MISSILE DEFENSE AGENCY

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Fact Sheet

Upgraded Early Warning Radars, AN/FPS-132

Three Air Force Early Warning Radars (UEWR), located in Beale Air Force Base, Calif.; RAF Fylingdales, United Kingdom; and Thule Air Base, Greenland, were upgraded and integrated into the Ballistic Missile Defense System (BMDS). The upgrades modernized the hardware and software to improve midcourse BMDS sensor coverage by providing critical early warning, tracking, object classification and cueing data. All three UEWRs were transferred to the U.S. Air Force for sustainment in FY14. The Early Warning Radars in Clear, Alaska and Cape Cod, Mass. began the UEWR modernization in FY12 and FY13, respectively.

Overview

- Solid-state, phased-array, all-weather, long-range radars.
- Provides Integrated Tactical Warning / Attack Assessment.
  - Alerts and provides the National Command Authority estimated launch and impact points.
- Supports Space Surveillance Network.
  - Classifies reentry vehicle and other space objects.
- Provides midcourse coverage for BMDS.
  - Detects sea-launched or intercontinental ballistic missiles.
  - Provides real-time information to BMDS Command and Control nodes.
  - Provides threat ballistic missile tracking data to commit the launch of interceptors and to update the target tracks to the interceptor while the interceptor is in flight.

Details

- Detects objects out to 3000 miles.
- Operates in the Ultra High Frequency Band.
- Two (Beale, Thule), or three (Fylingdales) radar faces. Each face provides 120°coverage.
- Beale has an active aperture of 73 ft. diameter; Fylingdales and Thule have an active aperture of 84 ft. diameter; overall radar height is 120 ft.