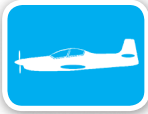


The most important thing we build is trust



**TOTAL COMMUNICATIONS CAPABILITY,
MAXIMUM INTEROPERABILITY**



- Maximum interoperability AM/FM, 29.7—960 MHz
- P-25 on all voice bands, with conventional frequency control (control head-programmable)
- 10 watts power across all bands for increased distance and clarity
- U.S. Forest Service Cooperator-compliant version available



Flexcomm™ Special Mission Communications

Tactical Radio Control Displays, Transceiver, Antennas and Tuners

Clear, reliable, long-range communications for a variety of tactical missions



C-5000 Control Head, Base Model

The C-5000 Control Head can control and independently monitor any combination of up to three RT-5000 transceivers. Two microphone and headset ports allow for simultaneous independent operation of two radio systems. Standard with the C-5000 are 350 preset channel memories, 99 scan group memory, DTMF/Pulse dialing, manual frequency selection for each system, front panel programming, and a PC database data port on the front of each unit. When multiple radios are connected to the C-5000, a push of a button turns the aircraft into a command and control platform capable of performing relay, simulcast, repeater, and full-duplex operations. All enhanced functions require that multiple radios be connected to the C-5000.

C-5000 Features

- Multiple radio-enhanced modes: cross-band relay, simultaneous multi-radio transmissions, repeater
- Programmable by PC database download, front panel, manual frequency entry
- Base model controls up to 3 transceivers
- P-25 model controls up to 2 P-25 transceivers
- Dual independent mic/headset ports
- Base: 350 preset channels / 99 preset scan groups
- P-25: 350 preset channels
- FAA PMA-certified



C-5000 Control Head, P-25 Model

The C-5000 P-25 model controls P-25-compatible transceivers. Operation is simple and intuitive even while performing the most complex command-and-control functions. Customized software allows for 12-digit Alpha Identifier labels, which allows precise channel identification. Two microphone and headset ports allow for simultaneous, independent operation of two radio systems. Standard with the C-5000 are 350 preset channel memories, DTMF/Pulse dialing, manual frequency selection of each system, front panel programming, and a PC database data port on the front of the unit. The P-25 model is recommended for all new installations not requiring three-transceiver independent control.



CD-5000 Control Display

The CD-5000 control display connects to the synthesized guard version of the RT-5000. This compact and powerful display provides “pilot ready” control of the most powerful civil service transceiver in the world. Weighing less than one pound, the CD-5000 controls the RT-5000 Main and Guard receivers either via frequency input mode or via the preset channels. Preset channels can be loaded via the factory-supplied PC program – RPWin. The CD-5000 allows pilots the ability to control the tactical radio in the same manner as any of their other aircraft radios.

CD-5000 Features

- Controls the RT-5000 with synthesized guard, which has two, 29.7 – 960 MHz receivers
- 350 preset channels
- Direct frequency entry
- Optimized for VHF/UHF AM operation
- Color display, NVG option



RT-5000 Remote-mount AM/FM Transceiver

The RT-5000 P-25 base transceiver, covering the 29.7 to 960 MHz band, can replace up to six transceivers. An additional, tunable “guard” receiver may be added for monitoring an additional frequency. This guard receiver is fully synthesized and covers the same 29.7-960 MHz range as the main transceiver. The RT-5000 P-25 is controlled by Cobham’s C3-enabling C-5000 control head or the Audio-Radio Control Display Unit (ARCDU). Each interfaces to the RT-5000 via a proprietary serial tuning bus that reduces wiring complexity and installation costs. A single antenna has been designed to meet the full frequency spectrum of the RT-5000, allowing easy installation on a large variety of aerial platforms. The latest versions of the RT-5000 P-25 transceiver can perform P-25 digital modulation across the entire range, plus up to two additional modules can be added to cover the VHF, UHF, and 700/800 MHz that add Trunking and Motorola-proprietary radio network features, giving the user unprecedented communications interoperability. Cobham’s single transceiver/single control head/ single antenna solution delivers the widest frequency and modulation coverage, enhanced mission capabilities, and addresses all Public Service communication needs.



AT-570 Antenna

The AT-570 is a multi-band, tunable antenna designed to comply with the requirements of TSO C169a. It provides communications over the frequency band 29.7 MHz to 960 MHz and is intended for operation in general subsonic airborne applications with Cobham’s RT-5000 radio and FC-5000 Logic Converter Unit.

- VHF function: 29.7 MHz to 174 MHz fulfilled by a tunable structure
- UHF function: 225 MHz to 400 MHz fulfilled by a passive element via a single RF connector
- Separate radiating structure provides 400 MHz to 960 MHz capability via a second RF connector



AT-5000 Antenna

The AT-5000 is a multi-band, tunable, VHF/UHF blade antenna system for use with the RT-5000 radio. The AT-5000 works as a system with the FC-5000 tuning box, giving performance in general accordance with the requirements of TSO C37d and C38d.

- VHF function: 29.7 MHz to 174 MHz configured as an electrically short monopole using capacitive tuning
- UHF function: 225 MHz to 400 MHz – monopole structure with enhanced performance from the VHF tuning element
- High Band function: 400 MHz to 960 MHz is a singularly tuned, reactively matched monopole



FC-570/FC-5000 Tuners¹

The FC-570 and FC-5000 Logic Converter Units (LCU) are designed to form part of an electrically-tuned antenna system. The LCU provides eight control lines at DC levels to tune the antenna. It accepts serial input control data from the RT-5000 Transceiver and translates the frequency content of the data into tuning information for the antenna.

- Tuning Resolution:
 - 20 to 79.975 MHz: 0.2 MHz
 - 80 – 409-975 MHz: 1.0 MHz
 - ≥ 410 MHz: one single ‘default’ coding
- Tuning Time: ≤60 μs

¹ FC-570 Tuner for use with AT-570 Antenna and FC-5000 Tuner for use with AT-5000 Antenna

Technical Specifications



C-5000 Base / P-25

Power Requirements:	27.5 Vdc +/- 20%
Current Requirements:	0.4 to 1.3 amps
Weight:	3.5 lbs. (1.59 kgs)
Height:	3.75" (92.25 mm)
Width:	5.75" (146.05 mm)
Length:	6.50" (165.1 mm)
Altitude:	55,000 ft (16,764 m)
Temperature:	-22°F to +140°F (-30°C to +60°C)

CD-5000

Power Requirements:	27.5 Vdc +/- 20%
Current Requirements:	28 Vdc 100mA 5 Vdc 500mA
Weight:	0.83 lbs. (0.349 kgs)
Height:	3.15" (80.01 mm)
Width:	2.50" (63.5 mm)
Length:	4.29" (108.97 mm)
Altitude:	55,000 ft (16,764 m)
Temperature:	Operational -4°F to +131°F (-20°C to +55°C)
	Storage -67°F to +185°F (-55°C to +85°C)



RT-5000 AM/FM Remote-mount Transceiver

Voltage Requirements:	27.5 Vdc +/- 20%
Current Requirements:	Receive: 2.5A Transmit: 10.0A max.
Weight (approx.):	15.8 to 19.0 lbs. (7.17 to 8.62 kgs)
Height:	7.64" (194.06 mm)
Length:	
Base:	14.00" (355.60 mm)
Plus Handle:	15.50" (393.70 mm)
Width:	4.88" (123.95 mm)
Temperature:	-22°F to +140°F (-30°C to +60°C)
Channeling:	12.5/20/25/30/50 kHz
Tunability:	1.25 kHz steps
Options:	Synthesized guard (29.7-960 MHz)
Certification:	FAA PMA/STC
Frequency range:	
AM/FM Analog & P-25 Digital 29.7-960 MHz,	
including bands:	
• 30-50 MHz	Mobile radio
• 50-88 MHz	Military
• 87.5-108 MHz	FM broadcast
• 108-118 MHz	VOR voice
• 118-154 MHz	ATC and Civil Air Patrol
• 136-174 MHz	Mobile radio
• 156-174 MHz	Maritime
• 225-400 MHz	Military
• 380-520 MHz	Mobile radio
• 764-960 MHz	Mobile radio

Project 25, SmartZone, SmartNet Trunking and encryption with:

• 136-178 MHz	Mobile radio
• 380-470 MHz	Mobile radio
• 450-520 MHz	Mobile radio
• 764-870 MHz	Mobile radio



AT-570 Antenna

Power handling:	15 Watt CW max. 29.7-400 MHz; 10 Watt CW max. 400-960 MHz
Weight:	2.7 lbs. Max. (1.22 kg)
Height:	9.5" (241.30 mm)
Base Length:	9.3" (236.22 mm)
Base Width:	2.75" (69.85 mm)
Altitude:	50,000 ft. (15,240 m)
Ambient Temperature Range:	a) Normal operation: -55° to +70°C b) Occasional range: -55° to +70°C c) Ground survival: -55° to +85°C
Approval certificates:	TSO-C169a, ETSO-2C37e, ETSO-2C38e

AT-5000 Antenna

Power handling:	15 Watt CW max. 29.7-400 MHz; 10 Watt CW max. 400-960 MHz
Weight:	3.5 lbs. Max. (1.59 kg)
Height:	5.5" (139.70 mm)
Base Length:	11.8" (299.72 mm)
Base Width:	3.6" (91.44 mm)
Altitude:	50,000 ft. (15,240 m)
Ambient Temperature Range:	a) Normal operation: -55° to +70°C b) Occasional range: -55° to +70°C c) Ground survival: -55° to +85°C

FC-570 / FC-5000 Tuner

Supply Voltage:	+28 Vdc nominal
Weight:	1.65 lbs. Max. (0.75 kg)
Height:	2.35" (59.69 mm)
Depth:	3.03" (76.96 mm)
Width:	6.29" (159.77 mm)
Altitude:	50,000 ft. (15,240 m)
Ambient Temperature Range:	a) Normal operation: -55° to +70°C b) Occasional range: -55° to +70°C c) Ground survival: -55° to +85°C

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