



## United States Coast Guard Auxiliary

District 11 Northern Region

Serving Northern California, Nevada, Utah



# Vessel Safety Check Review

Prepared by:

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Vessel Examiner

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, etc



# 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.



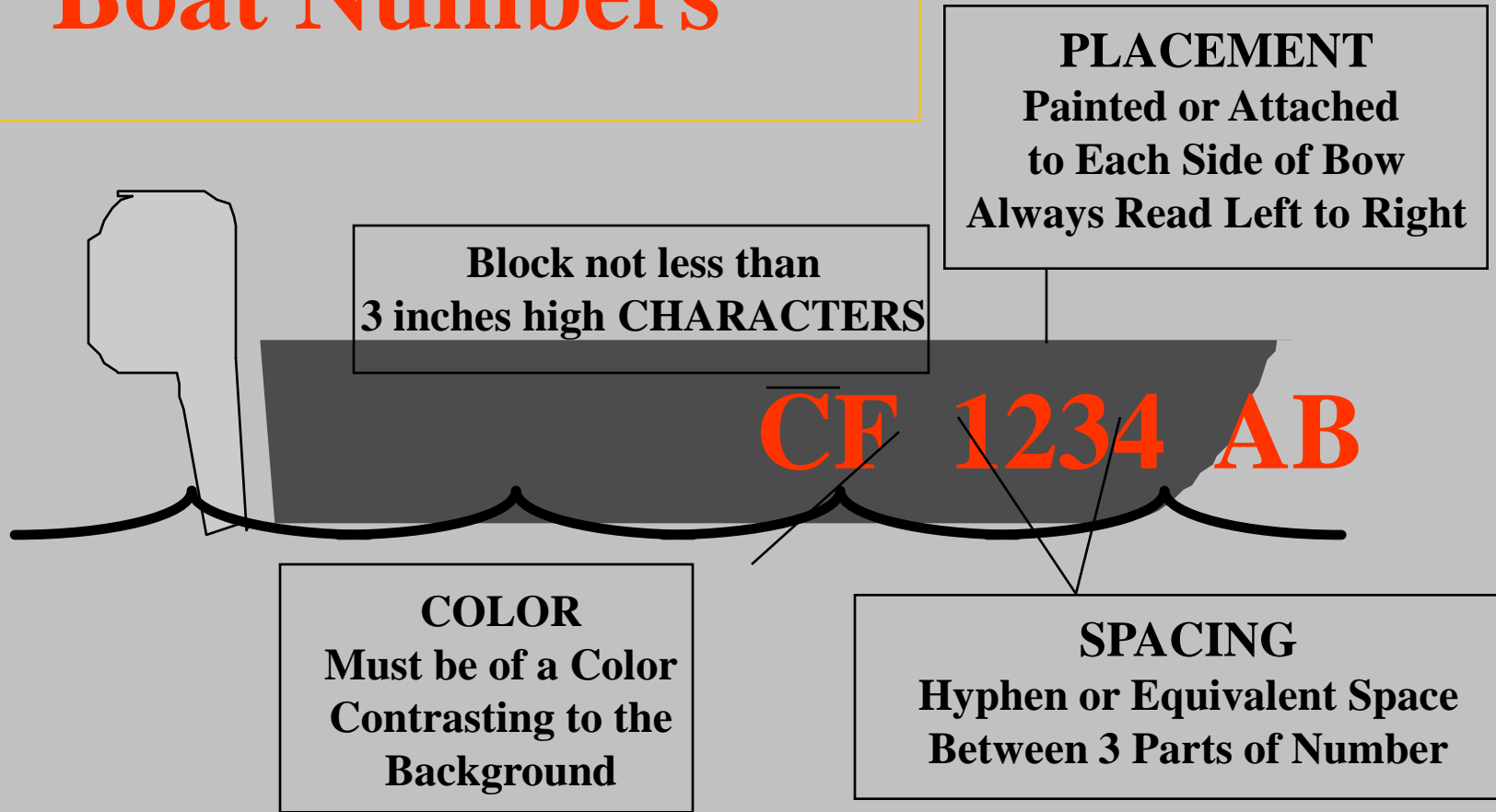
## Item 1 - Display of Numbers:

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**~~  
~~**CF 1234 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**

**Vessel Name**

**Hailing Port**

**Owner / Operator**

**Expiration Date**

DEPT. OF TRANSPORTATION 2105-0110

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION  
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

**CERTIFICATE OF DOCUMENTATION**

VESSEL NAME MIDNIGHT	OFFICIAL NUMBER 938931	LINK OR OTHER NUMBER OCM42020787	YEAR COMPLETED 1987
HAILING PORT SEATTLE, WA	HULL MATERIAL FRP	MECHANIC PETERSON	
GROSS TONNAGE 13 GRT	NET TONNAGE 10 NRT	LENGTH 43.3	BREADTH 14.6
DEPTH 3.1			
PLACE BUILT KAOHSIUNG, TAIWAN			
OWNERS JEFFREY L. KNIGHT		OPERATIONAL ENDORSEMENTS RECREATION	
MANAGING OWNER JEFFREY L. KNIGHT 3919 SW 324TH STREET FEDERAL WAY, WA 98023			
RESTRICTIONS NO COASTWISE FOREIGN BUILT NO FERRY FOREIGN BUILT			
ENTITLEMENTS NONE			
REMARKS NONE			
ISSUE DATE DECEMBER 31, 2002			
THIS CERTIFICATE EXPIRES JANUARY 31, 2004			
VDS		DIRECTOR: NATIONAL VESSEL DOCUMENTATION CENTER	

PREVIOUS EDITION OBSOLETE, THIS CERTIFICATE MAY NOT BE ALTERED

**Hull Id Number**

**Length feet**



# 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

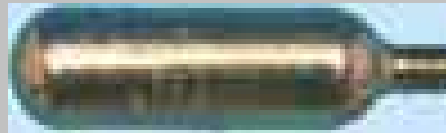
3. Shrinkage: A physical reduction in size may be indicated by “wrinkling” of the coating on vinyl dipped type or by a loose fitting shell on a fabric-covered PFD.



# 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.

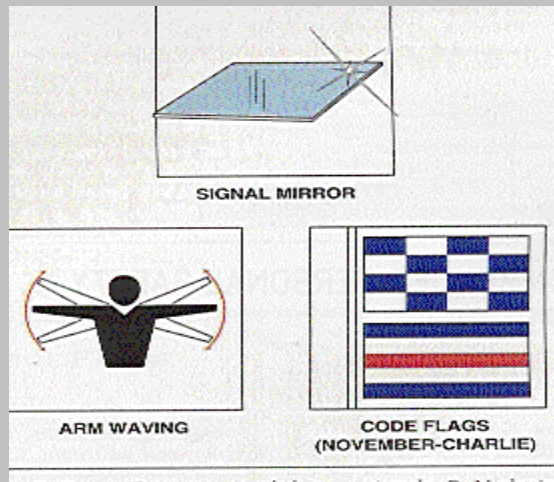




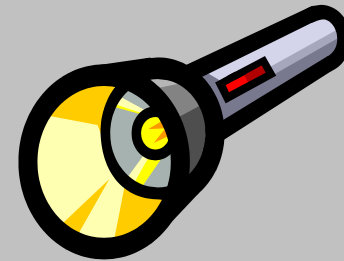
# Item 4 - Visual Distress Signals-Continued

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.

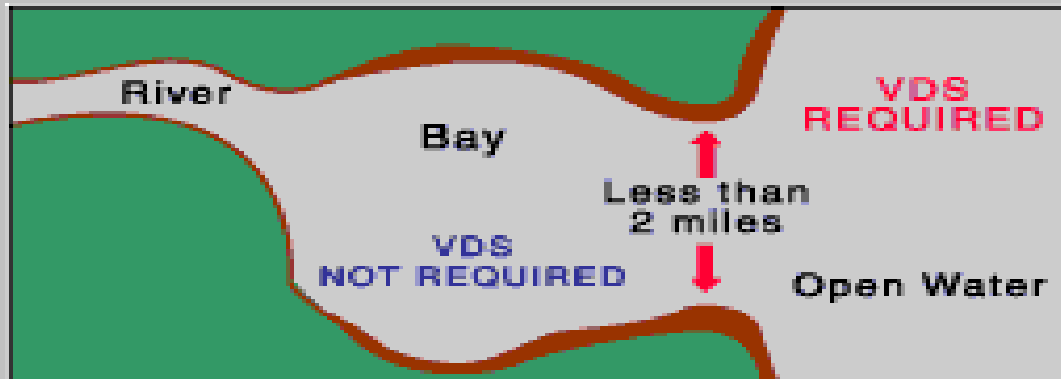
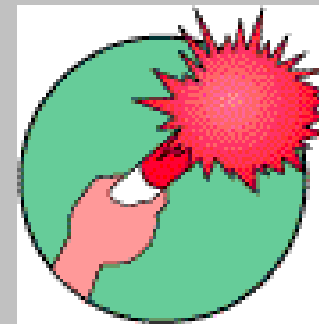
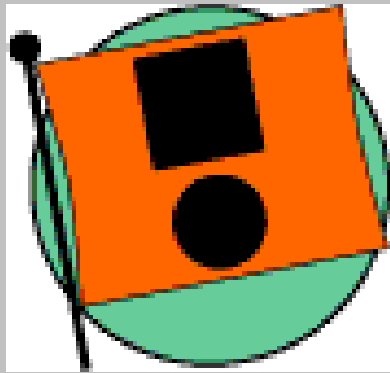
DAY



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.



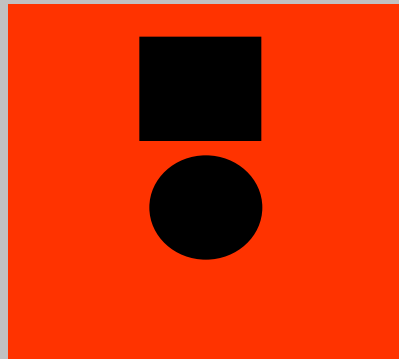
# Item 4 - Visual Distress Signals

## Flares have a 42 month expiration date

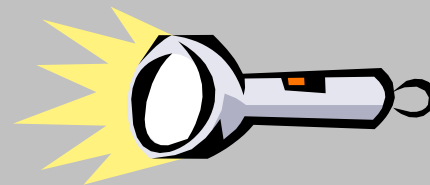
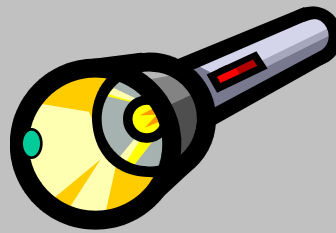


# Non Pyrotechnic Visual Distress Signals

- 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**



# 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:

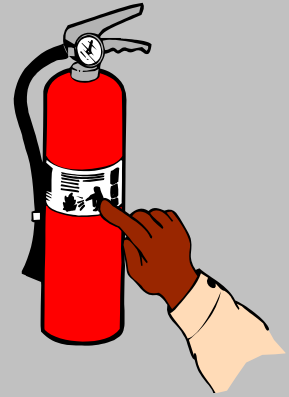
- (1) Inboard engine(s)
- (2) Closed compartments that store portable fuel tanks
- (3) Double bottom hulls not completely sealed or not completely filled with

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

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



## 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 1/2 mile.





# Item 8 - Sound Producing Devices / Bell:



## Item 8 - Sound Producing Devices

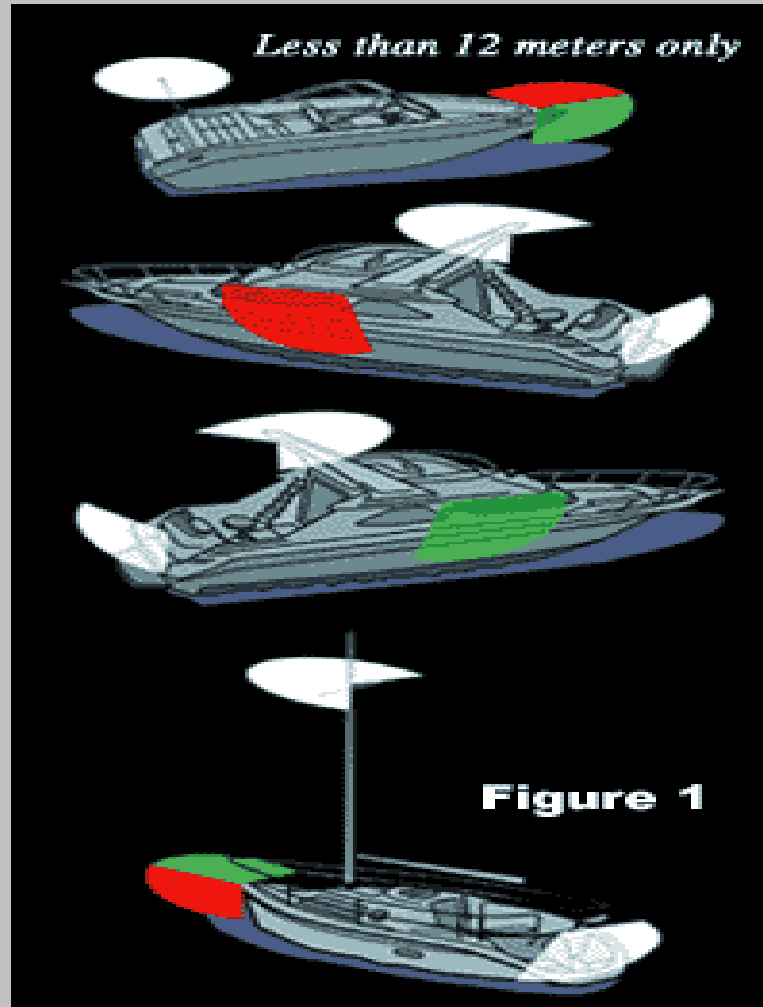
Recent changes in the Navigation Rules effectively have changed the requirements for the carriage of a bell on both International, and by default, Inland waters. It is now not required.



# 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 '3 to 12 miles' from shore, the second is '12 to 25 miles', and the third is 'Outside 25 miles'. Each zone has a list of items that are 'ILLEGAL TO DUMP'. A small boat is shown in the 3-12 mile zone, a larger boat in the 12-25 mile zone, and a cruise ship in the outside 25 miles zone. A white box at the bottom of the diagram states: 'State and local regulations may further restrict the disposal of garbage.'

Zone	ILLEGAL TO DUMP
U.S. Lakes, Rivers, Bays, Sounds and 3 miles from shore	Plastic & Garbage Paper Rags Glass Food
3 to 12 miles	Plastic Dunnage (lining & packing materials that float) also if not ground to less than one inch: Paper Metal Glass Crockery Metal Food
12 to 25 miles	Plastic Dunnage (lining & packing materials that float)
Outside 25 miles	Plastic

**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.

Marine Radio



Dewatering Device and Back-up



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

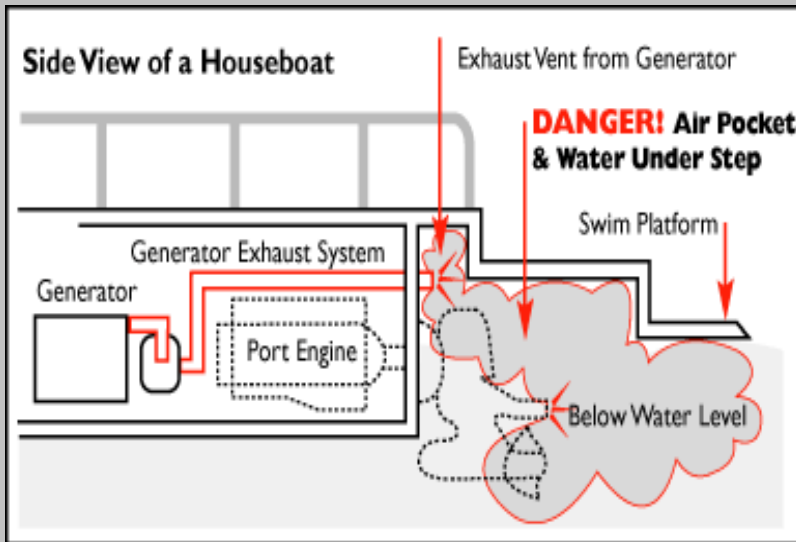
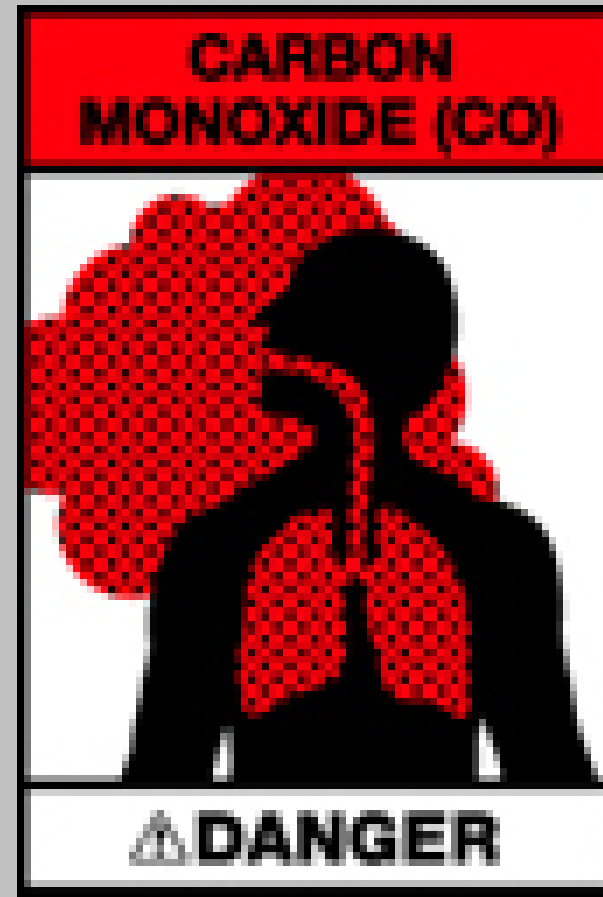
Liability Coverage; personal injury and property

Medical coverage

Towing; 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.



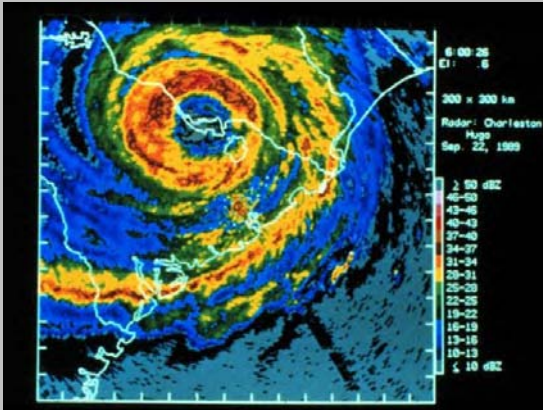
# FILE A FLOAT PLAN

- 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



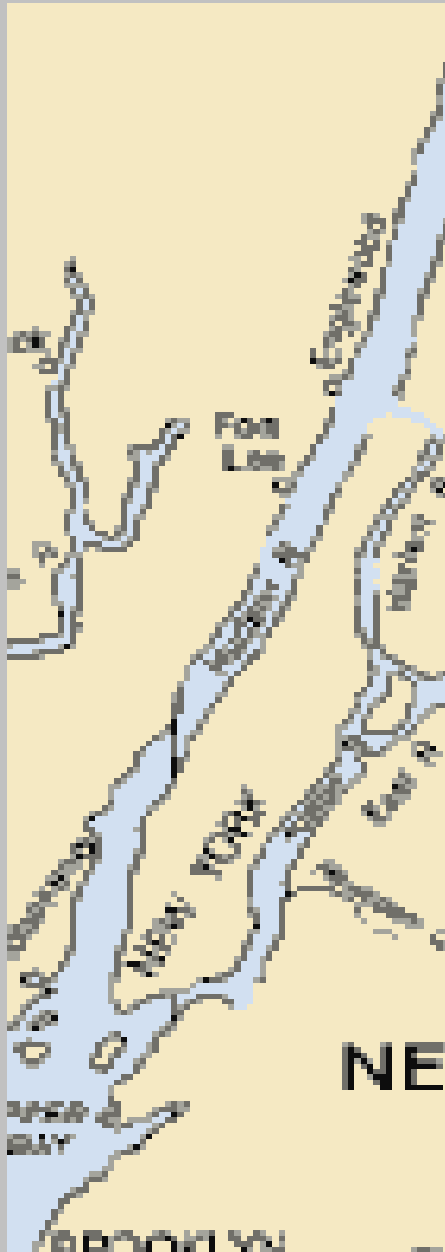
- **Bring along electronic communication and navigation devices such as a VHF Radio, GPS, and Cellular Phone.**



- **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

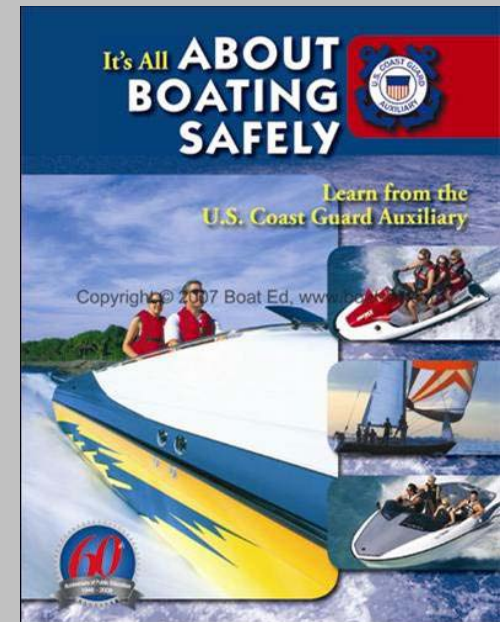


# BOATING SAFETY COURSE

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 RESPONSIBLY

