FACT SHEET

MDA FACT SHEET

THEATER HIGH ALTITUDE AREA DEFENSE (THAAD)

US BMD Strategy and THAAD

Over the past several years, the U.S. has become increasingly concerned about the possible proliferation of ballistic missiles and weapons of mass destruction in many of the world's high-threat regions. Ballistic Missile Defense (BMD) is designed to counter this problem by: (1) providing a ballistic missile defense (TMD) for U.S. forces deployed abroad and (2) devaluing ballistic missiles as strategic assets, thereby dissuading countries that desire a missile capability for aggressive purposes.

The Theater High Altitude Area Defense (THAAD) system fits into this strategy as one of the Missile Defense Agency's (MDA) terminal defense systems. The THAAD system represents a land-based upper tier BMD system, and will engage short and medium range ballistic missiles.

The THAAD system's ability to intercept missiles at long range and high altitude – both in the endo- and exo-atmosphere — will give U.S. forces the best chance to shoot down incoming ballistic missiles far enough out so that post-intercept debris will not harm our troops — a vital consideration if a missile carries a weapon of mass destruction.

Furthermore, this ability will give U.S. Ballistic Missile Defense (BMD) forces the time to judge the success of an intercept attempt and, if necessary, launch more interceptors from THAAD or other missile defense systems. As part of a layered missile defense architecture, THAAD provides near leak proof protection when employed, for example, with lower-tier systems like PAC-3 or Sea-based Terminal..

System Description

The THAAD system consists of four principal segments: truck-mounted launchers, interceptors, the THAAD Radar system, and the THAAD battle management/command, control, communications, and intelligence (BM/C3I) system.

The mobile launcher will protect and transport the interceptors, in addition to firing them. With its palletized load system, the launcher can be rapidly reloaded. Interceptors will consist of a single stage booster and a kinetic kill-vehicle that will destroy targets by the force of kinetic impact — "hit-to-kill." The THAAD radar will support the full-range of surveillance, target tracking, and fire control functions, and provide a communications link with THAAD interceptors in-flight. Finally, THAAD's

System Description Cont.

BM/C3I system will manage and integrate all THAAD components by providing instructions, communications, and by processing sensor data. The BM/C3I system will also link the THAAD system to other missile and air defense systems, and to our maneuver forces to support a multi-tiered, highly effective, interoperable BMD architecture. Transportability has been a key design issue from the start – with the exception of certain radar components, all system elements are transportable by C-130 aircraft.

Program Development and Schedule

THAAD is well along its development timetable. THAAD system development started in 1992 and is expected to be fielded in the 2007/8 timeframe. In the meantime, THAAD is undergoing rigorous testing and development.

Eleven flight tests were conducted during Program Definition and Risk Reduction (PDRR) phase, culminating in two successful body-to-body intercepts in the Summer of 1999. On June 10, 1999 during Flight Test 10 (FT-10), hit-to-kill intercept of a unitary target in the high endoatmosphere was achieved. During FT-11 on August 2, 1999, a second intercept was achieved — this time against a separating target in the exoatmosphere. The program was subsequently approved for entry into Engineering and Manufacturing Development (EMD) at a June 2000 Milestone II review. Design and development work is ongoing; segment level preliminary and Critical Design Reviews (CDR) will be held during FY2001-2003, with a system level CDR scheduled for early FY2004. Flight testing will resume in late 2004 at White Sands Missile Range, eventually transitioning to Reagan Test Site in the 2005 timeline. During current design and development activities, robust ground test and quality assurance programs are in place to reduce technical risk and ensure proven, quality hardware is used during flight-testing.

Delivery of the THAAD system to operational units will occur in two capability configurations. Configuration 1 (C1) initial fielding is planned for FY2007 and will satisfy all program key performance parameters against the 2007 threat. Sophisticated counter measures and battalion operational software is deferred to Configuration 2 (C2), which is planned for fielding in the FY2012 timeframe. This evolutionary acquisition approach reduces execution risk and increases our confidence that we will deliver this critical missile defense system on time. In addition, evolutionary acquisition allows us to better plan for the insertion of new technologies into the weapon system. Subsequent configurations (3, 4, etc.) will build on the core C1-C2 capability by incorporating components and subsystems into THAAD's open architecture to take advantage of technological advances that increase performance, reduce cost, increase reliability, or offer other tangible benefits to the mission.

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