The STANDARD Missile Family

STANDARD Missile is the U.S. Navy's primary anti-air warfare missile

The system was developed as the eventual replacement for the TERRIER, Talos and Tartar surface-to-air missiles. STANDARD Missile uses an evolutionary philosophy which has allowed the weapon system to pace the threat and grow with emerging technologies over the past 30 years.

The STANDARD Missile is operational on guided missile cruisers, destroyers and frigates in the U.S. Navy. STANDARD Missile is also in operation with over 13 Navies around the world.

STANDARD Missile-1 (SM-1) entered production in 1967, and is still in operation with the U.S. Navy and many international Navies. Raytheon continues to provide product support and upgrades to the latest version Block VIB.

SM-1 was followed by STANDARD Missile-2 (SM-2). There are several versions of the SM-2 in operation, production and development today. The SM-2's primary role is to provide area defense against enemy aircraft and anti-ship cruise missiles. The SM-2 Block IIIB is the latest version to enter the fleet, and incorporates a side-mounted IR seeker to aid in endgame guidance. The SM-2 Block IV is the latest version to enter production, and provides an extended range capability with the addition of an MK72 booster.

SM-2 Block IVA (Navy Area Defense)

The SM-2 Block IVA under development will provide area defense against TBMs, while maintaining its capability against aircraft and cruise missiles. The SM-2 Block IVA utilizes a side-mounted imaging infrared seeker to detect and track incoming ballistic missiles and guide to a lethal intercept. This capability was demonstrated in January 1997, when an SM-2 Block IVA intercepted a Lance ballistic target at White Sands Missile Range (WSMR).

STANDARD MISSILE

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		SM-1	TARTAR/AEGIS MR SM-2	AEGIS ER SM-2	NAVY AREA DEFENSE SM-2 BLK IVA	NTW SM-3	LASM SM-4	TERRIER TARGETS
Diameter	Missile	13.5 in.	13.5 in.	13.5 in.	13.5 in.	13.5 in.	13.5 in.	13.5 in.
	Booster	14.7 in.	—	21.0 in.	21.0 in.	21.0 in.	—	18.0 in.
Length	Missile	14.7 ft.	15.5 ft.	21.6 ft.	21.6 ft.	21.6 ft.	15.5 ft.	26.2 ft.
Weight	Launch	1358 lbs.	1556 lbs.	3200 lbs.	3300 lbs.	3310 lbs.	1653 lbs.	3297 lbs.
Propulsion		MK56Dual Thrust Rocket Motor	MK104 Dual Thrust Rocket Motor	MK104 MK72 Booster	MK104 MK72	TSRM MK104 MK72	MK104	MK30/MK104 MK70 Booster

SM-3 (Navy Theater Wide)

STANDARD Missile-3 is being developed as part of the Navy Theater Wide (NTW) TBMD system which will provide "theater-wide" defense against medium and long range ballistic missiles. In 1992,the Navy initiated the TERRIER LEAP Demonstration Program which culminated in four flight tests, and demonstrated the feasibility of theater wide ballistic missile defense. Subsequent to this demonstration, Raytheon was funded to develop the next generation NTW interceptor dubbed SM-3. The SM-3 interceptor is based on the SM-2 Block IV airframe and propulsion, but incorporates a Third Stage Rocket Motor, a GPS/INS Guidance Section, and a LEAP Kinetic Warhead.

SM-4 (LASM)

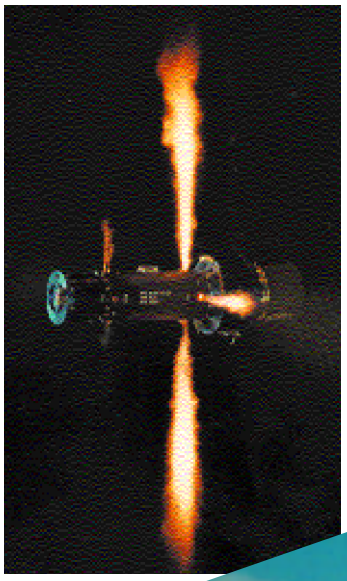
STANDARD Missile is taking on a new role in Naval Surface Fire Support (NSFS). Land Attack STANDARD Missile will provide fast response, precision naval fires in support of Army and Marine Corps forces ashore. The Navy is planning on converting older SM-2 Block II/IIIs to a LASM configuration, providing a significant cost savings. LASM utilizes an advanced Global Positioning System (GPS) guidance section to provide precision guidance. A modified MK125 warhead will provide significant lethality across the spectrum of fire support targets. LASM's supersonic speed and range fill a key role along with existing and planned gun systems and cruise missiles. Raytheon recently completed the LASM Demonstration Program,including several ground and flight tests which validated its role as a land attack missile.

SM-2 Block IVA
IR Seeker Telemetry of Lance Missile

LASM-2 Flight Test

TERRIER Targets

STANDARD Missile is turning into a target for itself and other air defense weapons. Raytheon is converting out-of-inventory TERRIER rounds into Tactical Ballistic Missile Targets (TBMT) and potentially Supersonic Sea-Skimming Targets (SSST). This represents a low cost,medium fidelity set of targets to support development testing and fleet training.



LEAP Hover Test

LASM-2 Flight Test

TERRIER Target Flight Test

SM-2 Block IIIB