

ATLANTIC KAYAK TOURS™

Signaling Equipment

An Atlantic Kayak Tours instructional information flyer

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Equipment

As you become an intermediate paddler and begin to take difficult, more exposed trips, your equipment list must grow. All equipment should be of high quality. A broken paddle is useless, a non waterproof VHF radio that gets wet is dangerous, and a semi drysuit won't keep you dry. The price difference between low and high quality is small.

Over the last decade we have been searching for the best equipment in each category. Because of the quantity of our equipment and the number of days we spend on the water in varying conditions, Atlantic Kayak Tours is a great equipment testing group. We think we have found the best available, but our search is an ongoing one. Very few items have reached perfection in sea kayaking, but we see a steady improvement each year. If we don't find what we want, we work with the manufacturers to design it. Ask us for our advice.

Remember that safety equipment does not replace skills and common sense. For signaling equipment to work it must be accessible. We carry most signaling equipment in our PFD. Extra flares and smoke is carried in a day hatch to back up the minimum that we have in our PFD.

Much of the following information is about VHF radios. While we use and believe these are useful tools, we have had many so called waterproof radios die, when needed. Many people carry VHF radios, but don't know how to use them. Study this following information and start listening to the radio to hear how others use them. We normally carry our radios in day hatches, but will put them on the deck when we feel we might need them. Even most waterproof models should be carried in a waterproof radio bag. Only the highest quality (and most expensive) radios will survive constant Eskimo rolling. Always clean off the radio after salt water use.

Signaling Equipment

Signaling equipment includes; aerial flares, smoke, dye, hand flares, flashlight, whistle, air horn, strobe light, mirror, and VHF radio. All of these have advantages and disadvantages; what you carry will depend on the trip you are doing. The type of signaling equipment varies for day and night trips.

For day trips you should have a minimum of a whistle, aerial flares, and smoke. These three items have different applications. A whistle is used to communicate between paddlers. Aerial flares are used to signal for help. Smoke, dye, and hand flares are used to pin point you, when rescuers are within sight. Remember, like all safety equipment, it is only good if you can reach it and know how to use it.

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Radio License for Boaters

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 side-band radiotelephone or marine satellite terminal, or required to carry a marine radio under any other regulation must still carry an FCC ship station license.

Whistles

We use Fox 40 whistles (figure 1). The Fox 40 is a pea-less design, which allows the whistle to drain immediately. It cannot be over blown. The harder you blow, the louder the whistle sounds. While the whistle may sound loud, boats under power will not hear it. Whistles are used to communicate with other kayakers. Whistles should not be attached to your PFD zipper. Attach it to the shoulder of the PFD using thin bungee and keeping the line short.

Aerial Flares

Aerial flares should always be carried in your PFD and treated like a fire arm. They should be kept away from children and never pointed at anyone. The most popular aerial flares are Sky Blazers® (figure 3). All flares have an expiration date. We have tested dozens of flares with a failure rate of about 50%.

This is a scary thought, when you realize that the Extra-Sport Seaker PFD has



Figure 1
Fox 40 Whistle



Figure 2
Storm Whistle is large, but very loud.

PFD has pockets to carry two flares. The reason we think flares go bad is the o-ring. Some SkyBlazer® flares have flat o-rings, which keep their shape better than the more common round o-rings. Tighten the cap snugly on new flares. SkyBlazer® flares work by unscrewing the bottom cap. A chain is released from the bottom. Hold the flare away from your body and point the barrel straight up. Pull the chain straight down, and the flare will shoot off. Your fingers should not go above the indented area of the SkyBlazer®. The top of the SkyBlazer® will get very hot.



Figure 3
Actual size

Other kinds of aerial flares are parachute flares and flare guns. Larger boats usually carry flare guns, but they are inconvenient for sea kayakers.

When paddling on more exposed trips you should

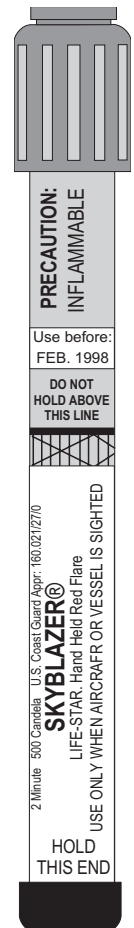


Figure 4
Half actual size

Required Signaling Equipment

Good For Both Day and Night Use

- Pistol projected parachute flare (red) 3
- Hand held rocket propelled parachute flare (red) .. 3
- Aerial pyrotechnic flare (red) 3
- Hand held flare (red) 3

Day Use Only

- Floating orange smoke distress signal 3
- Hand held orange smoke distress signal 3
- Orange flag - 1 required

Night Use Only

- Electric distress lantern for boats 1

The following persons need not comply with day signal carriage requirements; however, each must carry suitable night signals in the numbers required.

A person competing in any organized parade, regatta, race or similar event.

A person using a manually propelled boat.

A person using a sailboat of completely open construction, not equipped with propulsion machinery, under 26 feet in length.



Figure 5
Parachute
Flares

think of carrying larger, better quality flares to backup the Sky Blazers® aerial flares.

Pains-Wessex sell hand flares, aerial flares and smoke. These are large expensive units, that are both US Coast Guard and SOLAS approved. The Pains-Wessex SOLAS Mk 3 (figure 5) aerial flare is a parachute flare. This Parachute flare is much more powerful than SkyBlazer® (see signaling equipment comparison chart on page 5) but also much more expensive and they don't fit in most PFDs. They will fit in the rear pocket of some British PFDs. The advantage of parachute flares is that they have a much greater hang time.



Figure 6
Hand
Flares

Hand Held Flares

Hand held (figure 4 & 6) flares are very similar to highway flares. These flares, like aerial flares are dangerous and you should know how to use them before you need them. Hand flares are sold in both red and white. Red is for emergencies and white is usually for collision avoidance. Remember how invisible a kayak is to other boats, especially large vessels. The white flare is only good for collision avoidance if you can get at it quickly.

Coastal Maritime Safety Broadcasts

VHF Marine Radio Broadcasts. Urgent marine navigational and weather information is broadcast over VHF channel 22A (157.1 MHz) from over 200 sites covering the coastal areas of the U.S., including the Great Lakes, major inland waterways, Puerto Rico, Alaska, Hawaii and Guam. Broadcasts are first announced over the distress, safety and calling channel 16 before they are made. All ships in U.S. waters over 20m in length are required to monitor VHF channel 16, and must have radios capable of tuning to the

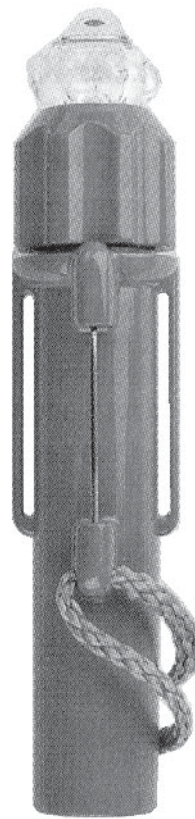


Figure 7) ACR C-light

Smoke

Smoke comes in 30, 45, 60, and 180 second containers. The 30 second container is the size of a film canister. Smoke should only be used when a rescuer is within sight. The windier it is, the shorter the usefulness of smoke. The Pains-Wessex smoke is in a much larger container. Because of the difficulty in storing this container most people will prefer the SkyBlazer® Smoke.



Figure 8
Actual size

Strobe Lights

A strobe light is a great night or foggy condition signaling device. A strobe light is visible from a long distance and works for many hours. Strobe lights are usually attached to the shoulder of a PFD, so it is visible while floating in the water. The light should be checked and batteries replaced regularly. The Firefly is a good, small strobe. Legally a strobe can only be used as an emergency signaling light and can not be used in place of a flashlight.

Flashlights

A flashlight is required by the Coast Guard for night paddling. We carry two lights each. A small flashlight is attached to the shoulder of our PFD and is usually hung over our back. The other is a high powered flashlight and it is kept tethered on our deck. The deck flash light is only turned on in busy areas or to signal other boats. A regular flashlight is not as visible as a lantern type light. The reason the deck light is kept off is to increase night vision. Light sticks are also used as a lantern type light. The ACR C-light (see figure 7) is good, but the bulb is not replaceable.

Visual Distress Signals (VDS)

All recreational boats 16 feet and over (with certain exceptions), or any boat carrying 6 or less passengers (for hire) on the coastal waters of the United States are required to carry Coast Guard approved Visual Distress Signals (VDS). Boats less than 16 feet are not required to have signals for day, but must have signals that can be used at night, between sunset and sunrise. Several types of approved signals are available, but only one type for day and one type for night, in the number indicated, are required.

It is clear that these signals may be all that stands between safety and disaster. The Coast Guard recommends that these signals be carried aboard your vessel and stowed in a safe but readily accessible location. VDS are usable for three years from the date of manufacture (stamped on the signal) and should be properly disposed of and replaced by new VDS after this date.

VHF Radios

While a VHF radio is one of the best signaling items, it does not replace other equipment and is not a Coast Guard approved signaling device. There are a few small waterproof VHF radios in the \$250-\$350 price range. We have been using an Apelco 510 (figure 9), which have now been updated to a newer model. This



Figure 9
Apelco 510

was a compact, (advertised as) waterproof model with most of the features you would want. The 510 meets the Coast Guard standard for waterproofness at CFR-46. The standard



Figure 10
Navico Axis
200 Radio

Sending a Distress Call

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

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.

Distress signal "MAYDAY", spoken three times.

The words "THIS IS", spoken once.

Name of vessel in distress (spoken three times) and call sign or boat registration number, spoken once.

Repeat "MAYDAY" and name of vessel, spoken once.

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.

Nature of distress (sinking, fire etc.).

Kind of assistance desired.

Number of persons onboard.

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.

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.

Boater Calling Channel (VHF Channel 9)

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.

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.

calls for a VHF radio to withstand a multidirectional stream of water shooting 65 gallons per minute for five minutes without leaking. This does not mean a radio is submersible, but it will stand wind driven rain and waves washing over your deck. It will not withstand constant rolling. All of our 510s have died at one time from water damage, but they come with a three year warranty which covers water damage, but not submersion damage. Remember we use our equipment much harder than

Distress Calls

The distress call has absolute priority over all transmissions and need not be addressed to any particular station. Any mariner hearing a distress call shall immediately cease all transmissions capable of interfering with the distress message and shall continue to listen on the frequency on which the call was heard. If your vessel is in distress and abandonment is necessary, activate your EPIRB and take it with you. If you do not have an EPIRB, the radio transmitter should be set for continuous emission to provide rescue vessels and aircraft with a homing signal.

most paddlers. We have had a few other high quality non waterproof radios that we kept in waterproof VHF bags, but they didn't hold up as well as the Apelco 510. Even waterproof radios should be kept in a waterproof container when not in use and would help to always keep it in a waterproof VHF bag. After each use in a salt water environment, it should be washed with fresh water and fully dried. The battery should be removed regally to be checked for water damage. We now put electrical tape around the battery seal to help with waterproofness. Check with the manufacturer to see if you should put silicon o-ring grease on the battery o-ring (most waterproof cameras use o-ring grease). Salt water is very destructive and only the best (expensive)

Signaling Equipment Comparison

Manufacturer	Model	Altitude	Brightness	Burn Time	Price
SkyBlazer	XLT	500'	10,000	8 sec.	\$15. for 3
Pains Wessex	Parachute	1,000'	30,000	40 sec.	\$40. each
SkyBlazer	Handheld	n/a	500	120 sec.	\$15. for 3
Pains Wessex	Handheld	n/a	15,000	60 sec.	\$13. each
SkyBlazer	Smoke	n/a	n/a	45 sec.	\$12. for 2
Pains Wessex	Smoke	n/a	n/a	180 sec.	\$40. each

Price is approximate selling price, not suggested retail price.

Brightness is in candlepower.

With smoke it is not only the burn time but also the amount of smoke.

United States Radio Watchkeeping Regulations

U.S. recreational vessels not required to carry radios

Vessels not required to carry a marine radio (e.g. recreational vessels less than 20m length), but which voluntarily carry a radio, must maintain a watch on channel 16 (156.800 MHz) whenever the radio is operating and not being used to communicate. Such vessels may alternatively maintain a watch on VHF channel 9 (156.450MHz), the boater calling channel. Note however that urgent marine information broadcasts, such as storm warnings, are announced on channel 9 only in First CGDistrict waters (northern New Jersey, New York and New England).

U.S. vessels required to carry a marine radio

U.S. vessels required to carry a VHF marine radio, such as commercial fishing vessels, must maintain a watch on channel 16 (156.800 MHz) while underway whenever the radio is not being used for exchanging communications.

radios which are well treated and maintained will survive for the long haul. If the radio doesn't work when needed properly in bad conditions what good is it.

Our newest radio is the Navico Axis 200. Navico (figure 10) has a version of this radio which meets GMDSS. By 1999 all large ships operating internationally must comply with the Global Maritime Distress and Safety System (GMDSS) carriage requirements. These include specifications for survival crafts hand held radios. We have been told that the Navico Axis 200 is identical to the GMDSS version, but hasn't been tested or certified as GMDSS. While the Axis 200 cost over \$600 (discounted) it is the best rated radio in that price range. The Axis 200 is more waterproof and drop resistant, but also larger and heavier than the Apelco 510. What good is a warranty when you are in a survival situation. If this radio holds up, it is well worth the price. Remember that even when the radio is not in use, the battery will lose about one percent of its power every day. The Axis 200 has

Channel 9 Calling Channel

The First Coast Guard District has instituted Channel 9 as the Recreational Calling Channel throughout the District. The Coast Guard does not monitor Channel 9, but does make Broadcast Announcements on Channel 9. Non-commercial and recreational boaters are encouraged to use Channel 9 for calling other vessels and reserve Channel 16 for distress and safety communications.

Proper use of Distress, Urgent and Safety Signals

Several instances have been reported of vessels calling MAYDAY to report they were out of gas, lost, having engine trouble, etc... and, in each case, when questioned, they advised they were in no immediate danger. The use of MAYDAY in this way violates Federal Communications Commission (FCC) regulations because it tends to nullify the importance of this signal (In the interest of maritime safety it is imperative that all mariners familiarize themselves with the proper use of radiotelephone signals authorized for the different situations they may encounter). The following is taken from these regulations.

DISTRESS SIGNALS: The radiotelephone distress signal consists of the word MAYDAY spoken three times. This signal indicates that a marine mobile station is threatened by grave and imminent danger and requests immediate assistance.

URGENT SIGNAL: The radiotelephone urgent signal consists of the three repetitions of the word group PAN-PAN (rhymes with CONN). This signal indicates that the calling station has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or the safety of a person.

SAFETY SIGNAL: The radiotelephone safety signal consists of the word SECURITE spoken three times. This signal indicates that the station is about to transmit a message concerning the safety of navigation or giving important meteorological warnings.

a battery power graph, which shows up each time the radio is turned on. The Apelco 510 displays "Low" on its LCD display when the battery is very low and the push-to-talk button is pressed. This is a problem because we use the radios mostly to listen. Some newer radios have better LCD displays.

Each year the radios are getting better and less expensive. What we would like is a totally waterproof, drop resistant, small sized radio with a twelve hour battery and all the scanning features available. This is not here yet, but almost.

The advantage of a radio is that you can call the Coast Guard or other boats for help. If you must cross a channel in the fog, you can send a message to all other boaters of what you are doing and where you are. The distance a VHF radio can transmit is line of sight. In a kayak, this is only a few miles if you are talking to another kayak. The Coast Guard antennas are high, which will increase the transmittable distance. To increase your transmittable distance use a telescoping antenna. A telescoping antenna will increase transmittable distance much more than increasing the output power. The problem is that most radios come with a non-telescoping antenna and the optional telescoping antenna is not waterproof. You can always carry a telescoping antenna and put it on in situations where you need to transmit further, but where the radio wont get wet.

U.S. VHF Marine Radio Channels

Channel Number	USE
01A	Port Operations and Commercial. VTS in selected areas.
05A	Port Operations. VTS in Seattle
06	Intership Safety
07A	Commercial
08	Commercial (Intership only)
09	Boater Calling. Commercial and Non-Commercial.
10	Commercial
11	Commercial. VTS in selected areas.
12	Port Operations. VTS in selected areas.
13	Intership Navigation Safety (Bridge-to-bridge). Ships >20m length maintain a listening watch on this channel in US waters.
14	Port Operations. VTS in selected areas.
15	Environmental (Receive only). Used by Class C EPIRBs.
16	International Distress, Safety and Calling. Ships required to carry radio, USCG, and most coast stations maintain a listening watch on this channel.
17	State Control
18A	Commercial
19A	Commercial
20	Port Operations (duplex)
20A	Port Operations
21A	U.S. Government only
22A	Coast Guard Liaison and Maritime Safety Information Broadcasts. Broadcasts announced on channel 16.
23A	U.S. Government only
24	Public Correspondence (Marine Operator)
25	Public Correspondence (Marine Operator)
26	Public Correspondence (Marine Operator)
27	Public Correspondence (Marine Operator)
28	Public Correspondence (Marine Operator)
63A	Port Operations and Commercial. VTS in selected areas.
65A	Port Operations
66A	Port Operations
67	Commercial. Used for Bridge-to- bridge communications in lower Mississippi River. Intership only.
68	Non-Commercial
69	Non-Commercial
70	Digital Selective Calling (voice communications not allowed)
71	Non-Commercial
72	Non-Commercial (Intership only)
73	Port Operations
74	Port Operations
77	Port Operations (Intership only)
78A	Non-Commercial
79A	Commercial
80A	Commercial
81A	U.S. Government only - Environmental protection operations.
82A	U.S. Government only
83A	U.S. Government only
84	Public Correspondence (Marine Operator)
85	Public Correspondence (Marine Operator)
86	Public Correspondence (Marine Operator)
87	Public Correspondence (Marine Operator)
88	Public Correspondence in selected areas only.
88A	Commercial, Intership only.

Note that the letter "A" indicates simplex use of an international duplex channel, and that operations are different than international operations on that channel. Some VHF transceivers are equipped with an "International - U.S." switch for that purpose. "A" channels are generally only used in the United States, and use is normally not recognized or allowed outside the U.S.

Boaters should normally use channels listed as Non-Commercial. Channel 16 is used for calling other stations or for distress alerting. Channel 13 should be used to contact a ship when there is danger of collision. All ships of length 20m or greater are required to guard VHF channel 13, in addition to VHF channel 16, when operating within U.S. territorial waters. Users may be fined by the FCC for improper use of these channels.

A Few Important Channels in the New York City Area

Channel 16 is for Distress, Safety, and Calling - you can make bridge-to-bridge contact with another ship, and have a brief safety related conversation here. If you're going to have a more lengthy conversation, you make contact on 16 and agree on another channel. Any vessel required to monitor VHF is required to be listening on this channel. That makes it, in general, the best channel for a distress call. But, for NY Harbor, read on.

Channel 11 is the USCG Vessel Traffic Service (VTSNY) initial call channel for New York. Channels 12 and 14 are also used.

NOTE THAT VESSELS USING THE VTSNY ARE NOT REQUIRED TO ALSO LISTEN ON 16. The USCG has an extensive system of cameras and radios around the lower and upper Bays, around Staten Island, and the southern ends of the East and Hudson Rivers. If you are in distress in this area, I'd recommend calling USCG "Traffic" on 11 first.

If you are around blind turns or piers (e.g., Manhattan side of the Hudson, Arthur Kill, Governor's Island), monitoring this channel can help give you warning of big vessel's entry and exit. Particularly for groups, you can also call the USCG and let them know to inform large vessels of your presence.

Channels 13 and 67. "Bridge-to-bridge" Power limited, useful for large vessels maneuvering around each other. Kayak applicability is that most staffed bridges or locks monitor these freqs.

Channels 68 69, 71, 72 - non commercial. Kayak-to-kayak or kayak-to-shore (except 72 is ship-to-ship only). Also, you can kick to these channels after making initial contact on 16.

Most VHF radios now come with six to eight hour battery so you can keep the radio on for an extended period. This is the amount of time you can have the radio on receive. Transmitting takes more power and will drain the battery much faster. All VHF radios have a high/low power transmitting switch. You should always use the low setting in non-emergency situations. If the party you are calling can hear you on low, it is only going to interfere with other people if you use the high setting. Typically rechargeable batteries will drain about 1% a day when not in use. Some batteries have "memory" and you need to drain them totally every few charges.

Historically, channel 16 has been the "Distress and Hailing" channel, but that is now changing in many areas (see Boater Calling Channel), because of over use. In those areas, channel 16 is for emergencies only, while channel 9 is for hailing. Either way a VHF is not for chit-chat, but for "business" use only. The Coast Guard requests that you limit calls to 30 seconds. If you receive no reply, wait 2 minutes; then try again.

The license requirement for Marine VHF operation has been suspended (see Radio License for Boaters) as of April 1996, but may be reinstated. Know the FCC rules and don't think having a radio will allow you to push limits.

Coast Guard Telecommunications Group Radio Stations

The Coast Guard operates 46 Group and 2 Section offices, whose responsibility include listening for distress calls over VHF maritime channel 16. Approximately 20,000 to 25,000 distress calls are made over this VHF system each year. On the Pacific, Atlantic, and Gulf coasts, these stations also listen for distress calls over the international radiotelephone distress frequency 2182 khz. These Group and Section offices also make voice broadcasts of weather and navigational warnings over VHF channel 22A and 2670 kHz, respectively.

Cell phones are not as good as VHF radios, because they don't hold up to water, rough handling and you can't call other boats with them. Would you want to use your cell phone in a driving rain or when waves are breaking over your deck, even if it is in a bag.

When making large open water crossings, paddling in fog or other times you might be a hazard to navigation you can send out a "Security" signal. On some advance programs we will use a Security message to warn other boaters that we are out there. Security is the third level of priority below Mayday and Pan. Security is used to report navigation or weather warnings. On these programs we will also keep our radios on to monitor channel 16. If we see a large ship or ferry we can call them on channel 16 to tell them where we are, where we are going and to ask what they would like us to do. These are all uses that make a VHF Radio indispensable. On a Long Island Crossing in eight foot seas we had on a VHF radio and heard the Coast Guard issue a Pan message that there were kayakers missing. I called them and told them we were all right. If not for the radio a search would have started. This is where a VHF out performs a cell phone.

Family Radio Service

Another option we have been using are Motorola TalkAbout radios in Waterproof bags. These radios fall under the FCC Family Radio Service rules and are sold by many companies besides Motorola. These are not replacements for VHF as they can not call other boats or the Coast Guard.

The advantage of these are that you are allowed to chit-chat all day with them.



Cellular Phone Use Aboard Vessels

Cellular telephones are fast becoming the land mobile communications link of choice throughout the United States. Their lowered cost, increased coverage, and ease of use have made them very popular. Cellular telephone coverage, however, is primarily optimized for the land areas, with limited cellular coverage offshore.

Cellular telephones have several limitations when compared to VHF-FM marine band radios. These include: Lower power. Cellular phones are limited to 3 watts output power-installed marine VHF-FM transceivers have as much as 25 watts when put on the "high power" setting.

Point-to-point communications. A call made on a cellular telephone "connects" one phone to another - no one else can (legally) monitor the call. If a cellular phone is used for distress, nearby vessels are unable to hear the distress call and render assistance.

No communications with CG units. A distressed vessel calling the Coast Guard for assistance will be able to contact a shore unit (if within cellular range of the shore) but will not be able to communicate with a CG cutter or aircraft. The mariner would still need a VHF-FM radio to communicate with the cutter or aircraft for coordinating the rescue.

No radio watch on cellular. The Coast Guard monitors Channel 16 VHF-FM through a system of overlapping transceiver sites. Calling on Channel 16 never results in a "busy signal" the way a telephone call might. The possibility also exists that the mariner could, in using cellular telephone, call the wrong CG unit, which could result in a delay in his being rescued.

THE BOTTOM LINE IS: The Coast Guard, by law, is required to monitor Channel 16 VHF-FM 24 hours a day. Cellular phones are nice, but the mariner's primary method of communication with the Coast Guard should continue to be VHF-FM radio.

To assist the "cellular" boater in distress to contact the Coast Guard, the cellular providers and the Coast Guard have jointly developed the "*CG" feature, which is available in all First District waters where cellular service exists. Cellular callers need only to dial "*CG" (*24) to be automatically connected to the nearest Coast Guard Group Operations Center. Callers should identify themselves and indicate that the call is a cellular call. This will help the Coast Guard in handling the case efficiently.

