AN/TPQ-36(V)10 FIREFINDER WEAPON LOCATING SYSTEM

EXTENDED AIR DEFENSE

AIR COMMAND AND

BATTLEFIELD SURVEILLANCE AND COORDINATION MISSIONS



COMBINED COMMAND AND CONTROL MISSIONS



Thales Raytheon Systems

Description:

The AN/TPQ-36 directs accurate counterfire to neutralize enemy positions.

Medium-Range Surveillance

ThalesRaytheonSystems' compact, mobile, combat proven AN/TPQ-36 Firefinder radar accurately, rapidly and automatically locates medium-range enemy mortars, artillery, and rocket launchers. It can handle simultaneous fire from weapons at multiple locations, detecting and reporting their positions on the first round. The AN/TPQ-36 can detect and report the positions of up to 10 different weapons in seconds, at a maximum range of 24 km. The system also corrects and improves delivery of friendly fire.

Highly Mobile

Compact and highly mobile, the AN/TPQ-36 supports rapid deployment of forces and close combat. It can be positioned and ready for operation in 15 minutes. It can be readied for movement in 5 minutes by a five-man crew. Because it can move quickly from one position to another, it is typically located close to the forward battle line in direct support of brigade operations. The AN/TPQ-36 comprises an antenna-transceiver trailer, a generator, and an operation control shelter that contains the paper map display and communications suite. The prime movers for the system consists of three HMMWVs (Recon/Cargo Vehicle, Shelter Vehicle with Q-36 in tow. Generator Vehicle with spare generator in tow). The manned operation control shelter can be located as far as 50 m away from the unmanned antenna trailer. The system is capable of being operated remotely 100 m from the shelter.

Defeats Enemy Firepower, Supports Friendly Weapons

The AN/TPQ-36 stationary antenna sweeps a rapid sequence of beams along the horizon, forming an electronic radar curtain over 90 degree area. Any target penetrating the curtain triggers an immediate verification beam. On verification, an automatic tracking sequence begins. While tracking any single target, the radar continues scanning, locating, and tracking others.

Training and Maintenance

With high system reliability and maintainability simplified by computer-controlled, built-in test equipment, ThalesRaytheonSystems' AN/TPQ-36 provides unusually high system availability. Improved On-line fault detection and off-line fault diagnostics alert the operator to system faults, directing repair action to the unit that must be replaced. Ninety percent of all repairs required in the field can be performed by the crew, with a mean-time-to-repair of only 30 minutes. The cost effectiveness of the AN/TPQ-36 is enhanced by its 90 degree – 360 degree sector, small crew, ease of operation, and high availability.

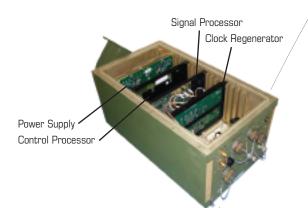
State of the Art Radar Processor

The AN/TPQ-36 has been upgraded with a full radar compliance radar processor. The radar processor is common between the AN/TPQ-36 and AN/TPQ-37 Radars. The new processor reduces the number of circuit cards from 9 to 3. Customers benefit tremendously from the significant reduction in cost per unit and unlimited future growth potential. The open LAN based design accommodates future changes.

Common Front End Software



- Enhanced Human-Machine Interface
- Improved Situational Awareness on the Battlefield
- Software Commonality Among Firefinder Radars
- Reduction in Training Hours for Operator and Maintenance Training



		/
AN/TPQ-36(V)10 Firefinder Weapon Locating System		
Capabilities	Specifications	Features
Locates mortars, artillery, and rocket launchers	Maximum range: 24 km	Permanent storage for 99 targets
Locates 10 weapons simultaneously	Effective range Mortar: 18 km	Embedded Training
Locates targets on first round	Artillery: 14.5 km Rockets: 24 km	Digital data interface
Performs high-burst, datum-plane, and impact registrations		Remote operations
	Azimuth sector: 90°	Enhanced situational awareness
Adjusts friendly fire	Frequency: X-band, 32 frequencies	Improved human-machine interface
Interfaces with tactical fire	Prime power: 115/200 VAC,	
Predicts impact of hostile projectiles	400 Hz, 3-phase, 8 kW	
	Peak transmitted power: 23 kW, min.	

