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Indian Navy to Commission Three Advanced Frontline Platforms

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Context:

The Indian Navy is set to induct three significant frontline platforms on January 15, 2025, at the Naval Dockyard in Mumbai. These platforms are part of India's ongoing modernization efforts to strengthen its naval capabilities. The three platforms being commissioned are:

1. **Scorpene-class Submarine: Vagsheer**
2. **Project-15B Stealth Destroyer: Surat**
3. **Project-17A Stealth Frigate: Nilgiri**

1. Scorpene-class Submarine: Vagsheer

- **Named after:** Vagsheer is named after a deep-sea predator of the Indian Ocean, the sand fish.
- **Historical Context:** The original Vagsheer, a Soviet-origin submarine, was commissioned in 1974 and decommissioned in 1997.
- **Specifications:**
- **Type:** Diesel-electric attack submarine.
- **Capabilities:** Designed for sea denial, anti-surface, anti-submarine warfare, intelligence gathering, mine laying, and surveillance.
- **Stealth Features:** Incorporates advanced acoustic absorption, low radiated noise, and hydro-dynamically optimized shape.
- **Armament:** Can carry up to 18 torpedoes, Exocet anti-ship missiles, or 30 mines.
- **Countermeasures:** Equipped with C303 anti-torpedo system.

2. Project-15B Stealth Destroyer: Surat

- **An Improvement over Kolkata-class:** Surat is an upgraded version of the Kolkata-class destroyers (Project-15A).
- **Design:** Developed by the Navy's Warship Design Bureau with enhanced stealth technologies.
- **Specifications:**
- **Displacement:** Around 7,400 tonnes.
- **Speed:** Capable of speeds exceeding 30 knots.
- **Range:** About 4,000 nautical miles at 18 knots.
- **Propulsion:** Powered by four gas turbines in a Combined Gas and Gas (COGAG) configuration.
- **Weapon Systems:**
- **Surface-to-Air Missiles:** Barak 8 missiles.
- **Anti-Ship Missiles:** BrahMos supersonic missiles.
- **Guns:** Advanced guns for surface engagements.
- **Sensors:** State-of-the-art radar and electronic warfare systems.
- **Sonar:** Advanced sonar for sub-surface detection.

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3. Project-17A Stealth Frigate: Nilgiri

- **An Advancement of Shivalik-class:** Nilgiri is a further development of the Shivalik-class frigates with advanced stealth and operational features.
- **Specifications:**
- **Displacement:** Around 6,670 tonnes.
- **Speed:** Can reach speeds up to 28 knots.
- **Range:** Approximately 5,500 nautical miles at 16 knots.
- **Propulsion:** Combined Diesel or Gas (CODOG) system with two LM2500 gas turbines.
- **Weapon Systems:**
- **Surface-to-Air Missiles:** 32 Barak 8 missiles.
- **Anti-Ship/Land Attack Missiles:** 8 BrahMos missiles.
- **Close-In Weapons:** Two AK-630 systems.
- **Sensors:**
- **Primary Radar:** EL/M-2248 MF-STAR AESA radar.
- **Secondary Radar:** Indra LTR-25 'Lanza' surface-search radar.
- **Sonar:** BEL HUMSA-NG hull-mounted sonar system.
- **Helicopter Operations:** Equipped to operate various helicopters, including Chetak, Dhruv, Sea King, and MH-60R.

The induction of **Vagsheer**, **Surat**, and **Nilgiri** strengthens India's naval capabilities across various dimensions: undersea warfare, surface-to-air and anti-ship operations, and advanced stealth technology. These platforms will significantly enhance the Indian Navy's ability to project power, secure maritime interests, and ensure strategic deterrence in the region.