

## NARROW-BAND RADIO UPDATE

As mandated by NTIA, the Auxiliary repeater and simplex frequencies we currently use will change to narrow-band only transmission on 1 January 2008. As a result of this change, **transmission using equipment designed for amateur radio use will no longer be authorized.** NTIA has determined that equipment that complies with FCC Type Acceptance standards for specific applications will meet the requirements for narrow-band operation.

**It is important to note that marine frequencies are not impacted by this change.** Marine frequencies will remain wide-band for the foreseeable future and cannot be changed without international agreement and implementation. The only frequencies that are impacted by the narrow-band change are those Federal Government assigned frequencies that fall into the 136-174 MHz band and include our simplex VHF and repeater inputs and outputs.

The following FCC Type Acceptance standards apply to the equipment that may be used by the Auxiliary:

Part 80 – Stations in the maritime services (Marine)

Part 90 – Private Land Mobile Radio Services (Commercial)

After 1 January 2008 Radio Facility Inspection Report forms (ANSC-7004) will have to note the model and serial number of the inspected radio and only radios that are FCC Part 80 / Part 90 compliant will be approved for use. **Radios that are FCC Part 97 type accepted (Amateur) will not be approved.**

### **Important!**

Radios that are FCC Part 80 / Part 90 compliant are **not** field programmable, unlike amateur products. They must be programmed using custom software normally available to dealers, and in some cases available to individuals but at added cost.

Some Auxiliary members have already purchased radios that are FCC Part 80 / Part 90 compliant and we have enough information to make recommendations for your consideration. All of the radios described have been purchased, programmed and tested by knowledgeable members.

### **STANDARD HORIZON HX370S**

The HX370S is a hand-held marine 5-watt radio that includes the ability to program up to 40 Land Mobile channels (136-174 MHz band, including 2-meter amateur and Auxiliary frequencies). It is pre-programmed with all marine channels and can have both wide-band and narrow-band channels added through programming software. **Thus it is usable and legal on marine, Auxiliary and amateur frequencies.**

**NOTE:** For mobile or base station operation where additional output power is desired an RF amplifier (Mirage B-34-G is currently being tested) can be added together with an external antenna and 12-volt power source to provide 30 watts output for vehicle use at an additional cost of about 120 dollars.

FCC Part 80 Compliant: Yes  
FCC Part 90 Compliant: Yes  
District Supported: Yes  
Price Class: 130

Vendor Link:

<http://www.standardhorizon.com/indexVS.cfm?cmd=DisplayProducts&ProdCatID=85&encProdID=EBD61457F117768BB3F44D8AA75A4A0E&DivisionID=3&isArchived=0>

### **VERTEX STANDARD VX-2200**

The VX-2200 is a base/mobile commercial 25-watt radio that can be programmed using software for up to 128 channels in the 136-174 MHz band, including Auxiliary, marine and amateur frequencies and both narrow-band and wide-band modes.

FCC Part 80 Compliant: No  
FCC Part 90 Compliant: Yes  
District Supported: Yes  
Price Class: 310

Vendor Link:

<http://www.vertexstandard.com/indexVS.cfm?cmd=DisplayProducts&ProdCatID=74&encProdID=AA66C056311FDD9A39663C17EFE45C27&DivisionID=64&isArchived=0>

### **ICOM IC-F121**

The Icom IC-F121 is a base/mobile commercial 50-watt radio that can be programmed using software for up to 128 channels in 8 memory banks and in the frequency range of 135-174MHz. It can be used for Auxiliary, marine and amateur operation in both narrow-band and wide-band modes.

FCC Part 80 Compliant: No  
FCC Part 90 Compliant: Yes  
District Supported: Yes  
Price Class: 330

Vendor Link:

[http://www.icomamerica.com/products/landmobile/f121\\_series/default.asp](http://www.icomamerica.com/products/landmobile/f121_series/default.asp)

### **MOTOROLA CDM1250**

The Motorola CDM1250 is a base/mobile 25-watt commercial radio that can be programmed using dealer licensed software for up to 64 channels in the 136-174

MHz band in both narrow-band and wide-band mode and can be used for Auxiliary, marine or amateur operation. It has a wide range of features primarily related to public safety (fire and police) and when used with other Motorola radios. This is the radio that has been installed at Station Los Angeles and Auxiliary Radio Newport.

FCC Part 80 Compliant: No

FCC Part 90 Compliant: Yes

District Supported: No (programming for a fee available)

Price Class: 550 used, unknown new

Vendor Link:

[http://www.motorola.com/governmentandenterprise/contentdir/en\\_US/NonXMLDocs/MD-CDM1250-01c\\_cdm1250\\_specs.pdf](http://www.motorola.com/governmentandenterprise/contentdir/en_US/NonXMLDocs/MD-CDM1250-01c_cdm1250_specs.pdf)

### **MOTOROLA HT1250**

The Motorola HT1250 is a hand-held 5-watt 128 channel radio that operates in both narrow-band and wide-band mode and can be used for Auxiliary, marine or amateur operations. It also has a number of features used primarily in public safety operation. It requires programming by a Motorola-licensed dealer.

FCC Part 80 Compliant: No

FCC Part 90 Compliant: Yes

District Supported: No (programming for a fee available)

Price Class: 425 average used, unknown new

Vendor Link:

[http://www.motorola.com/governmentandenterprise/contentdir/en\\_US/NonXMLDocs/MD-HTSERIES\\_01B\\_Brochure.pdf](http://www.motorola.com/governmentandenterprise/contentdir/en_US/NonXMLDocs/MD-HTSERIES_01B_Brochure.pdf)

### **NOTES:**

1. The comment "District Supported" means that there are members who have purchased programming software and interconnecting cables and are willing to assist other members with programming. It may in the future mean that the District will purchase the software and cables to ensure that member radios could be programmed or re-programmed at no cost to the member. Some of these details are still in development.
2. Most of these radios can be purchased new online through ebay using the "buy it now" price. Occasionally used radios show up as well at lower prices. Let the buyer beware – be sure you understand what you're getting into if you go that route.
3. See the next page for images of the radios.



Standard Horizon HX370S Handheld



Vertex Standard VX-2200 Base/Mobile



Icom IC-F121 Base/Mobile



Motorola CDM1250 Base/Mobile



Motorola HT1250 Handheld