



## United States Coast Guard Auxiliary

District 11 Northern Region

Serving Northern California, Nevada, Utah



# Vessel Safety Check Review

Prepared by:

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United States Coast Guard Auxiliary

# The Vessel Safety Check



# The Vessel Safety Check- One-on-One Education!

## Vessel Exams



# Vessel Safety Check

## The History

USCG AUX developed the Courtesy Motorboat Examination program in 1947 to provide recreational boaters an advisory review of their vessel's legally required equipment and additional recommended equipment essential for safe boating.

It also serves to provide one-on-one education of recreational boaters regarding the use of safety equipment, legal requirements and regulations,



# Vessel Safety Check

## The History-continued

The program evolved with the addition of sailboats and PWC's (jet ski's) and the name was changed to Courtesy Marine Examination. Then in 2000, with the addition of the U.S. Power Squadron, the program evolved to Vessel Safety Check (VSC) program. The VSC program now also includes PWC's , kayaks, and canoes. 2007 was the 60<sup>th</sup> anniversary of the program.



# The Vessel Safety Check

Vessel Examiners examine Powerboats, Sailboats, Personal Water Craft (PWC), kayaks and canoes, and most vessels less than 65', but NOT sailboards.



## Item 1 - Display of Numbers:

The boat's registration numbers must be permanently attached to each side of the forward half of the boat.

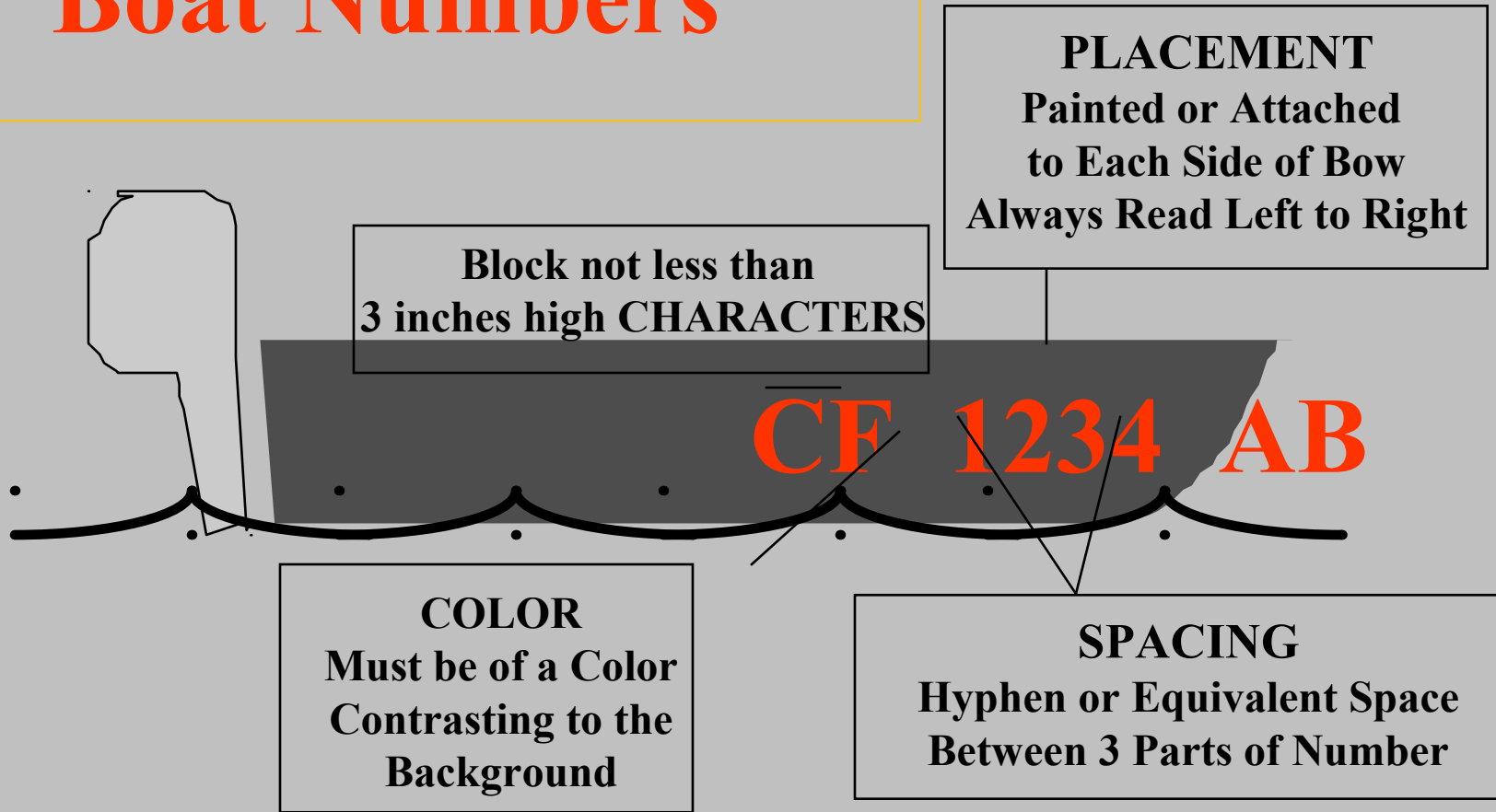
They must be plain, vertical, block characters, not less than three (3) inches high-the same height as the state

decal, and in a color contrasting with the background.

A space or hyphen must separate the letters from the numbers. The state decal should be on stern of the numbers.



# Boat Numbers



**CF 1234 AB**  
or  
**CF-1234-AB**

~~**CF1234AB**~~  
~~**CF1234 AB**~~





# Incorrect numbers



**Not permanently attached**



**Not block**



**No spaces**



**Under overhang**



**Not contrasting color**



## Item 2 - Registration and Documentation:

Original Registration or Documentation papers **MUST** be on board and available. Documentation numbers must be permanently marked on a visible part of the interior structure. The documented boat's name and hailing port must be displayed on the exterior hull in letters not less than 4 inches in height. To be documented a boat must be 5 net tons or greater.



# How to read a “Certificate of Documentation” for a documented vessel

**Official Number** → 938931

**Vessel Name** → MIDNIGHT

**Hailing Port** → SEATTLE, WA

**Owner / Operator** → JEFFREY L. KNIGHT  
3919 SW 324TH STREET  
FEDERAL WAY, WA 98023

**Hull Id Number** → 00V4020D787

**Length feet** → 43.3

**Expiration Date** → DECEMBER 31, 2002

VESSEL NAME	OFFICIAL NUMBER	HULL OR OTHER NUMBER	YEAR COMPLETED	
MIDNIGHT	938931	00V4020D787	1987	
HAILING PORT	FULL MATERIAL	FRP	MECHANICAL PROPULSION	
SEATTLE, WA				
GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
13 GRT	10 NRT	43.3	14.6	3.1
PLACE BUILT				
KAOHSIUNG, TAIWAN				
OWNERS		OPERATIONAL ENDORSEMENTS		
JEFFREY L. KNIGHT		RECREATION		
MANAGING OWNER				
JEFFREY L. KNIGHT				
3919 SW 324TH STREET				
FEDERAL WAY, WA 98023				
RESTRICTIONS				
NO COASTWISE FOREIGN BUILT				
NO FIBERGLASS FOREIGN BUILT				
ENTITLEMENTS				
NONE				
REMARKS				
NONE				
ISSUE DATE				
DECEMBER 31, 2002				
THIS CERTIFICATE EXPIRES				
JANUARY 31, 2004				



# Hull Identification Number (HIN)

- **MUST** be permanent
- Usually on Starboard Side of Transom Maybe on Portside prior 1984
- Must be on hull not top structure except on a PWC. May be also be on a pontoon near the waterline



# Item 3 Flotation Devices (PFD)



# Item 3 Flotation Devices (PFD):

Wearable PFDs shall be "readily accessible."

Throwable devices for 16'+ vessels except kayaks and canoes shall be "immediately available-not stored in a compartment." PFDs should NOT be stored in unopened plastic packaging.



# Item 3 Flotation Devices (PFD):

Acceptable PFDs (Life Jackets) Must be U.S. Coast Guard approved, in good serviceable condition, and of suitable size for the each person on the boat. Children must have properly fitted PFD's designed for children based upon their weight.



# Item 3 Flotation Devices (impact rated PFD's)

## WARNING:

Impact rated Life-jackets do not protect wearers from traumatic injury in a high speed crash.

The impact rating means that the PFD still be buoyant following an impact.





# Item 3 Flotation Devices

## Non-Serviceable and Substandard Type I Unicellular Plastic Foam Life Preservers

The US Coast Guard strongly recommends that owners and operators carefully inspect all of their older Type I unicellular plastic foam PFDs.

Potential indications that a Type I unicellular plastic foam PFD may no longer be serviceable include:



# Item 3 Flotation Devices continued

1. **Compression:** The PFD may be compressed from many years of stowage.
2. **Loss of resiliency:** The PFD is excessively hard, stiff or its foam is brittle. Normally after compressing the PFD to about half its initial thickness, the foam should expand to its original dimension in a short period of time.



# Item 3 Flotation Devices continued

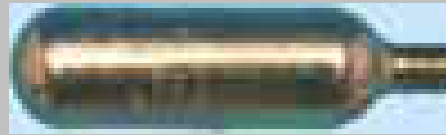
- 3. Shrinkage:** A physical reduction in size may be indicated by “wrinkling” of the coating on vinyl dipped type or by a loose fitting shell on a fabric-covered PFD.



# Item 3 Flotation Devices continued

## PFD INFLATION FAILURE DUE TO FALSE POSITIVE SERVICE INDICATORS AND INCORRECT CO2 CYLINDER INSTALLATION

There is a potential problem when installing CO2 cylinders that have bayonet tips on older inflatable PFDs.



If a cylinder is not properly installed, the PFD will not inflate with CO2. The problem may affect several thousand PFDs, but the Coast Guard is only aware of one incident to date.



# Item 3 Flotation Devices (PFD) continued:

For Personal Watercraft (PWC) riders, California, Nevada, and Utah require a PFD (type III) with an impact rating be worn. PWC's, kayaks and canoes are not required to have Type IV. However, ALL other vessels must carry one immediately available and not in a compartment.





# Inflatable Life Jacket Styles

- **STOLE** – worn over the shoulders.  
Thin profile and lightweight design offer comfort and excellent range of motion.
- **BELT PACK** – worn around the waist, to the front.  
Allows for comfort without obstruction.
- **VEST** – Fuller body coverage with pockets.  
When storage is needed; extra pockets, etc. are built in.



**STOLE**



**BELT PACK**



**VEST**



## Item 4 - Visual Distress Signals (VDS):



## Item 4 - Visual Distress Signals (VDS):

Recreational boats 16 feet and over used on coastal

waters or the Great Lakes require a minimum of either:

3 day (orange) and 3 (red) night pyrotechnic devices, or 3 (RED) Combination day/night devices.

- 1) Non-pyrotechnic devices day(flag) and one night (auto SOS light) or
- 2) A combination of 1) and 2). Recreational boats less than 16 feet on coastal waters or the Great Lakes need only carry night visual distress signals when operating from sunset to sunrise.



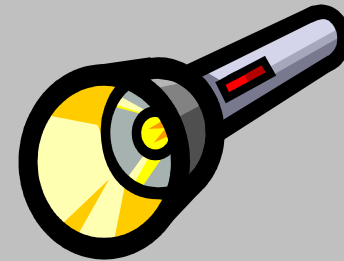
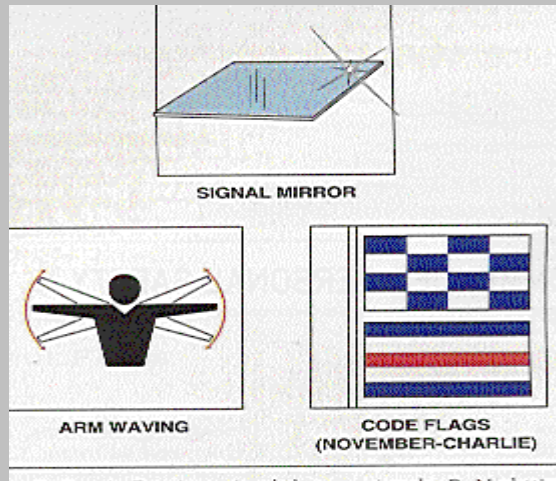


# Item 4 - Visual Distress Signals-Continued

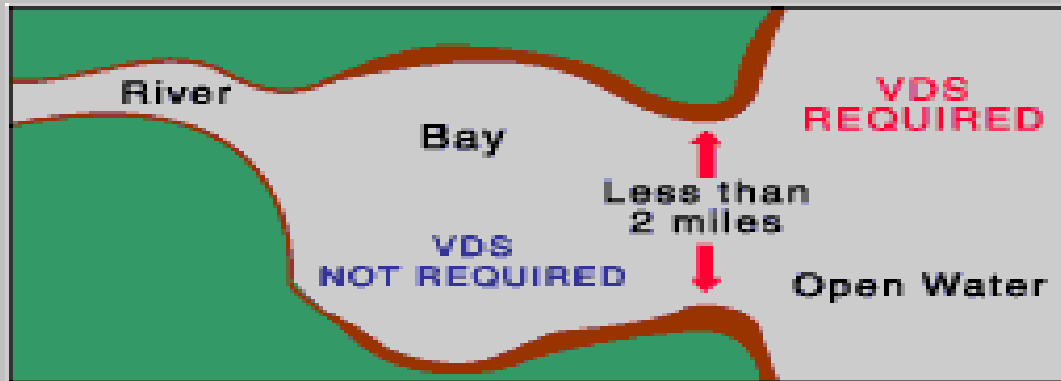
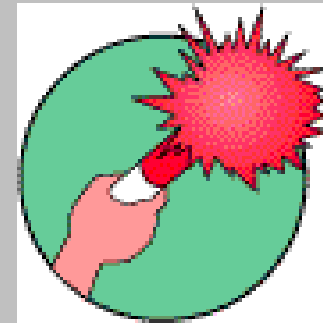
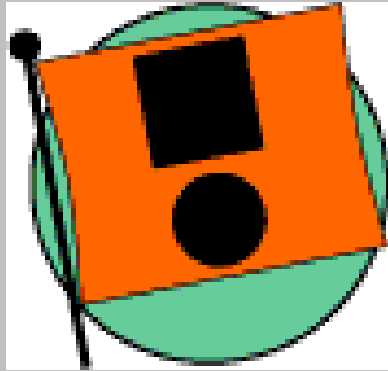
It is recommended, but not required, that boats operating on non-coastal (inland) waters should have some means of making a suitable day and night distress signal.

**DAY**

**NIGHT –Flash S O S!**



# Item 4 - Visual Distress Signals Continued



# Item 4 - Visual Distress Signals-Continued

## Night

Strobe light

Flashlight

Lantern

## Day

Signal mirror

Red or orange flags

Hand signals

The number and type of signals is best judged by considering conditions under which the boat will be operating.



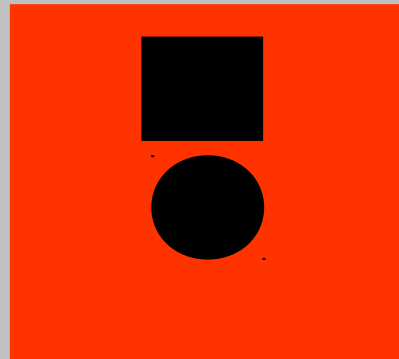
# Item 4 - Visual Distress Signals

## Flares have a 42 month expiration date

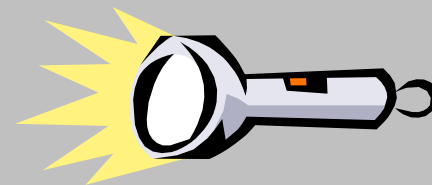
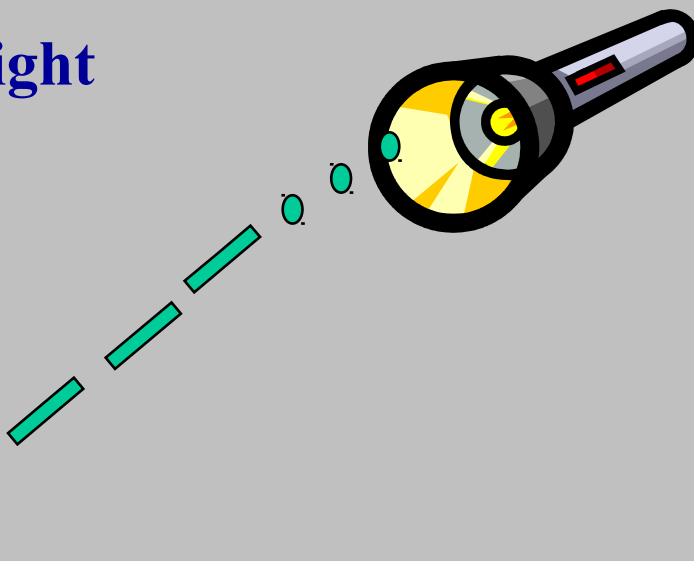


# Non Pyrotechnic Visual Distress Signals

- Day



- Night



# Item 4 - Visual Distress Signals-continued



**RED PARACHUTE FLARE**

**RED HAND-HELD FLARE**

**RED METEOR FLARE**

**3' X 3' DISTRESS FLAG**

**HAND-HELD FLARE**

**CG APPROVAL NUMBER**

**EXPIRATION DATE**

**ORANGE HAND-HELD SMOKE SIGNAL**

CA

A hand holding a red hand-held flare, showing the label with CG approval number and expiration date.

# Item 5 - Fire Extinguishers



# Item 5 - Fire Extinguishers- continued

## Fire Extinguisher Charge Indicators

Check the charge level of your fire extinguishers regularly. Replace them immediately if they are not fully charged.



**green button**

To check this style of fire extinguisher, depress the green button. If it is fully charged, the green button should pop back out immediately.



On this style of fire extinguisher, the needle indicator should be in the "full" range.





# Item 5 - Fire Extinguishers continued

Fire extinguishers are required if one of the following conditions exists:

- (1) Inboard engine(s)
- (2) Closed compartments that store portable fuel tanks
- (3) Double bottom hulls not completely sealed or not completely filled with flotation material

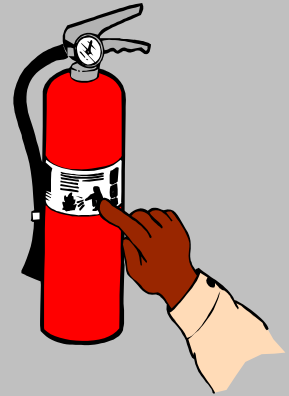


# Item 5 - Fire Extinguishers: Continued

(4) Closed living space

(5) Closed stowage compartments that contain flammable materials or

(6) Permanently installed fuel tanks



**NOTE:** Portable fire extinguishers must be serviceable, should be less than 10 years old and should be stored or mounted to be easily accessible.



# Item 5 - Fire Extinguishers: Continued

## Minimum number of extinguishers required

Boat Length	No Fixed System	With Fixed System
Less than 26'	One B-1	None
26' to less than 40'	Two B-1 or one B-2	One B-1
40' to 65'	Three B-1 or One B1 & One B-2	Two B-1 or One B-2



## Item 6 - Ventilation:

Boats with gasoline engines in closed compartments, built after 1 August 1980 must have a powered ventilation system.

Those built prior to that date must have natural or powered ventilation.



# Item 6 – Ventilation

## continued:

Boats with closed fuel tank Compartments built after August 1, 1978 must meet requirements by displaying a "certificate of compliance."  
Boats built before that date must have either natural or powered ventilation in the fuel tank compartment.



# Required warning Label for each engine at Key:

## WARNING

**“Gas vapors can explode. Before starting, operate blower for four minutes and check engine compartment for gas vapors.”**



# Item 7 - Backfire Flame Control:



All gasoline powered inboard/outboard (I/O) or inboard motor boats must be equipped with an approved backfire flame control device.



# Item 8 - Sound Producing Devices / Bell:

To comply with Navigation Rules and for distress signaling purposes all boats including kayaks, canoes, and PWC's must carry a sound producing device (whistle, horn, siren, etc.) capable of a 4-second blast audible for ½ mile.





# Item 8 - Sound Producing Devices / Bell:



# Item 8 - Sound Producing Devices

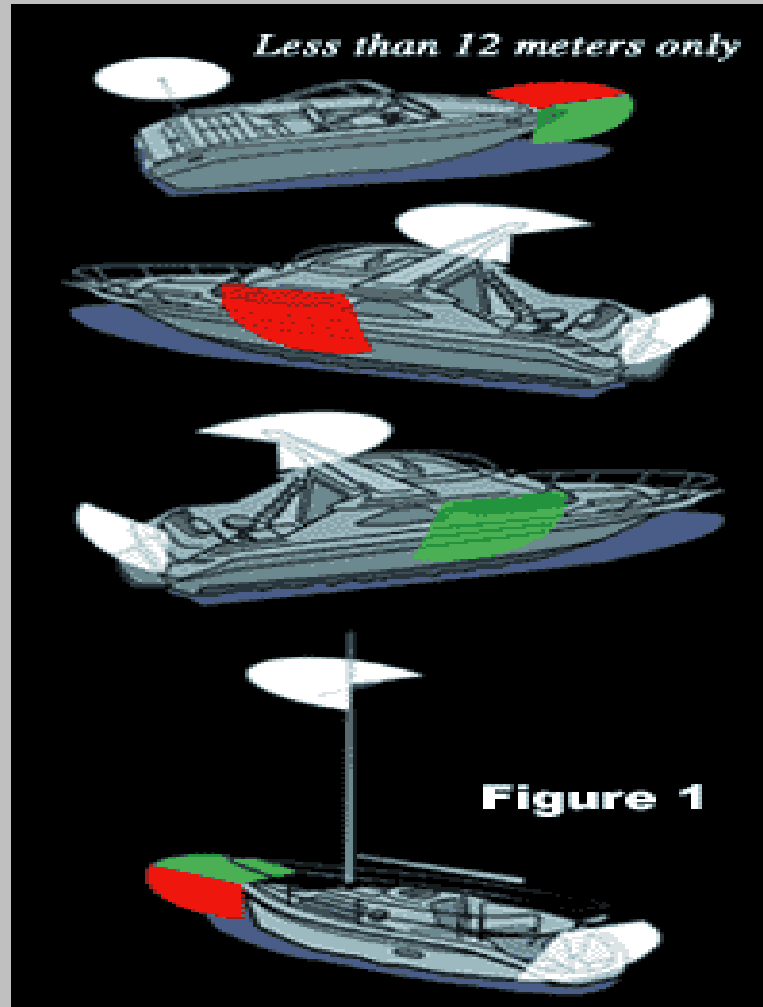
**Recent changes in the Navigation Rules effectively have changed the requirements for the carriage of a bell on both International, and by default, Inland waters. It is now not required.**



# Item 9 - Navigation Lights:



# Item 9 - Navigation Lights:



# Item 9 - Navigation Lights:

If equipped with lights, all boats must be able to display navigation lights between sunset and sunrise and in conditions of reduced visibility.

Boats 16 feet or more in length must have properly installed, working navigation lights and an all-around anchor light capable of being lit independently from the red/green/white "running" lights. PWC's must be off the water by sunset.



# Item 10 - Pollution Placard:

Boats 26 feet and over must display an oily waste "pollution" placard.

## DISCHARGE OF OIL PROHIBITED

### The Federal Water Pollution Control Act

prohibits the discharge of oil or oily waste into or upon the navigable waters of the United States, or the waters of the contiguous zone, or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States, if such discharge causes a film or discoloration of the surface of the water or causes a sludge or emulsion beneath the surface of the water. Violators are subject to substantial civil penalties and/or criminal sanctions, including fines and imprisonment.

Report all discharges to the  
National Response Center at 1-800-424-8802  
or to your local U.S. Coast Guard office  
by phone or VHF radio, Channel 16.



# Item 11 - MARPOL Trash Placard:

Boats 26 feet and over in length must display a "MARPOL" trash placard.

Boats 40 feet and over must also display a written trash disposal plan.

*It is illegal for any vessel to dump plastic trash anywhere in the ocean or navigable waters of the United States. Annex V of the MARPOL TREATY is a new International Law for a cleaner, safer marine environment. Each violation of these requirements may result in civil penalties up to \$25,000, a fine up to \$50,000, and imprisonment up to 5 years.*

The diagram shows a cross-section of the ocean with three zones defined by white boxes and lines. The first zone is 'U.S. Lakes, Rivers, Bays, Sounds and 3 miles from shore', where it is 'ILLEGAL TO DUMP Plastic & Garbage'. The second zone is '3 to 12 miles', where it is 'ILLEGAL TO DUMP Plastic'. The third zone is '12 to 25 miles', where it is 'ILLEGAL TO DUMP Plastic'. Outside 25 miles, it is also 'ILLEGAL TO DUMP Plastic'. A white box at the bottom states 'State and local regulations may further restrict the disposal of garbage.' The background features a blue sky, a white horizon, and several white boats on the water.

**U.S. Lakes, Rivers, Bays, Sounds and 3 miles from shore**  
**ILLEGAL TO DUMP Plastic & Garbage**  
Paper  
Rags  
Glass  
Food  
Metal  
Crockery  
Dunnage

**3 to 12 miles**  
**ILLEGAL TO DUMP Plastic**  
Dunnage (lining & packing materials that float) also if not ground to less than one inch:  
Paper  
Rags  
Glass  
Crockery  
Metal  
Food

**12 to 25 miles**  
**ILLEGAL TO DUMP Plastic**  
Dunnage (lining & packing materials that float)

**Outside 25 miles**  
**ILLEGAL TO DUMP Plastic**

State and local regulations may further restrict the disposal of garbage.

**WORKING TOGETHER, WE CAN ALL MAKE A DIFFERENCE!**  
Report any violation to the local U.S. Coast Guard Captain of the Port  
Designed by the CENTER FOR MARINE CONSERVATION, Washington, DC



# Item 12 - Marine Sanitation Devices:

**Any installed toilet must be a Coast Guard approved device.**

**Overboard discharge outlets must be capable of being sealed.**





# Item 13 - Navigation Rules:

**Boats 39.4 feet and over, when operating on Navigable Inland Waters, must have on board a current copy of the Inland Navigation Rules. It may also be an 8x11 copy from the internet. Sole state waters or Inland lakes are NOT exempt. (See page 36 of 2010 Federal Requirements.) As of 1/2014 an electronic copy on a laptop, tablet, etc. is acceptable.**



# Item 14 - State and/ or Local Requirements:

These requirements must be met before the "Vessel Safety Check" decal can be awarded.

A boat must meet the requirements of the state in which it is being examined.



# Item 15 - Overall Vessel Condition:

- **Deck free of hazards and clean bilge:**

The boat must be free from fire hazards, in good overall condition, with bilges reasonably clean and visible hull structure generally sound. The use of automobile parts on boat engines is not acceptable. For outboards, the engine horsepower must not exceed that shown on the capacity plate.



# Item 15 - Overall Vessel Condition:

- **Safe Electrical and Fuel Systems:**

The electrical system - Must be protected by fuses or manual reset circuit breakers.

Switches and fuse panels must be protected from rain or water spray.

Wiring must be in good condition, properly installed and with no exposed areas or deteriorated insulation.



# Item 15 - Overall Vessel Condition:

## Safe Electrical and Fuel Systems continued:

Batteries must be secured and terminals covered to prevent accidental arcing

All PWCs require an operating self circling or kill switch mechanism.



# Item 15 - Overall Vessel Condition:



# Item 15 - Overall Vessel Condition:

- **Fuel Systems - Portable fuel tanks (normally 7 gallon capacity or less) must be constructed of non-breakable material and free of corrosion and leaks.**

**All vents must be capable of being closed. The tank must be secured and have a vapor-tight, leak-proof cap. Each permanent fuel tank must be properly ventilated.**



# Item 15 - Overall Vessel Condition:

- **Safe Galley and Heating Systems:**



System and fuel tanks must be properly secured and with no flammable materials nearby. If gas, there also needs to be a shut off valve.





# Additional Discussion Items:

Boaters do not fail the VSC for missing any of these items, but they should have each on board their vessel.



Mounting Fire Extinguishers



Anchor and Line

Capacity/Certificate  
of Compliance



# Additional Discussion Items

## Accident Reports/Owner Responsibility

The boat owner is responsible for what occurs on their boat, even when they are not present.

## Offshore Operations

Boat operators are required by law to safely extend

help to other boaters in distress. Failure to assist is a felony punishable by fines and/or prison.



# Additional Discussion Items

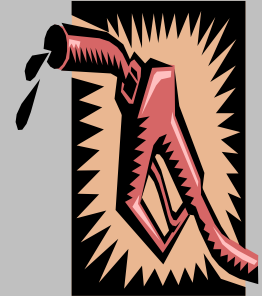
## Fueling/Fuel Management

- Refuel portable tanks away from the vessel.
- Close all hatches and openings before fueling.
- Don't smoke while fueling.
- Turn off engines, electrical systems, and any spark producing items.
- Remove all passengers.
- Keep the fill nozzle in contact with the tank and clean up any spills.



# Additional Discussion Items

## Fueling/Fuel Management



**After Fueling:**

**Open all hatches and openings**

**Check bilges and “sniff test” boat for fuel vapor**

**Run blowers for at least 4 minutes before starting engine**

**Always use the One Third Rule**

**One third of fuel going out**

**One third of fuel for coming back**

**One third of fuel as a reserve**



# Additional Discussion Items

## Insurance Considerations

Most States require proof of Insurance before you can register your boat.

**Coverage should include:**

Loss of, or damage to, boat

Loss of, or damage to, equipment

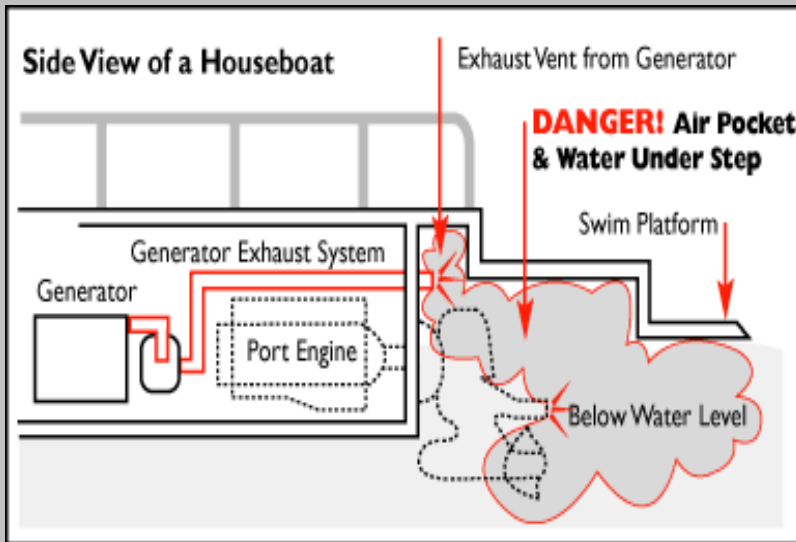
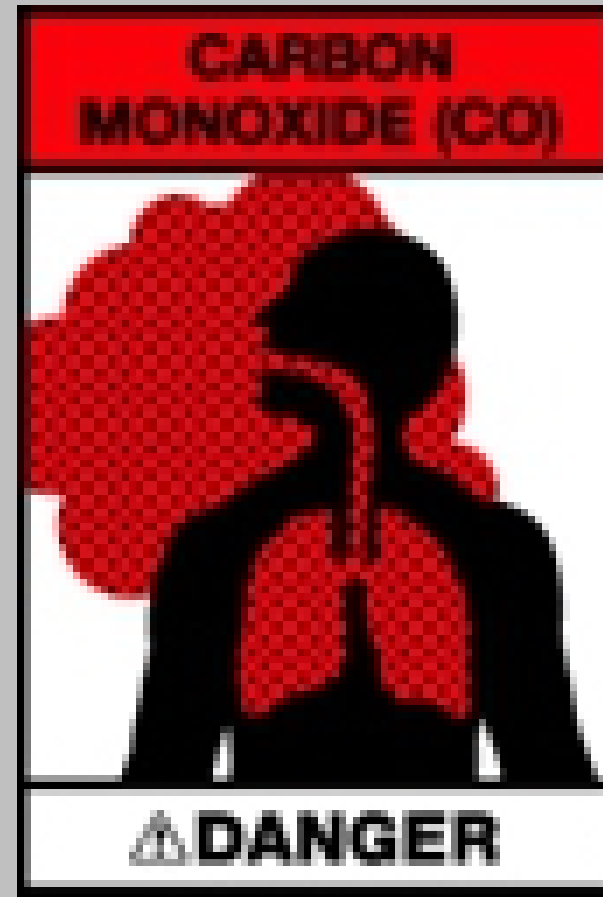
Liability Coverage; personal injury and property

Medical coverage

Boating; over both land and water



# Additional Discussion Items



# Additional Discussion Items

## Carbon Monoxide

- CO can affect you whether you're underway, moored, or anchored.
- You cannot see, smell, or taste CO.
- CO can make you sick in seconds. In high enough concentrations, even a few breaths can be fatal.
- CO symptoms are similar to seasickness or alcohol intoxication.



# **Additional Discussion Items**

## **Carbon Monoxide**

### **Each Time You Go On a Boat Trip**

- **Make sure you know where CO exhaust outlets are located on your vessel.**
- **Educate all passengers about the symptoms of CO poisoning and where CO may accumulate.**
- **When docked, or rafted with another boat, be aware of exhaust emissions from the other boat.**
- **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 alarm by pressing the test button.**



# **Additional Discussion Items**

## **Carbon Monoxide Hazards caused by Generator Exhaust**

**The Coast Guard advises owners and operators of boats to turn off gasoline-powered generators with transom exhaust ports when the swim platform on the stern is in use. Swimmers should not enter the cavity of a boat designed with a generator emitting exhaust into the cavity between the swim platform and the transom of the vessel.**



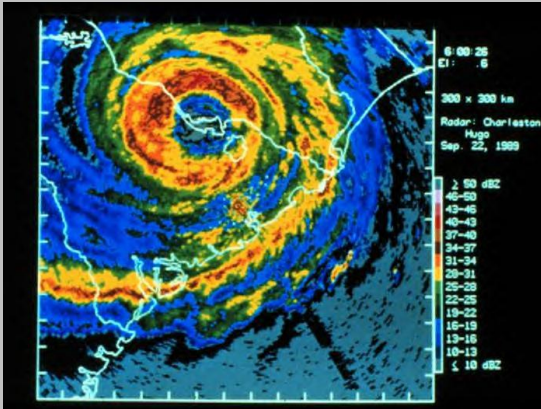
# FILE A FLOAT PLAN

- A float plan contains information about the operator and the vehicle used to transport the vessel as well as the vessel itself.

The plan also includes the expected route of travel along with a date and time of arrival and departure. Taking a few minutes to post a float plan with the marina operator, friends or loved ones is a great life insurance policy.



# CHECK THE WEATHER



- Monitor and evaluate weather conditions.
- Purchase a waterproof and portable weather radio or use a VHF radio that has a weather channel.
- Check sky and sea conditions and never operate in an environment that exceeds personal capability.



# FIRST AID KIT

Pack a waterproof First Aid kit and insure that it is secured to your boat.

In addition to the kit consider completing basic first aid training and CPR



# VHF Radio, GPS, Compass



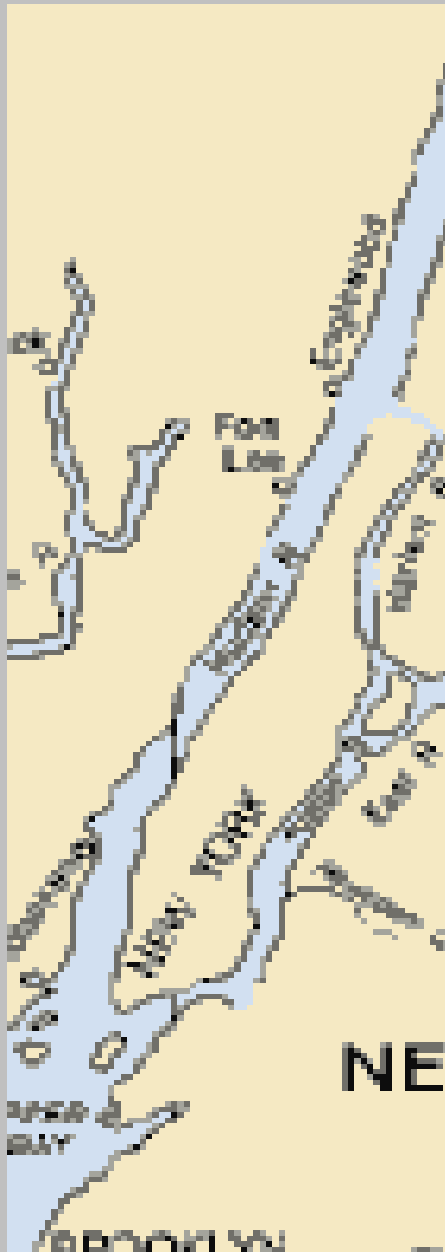
- Bring along electronic communication and navigation devices such as a VHF Radio, GPS, and Cellular Phone.



- Include a waterproof hand held compass as a back up in case



# CHARTS



- **When operating in coastal waters or navigable rivers, carry a chart and try to obtain local knowledge of waterway conditions.**
- **Familiarize yourself with basic coastal navigation procedures.**



# OTHER ITEMS

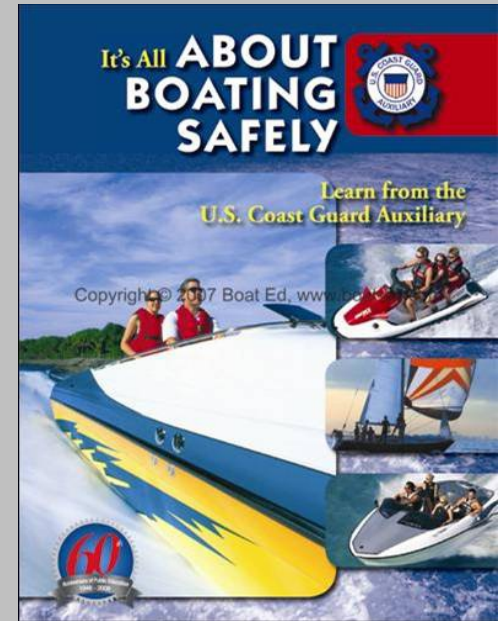


# BOATING SAFETY COURSE

All boaters should be encouraged to take a Boating Safety Course such as the “About Boating Safely” Course, whether online or in a classroom setting.

For more information about classes, please see:

<http://public.d11nuscgaux.info/pe-course.html>.





# CLEAN UP

- Pack a trash bag. Take all refuse away with you.
- Leave every stop or campsite cleaner than when you found it.



# The Vessel Safety Check Saves Lives!

For any questions, please contact:

Mike Lauro

Vessel Examiner

at:

[sumfun@juno.com](mailto:sumfun@juno.com)



Get a Free

# Vessel Safety Check

**YOU'RE IN COMMAND**  
BOAT RESPONSIBILITY

