etc. from North Eastern region	
35.	Women entrepreneurs which received loans through PM Mudra Yojana	
36.	Construction workers from Border Road Organization(BRO)	
37.	Water warriors under National Mission for Clean Ganga	

38.	Beneficiaries of National Minorities Development & Finance Corporation (NMDFC)	
39.	Best performing interns of PM Internship Scheme	
40.	Children who are winners of National School Band Competition	
41.	Best performing Workers/ Volunteers of National Disaster Management Authority (NDMA)	
42.	Best performing Primary Agricultural Credit Society (PACS)	
43.	Best performing My Bharat Volunteers	
44.	Best performing Women of Self Help Group under NRLM, Lakhpati Didi	
45.	Best performing Artisans & craftspeople trained under PM Vishwakarma scheme	
46.	Construction workers of Kartvya Bhawan	
47.	People from rural households, poor & marginalized communities, SC & ST majority villages, Vulnerable tribal groups etc. received tap water connection under Jal Jeevan Mission	
48.	Best performing Intellectual Property (IP) Holders i.e. Patents, Design, Copyright, Trade Mark etc.	
49.	Participants of 'Mann ki Baat'	
50.	Women beneficiaries under Self Help Group Livelihood Component of SEED.	

51.	Foreign delegates & accompanying Indian contingent of Youth Exchange Programme (YEP)-2026.	
52.	International & Indian Monk delegations attending 2nd Global Buddhist Summit 2026.	
53.	Medal winners of international Olympiad on Astronomy and Astrophysics, Junior (IOAA, Jr) 2025.	

These special guests will be prominently seated at Kartavya Path.

Tableaux

A total of 30 Tableaux (17 from States/ UTs and 13 from Ministries/Departments/ Services) will roll down the Kartavya Path this year:

Sl. No.	Name of the State/UT & Ministry/Department	Theme
1.	Assam	Ashirakandi: The craft village
2.	Chhattisgarh	Mantra of Freedom: Vande Mataram
3.	Gujarat	Swatantrata ka Mantra – Vande Mataram
4.	Himachal Pradesh	Himachal Pradesh – Dev Bhoomi is equally Veer Bhoomi
5.	Jammu & Kashmir	Handicrafts and Folk Dances of Jammu and Kashmir
6.	Kerala	Water Metro & 100% Digital : Atmanirbhar Kerala for

		Atmanirbhar Bharat
7.	Maharashtra	Ganeshotsav: A Symbol of Atmanirbharta
8.	Manipur	Towards Prosperity: From Fields International Markets
9.	Nagaland	The Hornbill Festival – Celebrating Culture, Tourism & Self-Reliance
10.	Odisha	Soil to Silicon: Rooted in Tradition, Rising with Innovation
11.	Puducherry	Puducherry's rich Heritage of Craft, Culture and Auroville's Vision
12.	Rajasthan	Camel Hide and Golden Art.
13.	Tamil Nadu	Mantra of Prosperity: Self-Reliant India – EV Manufacturing Hub
14.	Uttar Pradesh	Culture of Bundelkhand
15.	West Bengal	Bengal in the Freedom Movement of India
16.	Madhya Pradesh	'Punyashlok' Lokmata Devi Ahilyabai Holkar

17.	Punjab	350th Martyrdom Day of Sri Guru Tegh Bahadur Ji
18.	Air HQrs	Veteran Tableau – Nation Building through War
19.	Naval HQrs	Samudra Se Samridhi
20.	Department of Military Affairs	Tri-Services Tableau – Operation Sindoor, Victory through Jointness

21.	Ministry of Culture	Vande Mataram: The Soul-Cry of a Nation
22.	Deptt. of School Education & Literacy	National Education Policy 2020: Rocketing Indian School Education on the Path to Vikshit Bharat
23.	M/o AYUSH	AYUSH ka Tantra, Swasthya ka Mantra
24.	M/o Home Affairs (NDMA & NDRF)	Bhuj 25 Years Commemoration
25.	M/o Home Affairs (BPRD)	Jan Kendrit Nyay Pranali – Enactment of the Three New Laws – 2023
26.	M/o Housing & Urban Affairs (CPWD)	Vande Mataram ke 150 Saal (Floral Tableau)

27.	M/o Information & Broadcasting	Bharat Katha: Shruti, Kriti, Drishti
28.	M/o Panchayati Raj	SVAMITVA Scheme – Atmanirbhar Panchayat se Samriddh evam Atmanirbhar Bharat
29.	M/o Power	Prakash Ganga – Powering an Atmanirbhar and Vikshit Bharat
30.	M/o Skill Development & Entrepreneurship	India's Path to Self-Reliance and Future Readiness Powered by Skills.

Cultural Performance

Approx 2,500 cultural artists will perform on Kartvyapath this year. The theme of the performance is "स्वतंत्रता का मंत्र – वंदे मातरम" and "समृद्धि का मंत्र – आत्मनिर्भर भारत". The creative team shall comprise Shri M.M. Keeravani as Music Director, Shri Subhash Sehgal as Lyricist, Shri Anupam Kher as Narrator, and Shri Santosh Nair as Choreographer, under the overall supervision and direction of Dr. Sandhya Purecha. Creative design and costumes shall be handled by Smt. Sandhya Raman.

Unique naming of enclosures for RDP/BR 2026

Nomenclature of Enclosures for RDP-2026 is based on the River, flowing across the nation, i.e. Beas, Brahmaputra, Chambal, Chenab, Gandak, Ganga, Ghagra, Godavari, Sindhu, Jhelum, Kaveri, Kosi, Krishna, Mahanadi, Narmada, Pennar, Periyar, Ravi, Sone, Sutlej, Teesta, Vaigai, and Yamuna.

Similarly, For Beating Retreat Ceremony 2026, naming of enclosures will be based on Indian Instruments I.e. Bansuri, Damaru, Ektara, Esraj, Mridangam, Nagada, Pakhawaj, Santoor, Sarangi, Sarinda, Sarod, Shehnai, Sitar, Surbahar, Tabla and Veena.

National School Band Competition

The Ministry of Education in collaboration with Ministry of Defence conducted a National School Band Competition at an All-India level for Republic Day Celebrations-2026 in order to evoke a feeling of oneness, belonging and a deep sense of pride in school children towards their school and country. Around 763 school bands from 33 different States/UTs took part in the competition wherein around 18013 students participated.

The levels of National School Band Competition are as under: -

- Level 1: State Level – conducted by States/UTs.
- Level 2: Zonal Level – States/UTs were divided into 04 zones.
- Level 3: National Level (Final) – Performance at National Stadium, New Delhi.

First two levels of competition have already been conducted and the Final level event would be conducted at Major Dhyan Chand National Stadium (MDCNS), New Delhi on 24 January, 2026.

A total 16 Bands selected from 15 States/UTs of India would perform during the Nation level event in MDCN Stadium. These finalist teams will be given prizes and some of the winners will also witness the Republic Day Parade at Kartvaya Path on 26th January, 2026. One of winners team will be part of static band in front of dais to play Vande Mataram.

Veer Gatha 5.0

The Fifth edition of Project Veer Gatha was organized as a part of Republic Day Celebrations-2026 to inspire and spread awareness among children about the gallant deeds and sacrifices of the Armed Forces in the form of poem, paragraph/essay writing, painting, drawing, multi-media presentation on the topics like Gallantry Awards Winner/Rani Lakshmibai as role model, the 1857 struggle, role of tribal uprising in freedom struggle. The event was organised by Ministry of Defence in collaboration with Ministry of Education from 08.09.2025 to 10.11.2025. A total of approx. 1.92 crore school students have participated at pan India and a total of 100 school students have been declared winners of the Veer Gatha 5.0. These winners will be felicitated in New Delhi. They will also attend the Republic Day Parade at Kartavya Path.

Rashtraparv Portal

To facilitate citizens to have ease in information and getting access to witness the various events on Republic Day Celebrations – 2026 viz. booking tickets, getting location of the seating and parking arrangements etc. a comprehensive mobile App (on Apple play and Msewa) and Portal "Rashtraparv Portal" has been developed and will serve as a focus point for all the details relating events like RDP and BTR.

Couples in Traditional Attires

Invitation to minimum 50 Delhi based couples from each State/UT dressed in their traditional attires are being invited to witness the RDC-2026.

Fly-past

A fly-past by the aircraft of the Indian Air Force used to be a regular feature of the Republic Day Parade. This is a very popular item and the public look forward to see the fly-past, which is the grand finale to the Parade. This year, a total of 29 Aircraft of Armed forces will participate in various formation in RDC - 2026.

Bharat Parv

'Bharat Parv' will be organised at the Red Fort, Delhi from January 26-31, 2026 by the Ministry of Tourism. It will showcase Republic Day Tableaux, Regional Cuisine Display & Sale, Handicraft & Handloom, Culture & Heritage Performances, Central Ministries Stalls and Citizen Engagement Zone. The Tableaux, which will be showcased at the Red Fort as a part of 'Bharat Parv' are Chandigarh, Ladakh, Arunachal Pradesh, Bihar, Delhi, Goa, Jharkhand, Karnataka, Tripura, Uttarakhand and DRDO.

E-invitation

This year also, the invitation to the various dignitaries would be issued in electronic mode through the dedicated portal www.e-invitation.mod.gov.in. This ensured the whole process to be more secure & paperless and enabled people from all parts of the country to attend this national event.

E-ticket

In order to ensure maximum Janbhagidari, the number of seats for public has been increased. Accordingly, number of tickets for public has been increased which were available for online booking through

www.aamantran.mod.gov.in as well as "Aamantran App" (available for download on MSewa/Apple app Store) and through offline counters at various locations including two major DMRC stations, from 5th January to 14th January, 2026, Additionally, free entry for RDP- FDR will be made to 10,000 initial registrations.

Park & Ride and Metro Facility

Free of cost Park & Ride and Metro Facility would be provided to the public for witnessing the Republic Day Parade. Metro will be operational on 26th January, 2026. Guests and ticketholders may avail metro facility free of cost by showing their invitation/ticket. Free of cost Park & Ride bus facility may be availed by the guests and ticketholders from JLN Stadium and Palika Bazaar Parking area.

Post-event Swachhata Campaign

A post-event Swachhata Campaign in coordination with My Bharat Volunteers and NCC cadets covering a whole stretch of Kartavya Path have been planned and will be operated accordingly.

Convenience of citizen

Delhi Metro will start its operation from 3 AM in the morning and is free of cost with RDC invitation/tickets. QR codes are available with tickets as well as invitation. All enclosures are accessible and Divyang friendly with ramp facility. There will be volunteers from NCC and My Bharat to guide the guests. Drinking water, toilet facility and first aid booths will be available. Rain ponchoes will be provided as rain contingency measure for all the visitors.

PM's NCC Rally

As per practice, PM's NCC rally is scheduled to be organised at Cariappa Parade Ground, Delhi Cantt. on 28th January 2026 where the Prime Minister reviews the multifarious activities of the NCC. The Prime Minister will also meet NCC Cadets, NSS Volunteers, Youth Exchange programme cadets, Tableaux Artists, Tribal Guests, etc. of Republic Day Celebrations-2026 after the rally.

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ICGS Sankalp's port call at Port Louis, Mauritius as Part of Overseas Deployment in Indian Ocean Region

Source: PIB Dt. 17 Jan 2026

Indian Coast Guard Ship (ICGS) Sankalp, an Offshore Patrol Vessel, arrived at Port Louis, Mauritius on January 17, 2026 as part of its ongoing Overseas Deployment to Friendly Foreign Countries in the Indian Ocean Region. The visit reflects India's continued commitment to strengthening maritime cooperation, enhancing interoperability and further deepening bilateral ties with Mauritius.

The deployment is in line with India's maritime vision of SAGAR - Security and Growth for All in the Region- which seeks to promote regional maritime safety, security and environmental protection. In keeping with the Indian Coast Guard's emphasis on gender inclusivity in maritime operations, two women officers are embarked onboard ICGS Sankalp, underscoring their expanding role in the service and India's commitment to women empowerment in the maritime domain.

During its stay at Port Louis, the ship will undertake a series of professional interactions with the National Coast Guard of Mauritius and other maritime agencies of Mauritius. These interactions are aimed at sharing best practices and strengthening cooperation in key operational domains.

A comprehensive training programme has been planned, including sea and harbour drills, oil pollution response exercises, damage control (NBCD) exercises, as well as firefighting drills. The training activities will also include Visit, Board, Search and Seizure (VBCC) joint training, navigation bridge and Machinery Control Room (MCR) integration drills to enhance operational coordination and readiness.

In addition to operational engagements, the port call will feature friendly sports fixtures and cultural exchanges to promote camaraderie and people-to-people connect. The crew will also participate in community service activities, reflecting India's approach of constructive outreach and goodwill. The visit will further provide an opportunity to showcase India's indigenous shipbuilding capabilities, supporting the vision of Aatmanirbhar Bharat.

The visit of ICGS Sankalp reinforces India's role as a reliable maritime partner in the Indian Ocean Region and highlights the Indian Coast Guard's commitment to maritime safety, security, capacity building and environmental protection, while strengthening bilateral relations with Mauritius.

On completion of its visit to Mauritius, ICGS Sankalp will sail for Seychelles as part of its continuing Overseas Deployment in the Indian Ocean Region, further expanding India's maritime outreach and cooperation with key island nations.

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Secretary (Defence Production) to lead Indian delegation to Kenya for 3rd India-Kenya Defence Exhibition & Seminar

Source: PIB, Dt. 17 Jan 2026

A four-member Indian delegation, led by Secretary (Defence Production) Shri Sanjeev Kumar will be on an official visit to Kenya from January 19 to 21, 2026. The Secretary (Defence Production) will represent India's defence manufacturing and export ecosystem at the third India–Kenya Defence Exhibition and Seminar organised under the Brand India scheme of Department of Defence Production, scheduled to be held in Nairobi on January 19, 2026.

The event will witness participation from 20 Indian defence companies from both public and private sectors, showcasing a wide range of defence products and services. The High Commissioner of India to Kenya Dr Adarsh Swaika will also attend the event. The visit reflects the Government of India's vision to strengthen defence industrial cooperation and exports.

During the visit, the Secretary (Defence Production) will also hold meetings with the officials of the Government of Kenya and Kenya Defence Forces. The focus of the bilateral meetings will be on promoting India's indigenous defence manufacturing capabilities and exploring opportunities for mutual collaboration.

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INDIAN NAVY'S FIRST TRAINING SQUADRON ARRIVES AT CHANGI NAVAL BASE, SINGAPORE

The visit aligns with ASEAN–India maritime cooperation and India's current leadership of IONS

Source: PIB, Dt. 17 Jan 2026

Indian Navy's First Training Squadron (1TS), comprising INS Tir, INS Shardul, INS Sujata, and Indian Coast Guard Ship Sarathi, arrived at Changi Naval Base, Singapore, on 15 Jan 2026. The squadron is on a training deployment to the South East Indian Ocean Region (IOR).

The deployment gains added significance as the year 2026 is being celebrated as the 'Association of South East Asian Nations (ASEAN) – India Year of Maritime Cooperation 2026'.

During the visit, personnel from the Indian Navy and the Republic of Singapore Navy (RSN) will engage in several harbour activities and professional interactions aimed at capability enhancement and augmenting maritime cooperation. A series of structured training exchanges, joint yoga sessions, and sports fixtures between trainees of both the Navies are also planned.

Cultural interactions will feature performances by the Indian Naval Band at prominent public locations in Singapore. The ships will be open for visits by school children during their stay.

On arrival, Dr Shilpak Ambule, High Commissioner of India to Singapore, interacted with the trainees of 1TS. Senior Officer 1TS and Commanding Officers also called on the Commander of the Maritime Training and Doctrine Command (MTDC). Professional experiences were shared during a visit by a team of International Liaison Officers from the Information Fusion Centre.

Day 2 of the visit saw community engagements and interactions with the Republic of Singapore Navy. Visits to the Information Fusion Centre and RSN Museum, friendly sports fixtures, and an outreach activity at Sree Narayana Old Age and Nursing Home were some of the highlights.

The visit reinforces strong maritime partnerships and sustained engagement with Southeast Asian nations in furtherance of India's Act East Policy. It also enhances maritime security cooperation between the two Navies, underscoring India's leadership and commitment to the Indian Ocean Naval Symposium (IONS), while signifying a vital step in strengthening maritime cooperative engagement in line with the vision of *MAHASAGAR* (Mutual and Holistic Advancement for Security and Growth Across Regions).

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Govt is committed to achieving Aatmanirbharta in ammunition manufacturing & make the country a global production hub: Raksha Mantri

Source: PIB Dt. 18 Jan 2026

Raksha Mantri Shri Rajnath Singh has voiced Prime Minister Shri Narendra Modi-led Government's commitment to achieving *Aatmanirbharta* in ammunition manufacturing and make the country a global production hub in the field. Inaugurating the Medium Caliber Ammunition Manufacturing Facility at the Solar Defence & Aerospace Limited in Nagpur, Maharashtra on January 19, 2026, he recalled the time when ammunition shortages hampered the country's defence preparedness with the Government realising the need to become self-reliant in the field.

The facility, inaugurated by Raksha Mantri, is a fully automated plant manufacturing 30mm ammunition which is extensively used by the Indian Army and the Indian Navy. He had also visited the Pinaka Rocket manufacturing facility and flagged-off the first tranche of Guided Pinaka rockets to Armenia.

Commending the contribution of the private sector in making the defence sector *Aatmanirbhar*, Raksha Mantri stated that the nation is steadily marching forward in ammunition production as it is manufacturing quality and reliable products. He made special mention of the handing over of the Multi-Mode Hand Grenade, a fully Indian-made ammunition manufactured by the private sector, to the Indian Army in 2021. He added that Nagastra drones, manufactured by the Solar Group, were successfully used during *Operation Sindoor*, as it accurately struck terrorist targets, thereby proving its strategic capability. He appreciated the development of more advanced versions of Nagastra, exuding confidence that the weapons will prove extremely lethal to the nation's enemies if needed in the future.

Shri Rajnath Singh said that the successful test launch of 'Bhargavastra' Counter Drone System, being developed by the Solar Company, showcases the technological capabilities of the private sector. He added that the exports of Pinaka missiles developed at the facility have begun, demonstrating the capabilities of the

defence industry in further strengthening the export potential of the country. India is no longer just an importer but is rapidly moving towards becoming an exporter, he said.

Raksha Mantri termed *Operation Sindoor* as an example of how important self-reliance is for the nation. He emphasised that wars are becoming increasingly complex, which demands a nation to prepare itself on a war footing. "New methods of warfare are emerging. Wars are no longer confined to borders. Areas such as energy, trade, tariffs, supply chains, technology, and information have also become new dimensions of conflict. The importance of border vigilance and latest weapons and technologies has increased. Irrespective of the nature of war, the need of a robust defence industrial base will always remain. In such a situation, increased private sector's involvement in manufacturing and research & development is the need of the hour," he added.

Shri Rajnath Singh stressed that the Government is focusing on ensuring that the private sector's role in defence manufacturing reaches 50% or more in the coming times. The capabilities and innovations of the private sector clearly demonstrate its full potential, he said, expressing confidence that the goal will soon be achieved. "The Government is making every effort to strengthen the private sector and promote domestic vendors. We have decided to gradually indigenise our platforms, systems, and subsystems. Even for those things that we cannot manufacture, a provision for at least 50% indigenous content has been made. As a result of these efforts, we have been successful in increasing our indigenous content in many areas. This has also boosted the morale of the private sector," he said.

Enumerating the results achieved due to the Government's consistent push towards self-reliance, Raksha Mantri stated that the domestic defence production, which was only Rs 46,425 crore in 2014, has grown to a record approx. Rs 1.51 lakh crore today. He added that over Rs 33,000 crore of this contribution comes from the private sector, indicating that private industries are becoming partners in achieving the goal of *Aatmanirbhar Bharat*. He further said that due to the increasing participation of the private sector, India's defence exports, which were less than Rs 1,000 crore ten years ago, have now reached a record Rs 24,000 crore.

Shri Rajnath Singh pointed out that India possesses a unique and effective blend of both public & private sectors in its defence manufacturing ecosystem, calling it the nation's greatest strength. "We have capable and experienced public sector institutions, along with a strong & rapidly growing private companies. This balance is quite rare. There is a need to deepen this synergy, further enhance the capabilities of the private sector, constantly update them, and provide them with new technology, new opportunities, and new responsibilities, so that they can move forward in tandem with the public sector. The two sectors must complement each other, recognise each other's strengths, and utilise them for the national benefit," he added.

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2215884&reg=3&lang=1

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INDIAN NAVY CONCLUDES JOINT SERVICES MULTI-SPECIALITY MEDICAL CAMP AT THE LAKSHADWEEP ISLANDS

Source: PIB Dt. 18 Jan 2026

The Indian Navy successfully concluded the five-day Joint Services Multi-Speciality Medical Camp across the Lakshadweep Islands on 16 Jan 2026. Conducted at Kavaratti, Agatti, Amini, Androth, and Minicoy islands, the camp reaffirmed the Armed Forces' commitment to delivering quality healthcare and preventive services to remote island communities through seamless inter-services cooperation. The camp was

inaugurated on 12 Jan 2026 (https://www.pib.gov.in/PressReleseDetail.aspx?PRID=2214127) and was strongly supported by the civil administration and healthcare echelons of the Union Territory of Lakshadweep.

The camp witnessed an overwhelming response, 4,719 patients availed specialist and super-specialist consultations. For the first time in Lakshadweep, a medical camp of this scale offered an expanded range of specialists and super-specialists, significantly improving access to advanced healthcare. The team included experts in Neurology, Cardiology, Nephrology, Endocrinology and Gastroenterology, supported by specialists from Medicine, Surgery, ENT, Ophthalmology, Dermatology, Dental Surgery, Radiology and Community Medicine.

Rapid deployment of medical teams and equipment, along with the establishment of fully functional medical facilities on each island, underscored the high level of coordination and jointness among the three Services. Planned airlift and sea lift of personnel and sensitive medical equipment demonstrated effective inter-services synergy.

Comprehensive medical and surgical services were delivered across all islands. A total of 51 general surgical procedures were performed, reducing the need for referrals to mainland hospitals. In ophthalmology, 71 cataract surgeries were conducted, restoring vision for numerous elderly patients. Advanced diagnostics included over 50 endoscopic procedures, more than 50 echocardiographic examinations, and multiple treadmill tests for cardiac evaluation. Radiology services recorded over 250 ultrasound examinations, while more than 100 dental procedures and over 30 minor dermatological procedures were carried out. All services and medicines were provided free of cost.

As a lasting contribution, the Indian Navy donated two ECG machines to healthcare facilities at Agatti and Amini. Extensive Information, Education and Communication (IEC) activities were also conducted, covering preventive health, healthy lifestyle practices, cancer awareness, mental wellness and Basic Life Support (BLS) training.

Widely appreciated by the people of Lakshadweep and the Union Territory administration, the Joint Services Multi-Speciality Medical Camp stood out for its scale, professionalism and tangible impact. By delivering advanced medical care and strengthening preventive health awareness through a unified tri-services effort, the Indian Armed Forces once again reaffirmed their unwavering commitment to the health and well-being of citizens in remote regions of the nation.

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2215820&reg=3&lang=1

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युद्ध का चक्रव्यूह कैसे बनता है, परेड में भारतीय सेना दिखाएगी युद्ध व्यूह प्रारूप

Source: Navbharat Times , Dt. 17 Jan 2026

कैसे बनता है युद्ध का चक्रव्यूह, परेड में इंडियन आर्मी दिखाएगी बैटल एरे फॉर्मेट

Battle Array

■ NBT रिपोर्ट, नई दिल्ली

इस बार गणतंत्र दिवस परेड मे ऑपरेशन सिंदूर की छाप दिखाई देगी। इस बार की थीम है वंदेमातरम की 150वी वर्षगांठ, इसलिए इस थीम के हिसाब से सजावट हो रही है। इस बार परेड मे भारतीय सेना दिखाएगी कि किस तरह युद्ध के मैदान मे तैनाती होती है। परेड के लिए यूरोपियन यूनियन की तरफ से नेवी का एक छोटा दस्ता भी होगा। रक्षा सचिव राजेश कुमार सिंह ने कहा कि इस बार परेड नए फॉर्मेट मे होगी। इंडियन आर्मी अपनी क्षमता को बैटल एरे फॉर्मेट मे दिखाएगी।

गणतंत्र दिवस की इस बार की थीम है वंदेमातरम की 150वी वर्षगांठ

बैटल एरे फॉर्मेट का मतलब होता है कि उस तरह से जिस तरह लड़ाई के दौरान तैनाती होती है। किसी भी जंग मे जब सेना जाती है तो सबसे पहले रैकी एलिमेंट होते हैं ताकि वहां की जानकारी मिल सके, उसके पीछे होते है कॉम्बेट एलिमेंट, जिसमे पहले स्पेशल फोर्स या घातक के सैनिक होते है और फिर पैदल सैनिक। इसके पीछे होती है तोपखाने की ताकत और एयर डिफेंस सहित बाकी इक्विपममेंट। परेड मे भी इसी तरह दिखाया जाएगा। शुरू मे रेकी करते हुए हेलिकॉप्टर भी होंगे, इसमे ऑपरेशन सिंदूर का फ्लैग लगा होगा।

VIP कल्चर खत्म करने के लिए नाम बदले: रक्षा सचिव राजेश कुमार सिंह ने कहा कि इस साल VIP कल्चर खत्म करने के लिए हमने एनक्लोजर के नाम नदियो के नाम पर रखे है और बीटिंग रीट्रीट मे म्यूजिकल इंस्ट्रूमेंट्स के नाम पर। एनबीटी के ये पूछने पर कि एनक्लोजर के नाम बदलने से वीआईपी कल्चर कैसे खत्म होगा, रक्षा सचिव ने कहा कि पहले लोग जहां वी-1, वी-2 एनक्लोजर मे या उसके पास ही बैठना चाहते थे वही अब नदियो के नाम होने से, वे उसी एनक्लोजर मे बैठेगे जो उनके पास होगा। नाम से पता नही चलेगा कि कौन सा एनक्लोजर किसका है। एनक्लोजर के नाम यमुना, ब्यास, ब्रह्मपुत्र, गंगा, रावी, वैगई, पेरियार, गंडक, पेन्नार, नर्मदा, घाघरा, गोदावरी, कृष्णा, महानदी, सिंधु, कोसी, तीस्ता, चंबल, सतलुज, सोन, चिनाब, झेलम और कावेरी जैसी नदियो पर रखे गए है।

PTI

लद्दाख वाले ऊंट और पोनी भी

ईस्टर्न लद्दाख की विषम परिस्थियो मे लॉजिस्टिक सपोर्ट के लिए डबल हंप ऊंट और जांस्कार पोनी का इस्तेमाल होता है। कर्तव्य पथ पर इस बार ये भी दिखाई देगे। ये ऊंट माइनस 20 डिग्री तक आराम से काम कर सकते है और ये 200 किलो तक का वजन उठा सकते है। जांस्कार पोनी मजबूत और सहनशील देशी नस्ल के घोड़े है, जो बेहद कठिन मौसम मे भी कम बीमार पड़ते है। ये माइनस 40 डिग्री तापमान मे भी आराम से अपना काम कर सकते है। भारतीय सेना की रिमाउंट एंड वेटरनरी कोर के दस्ते मे चार रेप्टर्स भी होगे। ये ड्रोन को मार गिराने वाली चील है।

भैरव बटालियन से लेकर रफाल तक

भारतीय सेना की नई लाइट कॉम्बेट बटालियन भैरव भी परेड मे दिखेगी। भैरव बटालियन ऊंचा कदम ताल करेगी। भारतीय सेना के स्काउट्स का भी एक दस्ता होगा। कुल 18 मार्चिंग दस्ते और 13 बैंड होगे। फ्लाईपास्ट मे रफाल फाइटर जेट, सुखोई-30 फाइटर जेट, पी-8आई, सी-130, सी-295, मिग-29, अपाचे अटैक हेलिकॉप्टर, लाइट कॉम्बेट हेलिकॉप्टर, अडवांस्ड लाइट हेलिकॉप्टर, एमआई-17 अलग अलग फॉर्मेशन मे उड़ान भरेगे।

गणतंत्र दिवस

देशभक्ति का जुनून जगाती है यह परेड

गणतंत्र दिवस की परेड से जुड़ी हर भारतीय की अपनी एक कहानी है। हमने अपने रीडर्स से 26 जनवरी की परेड से जुड़े उनके खास अनुभव साझा करने को कहा है। जिस पर हमे रोजाना ढेरो रिस्पॉन्स मिले और उन्ही मे से कुछ चुनिंदा रिस्पॉन्स आज हम यहां छाप रहे है।

'नानी के कंधों पर बैठकर देखी थी परेड'

1965 से 1970 के बीच हम पहाड़गंज मे रहते थे। हमारी नानी मुझे अपने कंधे पर बैठाकर पैदल ही अजमेरी गेट रामलीला ग्राउंड तक गणतंत्र दिवस की परेड दिखाने ले जाया करती थी। वो बचपन की यादे आज भी मन को भावुक कर देती है।
-अजय कुमार गुप्ता

'जीवन का गौरवपूर्ण क्षण था वह दिन'

मै 1981 मे गणतंत्र दिवस परेड का हिस्सा रहा हूं। मै एयर फोर्स कंटिजेंट मे था। उस समय नीलम संजीव रेड्डी देश के राष्ट्रपति और इंदिरा गांधी देश की प्रधानमंत्री थी। इसके पहले और बाद के सालो मे भी दर्शक दीर्घा मे बैठकर यह समारोह लाइव देखा है। बचपन मे सुबह काफी पहले पहुंचकर दर्शक दीर्घा मे स्थान घेर लेते थे। अमेरिका के पूर्व प्रेजिडेंट ओबामा के मुख्य अतिथि बनने के वक्त भी परेड देखने का अवसर मिला।
-कृष्ण कुमार प्रजापत

RDAY लाइव ▶

कर्तव्य पथ पर एक साथ उठते कदम और अनुशासन मे सजी ये पंक्तियां सिर्फ परेड की तैयारी नही, बल्कि गणतंत्र दिवस की यादो की शुरुआत भी है। 26 जनवरी से जुड़ा आपका अनुभव क्या है। क्या आप कभी इस परेड का हिस्सा रहे है या दर्शक दीर्घा मे बैठकर इसे लाइव देखा है? अपनी यादे, किस्से और एहसास हमारे साथ साझा करे।

अपने अनुभव आप हमे 9220747220 पर वॉट्सऐप कर सकते है या फिर nbtreader@timesofindia.com पर मेल कर सकते है। सब्जेक्ट मे RDay जरूर लिखे।

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India defends decision to skip Brics naval drill

Source: The Times of India, Dt. 18 Jan 2026

India defends decision to skip Brics naval drill

'Purely A South African Initiative, Not All Members Took Part'

TIMES NEWS NETWORK

New Delhi: The Indian govt has defended its decision to not participate in the "Brics Naval Exercise", saying it was purely a South African initiative in which not all Brics members took part.

The naval exercise was not a regular or institutionalised Brics activity, said the ministry of external affairs.

"India has not participated in previous such activities. The regular exercise that India is a part of in this context is the IBSAMAR (India-Brazil-South Africa Maritime) exercise that brings together the navies of India, Brazil and South Africa. The last edition of IBSAMAR was held in Oct 2024," said MEA spokesperson Randhir Jaiswal.

The ministry was responding to queries related to India's absence from the "so-called Brics naval exercise". India will hold chairship of Brics in 2026 and external affairs minister S Jaishankar said last week that the grouping of emerging markets and developing economies remained an important forum for greater dialogue and cooperation, and practical responses, taking into account different national priorities and stages of development.

File photo of a Russian vessel arriving at the Simon's Town Naval base ahead of the joint naval exercise in South Africa's Cape Town

The joint exercise held in South African waters included the navies of China, Russia, Iran, Egypt, Indonesia, Saudi Arabia and the United Arab Emirates (UAE). The week-long military wargame took place amid increasing tensions in Iran over possible military strikes on the country following its crackdown on anti-govt protesters.

US President Donald Trump has repeatedly attacked Brics for looking to challenge American economic hegemony by moving away from the US dollar. India, however, maintains that it will not back any BRICS push for "de-dollarisation". Originally comprising Brazil, Russia, India, China and South Africa, Brics expanded in 2024 to include Egypt, Ethiopia, Iran, Saudi Arabia and the UAE, with Indonesia joining in 2025.

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10 महीने में 13 देशों के 18 बंदरगाह तक पहुंचेगी भारतीय नौसेना

Source: Navbharat Times, Dt. 19 Jan 2026

10 महीनों में 13 देशों के 18 पोर्ट तक पहुंचेगी भारतीय नेवी

■ NBT रिपोर्ट, नई दिल्ली

इंडियन नेवी का सेल ट्रेनिंग शिप (पाल वाला जहाज) INS सुदर्शिनी 20 जनवरी को अपने फ्लैगशिप अभियान 'लोकायन-26' पर रवाना होगा। यह 10 महीने का ट्रांसओशेनिक अभियान है, यानी ये महासागरों को पार करते हुए जाएगा। इसके तहत INS सुदर्शिनी 22 हजार से अधिक नॉटिकल मील की यात्रा करते हुए 13 देशों के 18 बंदरगाहों पर जाएगा। इंडियन नेवी के प्रवक्ता कैप्टन विवेक मधवाल ने कहा कि यह अभियान भारत की समृद्ध समुद्री विरासत और 'वसुधैव कुटुम्बकम' की भावना को दुनिया के महासागरों तक ले जाएगा।

'लोकायन-26' पर रवाना होगा नेवी का सेल ट्रेनिंग शिप

इस लंबी समुद्री यात्रा के दौरान INS सुदर्शिनी दो प्रतिष्ठित अंतरराष्ट्रीय टॉल-शिप आयोजनों में भी हिस्सा लेगा। इनमें फ्रांस के एस्केल आ सेते (Escale Ste) और अमेरिका के न्यूयॉर्क में SAIL 250 शामिल हैं। इन आयोजनों में INS सुदर्शिनी भारत की गौरवशाली समुद्री परंपराओं का प्रतिनिधित्व करेगा। इस अभियान के दौरान इंडियन नेवी और इंडियन कोस्ट गार्ड के 200 से अधिक ट्रेनी गहन सेल ट्रेनिंग से गुजरेंगे यानी उन्हें पाल वाले जहाज की समुद्री यात्रा के बारे में व्यावहारिक जानकारियां दी जाएंगी। इसके साथ ही विभिन्न देशों की नेवी के ट्रेनी के साथ संवाद और जॉइंट एक्टिविटी के मौके भी मिलेंगे। जिससे पेशेवर आदान-प्रदान और आपसी मित्रता को बढ़ावा मिलेगा।

मित्र देशों के साथ ट्रेनिंग में भी लेगा हिस्सा: INS सुदर्शिनी इस यात्रा के दौरान मित्र देशों की नेवी के साथ ट्रेनिंग इंटरेक्शन और समुद्री साझेदारी कार्यक्रमों में भी भाग लेगा। इंडियन नेवी के प्रवक्ता के मुताबिक यह पहल समुद्री सहयोग को मजबूत करने और MAHASAGAR के विजन को आगे बढ़ाने की दिशा में अहम है। लोकायन-26 सांस्कृतिक कूटनीति का सशक्त प्रतीक है। नेवी का दूसरा सेल ट्रेनिंग शिप INS सुदर्शिनी 1.40 लाख से अधिक नॉटिकल मील की यात्रा पूरी कर चुका है।

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No decision yet on Su-57 ; HAL awaits Russian team's report on cost

Source: Hindustan Times, Dt. 19 Jan 2026

MAKE IN INDIA

No decision yet on Su-57: HAL awaits Russian team's report on cost

Amrita Nayak Dutta
New Delhi, January 18

A RUSSIAN team studying the feasibility of manufacturing the fifth-generation Su-57 stealth fighter aircraft in India is expected to submit a report on the overall cost that Hindustan Aeronautics Limited (HAL) will incur if both countries decide to proceed with the project, *The Indian Express* has learnt.

According to sources, the cost report, which is expected this month, will provide a clear picture of the quantum of expenditure needed to manufacture the Russian fifth-generation fighter jets in India, including advanced technologies, human resource, infrastructure, and supply chain development. The Russian team, which includes representatives from the Sukhoi Design Bureau among defence entities, had sent a report to HAL around two months ago, highlighting that HAL already has half the infrastructure in place to produce the fifth-generation aircraft in India.

Sources said this became possible because HAL has been producing the Su-30 fighter aircraft. An Inter-Governmental Agreement for licence production of the Su-30MKI in India was signed in December 2000.

HAL's Nashik division houses the final assembly line for Su-30MKI fighters. Its Koraput division looks after the licensed production and overhaul of AL-31FP turbofan engines, while the Strategic Electronics Factory (SEF) in Kasaragod, Kerala, manufactures avionics components for the Su-30MKIs.

The exercise is an initiative of HAL in order to get an estimate of the investments and its capacity if this fighter jet were to be produced in India.

Officials clarified to *The Indian Express* that the government has not yet taken a call on which fifth-generation fighter jet would be acquired from a global defence major if it

E. EXPLAINED

Fifth-generation aircraft leap

Hindustan Aeronautics Ltd already has half the infrastructure in place to produce the fifth-generation aircraft in India as it has been producing the Su-30 fighter aircraft. However, the government has not yet taken a call on which fifth-generation fighter jet would be acquired from a global defence major before its own indigenous fifth-generation fighter jet, the Advanced Medium Combat Aircraft, is finally inducted in the next decade.

Advanced Medium Combat Aircraft, is finally inducted in the next decade.

At a recent event, Air Marshal Ashutosh Dixit, Chief of Integrated Defence Staff (CISC), said there is a gap of about eight to 10 years until India acquires its own fifth-generation aircraft.

"We are thinking right now how that gap (in fighter squadron strength) can be filled. There are various options. I can't list the platform. We are still working that out," he had said, adding that fifth-generation capability was being deliberated upon.

In case India does procure a limited number of squadrons of a fifth-generation fighter jet from a foreign defence major as a stopgap arrangement until the arrival of AMCA, it has two key options: the Russian Su-57E and the American F-35 stealth aircraft. Both were showcased at the Aero India 2025 in Bengaluru last year.

In October last year, Russian Ambassador Denis Alipov had indicated that Moscow was willing to support India's AMCA programme by way of local production of the Su-57. There has been no official word

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स्वदेशी हथियार, कितने तैयार

Source: Dainik Jagran, Dt. 19 Jan 2026

मुद्दा

हां 92% नहीं 8%
क्या लंबे समय के संघर्ष में स्वदेशी रक्षा उद्योग की आपूर्ति निर्णायक साबित होगी?

हां 46% नहीं 54%
क्या केंद्र सरकार रक्षा के क्षेत्र में आत्मनिर्भर होने के जरूरी संसाधनों का आवंटन कर रही है?

मुद्दा से संबंधित अपनी राय, सुझाव और प्रतिक्रिया mudda@jagran.com पर भेज सकते हैं।

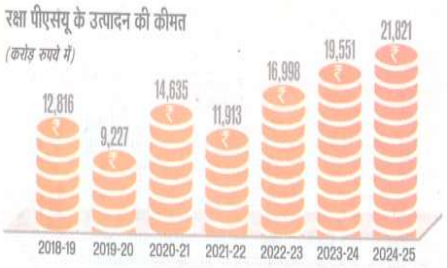
9 दैनिक जागरण नई दिल्ली, 19 जनवरी, 2026

स्वदेशी हथियार, कितने तैयार

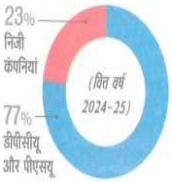
वर्तमान वैश्विक परिदृश्य में वही देश बाहरी हमलों और रक्षा चुनौतियों से प्रभावी तरीके से निपट सकता है, जो हथियारों और रक्षा साजो-सामान के मामले में आत्मनिर्भर हो। प्रधानमंत्री नरेन्द्र मोदी की अगुआई में राजग सरकार ने 2014 में सत्ता में आते ही बात को समझ लिया था और सरकार स्वदेशी रक्षा उद्योग का मजबूत ढांचा तैयार करने पर लगातार जोर दे रही है। आज सेना की गोला-बारूद की 90 प्रतिशत जरूरतें घरेलू रक्षा उद्योग पूरी कर रहा है। हाल में थल सेना प्रमुख जनरल उपेन्द्र द्विवेदी ने इस बात को रेखांकित करते हुए कहा कि युद्ध का स्वरूप तेजी से बदल रहा है और स्वदेशी रक्षा आपूर्ति भविष्य के संघर्ष में निर्णायक भूमिका निभाएगी। विशेषज्ञों का मानना है कि रूस-यूक्रेन युद्ध और इजरायल-इरान संघर्ष ने दिखाया है कि लंबे समय तक चलने वाले संघर्ष में वही देश टिक सकते हैं, जिनका घरेलू उद्योग रक्षा आपूर्ति में सक्षम हो। आपरेशन सिंदूर के दौरान हमें घरेलू रक्षा उद्योग की क्षमताओं और कमियों का अंदाजा हो गया है। मेक इन इंडिया और आत्मनिर्भर भारत का नारा तभी सार्थक होगा, जब हमारी सेनाएं स्वदेशी ड्रोन से लेकर स्वदेशी लड़ाकू विमान तक से लैस हों। इसके लिए बड़े पैमाने पर संसाधनों और शोध एवं विकास के मजबूत ढांचे की जरूरत है। ऐसे समय में जब बांग्लादेश भी भारत के हितों के खिलाफ चीन और पाकिस्तान की खतरनाक धुरी में शामिल होने की राह पर है, हमारी सुरक्षा चुनौतियां अप्रत्याशित रूप से बढ़ गई हैं। ऐसे में स्वदेशी रक्षा उद्योग के वर्तमान इकोसिस्टम और शोध एवं विकास के लिए जरूरी संसाधनों के आवंटन की पड़ताल अहम मुद्दा है...

रक्षा पीएसयू के उत्पादन की कीमत

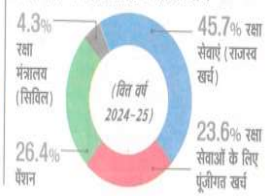
(करोड़ रुपये में)



सेक्टर में रक्षा उत्पादन



रक्षा क्षेत्र में बजट आवंटन का बंटवारा



सेनाओं की 70 प्रतिशत तक जरूरतें पूरी कर रहा है घरेलू रक्षा उद्योग

आपरेशन सिंदूर में दुनिया ने भारत के स्वदेशी हथियारों और एयर डिफेंस सिस्टम की ताकत देखी। विज्ञानियों के दशकों के प्रयास से देश ने यह क्षमता हासिल की है। आज देश का घरेलू रक्षा उद्योग सेनाओं की करीब 70 प्रतिशत जरूरतें पूरा कर रहा है। गोला-बारूद से लेकर एयर डिफेंस सिस्टम, ड्रोन और मिसाइल टेक्नालाजी के मोर्चे पर देश तेजी से अपनी स्थिति मजबूत कर रहा है। लड़ाकू विमान तेजस वायुसेना में शामिल हो चुके हैं। अब इसके उन्नत संस्करण का उत्पादन भी तेज हो गया है और तेजस मार्क-2 की पहली उड़ान भी अगले कुछ वर्षों में प्रस्तावित है। देश स्वदेशी लड़ाकू विमानों और जेट इंजन का मजबूत इकोसिस्टम बनाने के लिए प्रयासरत है। महेंद्र सिंह बता रहे हैं घरेलू रक्षा उद्योग की वर्तमान स्थिति और भविष्य की संभावनाओं के मोर्चे पर हम कहां खड़े हैं।

स्वदेशी होगा पांचवीं पीढ़ी का लड़ाकू विमान

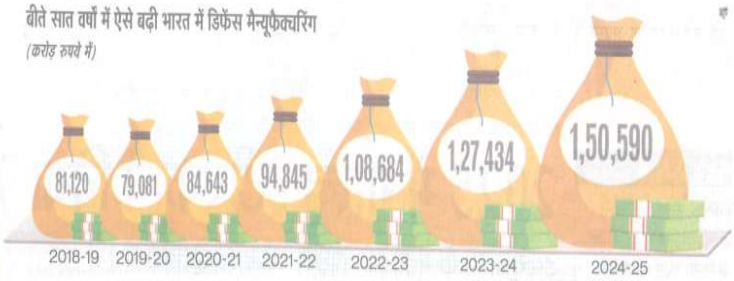
₹10,000 करोड़ पांचवीं पीढ़ी के विमान के विकास के लिए मंजूर किए हैं केंद्र सरकार ने

2035 तक बड़े पैमाने पर वायुसेना के लिए शुरू हो सकता है उत्पादन

- रटेल्थ क्षमता से लैस पांचवीं पीढ़ी का लड़ाकू विमान बना रहा है भारत, खत्म होगी आयात पर निर्भरता

बीते सात वर्षों में ऐसे बढ़ी भारत में डिफेंस मैन्यूफैक्चरिंग

(करोड़ रुपये में)



डीआरडीओ बना रहा है भविष्य के हथियार

सिस्टम	टाइप	खासियत	वर्तमान स्थिति
हाइपरसोनिक ग्लाइड मिसाइल	रणनीतिक हमले के लिए	मैक 5 से अधिक गति	अंडर डेवलपमेंट
ब्रह्मोस एनजी	सुपरसोनिक क्रूज मिसाइल	हवा से जमीन पर करती है हमला	चल रहे हैं परीक्षण
ब्रह्मोस-2	हाइपरसोनिक	1500 किलोमीटर रेंज	2026-27 में परीक्षण
अस्त्र एमके-2, एमके-3	एयर टू एयर	बियांड विजुअल	ट्रायल जारी
रूद्रम-2/4	एयर टू ग्राउंड	एंटी रेडिएशन	पाइपलाइन में

भारत को अभेद्य बनाएगा सुदर्शन चक्र

- हवाई हमलों को रोकने और जवाबी हमले के लिए विज्ञानी तैयार कर रहे सुदर्शन चक्र
- एयर डिफेंस सिस्टम और दूसरी प्रणालियों का नेटवर्क तैयार करेगा मल्टी लेयर एयर डिफेंस
- 2035 तक देश को हमलावर लड़ाकू विमान, मिसाइलों और ड्रोन के खिलाफ होगी सुदर्शन चक्र की तैनाती

चुनौतियां

- राष्ट्रीय सुरक्षा की चुनौतियों से निपटने के लिए पर्याप्त संसाधनों का आवंटन न होना
- डीआरडीओ के प्रोजेक्ट को समय से मंजूरी न मिलना, फंड आवंटन में देरी
- सेनाओं और डीआरडीओ के बीच आपसी समन्वय और भरोसे की कमी

*

रक्षा क्षेत्र में बड़ी छलांग : **114** राफेल खरीदने को हरी झंडी

Source: Dainik Jagran, Dt. 17 Jan 2026

रक्षा क्षेत्र में बड़ी छलांग: 114 राफेल खरीद को हरी झंडी

नई दिल्ली, आइएएनएस: देश की वायु रक्षा क्षमताओं को सुदृढ़ करने की दिशा में बड़ा कदम उठाते हुए रक्षा खरीद बोर्ड (डीपीबी) ने फ्रांसीसी कंपनी डसाल्ट से 114 राफेल लड़ाकू विमान खरीदने के प्रस्ताव को मंजूरी दे दी है। रक्षा सूत्रों के अनुसार अब यह प्रस्ताव रक्षा मंत्री राजनाथ सिंह की अध्यक्षता वाली रक्षा अधिग्रहण परिषद (डीएसी) के समक्ष रखा जाएगा, जिसके बाद पीएम मोदी की अध्यक्षता वाली सुरक्षा मामलों की कैबिनेट समिति से अंतिम स्वीकृति मिलने की उम्मीद है।

भारतीय वायु सेना ने पिछले वर्ष रक्षा मंत्रालय को 114 राफेल विमानों की आवश्यकता संबंधी औपचारिक प्रस्ताव सौंपा था। सूत्रों का कहना है कि भारत और फ्रांस के बीच इस सौदे पर अगले महीने तक अंतिम समझौते पर हस्ताक्षर हो सकते हैं। यह सौदा अंतर-सरकारी समझौते (जी-टू-जी) के तहत होगा, जिससे बिना किसी बिचौलिए के सीधी खरीद और पारदर्शी डिलीवरी सुनिश्चित होगी।

- रक्षा खरीद बोर्ड की मंजूरी के बाद प्रस्ताव डीएसी व कैबिनेट समिति के पास जाएगा
- वायु सेना ने रक्षा मंत्रालय को भेजा था प्रस्ताव, अगले माह फ्रांस से अंतिम समझौता संभव

उल्लेखनीय है कि पिछले वर्ष अप्रैल में भारत ने नौसेना के लिए 63 हजार करोड़ रुपये की लागत से 26 राफेल-मरीन लड़ाकू विमानों की खरीद का समझौता किया था। इसमें 22 सिंगल-सीटर और चार ट्विन-सीटर ट्रेनर विमान शामिल हैं, जिनकी आपूर्ति 2031 तक पूरी होने की संभावना है।

सेना ने अग्निशमन रोबोट खरीद का किया समझौता : आत्मनिर्भर भारत और विकसित भारत के लक्ष्य को आगे बढ़ाते हुए भारतीय सेना ने 'इनोवेशन फार डिफेंस एक्सीलेंस' (आइडेक्स) के तहत एक महत्वपूर्ण खरीद समझौते पर हस्ताक्षर किए हैं। सेना ने बीते मंगलवार को स्वदेशी एम्प्रेसा प्राइवेट लि. के साथ अग्निशमन रोबोट की खरीद का करार किया। यह करार भारतीय सेना के कैपेबिलिटी डेवलपमेंट निदेशालय में संपन्न हुआ।

यह रोबोट मूल रूप से भारतीय नौसेना के लिए आइडेक्स ढांचे के तहत विकसित किया गया था, लेकिन सिंगल स्टेज कंपोजिट ट्रायल के प्रविधान का उपयोग करते हुए सेना ने पहली बार किसी सहयोगी सेवा के लिए विकसित उत्पाद की सीधी खरीद की है। अग्निशमन रोबोट एक ठोस और बहुउपयोगी मानव रहित ग्राउंड व्हीकल है, जो आग जैसी खतरनाक परिस्थितियों में सुरक्षित दूरी से कार्य कर सकता है। इससे आपात स्थितियों में अग्निशमन कार्य के दौरान जवानों की सुरक्षा में उल्लेखनीय वृद्धि होगी।

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Pvt defence sector driving India's arms export push: Rajnath

Source: The Tribune, Dt. 18 Jan 2026

Defence Minister Rajnath Singh during the inauguration of a fully automated ammunition manufacturing facility in Nagpur on Sunday. ANI

Pvt defence sector driving India's arms export push: Rajnath

NAGPUR, JANUARY 18

Wars have become increasingly complex and are no longer limited to territorial borders, with energy, trade, tariffs, supply chains, technology and information now forming part of new battlefronts, Defence Minister Rajnath Singh said here on Sunday.

Addressing the inaugural ceremony of a medium-calibre ammunition facility at Solar Defence and Aerospace Limited, Singh said there was a time when defence production was confined to the public sector and private participation was scarcely imagined.

He flagged off the first tranche of guided Pinaka rockets manufactured by the Solar Group for export to Armenia.

The private sector had the capacity and potential, but its participation had not been at the desired scale, he said. There were challenges and doubts over private defence production as India moved towards "atmanirbharta", but the present government opened up the sector by changing policies and simplifying processes, having full faith in private industry's potential.

"This is resulting in better quality, improved timelines, higher productivity and faster delivery. Our defence ecosystem has strengthened significantly. The scientific temperament and technology-driven approach developed by the private defence sector is laudable," he said.

Singh said the private sector was now ahead of the public sector in research and development. India is moving rapidly towards becoming a major arms exporter, he added.

Recalling earlier shortages in ammunition supply, Singh said the government had achieved self-reliance in the sector, and lauded the Solar Group's defence production capabilities, including Pinaka missiles and the Nagastra drone used in Operation Sindoor.

The government's ambition was to make India a global hub for ammunition production, he said.

"Wars are becoming increasingly complex and their intensity is rising continuously. In such a scenario, war preparedness must be on a war footing. The nature of warfare is changing rapidly, with new methods emerging that were never part of traditional war," Singh said.

"Wars are now not limited to borders but its effect are felt directly by the common public. Energy, trade, tariff, supply chains, technology and information have become the new dimensions of conflict," he added. — PTI

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Several military equipment projects with japan under consideration, says MEA

Source: The Tribune, Dt. 18 Jan 2026

Several military equipment projects with Japan under consideration, says MEA

AJAY BANERJEE
TRIBUNE NEWS SERVICE

NEW DELHI, JANUARY 17

India and Japan on Friday discussed several defence equipment projects, however, progress hinges upon Tokyo's easing of export regulatory controls.

"Defence cooperation with Japan is an important element, and there are several projects under consideration," MEA spokesperson Randhir Jaiswal had said yesterday when asked about defence-related discussion between EAM S Jaishankar and his Japanese counterpart Toshimitsu Motegi.

Sources said Parliament of Japan lays down strict rules for the transfer of technology, and India seeks easing of this regulatory framework as Japan holds cutting edge technology in submarines, aero-engines and fighter jets, all of which India needs, and quickly.

In a statement on the Jaishankar-Toshimitsu talks, the MEA on Saturday said the two ministers reviewed the entire gamut of multi-faceted relations, including supply chain resilience in critical sectors, investment, trade, technology and innovation, and defence.

In the past decade, there have been two failed military equipment proposals – one on making conventional submarines and other on a sea-plane.

Now, the sea plane is back in focus. Last week, the MoD asked international companies to supply four specialised amphibious planes that can land and take off from sea. The MoD wants to take four such aircraft on lease for four years. The 'US-2' plane by the Japanese ShinMaywa Industries is in reckoning for this leasing.

TOKYO TO INVITE 500 AI PROFESSIONALS

- Japan plans to invite 500 skilled AI professionals from India by 2030 to promote joint research and innovation, officials said.
- As part of the new "Japan-India AI Cooperation Initiative", both sides agreed to set up a "Japan-India AI Strategic Dialogue" to facilitate research partnerships, academic exchanges & tech collaborations in the field.

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Want India to be global ammo hub ; Rajnath

Source: The Economic Times , Dt. 19 Jan 2026

FLAGS OFF PINAKA ROCKETS EXPORT TO ARMENIA

Want India to be Global Ammo Hub: Rajnath

Defence minister inaugurates Medium Caliber Ammunition Manufacturing Facility at Solar Defence & Aerospace Limited on Sunday – IANS

Manu Pubby

Nagpur: India is looking at becoming a global hub for ammunition production, defence minister Rajnath Singh said on Sunday, even as he made a strong case for the private sector to drastically increase capacity to meet both domestic and export demands.

The minister, who flagged off the first export consignment of Guided Pinaka rockets, said that the Indian private sector should increase its share in national defence production to at least 50 per cent, noting that private companies have demonstrated flexibility and agility, especially when it comes to research and development.

"We have to move forward with a spirit of cooperation, not competition. Our endeavour is to ensure that both the public and private sectors move forward with this spirit, complement each other, recognise each other's strengths and utilise them in the national interest," Singh said.

STAY PREPARED

Given the current geo-political situation, India needs to remain prepared for all eventualities: Defence minister

The minister was speaking after flagging off a consignment of Pinaka rockets from Solar Defence and Aerospace (SDAL) to Armenia, the first export customer for the long-range system.

He also commended the private sector for accelerating Indian defence exports. "As a result of the increasing participation of the private sector, India's defence exports, which were less than ₹1,000 crore ten years ago, have today increased to a record ₹24,000 crore," Singh said, adding that the indigenous Nagastra loitering munition supplied by SDAL was used effective for targeted strikes during Operation Sindoor.

"This drone proved its strategic capability by accurately striking terrorist targets harbouring enemies. I am confident that these weapons will prove extremely lethal for our enemies, if needed, in the future as well," he said.

Singh said that given the current geopolitical situation, India needs to remain prepared for all

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Mega Rafale deal with france gets key nod

Source: The Economic Times , Dt. 18 Jan 2026

AHEAD OF PRESIDENT MACRON'S VISIT

Mega Rafale Deal With France Gets Key Nod

Additional fighter jets likely to meet shortfall in IAF; Will head to high -powered DAC next

Manu Pubby

New Delhi: A mega deal for acquiring additional Rafale fighter jets has moved ahead, with a key clearance given by the defence ministry. The air force's proposal for 114 additional aircraft will now head to the Defence Acquisition Council (DAC), the top decision making body within the ministry of defence.

Sources said the statement of case moved by the air force, which includes the operational necessity of the aircraft, the indigenisation elements, categorisation and financial implications, has been given a go ahead.

In the next step, the DAC will examine the case and accord the acceptance of necessity (AoN), which will pave the way for deeper technical and commercial negotiations. The Indian side is expected to negotiate hard for technology transfer, increasing the indigenous content on the aircraft, seeking assurances on integration of self-developed weapons and lowering the acquisition cost.

Given the scale of the deal—if all 114 fighters are bought, it will be valued at well over €35 billion—final approvals for signing will be granted by the Cabinet Committee on Security (CCS). ET was the first to report that the mega deal is finally moving ahead, gaining steam in the run up to French President Emmanuel Macron's scheduled visit to India next month.

India has bought 36 Rafale jets for the Indian Air Force and has placed an order for 26 Rafale Marines for the Indian Navy. The need for additional jets has been felt as legacy Russian-origin platforms are reaching the end of their service life and are being retired. The indigenous Tejas light combat aircraft (LCA) has been ordered—contracts for 180 of the Mk1a version have been placed—but a requirement for a medium multi-role fighter jet still exists.

If signed, the project will bring critical technologies to the Indian industrial ecosystem. Tata Advanced Systems Limited (TASL) is already setting up a dedicated manufacturing facility at Hyderabad to make the four main parts of the fuselage for Indian requirements as well as global orders given to Dassault. The facility is expected to deliver the first units by FY28 and would have a capacity to produce 24 fuselages annually.

In addition, a French jet engine production plant is being planned at Hyderabad by Safran and a maintenance, repairs and overhaul (MRO) hub is being set up by Dassault at Jewar.

DRONES ON DISPLAY

New Unit 'Bhairav' at R-Day Parade

New Delhi: The army will showcase its newly raised units at the Republic Day parade this year, with several indigenously manufactured weapon systems also slated to take part in the celebrations. Troops from the army's newly raised 'Bhairav' battalion will take part in the march past and newly inducted systems like indigenous drones will also be showcased.

The parade this year will also include a small naval marching contingent from the European Union.–OPB

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Science & Technology News

Can datacentres in orbit solve for AI Models' energy demand?

Source: The Hindu, Dt. 18 Jan 2026

Can datacentres in orbit solve for AI models' energy demand?

Google's Project Suncatcher is experimenting with a novel approach: putting datacentres servicing AI workloads in low-earth orbit and letting them feed on solar energy; ISRO is also reportedly studying space-based datacentre technology

Aroon Deep

Datacentres are a growing share of global electricity consumption, and artificial intelligence is driving those power demands up. This is because AI datacentres use dense clusters of graphics processing units (GPUs) for running machine learning workloads, both when training large language models and deploying them. Since the generative AI boom shows no sign of slowing down, datacentres are guzzling more energy than ever, with whatever electricity sources are available. This has pushed Google Research to explore a literally outlandish prospect: launching datacentres into space and running them entirely on solar energy.

Google Research is so confident about this idea that its researchers have already chalked out a few of the main technical challenges and potential solutions.

Traditional datacentres have been driven primarily by growing consumption of content. In markets like India, that's mainly video, and as a result the bandwidth a datacentre needs on its own premises has theoretically been the same as that it is delivering to, or receiving from, the outside world.

AI datacentres are different. They need high bandwidth not between the infrastructure they host and the users they serve but within the datacentre itself, and with others situated nearby. For instance, Microsoft's AI datacentre complexes, called Fairwater, have petabit-per-second links between facilities. That is 10 lakh gigabits per second, a million times faster than the best consumer grade internet connection typically offered in Indian metros.

That kind of densely networked architecture is also important for datacentres in space. Since most of the bandwidth would be used for the distributed workloads across multiple satellites, the downlink bandwidth with ground stations is not nearly as important. An analogy is available closer to home: ChatGPT needs these superfast connections in its own infrastructure, but all the user needs the bandwidth for is the query they send and the response they receive.

Project Suncatcher proposes a constellation like Starlink's, but instead of being an evenly spread swarm blanketing the earth, the equipment architecture would rely on densely choreographed clusters, with each satellite no more than a few kilometres from its neighbours, while following an orbit that would always maintain a line of sight with the sun. This combined with technologies like multiplexing, which allows more data to be packed into a single radio beam, would enable the satellites to theoretically distribute their work while having enough power to operate.

Of course, there are many other challenges, and Google is working its way through. One obvious issue is how solar radiation might affect the tensor processing units over years of operation. "While the high bandwidth memory (HBM) subsystems were the most sensitive component, they only began showing irregularities after a cumulative dose of 2 krad(Si) – nearly three times the expected (shielded) five year mission dose of 750 rad(Si)," Google researcher Travis Beals wrote in a post last November about Suncatcher.

"No hard failures were attributable to total ionizing dose up to the maximum tested dose of 15 krad (Si) on a single chip, indicating that Trillium TPUs are surprisingly radiation-hard for space applications."

But datacentres have to be maintained all the time, and once equipment is in orbit, there's no cheap way to reach space for troubleshooting. Another "significant engineering challenge" is thermal management: While liquid cooling is practical in terrestrial datacentres, those in space are going to be blasted with solar energy all the time and have to dissipate heat in a vacuum.

Perhaps the greatest challenge is economics. For space-based datacentres to be feasible, the cumulative cost of researching their technologies, placing clusters in space, and conducting fresh launches to replace individual satellites that have stopped working must together be competitive with the price a firm pays to work with technology that's already on the ground.

Google says satellite launch prices will have declined to $200 per kilogram by the mid-2030s and that power savings due to the design of the architecture could lead to a compelling business case. Time will tell if Google – or indeed ISRO, which is also reportedly studying space-based datacentres – will be able to hit all these technological and economic targets while keeping pace with advancements for ground-based datacentres. Microsoft Natick, which tried underwater datacentres to make cooling their systems easier, ultimately abandoned the experiment in spite of its promise.

This said, scepticism about the viability and usefulness of satellite technologies tends to not age very well. Few could have predicted that Starlink would be able to reach the scale and performance it boasts today when SpaceX launched its very first test satellites in 2019.

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AI in orbit

Google's Project Suncatcher proposes a constellation like Starlink's, but relying on densely choreographed clusters

- Artificial intelligence's (AI) rising **energy** demands have pushed Google to explore solar-powered datacentres located in space
- Its Project Suncatcher proposes **dense** satellite clusters that maintain constant line of sight with the sun to run on solar power
- As with terrestrial AI facilities space-based datacentres require high **internal bandwidth** rather than high downlink speed
- Google has found that its chips can resist radiation well, although **cooling** them remains a significant engineering hurdle
- Economic feasibility depends on launch costs dropping significantly to compete with ground-based technology **prices**

While challenges remain, past successes like Starlink suggest dismissing space technology is often unwise

Heat is on: A datacentre in space will be blasted with solar energy all the time and have to dissipate heat in a vacuum. CREATED WITH NANO BANANA PRO

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AI Brainmapping , robotic dogs showcase depth of indian startups at New Delhi event?

Source: The Hindu, Dt. 18 Jan 2026

AI brain mapping, robotic dogs showcase depth of Indian startups at New Delhi event

RINKU BEHERA
TRIBUNE NEWS SERVICE

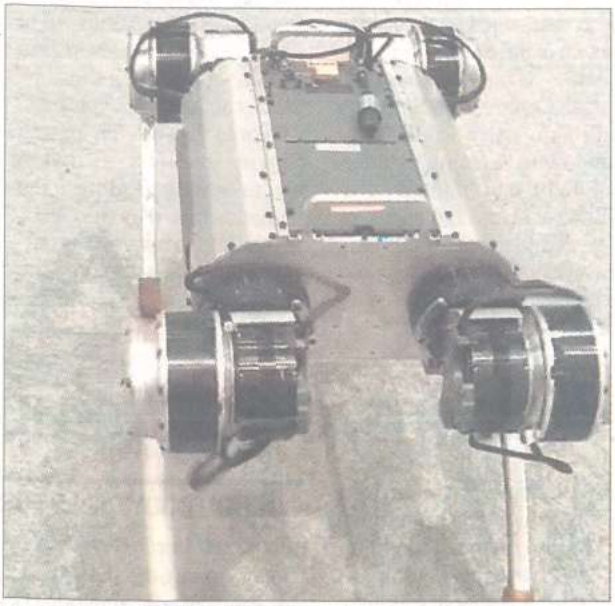
NEW DELHI, JANUARY 18

As the startup ecosystem continues to grow in India, they are increasingly making direct contribution to nation building through technological advancements.

Some key areas that have seen significant breakthroughs are artificial intelligence (AI)-powered brain mapping and advanced robotics.

Two such innovations — BrainSightAI's neuroscience platform VoxelBox and General Autonomy's quadruped robotic dog "PARAM" — highlight the growing depth and diversity of the startup ecosystem which was on display during events marking National Startup Day in New Delhi.

Founded in 2019 by Laina Emmanuel and Dr Rimjhim Agrawal in Bengaluru, BrainSightAI is making strides in neuroscience through its flagship product, VoxelBox. The platform uses AI to generate advanced maps of the human brain, helping neurosurgeons and clinicians make informed decisions.



A robotic dog developed by a Bengaluru-based startup.

Explaining the technology, Emmanuel said VoxelBox maps the brain much like Google maps charts a city.

"We create a traffic, road and a structural map of an individual's brain. This is used by neurosurgeons for precise planning before surgeries," she said.

The platform enables advanced neuro-navigation using a 12-minute resting scan. It generates visually rich reports highlighting critical functional networks and tracts around brain lesions.

VoxelBox focuses on connectomics, or the detailed mapping of functional connections in the brain. According to Emmanuel said that by analysing these patterns, doctors can identify markers for conditions such as dyslexia, Attention Deficit Hyperactivity Disorder (ADHD) and psychiatric disorders such as schizophrenia and bipolar disorder. The company recently commercialised VoxelBox, and it is now being used in over 80 hospitals.

Meanwhile, General Autonomy, another Bengaluru-based startup, is making headlines for its robotic dog.

Christened PARAM, the indigenous robotic dog is designed for versatility and durability, and can operate in challenging and hazardous environments where human intervention might prove to be risky. Company representatives said PARAM can be deployed for a wide range of operations, including search and rescue, firefighting, defence, inspection of public infrastructure and security at public events.

They said PARAM is also suited for crowd monitoring during mega events. It has an eight-hour battery life, enabling operations in extreme conditions, and can run at speeds of up to 15 km per hour.

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What happened to ISRO's PSLV-C62 Misssion ?

Source: The Hindu, Dt. 18 Jan 2026

What happened to ISRO's PSLV-C62 mission?

What did ISRO chairman V. Narayanan state about the mission? How did Thailand's space agency GISTDA respond? Are Failure Analysis Committees standing bodies within the ISRO? Has the FAC report of the PSLV-C61 mission been released in the public domain?

Vasudevan Mukunth

The story so far:

On January 12, the Indian Space Research Organisation's (ISRO) PSLV-C62 mission lifted off from Sriharikota carrying the EOS-N1 satellite along with 15 co-passenger satellites. Within minutes, ISRO said the mission had "encountered an anomaly during end of the PS3 stage", and that a detailed analysis was initiated.

What was the anomaly?

In a televised briefing after the launch, ISRO chairman V. Narayanan described what mission control was seeing: that performance was "as expected" up to near the end of the rocket's third stage, called PS3, then that there was increased "disturbance in the vehicle roll rates", followed by a deviation in the flight path. In other words, towards the end of the third stage, the rocket was spinning uncontrollably, enough for it to not be able to continue on its planned path. As of January 16, ISRO hasn't published a statement about the root cause of the mishap.

Following the incident, Thailand's space agency GISTDA, whose THEOS-2A satellite was on board PSLV-C62, said a malfunction late in the third stage caused an attitude-control abnormality and the vehicle deviated from its trajectory, preventing the rocket from deploying the satellites it was carrying. GISTDA also said the rocket and satellites were expected to fall back and burn up over the southern Indian Ocean. The anomaly resembled the events preceding the failure of the PSLV-C61 mission on May 18, 2025.

The mission's primary payload was EOS-N1, a surveillance satellite from the Defence Research and Development Organisation

Grave error: ISRO's PSLV-C62 carrying the EOS-N1 lifts off from the Satish

What happened to PSLV-C61?

ISRO's PSLV-C61 mission was carrying the EOS-09 satellite. The rocket failed after the first two stages, with the third stage not performing nominally. ISRO noted a drop in chamber pressure in the third-stage motor case during the PS3 operation, after which it said the mission "could not be accomplished".

Based on what has been reported publicly so far, both the C62 and the C61 missions suffered decisive anomalies on PS3 after a nominal early ascent and neither could deploy their payloads into the designated orbit (with a qualification for the KID payload). In C62, the main symptom was a "roll rate disturbance" late in the PS3 stage operation; in C61, the symptom was a chamber-pressure drop in the PS3 motor casing.

ISRO's initial communications in both cases also stressed that an anomaly had occurred and that analysis was underway, but it did not publish a detailed list of corrective actions it would have to take. After the C61 mission failed, Dr. Narayanan constituted a Failure Analysis Committee (FAC) to look into the causes of the mishap. The FAC submitted its report to the Prime Minister's Office in mid-2025.

What does the FAC do?

The FAC is not a standing body of experts within ISRO but instead an entity the ISRO chairman constitutes in the event of a major incident. Its responsibility is to reconstruct the chain of events leading up to the failure using telemetry and subsystem data and in conversation with people involved in that mission. It's expected to identify the causes, and recommend corrective action before the vehicle is cleared for a 'return to flight'.

The Committee members include experts within ISRO as well as relevant experts from academia. It has also been known to include former ISRO chairmen. The FAC submits its final report to the Indian government. The ISRO chairman is Secretary to the Department of Space, which functions directly under the PMO.

The aftermath of the GSLV-F10 mission provides an instructive window into the FAC's efforts. After that mission failed in 2021, here's an excerpt of what the FAC found: "The FAC concluded that the lower liquid hydrogen tank pressure at the time of cryogenic upper stage

the fuel booster turbo pump, leading to mission abort command and subsequent failure of the mission."

Where is the PSLV-C61 FAC report?

Although the PSLV-C61 FAC submitted its report to the PMO, the PMO hasn't cleared it for public release yet. Independent experts criticised the decision to withhold it after PSLV-C62 also suffered an anomaly in its third stage. ISRO has also not said whether it has constituted an FAC for the C62 mission, although a short statement on its website says "a detailed analysis has been initiated". On November 15, 2025, during an unrelated lecture, Vikram Sarabhai Space Centre director A. Rajarajan had attributed the loss of the PSLV-C61 mission to a "slight manufacturing error".

That said this isn't the first time details of the FAC's findings of a mishap have been withheld. Previous instances include the PSLV-C39 mission in 2017. ISRO has also been terse about the issues leading up to the underperformance of the NVS-02 satellite.

Earlier, even when the FAC report hadn't been released into the public domain, ISRO had issued statements with detailed summaries of the FAC's findings, for example, after the GSLV-F10 mission in 2021 and the GSLV-F02 mission in 2006. The aftermath of PSLV-C61 is a break from the past in this sense as well, since no such statements have been issued.

What happened to satellites on PSLV-C62?

The mission's primary payload was EOS-N1, a surveillance satellite from the Defence Research and Development Organisation. The co-passengers comprised payloads involving Thailand, the U.K., Nepal, France, Spain, and Brazil, plus seven satellites from Indian enterprises.

The PSLV has failed four times so far, but PSLV-C62 was the first time it failed while carrying customer satellites provided by Indian and foreign entities. The mission had been facilitated by ISRO's commercial arm, NewSpace India, Ltd. While the ISRO didn't say whether the mission had failed after the anomaly on January 12, the statement from Thailand's GISTDA suggested that the rocket's remaining stages and the payloads would fall back down towards the earth and burn up.

The KID payload was a reentry demonstrator – a device designed to fall back down from orbit and splash into the southern Pacific Ocean. In a statement released after January 12, Orbital Paradigm, its Spain-based co-developer, said KID had transmitted "off-nominal" data for about three minutes.

GISTDA said its THEOS-2A satellite had been insured. The Indian private sector payloads onboard PSLV-C62 reportedly hadn't been insured, so the cost of the loss would have been

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छात्रों ने अंतरिक्ष की सैर का रोमांचक अनुभव, वीआर थिएटर का उद्घाटन

Source: Punjab Kesari, Dt. 18 Jan 2026

छात्रों ने लिया अंतरिक्ष की सैर का रोमांच अनुभव, वीआर थिएटर का उद्घाटन

नई दिल्ली, (पंजाब केसरी): जैसे ही मैंने हेडफोन लगाया और चश्मा लगाया नेशनल साइंस सेंटर का शोर अचानक गायब हो गया। हमें ऐसा महसूस हुआ मानों जैसे हम किसी स्पेसक्राफ्ट के काकपिट में बैठे हो और मेरी कुर्सी अंतरिक्ष की लहरों के साथ धीरे- धीरे तैर रही हो। पृथ्वी के चारों ओर घूमने का अनुभव छात्र कभी नहीं भूल सकते। यह उत्साह दिल्ली सहित एनसीआर के विभिन्न स्कूलों से आए छात्राओं ने कहा। भैरो मार्ग स्थित नेशनल साइंस सेंटर में शनिवार को अत्याधुनिक वर्चुअल रियलिटी (वीआर) थिएटर का शुभारंभ अंतरिक्ष यात्री व ग्रुप कैप्टन शुभांशु शुक्ला ने किया।

इस दौरान भारतीय अंतरिक्ष यात्री और एक्सियम- 4 मिशन के पायलट ग्रुप कैप्टन शुभांशु शुक्ला ने 22 स्कूलों के लगभग 400 छात्रों के साथ संवाद किया और अपने मिशन के अनुभवों को साझा करते हुए विद्यार्थियों को बताया कि अंतरिक्ष में जीवन और काम करना बहुत चुनौतीपूर्ण और रोमांचक होता है। ऐसे भविष्य की खोज या मिशन में युवाओं की भूमिका सबसे महत्वपूर्ण है। अंतरिक्ष विज्ञान और तकनीक के क्षेत्र में करियर बनाना राष्ट्र निर्माण का हिस्सा है। संवाद के दौरान छात्रों ने शुभांशु शुक्ला से अंतरिक्ष में सोने, खाने और अन्य गुरुत्वाकर्षण (माइक्रोग्रैविटी)

19 वीआर स्टेशनों में बैठ कर सकेंगे अंतरिक्ष की सैर

इस अवसर पर नेशनल साइंस सेंटर के नोडल अधिकारी कैलाश चंद्र ने बताया कि इस नए थिएटर में हाई-एंड वीआर हेडसेट और मोशन-सक्षम सीटों का इस्तेमाल किया गया है, जो दर्शकों को अंतरराष्ट्रीय अंतरिक्ष स्टेशन के भीतर होने का जीवंत अहसास कराता हैं। यहां कुल 19 वीआर स्टेशन हैं, जहां दर्शक हिंदी या अंग्रेजी भाषा में 5 मिनट की फिल्म देख सकते हैं। नोडल अधिकारी ने बताया कि फ्राम अर्थ टू आर्बिट, एक्सप्लोरिंग स्पेस टुगेदर प्रदर्शनी भी लगाई गई। 30 पैनलों वाली इस प्रदर्शनी में भारत की प्राचीन खगोल विज्ञान परंपरा से लेकर इसरो की आधुनिक उपलब्धियों को दर्शाया गया है।

के प्रभावों को लेकर सवाल भी पूछे। वहीं, अभिभावकों ने भी बच्चों में वैज्ञानिक सोच विकसित करने के लिए विशेषज्ञों से मार्गदर्शन लिया। इसरो के ग्रुप डायरेक्टर अनुराग कुमार सिन्हा ने बताया कि भविष्य के मिशनों में ह्यूमनाइड (रोबोट) अंतरिक्ष में भेजे जाएंगे जो अंतरिक्ष यात्रियों के रिप्लेसमेंट नहीं होंगे बल्कि उनके सहायक (काप्लीमेंट) होंगे।

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