India successfully test-fires VL-SRSAM Missile

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Context - Indian naval warships just became more heavily protected and difficult to strike with aircraft and anti-ship missiles, with the successful flight-test of the Vertical Launch Short Range Surface to Air Missile (VL-SRSAM) recently.

Key Developments

- The VL-SRSAM, which the Defence Research & Development Organisation (DRDO) has indigenously developed for the Indian Navy, was fired from an Indian warship at a high-speed aerial target that was mimicking an incoming enemy aircraft.
- India's most modern naval warships, such as the Visakhapatnam-class destroyers and Nilgiri-class frigates, are equipped with multiple layers of defence against their biggest threats: enemy aircraft and sea-skimming anti-ship missiles.
- The first line of defence is provided by the Indo-Israeli medium range surface to air missiles (MRSAMs), which are capable of shooting down hostile aerial threats at ranges

out to 70 kilometres.

• If the MRSAM fails to destroy the incoming threat at long ranges, the warship launches its VL-SRSAMs at shorter ranges of 25-30 kilometres.

About MRSAM

- It is a high response, quick reaction, vertically launched supersonic missile, designed to neutralize enemy aerial threats missiles, aircraft, guided bombs, helicopters.
- Supersonic missiles exceed the speed of sound (Mach 1) but they are not faster than Mach-3. It is used by the Army, Navy and Air Force as different variants.
- In May 2019, Indian Navy, DRDO and IAI conducted the maiden co-operative engagement firing of the naval version of the MRSAM. It is a land based variant of the Barak Air and Missile Defence System (AMD).
- India buys Barak AMD from Israel, it was designed and developed by Israel to protect its economic zones and strategic facilities from various threats.
- The missile's management system uses the radar to track and correctly identify the target, calculates the distance from it and gives all the information to the Commander for a decision to be made on interception.