

Daily Defence Current Affairs

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Tejas Combat Jet Test Fires Astra Missile

- India's indigenously-built Tejas light combat aircraft on Wednesday successfully test fired homegrown air-to-air missile Astra. The test firing of the missile was carried out off the coast of Chandipur in Odisha.
- "The test-firing successfully demonstrated the direct hit of the missile on flying target," it said. "All the subsystems performed accurately meeting all mission parameters and objectives," the ministry said.
- ASTRA missile is designed and developed by the DRDO.
- It is capable of engaging targets at a range of over 100 km.
- The missile is equipped with advanced guidance and navigation systems that allow it to destroy targets with greater accuracy.
- The missile is already inducted into the Indian Air Force.



India Develops Directed-Energy Laser Weapon 'Surya'

- According to information published on the Facebook account of the IADN Centre on March 9, 2025, the DRDO is developing the **300 kW** Directed-Energy Weapon (DEW) laser, named Surya, which boasts a remarkable **range of 20 kilometres**.
- DRDO has made significant advancements in the field of directed-energy weapons. This system boasts an operational range of **20 kilometres** and is designed to neutralise aerial threats such as drones, missiles, and other airborne projectiles.
- The **Laser Science and Technology Centre** DRDO's lead laboratory for laser technology, is spearheading the project. While DRDO has previously developed a 25-kilowatt laser capable of targeting ballistic missiles within a 5-7 km range, this new initiative represents a significant leap in power and capability.



300 kW Laser System

System Parameters	
Power	300 kW, Continuous
Optical Quality (M^2)	< 2
Output Aperture (D)	50 cm
Expected Range	Upto 20 km
Configuration	Ground Transportable, 2 no. 8x8 vehicle with separate control vehicle

Major Technologies

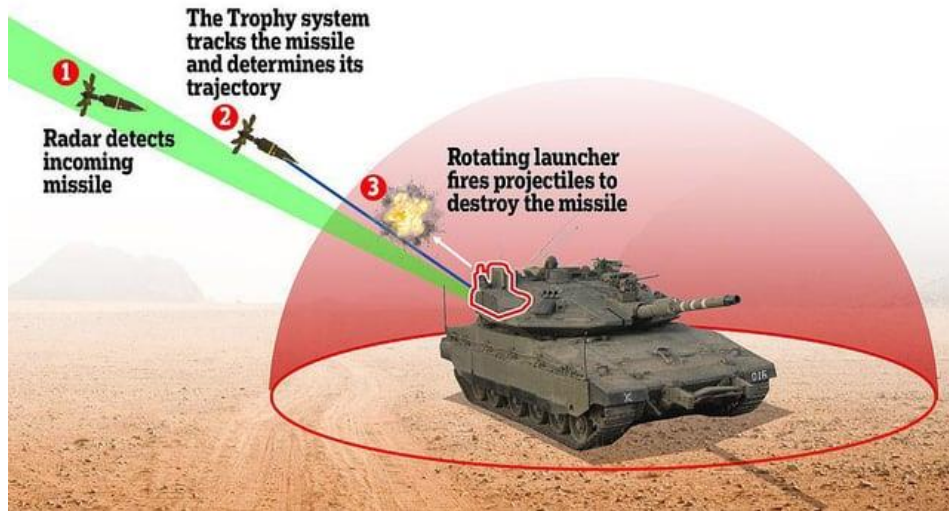
- Centrifugal Bubble SOG
- High Gain Supersonic Nozzle
- Sealed Exhaust Control
- Long Range Target Acquisition
- Large Aperture Beam Director
- Adaptive Control System

300 kW is the basic module for scaling by medium comb, to MW class

TROPHY Active Protection System

- In February 2025, **Rafael Advanced Defence Systems Ltd of Israel and Larsen & Toubro (L&T)** of India announced a significant collaboration at Aero India 2025, aimed at integrating the **TROPHY Active Protection System (APS)** into Indian combat vehicles.
- The TROPHY system is the **world's only operational and combat-proven APS**, designed to protect armoured vehicles against anti-tank threats while enhancing their ability to identify enemy positions.
- This partnership aligns with India's "Atmanirbhar Bharat" and "Make in India, Make for the World" initiatives, emphasizing self-reliance in defence technology.
- TROPHY APS will be customised for Indian defence platforms and manufactured locally, leveraging Rafael's cutting-edge expertise and L&T's advanced manufacturing capabilities.
- The TROPHY Active Protection System (APS) is a state-of-the-art, combat-proven technology designed to safeguard military platforms against a wide array of modern threats, including anti-tank missiles, rocket-propelled grenades (RPGs), and small unmanned aerial systems (drones).

HOW THE TROPHY ACTIVE PROTECTION SYSTEM WORKS



Bharat Electronics Bags ₹2,463 Crore Order

- BEL has secured a significant contract worth **₹2,463 crore** from the Ministry of Defence to supply **Ashwini Radars** to the IAF. These radars are fully indigenous and have been jointly developed by BEL and the DRDO. Here are some key features and implications of this deal:
- Ashwini Radars (also known as Air Defence Tactical Control Radar) are Active Electronically Scanned Array (AESA) systems, which provide advanced capabilities such as electronic scanning in both azimuth and elevation.
- They offer 4D surveillance, enabling the detection and tracking of aerial targets, including fighter jets and slow-moving objects like helicopters and drones.
- This contract marks a substantial milestone in India's pursuit of self-reliance in defence technology. With this order, BEL's total order book for the current financial year has reached an impressive ₹17,030 crore.



Framework To Restrict Chinese Components

- MoD is finalizing a framework to eliminate the use of Chinese components in military drones, addressing national security concerns and promoting indigenisation.
- This initiative follows intelligence reports highlighting vulnerabilities caused by Chinese-made parts in drones used by the Indian Army, particularly in border areas.
- These components, including cameras, communication systems, and software, pose risks of data breaches and adversary control over drones.
- Intelligence agencies flagged Chinese components in domestically manufactured drones supplied to the Army, raising alarms about compromised intelligence-gathering and operational control.



REVIEW QUESTIONS

1. Which of the following is the only known overseas airbase operated by the Indian Air Force?

- A. Diego Garcia
- B. Ayni Air Base
- C. Farkhor Air Base
- D. Changi Naval Base

ANSWER: C

2. India has secured military access to which port in Oman for refueling and maintenance of naval vessels?

- A. Sabang Port
- B. Duqm Port
- C. Nha Trang Port
- D. Assumption Island

ANSWER: B

3. The Agaléga Islands, where India is developing a strategic military base, belong to which country?

- A. Seychelles
- B. Mauritius
- C. Indonesia
- D. Vietnam

ANSWER: B

4. Which Indian military base is strategically located near the Malacca Strait in Indonesia?

- A. Changi Naval Base
- B. Sabang Port
- C. Nha Trang Port
- D. Reunion Island

ANSWER: B

5. Which of the following Indian military bases is developed in partnership with France?

- A. Reunion Island
- B. Farkhor Air Base
- C. Diego Garcia

D. Assumption Island

ANSWER: A

6. Which Indian company has secured a ₹2,463 crore contract to supply Ashwini Radars to the IAF?

A. Hindustan Aeronautics Limited (HAL)

B. Bharat Electronics Limited (BEL)

C. Larsen & Toubro (L&T)

D. Tata Advanced Systems

ANSWER: B

7. What is the TROPHY Active Protection System (APS) designed for?

A. Enhancing communication in combat zones

B. Protecting armored vehicles from anti-tank threats

C. Tracking enemy aircraft movements

D. Jamming enemy radar systems

ANSWER: B

8. What is the name of the 300 kW Directed-Energy Weapon (DEW) laser being developed by DRDO?

A. Agni

B. Surya

C. Varuna

D. Prahaar

ANSWER: B

9. Where was the Astra air-to-air missile successfully test-fired from the Tejas aircraft?

A. Pokhran, Rajasthan

B. Wheeler Island, Odisha

C. Chandipur, Odisha

D. Thar Desert, Rajasthan

ANSWER: C

10. Which organization developed the Astra missile?

A. Hindustan Aeronautics Limited (HAL)

B. Indian Space Research Organisation (ISRO)

C. Defence Research and Development Organisation (DRDO)

D. Bharat Dynamics Limited (BDL)

ANSWER: C

11.INS Darshak Is A

A. Destroyer

B. OPV

C. Submarine

D. Hydrographic Survey Ship

ANSWER: D

12.Pangong Tso lake Is Located In

A. Kashmir

B. Ladakh

C. Odisha

D. Kochi

ANSWER: B

13. INS Khukri Is A Type Of

A. Frigate

B. Submarine

C. Destroyer

D. Missile Corvette

ANSWER: D

14.Pangong Tso lake Is Located In

A. Kashmir

B. Ladakh

C. Odisha

D. Kochi

ANSWER: B

15. Priyadarshini Is A Fast Patrol Vessel Of

A. ICG

B. IAF

C. Indian Navy

D. BSF

ANSWER: A

16. Which Port Is Located In the Western Coast of India?

- A. Kandla
- B. Kolkata
- C. Mangalore
- D. Visakhapatnam

ANSWER: A

17. AAI Stands For

- A. Airport Author of India
- B. Air Authority of India
- C. Airport Authority of India
- D. None of the above

ANSWER: C

18. India Purchased Boeing 737 from

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

ANSWER: A

19. Indian Army Flag Consist Colours of ___ Colours.

- A. Gold, Red And Black
- B. Gold, Red And Blue
- C. Gold, Rose Black And Black
- D. Green, Red And Black

ANSWER: A

20. Operation Talwar Was Conducted In

- A. 1978
- B. 1988
- C. 1998
- D. 1999

ANSWER: D