

## *How do I?*

### *An occasional series*

#### *This week: Moving Beyond the HT*

Alright! You made a big first step! You looked at the slick paper catalogs that came in the mail. You went on line to the ARRL web site and looked at product reviews and looked at the reviews on eham.net. Maybe watched a YouTube video or two about the HT's on your list. Spent hours perusing the web sites of the firms that sent the catalogs. You bought one. The brown package car brought it a day or two later. You and your elmer made a sked to meet on air and you completed your first QSO! Congrats! For VHF/UHF hams don't usually exchange QSL cards or fill out log books, but your Elmer said she was happy to log your first QSO and gave you a card. (You will want to acquire some so you can give your elmer one as well, but that can wait a bit).

You and your HT went on to check into a local net on a regular basis. You even participated in a public service event by helping with a parade. But you and your HT want to more. But sometimes, you can hear the other station pretty well and they just cannot hear you. You moved up from the factory "rubber duck" to a Smiley or Diamond antenna and that helped, especially at the parade, but you feel like you could do better.

Then you decided to try providing support for a bicycle race. You and your HT had a good time, but you couldn't cover the check point you wanted because you just had a HT and it's down in a hole.

What to do! No! don't give up! let's find that stack of catalogs and go shopping again. What do you need? We have a couple options. One is a simple mag mount antenna to stick on the car. You really want it square in the middle of the roof. Really. A simple 2 meter mag mount and some coax will do a better job capturing the signal and getting you on the air. Check the antenna connector on your HT. You probably need an adapter. or maybe order an antenna with the correct connector on the cable. Most antennas come with a PL-259 (UHF) connector. Your radio most likely has a member of the SMA or BNC connector family. You need an adapter to connect the two.

Another option, if you are looking ahead, is to semi permanently mount an antenna on your vehicle. The most common ones use a mount that fits into a trunk lip, or door or mounts on a luggage rack. They often use a NMO connector to attach the antenna to the mount. You can mount one of these, or drill holes and install a mobile mount. This allows you to use the HT or any other radio you have in the vehicle without changing an-

tennas.



Diamond K702 mag mount



Diamond K400 series trunk lip mount.

Another option that will work with a HT or mobile radio for a public service event or a VFH/UHF contest or QSO party is a mobile antenna mounted on a ground plane on a



fiberglass or metal mast. The Diamond NR770HBNMO shown is a NMO base 2 meter/70cm mobile antenna mounted on a Diamond or Comet base. The base is simply a plate where the NMO mount antenna screws onto a SO-239 adapter and has 4 radials. The radials are the ground plane, replacing a magnetic base or the body of a vehicle.

Instead of the Diamond mobile antenna shown, you could use a Diamond X30 or X50 base antenna or a Yagi. With any of those options you will obtain better performance.

Catch ya on the air!

