

Dave's MASTR II Repeater Story

It was 2004 and Dave was looking for a UHF repeater to put atop a peak behind the family treefarm. On Craigs list, he found one for sale in the Vancouver, WA area.

It was a GE MASTR II radio that had been in service as a GMRS repeater. The guy offered the GE test set that went with it plus a set of cavities, a controller and a spare PA deck all in a short 19" rack for \$300.

Dave got it home and received a coordination from the WWARA for 441.4Mhz. The ICOMS (GE crystal ovens) were ordered and received and fellow ham Les Tomminger (W7UFI) and Dave retuned the radio to 441.4. It was no problem, they just followed the tuning procedure in the manual.

At the time, Dave was managing several labs at Boeing and one happened to be the main Seattle EMI lab. Dave posed the idea to the techs in the lab, he wanted to learn how to tune the resonant cavities. The techs were enthusiastic and Dave brought in the cavities and the 5db gain base antenna. The techs taught Dave how to use a \$50K network analyzer to set the three cavities and tune the antenna for 441.4Mhz. Powered it all up and it worked!

The controller lacked a CWID and was short on features. Dave ordered a CWID board and then ran into problems with the interface. At the time he was building his dream house on the family property near Granite Falls. Fast forward to 2017. There was now a road to the top of Jordan Peak about 1/2 mile from the house and AC power was available and Dave received permission to put a radio on the peak. It became apparent that the GE MASTR II should be pulled off the shelf, dusted off and made ready to go into service on the mountain. A fine spring project, it would need a new coordination from WWARA and a new repeater controller. Within visual sight from his house, Dave had already been experimenting with a point to point 2.4Ghz link to the peak.