MISSILE DEFENSE AGENCY

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Fact Sheet

Terminal High Altitude Area Defense

The Terminal High Altitude Area Defense (THAAD) element will give the Ballistic Missile Defense System a valuable, rapidly-transportable, forward-deployable capability that will intercept and destroy ballistic missiles inside or outside the atmosphere while they are in their final, or terminal, phase of flight.

Overview

- Land-based element capable of shooting down a ballistic missile both inside and just outside the atmosphere (i.e., Endo/Exo-atmospheric capability).
- Highly effective against the asymmetric ballistic missile threats.
- Uses “hit-to-kill” technology to directly hit the incoming missile and destroy it.
- The high-altitude intercept allows for enemy weapons of mass destruction to burn up in the atmosphere before reaching the ground.

Details

- Four main components: truck-mounted launchers, interceptors (eight per launcher), X-band radars, and fire control and communication units.
  Launcher: Highly mobile, able to store, transport, and fire interceptors and reload rapidly.
  Interceptor: Designed to intercept its target both in and out of the atmosphere using hit-to-kill lethality.
  Radar: Largest air-transportable X-band radar in the world. It provides search, track, discrimination and Fire Control updates to the Interceptor.
  Fire Control: Communication and data-management backbone; links Terminal High Altitude Area Defense components together; links these components to external units and to the entire Ballistic Missile Defense System; plans intercept solution.
- Rapid deployment: can be air-lifted anywhere in the world in hours. It is also sea and land transportable.

Development

- System design ensures high standards and efficient production and maintenance
- A comprehensive program of ground tests, quality assurance, and design and development activities to ensure mission success
- Major events in the Terminal High Altitude Area Defense program:
  - Build, test and verify Terminal High Altitude Area Defense initial capability
  - Returned to flight test on November 22, 2005 at White Sands Missile Range, N.M.
  - Completed five successful intercept tests, including an operationally realistic test in June, 2008 which resulted in the successful intercept of a separating target ballistic missile in the Pacific Missile Range Facility, Kauai, Hawaii
  - Continue component development to incrementally improve missile defense capability
  - Continue planning for and conducting soldier training
  - Continue planning for transition of operations to the Army