ARC-44 with homing option AN/ARA-31

RED numbers are terminals in terminal box J-562/AR

ARC44 External wiring
2-2-2011 kb
The ARC44 wiring

The ARC-44 was an FM transceiver, mainly used in helicopters for air-ground communication.
The main unit RT-294 was compact because the audio amplifier and power supply were external to the main unit.

Basic system
To build a system around the RT-294, the frequency selecting control panel SB-327, a whip antenna with matching unit, and the dynamotor power supply DY-107 were needed as long as the aircraft already had an intercom with audio amplifier. If not, the intercom control SB-329 was required as well.

Options
Two options were available: Homing to indicate if a (manpack) transmitter was to the left or to the right of the helicopter, and retransmit.
For the homing option, two open dipole antenna’s were required, a keyer to cycle between them, and a switch panel.
For retransmit, a second RT-294 was required, together with its SB327 control and DY107 dynamotor.

Connectors
All are M-series connectors, see http://www.tycoelectronics.com/catalog/feat/en/c/11532
AMP (now Tyco)
MIL-C-28748

The connectors on the various units are:
RT-294 34 pin male M-series
      a BNC (antenna) connector
      20 pin male test connector
SB-327 34 pin male M-series
SB-329 34 pin male M-series
SA-474 34 pin male M-series
DY-107 20 pin male M-series
KY-149 2 terminals, 3 normal and one inverted BNC connector