

Successful Trials of ERASR

Why in News?

The <u>Indian Navy</u> successfully conducted user trials of the **Extended Range Anti-Submarine Rocket** (**ERASR**) from <u>INS Kavaratti.</u>

 Defence Research and Development Organisation (DRDO)'s Armament Research & <u>Development Establishment (ARDE), Pune</u>, Maharashtra, led the design and development of FRASR.

Key Points

- ERASR
 - Key Features:
 - ERASR is a completely indigenous anti-submarine rocket designed to neutralize underwater threats.
 - It is launched from onboard in-real-life (IRL) systems of Indian Naval Ships.
 - The system features a **twin-rocket motor configuration**, enabling it to meet a broad range of operational distances with **high accuracy and consistency**.
 - It uses an indigenously developed **Electronic Time Fuze** for precision engagement.
- INS Kavaratti:
 - About:
 - The Navy named INS Kavaratti after **Kavaratti, the capital of the Lakshadweep**
 - It revives the legacy of the erstwhile Arnala Class missile corvette INS
 Kavaratti (P 80), which played a key role in the 1971 Bangladesh Liberation
 War.
 - Project 28 and ASW Capabilities:
 - INS Kavaratti is the fourth and final stealth corvette built under Project 28 (Kamorta Class) by Garden Reach Shipbuilders and Engineers (GRSE), Kolkata.
 - It joins its three sister ships—INS Kamorta, INS Kadmatt, and INS Kiltan—in the Eastern Naval Command (ENC).
 - Strategic Importance:
 - The ship significantly boosts India's ASW (Anti-Submarine Warfare)
 capabilities, especially amid rising Chinese submarine activity in the <u>Indian</u>
 Ocean.
 - Its induction marks a strategic game-changer on the eastern seaboard.
 - Stealth and Structural Innovation:
 - INS Kavaratti features enhanced stealth capabilities, including reduced **Radar Cross Section (RCS)** through sloped surfaces and stealthy superstructure design.
 - Along with INS Kiltan, it is one of the first major Indian warships with a **carbon fibre composite superstructure**, offering high strength and reduced weight.
 - Combat-Ready Design:
 - The ship carries state-of-the-art systems to operate in **Nuclear**, **Biological**, and **Chemical** (NBC) warfare conditions.

• It integrates high-tech indigenous equipment such as Combat Management System (CMS), Torpedo Tube Launchers and Infra-Red Signature Suppression System.

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