

The IAF's diversified AAM range



MBDA's Meteor will equip IAF Rafales while the ASRAAM has already been integrated on IAF Jaguars and is soon to be mated with the Su-30MKI and LCA

Getting a modern inventory

Access to modern WVR and BVR air to air missiles are essential for any Air Force for gaining air supremacy over its adversaries during an aerial engagement. The development of modern WVR or BVR air-to-air missiles has come about thanks to dramatic technological advancements in propulsion, guidance (navigation) and sensor (seeker) technology, these being the most critical technologies which help the missile not only to detect targets but also to engage them. While heat-seeking close combat missiles have become more accurate because of new superior dual-mode high-resolution IR seeker technology, the radar technology has also revolutionised long-range BVRs. At start of this century even more capable radar-guided beyond-visual-range air to air munitions with active-seeker have been developed to increase the aerial engagement ranges of fighter aircraft, even up to over hundred kilometers ranges such as the MBDA Meteor, Vypel's R-37M and the Chinese PL-15 or PL-21: of these missiles, the "game changing" Meteor is set to enter the IAF's missile inventory this year, being the first time the IAF is getting this class of long-range air to air missiles.

Besides this, there is some talk on the IAF ordering the I-Derby ER which also has very long range but its details are confidential.

After the Balakot airstrike and dogfight with the Pakistan Air Force in February 2019, the Indian Air Force is in the process of enhancing its operational capability in the short and long term by boosting its woefully outdated missile arsenal. Currently, the IAF already has many foreign missile systems of Russian, Israeli and French-origin, with its frontline fighters such as Su-30MKI, Mirage2000 and Mig-29UPG but most

of them are obsolescent and need to be supplanted as soon as possible. The world's 4th largest Air Force is now set to induct more new-generation indigenous and foreign air to air missiles in this year.

Current AAMs in IAF service

The current existing AAM inventory of the Indian Air Force are mostly short-range and medium-range air-to-air missiles, with ranges between 20km to 100km. Apart from this, the IAF is also rumoured to possess the long-range 'AWACS killer' called Novator



Russian missile with French fighter Vypel R-73 fitted on a Mirage-2000 (picture released by NDTV)