



**KAMARAJ IAS ACADEMY**  
Only IAS Academy by Grandson of "Perunthalaivar Kamarajar"

# Very Short Range Air Defence System - Man Portable Air Defence System

Published On: 28-09-2022

**Why is in news?** DRDO conducts successful tests of Very Short Range Air Defence System Missiles

DRDO conducted two successful test flight of Very Short Range Air Defence System (VSHORADS) missile on 27 Sep 2022 from a **ground based portable launcher** at the Integrated Test Range, Chandipur, off the coast of **Odisha**.

VSHORADS is a **Man Portable Air Defence System (MANPAD)** designed and developed indigenously by **DRDO's** Research Centre Imarat (RCI), Hyderabad in collaboration with other DRDO laboratories and Indian Industry Partners.

VSHORADS missile incorporates many novel technologies including miniaturized **Reaction Control System (RCS)** and **integrated avionics**, which have been successfully proven during the tests.

The missile, meant for **neutralizing low altitude aerial threats at short ranges** is propelled by a dual thrust solid motor.

The design of the missile including launcher has been highly optimized to ensure easy portability. Both the flight tests have completely met the mission objectives.

**MANPADS:** Are **short-range, lightweight and portable surface-to-air missiles** that can be fired by individuals or small groups to destroy aircraft or helicopters.

They **help shield troops from aerial attacks** and are most effective in targeting low-flying aircrafts.

**MANPATs or Man-Portable Anti-Tank Systems** work in a similar manner but are used to destroy or incapacitate military tanks.

MANPADS have a **maximum range of 8 kilometers** and can engage targets at altitudes of 4.5 km.

They can be **shoulder-fired, launched from atop a ground-vehicle, fired from a tripod or stand**, and from a helicopter or boat.

The **first MANPADS** were introduced by the **United States and Soviet Union in the 1960s**.

Countries such as Pakistan, Germany, UK, Turkey and Israel have also used MANPADS in their defence efforts.

**Kamaraj IAS Academy**

Plot A P.127, AF block, 6 th street, 11th Main Rd, Shanthi Colony, Anna Nagar, Chennai, Tamil Nadu 600040

Phone: **044 4353 9988 / 98403 94477** / Whatsapp : **09710729833**