



# Enhanced Position Location Reporting System

## EPLRS



A software defined, wireless networking system, the Enhanced Position Location Reporting System (EPLRS) provides fast, reliable tactical data communication.

### Benefits

- Supports a broad range of missions by integrating battlefield communication systems
- Delivers crucial information to the right place at the right time with optimal security and reliability
- Enables position/navigation throughout maneuver brigades and supports U.S. Army Battle Command System
- Low cost makes EPLRS affordable for all combat and combat support units
- Supports U.S. Air Force Situational Awareness Data Link (SADL)

### Broad-Range Mission Support

EPLRS provides robust, high-speed battlefield communications for warfighters on the move. Its contention-free networking architecture integrates current battlefield systems and ensures speedy data exchange in time-critical situations.

EPLRS' data collection and communication capabilities cover a wide variety of missions — from air defense to maneuver control and beyond. In air defense, where distributing command and control information and exchanging air track data are crucial, EPLRS reliably meets the challenge. In fire support missions, it simultaneously distributes artillery fire requests and mission support data to multiple destinations — a major benefit to warfighters.

EPLRS meets the demanding requirements of intelligence and electronic warfare by collecting data from widely dispersed systems in forward battle areas and sending it back to the combat force. Enhancing the system's reliability, the EPLRS network automatically reconfigures itself to overcome the line-of-sight limitations of ultra high-frequency communications and to mitigate jamming threats.

In maneuver control operations, EPLRS' data communication, position-location reporting, and navigation functions play an integral role. Through the Force XXI Battle Command Brigade and Below (FBCB2) system, EPLRS relays unit identification, position location, and operational status data to combined maneuver files. The data is displayed on the FBCB2 platform hosts and other tactical displays.

EPLRS provides e-mail, reports, and other information to assist commanders during force deployments and maneuvers.

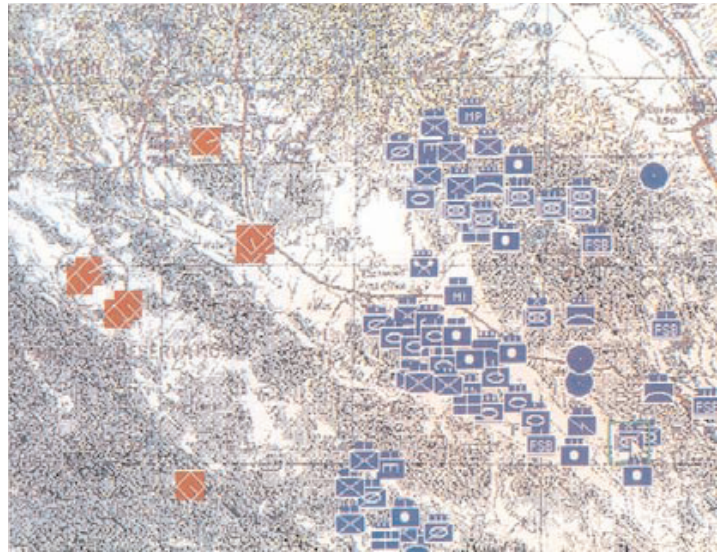
**SADL**

The Situation Awareness Data Link (SADL) integrates U.S. Air Force close air support aircraft with the digitized battlefield and with the Link 16 Command and Control Net via the U.S. Army's EPLRS. More than just a radio or a data modem, SADL provides fighter-to-fighter, air-to-ground, and ground-to-air data communications that are robust, secure, jam-resistant, and contention-free.

With its inherent position and status reporting for situation awareness, SADL provides an effective solution to the long-standing air-to-ground combat identification problem.

**The Power of Timely Information**

Timely information is a force multiplier. EPLRS delivers critical information to the right place at the right time, enabling commanders at all levels to make the right decision.



EPLRS supports Command & Control and Situational Awareness host applications.

**System Features**

- Robust, self-healing network architecture
- Externally programmable firmware and software
- Contention-free access and guaranteed speed of service
- Automatic mesh networking
- Jam-resistant, LPI/LPD, spread spectrum, frequency-hopping waveform
- Re-keys radios over the air
- Provides 8m (CEP) position accuracy with GPS
- Laptop based network monitoring and management

**Key Specifications**

- Frequency: UHF 420-450 MHz  
UHF Wideband 225-450 MHz
- Dimensions: 10.5 in x 11 in x 5.1 in (max)
- Weight: Approx. 18 lbs
- Output Power: .4, 3, 20, or 100 W selectable
- Security: Type 1 Crypto
- Radio Links: Up to 30 simultaneous independent data paths per radio. Automatic route establishment, maintenance and reconfiguration
- Data Rates: Variable data rates – up to 1 Mbps
- Configuration: Manpack, vehicular and airborne
- Interfaces: ADDSI (X25), ethernet, PPP



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