The AN/TPQ-49 multi-mission radar leverages SRC’s LCMR and LSTAR® software to provide the warfighter with a versatile, powerful, all-in-one multi-mission radar capable of supporting early warning weapon location for indirect fire, counterfire target acquisition (CTA) and air surveillance missions.

The radar provides continuous 360-degree surveillance and 3-D target location using a non-rotating, electronically steered antenna. Its small footprint and lightweight design make the radar ideal for fixed site emplacement in hard to reach areas where typical radars are impractical.

The system can simultaneously detect and track multiple targets from separate points of origin within a 315 square kilometer surveillance area. The radar is designed to support a variety of missions including: air surveillance, force protection, CTA, very short range air defense (VSHORAD), small UAS detection and tracking, and critical infrastructure protection.

**MULTI-MISSION**

The AN/TPQ-49 radar is multi-mission capable, allowing the operator to configure the radar to support a variety of missions simultaneously, including: early warning for indirect fire, CTA, air surveillance and counter-UAS missions. In multi-mission mode, the radar can perform the tasks of two or more radars and can be configured to prioritize specific capabilities to fit mission needs.
WEAPON LOCATION
SRC’s AN/TPQ-49 radar system is a trusted U.S. Marine Corps program of record. Combined with SRC’s LCMR software, the system is designed to detect, track, classify and warn of incoming RAM threats while determining point of origin and point of impact locations. The system can track multiple weapons simultaneously and has a detection range of greater than 10 kilometers, and a point of origin accuracy of 75 meters at 5 kilometers.

AIR SURVEILLANCE
With SRC’s LSTAR software, the radar can detect and track a wide range of traditional and non-traditional aircraft, with an instrumented range of 30 kilometers. The LSTAR software extends the radar coverage volume by employing air surveillance specific waveforms tailored to airspace monitoring. This capability makes the radar an ideal solution for general air surveillance for VSHORAD, wind farm gap filling, and small UAS detection and tracking.

APPLICATIONS
- Air surveillance
- Counterfire target acquisition
- Counter-UAS
- Critical infrastructure protection
- Force protection
- Ground based sense and avoid
- VSHORAD

BENEFITS
- Transports easily and installs rapidly (< 20 minutes) in challenging terrain
- Low lifecycle cost
- Unattended remote operation
- Few false alarms in challenging clutter
- Ideal for integrated solutions
  - EO/IR camera or counterfire response
  - ADS-B or secondary surveillance radar

SPECIFICATIONS
- Operating frequency: L-Band
- Detection range
  - Counterfire: > 10 km
  - Air Surveillance: 30 km
- Azimuth coverage: 360°
- Elevation coverage: 0 - 30°
- System weight: 68 kg / 150 lb
- System size: 40 in/102cm diameter by 85 in/216cm high (adjustable)
- Power: 1,200 W, 110/240 VAC 50/60 Hz, 24 VDC

FEATURES
- Performs multiple missions simultaneously including early warning, counterfire and air surveillance
- Extremely reliable with almost no moving parts
- Supports multiple interface standards
- Rooftop, tower, or tripod mountable
- Complete integrated logistics support
- 3-D location display
- 360 degree coverage with non-rotating, electronically steered antenna
- Powered by AC grid, generator, 24 VDC vehicle, or battery