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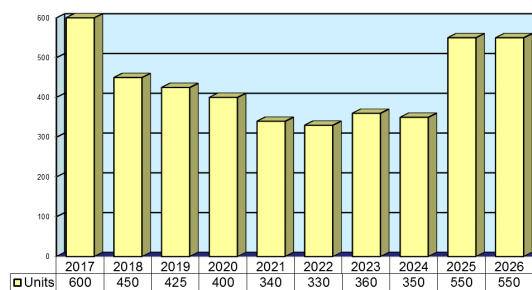
www.forecastinternational.com or call +1 203.426.0800

Spearhead

Outlook

- Forecast International estimates Harris will sell some 4,355 Spearhead handheld radios to defense departments worldwide over the next decade
- This forecast is conservative, given the lack of publicly available sales information
- In December 2015, Harris purchased Exelis Inc
- FI believes that Harris will continue Exelis's marketing strategy of promoting the Spearhead to customers outside the United States

**Unit Production Forecast
2017-2026**



Orientation

Description. Spearhead is a frequency-hopping, very high frequency (VHF), software-defined, handheld military radio manufactured by Harris (formerly Exelis).

Status. Available for sale.

Application. Communications.

Sponsor

Harris
Night Vision and Communications Solutions
7310 Innovation Blvd
Fort Wayne, IN 46818, USA
Tel: +1 (260) 451-4600
Website: <http://www.exelisinc.com>

Price Range. Forecast International estimates the price of one Spearhead military radio to be \$3,500.

Contractors

Prime

**Harris, Night Vision and
Communications Solutions**

<http://www.harris.com>, 7310 Innovation Blvd, Fort Wayne, IN 46818 United States,
Tel: +1 (260) 451-4600, Prime

Contractors are invited to submit updated information to Editor, International Contractors, Forecast International, 22 Commerce Road, Newtown, CT 06470, USA; rich.pettibone@forecast1.com

Spearhead

Technical Data

Function

- 30-88 MHz VHF-FM
- 2,320 channels
- Single-channel (SC) and frequency hopping (FH)
- Six FH presets, eight SC presets
- Handheld and hands-free (w/headset) operation

Performance

- Operating temperature of -20°C to +60°C
- Receive sensitivity: -115 dBm across entire temperature range
- SINCGARS and NATO squelch-compatible
- MIL-STD-810 tested for humidity, salt fog, dust, loose cargo, transit drop, immersion
- Mean time to repair (MTTR) of less than 30 minutes
- Mean time between failures (MTBF) greater than 5,200 hours
- Tested for MIL-STD-461E electromagnetic interference (EMI)

Features

- 199mm x 60mm x 46mm (inclusive of battery)
- 650 grams (inclusive of battery)
- 12 hours of operation on one battery
- Three power selections: 5 W, 2 W, and 100 MW
- Full band hopping in all modes
- Over-the-air Electronic Remote Fill (ERF) and Manual Remote Over-the-Air Load (MROAL)
- Lithium-ion rechargeable battery pack
- Software-reprogrammable for future advanced features, upgrades, and languages
- Available in two colors: green and tan
- Monochrome graphics display
- Built-in speaker and microphone
- Smart Battery monitoring technology

Program Review

Exelis (now Harris) introduced its Spearhead handheld military radio around the first quarter of 2002.

Exelis touted the Spearhead as being one of the smallest and lightest frequency-hopping VHF military radios available on the market. Including its battery, the radio weighs 650 grams and fits in a soldier's hand.

Spearhead is software-operated.

On July 20, 2006, the Defense Security Cooperation Agency of the U.S. Department of Defense announced that it had notified Congress of a possible Foreign Military Sale of Spearhead radios to Saudi Arabia. Under this FMS, Spearhead radios will be used by the Saudi Arabian National Guard. Forecast International has not been able to ascertain whether these sales to Saudi Arabia have been concluded.

In August 2008, Exelis announced that it had received a five-year, \$490 million FMS contract from the U.S. Army Communications-Electronics Command (see **Contracts/Orders & Options**). This contract is for the manufacture and delivery of communications and electronics equipment and services required by international customers through the FMS program – the

government-to-government method for selling U.S. defense equipment, services, and training to allied nations. The FMS contract contains an option for a sixth year and has a potential value of \$490 million. Potential products and services to be provided under the contract include communications systems and radios plus associated products and components, and services such as installation, training, and engineering support. Among the potential products to be provided are the export version of the Single Channel Ground and Airborne Radio System (SINCGARS), the High Capacity Data Radio (HCDR), the SpearNet Team Member Radio, and the Spearhead radio.

In September 2010, Exelis received a \$20.1 million contract to provide communications equipment to the Iraqi Ministry of Defense. The award includes the delivery of Spearhead handheld radios, communication management systems, SINCGARS, spare parts, and assorted ancillaries. Exelis said the award was part of the FMS indefinite delivery/indefinite quantity (IDIQ) contract awarded to Exelis by the U.S. Army CECOM in 2008. Forecast International believes the award is part of this contract.

Spearhead

In January 2013, Exelis received a \$25 million contract to provide a wide range of communications equipment to an international customer via FMS. The order includes the delivery of Spearhead radios, unit and intermediate-level spares, installation services, and the support of field service representatives.

In September 2013, Exelis received an FMS contract to supply an existing international customer with communications equipment, spare parts, ancillary devices, and operator training. The communications equipment procured under the contract includes the Spearhead handheld radio.

In December 2015, Harris Corp purchased Exelis Inc.

Funding

Spearhead is funded by Harris (formerly Exelis).

Contracts/Orders & Options

<u>Contractor</u>	<u>Award (\$ millions)</u>	<u>Date/Description</u>
Exelis	490.00	Aug 2008 – Five-year FMS contract from U.S. Army CECOM. This IDIQ contract was awarded through the Security Assistance Management Directorate, Ft. Monmouth, NJ, for the manufacture and delivery of communications and electronics equipment and services required by international customers. Contract contains an option for a sixth year.
Exelis	20.10	Sept 2010 – Contract to provide communications equipment to the Iraqi Ministry of Defense. The award includes the delivery of Spearhead handheld radios, communication management systems, SINCGARS, spare parts, and assorted ancillaries. The award is part of the FMS IDIQ contract awarded to Exelis by CECOM in Aug 2008.
Exelis	25.00	Jan 2013 – Contract to provide a wide range of communications equipment to an international customer. This contract was awarded by CECOM, Aberdeen Proving Ground, MD, via the FMS channel. The award includes the delivery of SINCGARS VHF base stations and vehicular systems in single- and dual-radio configurations.
Exelis	115.00	Sep 2013 – FMS contract to provide an existing international customer with communications equipment, spare parts, ancillary devices, and operator training. Communications equipment to be acquired under the contract includes the SpearNet radio system with accessories, the RT-1702 SINCGARS in the VRC-90 system, and the VRC-92 dual long-range radio system. Contract also covers the supply of PRC-119 manpack radio systems with GPS and of Spearhead handheld radio systems with accessories. Spare parts for all radio systems are included, as is SpearNet training for both the vehicular and soldier radio systems.

Timetable

<u>Month</u>	<u>Year</u>	<u>Major Development</u>
	2002	Exelis introduces Spearhead handheld military radio
Jul	2006	DSCA notifies Congress of possible FMS of Spearhead radios to Saudi Arabia
Aug	2008	Exelis awarded five-year FMS contract from U.S. Army CECOM; Spearhead will potentially be purchased under the contract
Sep	2010	Exelis awarded contract to provide communications equipment, including Spearhead handheld radios, to Iraqi Ministry of Defense
Jan	2013	Exelis receives \$25 million contract to provide communications equipment to an international customer. The award includes the delivery of Spearhead VHF handheld radios

Spearhead

<u>Month</u>	<u>Year</u>	<u>Major Development</u>
Sep	2013	Exelis awarded FMS contract to supply existing international customer with communications equipment, spare parts, ancillary devices, and operator training. The award includes delivery of Spearhead handheld radios
Dec	2015	Harris Corp purchases Exelis Inc

Worldwide Distribution/Inventories

According to publicly available information, the Spearhead radio has been purchased by U.S. allied nations, including **Saudi Arabia** and **Iraq**, under the U.S. Foreign Military Sales program.

Forecast Rationale

In December 2015, Harris Corp purchased Exelis Inc. As a result, Harris now sells the Spearhead radio.

Spearhead is a frequency-hopping, very high frequency (VHF), software-defined, handheld military radio.

Unfortunately, not much information has been publicly disclosed on the Spearhead radio.

Forecast International projects that Harris will sell more than 4,300 Spearhead handheld radios to defense departments throughout the world in the next 10-plus years. This forecast is extremely conservative, as no recent information is available on the radio.

Forecast International's projection is being driven by the need of defense departments for a cost-effective, software-operated handheld communications device.

Exelis described the Spearhead radio as a "portable handheld tactical radio [that] provides dismounted soldiers secure, frequency-hopping voice and packet data with integrated GPS in a small, lightweight package."

Forecast International believes Harris will continue Exelis's practice of marketing the Spearhead to customers outside the United States.

Ten-Year Outlook

ESTIMATED CALENDAR YEAR UNIT PRODUCTION												
Designation or Program		High Confidence				Good Confidence			Speculative			
	Thru 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Harris (Prime)												
Spearhead Military <> Worldwide <> Department of Defense												
	600	600	450	425	400	340	330	360	350	550	550	4,355
Total	600	600	450	425	400	340	330	360	350	550	550	4,355