

The'SAMAR' air defence missile system

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Indian Air Force successfully test fired 'SAMAR' air defence missile system at **Exercise Astrashakti 2023** at **Suryalanka** Air Force Station, **Andhra Pradesh**.



[Ref- Swarajya]

About SAMAR air defence missile system:

- The **Indian Air Force (IAF)** developed the **Surface to Air Missile for Assured Retaliation (SAMAR)** air defence missile system by using its old **Russian-origin** air-to-air missile systems.
- It carried out the successful firing trials of its **in-house designed and developed** SAMAR system under the IAF's **Maintenance Command**.
- SAMAR is jointly developed by the IAF's 7 and 11 **Base Repair Depot (BRD)** in association with Indian **private-sector companies**.
- The system participated for the first time in the exercise to test its **surface-to-air weapon systems** and carry out their **operational field trials**.

Key features of SAMAR:

- It is a **short-range air-defence** system that can engage aerial threats with missiles operating at a **speed range of 2 to 2.5 Mach**.
- SAMAR system consists of a **twin-turret launch platform** with the capability of launching two missiles in single and salvo mode, depending on the **threat scenario**.
- It has launch beams, fire-control unit, an electronic control unit, and **auxiliary units** like self-loading knuckle crane and a **servo mechanism feedback unit**.
- It employs the IAF's shelf-life-expired **Russian Vympel R-73E** infrared-guided **air-to-air missiles (AAMs)**, which were upgraded.
- SAMAR is intended **to replace** the IAF's **Pechora systems**, which have been in service since the 1970s.