

## VINTAGE AVIONICS

Communication.

## AN/ARC-52 FAMILY

1958

[HOME](#)**FM Communication**

[ARC-44](#)  
[ARC-54](#)  
[ARC-131](#)  
[CPRC-26](#)  
[FM Comm panels](#)

**VHF Communication**

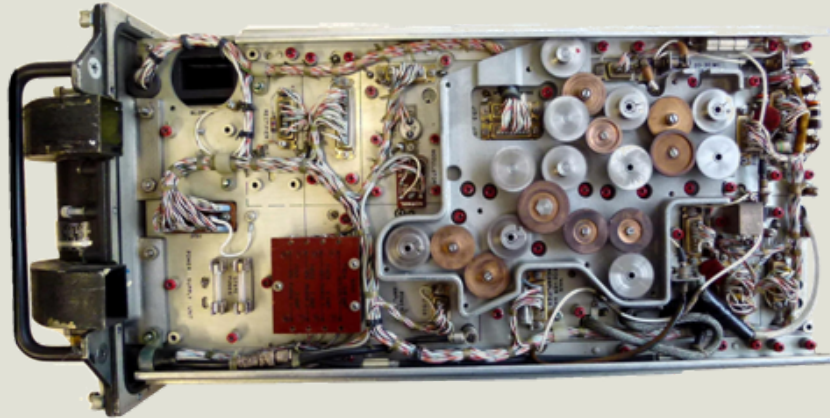
[ARC-73](#)  
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**UHF Communication**

[ARC-27](#)  
[ARC-34](#)  
[ARC-45](#)  
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[PRC-41](#)  
[ARC-552](#)  
[PTR-175](#)  
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[USB control](#)[Download pictures](#)[Download diagrams](#)**ARC-52**

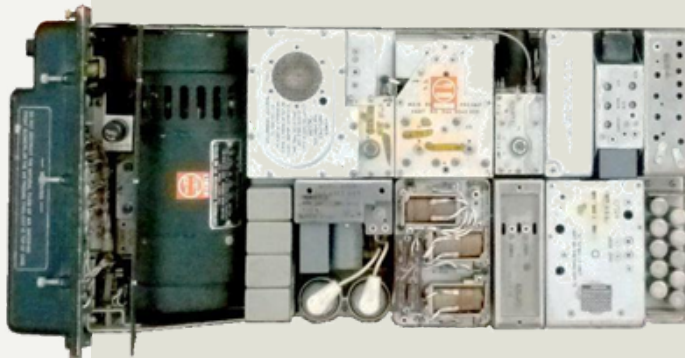
The ARC-52 is the grandfather of a family of UHF transceivers in military aircraft . The basic design from Collins is present in every member of the family, like the wheels that distribute motion to all RF, IF, and oscillator modules .



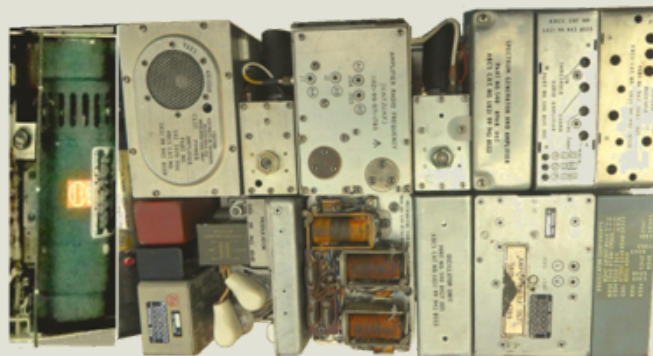
The **ARC52**, shown here, had 1750 channels, spaced 100kHz from 225 to 399.9 MHz, with AM modulation, and 20W RF output. The chassis includes a separate receiver on the guard frequency (243MHz.).

The 400Hz ac supplied version is the **RT332/ARC52** and the 27Vdc only version is the **RT424/ARC52X**.

The ARC52 was updated during its lifetime. The first version had 436 triodes in the UHF stages, the last version had seven 7077 planar triodes.



The **618W** designed by Collins Canada has a form to fit in the avionics bay of the F104 Starfighter. Supply is 400Hz ac. There are 3500 channels, spaced 50kHz. An intercom module (the brown box) is included. The air-air heat exchanger moved to the other end.



The **PTR175** was made by Plessey in the UK. Although size, number of modules, and power consumption are exactly the same, the PTR175 includes 350 VHF channels from 117.5 to 135.95 MHz . The design could be configured for retransmit/relay operation, fsk data demodulation, and ADF antenna support.

**Circuit diagrams**

[ARC52 circuit diagram last version](#) ( 1968)  
[618W-2 circuit diagram and description](#)  
[PTR175 UHF/VHF version](#)