

Medium Range Surface to Air Missile (MRSAM) air defence system

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In news– The Defence Research and Development Organisation (DRDO) conducted two successful flight tests of the Army version of MRSAM at the Integrated Test Range, Chandipur, off the coast of Odisha recently.

About MRSAM air defence system-

- **Also called as Barak 8** air defence system, MRSAM is a **surface-to-air missile jointly developed by DRDO and Israel Aerospace Industries (IAI)** for use by the Indian Army.
- Other firms involved in the project include Israeli firm Rafael, Bharat Electronics Limited (BEL), Bharat Dynamics Limited and Larsen & Toubro (L&T).
- It will **replace the ageing Air Defence systems of the Army.**
- The MRSAM weapon system **comprises multi-function radar, mobile launcher system and other vehicles.**
- **It has Army, Navy and Air Force variants.**
- The mobile launcher can transport, place and launch eight canisterised missiles.
- These can be fired either in single mode or in ripple firing mode in a vertical firing position.
- **Its 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.
- **The missile itself is 4.5 meters in length with a weight of around 275 kg.**
- It is equipped with fins and canards to stabilize its

flight and provide it manoeuvrability.

- It is **powered by a solid propulsion system** coupled with a **thrust vector control system**.
- It can **move at a maximum speed of Mach 2** (twice the speed of sound) and **can engage multiple targets upto a range of 70 km**.

Note: Israel has been among India's top three arms suppliers during the last five years, according to a report published by the Stockholm International Peace Research Institute (Sipri) in March 2021. India's top three arms suppliers during 2016-20 were Russia (accounting for 49% of India's imports), France (18%) and Israel (13%).