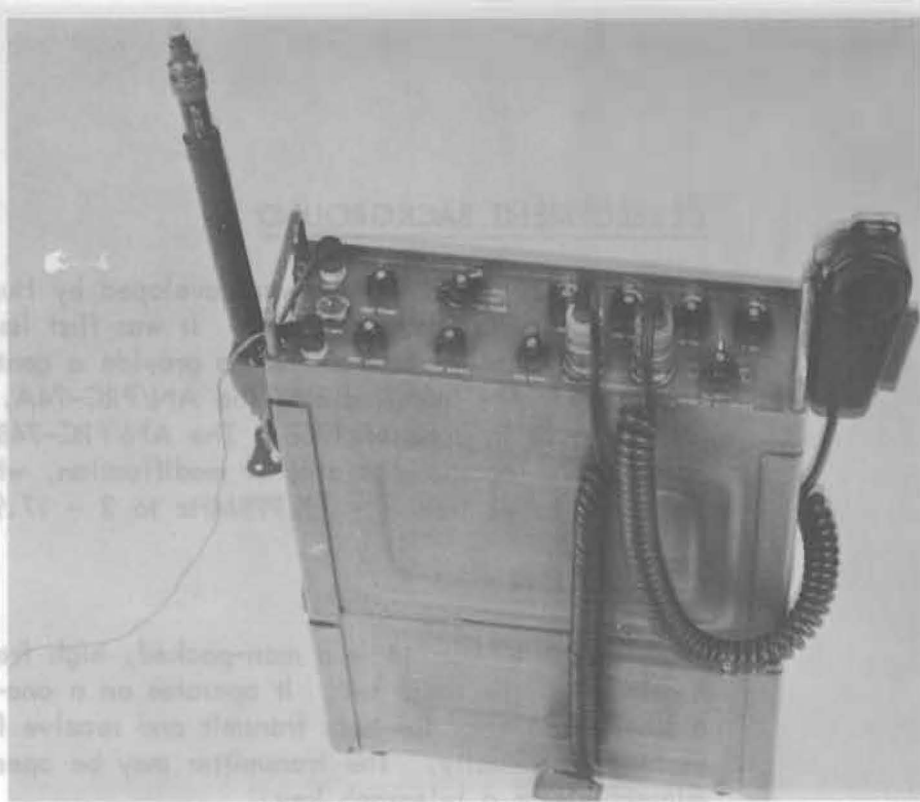


U.S. ARMY FACT SHEET

NOV., 1969

RADIOS

NO. 1



RADIO SET, AN/PRC-74B

CHARACTERISTICS

PHYSICAL

| | |
|--------------|----------------------------------------------------------------|
| Type | Solid state |
| Weight | 28 pounds 2 ounces (man-packed, with dry cell battery) |
| Size | 18" x 12" x 3-3/8" |
| Power source | BB-418 nickel-cadmium battery or BA-386 dry cell battery |
| Mounting | Manpack |
| Antenna | 10-foot whip (manpack) doublet, or slant wire |

OPERATIONAL

| | |
|-----------------|--------------------------------------------------------------|
| Frequency range | 2 - 17,999 MHz |
| Channels | 16,000 at 1 KHz intervals |
| Range | 15 miles (whip antenna) |
| | 30 miles (doublet) |
| | 500 miles (slant wire) |
| Power output | 15 watts |
| Operation modes | Single side band (voice), or continuous wave (code) |

EMPLOYMENT

Radio Set AN/PRC-74B is organic to Special Forces units and to Military Assistance Teams in Southeast Asia. It provides long-range patrols with a means of communicating with their base stations. The AN/PRC-74B is interoperable with other high-frequency single side band radios such as the AN/GRC-106.



Prepared for the OFFICE OF THE CHIEF OF INFORMATION, DEPARTMENT OF THE ARMY

by the U.S. ARMY COMMAND INFORMATION UNIT • WASHINGTON, D.C. 20315

DEVELOPMENT BACKGROUND

The AN/PRC-74 radio was developed by Hughes Aircraft Company primarily for the military market. It was first issued for user tests in 1964. In 1966 this radio was modified to provide a continuous wave transmission capability. The modified set, the AN/PRC-74A, was initially delivered for Army use in June of 1966. The AN/PRC-74B, issued to Army units in early 1967, incorporated another modification, which extended the set's frequency range from 2 - 11.999MHz to 2 - 17.999MHz.

DESCRIPTION

The AN/PRC-74B is a man-packed, high frequency, single side band/continuous wave radio set. It operates on a one-way reversible basis, using a single frequency for both transmit and receive functions. Tuning is performed manually. The transmitter may be operated by either a push-to-talk microphone or a telegraph key.

RADIO SET, AN/PRC-74B

CHARACTERISTICS

| <u>OPERATIONAL</u> | <u>PHYSICAL</u> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency range Channels Intervals | Type Weight |
| Range (whip antenna) (doublet) (slant wire) Power output Operation modes | Size Power source Mounting Antenna |
| 2 - 17.999 MHz 14,000 to 14,100 15 miles 30 miles 300 miles 15 watts Single side band (voice), or continuous wave (code) | 18" x 12" x 3-3/8" 88-418 nickel-cadmium battery or BA-386 dry cell battery Manpack 10-foot whip (manpack) doublet, or slant wire |

EMPLOYMENT

Radio set AN/PRC-74B is organic to special forces units and to Military Assistance Teams in Southeast Asia. It provides long-range patrol with a means of communicating with their base stations. The AN/PRC-74B is interchangeable with other high-frequency single side band radios such as the AN/GRC-106.

RADIO SET AN/PRC-74B

626960

CHARACTERISTICS

PHYSICAL

Type Portable, Transistorized

Major Components RT-794/PRC

Weight (w/Ni-Cad Battery) 38 lbs, 9 ozs

Size 18"H, 12"W, 3 3/4"D

Power Sources BB-418 Rechargeable Ni-Cad 15 lbs
70 BA-30s 27 lbs
2 ea BA-386s 9 lbs
Power Supply PP-4514/PRC-74 (Universal Power Supply and Battery Charger 40 lbs)

Mounting Man-Packed, Portable
Fixed

Antenna Whip Antenna AS-1887A/PRC-74
Antenna Kit MK-911A/PRC-74 (Slant Wire and Dipole Provided)

OPERATIONAL

Frequency Range 2-17.999 MHz

Channels 16,000

Range 30 Miles Voice w/Doublet
500 Miles CW

Output 15 watts PEP

Operation Modes SSB CW

Radio Signal SSB

Faint handwritten notes at the bottom of the page.

EMPLOYMENT

Radio Set AN/PRC-74B provides voice or CW communications in areas where direct line-of-sight communication is not possible. The set uses both ground wave and sky wave propagation.

DEVELOPMENT BACKGROUND

Radio Set AN/PRC-74 (Hughes HC-162) was developed by Hughes Aircraft Company primarily for the military market. The frequency range, originally 2 through 11.999 MHz, has been increased to 17.999 MHz. This set is an interim radio set to satisfy the man packed, high frequency, single sideband (HF, SSB) requirements. The AN/PRC-74 (2-11.999 MHz) was issued for user tests in 1964. In early 1966 the AN/PRC-74 was modified to provide coder burst transmission capability. The modified set, AN/PRC-74A, was initially delivered for Army use in June 1966. The extended frequency range version, AN/PRC-74B (2-17.999 MHz) was issued to Army units in early 1967.

DESCRIPTION

The AN/PRC-74B is a low powered, fully transistorized receiver-transmitter constructed on modular principles. The set operates on a single frequency for both transmit and receive functions. The transmitter is operated by either a push-to-talk microphone button or a telegraph key. The receiver is operative only when the transmitter is not being used. Therefore, communication is on a one-way reversible basis.

Test Set AN/PRM-31, also developed by Hughes, is designed for the rapid location of faulty modules in the radio set. It is intended for use at direct support level.

