

Monthly Defence Current Affairs

June 2025

Trials of Next-Gen Defence Technologies

- The Indian Army is currently undertaking extensive Capacity Development Demonstrations at key locations across the country, including the Pokhran Field Firing Ranges, Babina Field Firing Ranges, and Joshimath, with dedicated Air Defence equipment demonstrations also scheduled at Agra and Gopalpur.
- These field trials are being conducted under near-combat conditions, integrating electronic warfare simulations to assess the performance of cutting-edge defence systems rigorously.
- **Key platforms undergoing evaluation include:**
 - Unmanned Aerial Systems (UAS)
 - UAV Launched Precision Guided Munition (ULPGM)
 - Runway Independent (RWI) Remotely Piloted Aerial Systems (RPAS)
 - Counter-UAS Solutions
 - Loitering Munitions
 - Specialised Vertical Launch (SVL) Drones
 - Precision Multi Munition Delivery Systems
 - Integrated Drone Detection and Interdiction System (IDDIS)
 - Low Level Light Weight Radars
 - VSHORADS (Next Generation) IR Systems
 - Electronic Warfare (EW) Platforms
- Through these evaluations, the Indian Army aims to strengthen its technological edge, enhance operational readiness, and reaffirm its commitment to indigenous innovation and self-reliance in defence capability development.



Lt Gen Dinesh Singh Rana Takes Over as CINCAN

- Lt Gen Dinesh Singh Rana assumed charge as the 18th Commander-in-Chief of the Andaman & Nicobar Command (CINCAN) on June 01, 2025.
- The Andaman and Nicobar Command (ANC), based at Sri Vijaya Puram, is India's first and only joint services operational command, integrating the Army, Navy, Air Force and Coast Guard to safeguard national interests in the strategically vital Indian Ocean Region.
- Lt Gen Rana was commissioned into the 10th Battalion of The Garhwal Rifles on December 19, 1987, and later had the honour of commanding the same battalion. A graduate of the NDA, Khadakwasla, and a postgraduate of the DSSC, Wellington, he is also an alumnus of the NDC, New Delhi; Centre for National Defence Studies, Madrid, Spain; and the National Defense University, USA.



Ukraine's Op Spider Web

- India signed a **USD 5.43 billion** deal with Russia in 2018 for five squadrons of the S-400 Triumf missile system, a state-of-the-art air defence platform capable of engaging multiple aerial threats at long ranges. Three squadrons have already been delivered.
- Ukrainian special forces carried out simultaneous strikes across the length of the Russian Federation, striking air bases and damaging or destroying 41 Russian strategic bombers while they were on the ground.
- Estimates suggest that over 30 per cent of the Russian Federation's bomber fleet- Tu-95 and Tu-22s and A-50 airborne radars were destroyed by Ukrainian drones.
- Over 100 drones were flown out of shipping containers which discharged the pre-programmed vertical lift drones as they passed near Russian airbases. The bombers were those used to target Ukrainian positions during the war using stand-off weapons like cruise missiles and bombs.
- Russian media has termed these attacks a 'Pearl Harbour', referring to the Imperial Japanese Navy's surprise attack on the US Fleet in Hawaii in 1941. That attack brought the US into the Second World War.
- The Ukrainian attacks, however, come in a war that is now in its fourth year. It is one of the tactical high-points of the conflict and just before the second round

of peace talks between Russia and Ukraine in Istanbul on June 2. The first round, on May 16, led to the largest prisoner swap between the two sides.

- In sheer size, scale and complexity, Ukraine has carried out one of the world's largest special forces strikes— hitting two air bases in Olenya, Murmansk and Irkutsk, Siberia— over 6000 km apart and in three time zones.



Yashasvi Solanki, First Woman Navy Officer to Become President's ADC

- Yashasvi Solanki has gained a reputation for being at important positions and at the forefront of India's security. The Lieutenant Commander is the first navy officer to become the President of India's Aide-de-Camp (ADC).
- This has been the first time that a woman officer from the Indian Navy has been appointed to this role. The President of India is also the Supreme Commander of the Armed Forces.
- **What is the role of the ADC?**
- The role of the Aide-de-Camp of the President is very significant as the designated person is required to facilitate coordination and communication between the President and many arms of the establishment which makes the official formalities, meetings, works and protocols smoother.
- Her work also involves her assisting the President in ceremonial duties and coordinating high-level engagements. Her appointment symbolises a major

achievement in the country's military progress and has become a major example of women's progress in the field of defence and security.

- **Who is Yashaswi Solanki?**
- Yashaswi was commissioned into the Indian Navy after being commissioned in the Short Service. In her professional career, she has commanded excellent leadership and dedication towards her duties. Those who are chosen as ADCs have at least five to seven years of extraordinary service. Her new designation validates her extraordinary skills in taking the higher commands.
- The President officially has five ADCs which are selected from all the three armed forces, three from the Army, one each from the Navy and the Air Force. However, the President has the right to choose officers from among these armed forces as per their will.



Reliance Infra Targets Rs 3,000 Cr Defence Exports

- Reliance Infrastructure Ltd, the flagship company of Anil Ambani's Reliance Group, is targeting Rs 3,000 crore from the export of 155 mm ammunition and aggregates by the end of financial year 2027, sources said.
- In the current year itself, the company is estimated to export Rs 1,500 crore of large calibre ammunition.
- Reliance Infrastructure has already clocked exports of up to Rs 100 crore of artillery ammunition and aggregates and is aiming to be among the top three exporters of defence equipment in India, sources aware of the matter said.
- The key export market for Reliance includes countries in the European Union, focusing on large restocking demand for artillery ammunition.

- According to the experts, the market size for restocking is estimated at Rs 4,00,000 crore.



Indian Coast Guard Leads Marine Conservation Efforts

- On the occasion of World Environment Day 2025, the Indian Coast Guard (ICG) reaffirmed its leading role in marine conservation and sustainable maritime governance.
- With over 58 major coastal clean-up operations removing more than 194 tonnes of plastic waste in the past year, the ICG has significantly contributed to this year's global theme, #BeatPlasticPollution, under flagship campaigns such as **Swachh Sagar Surakshit Sagar, Puneet Sagar Abhiyan, and Mission LiFE.**
- With pollution control vessels like **Samudra Prahari, Samudra Paheredar, and Samudra Pavak**, the ICG leads swift response efforts against oil spills and chemical pollution, reinforced through large-scale NATPOLREX exercises involving over 50 national stakeholders.
- In 2025, **Operation Olivia** protected over 6.98 lakh olive ridley turtles nesting along Odisha's coast. Anti-poaching efforts in the Andaman & Nicobar Islands further curbed the illegal trade of endangered marine species, including sea cucumbers and corals.
- **Theme of World Environment Day 2025:** Beat Plastic Pollution



Dassault, TATA Tie Up To Manufacture Rafale Fighter Jet's Parts

- Dassault Aviation, the French manufacturer of the Rafale fighter jet, has entered into a landmark partnership with Tata Advanced Systems Limited (TASL) to manufacture key components of the Rafale aircraft in India.
- This collaboration will see the establishment of a state-of-the-art production facility in Hyderabad, where for the first time ever, the complete fuselage of the Rafale fighter jet will be produced outside France.

- The agreement encompasses the manufacture of critical structural sections, including the lateral shells of the rear fuselage, the complete rear section, the central fuselage, and the front section.
- The partnership is formalized through four Production Transfer Agreements, reflecting a significant step forward in bolstering India's aerospace manufacturing capabilities and integrating the country further into global supply chains.
- This partnership aligns closely with India's '**Make in India**' and **Atmanirbhar Bharat (self-reliant India) initiatives**, aiming to strengthen the country's position as a key player in the global aerospace supply chain.



ICG Inaugurates Dedicated Jetty at Vizhinjam Harbour

- ICG Director General (DG) Paramesh Sivamani, inaugurated a new dedicated ICG jetty at Vizhinjam Harbour, Kerala.
- The 76.7-metre state-of-the-art berth will support faster deployment and turnaround of ICG vessels, enhancing mission readiness for coastal surveillance, search & rescue, anti-smuggling, and fisheries protection.
- DG Paramesh Sivamani highlighted the strategic importance of the new facility, calling it a major step forward in strengthening the coastal security architecture and ensuring faster response capabilities in the region.
- A jetty is a structure built from land out into a body of water, serving various purposes like protecting a harbor, influencing currents, or providing access for boats. It can be a landing place, a walkway, or a breakwater.



Rudram-2,3,4 Missiles To Be Inducted In 3 To 4 Years

- DRDO has embarked on an ambitious missile development program that promises to revolutionise the country's air-to-surface strike capabilities through the Rudram missile series.
- The Rudram-2, Rudram-3, and Rudram-4 missiles represent a comprehensive family of **hypersonic and supersonic weapons** designed to neutralise enemy radar installations and conduct precision ground attacks.
- The Rudram-II has achieved the most advanced development status, having successfully completed flight trials from **Sukhoi-30MKI aircraft** off the coast of Odisha in May 2024.
- The primary strategic purpose of the Rudram missile family centres on **Suppression of Enemy Air Defences (SEAD)** operations, with each variant incorporating sophisticated **anti-radiation capabilities** designed to neutralise enemy surveillance and communication systems.
- The missile's Lock-On-Before/After-Launch capability offers tactical flexibility, allowing pilots to engage multiple targets in rapid succession or adjust targeting parameters based on evolving battlefield conditions.



DRDO Actively Developing 300km Pinaka

- DRDO is preparing to begin work on a new, advanced variant of the Pinaka multi-barrel rocket launcher system with an extended range of up to **300 kilometres**, as confirmed by the DRDO Chief.
- This ambitious project marks a significant leap in India's indigenous artillery capabilities, aiming to rival and surpass the range of comparable international systems such as **Russia's Smerch and China's PHL-16**.
- The 300 km Pinaka will incorporate advanced guidance, navigation, and control systems, enabling precision strikes against high-value targets deep inside enemy territory, including **command centres, bunkers, and logistics hubs**.



Lt Gen Rajiv Ghai Appointed Deputy Chief of Army Staff (Strategy)

- Lieutenant General Rajiv Ghai, whom the Pakistan's DGMO had called while India was pummeling Pakistani airbases during **Operation Sindoor**, pleading for a ceasefire, was on Monday appointed as the Deputy Chief of Army Staff (Strategy). He will continue to hold the post of DGMO.
- The Deputy Chief (Strategy) is a relatively new vertical created to oversee the Indian Army's Operations and Intelligence Directorates, among other important branches. It is considered one of the most crucial appointments within the Indian Army.
- On June 4, Lt Gen Ghai was also awarded the **Uttam Yudh Seva Medal (UYSM)** during the Defence Investiture Ceremony 2025 (Phase-II), recognising his distinguished service.
- Lt Gen Ghai, a senior officer from the Kumaon Regiment, has held several key operational roles in his military career. As the GOC of the Chinar Corps before becoming DGMO, he was at the forefront of counter-insurgency operations in Jammu and Kashmir.



Indian Army To Get Rs 30,000 crore QRSAM

- At a time when Indian air defence systems successfully thwarted the Pakistani aircraft, missile and drones attacks under Operation Sindoor, the Indian Army is all set to get Rs 30,000 crore boost with a new surface-to-air missile system expected to be cleared for acquisition by the Defence Ministry soon.
- The Defence Ministry is scheduled to take up the proposal for buying three regiments of the indigenous **Quick Reaction Surface to Air Missile system (QRSAM)** for the Army Air Defence for deployment along both western and northern borders.
- With a range of around 30 km, the system would be complementing the existing systems in the forces like the MRSAM and Akash in short to medium ranges.
- During the four-day conflict with Pakistan, which used Chinese weaponry, the Indian Army's Air Defence units destroyed majority of the drones using **L-70 and Zu-23 air defence guns** while the **Akash and MRSAM** played a crucial role along with the Indian Air Force's **Spydwr and Sudarshan S-400** air defence systems.
- The Army Air Defence is also getting a number of new radars, very short range air defence systems along with jammers and laser-based systems to deal with drones of Turkish and Chinese origin.



11 Years of India's Defence Sector

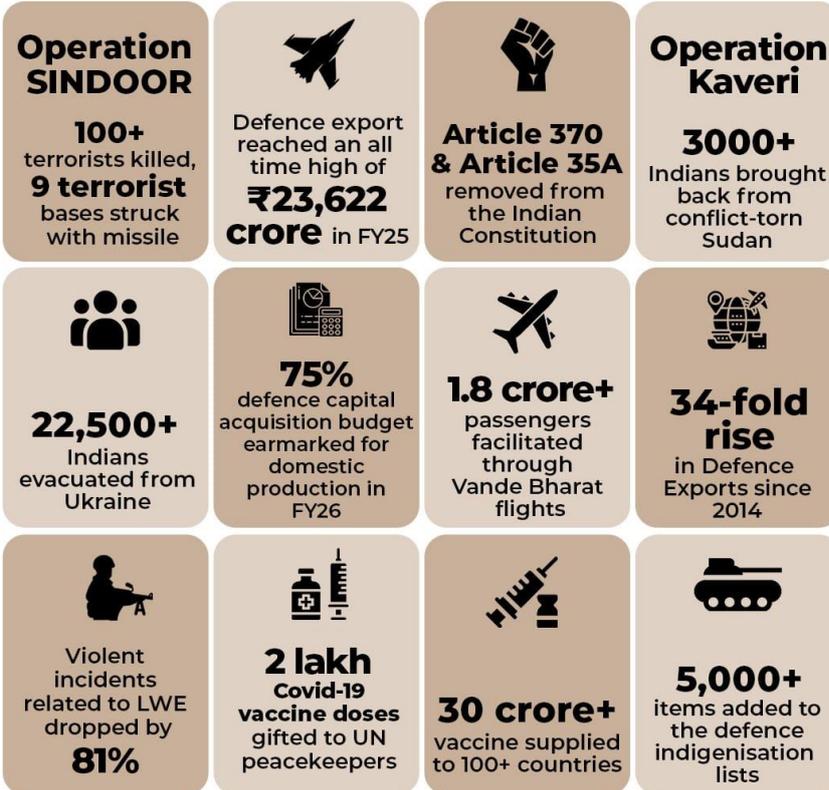
- India's defence sector has witnessed an extraordinary transformation over the last eleven years under Prime Minister Narendra Modi's leadership. The sector saw a steady rise in its defence budget, resulting in record-breaking production and a surge in exports.

- The defence budget has steadily risen, from Rs 2.53 lakh crore in 2013-14 to Rs 6.81 lakh crore in 2025-26. This sharp increase reflects India's commitment to strengthening its military foundations, according to a government release.
- India's defence manufacturing has seen a remarkable transformation in the last eleven years. In 2023-24, the country recorded its highest ever defence production, touching Rs 1.27 lakh crore. This is a sharp rise of 174 per cent compared to Rs 46,429 crore in 2014-15, according to the release.
- The shift from import dependence to domestic production has been both strategic and swift. With clear political direction and consistent reforms, India has moved towards true self-reliance in defence. The focus has been on developing a strong industrial base anchored in indigenous design and manufacturing.
- The government's push to prioritise domestic procurement in defence acquisition has further boosted production. Public sector undertakings and private companies are both contributing to this new era of growth. From aircraft and missiles to surveillance systems and artillery, the range of indigenous products continues to expand.



BIG PICTURE

NATION FIRST: NATIONAL SECURITY & FOREIGN POLICY



RISE IN DEFENCE EXPORTS

FROM BUYER TO BUILDER:
INDIA'S DEFENCE EXPORT BOOM

₹1,941 crore

(2014)



THEN

NOW

₹23,662 crore
(2024)



Growth: Over 1,100%

Visit Bharat ka Amrit Kaal
Seva, Sushasan, Garib Kalyan ke
11 SAAL

SURGE IN INDIGENOUS DEFENCE PRODUCTION

BHARAT BUILDS ITS OWN MIGHT

₹46,429 crore

(2014)



THEN

NOW

₹1,27,434 crore
(2025)

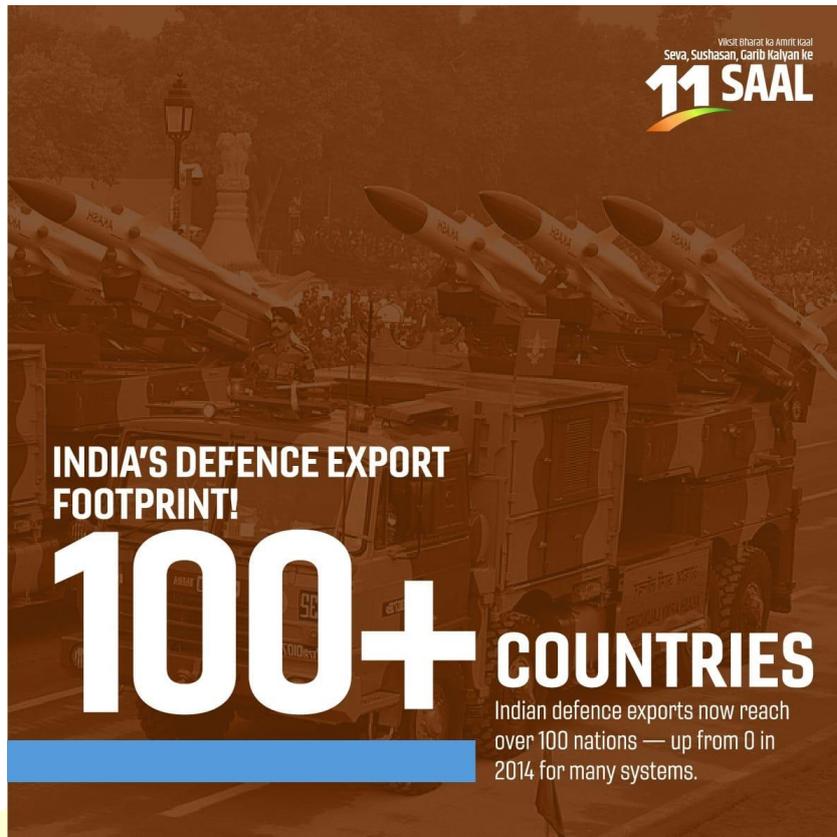


Growth: 174%

Visit Bharat ka Amrit Kaal
Seva, Sushasan, Garib Kalyan ke
11 SAAL



SSB
EXAMS



AI-Enabled Light Machine Guns In High-Altitude

- India has taken a significant leap in modernizing its military capabilities by successfully testing an artificial intelligence-enabled light machine gun (LMG) system in high-altitude terrain.
- The trials, conducted at an elevation of 14,000 feet in collaboration with the Indian Army, featured the AI-powered Negev LMG developed by Dehradun-based BSS Material Ltd.
- This system showcased its ability to autonomously identify and engage targets in the challenging conditions typical of India's mountainous border regions, marking a crucial advancement for operations in such rugged environments.
- With the integration of AI in weapons like the Negev LMG, India aims to extend its strategic reach into remote and high-risk zones, reducing dependence on manpower and enhancing the safety and effectiveness of its forces.



Military Exercise Khaan Quest

- The Indian Army contingent went Ulaanbaatar, Mongolia for the Multinational Military Exercise KHAAN QUEST, conducted from 14th to 28th June 2025.
- The exercise will bring together military forces from around the world to collaborate and enhance their peacekeeping capabilities. Last edition of Exercise KHAAN QUEST was conducted in Mongolia from 27th July to 9th August 2024.
- The exercise first started as a bilateral event between USA and Mongolian Armed Forces in the year 2003. Subsequently, from the year 2006 onwards the exercise graduated to a Multinational Peacekeeping Exercise with current year being the 22nd iteration.
- The Indian Army contingent comprising 40 personnel is being represented mainly by troops from a Battalion of the KUMAON REGIMENT along with personnel from other Arms and Services. One Woman Officer and two Women Soldiers will also form part of the contingent.
- KHAAN QUEST is to prepare Indian Armed Forces for peacekeeping missions while operating in a multinational environment, thereby increasing interoperability and military readiness in peace support operations under Chapter VII of United Nations Charter.



India Preparing To Test Hypersonic Cruise Missile

- India is on the verge of a significant breakthrough in its defence capabilities as it prepares to test the **Extended Trajectory-Long Duration Hypersonic Cruise Missile (ET-LDHCM)**, developed indigenously by the DRDO under the classified initiative '**Project Vishnu**'.
- This advanced missile is designed to achieve speeds up to Mach 8—approximately 11,000 km/h—enabling it to cover three kilometers every second and boasts a strike range of about 1,500 kilometers.
- The ET-LDHCM can carry both conventional and nuclear warheads weighing between 1,000 and 2,000 kg, making it suitable for a wide spectrum of strategic missions.
- Once operational, the ET-LDHCM will position India among a select group of nations—including the **United States, China, and Russia**—that possess functional hypersonic weapon systems.



India, US Conduct Maiden Special Forces Drill ‘Tiger Claw’

- In a first-of-its-kind independent Special Forces exercise between India and the United States, the Indian Air Force (IAF) and the United States Air Force (USAF) have successfully conducted Exercise "Tiger Claw" across North India.
- The IAF on Wednesday said the exercise, aimed at strengthening the partnership between the two Air Forces, began on May 26 and concluded at the Garud Regimental Training Centre (GRTC).
- During the two-week-long joint exercise, the two forces engaged in mutual exchange of best practices in special operations, conducted joint training, and built interoperability capabilities, the IAF added.
- Conducted at various locations in North India from 26 May to 10 June, the IAF said, “The objective of the exercise included expanding partnership, mutual exchange of best practices in special operations, and joint training between the two Air Forces to develop interoperability.”
- It must be noted that tigers are revered in many cultures for their strength and dominance, making their “claws” a potent symbol of power and authority.
- The GRTC is a crucial facility for training the IAF's elite Special Forces unit, the Garud Commandos, and is situated at Air Force Station, Chandinagar, in Uttar Pradesh.
- There are institutional exchanges and training programmes between the armed forces of the two countries at various levels. As far as the two air forces are concerned, they also conduct several air exercises, including the bilateral Cope

India, and participate in other multinational drills such as Tarang Shakti and Red Flag.

- Commando integration exercises are currently underway to develop common operational procedures. Given the sensitivity and significance of the Special Forces, it will take some time to reach a highly specialised level, sources added.
- The AFSOD, approved in 2019, comprises Special Forces from the Army, Navy, and Air Force. As reported by this newspaper earlier, AFSOD will initially consist of about 3,000 commandos drawn from the Army's Parachute Regiment, the Navy's MARCOS, and the Air Force's Garud Commandos. It is expected to be based in Agra, which already houses the Parachute Brigade.



Indian Air Force @IAF_MCC · 23h

Exercise Tiger Claw 2025, the first ever independent Special Forces exercise, between IAF and USAF, concluded at the Garud Regimental Training Center, yesterday.

Conducted at various locations in North India, from 26 May to 10 Jun 25, the exercise objectives included expanding partnership, mutual exchange of best practices in Special Operations, and joint training between the two Air Forces to develop interoperability.

[#ExerciseTigerClaw2025](#)
[#BondBeyondBorders](#)
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HQ Western Air Command, IAF and 6 others



Army Successfully Tests Rudrastra

- The Army has undertaken successful trials of indigenous vertical take off and landing (VTOL) drones being developed for cross-border strikes to take down enemy artillery positions.
- The trials have been conducted at the Pokhran firing range, with the drones demonstrating their ability to take down targets at a range of over 50 km.
- Equipped with precision-guided warheads that can be used in an anti-personnel role, the drones can relay back live video and return to the launch position in automated mode.
- The Army is looking to acquire the drones in significant numbers as a stand off weapon that can target enemy firing positions, including artillery guns placed well inside enemy territory.



Exercise Shakti 2025

- The 8th edition of Exercise Shakti-2025, a joint military exercise between India and France, will be held from 18th June to 1st July at La Cavalerie in France, aiming to enhance the joint military capability of both sides to undertake multi-domain operations, the Indian Army said.
- "The aim of the exercise is to enhance joint military capability of both sides to undertake Multi Domain Operations in a Sub Conventional scenario," it said.

- The joint exercise will facilitate developing interoperability, bonhomie and camaraderie between armies of both the nations, the officials said.



India's Shatrunash and Agniastra Systems

- The Indian Army has achieved a significant milestone in indigenous defence technology with the induction of two ground breaking weapons systems, Shatrunash and Agniastra, developed by Major Rajprasad R.S. of the Corps of Engineers.
- These cutting-edge technologies represent a paradigm shift in military operations, offering enhanced capabilities for both conventional warfare and counter-insurgency operations while reinforcing India's commitment to self-reliance in defence manufacturing.
- Shatrunash, aptly named "destroyer of enemies," is a handheld electromagnetic pulse (EMP) gun that represents a revolutionary advancement in directed-energy weapons.
- Agniastra, meaning "weapon of fire," is a sophisticated multi-target portable remote detonation system that significantly enhances the Indian Army's demolition capabilities.



Project Vishnu

- India is preparing to test a long-range hypersonic cruise missile developed under a classified Defence Research and Development Organisation (DRDO) initiative known as '**Project Vishnu**'.
- If successful, the test would mark a significant milestone in the country's indigenous missile development programme.
- Named the **Extended Trajectory-Long Duration Hypersonic Cruise Missile (ET-LDHCM)**, the system reportedly reaches speeds up to Mach 8 or about 11,000 kmph and can carry conventional or nuclear warheads weighing up to 2,000 kg.
- Its speed, altitude-hugging flight profile, and mid-air manoeuvrability are designed to evade modern radar and air defence systems, enabling deep strikes into adversary territory.
- Powered by a scramjet engine that uses atmospheric oxygen to sustain high speeds, the missile marks a major propulsion breakthrough.
- DRDO has already completed a successful 1,000-second ground test of the engine.
- Unlike ballistic missiles, the ET-LDHCM flies at low altitudes and is capable of course correction mid-flight.
- Built with heat- and oxidation-resistant materials, it can withstand extreme temperatures exceeding 2,000 degree celsius
- Designed for launch from land, sea, or air, the missile enhances India's flexibility across strike platforms and mission types.
- Once operational, it will place India among the handful of nations, including the US, China, and Russia, to field hypersonic weapon systems.



Operation Rising Lion

- Israel carried out a sweeping air and covert strike inside Iran early Friday, marking the most significant direct military assault on the Islamic Republic in over three decades.
- The mission—codenamed **Operation Rising Lion**—targeted more than 100 strategic locations including nuclear facilities, missile sites, and air defence systems.
- The Israeli military confirmed that the strike killed senior Iranian military officials, including **General Mohammad Bagheri**, **General Hossein Salami**, and **General Amir Ali Hajizadeh**. In addition, **six Iranian nuclear scientists** were confirmed dead.
- Announcing the operation in a televised statement, Israeli Prime Minister Benjamin Netanyahu said the attack would continue “for as many days as it takes” to eliminate Iran’s nuclear weapons ambitions.
- “We struck at the heart of Iran's nuclear enrichment programme,” Netanyahu said, confirming that Israeli forces had targeted key sites like the Natanz uranium enrichment facility, Iranian missile factories, and the scientists believed to be developing a nuclear bomb.
- According to the Israel Defence Forces (IDF), over **200 fighter jets** participated in the strikes, launching precision-guided munitions at military and nuclear targets

across Iran. “Dozens of IAF jets completed the first stage that included strikes on dozens of military targets, including nuclear targets in different areas of Iran,” the IDF said.



Reliance and Diehl sign ₹10,000 Crore Defence Pact

- In a move that could reshape India’s defence production landscape, Reliance Defence, a subsidiary of Reliance Infrastructure, has entered into a strategic cooperation agreement with Germany’s Diehl Defence.
- The partnership will focus on the local production of the **Vulcano 155mm precision-guided munition system**—an advanced artillery shell designed for long-range, high-accuracy strikes.
- The **Vulcano 155mm system** is no ordinary shell. It uses cutting-edge laser and GPS-guided targeting to deliver pinpoint accuracy. This makes it a valuable asset for the Indian Armed Forces, especially in modern combat scenarios where precision is critical.
- The manufacturing initiative will include over 50% indigenous value addition, directly supporting India’s defence indigenisation goals. It also aligns with the government’s target of achieving ₹50,000 crore in defence exports by 2029.



Indigenous Anti-Aircraft Gun Barrels

- For the first time, these barrels are being manufactured at the Field Gun Factory in Kanpur, replacing those previously imported and produced under license from Italian defence firm.
- The Indian Navy has achieved a major milestone in its quest for self-reliance by inducting the first-ever indigenously manufactured anti-aircraft gun barrels for its frontline Super Rapid Gun Mount (SRGM) systems.
- These barrels, now produced at the Field Gun Factory in Kanpur, mark a significant departure from the earlier practice of importing them or manufacturing them under license from the Italian defence firm OTO Melara at BHEL Haridwar.
- The SRGM is a high-speed, medium-calibre naval gun system capable of firing 120 rounds per minute, with a barrel length of 4,588 mm and the ability to launch 76mm shells at targets up to 15 km away.



Emergency Landing of British Navy's F-35B Jet

- The Indian Air Force (IAF) on Sunday evening confirmed that a British Royal Navy F-35B fighter jet made an emergency landing at Thiruvananthapuram airport on Saturday night (June 14).
- The aircraft was operating from UK Aircraft Carrier, **HMS Prince of Wales**, it was undertaking routine flying outside Indian ADIZ with Thiruvananthapuram earmarked as the emergency recovery airfield.
- "On having declared a diversion off an emergency, the F-35 B was detected and identified by the IAF's IACCS network and cleared for the recovery. IAF is providing all necessary support for the rectification and subsequent return of the aircraft," the IAF added.
- Meanwhile, the Indian Navy and the United Kingdom's Carrier Strike Group (UK CSG25) conducted a joint naval drill, commonly known as a Passage Exercise (PASSEX), in the western Arabian Sea earlier this week.
- This marked the UK Strike Group's "first major engagement" after entering the Indo-Pacific region.
- "UK CSG25 joined the Indian Navy for an exercise in the western Arabian Sea," read a post from the UK Carrier Strike Group.
- The Indian Navy had earlier stated, "**INS Tabar**, along with a submarine and P-8I aircraft of the Indian Navy, participated in a Passage Exercise in the North Arabian Sea on 09 and 10 June 2025 with HMS Prince of Wales and HMS Richmond from the UK Carrier Strike Group."
- The two-day exercise included various naval activities such as coordinated anti-submarine operations, tactical manoeuvres, unified control of helicopters, and professional exchanges between naval officers.



ISRO Achieves Historic First Rocket Launch From Uttar Pradesh

- ISRO marked a significant milestone by successfully conducting its first-ever rocket launch from Kushinagar, Uttar Pradesh. This event, carried out in collaboration with **Thrust Tech India Limited**, represents the inaugural instance of a payload being launched via rocket from the soil of Uttar Pradesh.
- This successful test serves as a prelude to a much larger event planned for October-November, during which approximately 900 youth-built satellites will be tested. The initiative aims to foster interest in space technology among children and youth across the region and the entire country.
- This achievement not only highlights ISRO's commitment to expanding its launch operations across new regions but also marks a significant step in engaging the next generation in India's rapidly advancing space sector.



Fifth FPV 'Achal' built by GSL Launched for ICG

- 'Achal', the fifth Fast Patrol Vessel (FPV) in a series of eight being constructed by Goa Shipyard Ltd for the ICG was ceremoniously launched on June 16, 2025, in Goa by Smt.
- Designed and constructed under stringent dual-class certification from the American Bureau of Shipping and Indian Register of Shipping, the FPV features over 60% indigenous content
- The vessel measures 52 meters in length and 8 meters in breadth, with a displacement of 320 tons. Powered by a CPP-based propulsion system, the vessel can reach a top speed of 27 knots.
- With its primary roles of **protection, monitoring, control, and surveillance**, 'Achal' is equipped to safeguard offshore assets and island territories.
- Built at a total cost of **Rs 473 crore**, the project has also provided a significant boost to local industry by generating substantial employment and supporting MSMEs engaged in production activities at various factories and within GSL.



Defence Cyber Agency Begins Exercise

- 'Cyber Suraksha', a comprehensive Cyber Security Exercise organised by Defence Cyber Agency under the aegis of Headquarters Integrated Defence Staff, commenced on June 16, 2025.
- This multi-phased exercise, which concludes on June 27, 2025, is a proactive step towards bolstering cyber resilience at national level, and encompasses the

conduct of targeted training sessions, evaluation and an engaging capsule for leadership.

- The exercise is designed to simulate real-world cyber threats, reinforce secure practices, and test the analytical and defensive cyber skills of participants in a high-paced, gamified environment.



China Has World's Fastest Growing Nuclear Arsenal: SIPRI

- China has the world's fastest growing nuclear arsenal and has been adding 100 new warheads every year while India has also slightly expanded its arsenal and continues to develop new delivery systems, a report by the **Stockholm International Peace Research Institute** says.
- The findings suggest that arsenals of nine nuclear-armed states are expanding at a time of geopolitical uncertainty and the global inventory stands at 12,241 warheads, with the US and Russia accounting for nearly 90% of these.
- As per the SIPRI yearbook 2025, **India has 180 nuclear stored warheads** as of January 2025, while **Pakistan has an estimated 170**. **China has 600** nuclear warheads as of January 2025, of which 24 are deployed warheads or those placed on missiles or located on bases with operational forces.
- The report said that India is believed to have once again slightly expanded its nuclear arsenal in 2024 and continued to develop new types of nuclear delivery systems.
- It said India's new 'canisterised' missiles, which can be transported with mated warheads, may be capable of carrying nuclear warheads during peacetime, and possibly even multiple warheads on each missile, once they become operational.



Indian Navy Set To Acquire 'Abhimanyu'

- The Indian Navy is making significant strides toward integrating unmanned aerial systems into its carrier air wings, with the Abhimanyu drone, developed by Bangalore-based New Space Research & Technologies (NRT), at the forefront of this initiative.
- The Abhimanyu is being developed as the basis for the Naval Collaborative Combat Air Vehicle (N-CCAV) program, representing India's entry into the global trend of deploying "loyal wingman" drones alongside crewed fighter aircraft.
- **Performance Specifications**
 - Top speed: ~300 knots (550 km/h)
 - Operational Range: 1,000 kilometers
 - Service Ceiling: 19,700 feet (6,000 meters)
 - Endurance: Up to 20 hours (as per some sources)
 - Multirole Capability: ISR (Intelligence, Surveillance, Reconnaissance), kinetic attack (air-to-air and air-to-ground), electronic warfare, and swarm operations



INS Arnala Commissioned

- INS Arnala, the **first of the Anti-Submarine Warfare Shallow Watercraft**, was commissioned into the **Eastern Naval Command** of the Indian Navy on 18 Jun 2025 in the presence of General Anil Chauhan, the CDS, at Naval Dockyard, Visakhapatnam.
- Designed for a broad range of Anti-Submarine operations, INS Arnala is equipped to conduct Sub-Surface Surveillance and Interdiction, Search and Rescue Missions; and Low-Intensity Maritime Operations (LIMO).
- This 77-meter-long warship, with a gross tonnage of over 1490 tonnes, is the largest Indian Naval warship to be propelled by a Diesel Engine-Waterjet combination.
- The induction of INS Arnala, named after the historic coastal fort off Maharashtra, is a step in the direction of building naval capabilities in line with the force levels envisaged to meet the challenges of the future.



Reliance Infra's Arm Partners With Dassault Aviation To Manufacture Falcon-2000 In India

- Reliance Infrastructure, led by Anil Ambani, has announced a significant partnership between its subsidiary Reliance Aerostructure Limited and French aerospace major Dassault Aviation to manufacture Falcon-2000 business jets in India.

- This collaboration, unveiled at the Paris Air Show, marks the first time Dassault will assemble its Falcon aircraft outside France, positioning India alongside the United States, France, Canada, and Brazil as one of the few countries manufacturing business jets for global markets.
- The joint venture, Dassault Reliance Aerospace Limited (DRAL), will establish a state-of-the-art final assembly line for the Falcon-2000 jets in Nagpur, Maharashtra.
- The first 'Made in India' Falcon-2000 jet is scheduled for its inaugural flight by 2028, catering to both corporate and military users in domestic and international markets.
- DRAL, established in 2017, has already delivered over 100 major Falcon-2000 sub-sections from its Nagpur facility.



India Set To Induct 300-Km Range Pinaka

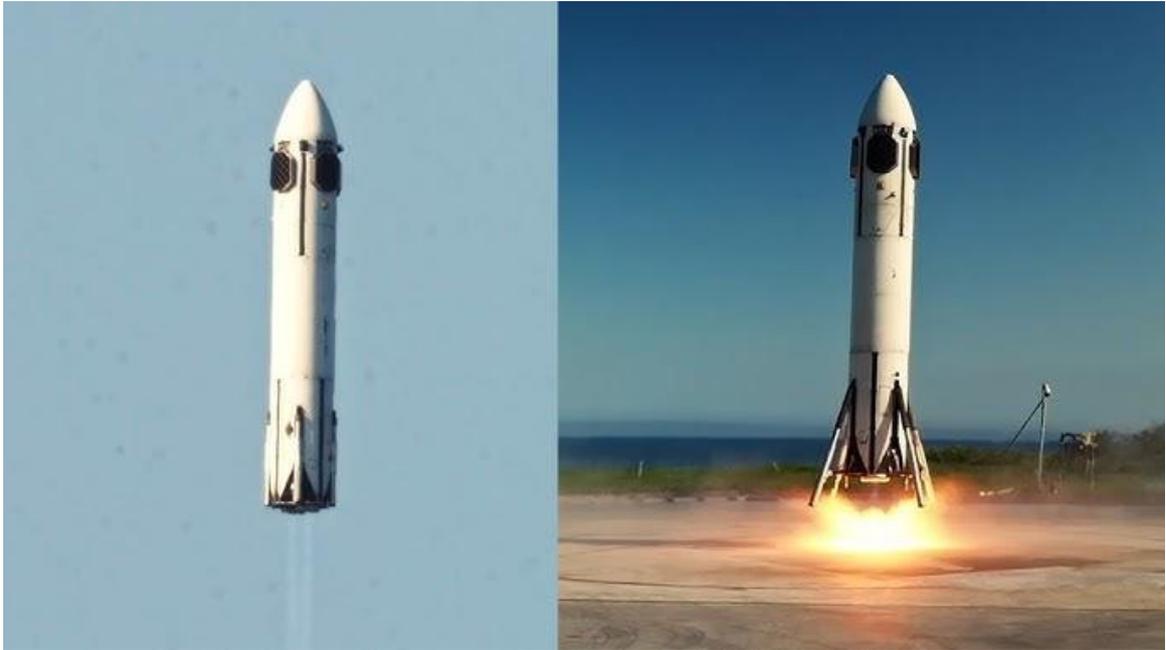
- DRDO is poised to revolutionise the nation's artillery capabilities with the development of **advanced Pinaka rocket systems** featuring extended ranges of **120 km and 300 km**.
- These next-generation variants, designated as **Pinaka-3 and Pinaka-4**, represent a significant leap in India's indigenous defence manufacturing capabilities and are expected to be inducted into the Indian Army within the next three to five years.
- With current operational variants including the **MK-I version** with approximately **40 km range**, the **Pinaka-II with 60 km range**, and the **MK-II ER** variant extending up to **90 km**.

- DRDO Chairman Dr. Samir V. Kamat has confirmed that development work is progressing on **Pinaka-3 and Pinaka-4 variants**, featuring significantly enhanced ranges of 120 km and 300 km respectively.



Honda Successfully Tested Reusable Rocket

- Honda R&D, the research and development division of Honda Motor, has made a significant leap into the burgeoning field of reusable space technology with the successful launch and landing of its experimental reusable rocket.
- This landmark test, conducted in Taiki Town, Hiroo District, Hokkaido, Japan, marks Honda's formal entry into the competitive arena of reusable rockets—a sector poised to reshape space access by dramatically lowering costs and increasing launch frequency.
- The entire flight lasted **56.6 seconds** and successfully demonstrated several critical technologies essential for rocket reusability, including stable flight during ascent and descent, as well as controlled, pinpoint landing capabilities.



UK Navy's F-35 Fighter Jet Develops Hydraulic Failure

- The British Royal Navy F-35B fighter jet, which had made an emergency landing at Thiruvananthapuram airport, has developed a hydraulic failure, and possibly, it would be taken back in a military transport aircraft.
- According to the officials, a bigger maintenance team is expected to come to recover the aircraft and if required, the aircraft may even be taken back in a military transport aircraft.
- "A maintenance team of the UK Navy had come and tried to rectify the problem but could not. A bigger maintenance team is expected to come to recover the aircraft. If required, the aircraft may even be taken back in a military transport aircraft," they added.
- The aircraft was operating from **UK Aircraft Carrier, HMS Prince of Wales**, it was undertaking routine flying outside Indian ADIZ with Thiruvananthapuram earmarked as the emergency recovery airfield.



Project Dhvani

- DRDO is quietly but decisively progressing on one of its most advanced missile programs yet: Project Dhvani, a next-generation Hypersonic Glide Vehicle (HGV) aimed at reshaping India's strategic deterrence and long-range strike capabilities.
- This HGV, projected for induction by 2029–2030, is being developed as part of India's expanding hypersonic weapons portfolio, positioning the country alongside the US, China, and Russia in this elite technology domain.
- DRDO is reportedly aiming for ICBM-class range, potentially exceeding 5,500 km or more, although official numbers remain classified. This would place Dhvani in the same category as Russia's Avangard and China's DF-ZF, both of which are nuclear-capable and known for their maneuverability at hypersonic speeds (Mach 5+).
- One of Dhvani's most critical components is its heat protection system (HPS), capable of enduring temperatures of 2,000–3,000°C encountered during hypersonic flight and atmospheric reentry.



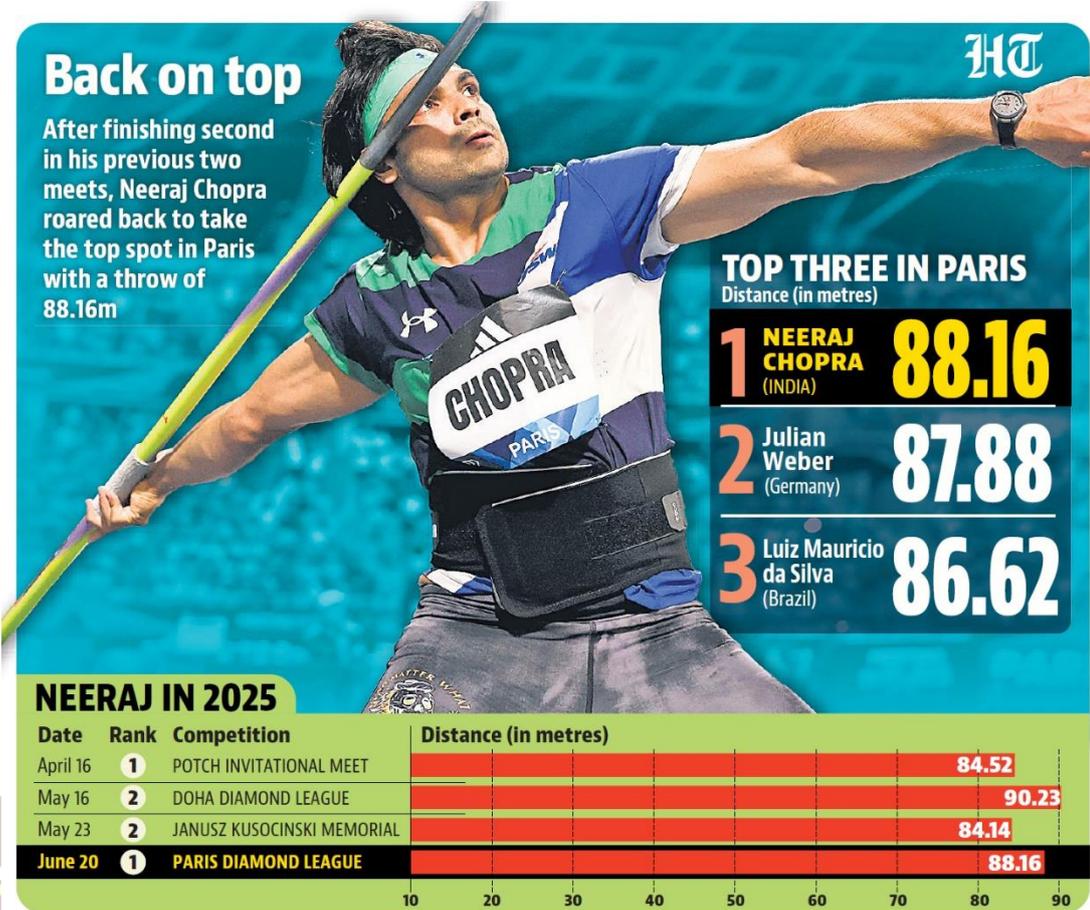
Indian Navy Set To Commission Tamal

- The Indian Navy is all set to commission its latest stealth multi-role frigate on 01 Jul 2025 at Kaliningrad, Russia.
- Christened “Tamal”, it is the eighth in the series of Krivak class frigates inducted from Russia over the past two decades. Tamal is the second ship of the Tushil Class, which are the upgraded versions of their predecessors, Talwar and Teg classes having three ships each.
- The ship has 26% indigenous components, including the BrahMos long-range cruise missile for targeting both at sea and land.
- Tamal punches well above its weight with a very high tonnage to firepower ratio, extended endurance, and a top speed in excess of 30 knots.
- Upon commissioning, Tamal will join the ‘**Sword Arm**’ of the Indian Navy, the Western Fleet, under the **Western Naval Command**.



Neeraj Chopra wins Paris Diamond League

- At some point this year, or maybe at a really big event in the future, Neeraj Chopra will leave an event both satisfied with the distance his javelin travelled in its parabola and the fact that it was sufficient for him to win the event on the day. For now, he'll have to wait for that. In Doha earlier this year, he crossed 90m for the first time in his career but called it bittersweet because he was pipped at the finish line by Germany's Julian Weber. On Friday night in Paris, his first throw of 88.16m was enough to beat the field, including a consistent but below-par Weber. But afterward, he was analyzing his technique with a tinge of disappointment, not completely satisfied with the speed of his run-up and the control of his throwing motion.
- "I'm happy with the throw. It was my first throw and it was a good start, but I was hoping for really good throws today," Neeraj said in the mixed zone later. "My run-up was really fast today. I can't control my speed, but I'm happy with the result and with first position."
- When it all comes together, it is bound to be glorious, but as such, it was another fruitful international outing for India's foremost track and field athlete as he clinched his first Diamond League meet win of the season.



Army Drone Deal: India Orders 450 Nagastra-1R

- The Indian Army's recent acquisition of 450 NAGASTRA-1R loitering munitions from **Solar Defence and Aerospace Limited (SDAL)** represents a significant milestone in India's defence modernization and self-reliance strategy.
- This procurement, combined with successful trials of SDAL's Rudrastra VTOL UAV and Bhargavastra counter-drone system, demonstrates India's growing capabilities in indigenous defence technology development and its strategic response to evolving warfare paradigms witnessed in recent global conflicts.
- The system's precision targeting capability stands out with a circular error probability (CEP) of just 2 meters, ensuring highly accurate strikes while minimizing collateral damage.
- A particularly noteworthy aspect of the NAGASTRA-1R is its impressive indigenous content of over 80%, substantially higher than the 75% threshold typically required under India's Make in India initiative.

Nagastra-1
Nagastra-1 is a fixed-wing electric unmanned aerial vehicle which is a loitering munition

450
completely indigenous UAVs to be purchased by the Indian Army

More than **75%** indigenous parts

RANGE
30KM
AUTONOMOUS MODE

15KM
MAN-IN-LOOP

ENDURANCE
60 MINS

Day-night surveillance cameras
Fragmenting warhead

KAMIKAZE MODE
Neutralise any hostile threat with an accuracy of **2 meters** USING GPS

If the mission is cancelled, the UAV can be called back and make a soft landing through a parachute recovery mechanism

Avantel Ltd Bags New Order From DEAL (DRDO)

- Avantel Ltd, a leading Indian telecom and defence electronics company, has secured a major purchase order valued at ₹13.67 Crores (inclusive of taxes) from the Defence Electronics Applications Laboratory (DEAL), a key laboratory under the DRDO.
- The order was formally confirmed via email on June 20, 2025, and is specifically for the development of **Software Defined Radios (SDRs)**, with execution scheduled to be completed by August 2027.
- The company has recently secured additional significant contracts, including a ₹17.7 Crore order from BEL for the supply, installation, and commissioning of 1 KW HF SDRs for ground and aerospace applications.
- It has developed and manufactured various radio components and unique products such as satellite communications, HF communications, electronic warfare, and radar systems. Currently, Avantel is working on expanding its portfolio by developing SCA-compliant software-defined radios, high-power HF systems, air defence radars, and small satellites.



Safran to Set Up Maintenance Centre in Hyderabad

- France-based Safran Aerospace announced plans to establish a new entity- Safran Aircraft Engine Services India-in Hyderabad, which will focus on the maintenance and overhaul of Rafale fighter jet engines, specifically the **M88 engines**.
- The initiative is expected to create approximately 150 new jobs by the end of next year, with the potential to add another 750 positions in subsequent phases, according to a press release from the Telangana government.
- Safran currently operates two world-class sites in Hyderabad: Safran Electrical & Power India, dedicated to manufacturing electrical harnesses for CFM LEAP engines and the Dassault Rafale fighter, and Safran Aircraft Engines Hyderabad, which specializes in the production of rotating parts for the LEAP engine's low-pressure turbine.



Bengaluru Firm Develops Drone Armed with AK-203

- A Bengaluru-based defence company, **BSS Alliance (Bharat Supply and Service)**, has developed a drone platform equipped with a firearm, designed for low-altitude tactical operations.

- The drone integrates with an assault rifle—ideally the AK-203—and is capable of surveillance as well as remote engagement. The system was recently tested in collaboration with the Indian Army.
- Earlier this week, BSS Alliance also conducted a trial of India's first AI-powered LMG weapon system in partnership with the Indian Army.
- The system used an Israeli Negev light machine gun with a 7.62×51 mm barrel.
- During the trials, the AI-enabled platform identified targets at a distance of 300 metres and engaged them accurately up to 600 metres. The weapon's effective range is rated at 1,000 metres.
- In 2020, India procured 16,479 **Negev machine guns** from Israel, with the total requirement projected at 40,000 units. The current AI-enabled drone platform tested by BSS Alliance is part of this shift towards advanced and indigenous defence technologies.



Neeraj Chopra Reclaims World No. 1 Spot

- Tokyo Olympics gold medallist Neeraj Chopra has reclaimed top spot in the World Rankings, in the most recent list released by World Athletics this week.
- Neeraj lost the No. 1 position to Anderson Peters on September 17 last year, after the Grenadian athlete clinched victory at the Diamond League Final in Brussels.
- Currently, Neeraj has 1445 points, and Peters has 1431. Meanwhile, German ace Anderson Peters is third with 1407 points, followed by Pakistan's Arshad Nadeem, who is fourth with 1370.

- He finally defeated Weber at the **Paris Diamond League**, with an opening throw of 88.16m. Then he got his third win of the season at the **Ostrava Golden Spike** with a throw of 88.16m.



K-6 Hypersonic Missile

- DRDO is developing the K-6 hypersonic missile for submarine launch, with trials expected soon.
- The K-6 hypersonic ballistic missile, a submarine-launched ballistic missile (SLBM), is poised to enhance India's naval arsenal.
- The hypersonic missile, which can carry both **conventional and nuclear warheads**, will be a formidable asset for the Indian Navy.
- K-6 SLBM can be launched from submarines and can target enemies at a speed of **7.5 Mach** (approximately 9,261 kilometres per hour).
- K-6 missile boasts an impressive range of 8,000 kilometres, covering the entirety of Pakistan. India has previously tested the K-3 (1,000 to 2,000 km range), K-4 (3,500 km range), and K-5 (5,000 to 6,000 km range) SLBMs, with the K-4 and K-5 already inducted into the Navy.
- The K-6 SLBM is being developed at DRDO's Advanced Naval Systems Laboratory in Hyderabad.



REVIEW QUESTIONS

1. Who assumed charge as the 18th Commander-in-Chief of the Andaman & Nicobar Command?

- A. Lt Gen Ajay Kumar Singh
- B. Lt Gen Rakesh Kapoor
- C. Lt Gen Dinesh Singh Rana
- D. Lt Gen Upendra Dwivedi

ANSWER: C

2. Where is the Andaman and Nicobar Command (ANC) headquartered?

- A. Port Blair
- B. Sri Vijaya Puram
- C. Campbell Bay
- D. Car Nicobar

ANSWER: B

3. Who is the first Indian Navy officer to be appointed as the Aide-de-Camp (ADC) to the President of India?

- A. Priya Jhingan
- B. Punita Arora
- C. Yashasvi Solanki
- D. Padmavathy Bandopadhyay

ANSWER: C

4. What is one of the key responsibilities of the Aide-de-Camp (ADC) to the President of India?

- A. Conducting military operations
- B. Managing presidential finances
- C. Assisting in ceremonial duties and coordinating high-level engagements
- D. Monitoring national elections

ANSWER: C

5. In which country is the 2025 edition of the exercise with India "NOMADIC ELEPHANT" held?

- A. Mongolia
- B. Thailand
- C. Nepal
- D. Bhutan

ANSWER: A

6. What is the theme of World Environment Day 2025?

- A. Ecosystem Restoration
- B. Say No to Plastic
- C. Beat Plastic Pollution
- D. Clean Air for All

ANSWER: C

7. Which Indian company has partnered with Dassault Aviation to manufacture key components of the Rafale aircraft in India?

- A. Bharat Electronics Limited
- B. Hindustan Aeronautics Limited
- C. Tata Advanced Systems Limited
- D. Larsen & Toubro

ANSWER: C

8. What is the strike range of the Gandiva (Astra MK-III) missile?

- A. 100 km
- B. 200 km
- C. 350 km
- D. 500 km

ANSWER: C

9. Which missile represents India's air-breathing Solid Fuel Ducted Ramjet (SFDR) based BVRAAM?

- A. Rudram-2
- B. Gandiva (Astra MK-III)
- C. Nag
- D. Prithvi-II

ANSWER: B

10. What is the proposed extended range of the new advanced variant of the Pinaka system?

- A. 120 km
- B. 180 km
- C. 250 km
- D. 300 km

ANSWER: D

11. BEML signed licensing agreements with which DRDO lab for manufacturing critical mobility and support systems for Indian Army?

- A. RCI (Research Centre Imarat)
- B. VRDE (Vehicles Research and Development Establishment)
- C. ADE (Aeronautical Development Establishment)
- D. DRDL (Defence Research and Development Laboratory)

ANSWER: B

12. What critical systems will BEML develop and produce for the Indian Army's MBT Arjun?

- A. Armoured Personnel Carriers
- B. Infantry Combat Vehicles
- C. Unit Maintenance Vehicle (UMV) and Unit Repair Vehicle (URV)
- D. Drone Swarm Systems

ANSWER: C

13. How many NGOPVs are being constructed by Goa Shipyard Ltd. (GSL)?

- A. Four
- B. Five
- C. Seven
- D. Eleven

ANSWER: C

14. Who has been appointed as the Deputy Chief of Army Staff (Strategy)?

- A. Lt Gen Upendra Dwivedi
- B. Lt Gen Rakesh Kapoor
- C. Lt Gen Rajiv Ghai
- D. Lt Gen Anil Chauhan

ANSWER: C

15. Which Indian company has partnered with Dassault Aviation to manufacture the fuselage of Rafale fighter aircraft in India?

- A. Hindustan Aeronautics Limited
- B. Tata Advanced Systems
- C. Reliance Defence
- D. Bharat Electronics Limited

ANSWER: B

16. Where is the Multinational Military Exercise KHAAN QUEST 2025 being held?

- A. India
- B. Kazakhstan
- C. Mongolia
- D. Russia

ANSWER: C

17. What is the name of the hypersonic cruise missile being developed under DRDO's classified initiative?

- A. Agni-VI
- B. ET-LDHCM
- C. BrahMos-II
- D. Shaurya-II

ANSWER: B

18. Under which DRDO initiative is the ET-LDHCM missile being developed?

- A. Project Kaveri
- B. Project Akash
- C. Project Vishnu
- D. Project Surya

ANSWER: C

19. What is the maximum speed the ET-LDHCM missile is reported to reach?

- A. Mach 2
- B. Mach 5
- C. Mach 8
- D. Mach 10

ANSWER: C

20. Where will the 8th edition of Exercise Shakti-2025 be held?

- A. Pune, India
- B. La Cavalerie, France
- C. Washington D.C., USA
- D. Toulouse, France

ANSWER: B

21. Which Indian company has entered into a strategic cooperation agreement with Germany's Diehl Defence for defence production?

- A. Tata Advanced Systems
- B. Larsen & Toubro
- C. Reliance Defence
- D. Bharat Forge

ANSWER: C

22. What is the name of the precision-guided munition system to be locally produced under the India-Germany partnership?

- A. Excalibur 120mm
- B. Vulcano 155mm
- C. BrahMos NG
- D. Pinaka Mk II

ANSWER: B

23. What was the codename of Israel's major military operation inside Iran?

- A. Operation Desert Shield
- B. Operation Iron Fist
- C. Operation Rising Lion
- D. Operation Silent Thunder

ANSWER: C

24. Which fighter jet made an emergency landing at Thiruvananthapuram airport, as confirmed by the IAF?

- A. Rafale
- B. F-16
- C. F-35B
- D. Eurofighter Typhoon

ANSWER: C

25. What is the name of the joint naval drill recently conducted between the Indian Navy and the UK Carrier Strike Group?

- A. SIMBEX
- B. PASSEX
- C. INDRA NAVY
- D. VARUNA

ANSWER: B

26. Where did ISRO conduct its first-ever rocket launch in Uttar Pradesh?

- A. Lucknow
- B. Prayagraj
- C. Varanasi
- D. Kushinagar

ANSWER: D

27. As per the SIPRI Yearbook 2025, how many nuclear warheads does India possess as of January 2025?

- A. 150
- B. 170
- C. 180
- D. 200

ANSWER: C

28. What significant quantum communication breakthrough was achieved at IIT Delhi?

- A. Launch of India's first quantum satellite
- B. Free-space quantum secure communication over 1 km
- C. Intercontinental quantum messaging system
- D. Development of a quantum supercomputer

ANSWER: B

29. What is the name of the fifth FPV constructed by Goa Shipyard Ltd for the ICG?

- A. Arjun
- B. Veer
- C. Achal
- D. Trikand

ANSWER: C

30. Who organized the Cyber Suraksha Cyber Security Exercise?

- A. DRDO
- B. CERT-In
- C. Defence Cyber Agency
- D. National Informatics Centre

ANSWER: C

