



Marine Radio Scanning

Marine Radio is an interesting area, and one that not too many people have accurate data for. While we're under construction here, let's look at a few helpful items.

Quick and Dirty Monitoring Tips:

Four Different Calling Channels: That's right. 156.800 is not all that it's cracked up to be. On the rivers, 156.65 reigns supreme, and there are any number of Port Ops frequencies to be investigated when you're out there ship-watching.

- **156.800 (Ch-16) - International Calling and Distress** - This is still the primary calling channel, and the Coast Guard will announce broadcast distress calls to mariners on this channel. These bulletins end with the request for "all vessels to keep a sharp lookout, assist if possible, and advise the Coast Guard of all sightings." This channel has become overcrowded, however, and some alternates have sprung up.
- **156.650 (Ch-13) - Intership Safety in Navigable Waterways** - On inland waterways, vessels which occupy the navigable channel must monitor this frequency, and periodically announce their location and intentions. This is the real calling channel on America's rivers. Most marine radios can simultaneously monitor this frequency and Ch-16, but those without that capability must monitor Ch-13 while in the waterway. Position announcements are supposed to be made with only 1 watt, but that's still plenty of power when coming from the mast of a seagoing ship. Vessels on the rivers are likely to be at full power. A typical position announcement might go, "*Security security security. This is the motor vessel Independent Endeavor at Dutch Gap, entering the Turkey Island Cutoff. Standing by for concerned traffic on Channel 13.*" Ships who are about to meet may briefly discuss their situation here or move over to **156.300 (Ch-6)** for longer discussions.
- **156.450 (Ch-9) - Alternate Calling Channel** - This channel is meant to remove some pleasure boat traffic off of a very crowded Ch-16.
- **156.575 (Ch-70) - Digital Signalling Devices** - This channel is set aside for selective calling devices. Since it is not active in my area, I don't have much knowledge of it.

Types of Channel Usage:

- **Calling & Safety** - As shown above, you have calling channels and safety channels blending in with each other a bit. These are definite musts for any scanner near the water.
- **Port Operations** - Includes the direction of ships through the port (Harbor Control), and the dispatch of harbor pilots to ships, and coordination between harbor pilots and tugboat pilots when docking/undocking ships.
- **Commercial** - Used by water-related business such as fisheries, launch services, tug services, etc. Users are licensed for the specific frequencies to be used.
- **Non-Commercial** - Most commonly used by Marinas for communications with pleasure boats.
- **Public Correspondence** - For the most part, this means marine telephone. Probably pretty slow now that cellular has taken over. These channels are split with ships transmitting around 157 MHz and shore stations transmitting around 161-162 MHz.

- **Coast Guard** - While the Coast Guard has a number of different frequencies, there is a block of marine channels set aside for them, roughly from 157.025 to 157.175. Coast Guard stations are organized into various Groups, and the Group will generally operate the main radio station. The station will monitor 156.800 (Ch-16), a working channel for vessels and stations in the group, and a frequency for the group's Marine Safety Office (vessel inspectors). They will also have certain port operations channels.
 - 157.100 (Ch-22A) - Used for communications between the Coast Guard and civilian vessels. Also used to broadcast bulletins to mariners, and for communications between vessels in distress and rescue crews.
 - 157.175 (Ch-83A) - Primary frequency for Coast Guard Auxiliary, a volunteer organization of private boaters.
- **Vessel Traffic System (VTS)** - The Coast Guard monitors vessels on radar and keeps them up to date on their locations, etc. around several crowded port cities.

Those "A" and "B" Channels: (In the US, "B" stands for *Bootleg!*) - Why do you hear channel 22 referred to as "22-Alpha?" Because many channels on the international band are split-frequency. On international radios, the regular channel number indicates the split. An "A" channel is simplex on the ship frequency. A "B" channel is simplex on the shore frequency (4.6 MHz above the ship frequency) NO "B" channels that I'm aware of are legal for marine simplex in the US.

- **Shipboard Use** - The only possible legitimate use that I'm aware of for "B" channels is for shipboard communications. I've seen frequency lists submitted by people who cruised on ocean liners that would indicate this. Whether legal under international treaty, I don't know. Four UHF frequency pairs are allocated for shipboard use. Repeater outputs would be at 457.525, 457.55, 457.575 and 457.600 with inputs 10.225 MHz higher at 467.750, 467.775, 467.800 and 467.825.
- **Where the "B"s Are** - At minimum, we're looking at the band from 160.600-162.025. It's possible that B's could go almost to 165 MHz in some radios, intruding even on Federal Government frequencies, but I have scant info on this. Areas that "B" channels would interfere with in the US include the railroad band 160.215-161.565 and the VHF broadcast pickup band at 161.640-161.760. This accounts for the "B" side of channels 1-23 and 60-83. Above this are our own marine telephone operators transmitting from 161.800-162.000.
- **How hot is the bootlegging traffic?** - Not much, as far as I know, although I've never really investigated it closely. The US Coast Guard keeps a close eye on marine radio use, and if they DF you to an inland location--well, it better not be at your house. I've heard 156.55 used around I-64 near Charlottesville, VA and have found 156.625 used for parking cars at a James River Plantation. This, and some bootlegging by the Richmond Police have all been on legit marine channels. I haven't found any "B" channels yet. Presumably, it would take some soldering, unsoldering or diode cutting to get to them. And, like scanners, the manufacturers may be dealing better with hackers these days. Another change has come with the establishment of new unlicensed services like the Family Radio Service (FRS) and the Multi Use Radio Service (MURS). Anyone can have access to cheap, durable low power handhelds with low-noise frequencies and selective squelch. These legal services are far superior to what's offered by bootlegging on the marine band.

[Essential Marine Channels for Your Scanner](#)

[Full US/International Marine Channel List](#)

[The Missing Marine Channels](#) - What about channels 30-59 or 90-120? Where did they come from, who if anyone uses them, and did they ever really exist?

[Scanning on the James River](#)