

VHF Radio Basics

(source : USCG)

What is a "Marine VHF Radio"?

Although not required in recreational boats under 65.6 feet long, a VHF Marine Radio is an essential piece of equipment in coastal waters. It allows instant communication between your boat and other boats, marinas, bridges, and the United States Coast Guard. It is the primary means of communication on the water and has many characteristics which make it preferable to a cell phone, CB Radio, or other means of communication. Most VHF Marine Radios also have instant access to NOAA weather forecasts, 24 hours a day.

Do I need a license?

If you are a recreational boater traveling within the United States, you do not need a license for a VHF Marine Radio.

If I have a radio do I have to listen to it all the time?

If you have the radio on, you must maintain a watch on VHF channel 9 or 16.

How do I operate it?

1. Make sure you are on the correct channel.
2. Adjust "Squelch" control as low as possible without hearing static or "white noise".
3. Push the button on the microphone to transmit (send). Speak in normal voice.
4. Take your finger **OFF** the button to hear the other person.

Which Channels may I use?

Channel 9: The primary calling channel. (Establish contact on this channel and move to a "working channel" as soon as possible.)

Channel 16: Emergency and Distress calls only.

Channel 22A: Restricted to Coast Guard use only. If you establish contact with the Coast Guard on 9 or 16, they may ask you to switch to 22A. You may also hear an announcement on channel 9 to switch to 22A for important information.

Channel 13: Communication with bridges — both bridges that must open in order for you to fit under them and the bridges of large vessels. This is a good channel to listen to in periods of poor visibility so that you can communicate with ferries, freighters, and other large vessels. (You must use the low power on your radio when broadcasting on Channel 13.)

Channels 68, 69, 71, 72, 78A: "Working Channels." The only channels available to non-commercial vessels for ship-to-ship and ship-to-shore communications. (Although you may have many other channels on your radio, each of them is restricted to specific uses.)

How do I use it?

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. Call the vessel, marina or restaurant on channel 9 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 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 a specific 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. OVER."
- *Responding Station:* "Magical Lady, Magical Lady, Magical Lady, THIS IS Sailfish Marina. OVER."
- *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.

Procedure for VHF Channel 16 MAYDAY:

1. 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. For a potentially dangerous situation, which may or may not end up in a "MAYDAY", use "PAHN, PAHN, PAHN." For important announcements that you want others to pay attention to, say "SECURITAY" (the French pronunciation of "Security").
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.

For example:

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.