

MBDA missiles for IAF Rafale fleet

BDA is the only European group capable of designing and producing missiles and missile systems that correspond to the full range of current and future operational needs of the three armed forces (land, sea and air). To bolster the capability of Indian Air Force (IAF) Rafale Omni-role strike fighters, MBDA as of now has transferred 200 SCALP Conventional Attack Stand-Off Missile (CASOM), 350 MICA RF and MICA IR Beyond Visual Range Air-to-Air Missiles (BVRAAM) and 200 Meteor BVRAAM. This consignment is in addition to 493 MICA RF and MICA IR BVRAAM meant for upgraded IAF Mirage 2000I/TI multi-role air superiority fighters.

Omni-role Rafale's avionics and electronics are integrated through four Mil STD-1553B data buses and two Mil STD-1760 data buses operating in the ADA language to enable integration wide range of state of the art weaponry. The standard Conventional Attack Stand-Off Missile (CASOM) of Dassault Rafale fighter is the MBDA turbojet powered 5.1 metre long, 1,300 kg weight and 300 km+ ranged SCALP/Storm Shadow CASOM pack that qualifies as a mini-cruise missile, capable of successful counterforce operations against enemy high value conventional and nuclear infrastructure by conventional strikes alone, yet stays clear from anticipated heavy enemy ground-based defences. Designed to cruise at low-levels on power of a micro-turbo engine to avoid radar detection, it has inertial guidance and navigation followed by TERrain PROfile Matching (TERPROM) navigation with an integrated GPS in the terminal target approach phase of flight. During terminal phase in combination with passive Imaging Infra–Red (IIR) sensors with Autonomous Target Recognition (ATR) system, the missile retains considerable autonomous operations capability over long ranges, while its effective 450 kg Bomb Royal Ordnance Augmented Charge (BROACH) unitary penetration warhead is programmed to inflict maximum damage on impact even on buried and hardened targets including heavily protected bunkers.

