Automatic Radio Direction Finder Proposal

I am proposing that the club purchase a Doppler Systems commercial direction-finding unit. The quote is for $2,902 and four NMO mobile magnetic mount antennas, equal length RG-58U cable and TNC connectors. We will need to provide 8, ¼ wavelength antennas, each tuned to the inputs of 147.900 (4) and 444.900 (4). To complete the unit (and to save money) we will provide one handheld or mobile radio and one laptop each suitable for mobile use.

I am requesting $3,200 for the complete unit and antennas.

Company Overview

Doppler Systems has provided radio direction finding systems to a variety of customers including the FCC, FAA, DEA, the intelligence community, with over 350 units to the Coast Guard alone. It is widely used by law enforcement and military agencies throughout the world. Units recently were sold to the Arizona State Troopers and the Phoenix Fire Department among others in our state.

Doppler Systems has been in continuous operation since I first spotted their article in 1981 in 73 Magazine. The factory is in Tucson and sources all components from Arizona based companies. Warranty is for one year and software updates are free for the life of the unit. Works with 7 local maps which are free to download such as Google Earth, USGS topo maps, and various local "street level" maps.

The owner and co-creator, Doug Havenhill, WB0EON is a ham operator and has offered to teach a day-long class in the history, theory, and practical operation of units, all free of charge.

Basic Operation

The unit samples 4 antennas, one-thousand times a second and displays a vector accuracy of 2.5 degrees within that second. As you mobile around looking for the offender, you can store various reading on an overlay of the map by taking "screen shots" each time.

Final Comments

The unit can be used for search and rescue and club repeater problems. We could also make it available to other clubs, individuals, government, and commercial concerns.

The vote will be at the Christmas Party regular meeting. December 5 at 7 pm.

Frosty, NQ1S

Technical Committee Chairman and Board Member