



Aegis Ballistic Missile Defense

Aegis Ballistic Missile Defense (BMD) is the naval component of the Ballistic Missile Defense System (BMDS). Aegis BMD builds upon the existing Aegis Weapon System (AWS), Standard Missile (SM), and Navy control and communication systems. The Navy embraces BMD as a core mission.

Regional Defense – Aegis BMD Engagement Capability

- Defeats short- to intermediate-range ballistic missile threats above the atmosphere with the SM-3, as well as short-range ballistic missiles inside the atmosphere with the SM-2 Block IV and SM-6 Dual I/II.
- In addition to the ship-based system, Aegis Ashore adapts AWS capabilities to land locations.
- Flight tests are conducted by operational fleet warships or the Aegis Ashore Missile Defense Test Complex at the Pacific Missile Range Facility (PMRF) in Hawaii. Each test increases the operational realism and complexity of targets and scenarios and is witnessed by Navy and Department of Defense testing evaluators.



Homeland Defense – Aegis BMD Long Range Surveillance and Track

- Aegis BMD ships on Ballistic Missile Defense patrols detect and track ballistic missiles of all ranges — including ICBMs — and report track data to the missile defense system. This capability shares tracking data to cue other missile defense sensors and provides fire control data to the Ground-based Midcourse Defense System and other Navy BMD ships.

Deployment

- Aegis BMD's first operational deployment was conducted in September 2004.
- As of 2016, there are 33 Aegis BMD ships (5 cruisers and 28 destroyers) in service. Of the 33 ships, 17 are assigned to the Pacific Fleet and 16 to the Atlantic Fleet.
- In response to the increasing demand for Aegis BMD capability from the Combatant Commanders, the MDA and Navy are working together to increase the number of Aegis BMD capable ships. Such efforts include upgrading Aegis DDGs to the BMD capability, incorporating Aegis BMD into the Aegis DDG Modernization Program, and building new Aegis DDGs.
- The first deployment of EPAA Phase I capabilities came on March 7, 2011, when the Aegis BMD cruiser, USS MONTEREY (CG 61), armed with SM-3 Block IA missiles, deployed to Europe.
- The deployment of EPAA Phase II capabilities began in February 2014 with the delivery of Aegis BMD ships that can fire SM-3 Block IB missiles and Romanian installation of Aegis Ashore in 2015.
- SM-3 Block IB missiles were operationally deployed by the Fleet in 2013.

International Efforts

- Aegis BMD is the first missile defense capability produced by the MDA that has been purchased by an allied nation. Japan's four KONGO-class destroyers have been upgraded with BMD capabilities.
- In 2015, the Maritime Theater Missile Defense (MTMD) forum's At Sea Demonstration (ASD)-15 campaign tested Integrated Air and Missile Defense (IAMD) interoperability with seven NATO countries and included an intercept of a ballistic missile target with an SM-3 Block IA during exercise 15-2.
- SM-3 Cooperative Development Program is the joint U.S.-Japan development of a 21-inch diameter variant of the SM-3 missile, designated SM-3 Block IIA, to defeat longer-range ballistic missiles.

Future Capabilities

- Engagement of longer-range ballistic missiles.
- Improving existing early intercept capability.
- Enhanced terminal capability against short and medium-range ballistic missiles.
- Increased engagement capability in a raid scenario.
- More maritime ally involvement.