

Canoe and Kayak Safety Equipment

“Outfitting the Paddler”

Handheld VHF Radios

By [Michael Gray](#)

(Michael Gray owns Uncommon Adventures and relies on his radio for most basic communication needs at his winter base in the Bay Islands of Honduras. Check them out on the web at www.uncommonadv.com)

Compact Very High Frequency (VHF) radios can be an extremely useful piece of signaling equipment and a good way to maintain group contact across the water. They have a useful range of about 5 miles and operate on a line-of-site signal. In other words, if there is a big hill between you and the location you are trying to call; well, its just not likely to work. I have lengthened my calling distance by climbing a palm tree....climbing a hill could also aid you as long a you are calling across water. Bear in mind that it is illegal to use handheld VHF's on land the way you would family radios.

They have a couple of advantages over cell phones...they work everywhere, they also host an array of NOAA weather channels and larger boats that you share the water with are required to monitor channel 16, the emergency channel. In a pinch, you can even call a marine operator to get you on a phone line for calls to land based telephones. Most models currently available are loaded with features...instant channel 16, scanning, one or five watt send modes, up to ten weather channels, backlit displays and a variety of waterproof/resistance options. They range in price from \$100 to close to \$500...the latter being a titanium model you can drive your Hummer over.

Why do you need one? One of the most useful features is the excellent weather information available. You have several stations to choose from and reception is usually far superior to \$30 weather radios. Clearly, being able to call for assistance when needed is a plus. If you are part of a larger paddling group and split into multiple pods, it can be a very useful tool to maintain contain between smaller groups. In the southern Caribbean, I've used my to call for taxis, make restaurant reservations and even ordered a pizza once.

Some features to look for:

- Durability: You do get what you pay for. The lowest cost models are probably not worth your time. Look for a model with

a 3 year warrantee or better that has easy to use buttons and will work inside a waterproof case.

- **Waterproof:** Some models are called waterproof, but may only take occasional splashing. Others are labeled submersible. Though you are unlikely to be using one while snorkeling, serious waterproofness is a great advantage. Just remember, it still doesn't float. It may be functional at 30 ft. of depth, but you've got to find it first.
- **Power:** A battery pack that can be swapped with AA batteries in the event you run out of power. Most models come with Nicad batteries which don't take a full charge if not fully discharged every time you use them. Some of the newer, higher end models use lithium ion cells which do not have this problem.

*****Recommended:** There are many fine waterproof bags now available that will protect your radio while stowed and in use. Some even come with a handy foam flotation insert....a PFD for your radio.

Where can you get them? Well most marine and boating shops offer the best selection and prices over the sport shops. Some of them even have on-line catalogs. The truly waterproof models have recently dipped below \$200 as well, making this safety aid more affordable than ever.

Signaling

When to Use What

By [Michael Gray](#)

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If you've ever been to a sea kayaking symposium, you've probably run into one of those folks armed with flares, whistles, smoke, day-glow jumpsuit, a mirror, EPIRB, VHF, GPS, SATCOM and operational manuals that are inconveniently non-waterproof. In the right context any of these items could save your life or at least get you arrested when you try to board a plane.

So when do you signal for help? When you find yourself in a situation that is beyond your capability. Yeah, its sort of like guys asking for directions...judgment IS always a factor. Not that you start by shooting rocket flares and shouting "mayday" at the top of your lungs...let's look at our options:

Sonic signals:

- Whistle: keep a high intensity whistle attached to your PFD. Three sharp blasts mean help and can be heard a fair distance.
- Air horn: these small devices that used canned air can really pack a sonic wallop...however, most people will think you are just screwing around. Remember 3 sharp blasts.

Visual signals:

- Paddle Waving: Really. Put a little reflective tape on the back of your paddle and you'd be amazed at how far it can be seen when waved back and forth.
- Rocket flares: ONLY use these when you can see whom you are trying to attract. White work well in the day and red at night or against a dark sky. Bear in mind that you have a limited supply and that they usually have very short burn times. You may need to save one so that your potential rescuers can follow the signals to you.
- Smoke or locator flares: These are usually handheld and used to help people find you once you've initially gotten their attention.
- Signal Mirror: On sunny days a simple mirror with a sighting hole will almost blind a boater at quite a distance if you want to get them to see you. You may already own several...CD's make terrific signal mirrors. That nugget comes courtesy of Karl Pearson.
- Orange distress flag: These large plastic square bags can also aid in exposure situations and is a good day time visual from the air when laid out on your boat or the water's surface.
- Fires...3 of anything mean SOS. Better hope Wilson's got the matches.

Phone home:

- Cell phones are getting to be very useful as coverage is getting better all the time. Be sure to have it accessible and in safely waterproof storage.
- Hand Held VHF's: You no longer need a license to operate one of these radios with a 5-mile line-of-sight range. You can even get good submersible ones for less than \$200 now. You can make a general distress call or call a marine operator to get access to the phone line system. They even offer a full compliment of weather stations. In a pinch you can even talk to other boater with them to get a line on weather that you can't see from down low. These are really a must for anyone wanting to do overnights or open water trips.
- Satellite telephones? No, you don't need to drive a Humvee and have a name like Clutch to own a satphone now. You can buy one off the web for \$900 and be able to phone virtually anyone from a deserted beach in some banana republic. Ask me how I know.

Remember, be prepared for the conditions you are paddling in, but if you are exercising proper judgment you shouldn't find yourself in need of any emergency arm waving.

Dressing for Success

The Four Seasons

By [Michael Gray](#)

Proper paddling skills are extremely important, but they won't help you that much if you are not properly dressed for the conditions. Paddling is one activity where being voted "worse dressed" can make you late. Late, as in ...the late (insert your name). So let's take a look at proper dress that will not only provide comfort, but can also save your life.



We'll work from the foundations on out, so let's start with the most benign condition:

Summer: Warm water and warm air make folks think of "shorts and t-shirt" weather. This is where fabrics provide protection from the sun as well as general comfort. We want quick drying fabrics that don't bind and provide some sun protection. Avoid cotton...it just doesn't do anything right when its wet and it will be wet. So swim suits, synthetic blend fast-dry shorts and shirts are the dress du jour for the warmest of conditions. Feet should get shod with water shoes or neoprene booties. Remember that footwear with straps (like sandals), laces or buckles could potentially get entangled in your footrests...this would be bad if you had to make a wet exit. Don't forget a brimmed hat with a chin strap to protect your head and help you keep your cool. Baseball style caps can work too, but remember that they usually expose your ears to sun, so slather on that sunscreen! Finish your summer ensemble with quality sunglasses and you are ready for action. Note: polarized shades help you to see underwater obstructions more clearly as well as the various critters that may be swimming around in the shallows.

Spring/Fall: On both shoulders of summer, you'll find that you often need another layer to be comfortable. Check your dresser for an item leftover from ski season...synthetic long underwear such a polypropylene, cool-max or something similar make a terrific layer for cooler temperatures...no cotton. You'll need both tops and bottoms. If its even cooler, say the water temperature and the air temperature combined add up to be less than 100 degrees, you should consider adding a Farmer John/Jane style wetsuit to boost your warmth in the event of immersions. Add a paddling jacket to cut the wind and you'll stay both warmer and dryer. High topped neoprene booties keep your feet warm and the rubber soles provide protection carrying your boat to and from the water. In cooler weather you may consider a fleece hat or a neoprene hood to protect your head. After all, the entire goal of your body's circulatory system is to keep your brain warm; why not help it out?

Winter: Brrr. I migrate, but if you are one of the hearty souls that often ventures out when the water and air temperature combined are less than 70 degrees, then

you may need to do more than layering everything above together. You're looking at dry suit conditions. Dry suits are designed simply to keep you dry with gaskets at your wrists, neck and ankles. You still need to add insulation underneath (all the stuff above). Some wise folks even wear a wetsuit under their drysuit in case of leakage. They are very expensive and often have custom options available like attached boots (great idea), a relief zipper or drop-seat (an even better idea) or breathable fabrics like Gore-tex. Though expensive, the breathable suits are far and away the most comfortable. Okay, big bucks, but what is your life worth? Remember, we are dressing for immersion. Feet get the neoprene bootie treatment with the addition of wool socks. It's tempting to wear rubber knee boots, but if they fill up in the water, you are compromising your odds greatly. The head gets a neoprene beanie and your hands will need protection from wind and cold. Pre-curved neoprene gloves, paddle mitts or pogies (a mitt that velcros around your paddle shaft allowing you direct contact) can all keep your fingers mobile and still allow you to grip your paddle.

Key points:

- Dress for the water temperature. If you have an untimely baptism you need to stay warm long enough to perform a rescue, whether assisted or self.
- Cotton kills. I can't stress this enough. Save it for when you are dry.
- Fabrics: Polypropylene, polar fleece, neoprene and fuzzy rubber are all excellent choices for paddle sports. The newer stretch fleece fabrics with the rubber coating on the outside (fuzzy rubber) are comfortable, quick drying and quite warm. They are much more comfortable to move around in than neoprene, but please take note that they are not quite as warm when you are exposed to prolonged immersion.

Suggested Gear List

(From Seakayaker Magazine, October, 2001 pp.30)

Essentials:

- | | |
|---|---|
| <input type="checkbox"/> Kayak/Canoe | <input type="checkbox"/> Spray skirt |
| <input type="checkbox"/> Hatch Covers/Lids | <input type="checkbox"/> Life Jacket |
| <input type="checkbox"/> Floatation | <input type="checkbox"/> Whistle |
| <input type="checkbox"/> Paddle | <input type="checkbox"/> Float Plan |
-

Paddling Gear:

- | | |
|--|---|
| <input type="checkbox"/> Pump | <input type="checkbox"/> Sling or self rescue rope |
| <input type="checkbox"/> Sponge | <input type="checkbox"/> Sea Anchor |
| <input type="checkbox"/> Spare Paddle | <input type="checkbox"/> Deck bag |
| <input type="checkbox"/> Tow Line | <input type="checkbox"/> Cockpit cover |
| <input type="checkbox"/> Rescue knife | <input type="checkbox"/> Paddle Leash |
| <input type="checkbox"/> Paddle Float | |
-

Navigation:

- | | |
|--|---|
| <input type="checkbox"/> Charts | <input type="checkbox"/> Binoculars |
| <input type="checkbox"/> Tide/Current tables | <input type="checkbox"/> Weather Radio |
| <input type="checkbox"/> Chart case | <input type="checkbox"/> GPS |
| <input type="checkbox"/> Deck compass | <input type="checkbox"/> Navigation Tools |
| <input type="checkbox"/> Hand bearing compass | <input type="checkbox"/> Waterproof notebook/pad |
| <input type="checkbox"/> Waterproof watch | |
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Signaling:

- | | |
|---|---|
| <input type="checkbox"/> Whistle | <input type="checkbox"/> Smoke can |
| <input type="checkbox"/> Cell phone & case | <input type="checkbox"/> Chemical light sticks |
| <input type="checkbox"/> VHF Marine Radio | <input type="checkbox"/> Rescue Banner |
| <input type="checkbox"/> Aerial flares | <input type="checkbox"/> Dye Marker |
| <input type="checkbox"/> Hand-held flares | <input type="checkbox"/> Strobe Light |
| <input type="checkbox"/> Signal Mirror | <input type="checkbox"/> EPIRB |
| <input type="checkbox"/> Flashlight | |
-

Accessible Personal Gear:

- | | |
|--|---|
| <input type="checkbox"/> Glasses | <input type="checkbox"/> Bandana/towel |
| <input type="checkbox"/> Sunglasses | <input type="checkbox"/> Water bottle/hydration system |
| <input type="checkbox"/> Eyeglass strap | <input type="checkbox"/> Energy bars |
| <input type="checkbox"/> Sunscreen | |
| <input type="checkbox"/> Lip Balm | |

Stowed Personal Gear:

- Wallet**
- Cash**
- Contact phone numbers**
- Copy of Float Plan**
- Car Keys**
- Medications**

Paddle/Immersion Clothing:

- Wetsuit**
- Dry suit**
- Neoprene hood**
- Neoprene gloves**
- Neoprene booties**

Clothing:

- Knit hat**
- Brimmed hat**
- Rain Jacket**
- Rain pants**
- Rain hat**
- UV Protective shirt**
- Paddling shoes**
- Synthetic underwear (long/short)**
- Polartec jacket/pants**

Shore Gear:

- Space blanket**
- Lighter**
- Knife**
- Bug spray**
- Tarp**
- Toilet paper**
- Trowel**
- Water filter**
- Water purification tablets**
- First aid kit**
- Snake bite kit**

Repair Kit:

- Duct tape**
- Epoxy**
- Spare batteries/bulb**
- Multi-tool**
- Cord**
- Needle and thread**
- Sea sealer**
- Wire**

Bivouac Gear:

- Bivi-bag**
- Candle/lantern**
- Hammock**
- Tarp**
- Fire starters**
- Cooking pot**
- Stove**
- Sleeping bag**
- Sleeping pad**
- Sterno stove**
- Camp saw**
- Folding seat**

In preparing this information packet, I thought it wise to put in my own thoughts on what to carry with you on every trip even if you are going on a short paddle in familiar water.

Of course, a float plan, either written out and left at home or call someone and tell them where you are going and when to expect you back.

I am a firm believer in having plenty of emergency signaling equipment. In coastal waters, flares, a reasonably good marine VHF portable radio with a charged battery, a cell phone (also with a charged battery) and a good signal mirror can all be carried in or attached to your life vest. A loud plastic whistle should be attached to every life vest you own.

Not going to stay out past sunset? No matter, carry a small water proof flashlight and a small strobe light. You are a lot easier seen in the dark if you light up and flash. And you never know when something might happen that causes you to stay out after the sun has dropped out of sight. I also suggest waterproof matches or a good disposable lighter would be a welcome thing to have if you get to land and want a fire for warmth or signaling. (\$5 to \$10 would put you in Cadillac equipment here)

Your paddle jacket should have SOLAS reflective tape on the shoulders and back. Some sticky SOLAS tape on your boat isn't a bad idea either. (\$5 for tape alone and \$80+ for a good paddle jacket with SOLAS markings and pockets)

Drinking water and/or other forms of hydration are essential to have along on every trip. Remember that old saying? "Water, water everywhere nor any drop to drink" Carry a bottle of water and/or a hydration pack. You might want to toss in some water purifiers in the first aid kit that I know you have in your dry bag. Oh, didn't I mention that... well buy a small soft sided first aid kit and add some aspirin (take real aspirin in the event you feel like you are having a heart attack, the aspirin will actually help save your life), water purification tablets and a small sunscreen bottle. (\$1.99 for water if you buy it \$40+ for a hydration pack)

I see some of our members on trips without some of the most essential equipment that you need to have. That being paddle floats and bilge pumps. If you have a boat with a cockpit (as opposed to a sit on top to which this does not apply), go spend the \$50 or so and get one each paddle float and bilge pump. If you swamp your boat and get back in, do you want all that water in there with you? And speaking of getting back in, how are you going to do that without a paddle float to stabilize the kayak? You should also add a length of rope or such so you can make a self rescue step too.

A word about a few more expensive items that you may want to consider essential. I think a cell phone is almost essential but obviously they can be a luxury if you are on a budget. Nonetheless, if you need to call for help and you are in the range of a cell tower, they will help you get rescued. (\$49 + and up). A marine VHF radio is darn near essential around on the coast but a handheld one is low powered and limited in distance that it will transmit. If it isn't waterproof (some are), put it in a dry bag.

A GPS (Global Positioning System) receiver is a fun thing to have to tell you where you are in the world, where you have been and how to get where you want to go (maybe). It tracks in real-time: your exact location on earth; speed; distance traveled; direction of travel and if you use it properly, it will set a return course for you to follow if you get lost. \$100 to \$300+ (average about \$150 for a good one). They are small and waterproof ones are available.

A wind meter or anemometer is a worthy addition to the gadget man's bag. A good one measures the wind speed and temperature plus wind chill. A worthwhile device to have when you want to know about the wind and ambient temperature/wind chill. (\$90-\$150)

Now, the US Coast Guard doesn't require paddle boats to have flares or signaling devices on board as they do of other vessels. BUT, if you **don't** have some means of attracting attention, your chances of being found by rescuers if something happens and you capsize, get lost, run out of daylight, or whatever, are extremely slim. A set of 3 pocket size flares run about \$20 or less. Cheap enough if you ever need them.

Respectfully submitted to the Club

Edward M. Garrison