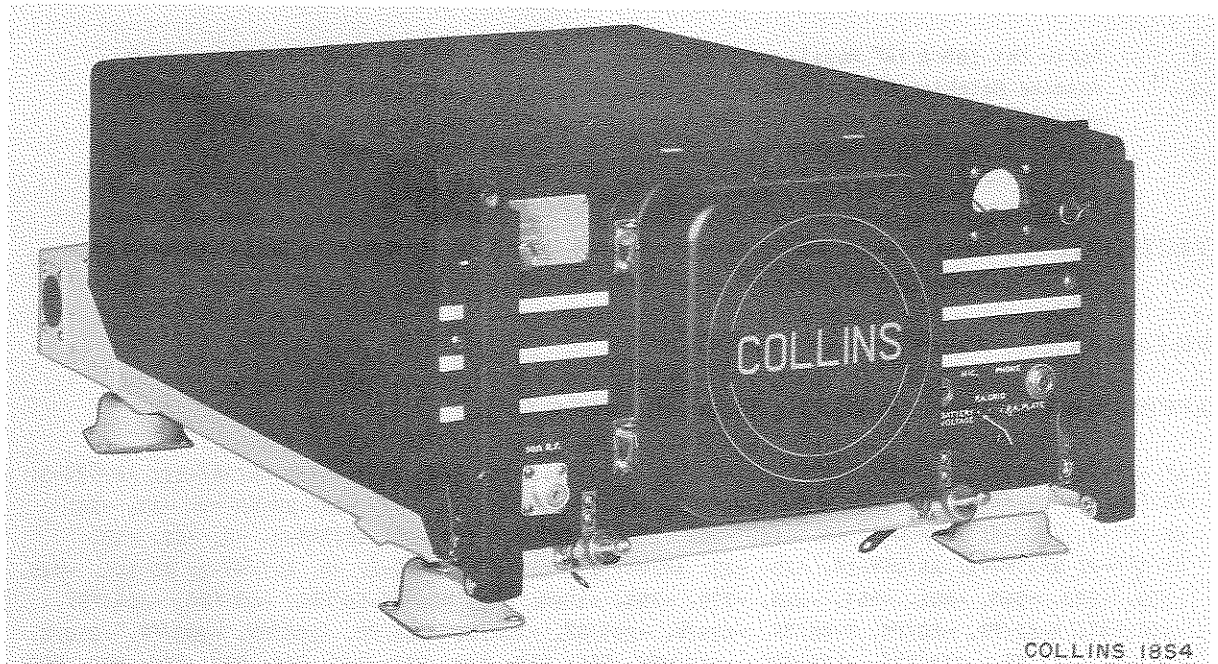


STATUS: Commercial

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force

DATE OF THIS SHEET: 19 May 52

**AN/ARC-TYPE**COMMERCIAL TYPE NO: COLLINS 18S-4 (AF MODEL)  
RADIO SET

COLLINS 18S4

Radio Set Collins 18S-4 (AF Model) is a modified, commercial aircraft transmitter-receiver for air-to-air, and air-to-ground, a-m (voice or cw) communication. It is normally used for long range communication in aircraft operating at altitudes under 31,000 feet and consists of a transmitter-receiver with self-contained dynamotor, an antenna matching network, and a remote control unit.

This equipment operates on 20 crystal-controlled frequencies in 10 tuned channels, each of which can be used for two frequencies (which differ by not more than 1% in the frequency range 2 to 18.15 mc). Nominal power output is 100 w up to 31,000 feet altitude.

The antenna matching network is designed to match the 52-ohm coaxial Radio Frequency Cable RG-8/U, which is used to connect the transmitter-receiver to antennas of 45 feet or more in length.

Frequency selection, as well as audio input and output, may be remotely controlled by an autotune system consisting of the remote control unit and interconnecting cables.

Requires 1,000-w (maximum) of 24-v, dc.

**AN/ARC-TYPE**

INSTRUCTION LITERATURE: Collins  
Instruction Manual 18S-4  
CLASSIFICATION OF EQUIPMENT: Unclassified  
USING SERVICE: Air Force  
DATE OF THIS SHEET: 19 May 52

COLLINS 18S-4 (AF MODEL) :COMMERCIAL TYPE NO.  
RADIO SET

**MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Set 18S-4 (AF Model) with mounting	24-1/2 x 9-1/2 x 16-3/8	59.0
1	Antenna Matching Network 180L-2 with mounting	10-3/8 x 5-7/8 x 9	13.0
1	Remote Control Unit 314S-6	5-3/4 x 2-5/8 x 6	3.5

**OPERATIONAL CHARACTERISTICS**

**TACTICAL USE:** Used in cargo and transport aircraft for MATS. It may also be substituted for Radio Set AN/ARC-21 in Liaison Aircraft.

**INSTALLATION:** Airborne, shock mounted.

**APPROXIMATE RANGE (IN MILES):** (Nominal) Medium, long.

**CAN COMMUNICATE WITH:** AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, R-96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR, RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -B3/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR, TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

**TECHNICAL CHARACTERISTICS**

**FREQUENCY RANGE IN MEGACYCLES:** 2.0 - 18.5 mc, up to 20 frequencies, 10 preset crystal-controlled channels each of which can be used for two frequencies differing by not more than 1%.

**TYPE MODULATION:** Am.

**TYPE OF SIGNAL:** Voice, cw.

**POWER OUTPUT:** Transmitter: 100 w nominal  
Receiver: 100 mw into a 500 ohm line.

**POWER REQUIREMENTS:** Standby: 192 w (8 amp) 24 v, dc.  
Transmitting: 912 w nominal, (38 amp)  
24 v, dc.

**PHYSICAL CHARACTERISTICS**

Radio Set COLLINS 18S-4 (AF Model) measures 16-3/8 x 15 x 24-1/2 inches, net weight 75.5 pounds, volume 3.5 cu ft. Packed for domestic shipment: total weight 83 pounds, total volume 4 cu ft. Shipped in 3 packages.