

Project 15B

The Visakhapatnam-class destroyers, commonly known as the P-15 Bravo-class destroyers or just P-15B, are a series of guided-missile warships currently under construction for the Indian Navy. The P-15 class is an updated version of its forerunner, the Kolkata-class, with enhanced stealth, mechanisation, and armament capabilities. Mazagon Dock Limited (MDL) is building four ships conceived by the Directorate of Naval Design (DND) as part of the Make in India project. INS Visakhapatnam, the class's premiere ship, was commissioned on November 21, 2021. By the year 2024, the Indian Navy aims to get all four destroyers operational.

The topic has a very high chance of being asked as a UPSC Prelims Science and Technology Question or as a Current Affairs Question, as it has been in the news recently.

History of Project 15B

The Defence Acquisition Council (DAC), India's leading armaments procurement authority, which is subsidiary to the Ministry of Defence (MoD), authorised the acquisition of four 6,800-tonne destroyer warships dubbed "Project-15B" in 2009 as a supplement to the Kolkata-class warships, that were under development at the time. Because Mazagon Dock Shipbuilders Limited (MDL), a leading navy shipyard, was the only corporation capable of developing guided-missile warships at the moment, no open tender was released for their development. The goal of the project was to develop a line of destroyers that were comparable to the preceding Kolkata-class warships (Project-15A), and only bit distinct "progressively" - in aspects of armament and sensors - in order to lower the development time and costs of the stipulated class. The Indian Navy awarded MDL the contract to build the four designated destroyer warships in January 2011.

About Project 15B

Under the project four different destroyer warships are to be built and commissioned by the Indian Navy.

- The very first warship, INS **Visakhapatnam**, was launched in April 2015 after the foundation was cast in October 2013. Visakhapatnam completed its river trials in December 2020 and began marine trials in January 2021, before being handed to the Indian Navy on October 28, 2021. On November 21, 2021, it got deployed by the Indian Navy's West Naval Command in Mumbai.
- **Mormugao** first started operations in September of 2016. On the anniversary celebration of Goa Liberation Day, it finished its basin trials on December 14, 2021, and went for sea trials in December 19, 2021. Mormugao is planned to be delivered in 2022.
- **Imphal** was founded in April of 2019.
- **Surat**, the class's last ship, was laid down in July of 2018.

Technical Facts of Project 15B

- **Type:** Guided Missile Destroyer
- **Displacement:** 7,400 tonnes (7,300 long tons; 8,200 short tons)
- **Length:** 163 metres (535 ft)
- **Beam:** 17.4 metres (57 ft)
- **Draft:** 6.5 metres (21 ft)

- **Speed:** More than 30 knots (56 km/h)
- **Range:** 4,000 nautical miles (7,400 km; 4,600 mi) at 18 knots (33 km/h; 21 mph)
- **Endurance:** 45 days
- **Crew:** 300 (50 officers + 250 sailors)

Difference between P-15B and P-15A

The only physical distinction between the P-15A (Kolkata class) destroyer warships and the P-15B (Visakhapatnam class) destroyer warships is the bridge layout; the bridge of the P-15B warships is vastly different from that of the P-15A – it was designed to minimize radar cross-section (RCS) and enhance resilience.

In terms of the equipments, the P-15A and P-15B destroyers vary from one another.

- The Kolkata class is equipped with an OTO Melara 76 mm naval gun, whereas the Visakhapatnam class is fitted with a Mk-45 127 mm naval gun. (The intention to arm the Visakhapatnam class with the Mark 45 127 mm cannon was cancelled due to financial concerns, and the OTO Melara 76 mm gun was substituted.
- The sonar will be moved to the bow out from hull.
- To lower radar cross-section (RCS), the bridge layout as well as the mast architecture were altered.
- A "rail-less" chopper traversing device to keep the helicopter safe in the event of bad weather at sea.
- With just a Ship Data Network (SDN), an Automatic Power Management System (APMS), as well as a Combat Management System (CMS), the layout is network-centric.

Latest Developments

- INS Visakhapatnam successfully test-fired an improved model of the BrahMos anti-ship missile with an increased range on 11th January 2022, approximately two months post its deployment.