

## Marine Radio Information for Boaters

We had a lot of response when we asked the question; "what courses would you like to see?" One suggestion was a course on radio procedure. While we have future plans for a course on radio licensing, we felt that some frequently asked questions about radios might be in order. Much of the information presented here is courtesy of the U.S. Coast Guard and the FCC. You have the option of selecting one of the questions below to go directly to that information or simply start with "Who needs a radio?" and scroll through the entire article.

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### Who needs a radio? ([back to top](#))

Although recreational vessels less than 20m (65.6 feet) in length are not required to have VHF radios, before you purchase anything else, make sure you have a VHF marine radio. If you plan to travel more than a few miles offshore, you should strongly consider purchasing an HF or single side band radiotelephone or mobile satellite telephone, an emergency position indicating radio beacon, or EPIRB, and a second VHF radio or cellular telephone as well. Mobile satellite telephones are becoming more common and more inexpensive. The mobile satellite will provide easier and clearer communications than the HF radiotelephone, but the HF radiotelephone will receive high seas marine weather warnings. Your radio is part of your life insurance policy that we talked about last week when we addressed EPIRB's.

### Do I need a radio license? ([back to top](#))

The Telecommunications Act of 1996 permits recreational boaters to have and use a VHF marine radio, EPIRB, and marine radar **without** having an FCC ship station license. Boaters traveling on international voyages, having an HF single sideband radiotelephone or marine satellite terminal, or required to carry a marine radio under any other regulation must still carry an FCC ship station license.

Those not exempted by the Telecommunications Act of 1996 must still have an FCC ship station license. A ship station license application is made on FCC Form 506,

available from local FCC Field Offices, by writing to the FCC, P.O. Box 1050, Gettysburg PA 17326, or by calling the FCC Forms Distribution Center at (202)418-3676 or the toll-free number (800) 418-FORM. Forms can also be obtained from most marine electronics dealers.

Radios can be used immediately upon license application. The license is not transferable if a boat is sold or if the installed radio equipment is moved from one boat to another.

Effective 18 September 1995, the FCC fee for renewing or applying for a new ship station license is \$75. Licenses will be valid for ten years.

If you wish to purchase a portable radio for use on more than one boat, only one license is necessary. When completing an FCC Application for Ship Station License (form 506), check "Portable" in block 10, "Type of License".

### **Do I need a permit to operate a radio? ([back to top](#))**

The FCC Restricted Radiotelephone Operator Permit is required for boaters having an HF radiotelephone, for boaters having a VHF transceiver and traveling in foreign waters, or where fitting of a marine radio is required by law (e.g. on boats 20m long or larger). There is a fee for this lifetime permit, but no tests are required in applying for this license. An application is made on FCC Form 753, available from local FCC Field Offices or by writing to the FCC, P.O. Box 1050, Gettysburg PA 17326.

### **If I have a radio do I have to listen to all that noise? ([back to top](#))**

Even though you may not be required to carry a VHF radio, if you do (and you should) you must maintain a watch on channel 16 (156.800 MHz) whenever the radio is operating and not being used to communicate. You may alternatively maintain a watch on VHF channel 9 (156.450 MHz), the boater calling channel. Note however that urgent marine information broadcasts, such as storm warnings, are announced on channel 9 only in First CG District waters (northern New Jersey, New York and New England).

Recently a charter boat whose radio was not tuned to the proper channel missed a severe storm warning. By the time the captain learned of the storm, it was too late to return to shore. The ship sank and a couple of persons died. A yacht in trouble off the west coast of Mexico and far from help saw a passenger ship. What should have been a quick rescue almost turned to disaster when the passenger ship (improperly) had its radio off. The yacht was able to attract the ship's attention, however, and was rescued. Misunderstanding of passing intentions by approaching vessels and near collisions have repeatedly been averted by working radios tuned to the proper channel.

The International Telecommunications Union established three VHF marine radio channels recognized worldwide for safety purposes:

- Channel 16 (156.800 MHz) - Distress, safety and calling
- Channel 13 (156.650 MHz) - Intership navigation (bridge-to-bridge)
- Channel 70 (156.525 MHz) - Digital Selective Calling

### **There are so many channels, how do I know which to use? ([back to top](#))**

Let me start by talking about the major channels that recreational boaters should be familiar with. The Federal Communications Commission has established VHF-FM channel 9 as a supplementary calling channel for noncommercial vessels (recreational boaters). A ship or shore unit wishing to call a boater would do so on channel 9, and anyone (boaters included) wishing to call a commercial ship or shore activity would continue to do so on channel 16. Recreational boaters may continue to call the Coast Guard and any commercial facility on channel 16.

The purpose of the FCC regulation is to relieve congestion on VHF channel 16, the distress, safety and calling frequency. FCC regulations require boaters having VHF radios to maintain a watch on either VHF channel 9 or channel 16, whenever the radio is turned on and not communicating with another station.

**Warning:** The Coast Guard announces urgent marine information broadcasts and storm warnings on channel 9 in the First Coast Guard District only (waters off the coast of northern New Jersey, New York, and New England). For that reason, we strongly urge boaters to use channel 9 in these waters. Use of channel 9 in other waters is optional, and we recommend boaters keep tuned to and use channel 16 in those waters unless otherwise notified by the Coast Guard.

Channels 9 and 16 are used for "hailing" (calling another vessel) only. Once you have contacted a vessel you should move your conversation to a "working channel". That is, one designated as "non-commercial" such as channel 68.

Another channel you should be aware of is channel 22A. This channel is reserved for the U.S. Coast Guard to relay marine information broadcasts. You may on occasion hear on channel 16 an announcement by the USCG telling all boaters that they have information that may be of importance to you. They would request that anyone wanting to listen to the information switch to channel 22A to hear the information.

If you would like to view or print out the available channels, transmitting and receiving frequencies and description and use of the channel just go to the [channel listing](#).

### **Okay, so I have a radio, how do I use it? ([back to top](#))**

The standard procedure for a non-emergency call such as calling another vessel, marina, or restaurant to ask where to tie up for dinner, is as follows.

1. You should call the vessel, marina or restaurant on channel 9 or 16 in the following manner.
2. Name of station being called, spoken three times.
3. The words "THIS IS", spoken once.
4. Name of your vessel and call sign (if you have a station license) or boat registration number, spoken once.
5. The word "OVER".
6. Then you wait for the station being called to answer. Their answer should be in the same manner as your call.
7. Once answered you should suggest going to a working channel to carry on your conversation.
8. The word "OVER".
9. Wait for reply or confirmation from the station being called, switch to the working channel and repeat the process.

An example might be:

Calling Station: "Sailfish Marina, Sailfish Marina, Sailfish Marina, THIS IS the motor vessel Magical Lady, WAI4093, OVER" (WAI should be spoken Whiskey, Alpha, India, fow er, zero, nin er, tree) If you think this sounds cool and very official you can view and or print out the [phonetic alphabet here](#).

Responding Station: "Magical Lady, Magical Lady, Magical Lady, THIS IS Sailfish Marina, WBC5678, OVER" (WBC should be spoken Whiskey, Bravo, Charlie, fife, six, seven, ait)

Calling Station: "Please switch and listen channel 68, OVER."

Responding Station: "Switching channel 68, OVER."

You would then switch to channel 68 and call Sailfish Marina using the same procedure and conduct your business. All conversations whether on a hailing channel or a working channel should be kept short and to the point.

## **What About in an Emergency situation like Mayday! Mayday! Mayday? ([back to top](#))**

**You may only have seconds to send a distress call. Here's what you do. Transmit, in this order:**

1. If you have an HF radiotelephone tuned to 2182 kHz, send the radiotelephone alarm signal if one is available. If you have a VHF marine radio, tune it to channel 16. Unless you know you are outside VHF range of shore and ships, call on channel 16 first.
2. Distress signal "MAYDAY", spoken three times.
3. The words "THIS IS", spoken once.
4. Name of vessel in distress (spoken three times) and call sign or boat registration number, spoken once.
5. Repeat "MAYDAY" and name of vessel, spoken once.
6. Give position of vessel by latitude or longitude or by bearing (true or magnetic, state which) and distance to a well-know landmark such as a navigational aid or small island, or in any terms which will assist a responding station in locating the vessel in distress. Include any information on vessel movement such as course, speed and destination.
7. Nature of distress (sinking, fire etc.).
8. Kind of assistance desired.
9. Number of persons onboard.
10. Any other information which might facilitate rescue, such as length or tonnage of vessel, number of persons needing medical attention, color hull, cabin, masks, etc.
11. The word "OVER"

Stay by the radio if possible. Even after the message has been received, the Coast Guard can find you more quickly if you can transmit a signal on which a rescue boat or aircraft can home in.

**An example of a Mayday call:**

MAYDAY-MAYDAY-MAYDAY  
THIS IS BLUE DUCK-BLUE DUCK-BLUE DUCK WA1234  
CAPE HENRY LIGHT BEARS 185 DEGREES MAGNETIC-DISTANCE 2 MILES  
STRUCK SUBMERGED OBJECT  
NEED PUMPS-MEDICAL ASSISTANCE AND TOW  
THREE ADULTS, TWO CHILDREN ONBOARD  
ONE PERSON COMPOUND FRACTURE OF ARM  
ESTIMATE CAN REMAIN AFLOAT TWO HOURS  
BLUE DUCK IS THIRTY TWO FOOT CABIN CRUISER-WHITE HULL-BLUE DECK HOUSE  
OVER

Repeat at intervals until an answer is received.

### **What do you do if you hear a distress call? ([back to top](#))**

If you hear a distress message from a vessel and it is not answered, then **you** must answer. If you are reasonably sure that the distressed vessel is not in your vicinity, you should wait a short time for others to acknowledge.

### **What do you do if you are out of range of other vessels, and no one responds to your distress call? ([back to top](#))**

Tune your HF radiotelephone to an HF channel guarded by the Coast Guard, and repeat your mayday call. Activate your EPIRB.

### **How do I know if there are Storm Warnings? ([back to top](#))**

The Coast Guard announces storm warnings and other urgent marine information broadcasts on VHF channel 16 and 2182 kHz before making the broadcasts on VHF channel 22A and 2670 kHz respectively. *The Coast Guard announces urgent marine information broadcasts and storm warnings on channel 9 in the First Coast Guard District only (waters off the coast of northern New Jersey, New York, and New England).*

### **What about radio checks, how do I know my radio is working? ([back to top](#))**

The Coast Guard First District (New England, south to northern New Jersey) is now answering radio checks on VHF maritime channel 16, operations permitting. Radio checks will not be answered when CG radio operators are handling distress communications.

The purpose of this policy change is to help reduce hoax MAYDAY calls. Radio checks with the Coast Guard are not permitted in any other location.

You should limit your radio checks to working channels.

### **What about MAYDAY Radio Checks and other Hoaxes? ([back to top](#))**

A growing number of boaters unsuccessful in getting a radio check on VHF channel 16 are calling MAYDAY to get a response. Every hoax, including MAYDAY radio checks, is subject to prosecution as a Class D felony under Title 14, Section 85 of the U.S. Code, liable for a \$5000 fine plus all costs the Coast Guard incurs as a result of the

individual's action. Since hoaxes can lead to loss of life, the Coast Guard and Federal Communications Commission will work closely together, using, when necessary, FCC equipment capable of identifying the electronic signature of the offending radio.

### Updates:

Within the past few years channel 9 was also designated to be used as a hailing frequency in addition to channel 16 (which is both hailing and distress). However, in the First Coast Guard District only (waters off the coast of northern New Jersey, New York, and New England), the Coast Guard announces urgent marine information broadcasts and storm warnings on channel 9.

As of July 1, 2000, the Ninth Coast Guard District (Great Lakes Region) has mandated that US recreational boaters use channel 9 only as a hailing frequency and they are not to hail on channel 16. This is due to the increase in radio traffic on channel 16. Emergencies, however, are still reported on channel 16.

### Related Articles:

[When You Radio for Help on the Water](#)

By Chief Warrant Officer Jim Krzenski Commanding Officer, U.S.C.G. Station Fort Pierce, FL

[Getting Help on the Water](#)

Also see: [The Basic Boating Course](#)



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