



# FACT SHEET



MDAFACTSHEET

## THAAD TESTING PROGRAM

### US BALLISTIC MISSILE DEFENSE 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 theater 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.

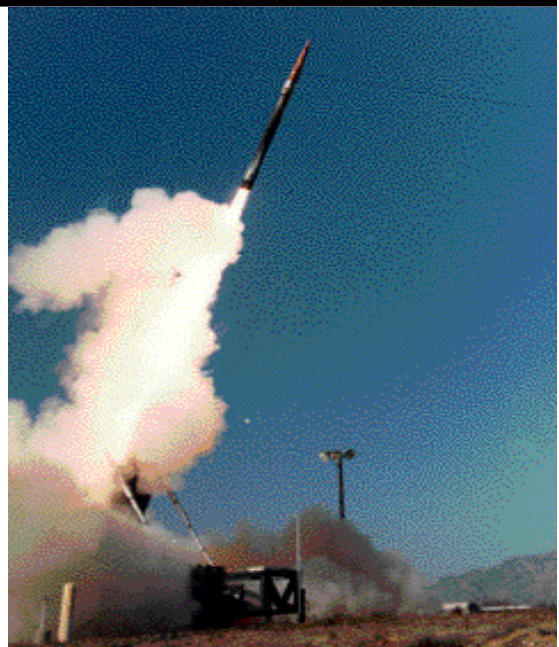
The THAAD system's ability to intercept missiles at long range and high altitude – both in the endo- and exo-atmosphere — will give U.S. forces the best chance to shoot down incoming ballistic missiles far enough out so that post-intercept debris will not harm our troops — a vital consideration if a 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 multi-tiered missile defense architecture, THAAD provides near leak proof protection when employed, for example, with lower-tier systems like PAC-3 or Sea-based Terminal.

### BACKGROUND

The THAAD System has conducted eleven Program Definition and Risk Reduction (PDRR) flight tests; it achieved its first successful body-to-body intercept of a ballistic missile target on June 10, 1999, during Flight Test 10. On August 18, 1999, following a second intercept (Flight Test 11; August 2, 1999), the Undersecretary of Defense for Acquisition, Technology, and Logistics instructed the Army to cancel remaining PDRR flight tests and begin preparations for entry into Engineering and Manufacturing Development (EMD). A successful Milestone II Review was held in June 2000 and the EMD contract was subsequently signed on 28 June 2000.

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 (WSMR, where all PDRR flight tests were conducted), eventually transitioning to Reagan Test Site (RTS) in



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## **BACKGROUND CONT.**

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.

## **EMD FLIGHT TESTING**

During EMD, the THAAD weapons system will undergo developmental and operational test and evaluation in support of key acquisition milestones; e.g., long lead materiel purchases, Low Rate Initial Production (LRIP), and Full Rate Production (FRP). This flight testing will demonstrate system design and support system development. Flight test objectives will initially be sequenced to progressively control the introduction of variables and to incrementally retire program risk; soldier involvement will gradually increase as well. As flight testing continues, test objectives will then address both technical and operational requirements, including non-scripted scenarios and multiple engagement missions.

## **PDRR FLIGHT TEST HISTORY**

The PDRR Flight tests 1-11 were conducted at White Sands Missile Range, NM. The test successfully demonstrated missile launch, booster performance, booster/kill vehicle (KV) separation, KV shroud separation, radar-to-missile communication, and flight/seeker environmental data collection. Two successful body-to-body intercepts of the target in the high endo-atmosphere were achieved. All system segments performed as planned and no major anomalies were experienced.

## **CONCLUSION**

The THAAD program is well along its development timetable. THAAD system development started in 1992 and initial fielding is expected in the 2007/8 timeframe. Flight testing— including two successful hit-to-kill intercepts during PDRR and future EMD flight testing that is planned — will ensure that an effective, reliable, safe ground-based terminal defense system will be developed and deployed to defend US soldiers and allies from short- and medium range ballistic missiles.

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