EAST VALLEY DIGITAL NET

3/10/2019

FREQUENCY: 145.550 MHZ, FM, 1500 HZ OFFSET (145.551.500 mhz)

STATIONS:

AG7GK – NCS

K7WZX – GARY

KD7OBD – BRENT

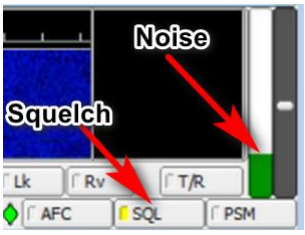
K7ZAE – HEIDI

Report

We had four stations checked in tonight, no problems were immediately evident as we've had previously issues with the transmission offset, weak signals, and no audio when PTT occurs. So we're making progress In stabilizing our equipment. AG7GK was running a new dedicated VHF only rig the FT2980R hooked to a raspberry pi via Signalink interface, had no problems with any of the stations or modes. We had some weak signals reported from K7WZX by other stations and he bumped up his power to 50 watts and all stations had good copy reported.

Lessons Learned

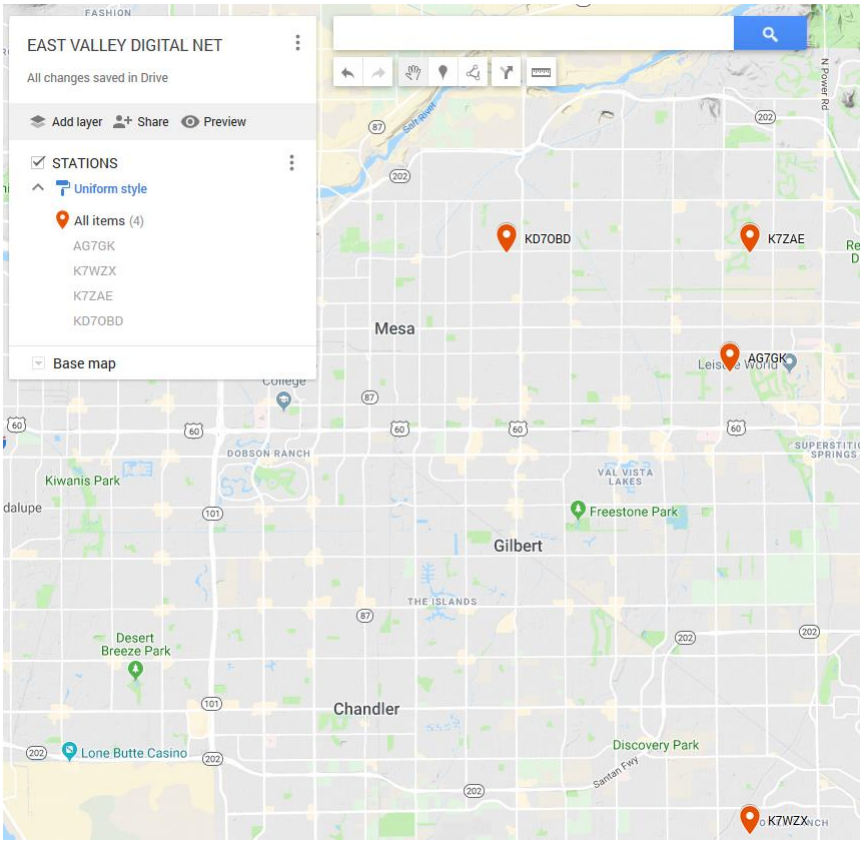
We had some discussion on the use of digital squelch vs radio squelch. AG7GK and K7WZX both use open squelch on the radio and let FLDIGI manage the squelch digitally. To enable that click the "SQL" button in the lower right of FLDIGI and then move the squelch slider up above the bouncing green noise line.



We tried a multi-psk mode, PSK125RC4 but that was not heard by one of the stations, or rather heard but not decoded. I have played with various modes between the windows FLDIGI and the Raspberry PI station and the PI station does not do well with 8psk, Multi-PSK of 250 or greater bandwidths, and MT63. Anyway, more practice with different modes will be interesting when we have folks from diverse locations.

MAP OF STATIONS

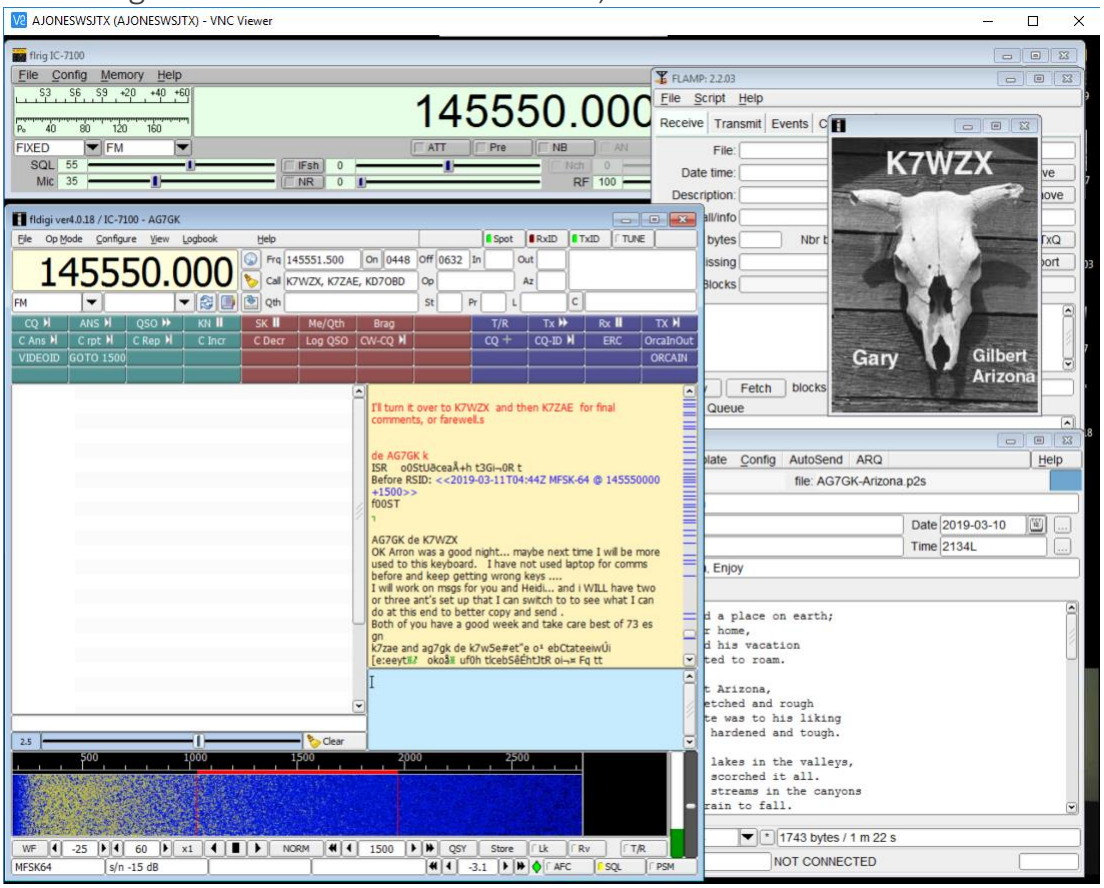
We had a solid 12 miles between furthest stations, not bad for VHF in the city.



Net Artifacts:

Image transfer from K7WZX – MFSK64

Receiving station: AG7GK – COMET GP3, ICOM IC-7100



Receiving Station: AG7GK-2, VHF DIPOLE, FT-9850R, Raspberry PI

Note the poorer reception on the image as compared to the other radio and antenna, attribute this to a 15dB loss due to the poor VHF dipole I was using on this station. Replacing with a copper j-pole that has worked very well in the past. Will be interesting to compare the COMET GP3 to the Jpole.