



Terminal High Altitude Area Defense

The Terminal High Altitude Area Defense (THAAD) element provides the Missile Defense System (MDS) with a globally-transportable, rapidly-deployable capability to intercept and destroy ballistic missiles inside or outside the atmosphere during their final, or terminal, phase of flight.

Overview

- Land-based element capable of shooting down a ballistic missile both inside and outside the atmosphere.
- Highly effective against ballistic missile threats.
- Uses hit-to-kill technology whereby kinetic energy destroys the incoming warhead.
- The high-altitude intercept mitigates effects of enemy weapons of mass destruction.



Characteristics

- Rapidly-deployable and globally-transportable via air, land, and sea.
- A THAAD Battery consists of four main components:
 - **Launcher:** Highly Mobile; Interceptors can be fired and rapidly reloaded; capable of up to 9 launchers per Battery.
 - **Interceptors:** Up to Eight per launcher.
 - **Radar:** Army Navy/Transportable Radar Surveillance (AN/TPY-2) – Largest air-transportable X-band radar in the world; searches, tracks, and discriminates objects and provides data to the Interceptor.
 - **Fire Control:** Communications and data-management backbone; links THAAD components together; links THAAD to external Command and Control nodes and to the entire MDS; plans and executes intercept solutions.
 - **Missile Segment Enhancement (MSE) Launcher:** THAAD has the capability to integrate MSE launchers into a THAAD Battery per U.S. Army direction. Adding MSE to the THAAD Arsenal increases engagement opportunities and conserves THAAD Interceptors.

Development

- Major events in the THAAD Program:
 - THAAD System Build 4.0 Region Specific was added to the MDS Operational Capability Baseline (OCB) in May 2022. THAAD System Build 4.0 delivers Initial THAAD and MSE Integration to the fleet.
 - THAAD System Build 4.0 Global was added to the MDS OCB in August 2023.
 - THAAD System Build 5.0, which includes mission assurance updates and Configuration 3 hardware, is currently in development with a planned addition to the MDS OCB in July 2026.
- Continuing element development to improve missile defense capability against current and future threats.
- Comprehensive program of ground and flight tests, quality assurance, and design and development activities support mission success.
- State-of-the-art engineering ensures high standards and efficient production and maintenance.

Fielding

- Eight THAAD Batteries have been procured and seven are currently fielded to the US Army to support the ballistic missile defense of the United States, its deployed forces, allies, and friends. The eighth THAAD Battery is currently in production.
- MDA delivered 799 operational Interceptors to the US Army and Foreign Military Sales (FMS) Customers as of 1OCT23 and continues to deliver Interceptors to support the fielded USG batteries and our FMS Customers.

Foreign Military Sales

- Two THAAD Batteries procured by and delivered to the United Arab Emirates (UAE) and are fully operational. The UAE's THAAD Weapon System successfully intercepted ballistic missiles in January 2022. This marked the first operational intercept using the THAAD Weapon System in a combat environment by any nation.
- The Kingdom of Saudi Arabia has signed multiple FMS Cases for delivery of seven THAAD Batteries and supporting equipment.