

# ADDENDUM SHEET

## America's Boating Course<sup>SM</sup> - 2001 Edition

### Homeland Security Measures

Boaters must be aware of rules and guidelines regarding homeland security measures. The following are steps that boaters should take to protect our country and are a direct result of the terrorist attacks of 11 September 2001.

Keep your distance from all military vessels, cruise lines, or commercial shipping:

- All vessels must proceed at a no-wake speed when within a Protection Zone (which extends 500 yards around U.S. naval vessels).
- Non-military vessels are not allowed to enter within 100 yards of a U.S. naval vessel, whether underway or moored, unless authorized by an official patrol. The patrol may be either Coast Guard or Navy.
- Violating the Naval Vessel Protection Zone is a felony offense, punishable by up to six years imprisonment and / or up to \$250,000 in fines.

Observe and avoid all security zones. Avoid commercial port operation areas. Avoid restricted areas near:

- Dams
- Naval ship yards
- Power plants
- Dry docks

Do not stop or anchor beneath bridges or in channels. Keep your boat locked when not using it, including while at temporary docks, such as yacht clubs, restaurants, marinas, shopping, etc. When storing your boat disable the engine. If on a trailer, immobilize it so it cannot be moved.

Keep a sharp eye out for anything that looks peculiar or out of the ordinary, and report it to the Coast Guard, port or marine security. When boating within a foreign country make certain that you check-in with the foreign country's Customs Service upon entering the country and with the USA Customs Service and/or Immigration and Naturalization Service upon returning. Know the rules before you go abroad so there are no unpleasant surprises upon your return home.

### Fishing and Hunting

People who fish and hunt on the water have one of the highest boating fatality rates. Many consider their boat as simply a part of their hunting and fishing gear. The standard safety rules that apply to all boating also apply to hunters and fishermen.

- Check the weather before you go. All boaters should watch for a build up of dark clouds, indicating an approaching thunderstorm.
- Make sure someone knows where you are going and when you plan to return.
- Always wear a life preserver (PFD—personal flotation device).
- Don't stand in the boat. Don't overload the boat.
- Always anchor from the bow to avoid swamping and/or capsizing, not from the stern.
- Stow firearms and hunting knives properly.
- Assign shooting and casting areas for each person in the boat to avoid accidents with others in the boat.
- Waders can be dangerous. If you fall overboard, they can fill with water and make it impossible to get back into the boat or up an embankment. If waders are used while launching your boat, remove them prior to leaving the launching area.
- Never use alcohol when boating!

### Aquatic Nuisance Species

To help prevent the spread of the latest plague of non-native fish and Zebra mussels in our waterways, boaters should follow these simple rules:

- Trailer boaters should remove visible mud, plants, fish or animals from boats and trailers before leaving the ramp area and prior to transport to another body of water.

- Scrape any mussels from boat or outdrive, and flush hull, bilges and water holding compartments with hot water, if available (at least 120 degrees Fahrenheit).
- Do not release plants or fish, including bait, into a body of water unless it came out of that same body of water.
- Pump fresh water through engines before leaving the area.
- Drain live-wells, bait buckets, bilge and transom wells.
- Remove water from trailer boats by removing the drain-plug and parking on an incline to facilitate draining.
- If available, use high-pressure hot water to spray down both boat and trailer.
- Let boat, trailer and equipment dry for at least 5 days.
- Empty water out of kayaks, canoes, rafts, etc.

These same rules apply to:

- SCUBA Diver equipment
- Waterfowl hunting gear
- Angler's rods and equipment
- Sailboats and sailboards
- PWCs
- Seaplanes

## Environmental Summary – Report Pollution When You See It

We all enjoy America's lakes, rivers and coastal waters. To keep them healthy and productive, follow good environmental boating practices.

TIP: The top ten Green Boating Tips

1. Keep your bilge clean ... don't pump oily water overboard.
2. Use bilge sorbents in place of detergents.
3. Never pump your sewage overboard ... use a holding tank.
4. Observe local and federal sewage regulations. Portable toilets may be illegal in your area.
5. Bring your garbage home ... don't litter.
6. Use detergents sparingly ... even "biodegradable" cleaners are hard on the aquatic environment.
7. When fueling, don't top off tanks. Clean up any spilled fuel.
8. Use only paints approved for marine use.
9. Avoid shoreline erosion ... watch your wake and propeller wash.
10. If fishing, practice catch and release.

## Cold Water Immersion and Hypothermia

Cold water immersion kills in several ways. The colder the water, the greater the chance of death. By understanding how your body reacts to cold water, you can prepare for and be better able to appropriately respond, increasing your chance of survival. A hypothermia victim should always receive medical treatment. Four stages of cold water immersion are:

- **Stage 1: Initial "cold shock"** occurs in the first 3-5 minutes of immersion in cold water. Sudden immersion into cold water can cause immediate, involuntary gasping, hyperventilation, panic, and vertigo—all of which can result in water inhalation and drowning. Immersion in cold water can also cause sudden changes in blood pressure, heart rate, and heart rhythm, which can also result in death.
- **Stage 2: Short-term "swim failure"** occurs 3-30 minutes following immersion in cold water. The muscles and nerves in the arms and legs cool quickly. Manual dexterity, hand grip strength, and speed of movement can all drop by 60-80%. Even normally strong persons can lose the strength necessary to pull themselves out of the water or even to keep their head above water. Death occurs by drowning.
- **Stage 3: Long-term immersion hypothermia** sets in after 30 minutes, at a rate depending on water temperature, clothing, body type, and your behavior in the water. Cold water robs the body of heat 25 times faster than cold air. Hypothermia occurs when your body loses heat faster than it produces it, cooling the organs in the core of your body. Hypothermia eventually leads to loss of consciousness and death, with or without drowning.
- **Stage 4: Post-immersion collapse** occurs during or after rescue. Once rescued, if you have been immersed in cold water you are still in danger from collapse of arterial blood pressure leading to cardiac arrest. Again, hypothermia victims should always receive medical treatment.

Of course the best prevention is to take all measures necessary to avoid capsizing your vessel or falling into cold water in the first place. If you do fall into or must enter cold water:

- Don't panic. Try to get control of your breathing. Hold onto something or stay still as possible until your breathing settles down. Focus on floating with your head above water until the cold shock response abates.
- When your breathing is under control, *perform the most important functions first* before you lose dexterity (10-15 minutes after immersion).

- If you were not wearing a PFD when entering the water, look to see if one is floating around you and put it on immediately. Don't take your clothes off unless absolutely necessary. A layer of water trapped inside your clothing will help insulate you.
- Focus on locating and getting everyone out of the water quickly before you lose full use of your hands, arms, and legs. Try to reboard your vessel, even if it is swamped or capsized, or anything else that is floating. Get as much of your body out of the water as possible. Even though you may feel colder out of the water, the rate of heat loss will be slower than if immersed in water.
- In as little as 10 minutes, you may be unable to self-rescue. Your focus should now be to slow heat loss. Stay as motionless as possible, protect the high heat loss areas of your body, and *keep your head and neck out of the water*. Safety usually looks closer than it actually is, so staying with the boat is usually a better choice than swimming. Adopt a position to reduce heat loss. If alone, use the HELP (Heat Escape Lessening Posture) position or if there are others in the water with you, huddle together. If you must swim, conserve energy and minimize movement. Swim on your back, with your upper arms against the sides of your chest, your thighs together, and your knees bent. Flutter-kick with your lower legs.

## Carbon Monoxide Poisoning

Carbon monoxide (CO), a by-product of internal combustion engines, is an invisible, odorless, tasteless gas. CO can make you sick in seconds. In high enough concentrations, even a few breaths can be fatal. Sources of CO on your vessel include engines, gas generators, cooking ranges, and space and water heaters. Early symptoms of CO poisoning include irritated eyes, headache, nausea, weakness, and dizziness. They are often confused with seasickness or intoxication.

Get anyone with these symptoms into fresh air immediately. Seek medical attention—unless you're sure it's not CO.

- To protect yourself and others against CO poisoning while boating:
  - Keep fresh air flowing throughout the vessel at all times; if fumes are detected, immediately ventilate.
  - Know where your engine and generator exhaust outlets are located and keep everyone away from these areas.
  - Never sit on the back deck, "teak surf," or hang on the swim platform while the engines are running.
  - Never enter areas under swim platforms where exhaust outlets are located—even for a second. One or two breaths in this area could be fatal.
  - Install and maintain CO detectors inside your vessel. Replace detectors as recommended by the manufacturer.
- Before each boating trip, you should:
  - Make sure you know where exhaust outlets are located on your vessel.
  - Educate all passengers about the symptoms of CO poisoning and where CO may accumulate.
  - Confirm that water flows from the exhaust outlet when the engines and generator are started.
  - Listen for any change in exhaust sound, which could indicate an exhaust component failure.
  - Test the operation of each CO detector by pressing the test button.
- At least monthly, you should:
  - Make sure all exhaust clamps are in place and secure. Look for leaks from exhaust system components, including rust or black streaking, water leaks, or corroded or cracked fittings.
  - Inspect rubber exhaust hoses for burns, cracks, or deterioration.
- At least annually, have a qualified marine technician check the engine and exhaust system.

**Blocked Exhaust Outlets** can cause carbon monoxide to accumulate in the cabin and cockpit area.

**Another Vessel's Exhaust** that is alongside can emit carbon monoxide into the cabin and cockpit of your vessel. Your vessel should be at least 20 feet from a vessel that is running.

**Teak Surfing** or dragging or water-skiing within 20 feet of a moving vessel can be fatal. If persons are using a swim platform or are close to the stern, all gasoline-powered generators with transom exhaust ports must be off.

**Slow Speed or Idling** causes carbon monoxide to accumulate in the cabin, cockpit, and rear deck.

**Station Wagon Effect** causes carbon monoxide to accumulate inside the cabin and cockpit if you are operating the vessel at a high bow angle or if protective coverings, such as a canvas back-drop, are used when the vessel is underway.

## Revisions and Clarifications to Federal Regulations

**Responsibilities Between Vessels (chapter 3, page 15)** - If operating a power-driven vessel, you must give way to:

- Any vessel not under command, such as an anchored or disabled vessel
- Any vessel restricted in its ability to maneuver, such as a vessel towing, laying cable, or picking up navigation markers, or a vessel constrained by its draft such as a large ship in a channel
- A vessel engaged in commercial fishing
- A sailing vessel unless it is overtaking

If operating a sailing vessel, you must give way to:

- Any vessel not under command or restricted in its ability to maneuver
- A vessel engaged in commercial fishing

**Regulatory and Information Markers (chapter 3, page 22)** – are identified by their white color with orange markings and black lettering.

**Personal Floatation Devices (chapter 5, page 41)** - Federal Regulations require that each child under 13 years of age, underway on a recreational vessel, wear an appropriate USCG-approved PFD unless the child is below decks or in an enclosed cabin. Many states also have laws that require children to wear their PFDs.

**Visual Distress Signals (chapter 5, page 45)** - All vessels, regardless of length or type, are required to carry night signals when operating between sunset and sunrise. At a minimum, paddlers must carry a flashlight to avoid a collision. Most vessels must also carry day signals; exceptions to the requirement for day signals are:

- Recreational vessels that are less than 16 feet in length
- Non-motorized open sailboats that are less than 26 feet in length
- Manually-propelled vessels

**Sound Producing Devices (chapter 5, page 46)** - Vessels less than 20 meters (65.6 ft.) in length, which includes PWCs, are required to carry on-board a whistle or horn or some other means to make an efficient sound signal to signal intentions or positions. Vessels that are 20 meters (65.6 ft.) or more in length are required to carry on board a whistle or horn, and a bell.

**Discharge of Oil and Other Hazardous Substances (chapter 5, page 49)** - You are not allowed to discharge oil or hazardous substances. The penalty for illegal discharge may be a fine up to \$10,000.

## The 20% Who Still Drowned While Wearing a PFD

The biggest cause of boating fatalities is falling overboard and drowning. Why in boating mishaps did the 20%, who were wearing life jackets, still drown? A significant number of these victims were paddlers, such as canoeists and kayakers. Paddlers have a few things working against them if they should have a mishap. To start, they tend to boat in remote areas far from rescue resources or help from passersby. They frequently paddle alone or with only one other person. The vessels they use tend to be relatively unstable and prone to frequent capsizing. Paddlers are particularly at risk for a dangerous situation called entrapment. This occurs in flowing water when a boater becomes snagged on rocks or debris at some hazardous point (referred to as a strainer), then goes under due to the severe hydraulics of the water pressure. If the boater is either unable to escape the craft or unable to escape the hydraulic pressures, then regardless of what kind of PFD the boater is wearing, the resulting cause of death would be drowning. Be aware of low head dams as they pose serious dangers above and below the dam. If you ever get separated from your boat in swift current, float with your feet downstream to protect your head and lesser the danger of entrapment. Paddlers – canoeists and kayakers – generally wear a good Personal Floatation Device (PFD) that is specifically designed for their active sport.

**Minimize Risk of Drowning – Wear PFDs (chapter 6, page 52)** – Inflatable PFDs are becoming more popular due to their comfort while being worn. The following applies to inflatable PFDs as well as non-inflatable devices. Remember that over time, the ultraviolet radiation from the sun will break down the synthetic materials used to make your PFD. Frequently inspect personal flotation devices for rips or tears, discolored or weakened material, insecure straps or zippers, or labels that are no longer readable. Discard and replace any PFD that has a problem, especially if it has a rip or tear. Before using an inflatable PFD, check the status of the inflator each time and ensure that the CO<sub>2</sub> cylinder has not been used, has no leaks, and is tightly screwed in. Also check that the PFD itself has no leaks by removing the CO<sub>2</sub> cylinder and orally inflating the PFD. The PFD should still be firm after several hours. After an inflatable PFD has been inflated using the CO<sub>2</sub> cylinder, replace the spent cylinder and re-arm it according to the manufacturer's directions.