



HF-9500 AIRBORNE HF COMMUNICATION SYSTEM

FUTURE GROWTH AVAILABLE TODAY

Software-defined ARC-190 replacement

Reliable communication systems are critical for mission success. Modernize your fleet with Collins Aerospace HF-9500 airborne HF communication systems – a direct replacement for ARC-190 radios. It's the last HF system you'll ever need to buy.

EASY INSTALLATION AND INTEGRATION

HF-9500 is a low-risk replacement for all ARC-190 models. The solution is designed to use a common suite of hardware and software components that meet Open Systems Architecture (OSA) and HF modernization requirements. Currently in production and available for order, Collins offers HF-9500 as a field-level replacement with minimal impact to aircraft availability. It quickly and easily integrates into the legacy system using the existing ancillaries and aircraft control systems. No aircraft modification is required.

KEY FEATURES AND BENEFITS

- Certified airworthy and in-production
- Low-impact replacement
- Exceeds ARC-190 system capabilities
- Can be used with all antenna types and configurations
- Existing cabling can be reused in-place
- No change required for coupler, wiring or antenna
- Provides full Simultaneous Operations (SIMOP) filtering capability
- Backwards compatible with legacy software and hardware
- Hardware upgrade supported to meet modernized features
- Sustainable for the service life of your platform



HF-9500 SYSTEM CAPABILITIES

- Single sideband (SSB)
- Independent sideband data (ISB)
- Amplitude Modulation Equivalent (AME)
- Continuous wave (CW)
- 2G Automatic Link Establishment (ALE)
- ARINC 714 selective calling (SELCAL)
- Low-rate data modes: 75 bps to 19.2 kbps
- ARINC 635 High Frequency Data Link (HFDL)*
- Embedded SIMOP filtering
- NTIA certified 400-watt PEP power amplifier
- MIL 1553 control (available with ARC-190 control message set)
- ARC-190 system interfaces (e.g., OFP, coupler, ACP)
- Automatic position reporting
- Software-defined radio (SDR) architecture
- Compatibility with VACM and legacy crypto devices

HF-9500 NEXT-GEN: PHASED PATHWAY TO MODERNIZED CAPABILITIES

- Modern I/O interfaces: Ethernet, USB
- 3G HF waveform (3G ALE and data modes)
- Type-3 AES-256 encryption
- MELPe digital voice vocoder
- Embedded ARINC 635 High Frequency Data Link (HFDL)
- Wideband HF data and wideband (4G) ALE

PROVISIONED FOR ADVANCED AND SPECIALIZED FEATURES

- Background scanning
- Tactical and secure networking
- Advanced waveforms: TDMA, MIMO, HFDL Next
- LPI/LPD and ECCM

HF-9500 SYSTEM PART NUMBERS

HF-9550	High Frequency Receiver-Transmitter	822-0980-003	NSN 5821-01-550-4036
HF-9545	Pressurized Antenna Coupler	822-0981-001	NSN 5985-01-473-7203
HF-9515	Set Control Unit (5V AC/DC)	822-1080-001	NSN 5821-01-506-6037
HF-9515	Set Control Unit (28V DC)	822-1080-003	NSN 5821-01-558-8227
MT-9551B	Receiver-Transmitter Mount	822-1082-001	NSN 5975-01-473-7204
MT-9545B	Antenna Coupler Mount	822-1171-001	NSN 5975-01-473-7202

*Currently requires CP-2024
 Specifications subject to change without notice.

COLLINS AEROSPACE HF-9500 AIRBORNE HF COMMUNICATION SYSTEM



HF-9550 receiver-transmitter and HF-9545 antenna coupler



HF-9515 radio set control



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