AN/MLQ-40(V)4
Prophet Spiral 1 + Multi-Sensor
SIGINT System

The AN/MLQ-40(V)4 Prophet Spiral 1+ is a ground-based SIGINT system that provides force protection information in a direct support role, either stationary or while On-The-Move (OTM). The system has the capability to detect, monitor, identify and selectively exploit Radio Frequency (RF) signals for intelligence information providing situational awareness and potential targets for Tactical Commanders. The exploited signal data can be relayed via voice or data through the organic Wideband Beyond Line of Sight (WBLOS) SATCOM communications system. The system has a networking capability with other similar assets to coordinate target information and location, as well as allowing real-time connection to the Global SIGINT Enterprise. The available AN/PRD-13(V)2 manpack configuration provides additional force protection information.

Modular, Platform-Independent Design

The system is currently mounted on a High Mobility Multi-Purpose Wheeled Vehicle (HMMWV); however, its design facilitates easy moves to other suitable vehicles. The system design integrates all necessary mission equipment into two 7U transit cases (one case for the Sensor and one for the SATCOM) which along with the WBLOS antenna can be dismounted for flexibility in operations.
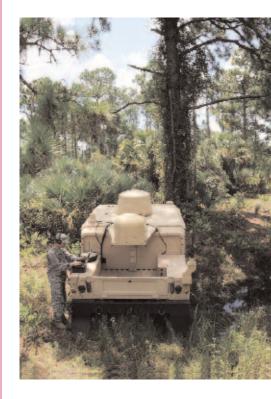
Special Sensor Subsystem

The Prophet Spiral 1+ incorporates a Special Sensor Subsystem and ancillary equipment including antenna, mounts and cabling. The Special Sensor Antenna Assembly is comprised of a Monitor and DF Antenna Array that receives, switches and amplifies RF signals within the 30 MHz to 3000 MHz frequency band. Both the RF and

PROPHET SPIRAL 1 +
A FIELD-PROVEN TACTICAL SIGNAL INTELLIGENCE SYSTEM PROVIDING PROVEN ACCURATE:

  – *DETECTION*
  – *IDENTIFICATION*
  – *LOCATION*

FOR A WIDE VARIETY OF MODERN BATTLEFIELD SIGNALS

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serial digital signals are connected to the Special Sensor Receiver-Processor. Other components of the Special Sensor Subsystem include an Ethernet switch and a server computer containing two removable hard drives. Control of the Special Sensor equipment is accomplished through Warrior Machine Interface (WMI) laptop computers via an Ethernet LAN.

This modularity and flexibility, which allows the Prophet system to detect and identify a wide variety of traditional and modern signals, gives the system its capability as an important part of an all source intelligence effort.

The ability of the system to geographically locate Signals of Interest (SOIs) provides a much higher level of situational awareness to the Tactical Commander than is available by other means.

Wideband SATCOM On-The-Move

On today's dynamic battlefield, the ability to stay connected to the global enterprise is critical. For Prophet Spiral 1+, WBLOS connectivity is provided by the TRM-1000 which is a field-proven, low-cost SATCOM On-the-Move (SOTM) terminal. The TRM-1000 is specifically designed to utilize the full capabilities of the Wideband Global SATCOM (WGS) satellites. The major components of the TRM-1000 are the MPM-1000 Internet Protocol (IP) modem with its embedded Network Centric Waveform (NCW) and an FSS-4000 series OTM antenna. The NCW employs native Ethernet encapsulation, which makes it easy to configure military networks that require COMSEC, TCP accelerators and any other IP networking devices.

Available Options

- Worldwide Shore Power Interface
- AN/PRD-13 (V)2 Man-Portable Signals Intelligence Module

TRM-1000 SOTM Terminal

Note: All specifications subject to change without notice

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