

Tactical Radio Products

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FALCON" II AN/PRC-117F(C)

One radio for all of your

demanding missions

next level solutions

Multiple bands. Multiple missions. One solution.





The AN/PRC-117F(C) (right) lightens the load for multi-service operations without compromising performance.

Harris	For more than 40 years, Harris Corporation has earned a reputation for delivering breakthrough technology that enables our customers to keep pace with changing communications needs. Military and government organizations worldwide depend on Harris for defense, air traffic control, and secure law enforcement communication solutions.
Tomorrow's technology today	Harris has drawn on its experience to lead the field once again with the AN/PRC-117F(C) multiband/multimission radio. This lightweight radio system places a software-based radio in the hands of the user today.
	The AN/PRC-117F(C) integrates the capabilities of several distinct radios into one: VHF-FM for combat net radio; VHF-AM for public safety and ground-to-air; and UHF-AM for military ground-to-air and UHF TACSAT communications. With integrated crypto functions.

communications. With integrated crypto functions, including black-key management and a Crypto Ignition Key (CIK), the AN/PRC-117F(C) is a complete communication package allowing interoperability with all military services in secure and non-secure communication modes.

Your mission is to save lives. Our mission is to make sure you succeed.



When your mission is to save lives, there is no room for error. Just as you depend on your fellow military comrades to execute a mission, you depend on your communication equipment as well. The AN/PRC-117F(C) allows you to get the job done reliably, no matter what the mission.

The AN/PRC-117F(C) has an expansive frequency range covering 30-512 MHz. This comprehensive coverage includes frequency bands and MIL-STD mandatory modulation modes for combat net radio operations, close air support, long-range patrol, government land mobile radio (LMR) and maritime uses. This makes the AN/PRC-117F(C) ideal for all joint ground, sea and air operations.

Interoperability:

VHF-FM low-band (30-88 MHz)

The AN/PRC-117F(C) provides secure interoperability with SINCGARS-ICOM, and a host of other tactical radios. You can interoperate with both foreign and domestic manufactured radios, as well as tactical data terminal equipment with data rates from 2400 bps through 64 kbps. The detachable keypad/display unit provides on-thebody remote control facilitating communications on the move. Built-in COMSEC eliminates the need for external tactical encryption equipment.



VHF/VHF-AM (116-150, 225-400 MHz) AM, FM, FSK, ASK

Whether on the ground or in the air, the AN/PRC-117F(C) provides secure communications capabilities. In these frequency bands, secure voice and data operation is supported, using either amplitude or frequency modulation.

HaveQuick I/II ECCM provides interoperable support for anti-jam operations. Used in conjunction with the secure black-side-retransmission capability, the AN/PRC-117F(C) enables a seamless interface between HaveQuick and SINCGARS networks when required. The embedded emergency distress beacon can be selected on any frequency, enhancing survivability.







The AN/PRC-117F(C) allows interoperability with your strategic international allies.

UHF SATCOM (243-270 MHz, 292-318 MHz)

The AN/PRC-117F(C) provides full interoperability with UHF TACSAT terminals including Demand Assignment Multiple Access (DAMA) protocols, MIL-STD-188-181A, -188-182, and -188-183.

Utilizing state-of-the-art modem technology, the AN/PRC-117F(C) can send and receive secure satellite transmissions at data rates of up to 56 kbps. In addition, the AN/PRC-117F(C)'s embedded automatic repeat request (ARQ) system provides error-free delivery of data packets. This system offers significantly higher data throughput than legacy systems utilizing external data controllers.

VHF/UHF (30-512 MHZ) FM, AM, FSK, ASK

The AN/PRC-117F(C) provides continuous coverage over the full 30-512 MHz band. Multiband scan operations automatically select the appropriate antenna port to deliver the highest levels of performance in scan operations.

The AN/PRC-117F(C) is interoperable with a wide variety of existing military and civilian communication systems. Support for land mobile squelch tones (CTCSS) makes the AN/PRC-117F(C) interoperable with most repeater systems. Because of these capabilities, joint and civilmilitary-federal liaisons for both voice and data can be accomplished in one radio.

Secure retransmission operations

The AN/PRC-117F(C) allows you to retransmit across bands linking SINCGARS nets to HaveQuick nets, HaveQuick to SATCOM and even 12 kbps SABER handhelds to SATCOM. The black-side-retransmission capability eliminates the need to decrypt and re-encrypt at the repeater site, enhancing performance and security.



The AN/PRC-117F(C) can be configured for manpack, vehicular and base station applications suitable for operation in a multiband, multimode service environment. Continuous coverage from 30 to 512 MHz fully utilizes the frequency spectrum, providing secure ground-to-ground, ground-to-air and SATCOM capabilities.

The AN/PRC-117F(C) is interoperable with legacy encryption systems and acts as a translator between otherwise incompatible radios. For instance, SINCGARS to HaveQuick, SATCOM and SABER retransmission can be accomplished.

The radio is a true marriage of radio and computer. The hardware can be reconfigured and software reprogrammed to optimize performance and add capabilities without opening the radio. The digital architecture of the AN/PRC-117F(C) ensures upgradability into the future.

The AN/PRC-117F(C) builds on the concepts and capabilities of Harris' first-generation, multiband radios. Building on over a decade of experience with software-based radios dating back to the RF-5000 and AN/PRC-138, the Harris AN/PRC-117F(C) is the most advanced software-based manpack radio in the world today.

The AN/PRC-117F(C) radio family can be assembled into manpack, vehicular and base station configurations.



Advanced internal features in the AN/PRC-117F(C) include:

- HaveQuick I/II ECCM
- SINCGARS ICOM ECCM
- DAMA MIL-STD-188-181A, -188-183, -188-182
- Standard user interfaces RS232, RS422, MIL-STD -188-114
- High-speed SATCOM up to 64 kbps
- High-speed line-of-sight data – 64 kbps
- Removable keypad with Crypto Ignition Key (CIK)
- Full remote control capability
- Longer battery life due to low voltage logic design
- Multi-band scanning
- 100 channel presets
- Radio-to-radio cloning
- Manpack weight 10 lbs. (w/o battery, antenna, handset)
- Built in GPS interface for navigation and time signals
- Passes MIL-STD-810E environmental requirements
- Software reprogrammable to accommodate evolving waveforms
- KY57 VINSON, KG84, KY99/ANDVT COMSEC

Communications solutions for today and beyond

Harris Corporation is a global communications company, providing solutions that take customers to the next level of competitiveness, productivity and profitability.

The capabilities, products and applications at Harris are focused in four communications markets wireless, broadcast, government systems and network support. Harris solutions include microwave and wireless loop systems; secure radios, national law enforcement and air traffic control communications systems; analog and digital television and radio systems; enhanced services and digital switching platforms, telecommunication tools and test systems and network management systems for worldwide communications service providers and broadcasters.

The company's 104-year history of strong technological resources and reputation, with an aggressive concentration on the global communications market, allows it to address the escalating demand for broader bandwidth communications. The corporation has sales and service facilities in nearly 90 countries.



Wireless



Broadcast



Government Systems



Network Support



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