Rolling Airframe Missile (RAM) is fire-and-forget Close-In Weapon System (CIWS) for ship self-defence against Anti Ship Missiles (ASM), helicopters, aircraft and surface targets. RAM was designed to engage the most challenging threats and is the only ASM defense system capable of effectively coping with multiple and high density raids, even in littoral scenarios.

RAM Block 2 is a kinematic and radio frequency (RF) receiver upgrade of the RAM Block 1A missile. A larger, more powerful rocket motor and advanced control section provides the Block 2 missile with the capability to defeat high-maneuver threats. The enhanced RF receiver allows detection of anti-ship missiles that employ low probability of intercept radars.

In more than 350 flight tests and operational firings RAM has proven first-shot kills on target in self-defense scenarios such as lowest level sea-skimming, diving and highly maneuvering profiles in single, stream and wave attacks - achieving a kill-performance above 95 %.

RAM-System GmbH (RAMSYS) and its US partner Raytheon Missile Systems (RMS) are jointly responsible for development, production, system improvements and logistic of the RAM ship self-defence weapon system. Diehl Defense and MBDA Deutschland are the shareholders of RAM-System GmbH and its major industrial partners in Germany.
The RA M system MK-31 consists of the missile RIM-116 and the Guided Missile Launching System (GMLS) MK-49. The GMLS holds 21 RAM Block 1 or RAM Block 2 RIM-116 missiles and is integrated with the Command & Control system of the naval platform.

The SeaRAM system holds 11 RIM-116 missiles and provides a fully autonomous CIWS solution including detection and fire control sensors.

The German Navy relies on the RAM ship self-defence weapon system for its K130 corvettes as well as the F123, F124 and F125 class frigates. RAM will also be integrated on the new multi-purpose combat ship MKS180.

The US Navy has installed RAM on more than 40 ships particularly on high value units like Aircraft Carriers, Amphibious Assault and Transport Ships. Recently the US Navy decided for RAM on the LCS Freedom class and SeaRAM on the LCS Independent class.

RAM is being in production since 1989 is operational on approx. 100 ships of the navies of Germany, USA, Greece, South Korea, UAE, Egypt and Turkey. In total, more than 200 weapon systems and 4500 missiles have been produced and delivered so far.

**Missile characteristics**
- **Weight:** 88 kg
- **Length:** 2.9 m
- **Diameter:** 160 mm
- **Speed:** supersonic
- **Range:** > 10 km
- **Seeker:** RF & IR

**Name**
- **RAM BLOCK 2**

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