



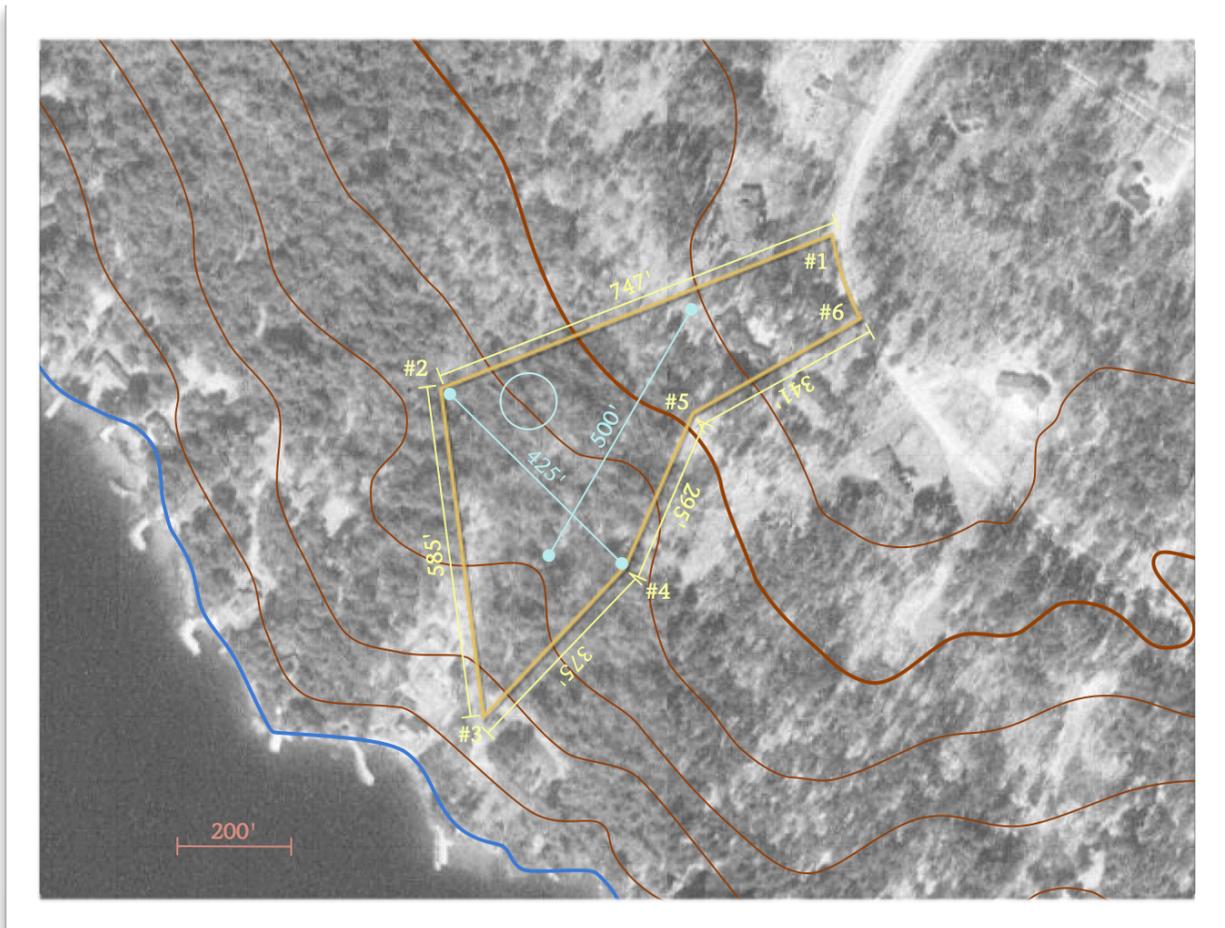
# Daytime noise floor

Below, Elecraft P3 panadapter screen captures for 160m and 80m, taken near 13Z in early September. Four cases for each band, for each of two reversible beverages.

## RECEIVE ANTENNA LAYOUT

The beverages are installed over terrain that generally slopes down towards Southwest at about 5 degrees. The layout below shows the two beverage wires in cyan. The cyan circle indicates a potential location for a W1FV 9-element receive array, with 140-foot diameter.

*K1GQ Beverage Layout*



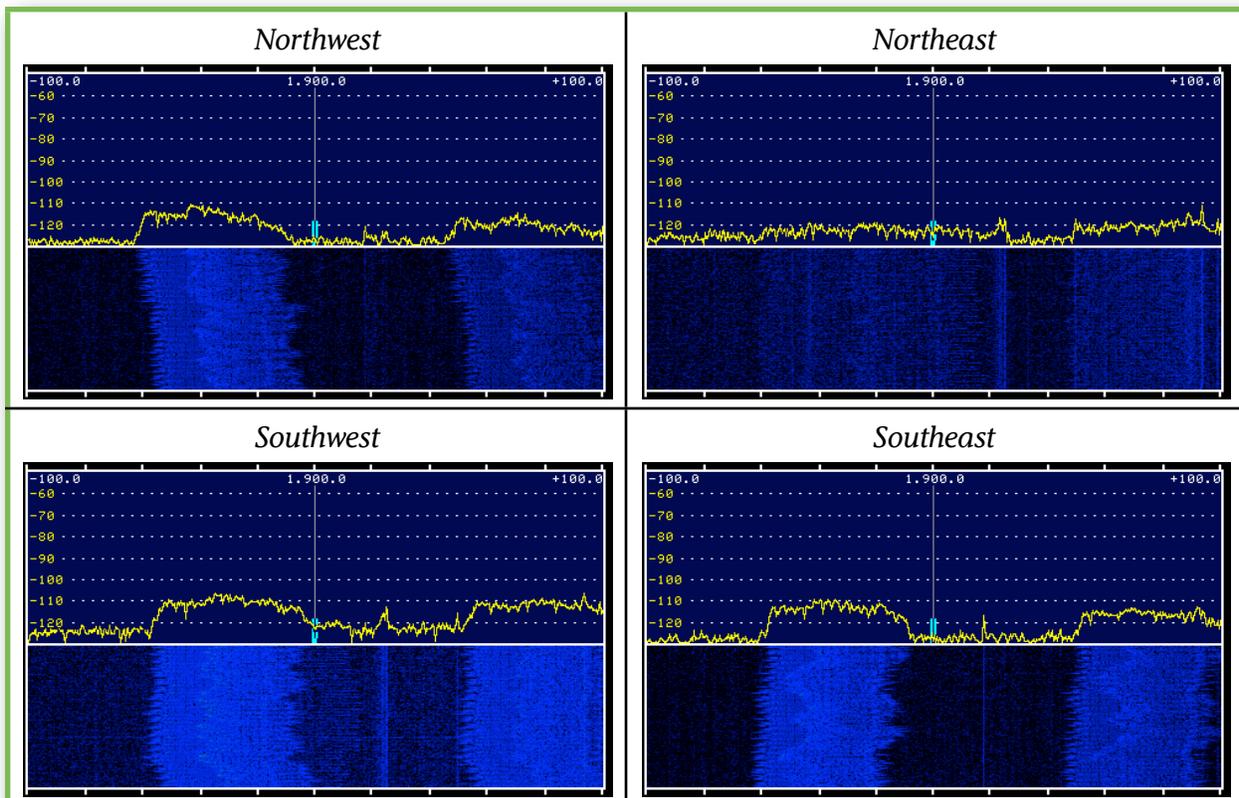


The terrain contour interval is 20 feet. Note that the NE/SW beverage direction is off by 30 degrees from where it ought to be; I compensated in the wrong direction for the difference between true and magnetic north.

## PANADAPTER SETUP

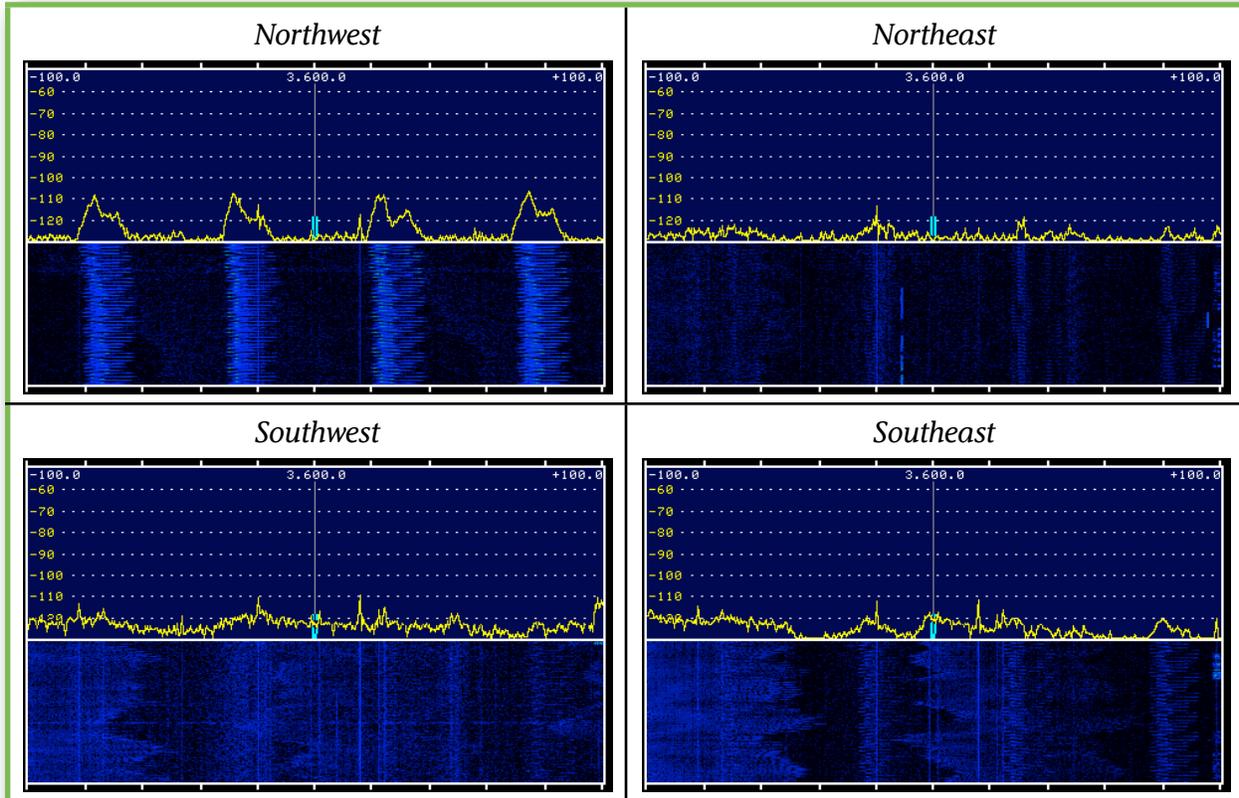
The P3 was set to maximum frequency span, 200 kHz, and maximum vertical axis range, 80 dB. The vertical axis is within about 5 dB of true dBm into the K3 RX ANT port. The upper half of the display shows signal level versus frequency averaged over 5 sweeps. The bottom half of the display (the “waterfall”) shows a history of the sweeps over the past 10 seconds or so, with color-mapped signal levels. The most recent sweep is at the top of the waterfall.

160 Meters





## 80 Meters



## OBSERVATIONS

- The beverages have directivity.
- The quietest direction is NE, uphill through my neighbor's house.
- -130 dBm is well below the nighttime band noise level; -110 dBm not so much.
- The RFI source on 160m is on the air all the time, so it's probably not outdoor lighting. It drifts quite a bit; sometimes the lower edge approaches 1810 kHz.
- It isn't clear whether or not the RFI on 80m is from the same source as the 160m source.
- The P3 is a useful device for assessing the RF environment.
- It would be even more useful if there were a database of wideband RFI signatures.