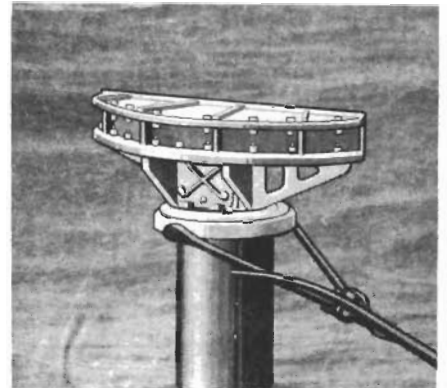


## TYPE 267 PW(1) SUMMARY OF DATA

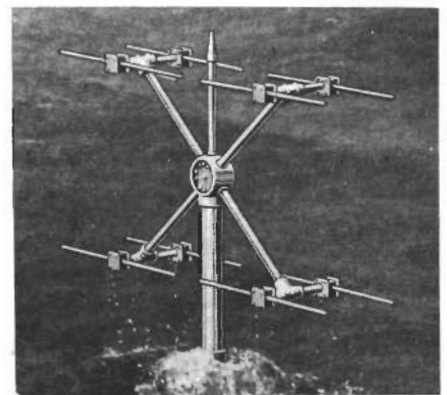
### PURPOSE

Air and Surface Warning Set fitted in "A" and "T" Class Submarines.

	<u>Seaguard</u>	<u>Airguard</u>
<b>FREQUENCY</b>	9650 - 9700 Mc/s (X-band)	214 Mc/s
<b>POWER OUTPUT</b>	30 kW (peak)	100 kW (peak)
<b>PULSE REPETITION FREQUENCY</b>	500 pulses per second	500 pulses per second
<b>PULSE LENGTH</b>	1.2 microseconds	1.2 microseconds
<b>BEAM-WIDTH</b>	Horizontal - 4.5° Vertical - 38.5° (Aerial Outfit ANF)	Horizontal - 52° Vertical - 83° (Aerial Outfit APT)
<b>INTERMEDIATE FREQUENCY</b>	11 Mc/s	11 Mc/s
<b>RECEIVER BANDWIDTH</b>	1.5 Mc/s	1.5 Mc/s
<b>POWER REQUIREMENTS AND CONSUMPTION</b>	(i) 180V 500 c/s 1250 watts (ii) 230V 50 c/s 1200 watts (iii) 24V D.C. 275 watts (iv) 22V D.C. 80 watts (setworking) 140 watts (set not working) (v) 220V D.C. 400 watts (set not working) Supplies (i) (ii) and (iii) are obtained from A.C. Supply Outfit DXA	



AERIAL OUTFIT ANF



AERIAL OUTFIT APT

**HEAT DISSIPATION IN OFFICE** 1½ kW approx.

### MAJOR UNITS

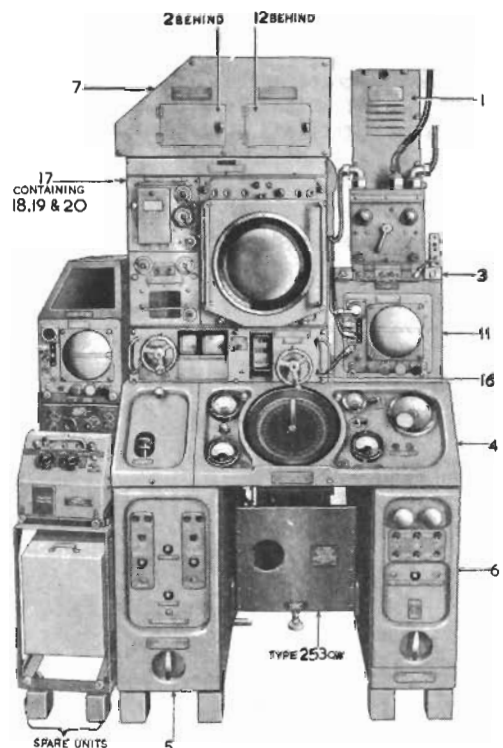
1. Patt.55768 Panel 3BJ Transmitting & Modulating
2. Patt.56806 Gain Control & Distribution Unit Des.2.
3. Patt.57906 Framework Steel 22 x 11 x 10 ins.
4. Patt.65710B Control Unit Upper Design 2.
5. Patt.65711 Control Unit Lower Left Design 2.
6. Patt.65712 Control Unit Lower Right Design 2.
7. Patt.66694 Framework Steel 22 x 19½ x 10 ins.
8. Patt.66697 Rectifier Unit Design 138.
9. Patt.66699 Transmitter and Pre-amplifier Unit Des.9.
10. Patt.67043 Control Unit Upper Design 3.

#### Receiver Outfit CPK

11. Patt.66695 Cathode Ray Unit Design 43
12. Patt.66696 Receiver P70

#### Display Outfit JP2

13. Patt.56961 Display Unit Design 8.
14. Patt.56963 Rectifier Unit Design 65.
15. Patt.58314 Control Unit Design 39.
16. Patt.59963 Range Bearing Unit Design 4.



TYPE 267PW CONSOLE

## Display Outfit JP2 (contd.)

17. Patt.59990 Display Panel Design 2.
18. Patt.59991 Display Unit Design 29.
19. Patt.59992 Mixer Unit Design 10.
20. Patt.59993 Time Base Unit Design 28.

Item 17 contains Items 18, 19 and 20.

All items except Items 8, 9 are fitted in one unit (Console).

## PHYSICAL DATA

Weight of Console complete	12½ cwt.
Weight of Remote Display Equipment	4½ cwt.
Weight of Aerial Outfit ANF	3 cwt.
Weight of Aerial Outfit APT	2 cwt.
Dimension of Typical Office "A" Class	- 5'4" x 6' x 6'6" high
"T" Class	- 3'2" x 6'4" x 6'4" high

## ASSOCIATED AERIAL OUTFITS

Aerial Outfit ANF comprising -

- Patt. 56541 Reflector Unit
- Patt. 66247 Aerial Drive Assembly
- Patt. 56937 Spark Suppression Unit
- Patt. 55756A/B Test Set Design 6.  
and Waveguides etc.

Aerial Outfit APT comprising -

- Patt. 56116 Filter Unit Design 11 H/F
- Patt. 56829 Switch Unit Common Aerial Des.4.
- Patt. 58497 Aerial Unipole Design 5.
- Patt. 57980 Aerial Unit Design 27.
- Patt. W325A Selsyn Motor

## ASSOCIATED POWER SUPPLY OUTFIT

A.C. Supply Outfit DXA (see respective Summary of Data Sheet)

## BRIEF DESCRIPTION

Type 267PW is fitted in "A" and "T" Class submarines to give air warning and surface warning with P.P.I. display. The air warning side operates on the 1.4 metre band, the surface warning on the X-band. Only one band can be used at any one time. X-band operation is possible from fully surfaced to periscope depth whilst operation on the 1.4 metre band is only possible from fully surfaced to semi-submerged depth, as the throw of the mast is insufficient to raise the aerial to the required height from periscope depth.

The main portion of the equipment is fitted in a Console in the Radar Office. The arrangement of this console is identical for both "A" and "T" Class submarines. The remaining equipment is fitted around the office. A remote display equipment is fitted in the Control Room.

Two separate aerial outfits are fitted, ANF which uses a periscopic aerial mast and a waveguide feeder system and APT which has a telescopic mast and a cable feeder system. Both aeriels are power driven and can be made to rotate one at a time or together in synchronism. The speed of rotation is 4.5 to 5 R.P.M. (approx.).

## REMARKS

The associated interrogator Type 2530W is fitted in the Console.

## HANDBOOK

B.R.1846(1) (2)

## ESTABLISHMENT LISTS

E.952 (Type 267PW and Receiver Outfit CPK) E.847 (Display Outfit JP2)  
E.486 (Aerial Outfit ANF) and E.523 (Aerial Outfit APT)

## INSTALLATION SPECIFICATION

B.600