

#### **United States Coast Guard Auxiliary**

District 11 Northern Region Serving Northern California, Neveda, Utah





### Vessel Safety Check Review

Prepared by:
Mike Lauro
DSO-VE 11NR

### D11NR V-Department For 9+ years:

- 1-Is the ONLY District to offer a 2-day Vessel Examiner class TWICE a year.
- 2-Offers New Member and New Examiner WELCOME letters!
- 3-Offers 2 levels of recognition for VSC production!
- 4-All Examiners receive a copy of the DSO-VE report to the District board.
- 5-Vessel Examiner recognition website.

And MORE!





# D11NR Vessel Examiner Website:

http://rbsafety.d11nuscgaux.info/ve/ve.html

- Updated several times a month
- Designed exclusively for Vessel Examiners
- Complete with EVERY form needed and LOADED with information!
- This **ONLY** one of it's kind in the Nation!





## D11NR Public Vessel Safety Check Website:

http://rbsafety.d11nuscgaux.info/public/ve.html

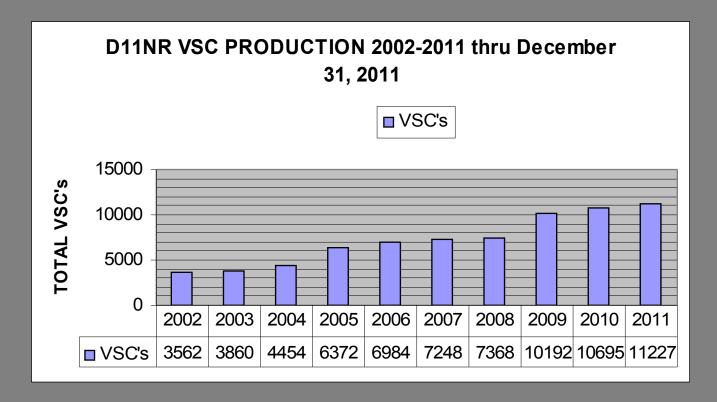
Designed **exclusively** for the public with a power-point VSC presentations for both boats and for kayak and canoes.

The site **is LOADED** with information!
This **ONLY** one of it's kind in the Nation!





### D11NR VSC GROWTH 2002-2011!







## The Vessel Safety Check







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







## 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 the name was changed to Courtesy Marine Examination, then in 2000 changed to become the Vessel Safety Check (VSC). The VSC program now includes PWC's, canoes and kayaks. 2007 was the 60th anniversary of the program that now includes the U.S. Power Squadron.





### The Vessel Safety Check

Vessel Examiners may examine Powerboats, Sailboats, Personal Water Craft (PWC), and kayaks and canoes. Sailboards do NOT qualify for a VSC.

Requests for VSCs on boats larger than 65ft in length should be referred to the DSO-VE.



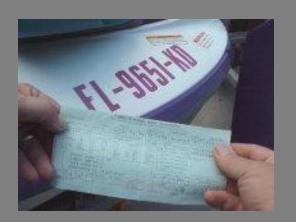


#### **Item 1 - Display of Numbers:**

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

Block not less than 3 inches high CHARACTERS

**PLACEMENT** 

Painted or Attached to Each Side of Bow Always Read Left to Right

CF 123/4 AB

COLOR
Must be of a Color
Contrasting to the
Background

**SPACING** 

**Hyphen or Equivalent Space Between 3 Parts of Number** 



CF 1234 AB or CF-1234-AB





#### **Incorrect numbers**







Not permanently attached

Not block

No spaces





**Not contrasting color** 

## Item 2 - Registration and Documentation:

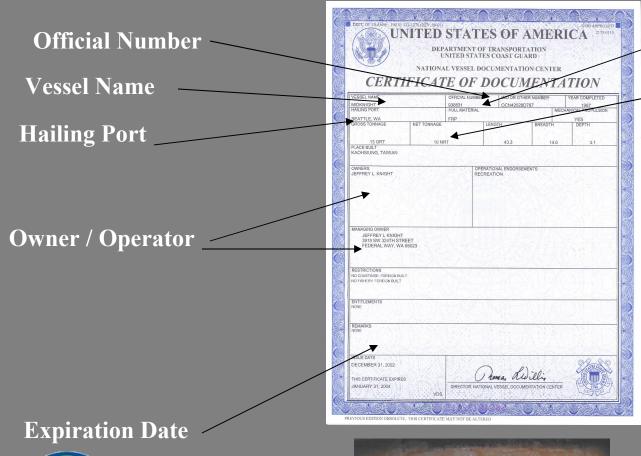
Registration or Documentation papers <u>must</u> be on board and available. Documentation numbers must be permanently marked on a visible part of the interior structure. Original registration and documentation <u>must</u> be on board.

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



Hull Id Number

- Length







# 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 shall be "immediately available." PFDs should NOT be stored in unopened plastic packaging.

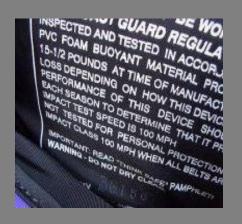




## Item 3 Flotation Devices (PFD):

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 PFDs designed for children based upon their weight.









# Item 3 Flotation Devices (100 MPH PFD):

#### **WARNING:**

100 MPH 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 a 100 MPH 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**

- 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 continued Flotation Devices

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

# 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):

For Personal Watercraft riders, California, Nevada, and Utah require that a PFD (recommend a type III) be worn and they also require an impact rating.

Boats 16 Feet or longer, must also have one Type IV.





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.



VEST



# Item 4 - Visual Distress Signals (VDS):



Do NOT accept expired flares or demo them!

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

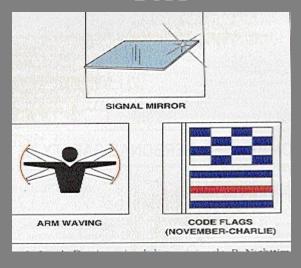
Recreational boats 16 feet and over used on coastal waters or the Great Lakes require a minimum of either:

- 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.





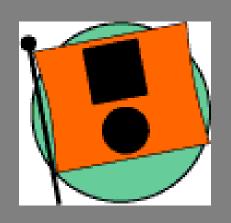
NIGHT –Flash SOS!

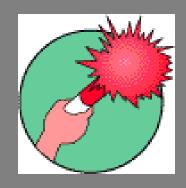


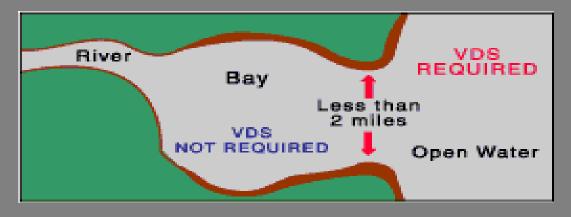




## Item 4 - Visual Distress Signals Continued











#### **Item 4 - Visual Distress Signals-Continued**

Night Day

Strobe light Signal mirror

Flashlight Red or orange flags

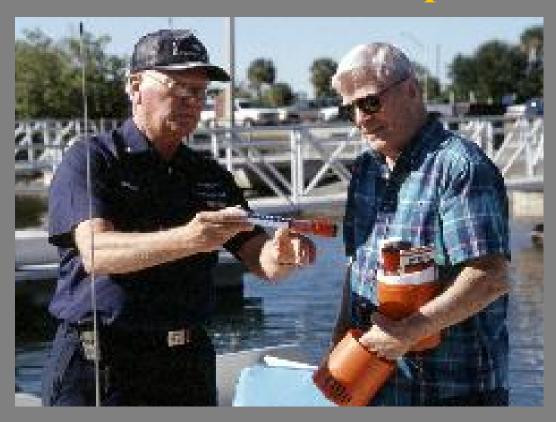
Lantern Hand signals

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







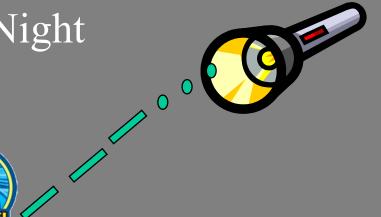
## Non Pyrotechnic Visual Distress Signals

Day





• Night

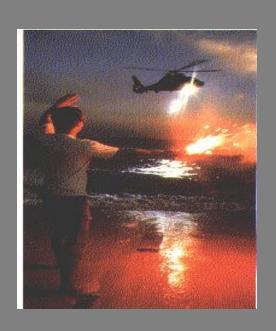


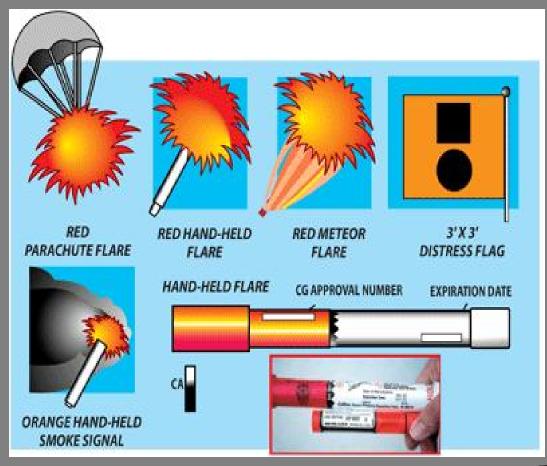






### **Item 4 - Visual Distress Signals-continued**

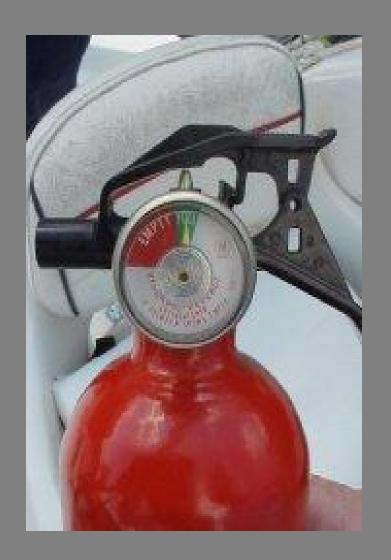








## Item 5 - Fire Extinguishers







### Item 5 - Fire Extinguisherscontinued







# 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>	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

Three B-1 or Two B-1 or One B1 & One B-2 One B-2





#### **Item 6 - Ventilation:**

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

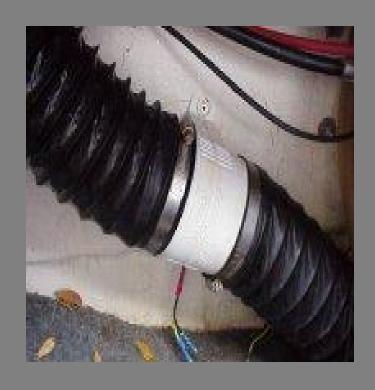
Those built prior to that date must have natural or powered ventilation.





#### **Item 6 - Ventilation:**

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 Blower Operation 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 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 <u>all</u> boats including PWC's, kayaks and canoes, 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**

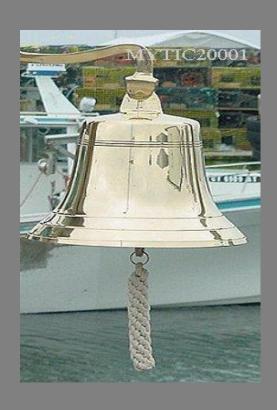
Recent changes in the Navigation Rules effectively have changed the requirements for the carriage of a bell on both International, and by default, Inland waters.







# Item 8 – Sound Producing Devices Bell:



Boats 20 meters and over are required to carry a bell of 300 mm minimum diameter.





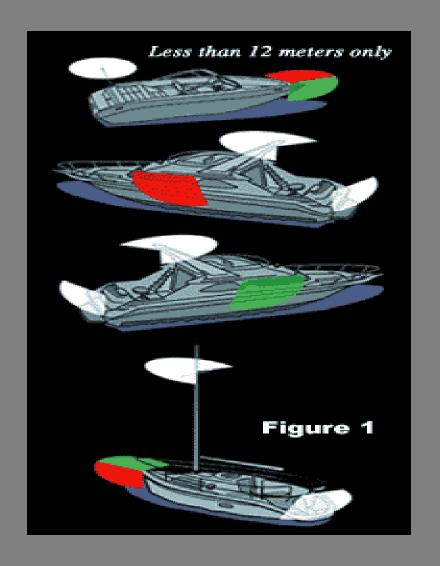
# Item 9 - Navigation Lights:







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# 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 at sunset



#### **Item 10 - Pollution Placard:**

Boats 26 feet and over must display a 5"x 8" oil 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 imprisionment.





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 4" x 9" "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 penalt up to \$25,000, a fine up to \$50,000, and imprisonment up to 5 years.

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

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

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

Outside 25 miles ILLEGAL TO DUMP Plastic



















#### **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 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.)





# 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.

We do NOT participate in inspections for Quagga/Zebra mussels EXCEPT to provide information!





• 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.

• 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.





# Safe Electrical and Fuel Systems continued:

Batteries must be secured and terminals and covered to prevent accidental arcing.

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













• 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 vaportight, leak-proof cap. Each permanent fuel tank must be properly ventilated.





• Safe Galley and Heating Systems:

System and fuel tanks must be properly secured with no flammable materials nearby.





We do <u>not</u> fail the boater for missing any of these items nor may each VSC have time to elaborate on each.

Marine Radio



Dewatering Device and Back-up

Mounting Fire Extinguishers

Anchor and Line













#### 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 safety 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.





#### 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



#### **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

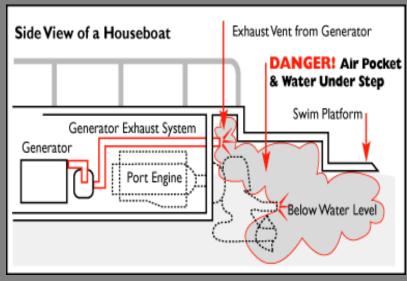
Liability Coverage; personal injury and property

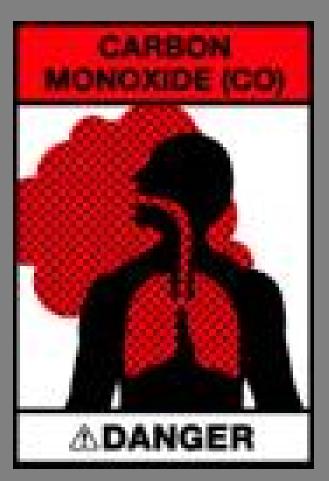
Medical coverage

Towing; over both land and water











#### 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**

Remind Recreational Boaters about 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.





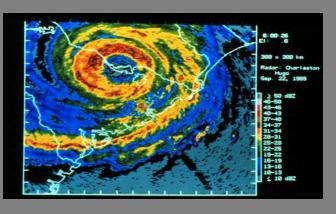
# FILE A FLOAT PLAN

• 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





# NE

# WEAR IT! U.S. COAST GUARD AUXILIARY

### **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



















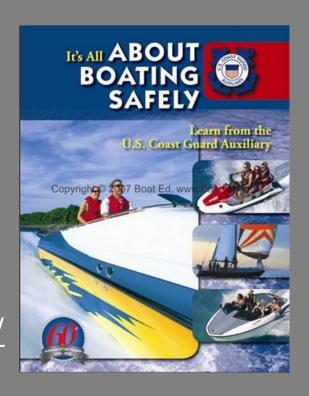
## **BOATING SAFETY COURSE**

All boaters should be encouraged to take a Boating Safety Course such as the "About Boating Safely" Course.

For more D11NR class info, promote: http//public.d11nuscgaux.info/

pe-course.html on ALL

handout material.







## CLEAN UP

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





"Recreational Boating Safety is the Auxiliary's core competency and core mission. The absolute strongest support to the Recreational Boating Safety mission is needed as never before."

"Preventive Search and Rescue saves lives and also creates opportunities for our limited active Coast Guard resources to conduct missions other than Search and Rescue, which is extremely valuable within the current maritime security environment..."

Capt. David B. Hill, CHDIRAUX











#### **VSC** Review

#### D11NR Vessel Examination Department

#### The V-DEPT. -----WE SAVE LIVES!





Prepared by:
Mike Lauro DSO-VE

