

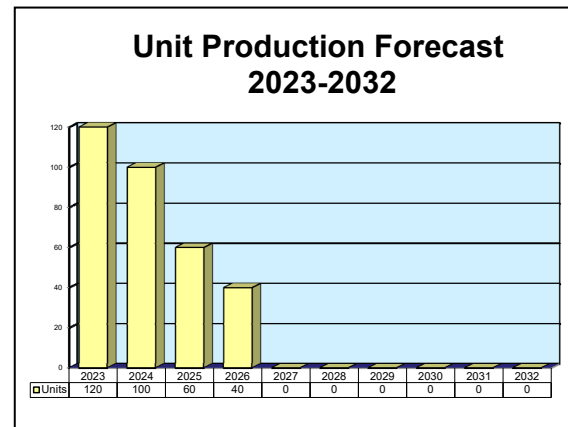
# ARCHIVED REPORT

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## PRC-2090

### Outlook

- PRC-2090 production may decline with the release of upgraded variant, the 4090 HF SDR manpack transceiver
- March 2020 contract to supply equipment to the U.S.-funded Counter Narcotics Global Threats program for a republic in Central Asia includes a range of PRC-2090 HF manpacks and vehicle stations



### Orientation

**Description.** The PRC-2090 is a manpack, vehicular, and base station military radio.

#### Sponsor

Barrett Communications Pty Ltd  
 47 Discovery Dr, Bibra Lake, WA  
 6163 Australia  
 Tel: + 618 9434 1700  
 Fax: + 618 9418 6757

**Status.** Possible ongoing production and support for numerous previously awarded contracts.

**Application.** Tactical communications.

**Price Range.** The price of one PRC-2090 military radio is estimated to be \$20,000. This figure is speculative.

### Contractors

#### Prime

<b>Barrett Communications Pty Ltd</b>	<a href="http://www.barrettcommunications.com.au">http://www.barrettcommunications.com.au</a> , 47 Discovery Dr, Bibra Lake, WA, Australia, Tel: + 61 618 9434 1700, Fax: + 61 618 9418 6757, Prime
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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](mailto:rich.pettibone@forecast1.com)

**PRC-2090****Technical Data**

**Frequency Range:** 1.6 MHz to 30 MHz Tx, 250 KHz to 30 MHz Rx

**Channel Capacity:** Up to 500 programmable channels (simplex or semi-duplex)

**Operating Modes:** J3E (USB, LSB) – H3E (AM) – J2A (CW) – J2B (AFSK)

**Frequency Stability:** ±10 Hz or better than 0.3 ppm over temperature range -30°C to +70°C

**Sensitivity:** -120 dBm (0.224µV) for 10 dB SINAD – J3E Mode pre-amp off

**Blocking:** -20 kHz and +20 kHz better than 71 dB

**Frequency Hopping:** 25 or 5 hops per second, with external synchronization unit supplied when this option is fitted

**Rx Intermodulation:** Better than 89 dBµV

**RF Connections:** Whip or long wire using internal automatic antenna tuner or 50 ohms

**RF Output Power:** 30 W PEP ±1.5 dB, 10 W PEP ±1.5 dB (100 W PEP) when in vehicle docking (voice duty cycle only)

**Supply Voltage:** 22 to 24 V DC from external supply

**Average Battery Life:** 20 hours based on a 10 percent voice duty cycle

**Environmental:** -30°C to +60°C

**Programming:** RS-232

**Weight:**

- PRC-2090 Manpack = 3.9 kg
- 2090 transceiver with 10 Ah Lithium Ion battery cartridge = 5.22 kg

**Standards:** 16

**Program Review**

According to Barrett Communications, the PRC-2090 radio possesses all the features available from traditional manpack military radio suppliers at a more "realistic price." The PRC-2090 radio is equipped with a fully automatic antenna tuner, allowing the deployment of a full range of whip and static antennas.

In July 2010, the PRC-2090 received approval from the Canadian Federal Communications Commission at 30 W in manpack mode and 100 W when docked in its vehicle docking station.

In December 2010, Barrett Communications introduced a range of digital encryption modules for the PRC-2090 manpack radio.

In September 2013, certification from the U.S. Joint Interoperability Test Command (JITC) of the PRC-2090 was announced. This certification verified conformance with the basic radio specification of MIL-STD-188-141B as well as the Automatic Link Establishment (ALE) specifications of MIL-STD-188-141B Appendix A. The JITC certification established the PRC-2090 transceiver's interoperability with other JITC-certified HF transceivers.

During the same month, Barrett Communications announced that it had received a three-year sole-source contract to supply up to 750 HF transceivers to an East African police force. The contract covered multiple configurations of Barrett HF solutions, including the 2090 HF manpack.

In October 2013, Barrett Communications announced the receipt of a multimillion-dollar radio order from a Central Asian nation. The order consisted of Barrett 2050 HF mobile and base station radios and 2090 HF manpack radios.

In May 2014, Barrett Communications was awarded a \$6 million contract to supply HF communications equipment in various configurations to a border security agency in Central Asia. The PRC-2090 transceiver is the basis of all configurations.

Barrett Communications won a \$1.4 million contract in April 2015 to provide 120 radio systems of various configurations to the Nepalese Army. The contract covers the provision of PRC-2090 HF tactical manpacks, PRC-2091 HF mobile vehicle systems, PRC-2081 VHF tactical manpacks, and PRC-2082 VHF tactical mobile vehicle systems, plus accessories and a 10-day comprehensive training program.

In June 2016, Barrett Communications announced it had received a contract from a customer in the Commonwealth of Independent States (CIS) for the supply of PRC-2090 tactical HF radio communications systems, in various configurations. These systems would be used in both voice and data modes via Barrett's CLOVER modems.

In August 2016, Barrett Communications signed a contract with the national defense force of an East African nation. The first phase of the contract involved

**PRC-2090**

the supply of PRC-2090 tactical RF communications systems in manpack configuration. The PRC-2090 manpacks would be used for both voice and data through Barrett's CLOVER modems.

In November 2016, Barrett Communications won a three-year contract from the Canadian National Defence Department (DND) for 2090 HF manpacks and 2050 HF transceivers in base station configuration. The company then announced, in September 2017, that the Republic of Fiji Military Forces (RFMF) had recently received 10 reconditioned Bushmaster armored troop-carrying vehicles fitted with PRC-2090 HF mobile systems and PRC-2080+ VHF mobile systems. Barrett Communications personnel worked with Thales in Australia to install the radios and integrate them with the Thales SOTAS intercom system.

In November 2018, Barrett Communications was awarded a contract to supply the Tanzania Wildlife Management Authority (TAWA) with HF radio communications for its national parks and conservation areas. The multiphase project was funded by USAID and included Barrett 2050 HF base stations and 2090 HF portable manpacks.

In April 2019, Barrett Communications was awarded a contract to supply equipment to the U.S.-funded

Counter Narcotics Global Threats program for a republic in Central Asia. The contract includes a range of PRC-2090 HF manpacks and vehicle stations with tracking software to provide communications and tracking capabilities to forces that will assist in controlling illicit narcotics trafficking.

In November 2019, Barrett Communications announced the delivery of equipment as part of a U.S.-funded program with the government of Egypt. The project was split over multiple phases and would include PRC-2080+ VHF equipment, PRC-2082+ 50-W vehicles systems, and the PRC-2090.

In March 2020, Barrett Communications entered into a partnership with the U.S. company Royal Communications International Inc and won a follow-on contract from the USAID mission in Central Asia for additional PRC-2090 radios.

In July 2021, Barrett Communications announced the end of new sales of the PRC-2090 and associated packages with the release of the upgraded 4090 HF SDR manpack transceiver.

On August 15, 2022, Motorola Solutions announced it had acquired Barrett Communications.

## Contracts/Orders & Options

<b>Contractor</b>	<b>Award (\$ millions)</b>	<b>Date/Description</b>
Barrett Communications	Unknown	Sep 2013 – A three-year sole-source contract to supply up to 750 HF transceivers to an East African police force. The contract covers multiple configurations of Barrett HF solutions, including a 2050 HF base station, 2050 HF mobile stations, and 2090 HF manpack radios. Also, it includes an option to procure Barrett 2020 e-mail, fax, and data; GPS tracking; and encryption systems.
Barrett Communications	Multi	Oct 2013 – Multimillion-dollar order from a Central Asian nation for 2050 HF mobile and base station radios and 2090 HF manpack radios.
Barrett Communications	6.0	May 2014 – Contract for the supply of HF communications equipment in various configurations to a border security agency in Central Asia. The PRC-2090 transceiver is the basis of all configurations.
Barrett Communications	1.4	Apr 2015 – Contract to provide 120 radio systems of various configurations to the Nepalese Army. The contract covers the provision of PRC-2090 HF tactical manpacks, PRC-2091 HF mobile vehicle systems, PRC-2081 VHF tactical manpacks, and PRC-2082 VHF tactical mobile vehicle systems, plus accessories and a 10-day comprehensive training program.
Barrett Communications	Unknown	Jun 2016 – Contract from a customer in the CIS region for PRC-2090 tactical HF radio communications systems, in various configurations.

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<u>Contractor</u>	<u>Award (\$ millions)</u>	<u>Date/Description</u>
Barrett Communications	Unknown	Aug 2016 – Contract from the national defense force of an East African nation. The first phase of the contract involves the supply of PRC-2090 tactical RF radio communications systems in manpack configuration. Operator and maintenance training would be provided to enable the customer to be fully self-supporting.
Barrett Communications	Unknown	Nov 2016 – Three-year contract from the Canadian DND for Barrett 2090 high-frequency HF manpacks and 2050 HF transceivers in base station configuration.
Barrett Communications	Unknown	Sep 2017 – Supply to the Republic of Fiji Military Forces of 10 reconditioned Bushmaster armored troop-carrying vehicles fitted with PRC-2090 HF mobile systems and PRC-2080+ VHF mobile systems.
Barrett Communications	Unknown	March 2020 – Follow-on contract from the USAID mission in Central Asia for additional PRC-2090 radios.

**Worldwide Distribution/Inventories**

PRC-2090 client nations include **Canada**, an **East African** police force, a **Central Asian** nation, and **Nepal**.

**Forecast Rationale**

Since prime contractor Barrett Communications' announcement two years ago of an upgraded variant, the 4090 HF SDR manpack transceiver, the outlook for the PRC-2090 has been downgraded. Since its introduction, the radio had been adopted by Canada and nations in Africa and Asia. The next few years may still see some production and support for previously awarded contracts. Promotional information on the more than viable older system is still available on the Barrett website.

In April 2019, Barrett Communications was awarded a contract to supply equipment to the U.S.-funded Counter Narcotics Global Threats program for a

republic in Central Asia. The contract included a range of PRC-2090 HF manpacks and vehicle stations.

In November 2019, Barrett Communications announced the delivery of equipment as part of a U.S.-funded program with the government of Egypt. The project was split over multiple phases and would include PRC-2080+ VHF equipment, PRC-2082+ vehicles systems, and the PRC-2090.

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## Ten-Year Outlook

<b>ESTIMATED CALENDAR YEAR UNIT PRODUCTION</b>												
Designation or Program	High Confidence					Good Confidence			Speculative			Total
	Thru 2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
<b>Barrett Communications Pty Ltd</b>												
<b>PRC-2090 &lt;&gt; Canada &lt;&gt; Department of Defense</b>												
	1,740	40	20	0	0	0	0	0	0	0	0	60
<b>PRC-2090 &lt;&gt; Department of Defense &lt;&gt; Worldwide</b>												
	3,140	80	80	60	40	0	0	0	0	0	0	260
<b>Subtotal</b>	4,880	120	100	60	40	0	0	0	0	0	0	320
<b>Total</b>	4,880	120	100	60	40	0	0	0	0	0	0	320