

CATNIP II – Electronics Upgrades Part 3

Parts 1 & 2 covered installation of a Lowrance HDS 9 sonar/chart plotter and the problems encountered connecting it to my VHF DSC radio. Towards the end of the summer of 2019, I discovered that the automated fog signal feature of the VHF radio was not working. I hoped the problem was the loud hailer speaker, but it was working fine. I decided to look for a new VHF radio that could connect to the chart plotter by NMEA 2000. Hopefully this would eliminate NMEA 0183 connection problems.

At the 2019 CPS-ECP National AGM in Victoria, I saw an ICOM M506 radio on display as one of the draw prizes. This radio had AIS and a NMEA 2000 connection. Joyce and I put all our tickets in that jar but we didn't win it. At the Toronto Boat Show, I paid a visit to the Radioworld booth. The ICOM M506 was on sale at a discount of \$150 from the regular price. Also included in the purchase was a \$50 rebate from ICOM.

On March 5, 2020, I picked up my shiny new ICOM M506 from Radioworld. A quick inspection revealed the radio is larger than the old one. The dash panel would need further modification. At that time, the dash panel was on the boat, under the shrink wrap. Luckily I had removed the HDS 9 before the boat was shrink wrapped.

In order to run tests, I needed a temporary NMEA 2000 connection between the ICOM M506 and the HDS9. I bought a NMEA 2000 network starter kit which included two connection tees, two drop cables, two terminators and a power cable. Since the power supply and each connected device need a separate connection, I needed one more tee. I purchased a tee with two connections. This left me a spare tee for future use. I had to rig temporary power connections for the HDS 9, the new radio and the NMEA 2000 network.



It quick and easy to assemble the NMEA 2000 network. The chart plotter immediately recognized that the ICOM M506 radio was connected. I put the HDS 9 in Simulate Mode but the simulated GPS position

did not appear on the radio screen. After some head scratching, I relocated the whole setup close to a window where the HDS 9 could receive satellite signals. The GPS position from the HDS 9 then appeared on the ICOM M506 screen. Confident that everything was going to work, I waited for spring.

Due to Covid-19, the wait was longer than expected. Finally I was able to remove the shrink wrap from the boat and complete the installation. The dash panel modification was touch and go but I was able to make everything fit. All the electronics are now installed and working, even the automated fog signal.

