

# Daily Defence Current Affairs

## 31 December 2025

### L&T Delivers Second Set of TEJAS MK-1A Wings

- Larsen & Toubro (L&T) has reportedly delivered the second set of wing assemblies for the Light Combat Aircraft (LCA) MK-1A to Hindustan Aeronautics Limited (HAL), marking a key progression in India's indigenous fighter jet program.
- This development builds on the first set handed over in July 2025 at L&T's Precision Manufacturing and Systems Complex in Coimbatore, Tamil Nadu.
- The TEJAS MK-1A represents an advanced variant of the TEJAS light combat aircraft, featuring enhanced avionics, an upgraded radar, improved electronic warfare capabilities, and integration for beyond-visual-range missiles.
- These wings, as flight-critical components, demand precision engineering to meet stringent aerospace standards, underscoring L&T's growing role in high-end defence manufacturing.
- L&T's Senior Vice President, Arun Ramchandani, confirmed plans to supply four wing sets annually initially, with ambitions to scale to 12 sets per year through automation and advanced processes.



## ATVP Initiates Construction of The First Two Units of S5 SSBNs

- The Advanced Technology Vessel Project (ATVP) under India's nuclear submarine program has initiated construction of the first two units of the S5-class SSBNs, marking a pivotal advancement in the nation's sea-based nuclear deterrence.
- These submarines boast a displacement of approximately 13,500 tonnes submerged, rendering them roughly twice the size of the Arihant-class vessels, which displace around 6,000 to 7,000 tonnes. This substantial increase in size facilitates enhanced stealth, superior nuclear propulsion, and greater missile payload capacity.
- The S5-class represents the pinnacle of India's indigenous SSBN evolution, designed to carry up to twelve or sixteen K-6 submarine-launched ballistic missiles (SLBMs), each equipped with multiple independently targetable re-entry vehicles (MIRVs).
- The K-6 missile, under development by the DRDO offers an intercontinental range of 6,000 to 8,000 km, enabling submerged launches from deep ocean depths for maximum survivability. Such capabilities ensure a robust second-strike option, aligning with India's no-first-use nuclear doctrine.
- The program enjoys direct oversight from the Prime Minister's Office, underscoring its strategic primacy amid Indo-Pacific tensions. Each S5 unit is projected to cost around ₹20,000 crore (approximately \$2.4 billion), reflecting the complexity of integrating advanced sensors, quietened reactors, and MIRV technology.



## India Holds 3<sup>rd</sup> Largest Rare Earth Reserves

- India possesses the world's third-largest reserves of rare earth elements, yet its production lags far behind global leaders, exposing deep-seated structural bottlenecks in the mining sector.
- A recent report by Amicus Growth, published on 29 December, underscores this disparity, noting that while India holds substantial resources, regulatory hurdles and limited processing capabilities have stifled output.
- The country boasts approximately 6.9 million tons of rare earth oxide (REO) reserves, positioning it just behind China and Brazil in the global rankings. China dominates with 44 million tons, followed closely by Brazil's 21 million tons.
- This places India ahead of other significant holders such as Australia (5.7 million tons), Russia (3.8 million tons), Vietnam (3.5 million tons), and the United States (1.9 million tons).
- Despite this enviable reserve base, India's production in 2024 amounted to a mere 2,900 tons, securing it only the seventh spot worldwide. In stark contrast, China churned out 270,000 tons, cementing its position as the unchallenged leader. The United States followed with 45,000 tons, while Myanmar produced 31,000 tons, and Australia, Thailand, and Nigeria each managed around 13,000 tons.



## BSF To Launch 'Operation Sard Hawa'

- The Border Security Force (BSF) is set to launch Operation Sard Hawa along the challenging India-Pakistan border, encompassing the Kashmir frontier, key security posts in Jammu, and the expansive desert stretches of Rajasthan.
- This annual winter security exercise, named after the 'cold wind' that typifies the season, targets the heightened risks posed by dense fog and mist, which drastically reduce visibility and create ideal conditions for infiltrators.
- Scheduled for deployment at an opportune moment next month, the operation will persist until the end of January, aligning precisely with the lead-up to India's Republic Day celebrations.
- BSF officials emphasise that the timing is critical, as adversaries may exploit the winter haze for cross-border incursions, smuggling, or other illicit activities along the Line of Control (LoC) and International Boundary (IB).
- Operation Sard Hawa forms part of the BSF's cyclical border security doctrine, mirroring the summer counterpart, Operation Garam Hawa (Hot Wind). Conducted annually in January, it intensifies efforts to detect and deter illegal crossings amid fog-shrouded conditions, covering the most demanding segments of the frontier.



## Ukrainian Drone Attack Sparks Fire

- A Ukrainian drone attack injured two people and sparked a fire that was quickly extinguished at the Tuapse oil refinery, the operational headquarters of Russia's Krasnodar region said on Wednesday.
- The strike damaged refinery equipment, one port berth and five homes - windows were broken in four apartment blocks and a private house - the Krasnodar operational headquarters said on the Telegram messaging app.
- Tuapse in the Krasnodar region lies in southwest Russia on the Black Sea and about 350 km (218 miles) to the nearest parts of Ukraine's mainland across the Sea of Azov.
- The refinery blaze was put out after burning about 300 square metres (3,229 square feet), it said, but the authorities did not provide details on the extent of the damage to the oil refinery's equipment or whether operations were halted.
- Tuapse is one of Russia's key Black Sea outlets for oil products, anchored by Rosneft's export-oriented Tuapse refinery, which has capacity to process about 240,000 barrels of crude oil per day and supplies products such as naphtha, fuel oil and diesel.
- The port and the refinery have been hit repeatedly by Ukrainian drone attacks during the war that Russia launched nearly four years ago, with past strikes reported to have sparked fires and at times disrupted operations.





## REVIEW QUESTIONS

**1. Which organisation has delivered the second set of wing assemblies for the LCA Mk-1A to HAL?**

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

**ANSWER: C**

**2. Where was the first set of LCA Mk-1A wing assemblies handed over to HAL in July 2025?**

- A. Bengaluru, Karnataka
- B. Hyderabad, Telangana
- C. Pune, Maharashtra
- D. Coimbatore, Tamil Nadu

**ANSWER: D**

**3. The construction of S5-class SSBNs has been initiated under which Indian project?**

- A. Project 75
- B. Project 17A
- C. Advanced Technology Vessel Project (ATVP)
- D. Project Chakra

**ANSWER: C**

**4. Operation Sard Hawa is being launched by which Indian security force?**

- A. Indian Army
- B. Central Reserve Police Force
- C. Indo-Tibetan Border Police
- D. Border Security Force

**ANSWER: D**

**5. The S5-class SSBNs have an approximate submerged displacement of:**

- A. 6,000 tonnes
- B. 8,500 tonnes
- C. 13,500 tonnes
- D. 20,000 tonnes

**ANSWER: C**

**6. Op Ajay Launched By Bharat To Rescue People From**

- A. USA
- B. Israel
- C. UK
- D. Iran

**ANSWER: B**

**7. DGAQA Stands For**

- A. Directorate General of Aeronautical Quality Assurance
- B. Directorate General of Aeronautical Query Assurance
- C. Directorate General of Aeronautical Quality Assured
- D. None

**ANSWER: A**

**8. Ex AL NAGAH, NASEEM-AL-BAHR, Ex EASTERN BRIDGE Conducted b/w India &**

- A. Qatar
- B. Oman
- C. UAE
- D. Maldives

**ANSWER: B**

**9. The Douglas C-47 Skytrain or Dakota Is A**

- A. UAV

- B. Military Transport Aircraft
- C. Fighter Aircraft
- D. None

**ANSWER: B**

**10. Infantry Day Is Always Observed On**

- A. 26 Oct
- B. 27 Oct
- C. 28 Oct
- D. 29 Oct

**ANSWER: B**

**11. PBG The Oldest Regiment In The Indian Army, Having Been Raised In**

- A. 1773
- B. 1774
- C. 1779
- D. None of the above

**ANSWER: A**

**12. INSAS Rifle Manufactured By**

- A. ARDE
- B. HAL
- C. IAI
- D. ISRO

**ANSWER: A**

**13. ISRO Hq Is In**

- A. Mumbai
- B. Kochi
- C. Chennai
- D. Bangalore

**ANSWER: D**

**14. Brahmos Is A**

- A. Hypersonic Cruise Missile
- B. Supersonic Cruise Missile
- C. Subsonic Cruise Missile
- D. Ballistic Missile

**ANSWER: B**



**15. Where Is The Hq Of The Central Command of The Indian Army?**

- A. Kochi
- B. Vishakhapatnam
- C. Pune
- D. Lucknow

**ANSWER: D**

**16. Sarmat Missile Is A**

- A. Nuclear-Capable Missile
- B. Cruise Missile
- C. Submarine Launched Ballistic Missiles
- D. None

**ANSWER: A**

**17. "The Broken Earth" Book Written By**

- A. Shashi Tharoor
- B. N.K. Jemisin
- C. Hew Strachan
- D. Philip Pullman

**ANSWER: B**

**18. What Is The Capital Of Nigeria?**

- A. Oslo
- B. Abuja
- C. Cape Town
- D. Warsaw

**ANSWER: B**

**19. Ex 'Ajeya Warrior' conducted b/w India &**

- A. Qatar
- B. Oman
- C. UAE
- D. UK

**ANSWER: D**

**20. Operation Ganga Was Conducted By IAF In**

- A. UK
- B. USA

- C. Ukraine
- D. Afghanistan

**ANSWER: C**