

HF-9000 Retrofit

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A cost effective solution to provide aircraft with worldwide communication capabilities.

The leader in HF communications for five decades has developed one of the most modern and lightweight airborne systems available today. The HF-9000 High-Frequency Communications System offers unprecedented capability and reliability, combined with unequalled ease of operation for the aviation HF communications user. The HF-9000 system consists of a compact control unit, receiver/transmitter and an automatic antenna coupler.

The HF-9000 system is designed for use in both fixed-wing and rotary-wing aircraft. Operating throughout the standard HF radio spectrum, the HF-9000 system provides communications capability anywhere in the world.

Rockwell Collins is proud to offer additional value to your purchase through a limited time offer of **CASP** (Corporate Aircraft Service Program) discounts for both new and existing enrollments. CASP is a premier maintenance and cost management program, which assures maximum aircraft dispatchability, minimum downtime, and reduced life cycle costs.

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KEY OWNER/USER BENEFITS

- Full-frequency HF system permits direct tuning of any of 280,000 frequencies between 2.0 and 29.9999 MHz in 100 Hz steps when operated in the discrete frequency mode
- Rapid-tune antenna coupler with up to 40 milliseconds computer tuning facilitates quick channel changes
- Fiber optic technology is used to interconnect all system elements for reduced EMI and installation weight
- 99 user-programmed half-duplex or simplex channels, 249 half-duplex ITU channels and six emergency channels may be called up by their channel numbers when operated in the channel mode
- Discrete frequency mode provides USB, UD, AM equivalent, CW, LSB and LD operation. The 99 user-programmed channels may be programmed to operate in any of these modes
- Selectable power outputs of 175, 50, or 10 W PEP (optional 200 W receiver/transmitter available)
- BITE is utilized for diagnostic testing and monitoring
- Control utilizes diachronic LCD for optimum readability in all lighting conditions
- RTU tuning available

DESCRIPTION

The HF-9000 system incorporates the latest in state-of-the-art technology that includes microprocessors, direct digital frequency synthesis and fiber optics as well as preplanned product improvement design philosophy. The HF-9000 system covers the 2.0 to 29.9999 MHz frequency range in 100 Hz steps. Communication is possible in both simplex and half-duplex in Upper Sideband (USB), Lower Sideband (LSB), Amplitude Modulation Equivalent (AME), Continuous Wave (CW) and optional Frequency Modulation (FM) mode. To minimize user workload, the HF-9000 system has the capability to store 99 user-programmed preset channels. The receiver/transmitter will store frequency data and RF emission mode for either simplex or half-duplex communication in nonvolatile memory. In addition, two emergency channel frequencies and all 249 half-duplex ITU maritime radiotelephone channels (public correspondence network) are preprogrammed into nonvolatile memory permitting phone patch capabilities over thousands of miles.

Built-In-Test Equipment (BITE) provides diagnostic testing and monitoring to determine if the system is capable of providing the specified performance. Should a fault occur, BITE will identify the specific unit, module/circuit card and the failed circuit. Frequencies and channels are selected with dedicated switches, and all knobs are sized and spaced to optimize ease of operation.

Pressurized automatic antenna couplers are available that provide high performance and installation flexibility. The antenna coupler tunes shunt antennas. The pressurized antenna coupler provides full operational capability and reliability at high altitudes and temperature extremes. The antenna coupler quickly matches the power amplifier in the receiver/transmitter to the antenna to maximize the radiated power. Each antenna coupler has the capability to learn and store tuning data for 99 preset channels as well as storing the last 50 manually tuned frequencies. This learning is accomplished during the first tune cycle and is then stored; upon recalling the preset channel or a previously used manual frequency, the antenna coupler tuning cycle time is nominally 40 milliseconds.

HF-9000 Retrofit.

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The flexibility of the HF-9000 system is clearly demonstrated by the various system configurations. The receiver/transmitter may be remotely mounted in the aircraft avionics bay and controlled by the control unit or controlled via a MIL-STD-1553B data bus, ARINC 429 data bus or some other control scheme. This flexibility of interface makes the HF-9000 system compatible with advanced flight deck management systems. Optional data bus configurations can also be implemented. Additional flexibility is provided by the modular design employed in the receiver/transmitter.

The HF-9000 system offers the user a variety of communication possibilities that include contact with air traffic control agencies over thousands of miles away, worldwide time and frequency standard broadcasts, Omega navigation station status reports, weather and marine storm warnings, radiotelephone service for personal messages and ARINC operational control services for messages relating to flying operations.

TRADE-IN CREDIT

A trade-in credit will be issued against the purchase of an HF-9031A/9034A system upon Rockwell Collins receipt of existing HF system. Trade-ins are limited to one credit for each HF-9031A/9034A system purchased. A credit will be issued to the dealer after the existing equipment is received at the Rockwell Collins Wichita Service Center, 2051 Airport Road, Wichita, Kansas 67209, phone number 316-677-4808. Dealer acceptance of special pricing in this bulletin obligates the dealer to pass the applicable equipment trade-in amount to the aircraft end operator.

CASP (CORPORATE AIRCRAFT SERVICE PROGRAM) SPECIAL INCENTIVES

Rockwell Collins is offering a CASP discount program when you take advantage of this Special Pricing Bulletin offer for remaining Rockwell Collins equipment in your aircraft.

For aircraft not currently enrolled in CASP, enroll within 30 days of placing an order for this upgrade and receive a 10% discount on current CASP prices.

Aircraft enrolled in CASP at the time of order placement will receive a 5% discount on their CASP renewal (in addition to the standard 10% renewal discount).

Key benefits of CASP include:

- Exchange, rental and repair
- Reliability upgrades
- Removal and refit labor reimbursement
- RVSM annual certification
- FMC/MDC battery replacement
- No charge for unused exchange returns
- Up to five no fault founds without penalty
- Global priority parts support

For CASP details and existing discounts that may be applicable to your aircraft, contact a CASP representative at 1.319.295.4361 or casp@rockwellcollins.com. You may also visit [CASP on Rockwell Collins.com](http://CASP.on.RockwellCollins.com). Discounts listed in this bulletin may be combined with all other standard CASP discounts.

TERMS AND CONDITIONS

Unless otherwise noted, programs are valid for orders placed between January 1, 2015 and December 31, 2015 with delivery requested by April 1, 2016. Warranty period for new equipment within this program is two years. Standard warranty does not apply to software.

SINGLE HF SYSTEM – 50W¹

Type	Description	CPN	Qty
HF-9031A	HF Rcvr/Xmitter (50w)	822-0101-002	1
HF-9041 ⁴	HF Antenna coupler Pressurized/Shunt	622-8114-002	1
MT-9030A	Low Profile Shock Mount	622-8116-001	1
MT-9041A	Low Profile Shock Mount	622-8122-001	1

SINGLE HF SYSTEM – 100W¹

Type	Description	CPN	Qty
HF-9034A	HF Rcvr/Xmitter (100w)	822-0102-001	1
HF-9041 ⁴	HF Antenna coupler Pressurized/Shunt	622-8114-002	1
MT-9030A	Low Profile Shock Mount	622-8116-001	1

OPTIONAL DUAL HF ANTENNA COUPLER MOUNT WITH SINGLE HF SYSTEM PURCHASE³

Type	Description	CPN	Qty
MT-9042A	Dual Low Profile Shock Mount	622-8124-001	1
MT-9041A	Low Profile Shock Mount	622-8122-001	-1

OPTIONAL DUAL HF ANTENNA COUPLER MOUNT WITH DUAL HF SYSTEM PURCHASE³

Type	Description	CPN	Qty
MT-9042A	Dual Low Profile Shock Mount	622-8124-001	1
MT-9041A	Low Profile Shock Mount	622-8122-001	-2

OPTIONAL HF CONTROLLERS

Type	Description	CPN	Qty
HF-9010	HF Comm Control	622-8111-005	1
RTU-42XX	Radio Tuning Unit		See Rockwell Collins RTU-4210/4220 Upgrade Marketing Bulletin, BRS-110085.4M, for information.

NOTES

1. RTU's may be purchased separately or upgraded. Please refer to RTU-4210/4220 Upgrade Marketing Bulletin, BRS-110085.4M, for information. Please contact an Authorized Rockwell Collins Dealer for RTU upgrade information.
2. For customers upgrading to a new Rockwell Collins HF system, a trade-in credit will be issued for aircraft with HF hardware already installed.
3. If a dual HF system is being purchased, a single MT-9042A mount may be substituted for two MT-9041A mounts at an additional cost.
4. Antenna Coupler, CPN 685-0350-002 is a CPN 622-8114-002 with optional Grounding Ring Adapter, CPN 685-0349-001. Other options may be found by logging into Rockwellcollins.com and selecting Products and Systems/Communications/Communication Radios/ HF9000/Specification/Other/Options.

How can we help?

Please call Rockwell Collins Customer Support at 319.295.5000.

Building trust every day.

Rockwell Collins delivers smart communication and aviation electronic solutions to customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

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