

**VHF Guidelines
(Very High Frequency)
Marine Radios**

An introduction to communications on the water

VHF Radio

- FCC Regulations
 - VHF Requirements & Recommendations
 - Advantages & limitations
 - VHF Procedures
 - Distress Calls
 - VHF Hints & Tips
 - Practical exercise
- GOAL:
- You will be able to call another boat or shore for assistance

FCC Regulations

- Channel frequencies assigned by FCC
 - Over 90 – You have 4 or 5 to use.
 - Radio call signs also assigned by FCC
 - No operator license is required unless you have a base station on shore
 - The operator by law, must be familiar with and adhere to the provisions of the Federal Communications Commission
 - FCC does monitor & have fined for misuse.
- Marine Radio is not Citizens Band (CB), Phrases such as "Hey Good Buddy," "I Copy," and "That's a Big 10-4" are illegal.
- Never use profanity or obscene language
 - Always use FCC call signals (or vessel reg #) at the beginning and the end of all transmissions.
 - Maintain radio watch on Channel 16, and use it only for emergency and calling purposes.

VHF Requirements & Recommendations

At a minimum, you should:

- Choose the correct channel when calling
- Limit the preliminary call to 30 seconds
- If there is no answer, wait ~~2~~ 1 minutes before repeating
- Limit ship to ship calls to 3 minutes & to ship's business
- Radio checks are prohibited on Channel 16.
- Use Channel 9 for radio checks & boat to boat comms
- Use low power (1 watt) whenever possible

Advantages of VHF

- USCG & most other boats have one
- Monitored 24/7
- Often better range than a cell phone
- Inexpensive
- Weather channels
- Does not require special permit

Limitations of VHF

- Line of sight - ~ 25 miles under best conditions
- Radio “holes”
- Not everybody has one
- Electronics & water not a good mix
- No “private” conversations
- Except with DSC

VHF Calling Procedures

- Choose the correct channel - Adjust squelch
- 9 = Informal calls to another boat, radio check
- 16 = “Hailing” frequency. Distress
- 68, 69, 71, 72, 78 – Working channels
- Wait until nobody else is talking
- Push the ‘Transmit’ button, pause, speak
- Speak slowly & enunciate clearly
- Yelling makes it worse

To call: (In less than 30 seconds)

- “<Name of boat you are calling>”, Repeat 3 times
- “This is <Your boat name & call sign>” “Over”
- Pause, release ‘Transmit’ button & listen
- If no answer, wait 2 minutes, repeat
- Boat calling will answer with
- “<Your boat’s name>”
- “This is <the other boat’s name>”
- “Switch to <working channel>” “Over”
- End transmission with “This is <boat name> Out”

Distress & Safety Calls

Channel 16 – Wait for a break in traffic

- Imminent loss of life or vessel only
- “**MAYDAY, MAYDAY, MAYDAY**”
- Give as much information as possible quickly
- Boat name, description, location, problem, # on board, action being taken
- “Over”
- Follow USCG instructions

Distress Calls

If you hear a Mayday call:

- If USCG answers –
- Allow them to handle it. You may offer assistance to CG.
- If nobody answers
- Acknowledge the call, record information
- Pass info along to USCG or another boat
- Provide assistance as required and is safe

Distress & Safety Calls

Channel 16 – Wait for a break in traffic

- Urgency signal -- Safety of person or vessel in jeopardy
- **“PAN PAN, PAN PAN, PAN PAN”**
- Safety signal – Concern for safety of navigation, meteorological info
- **“SECURITE, SECURITE, SECURITE”**

VHF Hints

- You can't hear when the “Transmit” button is pushed
- Pause before speaking
- Be clear & concise
- Everybody can hear what you say
- Know & use phonetic alphabet
- Know your call sign & vessel registration numbers

VHF Hints

- **“Over and Out”**
 - “Over” means that you expect a reply.
 - “Out” means you are finished and do not expect a reply.
- Read the owner's manual
- The VHF radio is safety equipment
- Think before speaking

Phonetic Alphabet

A	alpha	J	juliette	S	sierra
B	bravo	K	kilo	T	tango
C	charlie	L	lima	U	uniform
D	delta	M	mike	V	victor
E	echo	N	november	W	whiskey
F	foxtrot	O	oscar	X	xray
G	golf	P	papa	Y	yankee
H	hotel	Q	quebec	Z	zulu
I	india	R	romeo		