



Marine Safety Information Bulletin 01-03
Safety Alert
Television Antenna Interference with GPS
January 8, 2003

It has come to the attention of the Coast Guard that certain consumer electronics-grade active UHF/VHF marine television antennas are causing operational degradation in the performance of Global Positioning System (GPS) receivers. This interference may be realized as a display of inaccurate position information or a complete loss of GPS receiver acquisition and tracking ability.

The GPS interference on your vessel may vary from erratic vessel movement on the electronic chart display to erroneous speed information. In some cases, the GPS would correct itself while at other times the system required resetting. This interference is not limited to the GPS equipment onboard the vessel that has the antenna. There have been reports of interference occurring on other vessels and installations operating up to 2000 feet away.

Antenna models identified during investigations of GPS interference:

- TDP (Tandy Distribution Products) Electronics – MINI STATE
Electronic Amplified UHF/VHF TV Antenna – Models 5MS740, 5MS750, 5MS921
- Radio Shack Corporation – Long Range Amplified Omni Directional TV Antenna – Model 15 – 1624
- Shakespeare Corporation – SeaWatch – Models 2040/Code Date 02A00, 2050/Code Date 03A00
(Code dates are found on the antenna power supply.)

If one of the above-listed antennas is installed on your vessel, conduct the following on/off test, turn off the power to the antenna and if an improvement is noticed with your GPS receiver's performance than the antenna is your source of interference. Contact the manufacturer of the antenna and identify the symptoms. If the test is not positive and GPS interference persists, contact the watchstander at the Coast Guard Navigation Information Service at nisws@navcen.uscg.mil or telephone, 703-313-5900.

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