

umirtic.J44 clansman UHF/AM Manpack Transceiver

The PRC344 is a lightweight UHF/AM radio station. It is interoperable with the PTR1751 airborne transmitter/receiver and the PVS1760 and PVS1730 series of shipborne and ground multi-channel equipments.

It is suitable both for ground-to-air links between combat troops and their supporting ground-attack aircraft and for control communications for emergency airfields and helicopter landing pads. It can also be used in small naval craft for the control of marine corps assault troops and naval landing parties.

The PRC344 is an AM transmitter/receiver operating in the 225 to 399.95 MHz band with 50 kHz spacing, giving a choice of 3500 synthesised speech channels. Remote-control facilities operable up to 3 km are incorporated; rebroadcast and homing beacon facilities are also provided.

The transmitter output of 2.5 W with the battle or elevated omnidirectional antenna gives an operational range of greater than 160 km for ground-to-aircraft working at an altitude of 9000 m and 16 km for ground-to-ground (line-of-sight) working.

Operation involves channel selection by three decade rotary switches with two further controls for mode selection and volume level. The frequency indicator can be illuminated by switched dial light.

As a manpack, the radio is operated from rechargeable Ni/Cd batteries of 1 or 3.3 Ah capacity. Alternatively the radio can be powered by the hand generator system which includes a 1 Ah rechargeable Ni/Cd battery.

With its manpack carrier and battery the PRC344 *can be used as a clip-in vehicle installation*. A vehicle-mounted discone antenna is used and the battery is float-charged by a DC charging unit from the vehicle supply.

The radio can also be used as a ground station feeding the elevated discone antenna. The PRC344 uses the standard range of ancillaries.

Status

In production as part of the Clansman programme and in service with the British Army, the Royal Navy and Royal Air Force. In early 1979 Plessey received an order worth more than £250 000 from an unnamed Middle Eastern customer for PRC344 equipments to replace Larkspur A43 sets. In August 1979 the Royal Netherlands Marine Corps ordered a number of PRC344 sets since when further orders have been received from countries in Africa and the Middle East.

Technical Specification

Mode: AM

Frequency range: 225-399.95 MHz

Number of channels: 3500 digitally synthesised

Channel spacing: 50 kHz

Power output: 2.5 W (carrier) typical, 2 W minimum

Power supply: 28 V DC (22-29 V)

Consumption

transmit: 28 W

receive: 5 W

Battery life (3.3 Ah): 12 h at 1:9 TX:RX

Temperature range: -33 to +52°C plus allowance for solar radiation

Altitude: to 9000 m

Additional facilities: VOGAD control with over 26 dB dynamic range. Beacon and rebroadcast facilities with intercom facility in rebroadcast mode. Remote-control up to 3 km of field cable.

DIMENSIONS EXCL BATTERY

(ENVELOPE SIZE INCL CONNECTORS, ETC)

Height: 77 mm

Width: 223 mm

Depth: 240 mm

Weight: 4 kg

INCL 3.3 AH BATTERY AND AUDIO UNIT

Height: 77 mm

Width: 223 mm

Depth: 363 mm

Weight: 7.5 kg

Operational Specification

Designed to DEF-STAN 00-1 categories A1, A2, B1, B2, B3 and C1. Meets requirements of DEF-133, L3 and the relevant clauses of DEF-STAN-07-55.

Manufacturer

Siemens Plessey Systems, Tactical Communications Systems Division, Christchurch.