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The Navy's Ballistic Missile Defense Capabilities

"This was uncharted territory. The technical challenge was significant. You want to reach out to all of the Sailors on the ship, the technicians and the software programmers, grab them by the hand and thank them for what they did."

-- Gen. James Cartwright, Vice Chairman of the Joint Chiefs of Staff

On February 20th, the Navy intercepted a non-functioning National Reconnaissance Office satellite in its final orbits using a single modified tactical Standard Missile-3 (SM-3) fired from USS Lake Erie (CG 70). Fire Controlman 2nd Class Andrew Jackson, of Raytown, Mo., initiated the launch sequence of the SM-3 from the ship, one of ten Aegis ships currently with full surveillance/tracking and engagement Ballistic Missile Defense (BMD) capabilities.

Use of BMD in this one-time operation demonstrates the flexibility of our forces

The interception of this satellite using Aegis BMD was not a true missile defense operation. The Navy's successful intercept reflects the capabilities of our well-trained Sailors operating in a joint environment, our investment in flexible technology programs and our cooperation with the Missile Defense Agency's developmental efforts.

- The objective of the operation was to rupture the fuel tank to dissipate the approximately 1,000 pounds of hydrazine, a hazardous fuel which could be harmful, before it entered into earth's atmosphere.
- USS Lake Erie's SM-3 hit the satellite at a relative speed of more than 22,000 mph, approximately 133 nautical miles over the Pacific Ocean. USS Decatur (DDG 73) and USS Russell (DDG 59) were in the task force.
- Because the Aegis BMD system is not designed to intercept satellites, engineers made temporary software modifications to three SM-3 missiles, the ships' weapons and radar systems. These modifications will be reversed and normal capabilities restored within the next two weeks.

BMD is a key warfighting capability for the Maritime Strategy

The Navy's forward-deployed, flexible forces provide a platform to contribute to homeland defense forward further off our shores; interoperability of these defense capabilities with our partners provides further defense in depth.

- BMD will provide the ability to use international waters for defending against established and emergent threats, which underlines the importance of maritime security ensuring free and lawful use of the seas.
- Seven nations work with the Navy in various capacities to advance BMD capabilities around the world. Of these, our relationship with Japan is the most advanced, to include coordinated research and development on a SM-3 variant, and ship platform upgrades and installation.
- By early 2009, 18 Aegis ships (three CGs and 15 DDGs) are scheduled to be equipped with BMD capabilities, including the ability to engage short to intermediate-range targets with the SM-3. That same year, a terminal capability using the SM-2 will be added. BMD capability will be added to all DDGs beginning in FY12.

Key Messages

- The Navy's capabilities are the result of investments in our Sailors and flexible technology programs.
- Aegis BMD is an important part of the future Navy, providing mobile homeland protection.
- Missile defense is evolutionary. Maintaining continuous improvement in our capabilities, and working with our partners in doing so, is important in maintaining effectiveness against current and projected threats.
- BMD testing has repeatedly demonstrated the feasibility of missile interception.

Facts & Figures

- Aegis BMD is 12 for 14 in SM-3 Midcourse intercept tests and 1 for 1 in SM-2 Block IV terminal intercept tests. All tests involved real warfighters and operational and test personnel.
- The FY09 MDA budget includes more than \$1.1 billion for the Navy's BMD program in FY08, and more than \$6.7 billion for FY08-13.
- About 30 nations have now deployed a ballistic missile capability, compared to only eight in 1972, and across the world, more than 100 foreign ballistic missiles were launched in 2007.