



The Defenders: INS Visakhapatnam

For Prelims: INS Visakhapatnam, P-15B, BrahMos, MILAN 2022

For Mains: Defence Technology, Security, Issues of maritime security of India and Measure Regarding those Issues

In its ever-increasing pursuit of [Atmanirabhar Bharat](#), India commissioned the first [Project 15B](#) destroyer in 2021 to indigenously build frontline destroyers for the Indian Navy.

- Recently, the India-made stealth guided-missile destroyer INS Visakhapatnam was formally affiliated to the Visakhapatnam port.

What is INS Visakhapatnam?

- Named after the **historic city of Andhra Pradesh** on the east coast, Visakhapatnam, the '**City of Destiny**', the ship has a total complement of about 315 personnel.
- INS Visakhapatnam is the **lead ship of the P15B class of guided missile stealth destroyers** and was commissioned on **21st November 2021**.
- The ship symbolizes India's matured shipbuilding capability and quest for the [Make in India initiative](#) towards achieving '[Atmanirbhar Bharat](#)'.
- The crew of the ship abides by her motto '**Yasho Labhasva**' - a Sanskrit phrase that translates to '**Attain Glory**'.
 - It **embodies the indomitable spirit and capability of this mighty ship** to achieve success and glory in every endeavour.
- Visakhapatnam class ships are follow-on of the **Kolkata class destroyers (P-15A) commissioned** in the last decade.
- The ship is on her maiden visit to the port for participating in the **Presidential Fleet Review (PFR)** and [MILAN 2022](#).
 - The fleet review is a **long-standing tradition** followed by navies all across the world and it is an assembly of ships at a **pre-designated place** for the purpose of displaying loyalty and allegiance to the sovereign and the state.

What are the Features of INS Visakhapatnam?

- Amongst the largest destroyers built in India, INS Visakhapatnam has an **overall length of about 164 metres** and a displacement of over 7,500 tonnes.
- Visakhapatnam is capable of undertaking multifarious tasks and missions spanning the full spectrum of maritime warfare that is equipped with an array of weapons and sensors, which include supersonic **surface-to-surface [Brahmos missile](#) and Barak-8 long-range surface to air missiles**.
- It also has **medium and short-range guns**, anti-submarine rockets, and advanced electronic warfare and communication suits.
- The destroyer is fitted with indigenously developed anti-submarine weapons and sensors,

prominently the **Hull-mounted Sonar Humsa-NG**, heavyweight torpedo tube launchers and rocket launchers.

- HUMSA-NG is the **third generation indigenous**, ship borne, hull-mounted, Sonar system designed by Naval Physical & Oceanographic Laboratory, DRDO, Kochi and productionised by Bharat Electronics, Bangalore.
 - HUMSA-NG is a state of the art Active cum Passive Integrated Ship Sonar system **designed to be installed on a variety of naval surface platforms** such as Frigates, Destroyers, ASW Corvettes and other classes of ships.
- The Visakhapatnam **ship can accommodate a crew of 312**, has an endurance of 4,000 nautical miles and can carry out a typical 42-day mission with extended mission time in out of area operation.
- The ship is **propelled by a powerful combined gas and gas (COGAG)** propulsion plant, consisting of four reversible gas turbines, which enables it to achieve a speed of over 30 knots or approximately 55 km/hr.
- The ship is **equipped to fight under Nuclear, Biological and Chemical (NBC)** warfare conditions.

What is BrahMos?

- BrahMos is a joint venture between the [Defence Research and Development Organisation of India \(DRDO\)](#) and the **NPOM of Russia**.
 - BrahMos is named on the **rivers Brahmaputra and Moskva**.
- It is a **two-stage (solid propellant engine in the first stage and liquid ramjet in second)** missile.
- It is a **multiplatform missile** i.e it can be launched from land, air, and sea and multi capability missile with pinpoint accuracy that works in both day and night irrespective of the weather conditions.
- It operates on the **"Fire and Forgets" principle** i.e. it does not require further guidance after launch.
- Brahmos is one of the **fastest cruise missiles** currently operationally deployed with speed of **Mach 2.8**, which is nearly **3 times more than the speed of sound**.

What is Project-15B?

- **Four Guided missile Destroyers of Project 15B (P 15B)** are under construction at M/s Mazagaon Dock Shipbuilders Limited, Mumbai. The contract for construction of these four ships was signed in 2011.
- These ships are **amongst the most technologically advanced Guided Missile Destroyers** of the world, with **state-of-the-art weapon/sensor package**, advanced stealth features and a high degree of automation.

What are the Features of the P-15B Ships?

- These ships are equipped with BrahMos supersonic cruise missiles and long-range **Surface-to-Air Missiles (SAM)**.
- The ship has several indigenous weapons systems like **medium range Surface-to-Air Missile (SAMs)**, indigenous torpedo tube launchers, anti-submarine indigenous rocket launchers and 76-mm super rapid gun mount.

What are the Other three Ships of Project 15B?

- The **second ship of P15B, Mormugao was launched in 2016**, and is being readied for harbour trials.
- The **third ship (Imphal) was launched in 2019** and is at an advanced stage of outfitting.
- The **fourth ship (Surat) is under block erection** and will be launched within this current

financial year (2022).

What is the Role of P-15B in the Security in India?

- The **Indian Navy's responsibilities** to safeguard a large coastline of 7516 Kms and about 1100 offshore islands along with 2.01 million sq km **Exclusive Economic Zone (EEZ)** have been enhanced in the present geopolitical scenario.
- Destroyers like the P-15B class shall **play an important role** in the larger oceans of the **Indo-Pacific**, making the Indian Navy a potent force.
- The guided missile Destroyers are deployed for various responsibilities like escort duties with the Carrier Battle Group **to protect the Naval fleet against any air, surface and underwater threats.**

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