

# AN/MPQ-64 SENTINEL CONTINGENCY AND SECURITY

When airspace security counts, AN/MPQ-64 Sentinels are the eyes of vigilance

EXTENDED AIR DEFENSE MISSIONS

AIR COMMAND AND CONTROL MISSIONS

BATTLEFIELD SURVEILLANCE AND COORDINATION MISSIONS

COMBINED COMMAND AND CONTROL MISSIONS



  
**ThalesRaytheonSystems**

# AN/MPQ-64 SENTINEL CONTINGENCY AND SECURITY

## Description:

### Countering Low-flying Airborne Threats

For securing urban or isolated sites from covert aerial threats, the AN/MPQ-64 Sentinel 3-D mobile air defense radar is unmatched. With the Sentinel system, security teams can protect assets from unauthorized airborne threats flying below the horizon of air traffic control radar. The highly mobile Sentinel system delivers accurate low-altitude surveillance of small to large airborne devices, including domestic and military aircraft, unmanned aerial vehicles, helicopters, ultralights, and cruise missiles. The Sentinel will detect, identify, classify, and backplot flying devices from the nap of the earth to 55° elevation and 360° azimuth within an airspace search range of 75 km.

### Proven Protection at the 1996 and 2002 Olympic Games

The U.S. Customs Service and DoD requested a network of Sentinels to provide airspace detection and management for the 1996 Summer Olympic Games in Atlanta, Georgia and the 2002 Winter Games in Salt Lake City, Utah. In Atlanta alone, from strategic locations around the Olympic event venues and Village, the Sentinels detected more than 40 airspace violations. Although the majority of the incidents were light-plane "sightseers," a number of suspicious aircraft were intercepted, detained, and later convicted of penetrating restricted airspace. According to the coordinating federal agencies, these violators would have gone undetected without Sentinel.

### Integrated Airspace Security in Locations Worldwide

The self-contained, lightweight AN/MPQ-64 Sentinel system comprises the antenna transceiver group and its prime mover, the High Mobility Multi-Wheeled Vehicle (HMMWV). Capable of tracking more than 60 simultaneous targets, Sentinel reports confirmed target data to the site security command center for action. The Sentinel system's mobility, survivability, and readiness make it ideal for light force deployment in remote sites and extreme conditions. This advanced air defense radar system can be transported in a single C-130 sortie or sling-loaded by a CH-47 or UH-60L helicopter. The Sentinel requires a two-person crew for rapid emplacement, operation, and displacement, and there is no need for special ground handling equipment or personnel. Maintenance manuals on CD-ROM ensure fast, accurate repairs.

AN/MPQ-64 Sentinel		
Performance	Survivability	Mobility
<b>Surveillance Volume</b> Azimuth 360° Elevation search volume: -10° to +55° <b>Reliability/availability/maintainability (system)</b> MTBF: >600 hr MTTR: <30 min <b>Integrated IFF Capability</b> March order: <5 min Emplacement: <15 min Range: To 75 km <b>Range</b> Up to 75 km	<b>Temperature</b> Operating: -50°F to 125°F (-46°C to 52°C) Nonoperating: -50°F to 160°F (-46°C to 71°C) <b>Altitude</b> Operating: Up to 10,000 ft Nonoperating: Up to 40,000 ft <b>Wind</b> Operating: 52 mph, with gusts to 75 mph Nonoperating: 65 mph, with gusts to 100 mph <b>Rain</b> 5 in./hr, with winds to 52 mph	<b>Transport speeds</b> Level highway: 40 mph Graded gravel road: 30 mph Cross-country terrain: 8 mph <b>Grades</b> Side slope: 20% Longitudinal slope: 32% <b>Fording</b> Water up to 30 in. deep <b>Transport</b> C-130: Single sortie CH-47: Sling-loaded, single sortie UH-60L helicopter: Sling-loaded, two sorties



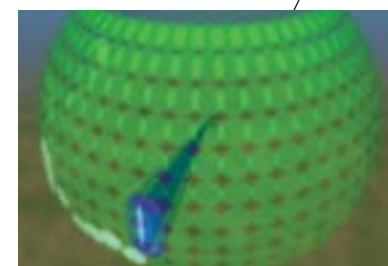
During the 1996 Olympic Games, Sentinels stationed around Atlanta provided effective airspace detection (see A, B, and C)

- Sentinel locations
- ▲ Olympic venues and restricted flight area

Sentinel delivers accurate tracking in azimuth, elevation and range



Sentinel fires over 1100 beams per scan



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