#### SUMMARY OF DATA

### **PURPOSE**

Radio Teletype (RATT) equipment in HM Ships is used in conjunction with wireless equipment to enable messages to be transmitted and received by automatic printing machines.

### BRIEF DESCRIPTION

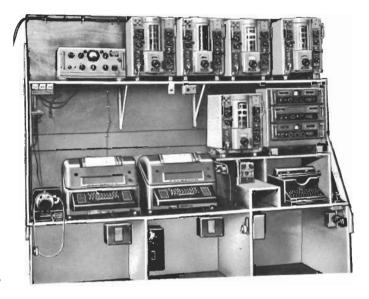
### (a) Broadcast RATT Reception

The audio output of a 840D receiver, or of two 840D, or one 840D and one 841, receivers is fed to the converter—comparator. The latter automatically selects the output which, at any instant, is contributing the greater amplitude, and converts it into current pulses for operating the teletypewriter in accordance with a definite code.

## (b) UHF RATT Transmission and Reception

When transmitting, operation of the teletype—writer keyboard causes pulses of current peculiar to each character to be fed to the Radio Teletype Terminal Set AN/SGC-1A where they are converted into "mark" and "space" tones. These tones are fed into the microphone circuit of the transmitter.

When receiving, the two—tone output from the receiver is converted into current pulses in the terminal set. These are used for operating the teletypewriter, causing it to print in accordance with the code received.



TYPICAL UHF AND BROADCAST RATT BAYS

### MAJOR UNITS

### (a) Broadcast Reception Bay

- (i) Frequency-Shift Converter Comparator Group AN/URA-8B (American).
- (ii) Teletypewriter TT-70A/UG (American).
- (iii) Rectifier PP-424/U (American) AP 28070 or AP F1/163279.
- (iv) Receivers B40D and B41 (part of Receiver Outfits CDW and CDY or CAY and CAZ).

#### (b) UHF Transmission and Reception Bay

- (i) Radio Teletype Terminal Set AN/SGC-1A (American).
- (ii) Teletypewriter TT-70A/UG (American).
- (iii) Rectifier PP-414/U (American) AP 28070 or AP F1/163279.
- (iv) Transmitter Auto 6S/5 or 6S/6.
- (v) AP 27922 Teleprinter Type 78P/N3 with Perforating Attachment, or AP 28085 Teleprinter Keyboard Perforator 7P/N3.

Cruisers and above

(vi) KH Control Unit (for connecting any transmitter and receiver to the RATT equipment).

# PRINCIPAL POWER REQUIREMENTS

Converter—Comparator AN/URA-88

115 V 50/60 Hz 166 W

Teletypewriter TT~70A/UG

115 V 50/60 Hz 95 W

Terminal Set AN/SOC-1A

115 V 50/60 Hz 86 W

Rectifier PP-424/U

115 V/230 V 50/60 Hz 300 W

# REMARKS

The main items of RATT terminal equipment are of American design and have been supplied under the Mutual Defence Aid Programme. These items will eventually be replaced by British equipment.

# HANDBOOK

BR 2133

## E LIST

E1120

# INSTALLATION SPECIFICATION

B794