Supersonic Missile Assisted Torpedo System (SMART)

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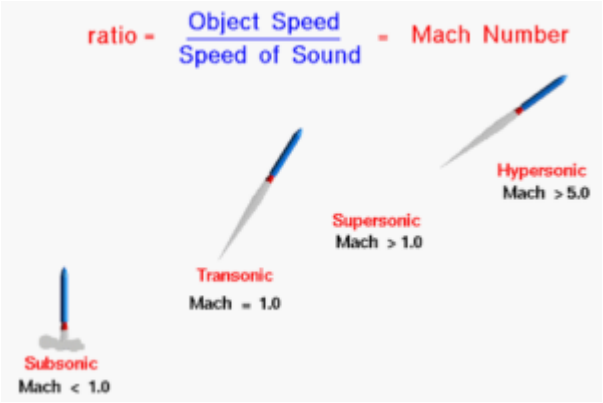
In news– Recently, a supersonic missile assisted torpedo system developed by DRDO was successfully launched from Wheeler Island in Odisha.

About the missile-

- It is a next generation **missile-based standoff torpedo delivery system.**
- It has been **designed to enhance anti-submarine warfare capability far beyond the conventional range of the torpedo.**
- **Torpedoes are self-propelled weapons that travel underwater to hit the target** and can be fired from either above or under the water surface.
- This canister-based missile system **consists of advanced technologies viz. two stage solid propulsion, electro-mechanical actuators and precision inertial navigation.**
- **This SMART system comprises** a mechanism by which the **torpedo is launched from an existing supersonic missile system – by making complex modifications in it** – which takes the torpedo to a much longer range than its own.



- The system also gives flexibility in terms of the launch platform that comes with the missile system.

- **A number of DRDO laboratories have developed technologies required for SMART system, they are:**
    - Defence Research and Development Laboratory (DRDL) Hyderabad.
    - Research Center Imarat (RCI) Hyderabad.
    - Aerial Delivery Research and Development Establishment (ADRDE) Agra
    - Naval Science and Technology Laboratory (NSTL) Visakhapatnam.
- The anti-submarine warfare assets **consist of deployment of submarines, specialized anti-submarine ships, air assets and state of the art reconnaissance and detection mechanisms.**
- It was the **second successful test of the SMART system, its maiden successful test in October last year.**
- The recent launch **was a text book launch**, where the entire trajectory was monitored by the electro optic telemetry system, various range radars, including the down range instrumentation and down range ships.