

Marine Radios

How to Use Them...



Marine Radio vs. Smart Phone

The United States Coast Guard evaluated both marine radios and smart phones to determine which is a better choice for your vessel. They rated it in three categories: AUDIENCE, COST AND BATTERY LIFE.

AUDIENCE - VHF

- Puts you in contact with more people, faster, and direct communication with responders
- New radios have the ability to tie into the GPS of the vessel

Cost:

- Handheld or mounted VHF price 100 - 300.
- No monthly payment

Battery Life:

- Handheld battery life can last all day if properly maintained
- No updates needed
- No charging ports needed
- Confidence of working

Audience - Cell Phone

- Only call individuals
- Quick and easy with in range of cell phones

Cost:

- Wide range of features and apps.
- Cost of the phone is comparable to a VHF but it comes with a monthly fee

Battery Life

- Life of the battery depends on the device
- More you use it the battery is depleted
- Uses more power to search a tower

VHF MARINE

IC-M421

VOL

16 INT
1W
47°54.800N
1°28.795W
CALLING DEC 4 18:31

OFF

ICOM

C

DUAL



16

CH

MENU

GRP

TAG

DISTRESS

SQL



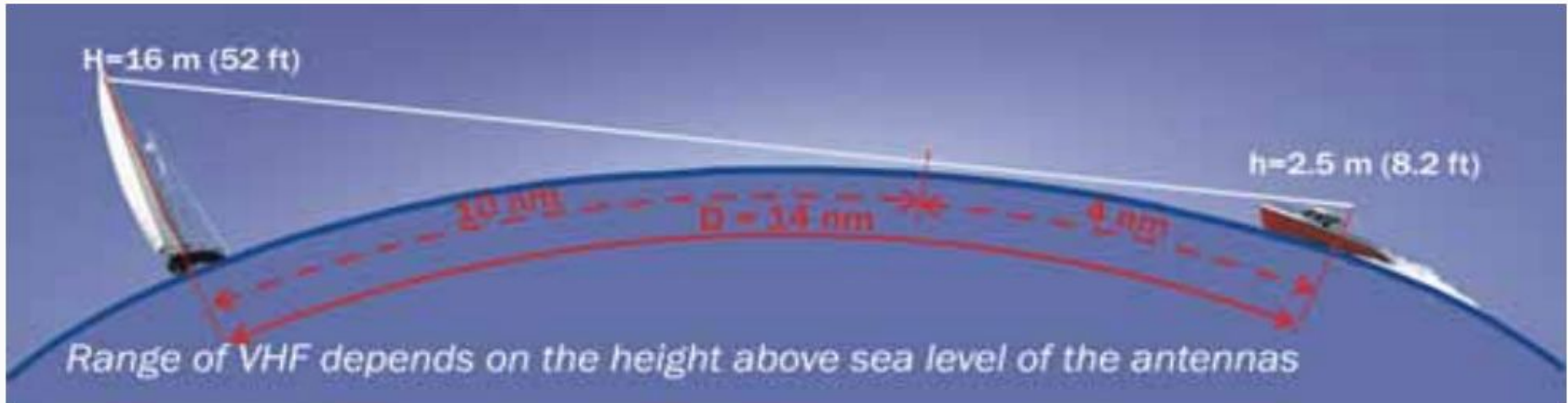
SCAN

CLR

ENT

Marine Radio Basics: How does it work?

Radio Waves for VHF radios travel in straight lines from the transmitting antenna. The range of the VHF is determined by the height of the transmitting antenna.



How to make a call

- Listen on the calling channel (**Channel 16 or 09**) for at least 30 seconds to be sure you will not interfere with a conversation already in progress.
- If the channel is clear, push down the talk button on your microphone
- Always start a broadcast with the name of the boat you are calling and the name of your boat. Repeat the name of the boat you are calling, 2 or 3 times if necessary.
- If you make contact, be prepared to switch and answer to another channel

How to Use a VHF

Radio Etiquette

[Radio Etiquette](#)

Channel Protocol

Rule No. 1: Respect the channel designations, especially those of the "big three."

- **Channel 16** is reserved for distress and safety calls and for contact calls to other vessels or shore stations.
- **Channel 13** is used for vessel bridge-to-bridge communications and is heavily trafficked by commercial ships for intership navigation.
- **Channel 22A** is used for safety broadcasts and U.S. Coast Guard communications; after hailing on 16, you're usually asked to switch to 22A.
- **Channel 9** has been designated as an alternate contact-calling channel between pleasure vessels and to shore stations but, except in some areas, the Coast Guard doesn't transmit safety messages on 9. You should always monitor 16 in case a nearby boat needs help and to hear Coast Guard safety messages
- **Channels 68, 69, 71, 72, and 78A** are considered non-commercial channels, and in most areas, 68 and 72 are commonly used by the recreational-boating community.
- **Channel 70**, has restricted use, and you can't use them for voice communications for
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Emergency Calls (How to)

- *MAYDAY, MAYDAY, MAYDAY*
- **This is (name of your boat) (call letter)**
- **Repeat once more, MAYDAY**
- **Tell your location**
- **Report the nature of the emergency**
- **Report the kind of assistance you may need**
- **Report the number of injuries**
- **Describe the boats seaworthiness**

Mayday call

What is DSC or Direct (Direct Selective Calling) / Rescue 21

- Goes out on Channel 70
- They tell the Coast Guard **who you are** (the name of your boat) and **where you are** (Lat. and Long)
- DSC distress calls are sent automatically with the push of a button.
- Your digital signal can be received and accurately decoded under conditions where voice messages are difficult or impossible to understand.
- Coordinates with high antennas to coordinate your location.

Equipping your boat for DSC

What you will need - Only five items:

- 1. Your unique Maritime Mobile Service Identity Number (MMSI)
- 2. VHF/DSC radio
- 3. GPS receiver
- 4. Two-wire connection between VHF and GPS
- 5. A few minutes to learn the DSC system

To obtain and register your MMSI number, the Coast Guard recommends visiting the website boat.us/mmsi and following the instructions. The registration is free for BoatUS Members and costs \$25 for others who are not members of that organization.

With DCS, Make a distress call

Locate the DISTRESS button.

Lift the cover.

Press and hold the button until the radio “beeps”. The DSC signal will tell the Coast Guard your boat’s information.

Select the nature of your call (if your radio includes features that allow you to make this selection).

Say loud and clearly “Mayday, Mayday, Mayday. This is vessel (use your boat’s name).”

Repeat 3x’s

Satellite

Mobile satellite telephones are becoming more common and more inexpensive. The mobile satellite will provide easier and clearer communications than the MF/HF radiotelephone, but the HF radiotelephone will receive high seas marine weather warnings.