



## SERVICE BULLETIN

EQUIPMENT TYPE 75A-1

BULLETIN NO. 3

DATE 11-4-47  
Page 1 of 1

## MUTING COLLINS 75A-1 RECEIVER FOR CW BREAK-IN OPERATION

A method has been worked out wherein the 75A-1 Receiver may be silenced when CW break-in operation; is desired. This muting is accomplished by applying a 20 volt positive potential to the cathode (pin #8) of the 6H6 detector limiter tube (V7) when the transmitting key is closed. This 20 volts should drop to zero when the key is up. A one half megohm isolating resistor should be connected to the socket pin #8 of V7 in series with the lead running out to the plus 20 volts.

One place this muting voltage may be obtained is from the voltage drop across a cathode resistor in the transmitter. The tube in the transmitter whose cathode resistor is used for this purpose should be a tube which is biased to cut off when the transmitter key is open.

It is necessary that a common ground connection be used between receiver chassis and transmitter chassis.

This voltage may also be obtained from a B battery of a low voltage power supply, and its application to pin #8 of V7 in the receiver may be controlled by a relay which in turn is operated by the transmitter keying circuit.

In the event cathode keying is used in the transmitter, a resistor may be placed between key and ground, and the voltage drop across this resistor may be used to supply the muting voltage.

You will note that this muting system does not provide protection to the input of the receiver. Protection of the input circuits of the receiver is a separate problem. It is recommended that a small neon bulb be connected between antenna and ground terminals of the receiver for this purpose. In the event a high powered transmitter is used, it is recommended that an antenna ground shorting relay be used in addition to the neon bulb.

