



INS Surat and frigate INS Udaygiri

Why in News?

Recently, the Defence Minister launched the **Indian Navy destroyer warship INS Surat and frigate INS Udaygiri in Mumbai.**

What is INS Surat?

▪ About:

- 'Surat' is the **fourth ship of Project 15B Destroyers** which heralds a significant makeover of the **P15A (Kolkata Class) Destroyers.**
- The **first ship (Visakhapatnam) of this class was commissioned in 2021.** The **second (Mormugao)** and **third (Imphal)** ships have been launched and are at different stages of outfitting/ trials.

▪ Named After:

- It is **named after the commercial capital of the state of Gujarat** and also the second largest commercial hub of western India after Mumbai.
 - Surat city has a rich maritime & ship building history and vessels built at the city in the 16th and 18th centuries were known for their longevity (of more than 100 years).
 - The ship Surat has been **built using the Block construction methodology.**
 - This methodology includes **hull construction at two different geographical locations** and has been joined together at MDL, Mumbai.

What is Project 15B?

▪ Project-15B:

- 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.
- In 2011, the deal to build four warships -- **Visakhapatnam, Mormugao, Imphal, and Surat** -- was signed under the Project-15B programme worth Rs 29,643.74 crore.
 - However, the final cost escalated to Rs 35,000 crore.
- All four ships have been **christened after cities from four corners of the country** and the induction of ships will be completed by 2024.

▪ 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 is INS Udaygiri?

▪ About:

- It is the **third ship of Project 17A frigates.**
- **Named After:**
 - The ship 'Udaygiri' is **named after a mountain range in the state of Andhra Pradesh.**
 - 'Udaygiri' is the **reincarnation of erstwhile 'Udaygiri'**, the Leander Class ASW Frigate, which saw numerous challenging operations in its illustrious service to the country spanning over three decades from 1976 to 2007.
- **Progress under P17A:**
 - Under the P17A program, **a total of seven ships, with 04 at Mazagon Dock Limited (MDL), Mumbai and 03 at GRSE are under construction.**
 - **Various novel concepts and technologies** like Integrated Construction, Mega Block Outsourcing, Project Data Management/ Project Lifecycle Management (PDM/PLM) etc have been adopted for the first time in indigenous Warship Design and Construction in this project.

What is Project 17A Frigates?

- **About:**
 - **Project 17A frigates** are follow-on of the **P17 Frigates (Shivalik Class)** with improved stealth features, advanced weapons and sensors and platform management systems.
 - A total of **seven ships are being constructed**, four at Mazagon Dock Shipbuilders (MDL), Mumbai and three at **Garden Reach Ship Builders Limited (GRSE), Kolkata.**
- **Features:**
 - The main advanced stealth features of P-17A pertain to the **smaller Radar cross-section of the ship** achieved through the use of a special super structure shape which reduces radar wave reflections.
 - Another important feature is regarding the **ship's low acoustic noise emanating from propellers**, operating machinery like Diesel Generators etc., which helps sonars on other ships to detect its presence.
 - Such **stealth features play an important role in improving the ship's survivability** in any hostile environment during operations.

[Source: PIB](#)

PDF Refernece URL: <https://www.drishtiiias.com/printpdf/ins-surat-and-frigate-ins-udaygiri>