



Army Navy / Transportable Radar Surveillance (AN/TPY-2)

The Army Navy/Transportable Radar Surveillance and Control, or AN/TPY-2, is a transportable X-band, high-resolution, phased-array radar designed specifically for ballistic missile defense. The AN/TPY-2 is capable of tracking all classes of ballistic missiles and identifying small objects at long distances. This radar plays a vital role in the Ballistic Missile Defense System (BMDS) by acting as advanced "eyes" for the system, detecting ballistic missiles early in their flight and providing precise tracking information for use by the system. Use of multiple sensors provides overlapping sensor coverage, expands the BMDS battle space, and complicates an enemy's ability to penetrate the defense system. The same radar provides surveillance, track, discrimination and fire control support for the Terminal High Altitude Area Defense (THAAD) weapon system.



Overview

- High-resolution, X-band, phased-array radar.
- Acquires, tracks, discriminates, classifies, identifies, and estimates the trajectory parameters of all classes of threat missiles and missile components, and passes this information to other BMDS components or the THAAD weapon system.
- Transportable by air, ship, truck, and rail.

Details

- AN/TPY-2 radars, coupled with layered sensors, give the BMDS a continuous tracking and discrimination capability with more opportunities to engage the target, resulting in a greater probability for a successful intercept.
- The radars pass target data to the BMDS and THAAD command and control systems.
- The radars perform autonomously or as cued by other sensors.

Development

- Three AN/TPY-2s are currently deployed in support of U.S. allies
- Seven AN/TPY-2s have been produced, with three additional currently in production.
- The radar can support additional missions including space surveillance and data collection.
- The current plan is for a total of 11 AN/TPY-2 radars.