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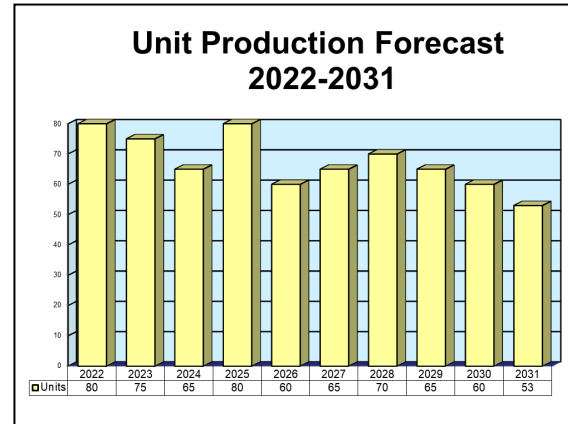
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PLRS/EPLRS

Outlook

- The next several years should see production for some export user nations and, to a lesser extent, U.S. Army units

- Software-defined, wireless networking system provides battlefield communications for warfighters on the move

Unit Production Forecast 2022-2031

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Units	80	75	65	80	60	65	70	65	60	53

Orientation

Description. The Enhanced Position Location Reporting System, or EPLRS (also known as the Position Location Reporting System, or PLRS), is a software-defined wireless networking system that provides battlefield communications for warfighters on the move.

Status. In production and service.

Application. Communications.

Price Range. Based on U.S. Army budget documents the average cost of the EPLRS is $25,000.

Contractors

Prime

Raytheon Technologies	http://www.rtx.com, 870 Winter St, Waltham, MA 02451-1449 United States, Tel: + 1 (781) 522-3000, Fax: + 1 (781) 860-2520, Prime

Contractors are invited to submit updated information to Editor, International Contractors, Forecast International, 75 Glen Road, Suite 302, Sandy Hook, CT 06482, USA; rich.pettibone@forecast1.com

PLRS/EPLRS

Technical Data

Key Specifications

- **Frequency:** UHF 420-450 MHz, UHF Wideband 225-450 MHz

- **Dimensions:** 10.5 inches x 11 inches x 5.1 inches

- **Weight:** Approximately 18 pounds

- **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

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

- Provides 8-meter (CEP) position accuracy with GPS

- Laptop-based network monitoring and management

Variants/Upgrades

EPLRS-XF. The EPLRS-XF (Extended Frequency) is a software-programmable wireless networking system that provides battlefield communications with wideband frequency operation.

Program Review

The following details recent activity in the development of EPLRS radios.

In April 2007, Raytheon announced that the company had received a contract to manufacture and deliver 650 Enhanced Position Location Reporting System radios to the Department of National Defence of Canada. In October 2008, Raytheon announced that it had produced its 20,000th EPLRS radio.

In April 2009, Raytheon Company (now Raytheon Technologies) announced that it had been awarded an initial $12.5 million contract to supply the U.S. Army with EPLRS-EF radios.

In January 2011, Raytheon announced that it had signed a $70 million contract with the Australian Defence Materiel Organization for the provision of EPLRS and MicroLight radios and associated support under Joint Project 2072.

In July 2011, the U.S. Army awarded Raytheon a $70-plus-million contract for EPLRS support services.

In June 2013, Raytheon announced that an upgraded version of its EPLRS radio (the EXF1915) had recently transmitted data securely over the air to more than 30 Stryker combat vehicles, proving that it could meet the U.S. Army's need for a tactical wireless Internet via a vehicle-mounted mobile radio system. Soldiers were able to send and receive e-mail and chat messages and

access the brigade's intranet-like Web portal, marking the first time 4/2 SBCT (4th Brigade 2nd Infantry Division Stryker Brigade Combat Team) was able to tap into a secure wireless network.

In May 2014, *Inside the Army* reported that some U.S. Army units intended to retire their remaining EPLRS radios during the period FY14-FY17. The service's Air Defense Command, which has 2,100 EPLRS radios,

planned to continue using the systems until it could rewrite its system control software. Once this was accomplished, the command could move to other radios. It plans to divest fully from EPLRS around 2028.

In November 2018, the Army reported on an Advanced Gunnery capabilities mission in South Korea. The EPLRS was highlighted as one of the systems utilized in the exercise.

Funding

Raytheon Technologies funds the PLRS/EPLRS.

Contracts/Orders & Options

Contractor	Award ($ millions)	Date/Description
Raytheon	14.00	Apr 2007 – An initial contract from the U.S. government to supply 650 EPLRS networked data radios to the Department of National Defence of Canada.
Raytheon	12.50	Apr 2009 – An initial contract to supply the U.S. Army with EPLRS-EF radios.
Raytheon	70.00	Jan 2011 – Contract from the Australian Defence Materiel Organization for the provision of EPLRS and MicroLight radios and associated support under Joint Project 2072. The contract includes a significant number of EPLRS and MicroLight radios as well as ancillaries, spares, support, and training.
Raytheon	70.52	Jul 2011 – Cost-plus-fixed-fee, indefinite delivery/indefinite quantity contract from the U.S. Army to provide engineering and integration, logistical and field support, and post-deployment software service support for the EPLRS. Work completed Jul 2014. The U.S. Army Contracting Command, Aberdeen Proving Ground, MD, was the contracting activity. (W15P7T-11-DC604)

Worldwide Distribution/Inventories

Outside of the **U.S.**, countries believed to have procured the EPLRS include **Australia**, **Canada**, and **Italy**

Forecast Rationale

The Enhanced Position Location Reporting System, or EPLRS (also known as the PLRS), is a software-defined wireless networking system that provides battlefield communications for warfighters on the move.

The next several years should see some production for export and for at least one segment of the U.S. Army.

After most of the service retired its remaining EPLRS radios during the period FY14-FY17, the Army's Air Defense Command planned to continue using the systems until it could rewrite its system control software. The group plans to divest fully from EPLRS around 2028.

PLRS/EPLRS

Ten-Year Outlook

ESTIMATED CALENDAR YEAR UNIT PRODUCTION											
Designation or Program	**High Confidence**				**Good Confidence**			**Speculative**			
	Thru 2021	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**Total**
Raytheon Technologies												
EPLRS <> Armed Services <> Worldwide												
	597	50	45	45	50	40	45	50	47	40	35	447
EPLRS <> United States <> Army												
	22,229	30	30	20	30	20	20	20	18	20	18	226
Subtotal	22,826	80	75	65	80	60	65	70	65	60	53	673
Total	22,826	80	75	65	80	60	65	70	65	60	53	673