MDA Considering Navy's Aegis System for Homeland Missile Defense

The Missile Defense Agency and U.S. Sailors manning the Aegis Ashore Missile Defense Test Complex at Kauai, Hawaii, conduct a flight test in 2018. MDA is investigating using the Aegis and the SM-3 Block IIB missile as part of a U.S. homeland defense.

WASHINGTON – The Missile Defense Agency (MDA) is investigating the feasibility of using the Navy's Aegis Combat System and Standard Missile-3 (SM-3) Block IIA as segment of a layered defense of the U.S. homeland.

"We are investigating the possibility of deploying layered homeland defense for additional opportunities to engage long-range missile threats," said Vice Adm. Jon A. Hill, director of MDA, speaking in an Aug. 18 webinar sponsored by the Heritage Foundation, a Washington think tank.

"This means we are investigating the potential of existing proven weapon systems such as Aegis ballistic-missile defense using Standard Missile-3 [SM-3] Block IIA and if that weapon can contribute to homeland defense."

Hill said that later this year the MDA will conduct the first Aegis test with SM-3 Block IIA interceptor against an intercontinental ballistic missile (ICBM). He said that the COVID-19 pandemic slowed the preparations but that the test will go ahead.

"We were ready and postured to go to the Pacific to execute Flight Test Maritime 44 (FTM-44), the first Aegis weapon system engagement against an intercontinental ballistic missile – a long-range ballistic threat being engaged by a

ship that's maneuvering with the SM-3 Block IIA missile," he said. "Our plan right now is to get that test under our belt before the end of the calendar year. We're on track to do that."

Hill said the FTM-44 test is to be conducted in a "defense of Hawaii" scenario, with a ship and the SM-3 Block IIA.

"We're going to really stress the SM-3 Block IIA way outside of its design space," he said. "It was designed for medium- and intermediate range. Now we're going against a long-range intercontinental ballistic missile. The analysis says we'll be successful. But nothing is real to any of us until we actually get the empirical data from being out on the flight range."

Hill said that a successful test will not be the end of the work.

"There will be upgrades required to the missile based on threats," he said. "We will have to certify the combat system, and we've got to work very closely with the Navy about where these ships would deploy and how fast we can increase the production line on the Block IIAs to get those out to sea and where we need them to add that complement to the Ground-Based System. If we succeed with Aegis … [U.S. Northern Command] can decide where they want these assets placed to provide that sort of layered defense."

The FTM-44 test will be against an ICBM without countermeasures.

"It allows us to take a missile that wasn't designed for that space and just go after that target," Hill said. "It's going to be very stressing because of the very long range that it flies, the error that it builds up, so we'll see how we do."

The admiral said that a successful test will allow the MDA "to start to think through that architecture and start working more closely with the warfighters and where they would

position a ship. Then we want to march up to another test where would test against a very complex ICBM, one that has a lot of separation debris, one that has a lot of countermeasures. We want to make sure the system in total – from the space assets to the radar to the engage-on-remote capability that passes that information to the ship – and the ship can actually sift through all of that and say, 'that's the RV [re-entry vehicle] and that's where the missile is going to go.'"

Hill said another challenge is coordinating the engagement coordination between the different layers [of defense.] The systems 'talk' with each other already today but the challenge is to get them talking as being different layered defenders.