

RANGING OUTFITS RTB AND RTE

SUMMARY OF DATA

PURPOSE

Ranging Outfit RTB is fitted in the Target Indication Room adjacent to the Target Indication Unit to provide accurate range transmission of targets selected on the Target Plot Indicator by the T.I.O. for long and close range armaments. Ranging Outfit RTE is fitted in Types 277 or 293 Radar Office to provide accurate range transmission of targets selected on the P.P.I. for tactical purposes, and in destroyers as stand-by range transmission for the armament.

MAJOR UNITS

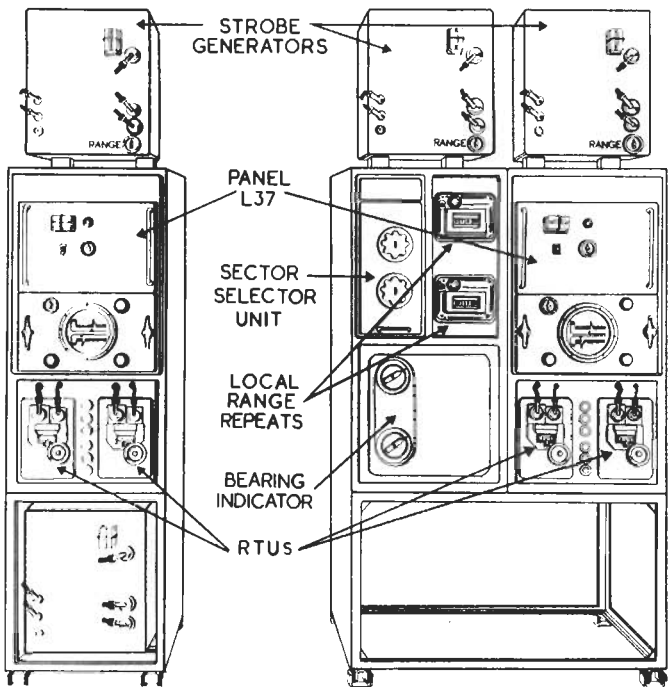
RANGING OUTFIT RTB

1. Patt. W7384B Generator (Strobe) and Signal Unit Des. F (2 off)
2. Patt. 54441 Range Transmitting Unit Des. 53 (2 off)
3. Patt. W9081 Panel L37 (RB)
4. Patt. 55418 Range Transmission Rack, Des. 2
5. Patt. 55196 Box, Range Indicating, Des. 2, 6 lamps

Items 1, 2 and 5 are components of Item 4.

RANGING OUTFIT RTE

1. Patt. W7384B Generator (Strobe) and Signal Unit Des. F (2 off)
2. Patt. W7473 Range Transmitting Unit Des. 52 (M type) (2 off)
3. Patt. W9081 Panel L37 (RB)
4. Patt. 54984 Range Transmission Rack Des. 1 L.H.
5. Patt. 54985 Range Transmission Rack Des. 1 R.H.
6. Patt. 55226 Range Transmission Rack Support Frame
7. Patt. W9083 Sector Selector Unit
8. Patt. 55196 Box, Indicating, Des. 2, 6 lamps



RTB

RTE

Items 1 and 7 are components of Item 4  
Items 2, 3 and 8 are components of Item 5

PHYSICAL DATA

	<u>Height</u>	<u>Width</u>	<u>Depth</u>	<u>Weight</u>
Ranging Outfit RTB	6' 7"	1' 5½"	2' 0½"	330 lb
Ranging Outfit RTE	6' 4½"	2' 10"	2' 0"	

BRIEF DESCRIPTION

Either outfit can deal simultaneously with two different targets in separate bearing sectors as selected by control knobs in the T.I.U. in the case of RTB, or the Sector Selector Unit in the case of RTE. When the aerial of the parent radar equipment is rotating, the echoes in the two selected bearings appear on two Class A scans, one for each sector, on the C.R.T. of the Panel L37. One scan is normal, the other is inverted. Two strobe generators provide ranging strobe spots for the two A scans, one per A scan, and each strobe spot is positioned by its associated R.T.U. which transmits the range to the local and remote indicators where fitted. The R.T.U.'s. of both outfits operate on three ranges viz.

RANGING OUTFIT RTB .

- 0 - 10,000 yards )
- 0 - 36,000 yards ) Magslip Transmission
- 0 - 100,000 yards )

RANGING OUTFIT RTE .

- 0 - 15,000 yards in 25 yard steps "M" type transmission
- 0 - 60,000 yards in 100 yard steps "M" type transmission
- 0 - 150,000 yards in 250 yard steps "M" type transmission

The three range scales provided on the Panel L37 are

(a) Ranging Outfit RTB :

Scale 1 0 - 15,000 yards  
Scale 2 0 - 36,000 yards  
Scale 3 0 - 75,000 yards

(b) Ranging Outfit RTE

0 - 15,000 yards  
0 - 75,000 yards  
0 - 150,000 yards

#### POWER REQUIREMENTS AND CONSUMPTION

Ranging Outfit RTB . 50v 50 c/s for magships  
RTE

180V 500 c.p.s. single phase 200W

22V D.C. 40W

Ranging Outfit RTE . 22v. DC .

180V 500 c.p.s. single phase

#### HANDBOOK

B.R.1506

#### ESTABLISHMENT LIST

E.724

#### INSTALLATION SPECIFICATIONS

B.479 Ranging Outfit RTB .

B.721 Ranging Outfit RTE .