P/N
AN/ARN-84

DESCRIPTION

The TACAN set is a "126 channel", airborne, UHF receiver-transmitter with decoding and data computation capabilities that are used for performing several tactical air navigational functions. These functions determine the bearing of the aircraft with respect to a surface beacon, or the slant range from the aircraft to a beacon. The TACAN set provides appropriate output signals to display this information on a bearing-distance-heading indicator (BDHI), the indicator not being a part of the TACAN set. In addition, the TACAN set receives a periodic identification signal from the beacon transmitter, which, after proper processing within the TACAN set circuitry, results in a corresponding audio output signal in Morse code to the aircraft’s intercommunication system.

The TACAN set AN/ARN-84 is capable of operation on any of the 126 available channels in each of two modes: X and Y, both in air-to-ground and air-to-air.
For the air-to-ground transmission, there are 126 frequencies within the 1025 to 1150MHz band. For the air-to-ground reception (serving both bearing and range functions), there are 63 channels between 962 and 1024 MHz (low band), in 1MHZ increments.

For air-to-air reception, there are 126 channels. Channels 1 through 126 (transmission) are assigned 1025 through 1150MHz. Channels 1 through 63 (reception) are assigned 1025 through 1087MHz. The channels are clear frequencies established solely on the basis of radio frequency (RF) selectivity; they do not depend upon pulse coding.

**INPUT POWER**

- 115VAC, 400 +/- 20Hz, single phase
- 26VAC, 400 +/- 20 Hz, single phase
- 28VDC

**DIMENSIONS**

- Depth: 21.95” (with handle)
- Width: 7.53”
- Height: 7.62”
- Weight: 32.0 Lbs

**OPERATING CONDITIONS**

- Temperature: 0 to + 50 degrees C
- Humidity: 0 to 95 % relative humidity
- Altitude: 10,000 feet maximum

**NON-OPERATING CONDITIONS**

- Temperature: -50 to +85 degrees C
- Humidity: 0 to 95 % relative humidity
- Altitude: 40,000 feet maximum