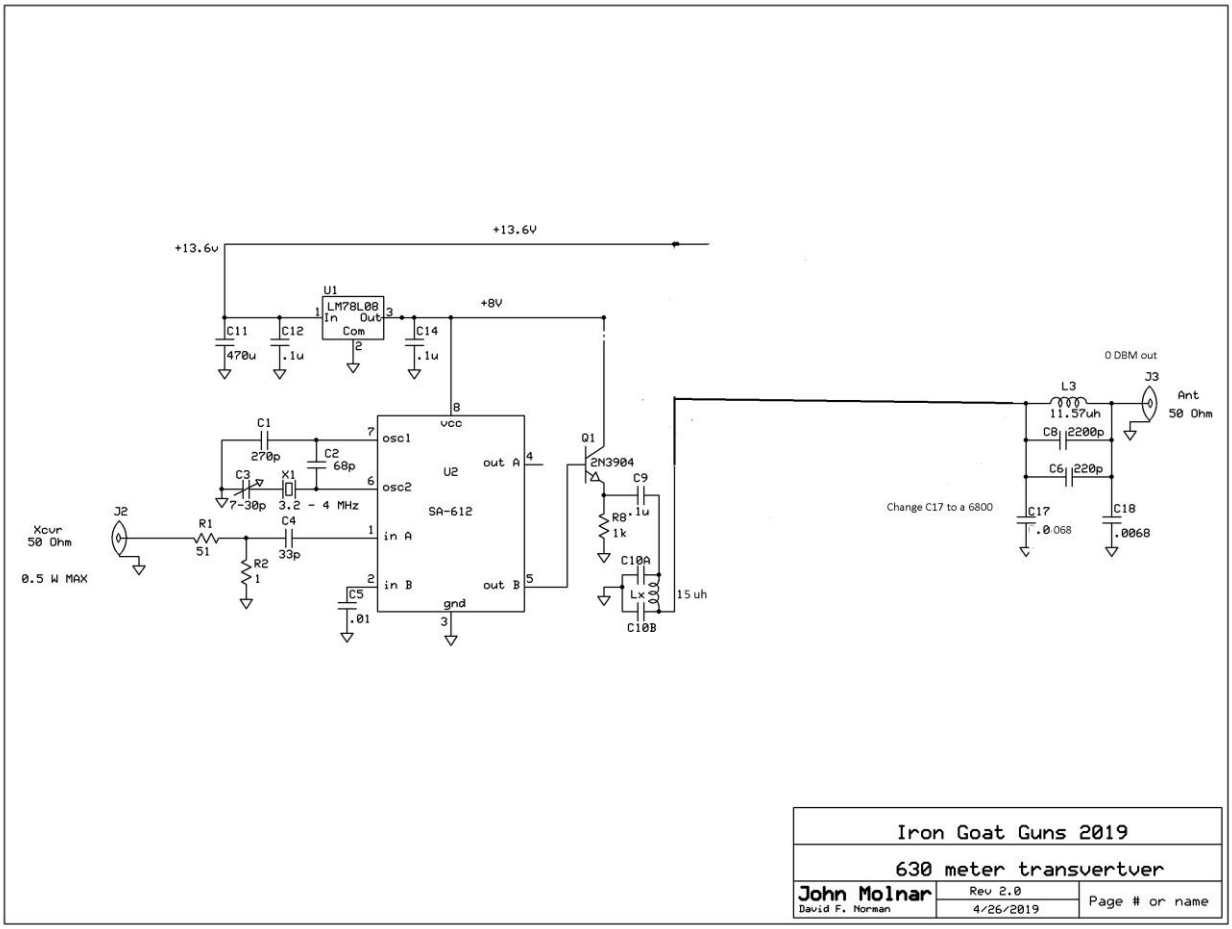
Modification of the W5DFN 630M Transverter for linear 0 dbm out, and Block diagram of the station configuration.

The output of the converter is -2 dbm which is a good level to drive any of the 0dbm linear or nonlinear amps designed for a 0 dbm input. Bench and on the air test have shown that this is a good way to get on 630 meters linear or nonlinear at 100 watts or above. The test was made with a 100-watt linear amp, and the on air QSO reported excellent audio from the modified converter.

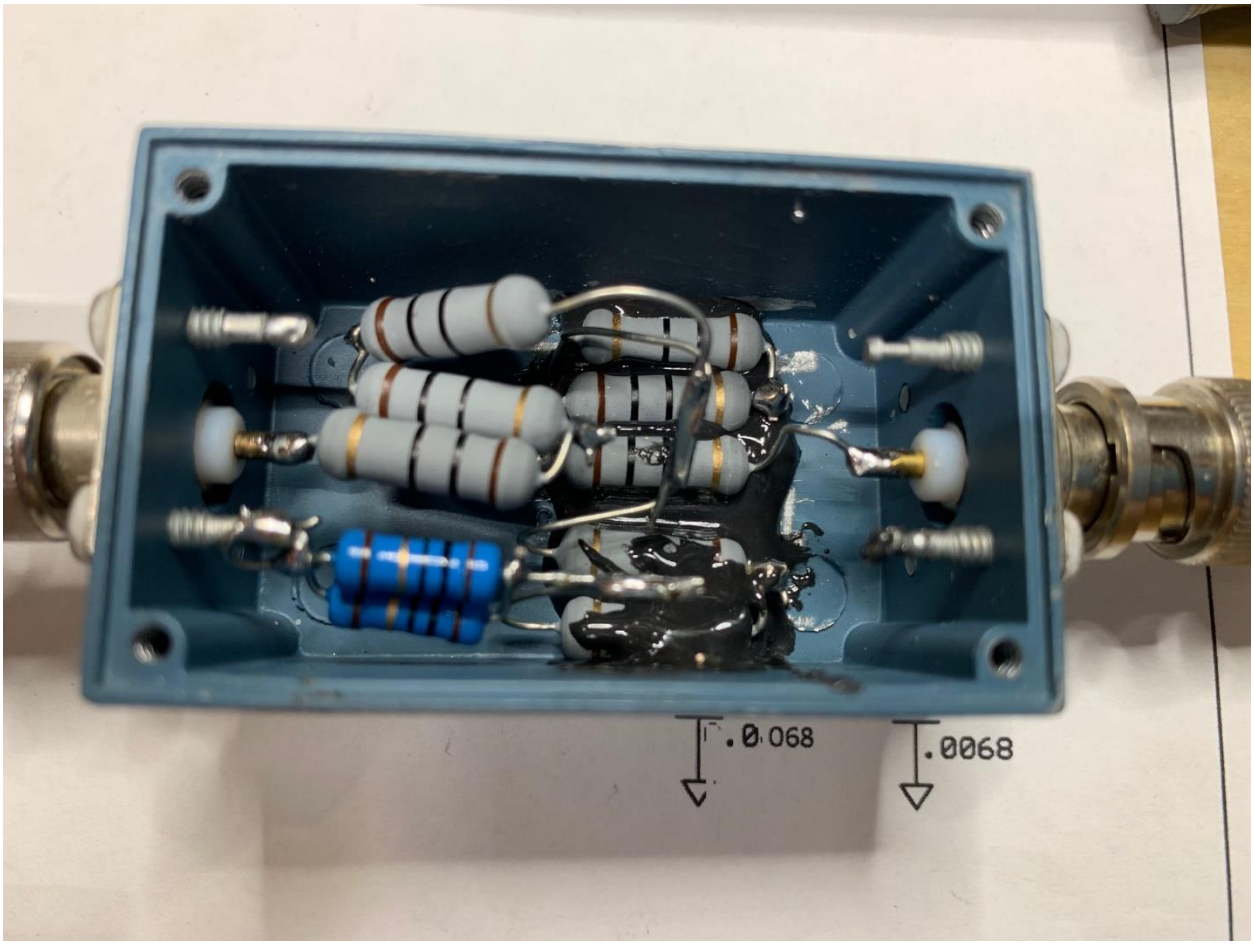
Modified W5DFN converter available at **w5dfn.com**



When using the converter for linear operation a 12 db 50 ohm pad is needed on the input of the converter. 5 watts from the rig will be connected to the pad and the +25 dbm output from the pad will drive the converter. This pad can be used at all times even if you're running a nonlinear amp. The converter can still be used with 5-watt drive (no pad) but the converter will

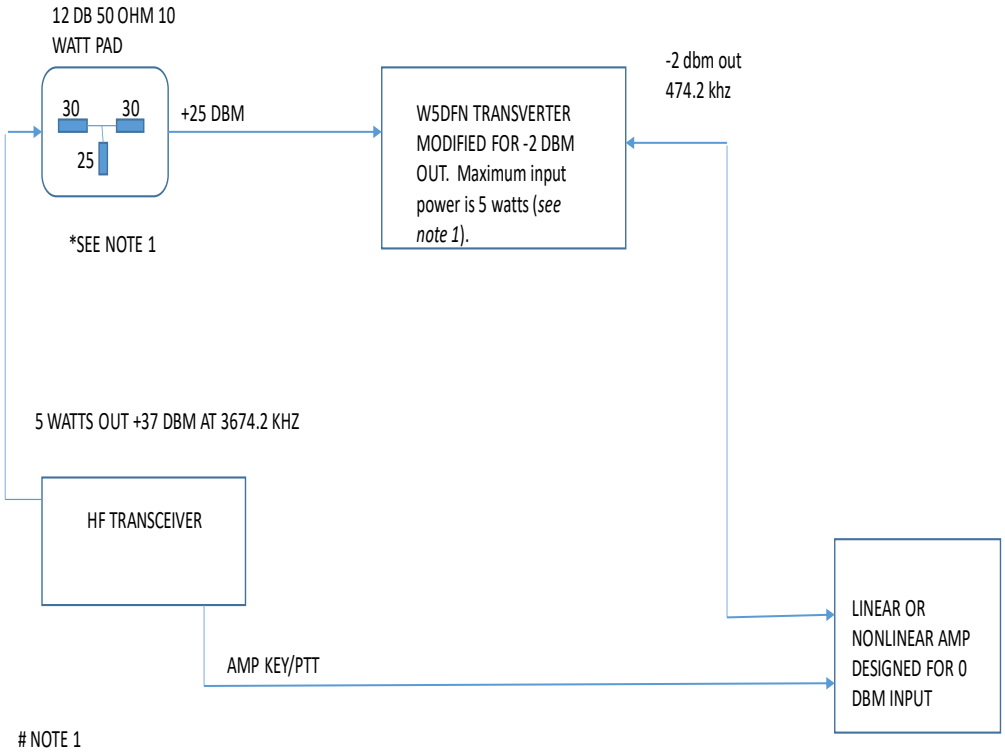
not be operating in the linear range. The output will still be -2 dbm out with or without the pad. The linear range of the converter is from 0 to +25 dbm input.

1 The 12db pad was made using 10 ohm 2 watt resistors. This gives you a 10-watt pad. I used JBweld in the pad box to help dissipate the heat from the resistors. *See picture* The JBweld was only used on the input side, that is where most of the heat will be generated from the 5 watt transmitter.



See Station block diagram on the next page showing the transmit path only. If using the transmit antenna for receive, an antenna switching network will be required.

Email me at my QRZ address if you have any questions. Tom WB4JWM



NOTE 1

The pad is made by using eight 10 ohm and one 5 ohm 2 watt resistors.
The pad is necessary if using the converter for linear operation. The converter can be fed without the pad up to 5 watts but the output of the converter won't be linear.
The converter input is linear from 0 to+25 dbm.

The -2 dbm out converter is available from David W5DFN. See his web site w5dfn.com