

# Daily Defence Current Affairs

## 13 May 2025

### 10 Satellites Working Round-the-clock To Ensure India's Security: ISRO

- Addressing the 5th Convocation ceremony of the Central Agricultural University in Imphal, the ISRO Chairman V Narayanan said that at least 10 satellites are working round-the-clock for strategic purposes to ensure the safety and security of Indian citizens.
- "You all know about our neighbours. If we have to ensure the safety of our country, we have to serve through our satellites. We have to monitor our 7,000 km seashore areas. We have to monitor the entire Northern part continuously. Without satellite and drone technology, we can't achieve that," he said.
- Speaking about India's achievements in space, the ISRO chairman said the Chandrayaan-1 mission discovered evidence of water molecules on the Moon's surface, making India the first country to do so. He also said that India is becoming a "vibrant space power" and will have its first space station by 2040.
- He added that India has launched and placed 433 satellites into orbit for 34 countries.
- V Narayanan added that ISRO is developing a satellite for G20 countries to study climate and air pollution and monitor weather.
- **CARTOSAT-3**
- CARTOSAT-3 is a third-generation agile advanced Earth observation satellite developed by ISRO.
- It replaces the IRS (Indian Remote Sensing) series and has high-resolution imaging capabilities.
- Launched aboard the Polar Satellite Launch Vehicle (PSLV-C47).

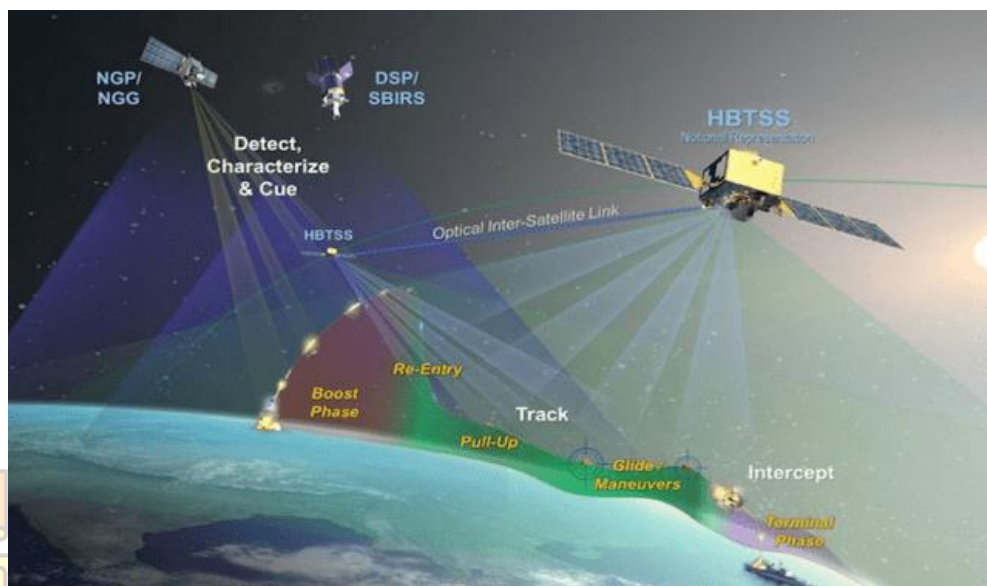
## Applications of CARTOSAT-3

- **National Security & Defense:**
  - **Military applications:** Used for **strategic surveillance, border security, and defense planning.**
  - **Previous use:** Cartosat-2 aided in **2016 surgical strikes** across the **LoC** and **2015 Myanmar-Manipur operations.**
- **Disaster Management & Urban Planning:**
  - **Assessing natural disasters:** Earthquake, floods, and landslide monitoring.
  - **Urban & Rural Infrastructure Planning:** Road networks, water distribution, and land-use regulation.
  - **Coastal Land Use & Regulation:** Monitoring environmental changes along the coastline.
- **Cartography & Remote Sensing:**
  - **High-Resolution Mapping** for **geospatial applications.**
  - **Detecting Natural & Man-Made Changes** in geographical features.

## India Ramps Up Efforts To Enhance Satellite-based Surveillance Tech


- The government has already directed three private firms - Ananth Technologies, Centum Electronics, and Alpha Design Technologies - to move up their satellite development schedule from four years to 12-18 months.
- The spy satellites are likely to be ready on or before 2026 instead of the earlier deadline set for 2028-end, the report said quoting individuals, who requested anonymity due to the sensitivity of the issue.
- One such satellite, which is in the advanced stage of development, is expected to be ready this year itself. Produced by Ananth Technologies, the satellite will either be launched aboard ISRO's Launch Vehicle Mark-III or SpaceX depending on mission schedules.
- The initiative is part of the \$3-billion Space-Based Surveillance-3 mission, which was approved by PM Modi-led Cabinet Committee on Security (CCS) in October 2024.

- Under the programme, 52 surveillance satellites are being built to monitor India's borders. In addition, these spy satellites will provide crucial assistance during natural disasters such as earthquakes or floods.
- Alpha Design has been one of ISRO's key partners in building and deploying the Indian Regional Navigation Satellite System (IRNSS), which seeks to replace the GPS in India with NavIC, an indigenous navigation standard.



## PL-15 Missile Failure

- During the recent India-Pakistan conflict, codenamed Operation Sindoor by India, Pakistan deployed advanced Chinese-origin PL-15 beyond-visual-range air-to-air missiles (BVRAAMs) in an attempt to target Indian assets.
- However, these missiles failed to achieve their objectives. Indian authorities showcased the wreckage of the PL-15 missile, which was recovered intact or in pieces within Indian territory, as evidence of its failure.

Reason	Description
Indian air defence interception	Multi-layered grid neutralized incoming missiles
Missile malfunction	Failure to detonate or hit target; found intact in Indian territory
Electronic countermeasures (ECM)	Indian jamming likely caused deviation or failure in missile guidance
 Self-destruct mechanism failure	Missile did not self-destruct, enabling recovery and analysis by Indian forces

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## WHAT IS CHINA-MADE **PL-15 MISSILE** USED BY PAKISTAN ARMED FORCES?



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### 5 FACTS ABOUT THE PL-15 MISSILE

#### ■ CHINESE ORIGIN

Radar-guided long-range air-to-air missile developed by China, used by Pakistani air forces

#### ■ IMPRESSIVE RANGE

Can strike targets up to 200 kilometres away

#### ■ DEADLY SPEED

It uses a dual-pulsed solid-fuel rocket motor. It can achieve speeds greater than Mach 5, which is five times the speed of sound

#### ■ PHYSICAL SIZE

4 metres long with 200mm diameter

#### ■ MILITARY HISTORY

First tested in 2011, entered Chinese service in 2015

## Pakistan Violating Cessation

- Even after Prime Minister Narendra Modi sent an explicit message against terrorism being "encouraged" by Pakistan, there is a sense of scepticism in the

border villages who fear that Pakistan's army will not desist from aggression as they have tried to breach the understanding reached between two countries.

- The local residents of a border village in Samba district of Jammu say that they heard the blasts occurring last night, and splinters hit one of the houses. The roof and kitchen of the affected house have also been damaged after shelling by Pakistan.
- The Prime Minister said terrorists never imagined India would make such a bold move, but when the nation stands united with 'nation first' as its guiding principle, firm decisions are taken and impactful results are delivered.
- He said India's missile and drone strikes on terrorist hubs in Pakistan shattered not only their infrastructure but also their morale. He pointed out that locations like Bahawalpur and Muridke had long operated as centers of global terrorism, linking them to major attacks worldwide, including the 9/11 attacks on the US, the London tube bombings, and decades of terrorist incidents in India.
- India's operation resulted in the elimination of over 100 terrorists, including key figures who openly plotted against India for decades, PM Modi added, affirming that those who orchestrated threats against India had been swiftly neutralized.





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If there's going to be  
any talk with Pakistan,  
**it will be about PoK**

PM Modi's Address To The Nation



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**Zero Tolerance**  
**against** terrorism is the  
guarantee of a better and  
safer world



PM Modi's Address To The Nation,  
12 May 2025



## REVIEW QUESTIONS

**1. What is the name of the advanced Earth observation satellite developed by ISRO?**

- A. INSAT-3D
- B. CARTOSAT-3
- C. RISAT-2BR1
- D. GSAT-6A

**ANSWER: B**

**2. How many satellites are currently working round-the-clock for India's strategic purposes, according to ISRO?**

- A. 5
- B. 7
- C. 10
- D. 15

**ANSWER: C**

**3. Which high-precision weapon used by the Indian Air Force in Operation Sindoor is a long-range, air-launched cruise missile developed by MBDA?**

- A. HAMMER
- B. Loitering Munition
- C. SCALP
- D. BrahMos

**ANSWER: C**

**4. USSR Stands For**

- A. Union of Soviet Socialist Republics
- B. Union of Soviet Social Republics
- C. Union of Soviet Socialist Rebound
- D. Union of Soviet Socialist Robot

**ANSWER: A**

**5. College of Military Engineering Is At**

- A. Bangalore
- B. New Delhi
- C. Nagpur
- D. Pune

**ANSWER: D**

**6. Sashastra Seema Bal Was Formed In**

- A. 20 December 1963
- B. 20 December 1964
- C. 20 December 1965
- D. None of the above

**ANSWER: A**

**7. SSB Force of India Deployed Along Its Border With**

- A. Nepal and China
- B. Bangladesh and Bhutan
- C. Pakistan and Sri Lanka
- D. Nepal and Bhutan

**ANSWER: D**

**8. The Bab-El-Mandeb Is A Strait Between**

- A. Arabia and Africa
- B. Asia and Africa
- C. Arabia and the Mediterranean Sea
- D. None of these

**ANSWER: A**

**9. The Number of Non-permanent Members of UN Security Council Is**

- A. 8
- B. 10
- C. 12
- D. 14

**ANSWER: B**

**10. Country Do Not Share Border with The Caspian Sea Is\_**

- A. Turkmenistan
- B. Kazakhstan
- C. Armenia
- D. Iran

**ANSWER: C**

**11. INS Tarkash Is A**

- A. Destroyer
- B. OPV

- C. Submarine
- D. Frigate

**ANSWER: D**

**12. Department of Military Affairs is headed by**

- A. Indian Army Chief
- B. Indian Air Force Chief
- C. Indian Navy Chief
- D. CDS

**ANSWER: D**

**13. Regimental Centre Of THE BRIGADE OF THE GUARDS**

- A. Kamptee, Maharashtra
- B. Ahmednagar, Maharashtra
- C. Delhi Cantonment
- D. Fatehgarh, Uttar Pradesh

**ANSWER: A**

**14. 'Service And Loyalty' Is The Motto Of**

- A. CRPF
- B. BSF
- C. NSG
- D. ITBP

**ANSWER: A**

**15. Khartoum Is The Capital Of**

- A. Sudan
- B. Italy
- C. Japan
- D. Maldives

**ANSWER: A**

**16. "Walking with Lions: Tales from a Diplomatic Past" Book Is Written By**

- A. K Natwar Singh
- B. Ratan Tata
- C. Harper Lee
- D. Fatima Bhutto

**ANSWER: A**

**17. 'Sarvatra, Sarvottam, Suraksha' Is The Motto Of**

- A. CRPF
- B. BSF
- C. NSG
- D. ITBP

**ANSWER: C**

**18. Battlefield Surveillance Radar Developed by**

- A. DRDO
- B. Boeing
- C. CSL
- D. HAL

**ANSWER: A**

**19. Gwadar Port Is Located In**

- A. Israel
- B. Iran
- C. Pakistan
- D. Iraq

**ANSWER: C**

**20. Which Country Supplied Dragunov Sniper Rifles To India?**

- A. Israel
- B. USA
- C. Japan
- D. Russia

**ANSWER: D**