

# TYPE 46 TRANSMITTER 3N H/F (CONT).

R111  
R123

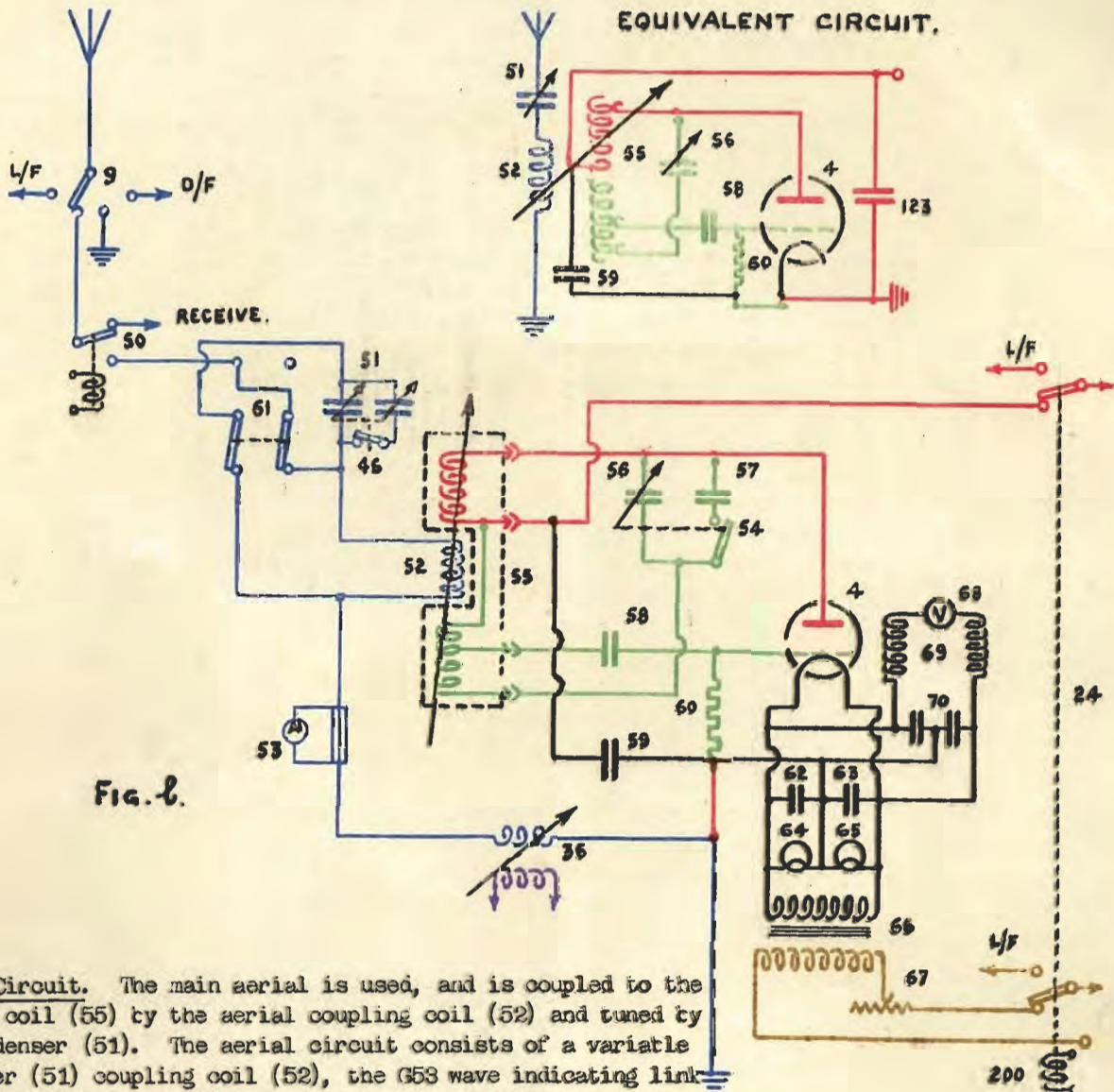


Fig. 6.

Aerial Circuit. The main aerial is used, and is coupled to the primary coil (55) by the aerial coupling coil (52) and tuned by the condenser (51). The aerial circuit consists of a variable condenser (51) coupling coil (52), the G53 wave indicating link circuit coupling coil (36) and aerial ammeter (53).

The coupling coil (52) is movable between the two halves of the primary coil (55) to obtain the correct degree of coupling.

The condenser (51) can be connected in series or parallel with the coupling coil (52) by means of the D.P. switch (61). In addition this condenser is so arranged that by means of a switch (46) fitted and controlled by a cam on the condenser spindle, half or all the fixed plates may be brought into use as necessary for tuning. The respective capacity values are 80 and 150 cms. (.08 and .15 jars).

The coil (36) is coupled to the link circuit of the G53 (see page GD5) for checking the transmitted frequencies.

The aerial link switch (9) connects the aerial to the H/F send-receive switch (50). This switch (50) when operated (see figure u.) completes the transmitting aerial circuit.

Tuning. Insert the appropriate primary coil (55) for the frequency required. Adjust the condenser (56) as indicated in the approximate adjustment table issued with the set. Make the appropriate auxiliary circuit switches and switch on the set. The primary A.C. voltage must not exceed 135 volts.

Press the morse key (151) (see figure w.) and adjust the aerial condenser (51) for a maximum reading in the aerial ammeter (53). Note the frequency reading on the wave indicator G53 (35) (see figure z.) and adjust the condenser (56) until the desired frequency is indicated by the G53. Readjust the aerial condenser (51) and aerial coupling (52) for a maximum aerial current, then reduce the coupling until the aerial current has fallen about 10%. The condenser (56) may require slight readjustment and the set is now roughly tuned.

Accurate adjustment is now carried out with the G7 or G8 wavemeter (see pages GA8 and GA9) and the G31 oscillator as described on pages GC3 -- 4.

Finally tune the wave indicator G53 (see page GD5) to the transmitted frequency and carefully note the adjustments for checking any future transmissions on that frequency.

It should be noted that the aerial condenser (51) and primary condenser (56) should not be adjusted to work either of the switches (46) and (54) while power is applied to the transmitter or arcing will occur at the switch contacts.