

## ICOM IC-R70 MODIFICATIONS

## IMPROVED AM SELECTIVITY:

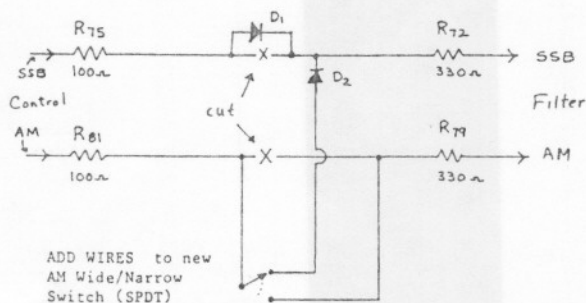
This mod will allow the SSB PBT filter ( approx. 2.7 khz) to be used in place of the present 6 khz AM PBT filter. With PBT "OFF" the AM BW will be 2.7 khz. With PBT "ON" the BW may be varied considerably, down to about 1.5 khz. In actual use this is very effective and well worth the trouble of modifying the set.

REFER to your R-70 large fold out schematic.

Locate FI 4 and FI 5 near the center fold. Further locate R81/R79 (AM) and R75/R72 (SSB). Physically, R72 and R79 are located near their filters, while R75 and R 81 are located some distance away. They are joined by wires, not PC traces, which is convenient!

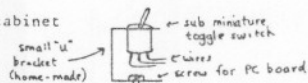
- 1- cut the SSB control wire near R 72 (filter end)
- 2- remove the other wire from R81 to R79 and discard.
- 3- install two diodes at R-72 - i.e. where you removed the one end of the SSB wire.
- 4- install a switch to select between either filter - wire as in diagram below.

D1,D2 1N914 or similar switching diode. Radio Shack # 276-1620



The switch can be installed in a number of spots ( the wires need not be shielded as they only carry a small DC switching voltage ) such as :

- 1- the rear panel
- 2- inside the "hatch" on the top of the cabinet



- 3- on the front panel NOISE BLANKER WIDE/NARROW switch which has two sections, only one of which needs to be use. This involves removing the front panel and knobs ( with many screws etc ). Then remove the NB W/N switch ( small screw to the left of it ) and separate the terminals and add the 3 wires as in the above diagram. The only drawback is that you tie in the NB time constant with the bandwidth which may be inconvenient in some circumstances. However the added advantage of having the switch on the front ( not top or side ) more than makes up for it.

## ALLOW PREAMP TO FUNCTION BELOW 1600 KHZ

Very simple, just snip the red wire on the right hand side of the set ( in the RF bandpass filter section ) that goes from R59 (10 k) to L15. This wire provides "BAND O" data to the preamp control to turn it off. Without the wire, the preamp may be turned on/off via the normal front panel control.

In many cases the preamp will not improve the signal - and may actually contribute more IM distortion etc; however at least now you have the option of using it if you need it. The Preamp runs out of gain below 300 khz approx and definately should not be used down here!

*Don Moman*