INS Taragiri

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Why in News?

The Indian Navy is set to commission its latest stealth frigate INS Taragiri (F41) at Visakhapatnam.

- It is an indigenously built ***stealth guided-missile frigate*** under Project 17A.
  - 4th ship of the Project 17A class.

  In F41, F represents frigate classification, and a frigate is generally a Medium-sized warship.

- **Built in –** Mazagon Dock Shipbuilders Limited (Mumbai), a defense public sector unit.
- **Supported by -** 200+ MSMEs and private sector players to achieve over 75% indigenous content.
- **Features –**
  - **Displacement –** 6,670 tonnes.
  - **Stealth Technology –**
    - Advanced hull shaping + radar-absorbing materials
    - Low radar, infrared, and acoustic signatures
    - Reduced Radar Cross Section
    - Low radar, infrared, and acoustic signatures
  - **Propulsion –** CODOG (Combined Diesel or Gas) system
    - Diesel → fuel efficiency
    - Gas turbine → high speed
  - **Automation –** Integrated Platform Management System (IPMS) that reduces crew workload.
  - **Combat Capabilities –** Missile Systems
    - Supersonic Surface-to-Surface Missiles

        - Medium-range Surface-to-Air Missiles
    - **Anti-Submarine Warfare (ASW) –** Advanced sonar & torpedo systems
    - **Combat Management –** Integrated Combat Management System (CMS)
    - **Network-Centric Warfare –** Real-time data sharing with naval & air assets
    - **Helicopter Capability –** Operates multi-role helicopters (e.g., MH-60R).
- **Operational Roles**
    - Multi-dimensional warfare (air, surface, sub-surface).
    - Blue-water naval operations.
    - Sea control & sea denial strategies.
    - Maritime security & surveillance.
    - Fleet escort missions.
    - Humanitarian Assistance and Disaster Relief (HADR).
- **Strategic Significance –**
    - Enhances India's presence in the Indian Ocean Region (IOR).
    - Secures Sea Lines of Communication (SLOCs).
    - Strengthens Aatmanirbhar Bharat in defence manufacturing.
    - Reflects expansion of India's defence industrial ecosystem.
    - Supports India's transition into a blue-water navy.

Quick Facts

- **Project 17A (P17A) –** It involves the construction of 7 advanced guided-missile stealth frigates for the Indian Navy.
- It is designed for superior combat capability and low detectability.
- It is designed by the Directorate of Naval Design (DND).
- Follow-on of Shivalik-class (Project 17).
- Ships named after Indian mountain ranges (Taragiri, Nilgiri, Himgiri).

References

1. PIB | INS TARAGIRI
2. TOI | INS TARAGIRI



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