"In the business of theater missile defense, I really do believe that the Navy has a tremendous contribution to make with an AEGIS force already well-invested in ... I'm excited about the potential of both lower-tier and upper-tier capabilities ... I think it's relevant and a very, very potent capability for our country..."

- Admiral Jay Johnson, Chief of Naval Operations
  Congressional Testimony, July 1996

The partnership between the Navy and the Ballistic Missile Defense Organization (BMDO) to develop the Navy Area Theater Ballistic Missile Defense (TBMD) Program expands the Navy mission with real capability to defeat the growing ballistic missile threat. Capitalizing on rapid advancements in missile guidance, propulsion, and seeker technology, the Navy is on the verge of being able to protect U.S. and Allied forces ashore when threatened by ballistic missile attacks.

The mission of the Navy Area TBMD system is to provide U.S. and Allied forces, as well as areas of vital national interest, defense against theater ballistic missiles (TBMs). AEGIS cruisers and destroyers, equipped with a modified AEGIS combat system (ACS), will detect and track short to medium range TBMs and engage them with the STANDARD Missile-2 (SM-2) Block IVA interceptor.

The Navy Area TBMD program, scheduled for First Unit Equipped (FUE) in 2003, consists of modifications to the AEGIS AN/SPY-1 radar to enable detection, tracking, and engagement of TBMs using a modified STANDARD SM-2 missile and minor changes to existing command and control systems. More than 50 AEGIS cruisers and destroyers are at-sea or under construction and the support, training, and logistics infrastructure is already in place and operating. The plan includes providing a system called "LINEBACKER" for fleet use and feedback to influence tactical design improvements, that would also be available for contingency use by the Commander-in-Chief (CINC) of a regional military command. LINEBACKER is at sea today.
The Navy will have the flexibility to forward deploy, nearly indefinitely, sea-based TBM defense forces to potential crisis spots in regions where U.S. land-based forces could not so readily deploy. Since these sea-based forces would be deployed in international waters, no foreign governmental approval will be needed. Thus, an effective defense capability can be in place to provide Navy Area defense before hostilities erupt or before land-based defenses can be transported to the theater. If U.S. forces have to fight their way into the theater of operation, Naval combatants could provide critical area defense coverage early in the conflict.

Additionally, TBM defense provided by ships at sea will greatly alleviate the demand on our airlift and sealift. Desert Storm demonstrated the time and resources required to move defense forces into a theater of operation with an active TBM threat. Deployed Naval forces with TBM defense capabilities will enable a theater commander to concentrate available lift on anti-armor, tanks, troops, ammunition and other reinforcements needed to stop an enemy advance.

**Command and Control**

The Navy has years of experience with Battle Force air defense and has deployed the command and control systems necessary to conduct area defense from the sea. The ability to integrate satellite communications, the Joint Tactical Information Distribution System (JTIDS), Tactical Related Applications/Tactical Receiver Equipment (TRAP/TRE), Naval Tactical Command System-Afloat (NTCS-A), and other vital intelligence, sensor, and tactical information makes the Navy a logical choice to have a role in TBM defense.

**AEGIS Ships**

**TICONDEROGA CLASS GUIDED MISSILE CRUISER (CG)**
- Displacement: 9450 Tons
- Dimensions: Length - 567 ft, Width - 55 ft
- Speed: 30+ knots

**ARLEIGH BURKE CLASS GUIDED MISSILE DESTROYER (DDG)**
- Displacement: 9200 Tons
- Dimensions: Length - 509 ft, Width - 66 ft
- Speed: 32+ knots

**Program Achievements**

The Navy successfully demonstrated a TBMD capability when a ballistic missile target was shot out of the sky for the first time (1997) using a new version of the proven STANDARD missile family. With this intercept the Navy moved into a new era where it will play an increasingly vital role in the defense of forces ashore. This joint development effort is conducted by the Navy under the direction of the Ballistic Missile Defense Organization.

Two AEGIS cruisers, USS *Lake Eire* (CG70), and USS *Port Royal* (CG73), were the first to receive TBMD system modifications called LINEBACKER in September 1998. Successful sea trials were completed in October 1998. The LINEBACKER ships will conduct at-sea testing, develop core doctrine and tactics, and serve as focal point for getting our TBMD capability to sea.

The Controlled Test Vehicle One (CTV-1) Flight Test at White Sands Missile Range (WSMR) was successfully completed in June 2000. The objectives were to demonstrate performance of launch and fly-out functions, autopilot performance at near maximum angle of attack, autopilot response performance, and stable autopilot performance throughout flight.

The Controlled Test Vehicle Two (CTV-2) Flight Test at WSMR was successfully completed in August 2000. The objectives were to demonstrate performance of launch and fly-out functions, enhanced missile structural integrity, autopilot response performance, and stable autopilot performance throughout flight.

The exit criteria to enable entry into Low Rate Initial Production (LRIP) Long Lead Material (LLM) were completed in August 2000. Specifically, these included: SM-2 Block IVA Critical Design Review (CDR), AEGIS Weapon System tactical computer program CDR, Initial SM-2 Block IVA Production Readiness Review, Initial SM-2 Block- IVA Pre-Production Reliability Design Review, successful completion of two SM-2 Block IVA Controlled Test Vehicle (CTV) tests, ground testing and analysis on lethality against threat representative targets, and provide ground testing and analysis on fuzing performance. The actual decision to proceed with LRIP LLM is the next step.