

# 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%).