

LOCKHEED MARTIN

# Single Cell Launcher Flexible and Adaptable for Today's Navy



### Single Cell Launcher

Lockheed Martin and BAE have teamed together to develop an improved, scalable, modular, flexible missile launcher to provide an improved capability for navies around the world. The launcher, which exists today, uses the structure, software and electronics associated with the combat-proven MK 41 Vertical Launching System (VLS).

#### Single Cell Launcher (SCL)

The Single Cell Launcher (SCL) is designed to meet maritime force protection requirements leveraging the latest state-of-the-art MK 41 Vertical Launching System (VLS) Launch Control System, MK 25 Quad Pack Evolved Sea Sparrow Missile (ESSM) Canister and a new scalable mechanical structure. This design provides for a flexible system that is easily configurable particularly where size and space concerns are paramount. SCL has been designed to meet the need for a smaller, lighter, more flexible launcher for smaller ship classes like those found in many international navies. Due to its single cell modularity, SCL can be configured in any number of ways to meet the defined mission. Leveraging the combat proven design and open system architecture from the MK 41 VLS, SCL will incorporate the latest available software, computer and

electronics systems as they enter production with the MK 41 VLS system.

#### **Commonality and Affordability**

SCL can provide the U.S. Navy and international navies with superior reliability, flexibility and maintenance over similar systems in fleet inventories today. In total, SCL benefits from nearly 90 percent commonality with MK 41 VLS, thereby significantly reducing lifecycle cost. Additionally, SCL includes the U.S. Navy qualified MK 25 Quad Pack Canister, capable of accommodating the launch of four ESSM's providing greater capability within a smaller footprint.

#### **Leveraging Investments**

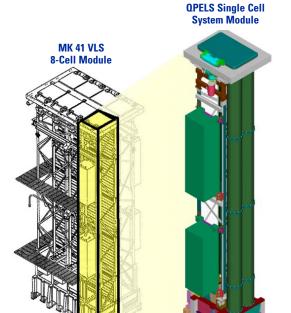
Over the life of the MK 41 VLS program, the U.S. Navy has invested more than \$500 million dollars. Today there are more 11,000 MK 41 VLS cells found aboard 16 different ship classes in 11 navies around the world. International customers will benefit from the shared SCL components,

Single Cell Launcher withstands restrained firing test

technical and logistics support currently in place for the MK 41 VLS.

#### **Proof Positive**

In 2002, the SCL structure was loaded with a MK 25 Quad Pack Canister to conduct an ESSM restrained firing test at Naval Surface Warfare Center, Dahlgren, Va. All primary test objectives were met, and both the gas management and primary missile restraint systems performed as expected, safely containing the test vehicle through full rocket motor burn. SCL is ready to serve fleets around the world anchored by 25 years of experience and commitment to excellence in naval missile launching.



## SCL Heritage from MK 41 VLS:

- Certified by 32 Weapon System Explosive Safety Review Boards
- ▶ 12 Missile Integrations Completed
- ▶ 6 Canister Qualifications
- >> 3500 Firings
- >99% Firing Success
- >> >98% Availability

#### **Lockheed Martin Corporation**

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