



FTM-19 Fact Sheet

Aegis BMD and SM-3 Block IB

As Aegis BMD continues to evolve to defeat the ballistic missile threat, the focus of the second generation Aegis BMD Weapon System is centered on the global trends in the development, deployment and proliferation of ballistic missiles. This Aegis BMD system enables the engagement of increasingly longer range and more sophisticated ballistic missiles launched in larger raid sizes. A series of intercept firings are being conducted to validate the operational effectiveness and suitability of Aegis BMD and the SM-3 Block IB missile against these threats.

On May 9, 2012 Aegis BMD and the SM-3 Block IB achieved the first successful intercept of a ballistic missile target, verifying the proper performance of all the system upgrades. Seven weeks later, the second generation Aegis BMD system moved on to Operational Testing with FTM-18 conducted on June 26, 2012. The system successfully identified and intercepted the lethal object of a separating, medium range ballistic missile target in a dense debris environment. FTM-19 increases the challenge to the discrimination capability of the

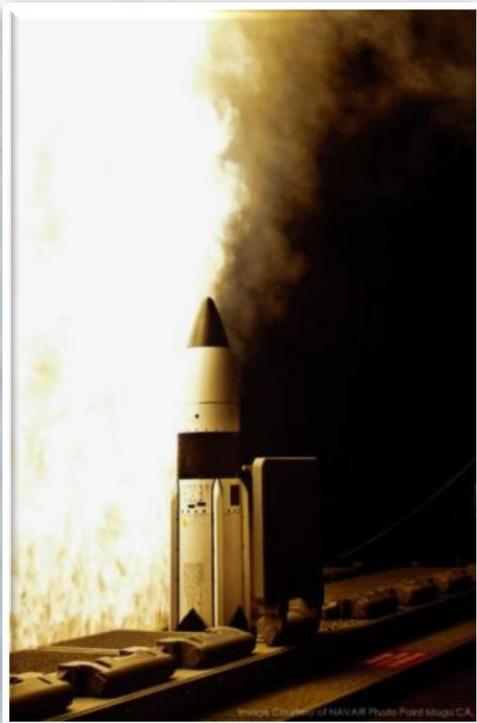
ship's Ballistic Missile Defense Signal Processor (BSP) and the missile's two-color infrared seeker. This test event, FTM-19, uses a production representative missile configuration and incorporates operational upgrades learned from previous tests.

Ship and Missile Improvements

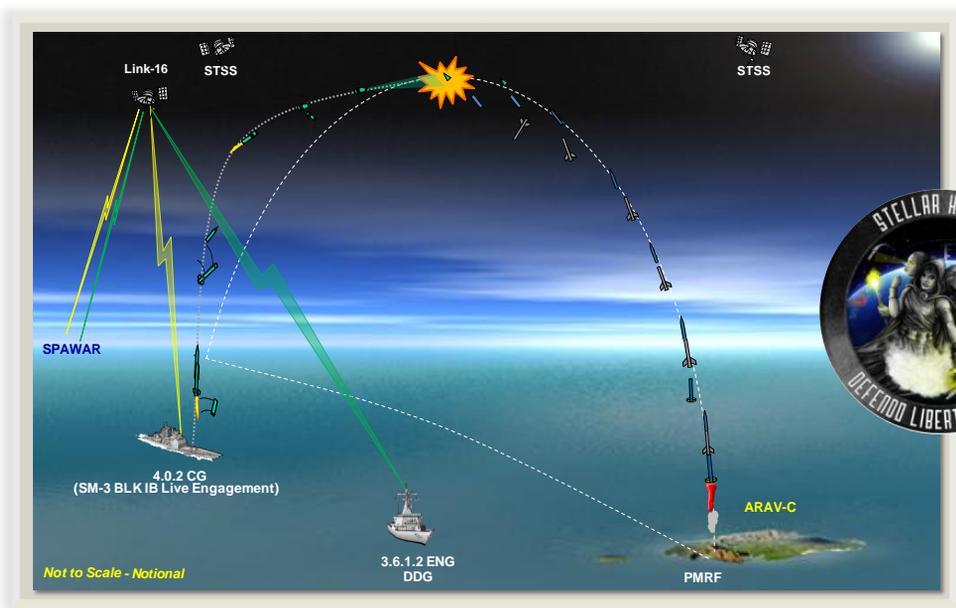
The Aegis BSP enables tracking of individual objects and uses advanced algorithms to identify various objects. The SM-3 Block IB new assemblies are a two-color seeker, processor and kill vehicle engine in the SM-3 warhead.



USS LAKE ERIE



SM-3 Block IB Firing



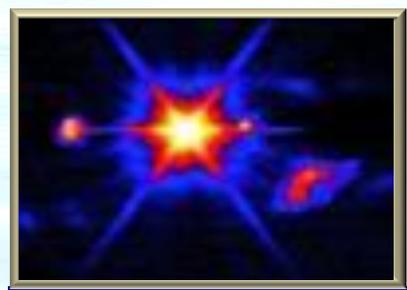
FTM-19

The primary objective of FTM-19 is to “conduct a lethal engagement of a complex, separating short range ballistic missile target with the Aegis BMD Weapon System and an SM-3 Block IB missile.” Test participants include an Aegis BMD cruiser, Aegis BMD laboratory at the Space and Naval Warfare Center (SPAWAR), and the Space Tracking and Surveillance System (STSS).

Continuing Aegis BMD’s tradition of operationally realistic, unscripted testing, the FTM-19 event begins as the Aegis BMD ship receives operational intelligence that hostile forces are making preparations to take aggressive action against a friendly nation. The ship’s mission is to protect this hypothetical friendly nation from ballistic missile attacks. The ship’s crew uses this intelligence information with the Aegis BMD Mission Planner to determine an acceptable ship patrol area along with recommended search sectors for the Aegis AN/SPY-1B(V) radar. The timing of the target launch is not revealed to any of the participants. The target is launched from the Pacific Missile Range Facility (PMRF), Barking Sands, Kauai, Hawaii.

Shortly after the target is detected and declared engageable by the weapon system, the ship’s crew fires a SM-3 Block IB missile. The system tracks the SM-3 missile throughout the remainder of its flight.

The SM-3 Block IB Kinetic Warhead (KW) performs divert maneuvers to approach the target. Additional refinement of the intercept calculations are made by the KW and final intercept divert maneuvers are conducted. The KW impacts the target, destroying it with the kinetic energy of impact.



SM-3 Block IB Intercept

Acquisition Strategy

Upon successful execution of FTM-19, Aegis BMD plans to request approval to procure long lead material. An All Up Round Decision is anticipated in late CY 2013.

Deployment

Two Pacific Fleet Aegis BMD cruisers, *USS LAKE ERIE* (CG-70) and *USS SHILOH* (CG-67), have the second generation Aegis BMD Weapon System installed. Two Atlantic Fleet destroyers, *USS CARNEY* (DDG 64) and *USS DONALD COOK* (DDG-75), are now being upgraded to this Aegis BMD configuration.