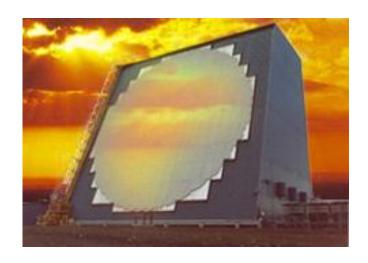


7100 Defense Pentagon Washington, DC 20301-7100

Cobra Dane Upgrade

The U.S. Air Force Cobra Dane radar in Shemya, Alaska has been upgraded to include the missile defense mission and has been integrated into the Ballistic Missile Defense System (BMDS).

The upgrade improves midcourse BMDS sensor coverage by providing acquisition, tracking, object classification, and data that can be used for cueing, launch of interceptor missiles, and course updates of interceptors while retaining the site's legacy intelligence and space track missions. The Cobra Dane Upgrade has transitioned system operations, maintenance and sustainment responsibilities to the Air Force.



Overview

- Traveling wave tube fed phased-array, all-weather, long-range radar
- Provides midcourse coverage for the BMDS
 - o Detects sea-launched or intercontinental ballistic missiles
 - Classifies reentry vehicle and other missile objects
 - o Provides real-time information to Fire Control
 - Provides tracking of threat ballistic missiles sufficiently accurate to commit the launch of interceptors and to update the target tracks to the interceptor while the interceptor is in flight

Details

- Cobra Dane has one radar face providing 136° of azimuth coverage
- The radar face is approximately 95 feet in diameter; overall radar height is 120 feet
- Detects objects out to 3000 miles
- Cobra Dane operates in the L-band frequency