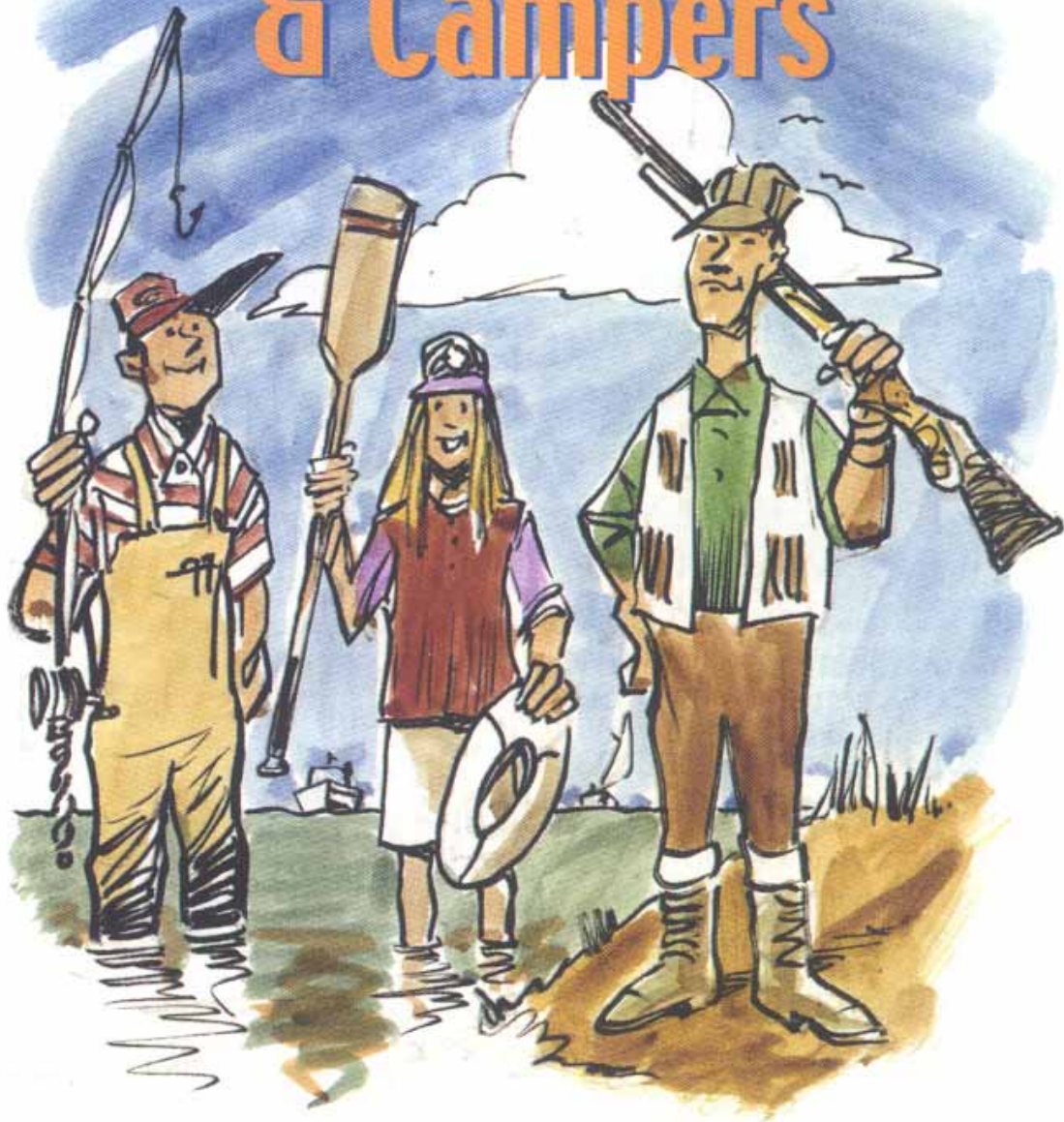
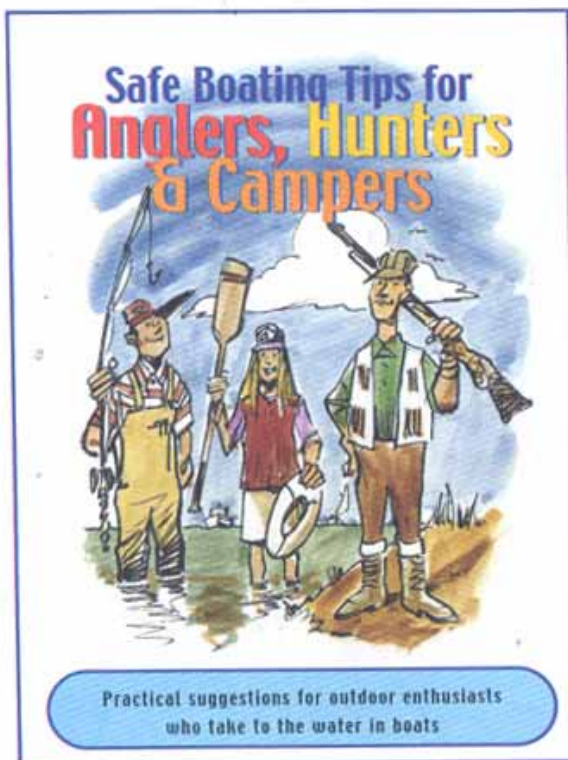


# Safe Boating Tips for Anglers, Hunters & Campers



**Practical suggestions for outdoor enthusiasts  
who take to the water in boats**



## **4** Reasons why you should review this booklet before you leave the dock.

- 1) The information could save your life.
- 2) The information could save you from injury.
- 3) The information will provide you with legal requirements on what you must have on your boat and save you from a possible citation and/or fine.
- 4) The information will make your fishing, hunting or camping more enjoyable.

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[www.usbi.com](http://www.usbi.com)



### **USBI Member Organizations**

American Red Cross • United States Coast Guard Auxiliary Association, Inc.  
United States Power Squadrons®  
United States Sailing Association  
Canadian Power and Sail Squadrons

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# Tips for Anglers, Hunters & Campers

No matter how many years you've been around boats, please take the time to review this quick-reading booklet. People who hunt or fish from boats have one of the highest boat fatality rates. More die from falling off boats 16-feet and smaller than larger boats, and most boats are anchored at the time. Here are a few of the most important safety tips:



**Be weather wise.** Sudden wind shifts, lightning flashes and choppy water all can mean a storm is brewing and heading your way.



**Tell someone** where you're going, who is with you, and how long you'll be away. **Check your boat,** equipment, boat balance, engine and fuel supply before leaving.

**Ventilate after fueling.** Open hatches, run the blower, and most important, carefully sniff for gasoline fumes in the fuel and engine areas before starting your engine.



**Keep fishing and hunting gear clean and well packed.** A loose fish hook can cause a lot of pain and ruin a great outing. Bring extra line to secure both your boat and your sporting equipment.



**Don't Overload.** When you overload you are asking for trouble. Even with flotation, a swamped boat is dangerous. Capsizing and falls overboard account for 70% of boating fatalities.



**When boarding** or changing seats, stay low and near the center line of a small boat, which can capsize easily if weight is not properly distributed.

# Life Jackets - Wear them

If you've ever tried to put on a life jacket (PFD—personal flotation device) while you were in the water you know how difficult that task can be - even in calm waters and during daylight hours. It would be much more difficult to attempt in rough waters and at night. Because of this we urge you to do the following: Before you cast off in a boat you should find a life jacket and put it on to make sure it fits you properly and is approved for your specific type of activity.

Your lifejacket should always be readily available. When rough weather threatens, make certain that your life jacket is on.

If you are a non-swimmer wear it at all times. It is also recommended that children under the age of 13 wear a life-jacket while aboard a boat.

Never leave life jackets sealed in plastic wrapping. They must be ready to be put on fast.

Whenever water conditions or weather cause concern, have everybody aboard immediately put on their life jacket.

If someone should fall in the water stay with the boat or wait for the boat to come along side.

There are a great variety of life jackets on the market today, including light weight inflatables. The various types of life jackets are as follows:

**Offshore Life Jackets (Type I PFD):** Provides the most buoyance. It is effective for all waters, especially open, rough or remote waters where

rescue may be delayed. It is designed to turn most unconscious wearers to a face up position.

**Near Shore Buoyant Vests (Type II PFD):** Intended for calm, inland water, where there is a good chance of quick rescue. PFDs of this type will turn some, but not all, unconscious wearers to face up position in water.

**Flotation Aids (Type III PFD):** Vest style, popular among recreational boaters. Designed for calm water with good chance of quick rescue. Wearer

may have to tilt head back to keep face out of water. Most comfortable type for continuous wear.

**Throwable Devices (Type IV PFD):** Intended for calm, inland waters with heavy boat traffic where help is always present. It is designed to

be thrown to a person in the water and grasped and held by the user until rescued. It is not designed to be worn.

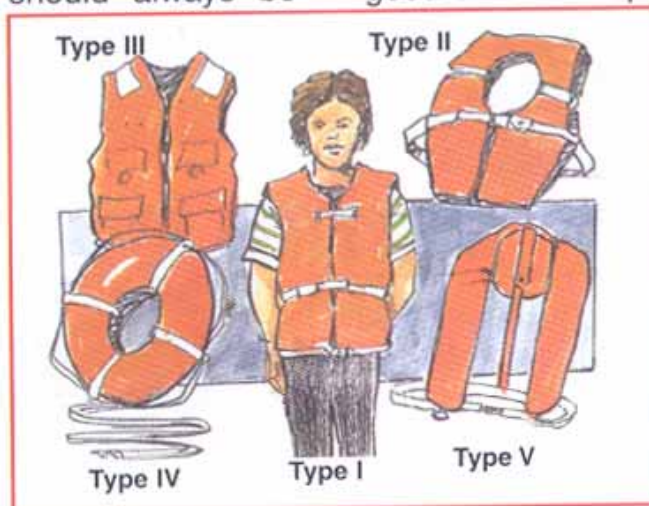
**Special Use Devices (Type V PFD)**

Intended for specific activities and may be carried instead of another PFD only if used according to approved condition(s) on the label. Some type V devices provide significant hypothermia protection. Varieties include deck suits, work vests, and board sailing vests.

Total inflatable jackets are now U.S.Coast Guard approved if they have the approval number listed on the label. There are Type V Hybrids inflatables approved for children.

**Try this life jacket experiment:**

See who can find and put on their life jacket in 30-seconds or less when you give the signal. It proves a point.



# Sobering Facts about Alcohol

Approximately 800 people die in boating accidents every year. Nine out of ten of them drown. About 1/3 of those deaths involve alcohol. A U.S. Coast Guard study estimates that boat operators with a blood alcohol concentration (BAC) above .10 percent are estimated to be more than 10 times as likely to be killed in a boating accident than boat operators with zero BAC.

Alcohol also accounts for a large percentage of boating injuries and property damage—a fact well documented by marine law enforcement agencies.

Several hours of exposure to powerboat noise, vibration, sun, glare, wind and motion produces a kind of boater's hypnosis. This slows reaction times. Adding alcohol to this exposure intensifies the effects. As the chart shows, sometimes just a couple of beers are too many.

When you're "tipsy," you're much more likely to fall overboard. Alcohol also reduces your body's ability to protect against cold water. So within minutes you may not be able to call for help, or swim to safety. Actually, an intoxicated person whose head is immersed can be confused and swim down to death instead of up to safety.



Drinking while boating kills hundreds of people a year.

BOATING FATALITIES



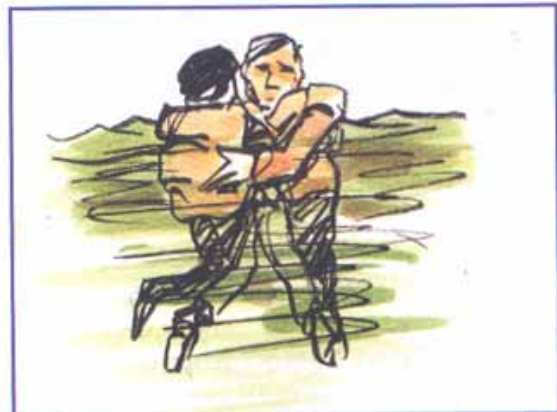
TYPE OF ACCIDENT  
50% ALCOHOL RELATED

Blood Alcohol Content Chart	
Body Weight in Pounds	Number of Drinks in a Two Hour Period. 12 oz. beer = 5 oz. wine = 1 oz. 80 proof liquor.
100	1 2 3 4 5 6 7 8 9
120	1 2 3 4 5 6 7 8 9
140	1 2 3 4 5 6 7 8 9
160	1 2 3 4 5 6 7 8 9
180	1 2 3 4 5 6 7 8 9
200	1 2 3 4 5 6 7 8 9
220	1 2 3 4 5 6 7 8 9
240	1 2 3 4 5 6 7 8 9
<b>BAC to 05%</b>	<b>BE CAREFUL</b> - Loss of judgment and coordination
<b>BAC .05% to .10%</b>	<b>ABILITIES IMPAIRED</b> - Chance of accident increased
<b>BAC .10% and over</b>	<b>DO NOT OPERATE A BOAT</b> - High risk of accident

# Hypothermia: the cold killer

Exposure to cold causes loss of body heat. This is called hypothermia. Hypothermia can kill. Defense against hypothermia is to avoid exposure to cold. Do this by staying dry and avoiding the wind. Put on rain gear before you get wet. If you fall into cold water, do NOT discard clothing; it will help trap body heat. Avoid moving as much as possible. A life jacket helps in two ways: it reduces the need to move, and it helps insulate against heat loss. When you wear a life jacket, draw knees up into a Heat Escape Lessening Position (HELP)

If several persons are in the water, huddle together so you can conserve heat and stay alive. Treatment for hypothermia involves getting the victim out of the cold producing environment. Strip off all wet clothing and get the person into a warm sleeping bag. Try to keep person awake. DO NOT give alcohol or massage vigorously. Giving the person warm drinks or food is not a good idea. They don't help rewarm the person and they can pose a choking hazard. Transport the victim to a hospital as soon as possible.



**Hypothermia Chart**

If the Water Temp. (F) is...	Exhaustion or Unconsciousness	Expected Time of Survival is...
32.5	Under 15 Min.	Between 15–45 Min.
32.5–40.0	15–30 Min.	30–90 Min.
40–50	30–60 Min.	1–3 Hours
50–60	1–2 Hours	1–6 Hours
60–70	2–7 Hours	2–40 Hours
70–80	3–12 Hours	3–indefinitely
over 80	Indefinitely	

# What you Must have Aboard

Federal Law says you must have certain safety equipment aboard. The requirements are listed below. To be a safe boater you should also have additional equipment which is not required. This includes an anchor, a marine radio, cell phone, a first aid kit, chart of the waters you are boating in, a radio for weather reports, binoculars, and sufficient rope for tying up to a dock.



EQUIPMENT	LESS THAN 16 FEET	LESS THAN 26 FEET
Life Jackets (PFDs)	One Type I, II, III or Type V wearable for each person. Type V must be used in accordance with label directions. That does not always mean wearing it. All Type V's are wearables.	One Type I, II, III or Type V for each person on board or being towed on water skis, etc. plus 1 type IV available to be thrown.
Fire Extinguishers	At least one B-1 U.S. Coast Guard approved type hand portable fire extinguisher. Not required on outboard motorboats less than 26 feet in length if the construction of such motorboats will not permit the entrapment of flammable gases or vapors	
Ventilation	At least 2 ventilator ducts fitted with cowls for the purpose of properly and efficiently ventilating the bilges of every inboard engine and fuel tank compartment of boats constructed or decked over after 25 April 1940, using gasoline or other fuel having a flashpoint less than 110°. Boats built after 31 July 1980 must have operable power blowers.	
Sound producing devices	Any device capable of making an "efficient sound signal" audible for 1/2 mile. (whistle, bell or horn)	
Backfire Flame Arrester	One U.S. Coast Guard SAE or UL approved device on each carburetor of all gasoline engines installed after 25 April 1940, except outboard motors	
Visual Distress Signals for coastal water, Great Lakes or high seas.	Required only when operating between sunset and sunrise (N). Same night equipment choices as for larger boats as shown at right.	Orange flag with black square-and-ball (D); and an auto S-O-S electric light (N); or 3 orange smoke signals, hand held or floating (D); or 3 flares of hand-held, meteor or parachute type (D/N).

# Distress Signals



Orange Flag for use in daytime only



Arm signals (use bright cloth)



Red distress Flare (Hand)  
Use day and night.  
(Minimum of 3 required)

This illustrates the variety and combinations of distress signals which can be carried in order to meet U.S. Coast Guard requirements (the arm signals are shown for information only - they are an internationally recognized sign of distress, but are not listed as "required distress signals"). All signals, except for the distress flag and light, must show the words "U.S. Coast Guard Approved" and be marked with the service life of the signal. The distress flag and light must carry the manufacturer's certification that they meet U.S. Coast Guard requirements.



Orange Smoke Signal (Hand)  
Use day only  
(Minimum of 3 required)



Red Meteor—use day, night (min. of 3 required.)



Night use only.



Orange Smoke Signal (floating). Use day only  
(Minimum of 3 required)

# Carbon Monoxide Poisoning

**If you have a generator aboard your boat take warning.**

Owners and operators of boats equipped with gasoline-powered generators with exhaust ports which exit through the transom beneath or near a swim platform should turn off their generators when passengers are on the swim platform or swimmers are in the water.

A September 2000 National Institute of Occupational Safety and Health study of carbon monoxide deaths on Lake Powell in Arizona over the last 10 years showed seven fatalities involved houseboats with through-transom generator exhaust systems. A similar National Park Service investigation found dangerous accumulations of carbon monoxide gases on houseboats with through-transom exhaust systems when the generator was running and exhaust fumes became trapped beneath the swim platform.

Carbon monoxide is a colorless, odorless and tasteless gas that accumulates rapidly. Carbon monoxide in high concentrations

can be fatal in a matter of minutes. Unless the symptoms are severe, carbon monoxide poisoning is often mis-diagnosed as seasickness; however, lower concentrations must not be ignored because the effects of exposure to carbon monoxide are cumulative and can be just as lethal.

Although the studies were limited to houseboats, the problem can exist on any boat with a gasoline-powered generator exhaust post



located adjacent to a swim platform on the transom. A common practice of running gasoline-powered generators to power air conditioning, entertainment centers and galley appliances

while anchored or moored exacerbates the problem.

For that reason all owners and operators of boats equipped with swim platforms and gasoline-powered generators with exhaust ports on the transom are advised to turn off their generators when their boats are at anchor or moored and passengers are on or near the swim platform or swimmers are in the water.

# First Aid Emergency Measures

When injuries occur at home or in an automobile, first aid help is usually as close as the nearest telephone. When they occur on a boat much more time can pass before medical help arrives. Because of this everyone who boards a boat should be boatwise by bringing a cell phone, a portable radio and regularly checking weather reports, by keeping a first aid kit aboard, and by taking a First Aid, CPR, and Automated External Defibrillation (AED) course. A boater should also know how to take emergency measures for the most common injuries until professional help arrives. Listed below are common types of injuries and illnesses, the signs, and the care. Please review these before leaving the dock.

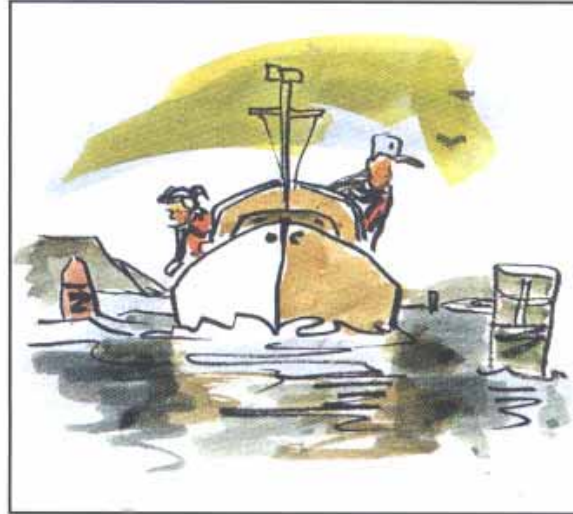


Injury	Signs	Care
Bleeding	Bleeding from a wound	Put on disposable gloves. Secure wound with a dressing and apply direct pressure. Elevate. Use a roller bandage to cover the dressing.
Breathing Emergency	Chest does not rise and fall. Cannot hear or feel breaths.	Provide rescue breathing (1 breath every 5 seconds).
Cardiac Arrest	No breathing or pulse	Give CPR. If available use an AED if trained.
Choking	Unable to speak, cough or breath	Give abdominal thrusts (Heimlich Maneuver)
Unconsciousness	Unresponsive	Check airway, breathing & pulse
Heat Emergency	Early - Cool, moist pale skin, headache, nausea Life Threatening - High body temperature, red, hot skin (dry or moist), change in level of consciousness.	Move to cool place, make comfortable and cool the body temperature with cool wet cloths - for late stages get emergency assistance immediately
Burns	Redness and possible blisters. Severe: brown or charred.	Cool with large amounts of cool water. Then cover with dry clean dressing and bandage loosely. Get emergency assistance quickly for severe burns.
Broken Bones	Pain, swelling, deformity, discoloration	Immobilize above and below the injury - obtain emergency assistance.

**For any serious injury or illness obtain immediate emergency assistance. Always make the victim as comfortable as possible.**

# U.S. Aids to Navigation

Aids to navigation are our signposts on the water. With a chart of the waters you are operating in, you can observe the Aids to Navigation both on the chart and on the water, during both daylight and night time hours. Some aids have been installed to mark the channels, others indicate caution or obstructions. As a rule of thumb when you are operating in a U.S. Aids To Navigation System keep the RED aids on your RIGHT when you are RETURNING or traveling up-stream from seaward. Red Starboard Side aids have even numbers. When they are lighted they use a red light only. Green or Port Side aids have odd numbers. When they are lighted they use a green light only. Keep marked channels clear. Don't anchor in a channel or to an Aid to Navigation. State waterway aids are not shown. For more information on Aids to Navigation contact your state boating law administrator.



## Safe Water Aids marking mid-channels and fairways

No numbers.  
May be lettered.



Lighted  
(White Light)



Spherical Buoy  
(Unlighted)

## Lateral Aids Marking the sides of channels as seen when entering from open water.

Port Side  
Odd Numbers



Lighted Buoy  
(Green Light Only)



Can Buoy  
(Unlighted)

Starboard Side  
Even Numbers



Lighted Buoy  
(Red Light Only)



Nun Buoy  
(Unlighted)

## Preferred Channel Aids (Mark bifurcations. No numbers. May be lettered.)

Preferred Channel  
to Starboard



Lighted Buoy  
(Green Light Only)



Can Buoy  
(Unlighted)

Preferred Channel  
to Port



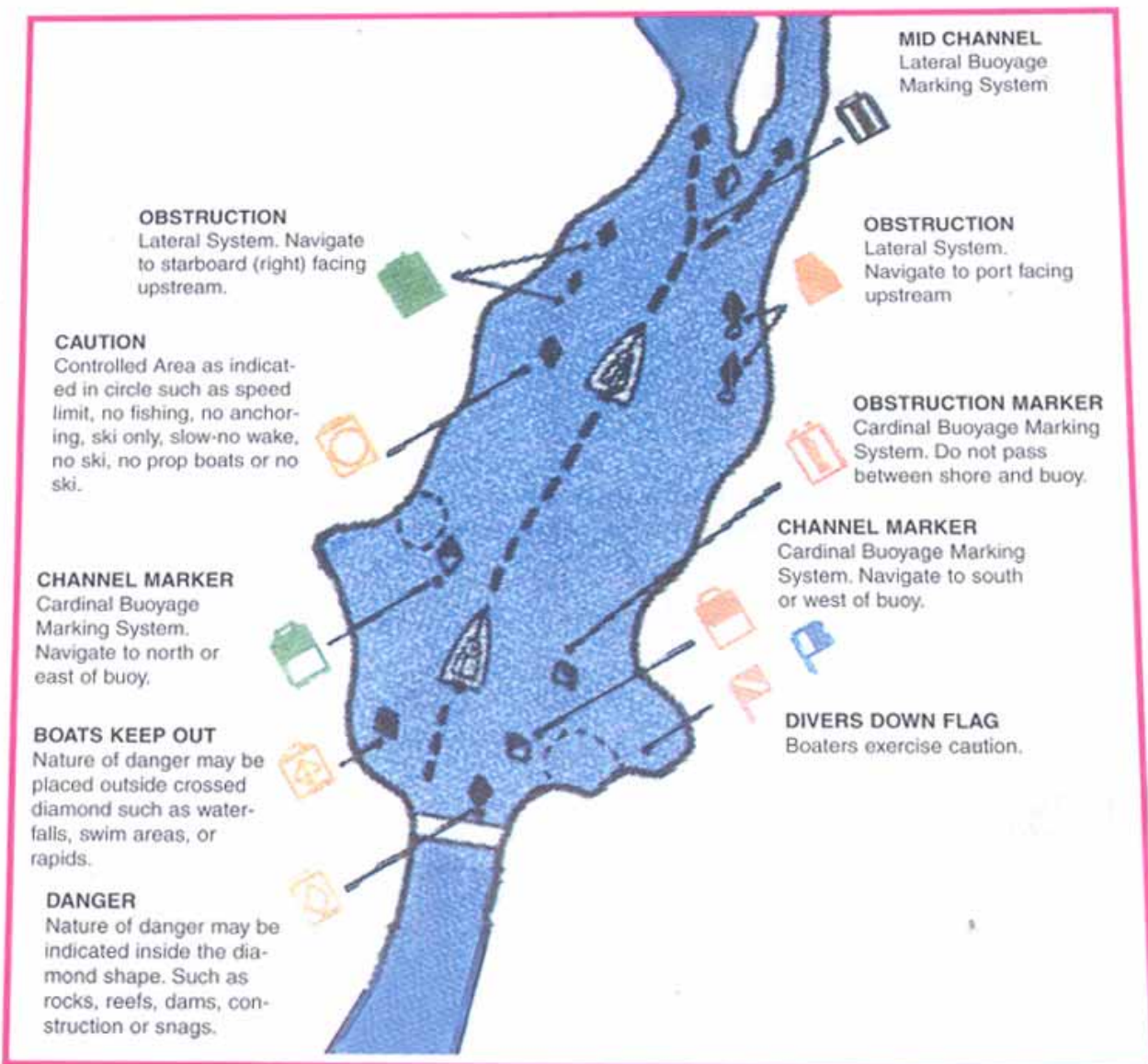
Lighted Buoy  
(Red Light Only)



Nun Buoy  
(Unlighted)

# Charts – Your Nautical Road Maps

Most areas have government or locally prepared charts available that give water depth, show navigational aids & major landmarks, underwater danger areas, as well as shorelines, waterways and harbor areas. Be sure to purchase a local chart of the waters you intend to boat in and review it before you leave the dock. Some “Uniform State Waterway” aids are shown in the chart sketch. In most areas, federal waterway aids also would be shown.



# Boating's Operating Rules

Operating a boat is fun but it also involves legal obligations: As the skipper you are legally responsible for the following: 1) the safety of those on your boat, 2) any damage your boat causes to other boats and property and 3) injuries to others created by the damage you may cause. Ignorance of the law is no excuse.

The law states that you are guilty if you cause an accident whether or not you had priority of movement. Your primary obligation is to prevent an accident and use caution at all times.

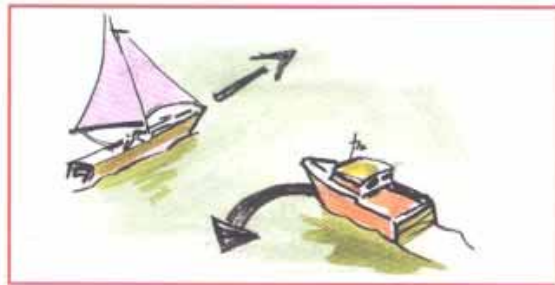
The following illustrations show some of these Operating Rules (Horn signals, navigational lights, and radio use is not covered here):

**CROSSING:** Every boat has a DANGER ZONE from straight in front (the bow) to past the middle of its right (starboard) side. It's similar to meeting a car at an intersection, the one on the RIGHT has Priority of Movement. You must YIELD to boats in your DANGER ZONE.

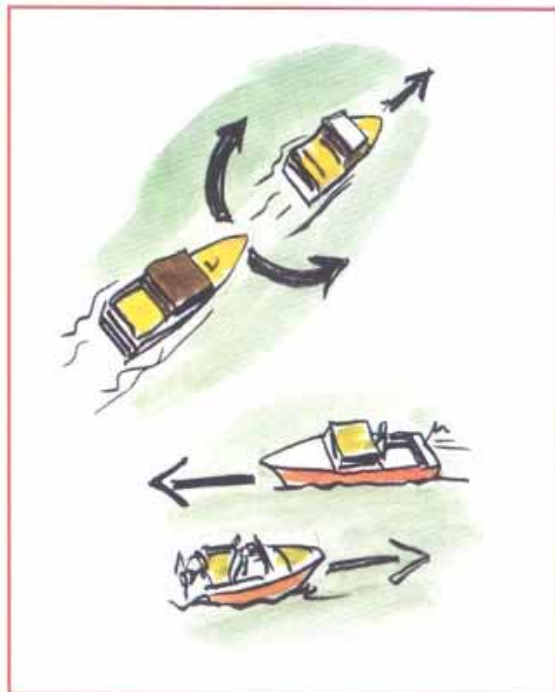


**POWERBOATS MUST YIELD TO SAILBOATS UNDER SAIL** and boats being rowed or paddled, except in a narrow channel. They must also yield to large commercial vessels in a narrow channel.

**OVERTAKING:** Be ready for trouble when a powerboat passes you in a narrow waterway. As the lead boat (which always has Priority of Movement) stay on your side of the channel and maintain a steady speed so that the overtaking vessel can pass you safely. Use your radio to discuss this with the passing boat.



**MEETING:** As in a car, both stay to the right and as far apart as practical, so it's easier and safer to cross each other's wake. Okay to pass left if both know the intent. Give notice by steering to right or left while still far apart. Then stay with that course unless the other boat indicates otherwise.



# Canoeing/Kayaking Safety



Canoes are a popular open water craft that are used on all kinds of water. Kayaks are usually decked except for an opening for the paddler(s). Both canoes and kayaks have less stability than other small craft. The key to safety for canoeing or kayaking is to have proper training in their use, safety and rescue.

Important safety steps include:

- Wearing approved life jackets. Most small craft boating related fatalities could have been prevented if life jackets had been worn.
- Knowing weather conditions and taking appropriate precautions - storms, lightning, high winds and sudden temperature changes can cause disasters.
- Get information on waters where you will be canoeing or kayaking and take appropriate precautions - dam controlled water levels of lakes and rivers, tides, currents, recent rain, spring

thawing, low head dams and other hazards need to be known in advance.

- Avoid drinking alcohol when boating—approximately 1/3 of boating related drownings involved alcohol.

- Have emergency supplies or safety equipment—water proof first aid kit, signaling device, extra paddle, helmets (note: take first aid, CPR, and AED (Automated External Defibrillation) training.

- Knowing and abiding by the rules of the road—collisions with other boats or objects are often due to ignorance of the boating rules of the road.

- Wear appropriate clothing—choose clothing based on conditions and in colder conditions choose clothing that preserves body heat even when wet.

- Know the capacity of your craft—overloading your craft increases possibility of falling overboard, capsizing or swamping.

- Know and meet legal requirements for where you are canoeing or kayaking—check with state and local boating authorities.

- Stay with your craft if you unintentionally fall out of your canoe or kayak—they float.

- Submit float plans—this is especially important if traveling in a wilderness area.

- Have an emergency action plan—in case something does happen know what you are going to do and how to obtain emergency assistance.

And, of course, it helps to know or learn how to swim. If you can't, take lessons.



Getting in and out of a canoe: Keep the center of gravity low and move slowly.

# Keep Our Waters Clean

## 1. HUMAN CONTAMINATION:

Use the local onshore bath facilities as much as possible and bring portable toilets ashore for proper waste disposal. Just like lawn fertilizers and manure, human waste contains nutrients which can unnaturally stimulate algae growth and deplete the amount of oxygen in the water. Human sewage can be a significant source of life threatening bacteria in waters with high boat densities. The primary concern of sewage in the water is its potential for carrying disease causing pathogens to swimmers and shellfish.

## 2. ENGINE CONTAMINATION:

Oil spills are not confined to the well publicized disasters involving giant oil tankers or pipe-lines. The fact is that any engine can leak oil and gasoline and this discharge is illegal and extremely harmful to the environment. A single quart of oil can pollute an area equivalent to three football fields of water surface. If you do spill fuel or oil into the water **DO NOT DISPERSE IT WITH DETERGENT OR SOAP.** This only sends the problem down to the seafloor where it becomes more toxic and more difficult to clean up.

## 3. GARBAGE CONTAMINATION

Never discard your garbage overboard. Whatever you take aboard, bring back. Plastic bags and containers have made our lives a lot easier, but when thrown overboard they will probably outlive us by 100 years and seriously add to water pollution. Plastics can foul propellers and clog seawater intakes on boats, causing engine overheating.\*Marpol laws now

make it a federal offense to pollute our waters with plastics and other contaminating substances.



## 4. CLEANSER CONTAMINATION:

The word CLEANSER would lead you to believe that a cleaning solution would help to keep our waters clean. Just the opposite may be the case. Most detergents contain toxic ingredients such as chlorine, phosphates and ammonia, which are extremely harmful to plant and aquatic animal life. If you must use soaps and cleaning products, make sure to purchase the least toxic product to do the job. Look for the words, "Phosphate-free" and "Biodegradable" on the product label. Help keep our waters clean.

## THE MARPOL TREATY AGREEMENT

makes it illegal to dump the following materials in U.S. Lakes, Rivers, Bays, Sounds and up to 1 mile offshore:

Plastic - Garbage - "Glass - Food - Paper - Metal - Dunnage - Rags - Crockery

Each violation of these requirements may result in civil penalty up to \$25,000, a fine up to \$50,000 and imprisonment up to 5 years.

# Take a Boating Course



The majority of people who were involved in fatal boating accidents never took a boating course. The majority of them were also in small boats. If you are an angler, hunter, or camper who uses a boat in your sport, we urge you to take a boating course. The non-profit organizations below, plus many state boating authorities, provide an approved boating course.



USPS offers a number of public Boating Courses including an 8-hour *Boat Smart Course*, a six lesson *Boating Course* (which is usually offered in seven or eight segments), a *Video Boating Course*, a *Jet Smart Video Course* and a new Internet course called *America's Boating Course*, which was created in cooperation with the U.S. Coast Guard Auxiliary. USPS also provides vessel safety examinations for recreational boats and personal watercraft to check for proper safety equipment. For information on USPS courses and other programs, call 1-888-FOR-USPS or visit the USPS web site at [www.usps.org](http://www.usps.org).



The U.S. Coast Guard Auxiliary, created by Act of Congress in 1939, is the Volunteer Civilian Arm of the United States Coast Guard. In promoting safe boating in the U.S.A., it performs these non-profit services: Teaches several public boating courses twice yearly in most parts of the country, offers the exciting new internet course, *Americas Boating Course*, examines

recreational boats and personal watercraft for proper safety equipment, Assists regular U.S. Coast Guard in search \* rescue, and patrols navigable and state waterways. For more information on boating courses and safety (including safety recalls) call toll-free 1-800-368-5647 or visit the website at [www.cgau.org](http://www.cgau.org)



United States Sailing Association is the National Governing body for Sailing in the USA. USSA is also a membership organization of 44,000 active sailors and sailing groups. Programs include instructor training, sailing safety, and many other services to sailing groups, such as Safety at Sea seminars. Membership benefits include discounts on sailing publications, videos, and travel; monthly "American Sailor" magazine. For information call (401) 683-0800 or write USSA, 15 Maritime Dr. # 1260, Portsmouth, RI 02871.



American Red Cross (ARC): By congressional charter, the ARC is responsible for reviewing and preventing accidents and suffering. The aim of the organization is to improve the quality of human life and to enhance individual self reliance and concern for others. It provides standards, courses, and materials in first aid, CPR, swimming, lifesaving, lifeguarding, and boating safety (canoeing, kayaking, and sailing.)



For information for boating classes in Canada call Canadian Power & Sail Squadrons at: 1-800-268-3579. CPS offers courses and programs that are similar to USPS.



**For a free Vessel Safety Check contact your local USPS or United States Coast Guard Auxiliary unit.**



"Produced Under A Grant From the Aquatic Resources (Wallop-Breaux) Trust Fund Administered By the U.S. Coast Guard.

