

# Daily Defence Current Affairs

## 18 March 2025

### India Approves 23 Quantum Labs

- India's National Quantum Mission (NQM) has marked a significant milestone with the approval of 23 academic institutions to establish quantum teaching laboratories.
- This development emerged from the joint monthly meeting of Secretaries of Science Ministries, held in New Delhi on 16 March 2026. Another 100 proposals remain under evaluation, signalling robust momentum in the country's quantum technology drive.
- The NQM, sanctioned with a substantial budget of ₹6,003.65 crore for the period 2023–2031, harbours ambitious goals. It seeks to engineer quantum computers boasting 50 to 1,000 qubits, alongside satellite-based secure communication systems and high-precision quantum sensors and materials.
- These objectives position India to leapfrog into the forefront of quantum innovation.
- A Polar Satellite Launch Vehicle (PSLV) mission looms on the horizon later this year, while a dedicated navigation satellite for the Indian Navy is slated for launch around May. These space endeavours underscore the intersection of quantum advancements with India's broader aerospace and defence priorities.
- The Department of Science and Technology (DST) is actively refining manpower guidelines for project staff. These norms, last updated in 2020, are being aligned with the Anusandhan National Research Foundation framework to better support ongoing quantum and scientific initiatives.



## IAF Charts Jaguar Phase-Out Amid Mirage-2000

- The Indian Air Force (IAF) is preparing to retire its ageing Jaguar strike aircraft, a platform that has served for over four decades.
- To maintain squadron strength during this transition, the Mirage-2000 fleet will be extended in service until around 2039, while the IAF continues to source Jaguar spares globally.
- This balancing act reflects the challenges of sustaining combat readiness amid delays in inducting TEJAS MK-2 and additional Rafales.
- The Jaguars, once central to India's low-level penetration strike capability, are now being phased out due to logistical hurdles rather than doctrinal shifts. Retirement will begin with the oldest airframes between 2028 and 2031, while upgraded DARIN-III variants will remain slightly longer.
- The Mirage-2000, inducted in 1985 and known as 'Vajra,' was originally slated for retirement around 2035 but may now serve until 2038–2039. Its extension is supported by Dassault Aviation's technical backing and spares availability.
- The Jaguar, dubbed 'Shamsher,' entered service in the early 1980s as a dedicated deep-strike aircraft. India became its largest operator, acquiring over 160 airframes, many built locally. Variants included strike, trainer, and maritime models, with the fleet serving nuclear-capable roles.



## US-Israel Intensify Strikes, Iran Confirms Larijani Death

- Day 19 of the US-Israel war on Iran entered with Tehran's confirmation of the assassination of a top Iranian power broker, expanded US strikes on critical infrastructure, and sweeping retaliation by Tehran across the region.
- At the centre of the escalation was the killing of Ali Larijani, one of the Islamic Republic's most influential figures, in a US-Israeli airstrike in Tehran.
- His death, coming weeks after the reported killing of Supreme Leader Ayatollah Ali Khamenei, has deepened a leadership vacuum even as Iran faces mounting military pressure and internal instability.
- The United States struck Iranian missile sites near the Strait of Hormuz with heavy bunker-buster bombs, while Iran responded with missile and drone attacks on Israel and across Saudi Arabia, Iraq and the United Arab Emirates.
- The death of Ali Larijani removes one of Iran's most influential power brokers at a critical moment in the war.
- Larijani, a longtime confidant of Ayatollah Ali Khamenei, was killed in an airstrike while visiting family in a Tehran suburb.
- He had emerged as a key decision-maker after Khamenei's death earlier in the conflict, making his loss strategically significant.
- Israel's defence leadership confirmed the strike earlier, with Iranian media later acknowledging his .

- **US expands war to Hormuz**
- Washington escalated its military campaign by targeting Iran's coastal missile infrastructure.
- The US deployed 5,000-pound bunker-buster bombs on hardened missile sites near the Strait of Hormuz.
- These sites were seen as a direct threat to international shipping routes.
- The strikes followed Iran's move to restrict access through the critical oil chokepoint.
- The escalation signals a shift from nuclear targets ..



## **India's D4 Shield Ushers In Era of Drone Defence Escalation**

- India's naval expansion has reached a pivotal juncture with the formal induction of the indigenous D4 Anti-Drone Shield, developed by the Defence Research and Development Organisation (DRDO) and manufactured by Bharat Electronics Limited (BEL).
- This counter-unmanned aerial system (CUAS), dubbed "Drone Detect, Deter, and Destroy," embodies New Delhi's "Make in India" ambitions amid escalating regional tensions.

- The system's rapid deployment underscores a strategic pivot towards advanced electronic warfare capabilities. Framed by Indian officials as a triumph of self-reliance, the D4 integrates multi-sensor fusion for comprehensive 360-degree surveillance, leveraging active phased-array radars, radio frequency (RF) sensors, and electro-optical/infrared (EO/IR) trackers.
- At its core, the D4 employs a layered response protocol. Detection occurs through real-time scanning of drone signatures, followed by soft-kill measures such as GPS spoofing and high-power electronic jamming to disrupt command links. For hardened threats, it escalates to hard-kill options, including directed energy weapons (DEWs) like high-energy lasers capable of neutralising targets at ranges exceeding several kilometres.
- This induction follows heightened hostilities, particularly the high-altitude skirmishes of 2025, retrospectively labelled "Operation Sindoor" in Indian discourse. Deployments are now prioritised at key naval dockyards, coastal installations, and forward bases along the North Arabian Sea frontier, enhancing protection against low-cost, asymmetric drone incursions.



## REVIEW QUESTIONS

1. Under India's National Quantum Mission (NQM), how many institutions have been approved to set up quantum teaching laboratories?
  - A. 15
  - B. 23
  - C. 50
  - D. 100

**ANSWER: B**

**2. What is the budget allocated for the National Quantum Mission (2023–2031)?**

- A. ₹3,000 crore
- B. ₹4,500 crore
- C. ₹6,003.65 crore
- D. ₹10,000 crore

**ANSWER: C**

**3. Which aircraft is the Indian Air Force planning to retire gradually?**

- A. Rafale
- B. Tejas Mk-2
- C. Mirage-2000
- D. Jaguar

**ANSWER: D**

**4. The D4 Anti-Drone Shield developed by DRDO follows which operational framework?**

- A. Track, Target, Terminate
- B. Detect, Deter, Destroy
- C. Scan, Secure, Strike
- D. Identify, Isolate, Eliminate

**ANSWER: B**

**5. The Strait of Hormuz is strategically important because it:**

- A. Connects Europe and Asia directly
- B. Is a major naval training zone
- C. Handles a significant portion of global oil transport
- D. Is the largest port in the Middle East

**ANSWER: C**

**6. INS Taragiri Is Manufactured By**

- A. CSL
- B. MDL
- C. GRSE
- D. None

**ANSWER: B**

**7. INS Taragiri Is Made Under\_\_ Project.**

- A. P75 I
- B. P17A

- C. P15B
- D. None

**ANSWER: B**

**8. Ex SURYA KIRAN Conducted b/w India &**

- A. Bhutan
- B. Sri Lanka
- C. UAE
- D. Nepal

**ANSWER: D**

**9. European ASRAAM Stands For**

- A. Advanced Short Range Air Missile
- B. Advanced Short Ring Air-to-Air Missile
- C. Advanced Short Range Air-to-Air Missile
- D. None

**ANSWER: C**

**10. Marine Engineering Training Establishment of the Indian Navy located at**

- A. Noida
- B. Kochi
- C. Pune
- D. Wayanad

**ANSWER: C**

**11. Where Is The Hq Of The Southern Western Command of The Indian Army?**

- A. Jaipur
- B. Jabalpur
- C. Pune
- D. Mumbai

**ANSWER: A**

**12. Sea Dragon Exercise Hosted By**

- A. USA
- B. Sweden
- C. France
- D. None of the above

**ANSWER: A**

**13. India Purchased C 130 J from**

- A. USA
- B. Sweden
- C. France
- D. None of the above

**ANSWER: A**

**14. College of Military Engineering (CME) Is Located At**

- A. Pune
- B. Kamptee
- C. Mumbai
- D. Noida

**ANSWER: A**

**15. Which Country Ranked Third Highest In The World Defence Expenditure?**

- A. Australia
- B. USA
- C. France
- D. Bharat

**ANSWER: D**

**16. Regimental Center Of PUNJAB REGIMENT Is In**

- A. Balasore, Odisha
- B. Chennai, T.N.
- C. Trombay, M.H.
- D. Ramgarh Cantonment, Jharkhand

**ANSWER: D**

**17. India Purchased IAI Searcher UAV from**

- A. USA
- B. Sweden
- C. France
- D. Israel

**ANSWER: D**

**18. KHARTOUM Is The Capital Of**

- A. Spain

- B. Sri Lanka
- C. Suriname
- D. Sudan

**ANSWER: D**

**19. HELINA Missile Has A Maximum Range Of**

- A. 7 kilometres
- B. 8 kilometres
- C. 9 kilometres
- D. 10 kilometres

**ANSWER: A**

**20. Joint Exercises B/w The India And France Is Called:**

- A. Yama
- B. SLINEX
- C. Indra
- D. GARUDA

**ANSWER: D**

