

Daily Defence Current Affairs

27 May 2025

DRDO Developing New Gun Fired ATGM For 105mm

- The DRDO is actively developing a new gun-fired Anti-Tank Guided Missile (ATGM) system tailored for the 105mm cannon of the **Zorawar Light Tank**, marking a significant step in India's push for indigenous defence capabilities.
- The Zorawar, jointly developed by DRDO's **Combat Vehicles Research and Development Establishment** and **Larsen & Toubro** is a 25-ton, three-crew light tank designed for agility, high-altitude operations, and rapid deployment.
- Its primary armament is a 105mm high-pressure rifled gun, initially sourced from John Cockerill of Belgium, but DRDO's **Armament Research and Development Establishment** is now developing an indigenous replacement to reduce reliance on foreign systems.
- This gun-launched ATGM is expected to offer projectile penetration of approximately 500mm of armoured steel at ranges between **2,000 and 2,500 meters**, enabling the tank to effectively engage and destroy enemy tanks, armoured vehicles, and fortified positions from stand-off distances.



TATA Advanced Systems Advanced Thermal Sighting System

- The Indian Army has significantly enhanced its air defence capabilities by integrating **TATA Advanced Systems Limited's** advanced Thermal Sighting System with the Russian-origin **IGLA man-portable air defence systems (MANPADS)**.
- This state-of-the-art thermal sight, specifically the **Rajak Thermal Weapon Sight**-Cooled empowers operators with real-time tracking and engagement of aerial threats such as drones, helicopters, and aircraft, both during the day and at night, as well as in adverse weather and low-visibility conditions.
- It enables detection of man-sized targets up to 6 km and tank-sized targets up to 4 km, while larger aerial targets like aircraft and helicopters can be detected from 12–15 km away. Smaller targets, such as UAVs, can be tracked from 3 km.
- The **Igla-S system itself is a third-generation**, shoulder-fired, infrared-homing surface-to-air missile with a range of **up to 6 km** and an **altitude ceiling of 3.5 km**.



DRDO's Anti-Stealth Surveillance Radar (VHF-SR) By DRDO-BEL-TASL Enters Field Trials

- DRDO has achieved a significant milestone with the advancement of the Anti-Stealth VHF-SR (Very High Frequency-Short Range) **surveillance radar system**

into critical field trials, representing a transformative leap in indigenous radar technology.

- Developed through a collaborative effort between the **DRDO, BEL, and TASL**, this cutting-edge radar system demonstrates India's growing prowess in developing sophisticated counter-stealth technologies.
- The system's remarkable **400-km** detection range represents a considerable achievement for a truck-based mobile VHF radar platform, enabling comprehensive early warning and surveillance capabilities across vast operational areas.
- The VHF-SR radar's primary technological advantage lies in its ability to detect **very low observable (VLO)** aircraft, including advanced stealth fighters that are specifically engineered to evade conventional radar systems. Operating within the **VHF band (30 to 300 MHz)**.



Indigenous Engines To Power India's 1,000 Km Range Kamikaze Drones

- India has made a significant leap in indigenous defence technology with the unveiling of potent **Kamikaze drones** powered by home-built engines, capable of striking targets up to **1,000 kilometres** away.
- Developed by the **National Aerospace Laboratories** under the **Council of Scientific and Industrial Research** these loitering munitions—also known as "**do-and-die**" drones.

- The Indian Kamikaze drone, named "Bharat" in some reports, measures approximately 2.8 meters in length with a 3.5-meter wingspan and weighs about 120 kilograms.
- It is powered by a 30-horsepower Wankel engine, developed indigenously by NAL, which enables the drone to achieve a maximum speed of 180 km/h and a flight range of up to 1,000 kilometres.
- The drone can carry an explosive payload of 25 kilograms, making it a formidable weapon for precision strikes on high-value enemy assets.
- Hyderabad-based **Raghu Vamsi Machine Tools (RVMT)**, a prominent aerospace and defence manufacturing firm, has announced plans to develop a cutting-edge Kamikaze drone, signalling a major advancement in India's indigenous unmanned aerial systems (UAS) capabilities.



Image credit: Pallava Bagla

REVIEW QUESTIONS

1. The new gun-fired ATGM system being developed by DRDO is designed for which tank?
 - A. Arjun MBT
 - B. T-90 Bhishma
 - C. Zorawar Light Tank
 - D. T-72 Ajeya

ANSWER: C

2. What is the weight of the Zorawar Light Tank?

- A. 20 tons
- B. 25 tons
- C. 30 tons
- D. 15 tons

ANSWER: B

3. What is the range of the Igla-S missile system?

- A. 3 km
- B. 5 km
- C. 6 km
- D. 8 km

ANSWER: C

4. Which companies collaborated with DRDO to develop the Anti-Stealth VHF-SR surveillance radar system?

- A. HAL and BDL
- B. BEL and TASL
- C. ISRO and BEL
- D. L&T and TASL

ANSWER: B

5. What is the maximum flight range of the Indian Kamikaze drone "Bharat"?

- A. 500 km
- B. 750 km
- C. 1000 km
- D. 1200 km

ANSWER: C

6. International Maritime Organisation (IMO) Hq Is At

- A. London, United Kingdom
- B. Vienna, Austria
- C. Paris, France
- D. Geneva, Switzerland

ANSWER: A

7. Chairman Of The Appointments Committee of the Cabinet (ACC) Is

- A. PM
- B. NSA

- C. CDS
- D. Home Minister

ANSWER: A

8. CBI Hq Is In

- A. New Delhi
- B. Mumbai
- C. Hyderabad
- D. Chennai

ANSWER: A

9. ___ Is The Largest Defense Contractors in the World.

- A. Lockheed Martin
- B. Boeing
- C. Raytheon Technologies
- D. None of the above

ANSWER: A

10. "If you win, you need not have to explain...If you lose, you should not be there to explain!" Said By___

- A. Winston Churchill
- B. Adolf Hitler
- C. Subhas Chandra Bose
- D. Bhagat Singh

ANSWER: B

11. Air Marshal Rank Of IAF Is Equivalent To Which Rank Of Indian Army?

- A. Brigadier
- B. Lt. Gen
- C. Captain
- D. Major General

ANSWER: B

12. Current Secretary-General Of NATO Is___.

- A. Jens Stoltenberg
- B. Admiral Rob Bauer
- C. General Tod D. Wolters
- D. None of the above

ANSWER: A

13. "It Is Our Duty To Pay For Our Liberty With Our Own Blood." Said By__

- A. Pandit Nehru
- B. Mahatma Gandhi
- C. Subhas Chandra Bose
- D. Bhagat Singh

ANSWER: C

14. 'The Communist Manifesto' Book Written By__.

- A. Karl Marx and Friedrich Engels
- B. Alexis
- C. Thomas Paine
- D. Niccolo Machiavelli

ANSWER: A

15. OPEC Hq Is In

- A. Budapest, Hungary
- B. New York, USA
- C. Luanda, Angola
- D. Vienna, Austria

ANSWER: D

16. IPCC Was Created By

- A. WMO & UNEP
- B. IMO& UNESCO
- C. IMF& WTO
- D. UNO& UNFCCC

ANSWER: A

17. Madagascar Is In

- A. Pacific Ocean
- B. Indian Ocean
- C. Black Sea
- D. Arctic Ocean

ANSWER: B

18. Which Is Not The Member Of SAARC?

- A. Bangladesh

- B. Myanmar
- C. India
- D. Pakistan

ANSWER: B

19. With reference to MILAN Exercise, consider the following statements:

1. It is a multilateral Naval Exercise conducted by the members of Shanghai Cooperation Organization (SCO).
2. MILAN 2024 conducted in the East China Sea.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

ANSWER: D

20. Mitra Shakti Ex Conducts B/W

- A. India & Indonesia
- B. India & UK
- C. India & Sri Lanka
- D. India & Thailand

ANSWER: C

