Successful Sea-Based Missile Defense “Hit to Kill” Intercept

Lieutenant General Henry “Trey” Obering, Missile Defense Agency (MDA) director, announced the successful completion today of the latest Aegis Ballistic Missile Defense “hit to kill” intercept flight test. Conducted jointly with the U.S. Navy, the test involved the simultaneous engagements of a ballistic missile “unitary” target (meaning that the target warhead and booster remain attached) and a surrogate hostile air target. This marked the eighth successful intercept in ten flight tests for the Aegis Ballistic Missile Defense (BMD) Program. The Aegis BMD system is the maritime component of the MDA’s Ballistic Missile Defense System, and is designed to intercept and destroy short to intermediate-range ballistic missiles. This test also marked the 27th successful hit to kill intercept in tests since 2001.

The mission was completed by the Aegis BMD cruiser USS Lake Erie (CG 70), using the Aegis BMD’s shipboard weapon system; the Standard Missile-3 (SM-3) Block IA, against the ballistic missile target; and the Standard Missile-2 (SM-2) Block IIIA, against the surrogate hostile air target. The test demonstrated the USS Lake Erie’s ability to engage a ballistic missile threat and defend itself from attack at the same time. The test also demonstrated the effectiveness of engineering, manufacturing, and mission assurance changes in the solid divert and attitude control system (SDACS) in the kinetic kill weapon. This was the first flight test of all the SM-3 Block IA’s upgrades, previously demonstrated in ground tests.

At approximately 11:31 a.m. Hawaii Time (5:31 p.m. EDT), a short-range ballistic missile target was launched from the Pacific Missile Range Facility (PMRF), Barking Sands, Kauai, Hawaii. At the same time, a target with characteristics similar to a hostile high performance aircraft was launched from a Navy aircraft. The Lake Erie’s Aegis Ballistic Missile Defense 3.6 Weapon System detected and tracked both targets and developed fire control solutions. Approximately one minute later, the Lake Erie’s crew fired the SM-3 and SM-2 missiles, and two minutes later both missiles successfully intercepted their respective targets. The SM-3 intercept occurred approximately 100 miles above the Pacific Ocean and 250 miles northwest of Kauai, once again successfully demonstrating “hit to kill” technology, which means that the target missile was destroyed when the interceptor missile collided directly with the target.

MDA and the U.S. Navy cooperatively manage the Aegis BMD Program. The SM-2 Program is managed by the Naval Sea Systems Command. Lockheed Martin Maritime Systems and Sensors of Moorestown, New Jersey is the Combat System Engineering Agent (CSEA) and prime contractor for the Aegis BMD Weapon System and Vertical Launch System installed in Aegis-equipped cruisers and destroyers. Raytheon Missile Systems of Tucson, Arizona is the prime contractor for all variants of the Standard Missile.

News media contacts are Chris Taylor, MDA Public Affairs, at (703) 901-9476 (cell)/(808) 335-4740 (PMRF), or Rick Lehner, MDA Public Affairs, at (703) 697-8997 or Richard.lehner@mda.mil