

# 2023 year end highlights of DRDO

**Akash-NG:** Flight trial of new generation Surface to Air Missile Akash-NG was conducted against a Banshee target from the Integrated Test Range, Chandipur, Odisha. It is meant for use by Indian Air Force with an aim of intercepting high manoeuvring low RCS aerial threats. The system has been developed with better deployability compared to other similar systems with canisterised launcher and much smaller ground system footprint.

**ITCM Missile:** Indigenous Technology Cruise Missile is a new generation 'Long Range Land Attack Cruise Missile' being developed for land and sea platforms. Flight trial was conducted on 21 February 2023 from the Integrated Test Range, Balasore, Odisha.

**Maiden test of ASTRA BVRAAM on LCA Tejas:** ASTRA is a BVR Air to Air missile to engage and destroy highly manoeuvring supersonic aerial targets. Light Combat Aircraft (LCA) Tejas, successfully fired the ASTRA indigenous Beyond Visual Range (BVR) AAM.



**Man Portable Anti-Tank Guided Missile:** MPATGM is a 3rd generation ATGM with 'Fire & Forget' and 'Top Attack' capabilities with day and night operational capability. Flight Trials of MPATGM was conducted for a range of 2.5 km at NOAR, Kurnool.



**Very Short Range Air Defence System:** VSHORADS is a 4th generation Man Portable Air Defence System system, it employing state of art uncooled imaging infrared seeker. The missile was flight tested against high speed unmanned aerial targets, simulating approaching and receding aircraft from Integrated Test Range, Chandipur, off the coast of Odisha.

**MRSAM for Indian Navy:** MRSAM for the Indian Navy is a joint development programme of DRDO and Israeli Aerospace Industries, Israel. The weapon system provides a point and area defence for P15A ships of the Indian Navy against a vast variety of aerial threats including fighter aircraft, subsonic and supersonic missiles, etc. The Indian Navy successfully flight tested MRSAM from Visakhapatnam.

**Heavy Weight Torpedo:** Indigenously designed and developed Heavy Weight Torpedo 'Varunastra' was successfully test fired with a live warhead against an undersea target by Indian Navy. 'Varunastra' is a ship launched anti-submarine torpedo having low drift navigational systems, acoustic homing, advanced acoustic counter measure features, autonomous guidance algorithms, insensitive munitions warhead and a GPS based recovery aid for practice torpedo.



**Vertical Launch Short Range Surface to Air Missile:** VL-SRSAM is a vertical launch short range surface to air missile having a strike range upto 80 km for fighter aircraft, helicopter, UAVs etc.

The missile has been developed for the Indian Navy for neutralising various aerial threats at close ranges including sea skimming targets. The missile was flight tested from Integrated Test Range, Chandipur.

