



MK 29 SEASPARROW Guided Missile Launching System With ESSM Upgrade



Provides lethal self-defense capability against airborne and surface threats.

Benefits

- Launches RIM-7 SEASPARROW or RIM-162 Evolved SEASPARROW Missile (ESSM)
- High reliability
- Low life-cycle cost
- Fully tested and qualified; over 160 fielded
- Maintenance and logistical support programs in place
- No canisters required
- Reloadable at sea
- Provides the ready-to-launch firepower of eight missiles
- In service since 1975 with 15 nations

Proven Self-Defense System

The MK 29 SEASPARROW Guided Missile Launching System (GMLS) delivers effective protection against airborne and surface threats using the proven RIM-7 NATO SEASPARROW missile. As the latest upgrade to the MK 29 GMLS, the MK 29 MOD 4 allows the launcher to launch the RIM-162 Evolved SEASPARROW Missile (ESSM). The RIM-162 ESSM has proven itself against a broad spectrum of airborne and surface threats. These threats include subsonic and supersonic missiles that arrive at steep dive angles or low sea-skimming altitudes and are aided in their penetration by low radar cross section, evasive maneuvering and electronic jamming. Small boats can also be neutralized by the RIM-162 ESSM.

Increased Lethality

With a capacity of up to eight ready ESSMs, the MK 29 MOD 4 significantly increases the lethality of the MK 29 GMLS. In addition, the missiles can be launched with minimal intervals between each salvo. Developed by Raytheon and the U.S. Navy, the MK 29 MOD 4 has undergone a rigorous qualification and has been selected to defend the U.S. Navy aircraft carrier fleet. The MK 29 MOD 4 is currently in full-rate production.

Launcher Growth

The Raytheon's MK 29 GMLS design has allowed it to be continuously upgraded and improved. Its open architecture ensures successful integration to fire control systems and allows for easy future software upgrades. The MK 29 GMLS can be initially fielded for

RIM-7 and upgraded for ESSM at a later date with no modifications to the ship.

The System Launcher Controller (SLC) is a programmable processor responsible for launch sequencing and launcher pointing. It also hosts the Common Missile Library, the NATO consortium's technical standard for engagement management of RIM-7 and ESSM. In addition, the SLC provides the digital interface to the Fire Control System and can be adapted to any format of the user's choosing. The SLC greatly facilitates shipboard integration with maximum flexibility and minimal impact to the Fire Control System.

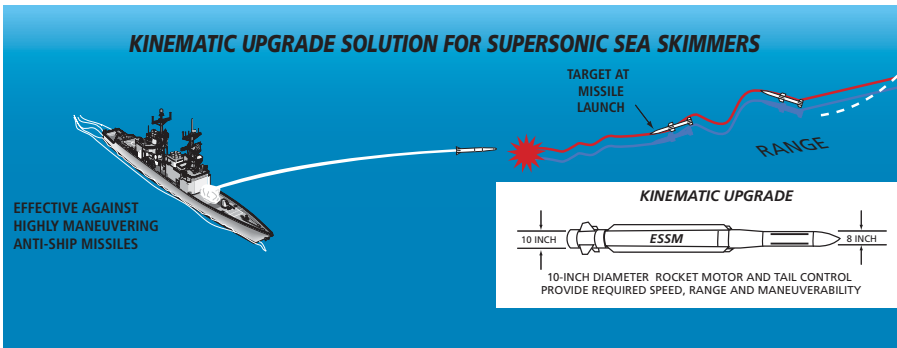
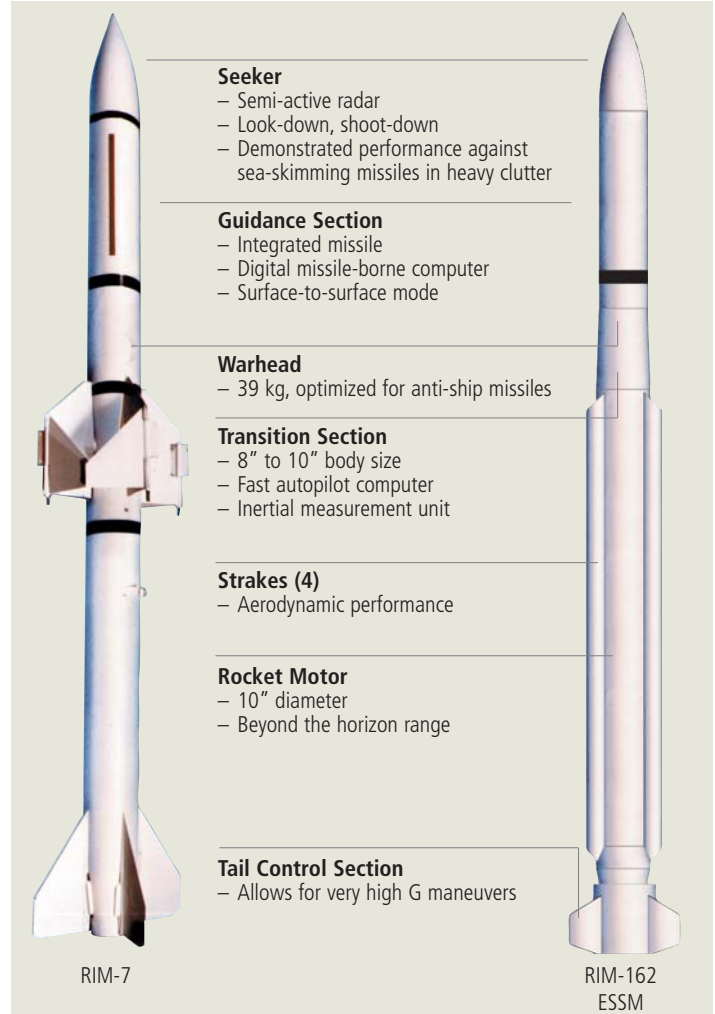
MK 29 SEASPARROW Guided Missile Launching System

MK 29 Environmental and Power Specifications; Significant MIL-STDs

Power	
3 Ph, 60 Hz, 440VAC	22KVA Average 55 KVA Peak
3 Ph, 400 Hz, 115VAC	4 KVA
1 Ph, 60 Hz, 115V	1.5 KVA Average (MIC) 2.5 KVA (SLC)
+28VDC	2 Amperes
Environment	MIL-STDs
Vibration	MIL-STD-167
Shock	MIL-STD-901
E3	MIL-STD-461
HERO	MIL-STD-1385
Climatic Extremes	Above-Deck Equipment -28° C to +65° C
Climatic Extremes	Below-Deck Equipment 0° C to +50° C

MK 29 MOD 4 Weights and Dimensions

Unit	Weight (lbs)	Dimensions (in)
MK 132 MOD 2 Launcher	10,498 (no missiles) 15,498 (with missiles)	140 x 148 x 99
MK 34 MOD 1 SLC	580	62 x 24 x 40
MK 108 MOD 2 LCC	936	24 x 29 x 72
MK 8 MOD 3 MIC	1336	35 x 30 x 75
MK 147 MOD 0 PS	560	36 x 25 x 24
MK 14 MOD 2 Loader	132	17 x 110 x 15
MK 109 MOD 0 Deck Control	18	9 x 8 x 18



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