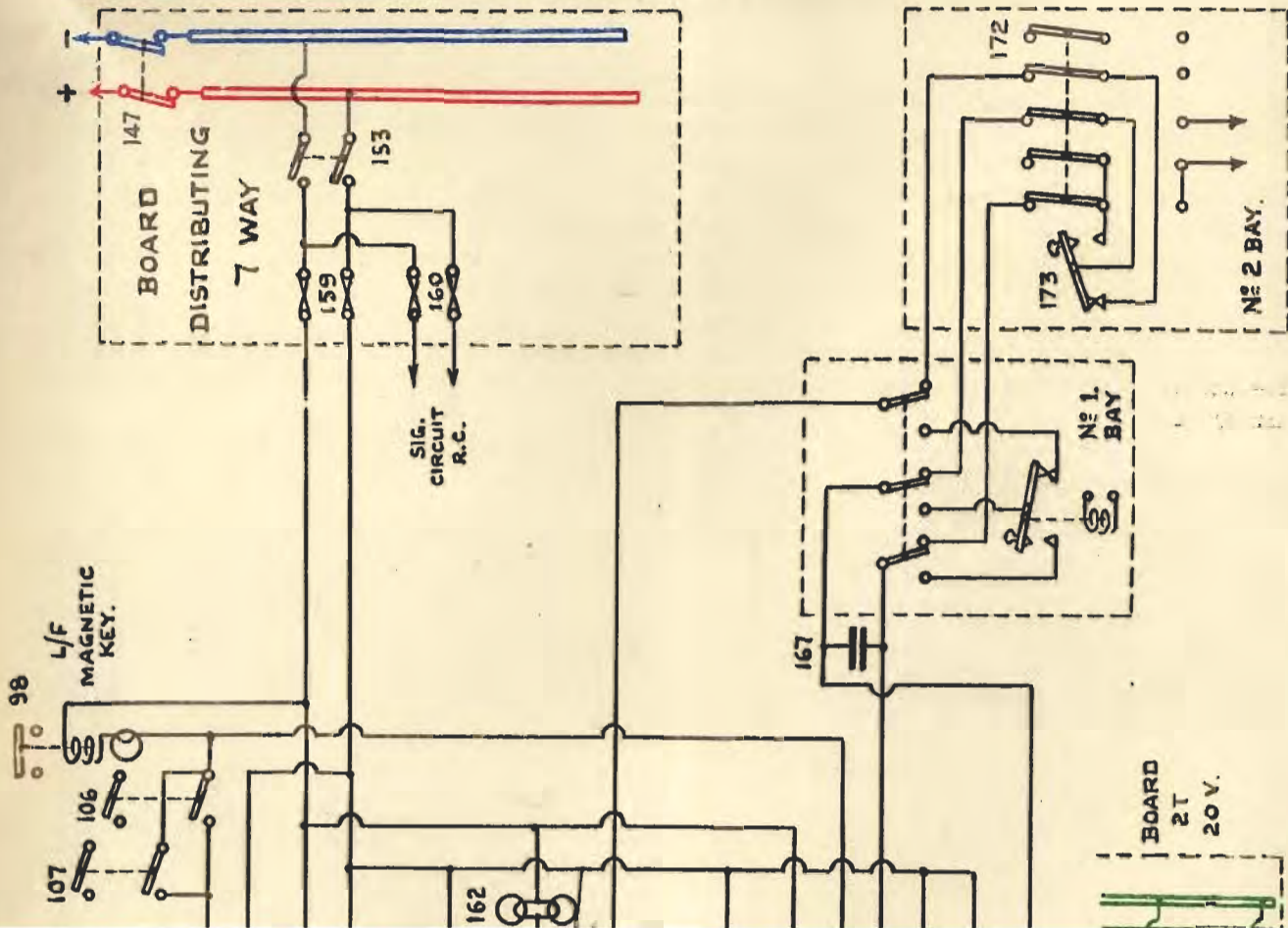


RN16

TYPE 49

D.C. AUXILIARY CIRCUITS



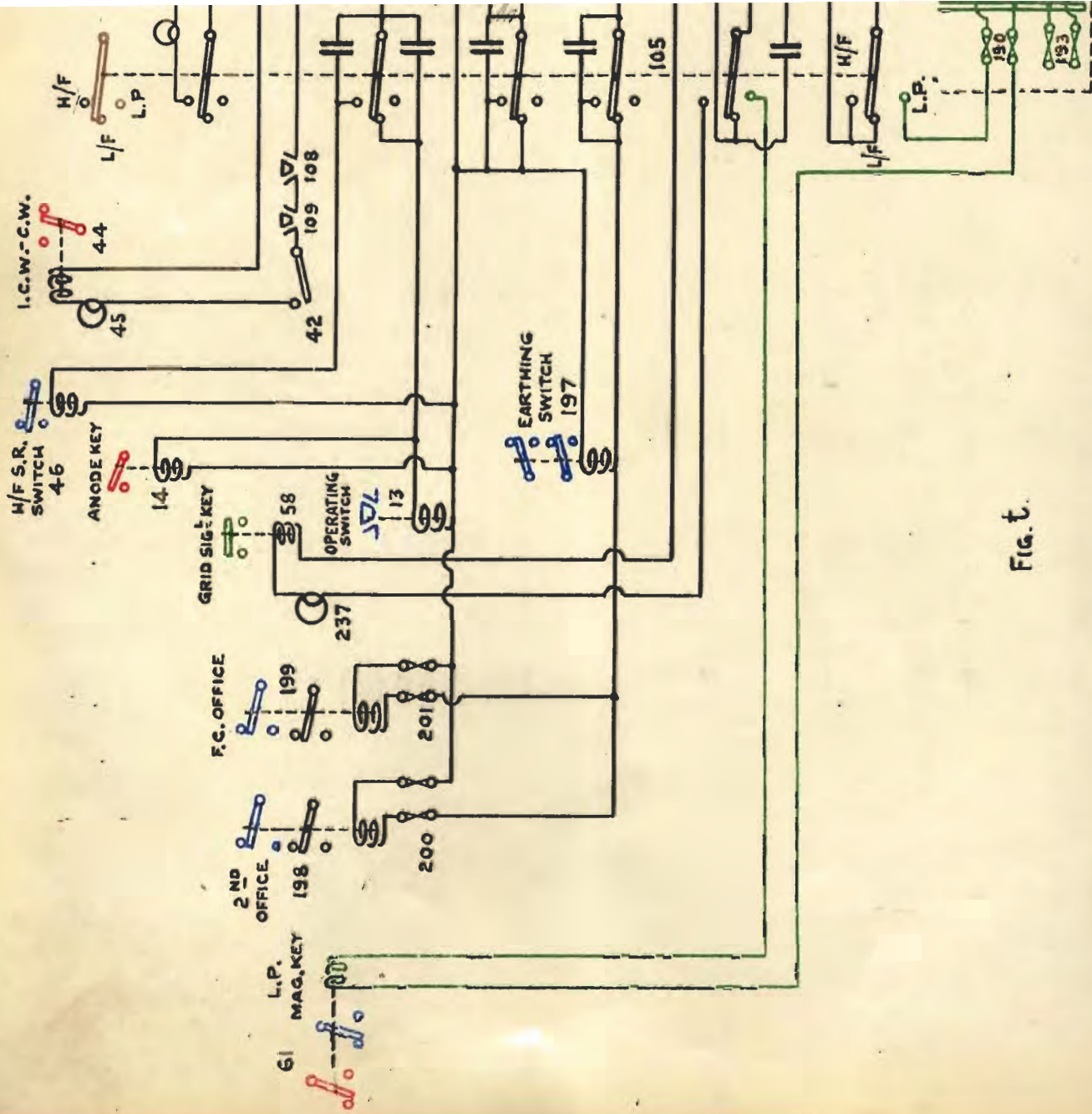


Fig. t.

TYPE 49

RN17

D.C. AUXILIARY CIRCUITS

The supply for the D.C. auxiliary circuits is from the board, distributing, 7 way. A main D.P. switch (147) controls the supply to the six subsidiary D.P. switches (149) to (154) (see figure z.)

These switches control supplies to:-

- (i) Lights.
- (ii) Fan.
- (iii) Filament control.
- (iv) Signalling circuit. Signalling circuit (R.C.).
- (v) Radiator.
- (vi) Battery charging.

The filament control switch (151) and fuses (157) supply the bobbin circuit of the filament switch (31), the supply being completed by one contact of a double pole tumbler switch (107) mounted on the rack in the receiving bay (see figure u.) The other contact of the tumbler switch (107) completes the circuit to the bobbin of the L/F main magnetic key (98) when the auxiliary circuits' C.O.S. (105) is in the H/F position. (See figure t.). In ships where a second operator's bay is fitted a second tumbler switch (106) is fitted on the rack in the second bay and is connected in parallel with the tumbler switch (107) in the main operator's bay as shown in figure u.

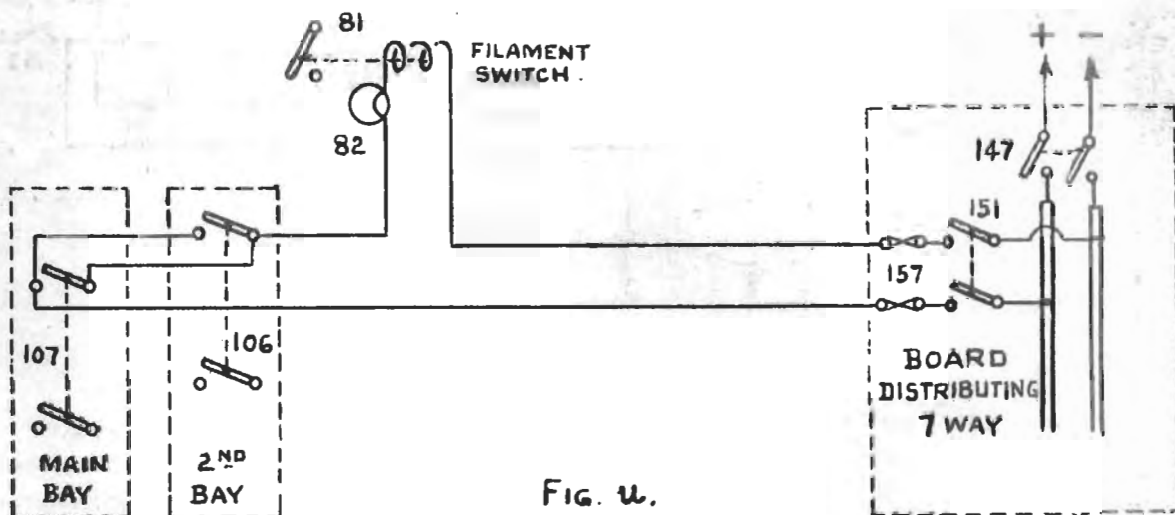


FIG. u.

The signalling circuit switch (103) and fuses (159) (see figure t.) supply the key circuits for operating the I.C.W. - C.W. switch (44), H/F send-receive switch (46), magnetic key (98), anode key (14), operating switch (13), grid signalling key (58), earthing switch (197) and the listening through keys (198)(199) in the second and F/C offices. The signalling circuits are changed over for the type of transmission required by means of the auxiliary circuits C.O.S.(105) which is mounted on the front of the rectifying panel and can be set to "H/F," "L/F" or "Low Power".

The circuits in use when the auxiliary circuits C.O.S.(105) is made to each of the positions stated above are as follows:-

"H/F" Position. One contact arm of the switch (105) completes the supply to the bobbin of the L/F magnetic key (98) when the tumbler switch (103) or (107) is made. The H/F, send-receive switch (46) earthing switch (197), second office and F/C office listening through keys (198)(199) are connected across the back contacts of the morse key (169) or (173). The grid signalling key (58) is connected across the front contacts of the morse key (169) or (173).

The circuits to the bobbins of the operating switch (13), anode key (14) and low power magnetic key (61) are broken.

"L/F" Position. The anode key (14), operating switch (13), earthing switch (197), second office and F/C office listening through keys (198)(199) are connected across the back contacts of the morse key (169) or (173). The L/F magnetic key (98) is connected across the front contacts of the morse key (169) or (173).

The circuits to the H/F send-receive switch (46), grid signalling key (58) and low power magnetic key (61) are broken.

"Low Power" Position. The back contacts of the morse key (169) or (173) are not used. The low power magnetic key (61) is connected across the front contacts of the morse key (169) or (173) which makes and breaks the 20 volt supply to the low power magnetic key bobbin.

The bobbin of the I.C.W. - C.W. switch (44) is connected in series with a 32 c.p.resistance lamp (45) and two safety switches (109)(109); the circuit being completed by the I.C.W. - C.W C.O.S.(42) which is mounted on the front of the rectifying panel.

REMOTE CONTROL CIRCUITS

Remote Control Circuits. In ships where remote control is fitted the remote control signalling circuits for operating the morse key (169) in the main receiving bay are supplied from a separate pair of fuses (100) marked "Signalling Circuit, R.C." on the 7 way distributing board.

A remote control attachment is fitted to the morse key (169) in the main bay and is connected to the R.C.O. morse key (177) by making the main bay remote control switch (170) and setting the R.C.O. remote control C.O.S. (176) to "Main Office".

The morse key (173), in No. 2 bay, is connected to the main-emergency switch (172), which is fitted under the base of the key (173). When this switch (172) is set to "main" the morse key (173) can be used to operate the main I/P, H/P or Low Power transmitter as required (see figure t.) When the switch (172) is set to "Emergency" the No. 2 bay morse key (173) is connected to the remote control switch (179) in the second W/T office and the operator in No. 2 bay can then remote control whichever transmitter in the second W/T office is connected to the R.C. switch (179).

The second office transmitters can also be remote controlled from the R.C.O. position by setting the R.C.O. remote control C.O.S. (176) to "second office" and making the remote control switch (174) in No. 2 bay.

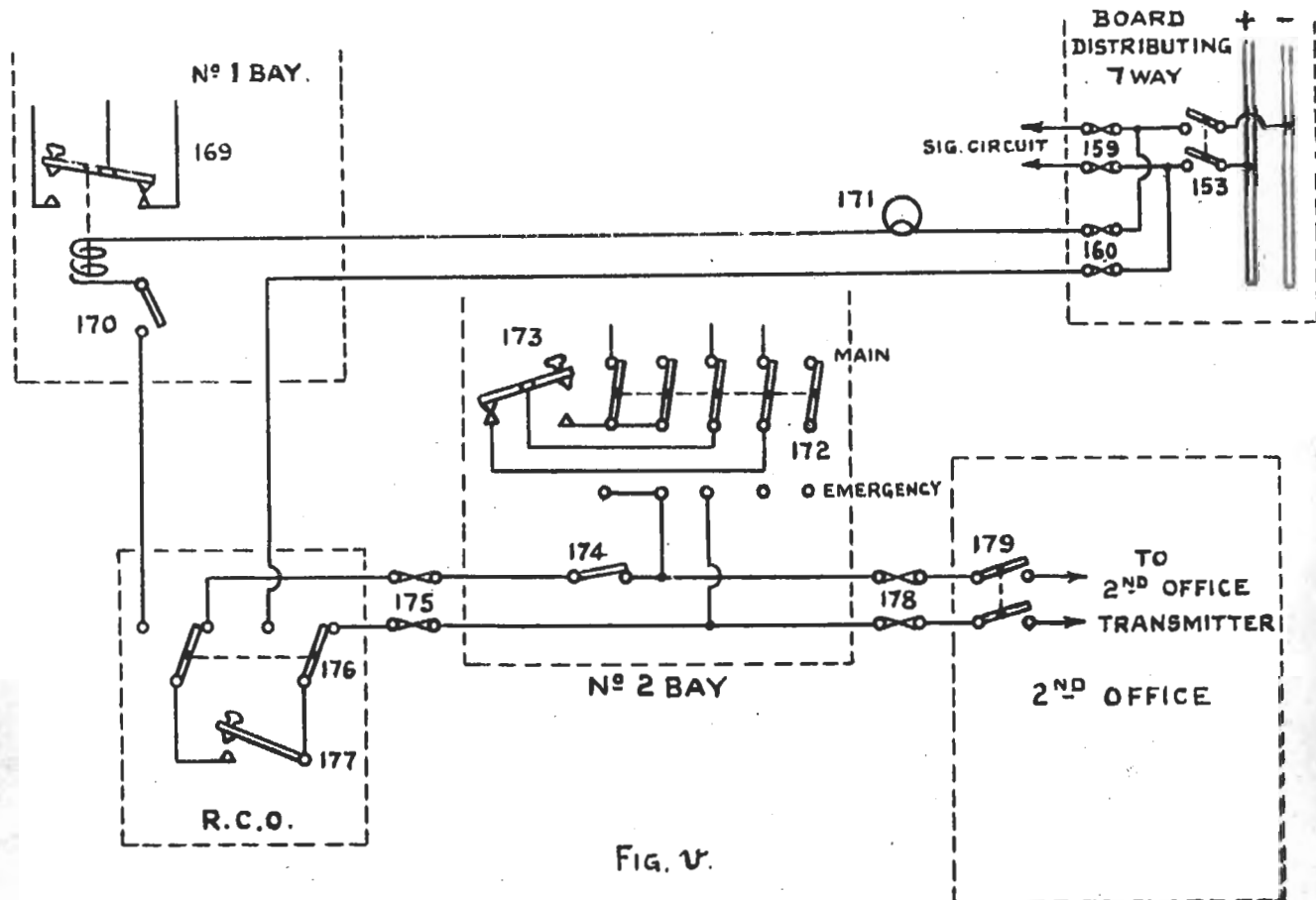


Fig. V.