

**HARRIS CORPORATION
EXPERIMENTAL SPECIAL TEMPORARY
AUTHORITY APPLICATION
FILE NO. 0438-EX-ST-2015
APRIL 2015**

EXHIBIT I - REQUEST FOR SPECIAL TEMPORARY AUTHORITY

Harris Corporation ("Harris") hereby requests FCC experimental Special Temporary Authority ("STA") to conduct testing utilizing its family of wideband tactical radios at locations centered around Columbia, Maryland and Ellicott City, Maryland. STA is requested for a six month period.

The testing will utilize the following equipment:

Harris Corp AN/PRC-158, 10 units
Harris Corp. AN/PRC-117G, 10 units
Harris Corp. AN/PRC-152A, 10 units
Harris Corp. RF-330E, 10 units

The requested frequencies will be used to perform testing on new waveforms and waveform enhancements. ANW2 is a networking waveform that allows user to do secure voice and data over tactical military radios. Harris will be testing basic ANW2 and SRW waveform functionality such as net formation, voice and IP data. Harris will also be testing basic narrowband LOS waveform functionality such as voice and data in VULOS, SINCGARS, HPW, DAMA, IW and P25. Operations would include multiple radios (both vehicular and handheld) attempting to simulate typical military communications needs in rural, suburban, and urban environments.

Harris has requested 5 MHz of contiguous bandwidth. Given the frequency usage restrictions for spectrum below 450 MHz range Harris hereby requests that if the requested bandwidth cannot be authorized under STA, it be allowed to modify the bandwidth to 1.2 MHz for the lower band spectrum.

Harris acknowledges that all transmissions will be on a non-interference basis and will adhere to any conditions placed on the Special Temporary Authorization.

Because the equipment is technically incapable of providing station identification, Harris respectfully requests a waiver of the station identification provisions of Section 5.115 of the Commission's rules, 47 C.F.R. § 5.115.

All network traffic will be simulated traffic only, solely for evaluation purposes and not for the purpose of providing network data communications services to user stations.

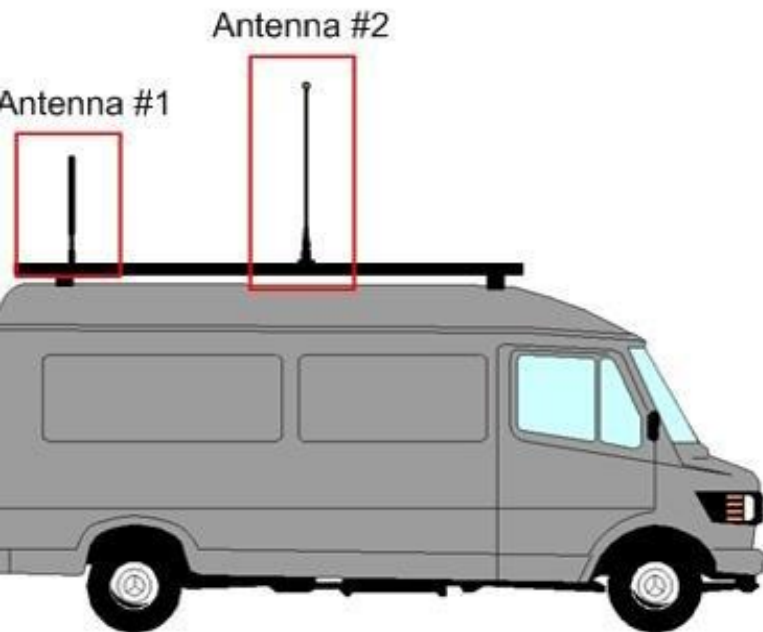
Harris submits that a grant of this application is necessary and in the public interest because it will advance national security efforts in the further development of equipment utilized by US Armed Forces around the world.

The **stop buzzer contact** for this demonstration is Matthew Hausknecht at Harris, tel: 443-259-3199, mobile: 585-738-7731, e-mail mhauskne@harris.com.

Antenna Sketch for L-Band License Request

Fixed and Mobile Stations

For the purpose of this experiment, a fixed station is defined as a stationary test van and a mobile station is defined as either a test van or a person on foot that is moving. Depending upon asset availability and testing parameters, stations will consist of a mix of vehicles persons on foot. Total quantity of stations will not exceed 10.



≤ 50 km

Antennas
#1, 3, & 4



Antennas to be used during testing

Antenna #1:
RF-3165-AT122



Antenna #2:
RF-3187



Antenna #3:
RF-3150-AT152



Antenna #4:
RF-3152-AT152





TYPE-1 WIDEBAND MULTIBAND MULTIMISSION RADIO WITH INTERNAL SAASM GPS

AN/PRC-117G(V)1(C)

FEATURES

- > A revolutionary CNR-sized radio with US/NATO standardized waveforms and wideband data capabilities



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The Falcon III® AN/PRC-117G(V)1(C) manpack is a software defined tactical radio that provides breakthrough wideband data performance and interoperability with fielded waveforms. This single channel radio covers 30 MHz to 2 GHz and is 30% smaller and 35% lighter than currently fielded multiband manpack radios. The radio operates off a single standard battery, further reducing the weight of a dismounted radio yet maintaining peak transmit power of 10 watts VHF and 20 watts UHF.

The AN/PRC-117G features a JTEL-certified Software Communications Architecture (SCA) operating environment, providing the optimal transition to software-defined radio technology. The AN/PRC-117G provides SINCGARS, Havequick II, VHF/UHF AM and FM, DAMA, 181B Dedicated Channel TACSAT, High Performance Waveform (HPW), Integrated Waveform (IW), as well as Soldier Radio Waveform (SRW), and the Harris Adaptive Networking Wideband Waveform (ANW2). The ROVER L-Band receive and APCO P25 are also available as optional waveforms. Future planned software upgrades include MUOS and SATURN waveforms (subject to NSA approval).

AN/PRC-117G networking capabilities can be enhanced using the RF-7800B series of Broadband Area Global Network (BGAN) terminals. The RF-7800B BGAN terminals provide satellite-based wideband beyond-line-of-sight (BLOS) communications. When combined with the AN/PRC-117G, the system provides automatic and secure range extension, connection to out-of-range networks, and entry into the Internet or remote private networks.

Secured by the Harris Sierra™ II software programmable encryption module, the AN/PRC-117G is certified to carry up to US Top Secret voice and data traffic. The Sierra II, designed to maximize battery life in battery-powered radios, supports all JTRS COMSEC and TRANSEC requirements. The radio supports HAIPE® in-line encryption for secure network connectivity. Numerous legacy encryption modes are also supported, including KY-57/VINSON, ANDVT/KYV-5, KG-84C, and keyfill modes of DS-101 and DS-102. The radio also supports Type-3 AES keys in VHF/UHF AM and FM mode.

The AN/PRC-117G stores multiple mission fill files, extending the time between reconfigurations. It also includes an embedded SAASM GPS receiver to display local position and provide automatic position reporting for situational awareness on the battlefield. A commercial GPS option is also available. Three separate antenna connections allow efficient and flexible use of antennas. The AN/PRC-117G(V)1(C) includes the R/T, manuals, H-250 handset, radio programming application, and programming cable.

SPECIFICATIONS FOR: AN/PRC-117G(V)1(C)

GENERAL

RT Nomenclature	RT-1949(P)(C)
Frequency Range	30 MHz-2 GHz Narrowband (NB): VHF Low: 30-90 MHz VHF High: 90-225 MHz UHF Low: 225-512 MHz SATCOM UHF Low: 243-270 MHz and 292-318 MHz Wideband (WB): UHF/L-Band: 225 MHz-2 GHz
Channel Spacing	NB: 8.33 kHz, 12.5 kHz, 25 kHz SATCOM: 5 kHz, 25 kHz WB: 500 kHz, 1.2 MHz, 2.5 MHz, 5 MHz FM Deviation: 5 kHz, 6.5 kHz, 8 kHz
Net Presets	100
Data Interfaces	Ethernet, RS-232/RS-422, USB
Control Interfaces	SNMP: Ethernet, RNDIS USB ASCII: RS-232, RS-422, USB
Management Tool	Windows-based Communications Planning Application (CPA)
Software Environment	JTEL Certified SCA 2.2
Integrated GPS	SAASM (Commercial GPS optional)
Frequency Stability	0.5 ppm
Frequency Tuning	10 Hz from 30 MHz-512 MHz 100 Hz from 513 MHz-2 GHz

SPECIFICATIONS

Dimensions (no handles)	7.4 W x 3.7 H x 8.8 D in. (without battery) 7.4 W x 3.7 H x 13.5 D in. (with battery)
Weight	8.2 lbs (without battery) 12 lbs (with battery)
Color	CARC Green 383

MODES AND WAVEFORMS

Narrowband Waveforms	AM/FM, VHF/UHF LOS, SINCGARS, Havequick I and II, APCO P25 (optional), P25 OTAR (optional)
Wideband Waveforms	ANW2, ROVER III L-Band Receive (optional)
UHF SATCOM Waveforms	MIL-STD-188-181B Dedicated Channel MIL-STD-188-182A, 183A DAMA MIL-STD-188-181C, 183B IW Phase 1 HPW
Voice and Data Modes	Simplex or Half-duplex, MIL-STD-188-113 CVSD STANAG 4198 LPC-10e, STANAG 4591 MELPe
Data Modes	Synchronous Data (300, 600, 1200, 2400, 12k, 16k bps) SINCGARS ECCM (VHF Low band/1200, 2400, 4800, 9600) Wideband FSK Cipher Text Digital Data (16 kbps; KY-57) Narrowband Cipher Text Digital Data (2.4 kbps; ANDVT/ KYV-5) KG-84C Havequick VIII ECCM (16 kbps; KY-57 UHF band only)



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SECURITY

Encryption	Sierra™ II Based Type-1
Encryption Modes	KY-57, KYV-5, KG-84, HAIPE®, AES
Key Fill Device Compatibility	AN/CYZ-10 DTD, KOI-18, KYK-13, KYX-15, MX-18290, AN/PYQ-10, KIK-11, KIK-20
Key Storage	Up to 300
Mission Fill Device Compatibility	Windows-based Communications Planning Application

POWER

Power Input	19-34 VDC
Power Consumption	55W max
Battery Types	BA-5590/U, BA-5390/U, BB-590/U, BB-390/U, BB-2590/U

ENVIRONMENTAL

Shock/Vibration	MIL-STD-810G for tracked vehicles, wheeled vehicles, shipboard
Immersion	1 meter

TRANSMITTER

Power Output	NB: 10W, SATCOM: 20W WB: 20W peak/5W average
Antenna Outputs	NB: 30 MHz-512 MHz, SATCOM: 243 MHz-318 MHz WB: 225 MHz-2 GHz
Harmonic Suppression	Greater than 50 dBc

RECEIVER

Narrowband Sensitivity (for 10 dB SINAD)	LOS FM 30-512 MHz: -118 dBm LOS AM 90-512 MHz: -110 dBm with 70% Modulation TACSAT FM 243-270 MHz: -120 dBm
Adjacent Channel Rejection	60 dB referenced to 10 dB SINAD (50 kHz channel) VHF: 60 dB (50 kHz off channel) UHF: 50 dB (50 kHz off channel)

ACCESSORIES

10075-1399	H-250 Handset
RF-6650M	Communications Planning Application (CPA)
12043-0750-A006	USB Programming Cable
Manuals	Operation Manual, Reference Guide, SINCGARS Pocket Guide, ANW2 Pocket Guide
OPTIONAL	
RF-300M-DK001	Dismount Antenna Kit
RF-300M-VK001	Vehicular Antenna Kit
RF-3166-AT120	L-Band ROVER Antenna Kit
RF-7800M-V150	50W Vehicular Amplifier Adapter
RF-7800M-V120	20W Vehicular Amplifier Adapter
RF-3590-RT	Harris Ruggedized Tablet
RF-3073-AT242	Push-on GPS Antenna Kit (L1/L2 Band)
12043-2710-A006	PPP Data Cable
12043-2730-A006	Data and Remote Control Cable
12043-2740	Digital Retransmission Cable
12043-260-A006	Black Ethernet to RJ45 Ethernet Cable
12043-2760-A006	Ethernet Cable
RF-5910-PS005	Battery Eliminator
RF-7800B-DU024	BGAN Land Portable Antenna System
RF-7800B-VU104	BGAN Land Mobile Antenna System

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WIDEBAND NETWORKING HANDHELD

AN/PRC-152A

FEATURES

- > Sierra II based Type-1 encryption
- > SCA v2.2.2 compliant (no waivers)
- > Wideband networking waveforms
- > Narrowband and SATCOM support
- > PLGR DAGR interface
- > Internal GPS (option)
- > Built-in speaker/microphone
- > Full numeric keypad
- > NVG compatible display
- > Supports multiple mission plans



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The FALCON III® AN/PRC-152A Wideband Networking Handheld provides simultaneous voice and high-speed networked data using the Harris Adaptive Networking Wideband Waveform (ANW2) and the Soldier Radio Waveform (SRW). ANW2 uses innovative intelligent protocols that do not require the presence of a designated network control station each radio automatically discovers and joins an authorized network. Ad-hoc networking allows automatic and transparent relay through an available station. It also heals the network if a station leaves, ensuring network reliability. Combined with the NSA certification for TOP SECRET and Below communication, the AN/PRC-152A is the handheld capable of interoperating on either SECRET or Sensitive but Unclassified (Type-2) SRW networks.

The ANW2 and SRW waveforms provide situational awareness and data on demand, seamlessly linking dismounted and upper-echelon networks. The radio quickly and efficiently transmits mission-critical voice, data, imagery, and video in the most challenging communications environments. With the AN/PRC-152A, dismounted radio operators have access to more real-time intelligence, creating increased situational awareness and faster decision making in the field.

The AN/PRC-152A is built with the same form factor as the widely fielded AN/PRC-152 Multiband Handheld, without compromise to size, shape, or weight. With a common form factor, user and data interfaces, the AN/PRC-152A continues support for fielded customer accessories. The handheld covers the multiband (30 to 512MHz) frequency range and outputs 5W transmit power for line-of-sight (LOS) waveforms, 10W for SATCOM. On top of supporting next generation wideband (1.2MHz bandwidth) networking waveforms, the AN/PRC-152A continues legacy interoperability with the traditional narrowband waveforms such as SINCGARS, HAVEQUICK III, and VHF/UHF AM and FM. The handheld is delivered with a standard high band enhancement that increases the radios frequency coverage to 520 MHz and adds the 762-870MHz band for select waveforms.

The AN/PRC-152A features the Software Communications Architecture (SCA) operating environment, providing the optimal transition to software defined radio technology. JTEL certified without waivers (v2.2.2), the SCA architecture enables the upgrade to future waveforms supporting the evolution of communications from legacy narrowband to network centric wideband operations. Secured with the Harris Sierra™ II encryption module, the AN/PRC-152A provides voice and data security supporting legacy and modern encryption, up to the TOP SECRET level.

The AN/PRC-152A is the wideband radio that can deliver secure, IP-based mobile ad-hoc networking to operators at the tactical edge.

SPECIFICATIONS FOR: AN/PRC-152A

GENERAL

Frequency Range	Narrowband: 30-512MHz Extended Narrowband: 512-520MHz, 762-870MHz (P25 and AM/FM) Wideband: 225-450MHz
Channel Spacing	Narrowband: 12.5kHz, 25kHz Wideband: 1.2MHz
Tuning Resolution	10Hz
Presets	99 (standard); Unlimited with multiple mission plan files
Software Environment	SCA 2.2.2 (JTEL Certified)

SPECIFICATIONS

Dimensions	2.9 W x 9.6 H x 1.9 D in. (with battery)
Dimensions (With GPS)	2.9 W x 9.6 H x 2.5 D in. (with battery)
Weight	2.5 lbs max (with battery and antenna)
Weight (With GPS)	2.7 lbs max (with battery and antenna)
Volume	40 in ³ (with battery)
Volume (With GPS)	42 in ³ (with battery)
Finish	CARC Green

MODES AND WAVEFORMS

Narrowband Waveforms	AM/FM Line-of-Sight SINCARS HAVEQUICK I/II HPW & HPW IP (Optional) APCO P25 (Optional)
Wideband Waveforms	SRW, ANW2 Compatibility, ANW2 30-Node
UHF SATCOM Waveforms	DAMA modes (Optional): MIL-STD-188-181B, MIL-STD-188-182A, MIL-STD-188-183A IW Phase 1 (Optional): MIL-STD-188-181C, MIL-STD-188-183B HPW (Optional)
Voice and Data Mode	Simplex or Half-Duplex
Transmission Modes	AM, ASK, FM, FSK, PSK, CPM

KEY RADIO FEATURES

Wideband networking and legacy waveform support
PLGR/DAGR interface
Built-in speaker and microphone
Full alpha-numeric keypad
Night Vision Goggle compatible display
Sierra based Type-1 encryption, certified TOP SECRET and below
Internal GPS (option)
Highband frequency coverage for Public Safety
10W SATCOM, beyond-line-of-sight mode



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SECURITY

Encryption	Sierra II Programmable Crypto
Encryption Modes	VINSON KY-57, ANDVT, TSVCSIS, KYV-5/KG-84C, T1 AES, T3 AES, T3 DES, HAIPE
Key Fill Device Compatibility	AN/CYZ-10 DTD (Supports DS-101, DS-102 & Mode 2/3), KOI-18, KYK-13, KYX-15, MX-18290, AN/PYQ-10, KIK-20

TRANSMITTER

Power Output	250mW to 5W 10W SATCOM mode
Frequency Stability	+/- 0.5 ppm

RECEIVER

FM Sensitivity	-116 dBm, 12 dB SINAD
FM Deviation	5, 6.5, 8kHz
Adjacent Channel Rejection	Greater than -40 dB
Squelch	Selectable (Tone, noise, CDCSS, CTCSS)

INTERFACES

External Data	USB, USB RNDIS Host and Device, Ethernet, RS-232
Audio	Standard 6-pin
Antenna	50-ohm TNC
Programming	USB
Remote Control	USB, RS-232; Remote Keypad Display Unit (KDU)

ENVIRONMENTAL

Shock/Vibration	MIL-STD-810G
Temperature	-30C to +60C
Immersion	2 meter (20 meter radio option available)

ACCESSORIES

Antenna	VHF/UHF Multiband Antenna UHF Antenna
Battery	Rechargeable Lithium Ion Battery Field Replaceable Hold-Up Battery (HUB)

NEW DATA ACCESSORIES

12041-7227-02 and -04	USB Networking and Remote KDU Adapter
12041-7227-01	USB Programming Cable
10553-0100-02	Falcon III KDU Remote Control Kit (Requires 12041-7227-02 or -04)
12043-2853-A006	RS-232 DB9 Cable (Requires 12041-7227-02 or -04)
12043-2854-A006	GPS PLGR/DAGR Adapter Cable (Requires 12041-7227-02 or -04)
12083-0707-A003	USB to Ethernet Cable (Requires 12041-7227-02 or -04)

LEGACY DATA ACCESSORIES

12041-7110-A1	Asynchronous and Synchronous Data 9pin and 25pin Y-Cable
12041-7290-A006	Asynchronous or Synchronous Data 25pin Cable
12041-7130-A1	Retransmission Cable
12041-7170-A006	GPS Interface Cable for PLGR/DAGR
12041-7180-A006	PPP Data Cable
12041-5490-A006	Falcon III KDU Cable

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TYPE 1 MULTI-CHANNEL MANPACK

AN/PRC-158

FEATURES

- > Covers 30 to 2500 MHz frequency range
- > Provides 2 channels in 1 radio
- > Is 30% smaller than other 2-channel manpacks
- > Runs narrowband and wideband waveforms
- > Integrated MUOS* without a separate Power Amplifier
- > Embedded routing and cross-banding
- > Optional 3rd slot for advanced mission capabilities

*MUOS, ANW2, and WNW will be software upgrade



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The AN/PRC-158 is a modular two-channel manpack radio designed to exceed the HMS Manpack program requirements, and covers the full 30-2500 MHz frequency range in a form factor 30% smaller than similar products.

Each channel is capable of running a wide variety of Software Communications Architecture (SCA) narrowband and wideband waveforms – including the same waveform on both channels. Each channel can be used to transmit and receive simultaneously, using different frequency bands and/or waveforms. Embedded routing and cross-banding provide the ability to connect different nets and sub-nets for both voice and data.

A defining feature of the AN/PRC-158 is that no Power Amplifier (PA) change-outs or additions are required to switch between waveforms or to run Mobile User Objective System (MUOS)*. Fully integrated MUOS-capable PAs eliminate logistical complexity, cost, and further reduce size and weight.

Secured by Harris Sierra™ II software programmable encryption, the AN/PRC-158 is certified to carry up through US Top Secret voice and data traffic on either channel. The Sierra II, designed to maximize battery life in battery-powered radios, supports all JTRS COMSEC and TRANSEC requirements. Numerous legacy encryption modes are also supported, including KY-57/VINSON, ANDVT/KYV-5, KG-84C, and keyfill modes of DS-101 and DS-102. The radio also supports Type-3 AES keys in VHF/UHF AM and FM mode.

Additionally, a third slot accommodates an optional module that adds a variety of advanced capabilities. These embedded capabilities include Intelligence Surveillance and Reconnaissance (ISR) receiver, additional Mobile Ad-hoc Network (MANET) capabilities and Signals Intelligence (SIGINT). An interface based on industry standards is defined to provide vendors with the ability to create future enhancements on their own.

The AN/PRC-158 is able to store multiple mission fill files, providing maximum mission flexibility. Situational awareness is enhanced through an embedded SAASM GPS receiver that displays local position and provides automatic position reporting. Use of a single, standard lithium ion battery further reduces the weight of the radio while maintaining peak transmission power of up to 20 watts.

The AN/PRC-158 is based on the AN/PRC-117G certified Software Communications Architecture and is compatible with JTRS Enterprise Network Manager (JENM) software. It is also compatible with the Harris AN/VR-114 and RF-7800M-V series of Vehicular Amplifier Adapters utilized with the AN/PRC-117G.

SPECIFICATIONS FOR: AN/PRC-158

GENERAL	
Number of Channels	2, +1 option module
Frequency Range	30 MHz-2.5 GHz Narrowband (NB): VHF low: 30-90 MHz VHF high: 90-225 MHz UHF low: 225-520 MHz, 762-874 MHz Wideband (WB): UHF 225-520 MHz, 762 MHz-2.5 GHz
Channel Spacing	Narrowband: 8.33 kHz, 12.5 kHz, 25 kHz Wideband: 1.2 MHz, 5 MHz, 10 MHz
FM Deviation	5 kHz, 6.5 kHz, 8 kHz
Net Presets	99
Management Tool	Communications Planning Application (CPA) ; JENM Compatible
Software Environment	SCA v2.2.2
Internal GPS	SAASM receiver (commercial GPS optional)
Frequency Stability	0.5 ppm
Frequency Tuning	10 Hz from 30-520 MHz 100 Hz from 762 MHz-2.5 GHz

SPECIFICATIONS	
Dimensions (no handles)	7.4 W x 3.5 H x 9 D inches 7.4 W x 3.5 H x 14 D in. (with battery)
Volume	181 in ³ (without battery) 264 in ³ (with battery)
Weight	8.8 lbs (without battery) 12.6 lbs (with battery)
Color	CARC Green 383

MODES AND WAVEFORMS	
Narrowband Waveforms	AM/FM, VHF/UHF LOS, SINGARS, HAVEQUICK (SATURN, APCO P25 capable)
Wideband Waveforms	SRW (WNW, ANW2 capable)
UHF SATCOM Waveforms	MIL-STD-188-182A, 183A DAMA MIL-STD-188-181C, 183B IW Phase 1 (IW Phase II, MUOS, HPW capable)
Voice and Data Modes	Simplex or Half Duplex Full Duplex Capable MIL-STD-188-113 CVSD STANAG 4198 LPC-10e STANAG 4591 MELPe
Transmission Modes	AM, ASK, FM, FSK, PSK, CPM



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SECURITY	
Encryption	Sierra™ II Based Type 1
Encryption Modes	KY-57, KYV-5, KG-84, AES, Fascinator, Type 3-DES
Key Fill Device Compatibility	AN/CYZ-10 DTD, KOI-18, KYK-13, KYX-15, MX-18290, AN/PYQ-10, KIK-11, KIK-20
Key Storage	Up to 700 per channel
Mission Fill Device Compatibility	Windows-based Communications Planning Application

POWER	
Power Input	18-38 VDC
Power Consumption	120W Max
Battery Types	BA-5590/U, BA-5390/U, BB-2590/U

ENVIRONMENTAL	
Shock/Vibration	MIL-STD-810G for tracked and wheeled vehicles, ADTP-2404D Ballistic Shock
Immersion	2 meter salt water (MIL-STD-810G)
Temperature	-40C to +55C
EMI/RFI	MIL-STD-461F

TRANSMITTER	
Power Output	Narrowband: 10W, SATCOM: 20W, Wideband: 10W
Antenna Outputs	Single 30-2500MHz N-connector per channel
Harmonic Suppression	Greater than 53 dBc

RECEIVER	
Narrowband Sensitivity (for 10 dB SINAD)	LOS FM 30-512 MHz: -116 dBm LOS AM 90-512: -103.5 dBm with 30% modulation
Adjacent Channel Rejection	40 dB referenced to 10 dB SINAD (25 kHz channel)

INTERFACES	
External Data	USB, USB RNDIS Host and Device, Ethernet, RS-232
Audio Programming Remote Control	Standard 6 Pin USB, RS-232, Remote Keypad Display Unit (KDU)

OPTIONAL ACCESSORIES	
12043-4800-01	Battery Box
RF-3150-AT122	VHF, 30-108 MHz NB Antenna
RF-3162U-AT001	UHF, 225-450 MHz Antenna
RF-3166L-AT001	L band 1250-1850MHz Antenna
RF-5934-XX	Multi-channel Manpack Backpack
12083-0707-A003	USB to Ethernet cable
12006-9005-01	Portable SATCOM Antenna
10075-1399	H-250 Handset
12043-2750-A006	USB Programming Cable
RF-30XX	Push on GPS Antenna
10553-0100-02	Fill Remote KDU
10535-0707-A020	Cable Assy, Speaker Audio
10535-2713-A020	Cable Assy, Speaker Power, VAU, Right Angle
10535-0706-A250	Cable Assy, Speaker Power
11080-3980-01	DC Switch Assy
RF-3071-AT234	L1/L2 Vehicular GPS Antenna
A30-1059-002	Handset, Mod H-250, Dual Audio
RF-3143-AT320	Tri-Band Antenna
12172-4200	MCMP Single Mount
12172-4600	MCMP Dual Mount
12172-0300	Tethered V/U PA

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WIDEBAND NETWORKING TEAM RADIO

RF-330E-TR001

FEATURES

- Suite B, Secret and Below, non-CCI security architecture
- Meets and exceeds Rifleman Radio and Nett Warrior operational requirements
- Market-leading 24-hour mission weight (< 3 lbs)
- Market-leading battery life supports missions over 24 hours with one spare battery
- Market-leading point-to-point range
- OLED display provides visual confirmation of vital radio status without external device
- Harris' single Tri-band antenna addresses full SRW spectrum requirements
- Uses currently fielded batteries and charging systems
- Provides user Situational Awareness (SA); with Position Location Information (PLI)
- Software programmable security architecture

The RF-330E-TR Wideband Team Radio is a small, tactical team radio, NSA certified for Type 1 Suite B, Secret and Below encryption in a non-CCI package. Designed to exceed Rifleman Radio and Nett Warrior operational requirements for range, battery life and mission weight, the RF-330E-TR provides simultaneous voice, high-speed data and up-to-date position location information, enhancing situational awareness and ensuring the individual war fighter is always connected and never alone.

As a member of the Harris Falcon III® family of tactical handheld radios, the RF-330E-TR utilizes the same menu structure and widely- fielded battery and charging systems as the Falcon III HH family of radios. Compatibility with a fielded battery form factor and well known menu structure greatly eases the logistical burden of fielding and training for a new radio system. Additionally, the innovative design of the RF-330E-TR optimizes power consumption, offering unparalleled battery life capable of supporting missions well in excess of 24 hours with only a single spare battery, minimizing the total weight carried into the field.

The RF-330E-TR hosts the SRW networking waveform and features a Software Communications Architecture (SCA v2.2.2) operating environment, enabling software upgradeability as well as hosting additional software defined waveforms.

The compact size and advanced capabilities of the RF-330E-TR provide a means to allow seamless voice and data capabilities for every team member, enabling today's war fighter to take on tomorrow's missions.



SPECIFICATIONS FOR: RF-330E-TR001

GENERAL

Frequency Range	Tri-band antenna optimized for: 225-450 MHz, 1250-1390 MHz and 1755-1850 MHz
Power Out	Selectable up to 3.2W
Bandwidth	Supports SRW 1.2 MHz channel spacing
Displaced Volume	33.5 cubic inches with battery and antennas
Weight	2 lbs with battery and antenna
Waveforms	SRW software upgradeable to support additional / future waveforms
Type-1 Secret and Below (non-CCI)	SW programmable Security architecture Suite B
Power Input	Nominal 10.8 VDC (Falcon III HH radio family interface)
Battery	Interfaces with currently fielded inventories of Falcon III HH batteries and chargers (Falcon III HH radio family)
Battery Life	Unparalleled battery life capable of supporting missions well in excess of 24 hours with only a single spare battery
Net Presets	Storage for up to 99 programmable presets
GPS	Internal GPS standard External SAASM interface (DAGR/PLGR)
SW Environment	SCA v2.2.2

ENVIRONMENTAL

Environmental	MIL-STD-810G
Operating Temperature	-30C to +55C
Storage Temperature	-51.1C to +71C
Immersion	2 Meters
EMI / RFI	MIL-STD-461F (including CE106 Compliance)

INTERFACE

RF Antenna	Single TNC connector
Audio	Supports interoperability with standard 6-pin ADF interface
Key Fill	DS-101
Mode/Presets switch	(Off/Zeroize/Load) Access to 11 programmable presets
OLED Display (HMI)	Immediate visual confirmation of R/T status: Battery gauge Net connection status Preset number and label Indication of loaded key material
Utility Access (HMI)	User friendly access to menu driven radio utilities without requiring an external device



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