6. Androth - Science & Technology

The Indian Navy has inducted 'Androth', the second of eight indigenous Anti-Submarine Warfare Shallow Water Crafts (ASW-SWC) built by GRSE. These vessels, with over 80% indigenous content, are designed to enhance India's coastal security and capabilities against underwater threats.

Introduction of 'Androth' - ASW Shallow Water Craft

The Indian Navy has inducted 'Androth,' the second vessel in a series of eight indigenously built Anti-Submarine Warfare Shallow Water Crafts (ASW-SWC). This marks a significant step in bolstering India's coastal defense capabilities.

Naming and Legacy - The ship is named after Androth Island, the largest island in the Lakshadweep archipelago, signifying the nation's strategic focus on securing its island territories and maritime boundaries. The name also honors the legacy of a previous naval vessel, INS Androth (P69), a Petya-class anti-submarine patrol ship that served the Indian Navy for over 27 years before being decommissioned.

Indigenous Construction - 'Androth' was built by Garden Reach Shipbuilders and Engineers (GRSE), Kolkata. Featuring over 80% indigenous components, the ship's construction is a testament to the government's Aatmanirbharta (self-reliance) vision in defense manufacturing.

Key Features and Mission Profile

Propulsion System - The ASW-SWC ships are propelled by a powerful diesel engine-waterjet **combination**, which provides high maneuverability in shallow coastal waters.

Armament - They are equipped with state-of-the-art weaponry for anti-submarine warfare, including - Lightweight torpedoes. Indigenously developed anti-submarine warfare (ASW) rockets.

Primary Roles - These vessels are specifically designed for -

1. **Anti-submarine operations** in coastal areas.
2. **Low-Intensity Maritime Operations (LIMO)**, such as surveillance and interdiction.
3. **Mine-laying missions** in designated areas.

Overview of India's Anti-Submarine Warfare (ASW) Capabilities

India has developed a multi-layered and technologically advanced ASW ecosystem to counter underwater threats.

Capability	Platform/System	Description
Surface Ships	Kamorta-class Corvettes (e.g., INS Kamorta, INS Kadmatt)	Stealth warships designed with low radiated underwater noise signatures to hunt submarines effectively.
	Integrated ASW Defence Suites (IADS)	Developed with Mahindra Defence Systems, these suites provide advanced underwater detection and self-protection against torpedo threats.
Aerial Assets	Boeing P-8I (Poseidon)	Long-range maritime patrol aircraft used for anti-submarine reconnaissance, detection, and attack.
	MH-60R Seahawk Helicopters	Multi-role helicopters deployed from warships, equipped with advanced sensors and weapons for anti-submarine warfare.
Weapon Systems	SMART System	A missile-assisted, lightweight torpedo delivery system developed by DRDO. It allows for quick, long-range targeting of enemy submarines.

Strategic Significance of ASW for India

Securing a Vast Coastline - India's extensive coastline and strategic location in the Indian Ocean require robust capabilities to monitor and neutralize underwater threats.

Countering Regional Threats - The increasing presence of nuclear-armed submarines and advanced naval assets from extra-regional powers in the Indian Ocean region poses a significant and growing security challenge.

Maintaining Maritime Dominance - Strong ASW capabilities are essential for maintaining India's maritime security, protecting its sea lanes of communication, and asserting its influence in its area of strategic interest.

Source - https - //www.thehindu.com/news/national/indian-navy-gets-anti-submarine-warfare-ship/article70051137.ece