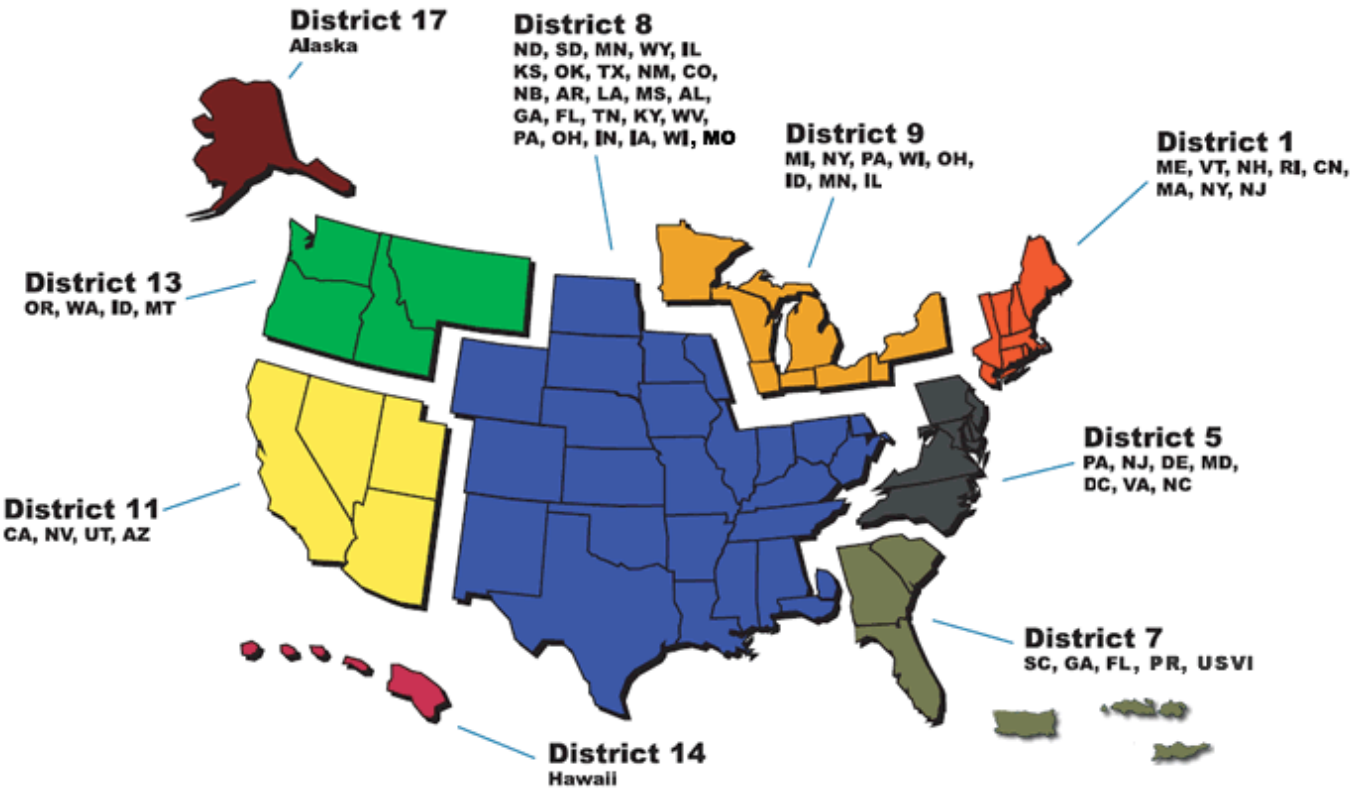
United States Coast Guard

Requirements For Uninspected Passenger Vessels



Revised: November 2016, CGD11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If you:

- **Have questions about the information in this guidebook,**
- **Want additional copies of the handout, or**
- **Want a courtesy Safety Examination of your boat:**

- Please contact the Prevention Department at your local Coast Guard Sector office:

  Find your local USCG Sector Field office online at USCG Homeport – Port Directory

- Or contact the Coast Guard District Prevention division at:

• District One	Boston MA	(617) 223-8442
• District Five	Portsmouth, VA	(757) 398-6558
• District Seven	Miami, FL	(305) 415-6868
• District Eight	New Orleans, LA	(504) 671-2165
• District Nine	Cleveland, OH	(216) 902-6052
• District Eleven	Alameda, CA	(510) 437-5960
• District Thirteen	Seattle, WA	(206) 220-7217
• District Fourteen	Honolulu, HI	(808) 535-3422
• District Seventeen	Juneau, AK	(907) 463-2808

To suggest additions or corrections to this handout, contact LANTAREA Prevention Division at 757-398-7787.

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U. S. COAST GUARD REQUIREMENTS FOR UNINSPECTED PASSENGER VESSELS: TABLE OF CONTENTS

SUBJECT	PAGE

Introduction 7

Definitions 9

Personnel Licensing 11

Watchstanding 12

Vessel Documentation 13

Drug Testing 15

Marine Casualty Reporting 20

Communication 22

Automatic Identification System (AIS) 22

Charts and Nautical Publications & Electronic Equivalencies 23

Navigation Lights and Sound Signals 26

Garbage & Waste 29

Lifesaving Equipment 32

Fire Fighting Equipment 36

Fire Prevention and Suppression 38

Safety Orientation and Instructions 46

Marine Sanitation Devices 49

Oil Pollution Prevention 51

Special Permits or Excursion Permits 52

Marine Events of National Significance 53

Additional Recommended Safety Items 54

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INTRODUCTION

Overview

This document applies to U.S. uninspected passenger vessels (UPVs) that do not carry freight for hire. It has been developed to assist UPV owners and operators as well as Coast Guard Marine Inspectors, Examiners and Boarding officers during dockside or at-sea examinations of UPVs. **It is not meant to replace the federal regulations.** For precise language, exemptions and interpretations of please consult the specific laws or regulations containing that requirement.

Each section corresponds to the checklist, enclosure (2) of LANT/PACINST 16710.2. The checklist is designed to be used with this booklet.

Abbreviations

Listed are abbreviations found in this document:

CFR:	Code of Federal Regulations
CG:	U. S. Coast Guard
COD:	Certificate of Documentation
COTP:	USCG, Captain of the Port
GT:	Gross Tons
MMC:	Merchant Mariner Credential
MMD:	Merchant Mariner Document
MSD:	Marine Sanitation Device
NM:	Nautical Mile
NT:	Net Tons
OCMI:	USCG, Officer-in-Charge Marine Inspection
PFD:	Personal Flotation Device
SPC:	Sector Prevention Command
STCW:	Standard Training and Certification Watchstanding
TWIC:	Transportation Worker Identification Credential
UPV:	Uninspected Passenger Vessel
USC:	United States Code
VTS / VMRS:	Vessel Traffic System / Vessel Movement Regulatory System

Copy of Regulations

For more detailed information, contact the Prevention Department at your local Sector office. The following summary of requirements is free; however, you may purchase a full text copy of the Federal regulations through the Government Printing Office at HTTP://bookstore.gpo.gov/ , or by contacting GPO at (866) 512-1800. United States Code (USC) and the Code of Federal Regulations (CFRs) are also available online at www.gpoaccess.gov/cfr/.

Penalties

In accordance with *46 USC 4106*, if an UPV is operated in violation of applicable laws and regulations, the owner, charterer, managing operator, agent, master, and individual in

charge are each liable for criminal or civil penalties. The UPV is liable *in rem* for the penalty.

DEFINITIONS

Coastal Waters - The territorial Seas of the U.S. (3nm), U.S. waters of the Great Lakes, and those waters directly connected (i.e. bays, sounds, harbors, rivers, inlets, etc.) where any entrance exceeds 2nm.

Coastwise Voyage - Navigating the waters of any ocean or the Gulf of Mexico, 20nm or less offshore.

Consideration - An economic benefit, inducement, right, or profit including monetary payment going to

an individual, person, or entity, but not including a voluntary sharing of the actual expenses of the voyage, by monetary compensation of fuel, food, beverage, or other supplies. *46 USC 2101 (5a)*

Crewmember - An individual who is on board a vessel acting under the authority of a license, certificate of registry, or merchant mariner's document issued under this subchapter, whether or not the individual is a member of the vessel's crew; or engaged or employed on board a vessel owned in the United States that is required by law or regulation to engage, employ, or be operated by an individual holding a license, certificate of registry, or merchant mariner's document issued under this subchapter. *46 CFR 16.105 (a) (b).*

Demarcation Line - The regulations in this part established the lines of demarcation delineating those waters upon which mariners shall comply with the International Regulations for Preventing Collisions at Sea, 1972 (72 COLREGS) and those waters upon which mariners shall comply with the Inland navigation Rules. The waters inside the lines are Inland Rules waters. The waters outside the lines are COLREGS waters. *33 CFR 80.01 (a) (b)*

Great Lakes Voyage - Voyage from a U.S. port or place on the Great Lakes to another U.S. or Canadian port or place on the Great Lakes, or conversely.

Inland Waters - the waters shoreward of the territorial sea baseline. *33 CFR 2.26*

In rem - Unlike in personam (which is against a person and its property) in rem is a technical term meaning "against a thing or property". Any lawsuit or judgment made against the property or thing is an action "in rem". In this case, the location of the property is important as the court can hold the trial only in the jurisdiction under which the land falls. Unlike in personam, the judgment can be against the land and not its owner.

Merchant Mariner Credential - A MMC is the credential issued by the Coast Guard under 46 CFR part 10. It combines the individual merchant mariner's document, license, and certificate of registry enumerated in 46 U.S.C. subtitle II part E as well as the STCW endorsement into a single credential that serves as the mariner's qualification document, certificate of identification, and certificate of service.

Ocean Voyage - Includes waters of any ocean, or the Gulf of Mexico more than 20nm offshore.

Oceangoing - Vessels operating seaward of the outermost boundary of the Territorial Sea (3nm) of the U.S. (i.e. beyond 3nm).

Passenger - *Passenger* means an individual carried on a vessel, EXCEPT—

(1) The owner or an individual representative of the owner, or in the case of a vessel under charter, an individual charterer or individual representative of the charterer; (2) The master; or (3) A member of the crew engaged in the business of the vessel, who has not contributed consideration for carriage, and who is paid for onboard services. *46 USC 2101 (21) and 46 CFR 24.10-1.*

Note: All persons on board are crewmembers, passengers, or National Marine Fisheries Service official observers. **THERE ARE NO GUESTS OR "OTHER" OBSERVERS.**

Passenger for Hire - Passenger for whom a consideration is contributed as a condition of carriage whether directly or indirectly flowing to the owner, charterer, operator, agent, or any other person interested in the vessel is a passenger for hire. *46 USC 2101 (21a)*

TWIC - Congress directed the federal government, through the Maritime Transportation Security Act (MTSA), to issue a biometric security credential to individuals who require unescorted access to secure areas of facilities and vessels and all mariners holding Coast Guard- issued credentials or qualification documents. A Transportation Worker Identification Credential (TWIC) is needed only for an initial license issuance or if your vessel has a Vessel Security Plan or if unescorted access to secure areas of regulated facilities is required. CG Policy letter 11-15.

UPV - A vessel not subject to inspection by the Coast Guard under *46 USC 3301*, less than

100 GTs:

- Carrying no more than six passengers, including at least one passenger for hire, or
- Chartered with the crew provided by the owner or owner's representative, and carrying six or fewer passengers. *46 USC 2101(42)(B)*

UPVs may also include vessels over 100 GTs but less than 300 GTs that carry not more than 12 passengers, with at least one being a passenger for hire. Refer to the USCG guide, Addendum *Uninspected Passenger Vessels over 100 GTs but less than 300 GTs that carry 12 or fewer passengers for hire* .

PERSONNEL LICENSING

Applies To:

All UPVs, 100 GTs or less, carrying at least one passenger for hire.

Personnel Licensing:

Every UPV must be under the direction and control of an individual licensed by the Coast Guard. *46 CFR 15.605*

The following rules apply:

- An individual holding a Merchant Mariner Credential (MMC) or license as master or pilot of inspected, self-propelled vessels is authorized to serve as operator of an UPV within any restrictions other than gross tonnage limitations on the individual's license;
- A licensed mate of inspected, self-propelled vessels on the Great Lakes, inland, or rivers **of not more than 200 GTs** are authorized to serve as an operator of an UPV and must operate in their respective waters only; if a licensed mate of over 200 GTs, see below;
- A licensed mate of oceans and coastwise inspected, self-propelled vessels is authorized to serve as an operator of an UPV, within any restrictions other than gross tonnage limitations on the individual's license. *46 CFR 15.905*

An individual may not serve in a position in which the individual is required to hold a license unless the individual holds a valid license authorizing service in the capacity in which the individual is employed and the individual serves within any restrictions placed on the license. *46 CFR 15.401*

The original Coast Guard MMC or license suitable for the vessel's route and service license must be kept on board and be available for immediate presentation it to Coast Guard officials whenever passengers are being carried for hire.
46 CFR 26.20-1

Mariners who are being issued an initial MMC, or who never held a TWIC, will need to enroll for a TWIC at a TWIC enrollment center. They will also have to pay all applicable fees associated with getting a TWIC. This is required because the TWIC enrollment center is the only place where the Coast Guard can obtain biometric information (fingerprints) from the applicant.

For mariners renewing their MMC, who do not require a TWIC, they may skip the TWIC enrollment process and apply for an MMC at a Regional Exam Center (REC). If a mariner chooses to do this, only criminal background data from previous applications will be available. 46 CFR 10.113& 12.01-11 Policy Letter 11-15.

PERSONNEL LICENSING (CONTINUED)

There is no requirement for mates or other UPV personnel who are not in control of the vessel to hold a Coast Guard license or document.

WATCHSTANDING

Applies to:

All UPV's of 100 GTs or less, carrying at least one passenger for hire.

Work-hour Limitations:

A licensed individual may not be *required* to work more than 12 of 24 hours at sea, except in an emergency when life or property is endangered. *46 USC 8104 (b)*

UPVs operating more than 12 hours *should* have a two-watch system, specifically a second licensed operator.

Licensed individuals serving as the operator of a UPV may voluntarily work more than 12 hours in a 24-hour period. *He or she must maintain an adequate watch.* If they have no relief and are too fatigued to stand an alert watch, then that individual would be negligent for failure to maintain an adequate watch. Charter fishing and dive vessels routinely operating more than 24 consecutive hours with only one licensed operator present significant issues of negligence on the part of the UPV operator or owner for failure to provide an adequate watch. Between 12 and 24 hours of operation, there is a gray area in which the owner/operator of the UPV must judge the prudence of a decision to sail without a second licensed individual.

It has been suggested by some operators that a qualified seaman could be left at the helm while the licensed operator sleeps close by. This is an untenable position. *46 USC 8903* mandates the vessel be operated (under the "direction and control") by a licensed individual; the Coast Guard does not have the discretion to allow any unlicensed seaman to control the vessel without supervision.

VESSEL DOCUMENTATION

Applies To:

All UPVs of at least 5 net tons. If you are not sure if you vessel is at least 5 net tons you can check with the simplified measurement form at http://www.uscg.mil/hq/msc/docs/CG-5397.pdf. Other questions regarding vessel documentation contact National Vessel Documentation Center see contact information below.

Certificate of Documentation: Over 5 Net Tons

A UPV of at least 5 net tons that engages in domestic or coastwise trade must have a Certificate of Documentation (COD) on board bearing a valid endorsement for the activity in which it is engaged. *46 CFR 67.*

UPVs whose route is from point "A" in the U.S. to point "B" in the U.S., or returning to point "A" without leaving U.S. territorial waters must be U.S. built and hold a COD with an operational endorsement for coastwise trade. If the vessel is of foreign or unknown build, it must receive a waiver from MARAD through the Small Vessel Waiver Program. *46 USC 12106(b), 46 CFR 67.19(a), 19 CFR 4.80.*

COD endorsements are valid for 1 year.

- To renew, an original Notice of Expiration (CG-1280) or Final Notice of Expiration (CG-1280-B) form must be completed;
- The renewal forms can be obtained through the Coast Guard's National Vessel Documentation Center at (800) 799-8362; or at http://www.uscg.mil/hq/cg5/nvdc/default.asp
- A renewal decal will be issued which must be affixed to the COD to prove that the COD has been renewed. *46 CFR 67.163*

Display of official number:

- BLOCK-type Arabic numerals not less than **three** inches in height;
- Preceded by the abbreviation "NO.";
- Must be marked on some clearly visible **interior** structural part of the hull;
- Must be permanently affixed so that alteration, removal, or replacement would be obvious. *46 CFR 67.121*

Example: NO. 123456

VESSEL DOCUMENTATION (CONTINUED)

Documented Vessel Markings:

UPV name must be marked on some CLEARLY visible **exterior** part of the port and starboard bow and the stern. The hailing port must be marked on some clearly visible **exterior** part of the stern, the hailing port must be a place in the United States and must include the State, territory, or possession in which it is located;

- For UPVs with a square bow, the name must be marked on some clearly visible **exterior** part of the bow in a manner to avoid obliterating. The name and hailing port must be marked on some clearly visible **exterior** part of the stern;
- These markings, which may be made by the use of any means and materials which result in durable markings, must be made in clearly legible letters of the Latin alphabet or Arabic or Roman numerals not less than **four** inches in height. *46 CFR 67.123*

UPVs Under 5 Net Tons

UPVs under 5 net tons shall be State numbered. A State registered, undocumented vessel must have a valid state certificate aboard whenever the vessel is underway. State registration certificate might be endorsed for Commercial or Commercial Passenger service. This endorsement/certificate various from state to state, check with your state. *33 CFR 174.19(a)/173.21(a), 46 CFR 67. /46 CFR 67.9*

Vessel markings (State Registered):

- Numerals and letters of State issued numbers must be plain, block characters reading from left to right, and must not be less than **three** inches in height;
- Numbers must be painted or permanently attached to each side of the forward half of the vessel, must be visible from each side of the vessel;
- The color of the numbers and letters must be in contrast with the background to which they are affixed.
- Spaces must be placed between letters and numerals; they must be equal to the width of a letter or numeral (other than I or 1). *33 CFR 173.27*

Example: VA 1234 AB or FL-1234-AB

DRUG TESTING

Applies To:

- Coast Guard (CG) licensed UPV crewmembers, operators and/or masters acting under the authority of a license/MMC.

- UPV crewmembers who do not hold a MMC but whose duties directly affect the safe operation of the vessel (such as those who assist passengers in emergency evolutions).

- Crewmember includes all individuals above that perform safety sensitive duties aboard.

Pre-Employment Testing

No marine employer shall engage or employ any individual to serve as a crewmember unless the individual passes a chemical test for dangerous drugs for that employer. This may be waived if the individual can satisfactorily provide evidence that the individual either:

- passed a chemical test for dangerous drugs within the past six months with no subsequent positive tests
- or during the previous 185 days, has been subject to random testing for at least 60 days and did not fail or refuse to participate in a chemical test for dangerous drugs. *46 CFR 16.210*

Periodic Testing

Whenever a physical examination is required for an individual for Licensing by 46 CFR Part 10, a chemical test for dangerous drugs must be included as a part of the physical examination, unless exempted under paragraph (c). 4*6 CFR 16.220*

Random Testing

Marine employers shall establish programs for the chemical testing for dangerous drugs on a random basis of their crewmembers. Crewmembers shall be tested on a random basis at an annual rate generally of not less than 25%. Random selection means that all crewmembers have an equal chance of selection. *46 CFR 16.230(b)*

Reasonable Cause Testing

Employers shall require any crewmember of the UPV who is reasonably suspected of using a dangerous drug to be chemically tested for dangerous drugs. The employer's decision must be based on a reasonable and articulate belief that the individual has used a dangerous drug based on direct observation. Where practicable, this belief should be based on observations by two persons in supervisory positions. *46 CFR 16.250 and 33CFR 95.035*

DRUG TESTING (CONTINUED)

Serious Marine Incident *46 CFR 4.06*

The marine employer shall ensure that all persons directly involved in a serious marine incident (SMI) are chemically tested within 32 hours for dangerous drugs and within 2 hours for alcohol, IAW the requirements for mandatory chemical testing.
Must demonstrate the capability to meet the alcohol testing requirements by carrying test kits on board or identify an approved facility where the testing will be conducted for all the vessel's hours of operation.

Testing

A serious marine incident includes the following events

- A marine casualty or accident required to be reported to the CG that results in one or more deaths,
- Injury requiring professional medical treatment and, for a crewmember, that renders the person unfit to perform his or her routine duties,
- Damage to property in excess of $100,000,
- Actual or constructive total loss of any vessel subject to inspection, or
- Actual of constructive total loss of any self-propelled vessel, not subject to inspection, of 100 gross tons or more,
- A discharge of oil of 10,000 gallons or more into U.S. navigable waters; or
- A discharge of a reportable quantity of a hazardous substance into U.S. navigable waters or a release of a reportable quantity of a hazardous substance into the environment of the United States. *46 CFR 16.240*

Failure of a Drug Test *46 CFR 16.201*
(a.k.a. Positive or Non-Negative Test Results)

If an individual fails a chemical test for dangerous drugs under this part, the individual will be presumed to be a user of dangerous drugs.

If an individual holding a license, certificate of registry, or merchant mariner's document fails a chemical test for dangerous drugs, the individual's employer or prospective employer shall report the test results in writing to the nearest Coast Guard Officer in Charge, Marine Inspection (OCMI). An individual shall be denied employment as a crewmember or removed from duties which directly affect the safe operation of the vessel as soon as practicable. An individual holding a merchant mariner credential shall be subject to suspension and revocation proceedings.

If an individual does not hold a license, merchant mariner's document, or certificate of registry fails a chemical test for dangerous drugs, the individual shall be denied employment as a crewmember or removed from duties which directly affect the safe operation of the vessel as soon as possible. *46 CFR 16.201*

DRUG TESTING (CONTINUED)

Drug Testing Records

Employers shall maintain records of chemical tests which the Medical Review Officer reports as **positive or "non-negative"** for a period of five years. Records of tests reported as **negative** shall be retained for one year. Safety sensitive employees shall have proof of attending EAP training; supervisors at least 60 minutes of EAP training. *49 CFR 40.333* and *46 CFR 16.260* The CCF and MRO test result.

Pre-employment test records are to be maintained for the duration of employment. *46 CFR 16.260*

Chemical Testing History

Employers must conduct 2-year drug and alcohol testing history checks for all newly hired crewmembers. *49 CFR 40.25*

- Employers must obtain a newly hired crewmember's written consent to contact previous employers for this purpose.
- Employers must contact previous marine employers, and any other employer that are subject to federal DOT chemical testing regulations (i.e. commercial trucking, aviation, railroad, and public transportation agencies);
- Employers must inquire of previous employers within 30 days if the newly hired crewmember has failed or refused a federal/DOT chemical test within the previous 2 year period;
- Employers must not employ anyone as a crewmember if that person has failed or refused a federal/DOT chemical test within the previous two-year period.
- An employer may employ a crewmember who has completed a prescribed treatment program from a SAP as outlined in 49 CFR Part 40.293 through 40.305, and who has been issued a "Return to duty" letter from a certified medical review officer.
- Employers must maintain this info on file for at least three years, regardless of the crewmember's duration of employment.

***Note**: Marine employers may obtain a sample consent and report form that may be reproduced and used in order to achieve compliance with this regulation by going to:*
http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/drug_alcohol/forms/media/Release_of_Information_Page.pdf

DRUG TESTING (CONTINUED)

Management Information System Reports

Employers must submit a Management Information System (MIS) report (OMB No. 2105-0529) by March 15th of the following calendar year. This form must be submitted to Coast Guard Headquarters at the address listed below:

COMMANDANT (CG-5451)
ATTN DAPI
US COAST GUARD
2100 2ND ST SW STOP 77581
WASHINGTON, DC 20593-7581

For additional information, see the "Marine Employers Drug Testing Guidance" which is published by the US Coast Guard and is available on homeport. http://homeport.uscg.mil (click on "Investigations" on right side of page, click "Drug and Alcohol Program" on right side of page, scroll down and click on "Marine Employers Drug Testing Guidance", click "View Document")

***Note**: Employers who submitted this form for any three consecutive years, and Who have not employed more than ten crewmembers (including the owner who may also be the operator) are exempt from this requirement. If the employer subsequently employs more than ten crewmembers (including self employed operators) then the MIS form must again be submitted.*
46 CFR 16.500

There is capability online to submit the report at the following site:
http://damis.dot.gov

Operating While Intoxicated

A person is prohibited from operating UPVs while intoxicated. A person is considered operating the UPV when that person is a crewmember (including a licensed person) of the vessel. A person operating a vessel (other than recreational vessel) is considered intoxicated if his or her blood alcohol content (BAC) is 0.04 or more by weight. A person is also considered intoxicated (under the influence of alcohol or dangerous drug) when the effect(s) of the intoxicant(s) consumed have an apparent and observable effect on his or her manner, disposition, speech, muscular movement, general appearance or behavior. *33 CFR 95.015 & .020*

General operating rules for vessels inspected, or subject to inspection, under Chapter 33 of Title 46 United States Code.

While on board a vessel inspected, or subject to inspection, under Chapter 33 of Title 46 United States Code, a crewmember (including a licensed individual), pilot, or watchstander not a regular member of the crew: (a) Shall not perform or attempt to perform any scheduled duties within four hours of consuming any alcohol; (b) Shall not be intoxicated at any time; (c) Shall not consume any intoxicant while on watch or duty; and (d) May consume a legal non-prescription or prescription drug provided the drug does not cause the individual to be intoxicated. *33 CFR 95.045*

Note: Intoxicants include alcohol, drugs, or combination thereof.

MARINE CASUALTY REPORTING

Applies To:

All CG documented UPVs.

For undocumented UPVs (state numbered), a casualty or accident report must be submitted to the reporting authority of the state who issued the state numbers or to the state where the accident occurred. *33 CFR 173.51 & .59, 46 CFR 4.01-3*

Verbal Notice of Marine Casualty:

The following applies to CG documented UPVs:

Immediately after addressing safety concerns, the owner, master, operator, or person in charge shall notify the nearest Coast Guard Sector whenever a vessel is involved in a marine casualty, such as:

- An unintended grounding, or an unintended strike of a bridge or bridge fendering system;
- An intended grounding or an intended strike of a bridge that creates a hazard to navigation, the environment, or safety of a vessel;
- Loss of main propulsion, primary steering, etc. that reduces the maneuverability of the vessel;
- An occurrence adversely affecting the seaworthiness or fitness including fire, flooding, or failure of/damage to fire fighting, lifesaving, & auxiliary power equipment, or bilge-pumping systems;
- A loss of life;
- Injury requiring professional medical treatment and, for a crewmember, that renders the individual unfit to perform his or her routine duties;
- Any occurrences of injury or loss of life to any person while diving from a vessel and using underwater breathing apparatus or
- Occurrence causing property damage above $25,000 including cost of labor and material but not cost of salvage, gas-freeing, drydocking, or demurrage. *46 CFR 4.05-1*
  (Demurrage is "the compensation payable to a carrier of freight whose vehicle or vessel is delayed, as by failure to load or unload the freight within the time allowed." Webster.)

MARINE CASUALTY REPORTING (CONTINUED)

Written Notice of Marine Casualty

In addition to the verbal report, the owner, master, operator, or person in charge shall, within 5 days, file a written report with the nearest OCMI or Sector Prevention Office on form CG-2692: Report of Marine Accident, Injury or Death and, as necessary, be supplemented by form CG-2692B: Report of Required Chemical Drug & Alcohol Testing following a Serious Marine Incident.

Serious Marine Incident includes the following events involving a UPV in commercial service:

A marine casualty or accident required to be reported to the CG that results in:

- one or more deaths,
- injury requiring professional medical treatment and, for a crewmember, that renders the person unfit to perform his or her routine duties,
- damage to property in excess of $100,000,
- actual or constructive total loss of any vessel subject to inspection, or
- actual of constructive total loss of any self-propelled vessel, not subject to inspection, of 100 gross tons or more,
- a discharge of oil of 10,000 gallons or more into U.S. navigable waters;
- a discharge of a reportable quantity of a hazardous substance into U.S. Navigable waters or a release of a reportable quantity of a hazardous substance into the environment of the United States.
  46 CFR 4.03-2, 46 CFR 4.05-10

***CG-2692 must be submitted in writing with an original signature.**

COMMUNICATIONS

Applies To:

All UPVs over 20 meters (65.6 feet) in length. *33 CFR 26.03(a)(1)*

VHF-FM Radio:

UPVs of 20 meters and over must have one or more VHF-FM radios onboard as prescribed by 33 CFR 26 and 47 CFR 80, and must be capable of transmitting and receiving on channel 22A (157.1 Mega-Hertz).

When transiting any waters within a vessel traffic service (VTS) area, a second VHF-FM radio must also be onboard. *33 CFR 26.03*

VHF-FM, MF and HF Radios Equipped for DSC:

All VHF-FM, Medium and High Frequency (also known as single side band (SSB)) Radios that are equipped for Digital Selective Calling (DSC), should have a Maritime Mobile Service Identity (MMSI) programmed and have an input from a GPS. See: *http://www.uscg.mil/acquisition/rescue21/benefits.asp*

Radio Station Licenses:

Radio transmitting devices onboard UPVs of 20 meters and greater, and UPVs with Single Side Band radios, must be licensed by the Federal Communications Commission (FCC). The licenses are valid for 10 years. If the license has just recently been applied for, a UPV should have a copy of FCC Form 605 and it accompanying Schedule B for use as a temporary permit. FCC ship station license application forms can be obtained by calling the Federal Communications Commission at (800) 418-FORM (3676), or online at *http://www.fcc.gov/*. The license is issued to the UPV, and cannot be transferred to another vessel. *47 CFR 80.13 & .25*

Each UPV 20 meters and greater in length must have a radio operator who holds a restricted radiotelephone operator permit or higher class license. Operator permits and licenses issued on or after 25 March 2008 no longer expire, and are valid for the life of the holder. *47 CFR 80.163 / 33 CFR 26*

AUTOMATIC IDENTIFICATION SYSTEM - AIS

Applies to: Self propelled vessels 65 feet or greater in length.

An AIS Class A device is required. A USCG type-approved AIS Class B device can be used in lieu of a Class A if the following are met: (1) Vessel is not subject to pilotage by other than the vessel master or crew; (2) Does not operate in a Vessel Traffic Service

AIS continued.

(VTS) or Vessel Movement Reporting System (VMRS) (33CFR161(c)); AND (3) Does not operate at speeds in excess of 14 kts.

CHARTS AND NAUTICAL PUBLICATIONS

Charts and Nautical Publications

As appropriate for the intended voyage, all vessels must carry adequate and up-to-date—

- Paper charts of appropriate scale to make safe navigation possible;
- "U.S. Coast Pilot" or similar publication;
- Coast Guard light list;
- Tide tables, and
- Current tables, or a river current publication issued by the U.S. Army Corps of Engineers, or a river authority.

Alternative Compliance:

As an alternative, you may substitute extracts or copies from the publication above. This information must be applicable to area transited.
46 CFR 26.03-4.b

Electronic Charts and Publications Equivalency - NVIC 01-16

Electronic navigational charts and electronic publications are accepted as equivalent to requirements in Title 33 and Title 46 of the Code of Federal Regulations. NVIC 01-16 should be reviewed. Equivalency guidance:

A. Charts

_ Official charts must be issued by authority of a government or hydrographic office or relevant government institution ("official electronic charts").

B. Electronic Charting System (ECS) Carriage

Vessel representative should be able to validate that the ECS is:

_ SOLAS compliant vsl meeting the chart carriage requirements on all waters, or

B. Electronic Charting System (ECS) Carriage cont.

_ Meets Radio Technical Commission for Maritime Services (RTCM) class A ECS chart carriage requirements (for vsls. not on international voyages), or

_ Meets RTCM class B or C ECS chart carriage requirements for vsls not more than 12nm from territorial sea baseline.

RTCM class D does **not** meet equivalency requirements to paper charts.

C. Redundant Arrangements

Electronic charts as the primary means of navigation must have an independent redundant arrangement, and:

_ Be equivalent to requirement in paragraph B, connected to a back-up power supply separate and independent from the primary system, or

_ Have a full folio of required official paper charts for the intended voyage.

_ If official electronic charts are being used as primary and back-up means of navigation, equipment identified in Section E (Integration) of this enclosure must also be integrated with the redundant arrangement.

D. Training

1. RTCM class 'A' is considered to function closely to an Electronic Chart Display and Information System (ECDIS). Mariners in charge of a navigational watch & using a class 'A' ECS must possess completion certificate from a USCG approved ECDIS course and have the appropriate MMC endorsement -- this training meets 46 C.F.R. §15.405.

2. RTCM ECS class 'B' and 'C'. Title 46 C.F.R. § 15.405 require each credentialed crewmember must be familiar with installed navigation equipment. Required familiarity: company follows manufacturer's standards, user's manuals, and company policies to document watch stander competency. ECDIS endorsements on MMCs are compliant with this Circular - no additional training in needed.

E. Integration.

1. The following equipment must be integrated with the ECS:
   a. External electronic position-fixing device providing position information,
   b. Automatic Identification System (AIS),
   c. Gyro-compass or other means to determine and display the vessel's heading by vessel borne non-magnetic means and transmit heading information, and
   d. Marine radar.

2. *Recommended* equipment integrated with the ECS:
   a. Magnetic compass; and
   b. Voyage data recorder or simplified voyage data recorder.

F. Electronic Publications Carriage.
33 C.F.R. § 161.4, 164.33, 164.72 and SOLAS Ch.V Reg. 27

U.S. Coast Pilot, Sailing Directions, Coast Guard Light List, List of Lights, tide-current and river-current tables, Notice to Mariners, Local Notice to Mariners, Notices to Navigation, and Vessel Traffic Rules.

_ Derived from the original source,

_ currently corrected/up-to-date, and

_ readily accessible on the vessel's bridge.

_ a redundant copy is required and may be a second computer, CD, or portable mass storage device readily displayable to the navigation watch, or a paper copy.

NAVIGATION LIGHTS & SOUND SIGNALS

Applies to:

All UPVs at anchor or underway from sunset to sunrise, or in or near areas of restricted visibility.

Inland Rules:

The operator of each UPV 12 meters (39.4 feet) long or more, operating in Inland Waters and Canadian Waters of the Great Lakes, shall carry a copy of the Inland Navigation Rules, COMDTINST M16672.2D.
33 CFR 88.05

Navigation Lights:

Each UPV underway, greater than 12 meters (39.4 feet) shall display, per Navigation Rule 23, Inland and International:

UPVs underway shall display:

- red and green sidelights (displayed on red/port and green/starboard sides respectively) showing light from right ahead across an unbroken arc (unobstructed) of 112.5 degrees arc of visibility across the horizon,
- one white masthead light showing light from right ahead across an unbroken arc (unobstructed) of 225 degrees (112.5 degrees on either side of center line) across the horizon,
- an additional masthead light abaft of and higher than the first mast head lights if the UPV is 50 meters (164 feet) or greater in length (except that a UPV may show this light forward of and lower than other masthead lights if such lights are displayed on the UPV's aft mast,*
- one white stern light placed on UPV's centerline showing light astern across an unbroken arc (unobstructed) of 135 degrees across the horizon,
- masthead light must be at least 1 meter above sidelights.
- UPVs less than 12 meters (39.4 feet) may substitute one all around (unobstructed) white light for the white masthead and stern lights.

** Note: UPVs 20 meters (65.6 feet) or greater in length may not place all of their masthead lights aft of their sidelights. See Navigation Rules Annex I.3 (b) & (d), both Inland and International, for further details on horizontal light placement.*

NAVIGATION LIGHTS & SOUND SIGNALS (CONTINUED)

Note 1: it is recommended that the Inland and International Navigation Rules COMDTINST M16672.2D Navigation Rules, International - Inland) be reviewed for specific information on various configurations for lights and shapes *(*the latest *Navigations Rules* can be found at the USCG Navigation Center website*). Navigation Rule 23, Inland and International 23.*

Note 2: Navigation light fixtures with bulbs must comply with the horizontal and vertical sectors and meet the range requirements as outlined in Annex I of the Navigation Rules. Household bulbs and compact fluorescents are not permitted. **Use only manufacturer approved bulbs**. *Navigation Rules ANNEX I, Inland and International.*

Sidelights

UPVs underway shall be fitted sidelights (green stb/red port) with 112.5^{o} arch of visibility.

Power driven vessels less than 7 meters in length whose maximum speed is 7 or less knots may, in lieu of displaying a mast, stern and sidelights, just display an all around white light.

Power driven vessels less than 12 meters may exhibit the masthead light or all-round white light aft displaced (off center) from the fore and aft centerline of the vessel if centerline fitting is not practicable, provided that the sidelights are combined in one lantern which shall be carried on the fore and aft centerline of the vessel or located as nearly as practicable in the same fore and aft line as the masthead light or the all-round white light.

Power driven with 20 meters (65.6 feet) or more in length: sidelights shall be fitted with matte black inboard screens. For UPVs less than 20 meters, sidelights, if necessary to meet the arc required of the light, shall be fitted with black matte inboard screens.

Sound Signals:

Equipment for Sound Signals Rule 33, Inland and International:

- A vessel of less than 12 meters (39.4 feet) in length shall be provided with some means of making an efficient sound signal
- Vessels 12 meters or more in length shall be provided with a whistle.
- Vessels 20 meters or more in length shall be provided with a bell and a whistle.
- Vessels 100 meters or more in length shall, in addition, be provided with a gong, the tone and sound of which cannot be confused with that of the bell.

The whistle, bell and gong shall comply with the specifications in Annex III of the Nav Rules. The bell or gong or both may be replaced by other equipment having the same respective sound characteristics, provided that manual sounding of the prescribed signals shall always be possible.

NAVIGATION LIGHTS & SOUND SIGNALS (CONTINUED)

Bells shall be of corrosion-resistant material and designed to give a clear tone. When practicable, a power-driven striker is recommended to ensure a constant force but manual operation shall be possible. *33 CFR 86.23*

The bell does not have to be mounted. It must be on board the vessel and accessible.

Whistle

The audibility of a whistle must meet the following distances:

Audibility Table

Vessel Length		Audibility Range
Over or Equal to	Less Than	
	20 M (65.6 ft)	0.5 NM
20 M (65.6 ft)	75 M (246 ft)	1.0 NM
75 M (246 ft)	200 M (656 ft)	1.5 NM
200 M (656 ft)		2.0 NM

NOTE: This table is provided for informational guidance purposes only in explaining the whistle audibility requirements.

GARBAGE POLLUTION PREVENTION

Applies to:

All UPVs.

General Requirements:

No person may discharge garbage into U.S. navigable waters and tributaries. *33 CFR 151.66*

Garbage Placards:

Applies to UPVs over 26 feet in length.

UPVs shall display at least one garbage placard. Each placard must be at least nine inches wide by four inches high, made of durable material, and with letters at least 1/8" high. The placard must notify the reader of the following IAW *33 CFR 151.59 (d):*

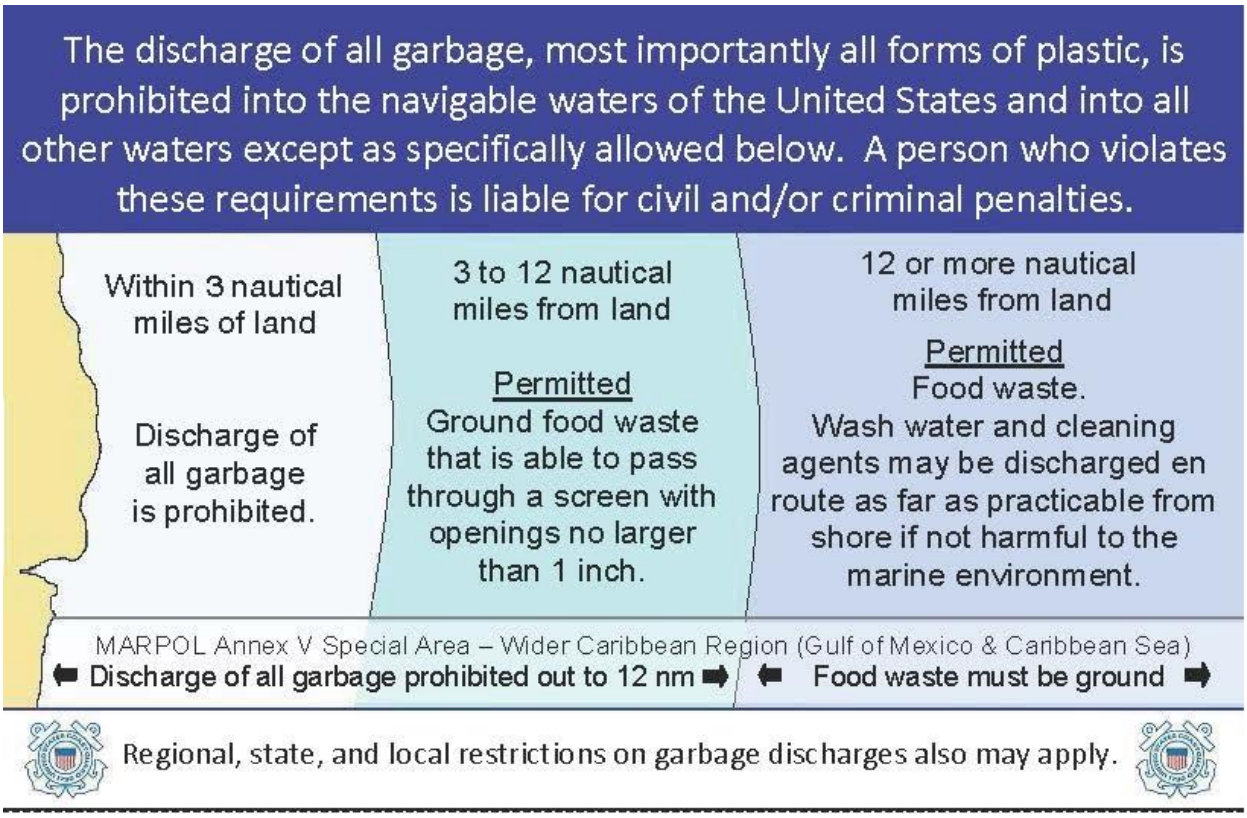
- Discharge of plastic or garbage mixed with plastic into any waters is prohibited;
- Discharge of garbage is prohibited in U.S. navigable waters and in all other waters within three nautical miles (NM) of the nearest land;
- Discharge of dunnage, lining, and packing material that float is prohibited within 25 NM of the nearest land;
- Other unground garbage may be discharged beyond 12 NM from the nearest land;
- Other garbage ground to less than one inch may be discharged beyond three NM of the nearest land;
- Violators are liable for civil penalties up to $25,000, criminal fines up to $500,000, and imprisonment for up to six years per violation;

Garbage placards must be displayed in prominent locations so that crew and passengers can read them. *33 CFR 151.59*

The discharge of all garbage into the Great Lakes or their connecting or tributary waters is prohibited. *33CFR151.59c*

GARBAGE POLLUTION PREVENTION (CONTINUED)

Example Garbage Placard



Waste Management Plan:

Applies to:

Oceangoing (>3nm) UPVs 40 feet or more in length that are engaged in commerce or equipped with a galley and berthing.

UPVs must have a waste management plan detailing who is responsible for the garbage, how it shall be collected, how it is to be stowed, and how it is disposed of.
33 CFR 151.57.

SAMPLE WASTE MANAGEMENT PLAN:

Waste Management Plan for (Vessel Name):_____
Person in Charge: _____

Solid Waste Management Procedures:

Crew Education:
At the beginning of each season, all crewmembers are reminded of the refuse discharge laws and shown the MARPOL V placard posted in the galley. Crew is told that it is vessel policy to stow all garbage materials on board except for food and paper when the vessel is outside of 12 miles. The captain orients all new crew and passengers to the rules governing the vessel including refuse laws and refuse handling.

If the vessel is within 12 miles of shore or returning to shore:
All refuse materials are put in garbage bags and stored on board until the end of the trip when the deckhand disposes of the bags in the dockside trash receptacles.

If the vessel is outside of 12 miles from shore:
All the garbage with the exception of food materials and paper is put in a garbage bag to be hauled to the dockside trash receptacle at trip's end. Food materials and paper generated in the galley are collected in a bucket (or in a paper bag or cardboard box) and the bucket emptied over the side (or the food filled bag or box is thrown overboard) by a crewmember.

OR

All vessel refuse is put in garbage bags and stored on board until they can be disposed or in dumpsters on shore.

LIFESAVING EQUIPMENT

Applies to: All UPVs.

Personal Flotation Devices (PFD), i.e., Life Preservers

All UPVs must have at least one CG approved **TYPE I PFD** of a suitable size for each person embarked. *46 CFR 25-25(c).*

Kapok and fibrous glass life preservers without plastic covered pad inserts are unacceptable.

Commercial hybrid PFDs may be substituted for life preservers if:

- It is worn when the UPV is underway and the intended wearer is not within an enclosed space;
- It is used in accordance with the marked conditions on the PFD and in the owner's manual; and
- Labeled for use aboard commercial vessels. *46 CFR 25.25(f), 46 CFR 160.077.*

Each required life preserver intended to be worn must have approved Type I retro-reflective material (often flexible tape with an adhesive backing) with *at least 200 sq. cm*. (31 sq. in.) of material on the front, *at least 200 sq. cm*. on the back, and, if reversible, *at least 200 sq. cm*. on each reversible side. The material attached on each side must be divided equally between the upper quadrants of the side and as close as possible to the shoulder area of the PFD.
46 CFR 25.25-15

> ***Note:*** *Additional Type II or Type III PFDs may be carried aboard a UPV, however, they must be stowed separately and they may not be used to substitute any Type I PFDs that must be kept onboard (i.e. one Type I for each person embarked).*

On Ocean, Coastwise, or Great Lake voyages each required life preserver and buoyant device or vest must have a working CG approved PFD light attached to the front shoulder area. *46 CFR 25.25-13*

> If a PFD light has a **non-replaceable power source**, the light must be replaced on or before expiration date. If a PFD light has a **replaceable power source**, the power source must be replaced before its expiration date, and the light must be replaced when is no longer serviceable.

LIFESAVING EQUIPMENT (CONTINUED)

Ring Life Buoy

UPVs 26 feet or longer in length must have at least one CG approved orange or white throwable ring life buoy with a minimum outside diameter of 20 inches. **Note: If on an international voyage, the ring life buoy must be orange.** *46 CFR 25.25-5(d)*

Emergency Position Indicating Radio Beacon (EPIRB)

UPVs less than 100 gross tons are not required to carry EPIRBs. *46 CFR 25.26-10*

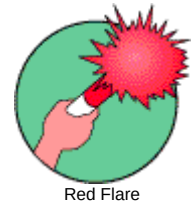
Note: although not required by regulation, UPVs are highly encouraged to outfit their vessels with a float-free, automatically activated, Category 1, 406 MHz EPIRB. All EPIRBS must be registered with NOAA; see *www.beaconregistration.noaa.gov*



Visual Distress Signals (VDS)

All UPVs must carry three day and three night visual distress signals (VDS) while operating on Coastal Waters (which includes the Great Lakes) and Oceans. All VDS must be current (unexpired date).

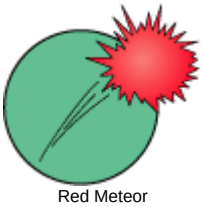
Launchers. When a visual distress signal carried to meet these requirements requires a launcher to activate, then a launcher approved per 46 CFR 160.028 must also be carried. *33 CFR 175.113*


Red Flare
(hand held/day and night)


Parachute Flare
(day and night)

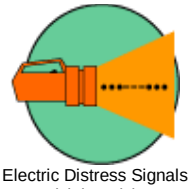

Orange Smoke Signal
(hand held/day only)


Floating Orange Smoke Signal
(day only)


Red Meteor
(day and night)

Non-Pyrotechnic Device Examples


Orange Flag
(day only)


Electric Distress Signals
(night only)

Exceptions. The following persons need not comply with these carriage requirements; however, each must carry on board visual distress signals suitable for night use, selected from Table 175.130 (including "Existing Equipment"), in the number required, and between sunset and sunrise:

- A person competing in any organized marine parade, regatta, race, or similar event;
- A person using a manually propelled boat; or
- A person using a sailboat of completely open construction not equipped with propulsion machinery, less than 26 feet in length. *33 CFR 175.115*

Stowage. Visual distress signals required are readily accessible. *33 CFR 175.20*

Serviceability. Each signal is required to be in serviceable condition and the service life of the signal, if indicated by a date marked on the signal, has not expired. *33 CFR 175.125*

Marking. No person may use a boat unless each signal is legibly marked with the approval number or certification statement as specified in 46 CFR Parts 160 and 161. *33 CFR 175.128*

Visual distress signals required. No person may use a boat operating as an uninspected passenger vessel unless visual distress signals selected from the Table 175.130 or meeting the 'Existing Equipment ' requirements, in the number required, are onboard. Devices suitable for day use and devices suitable for night use, or devices suitable for both day and night use, must be carried. *33 CFR 175.110*

Visual distress signals accepted.

- Any of the following signals, when carried in the number required, can be used to meet these requirements.:
  - An electric distress light meeting the standards of 46 CFR 161.013. One is required to meet the night only requirement.
  - An orange flag meeting the standards of 46 CFR 160.072. One is required to meet the day only requirement.
  - Pyrotechnics meeting the standards noted in Table 175.130.

- Any combination of signal devices selected from the types noted in paragraphs of this section, when carried in the number required, may be used to meet both day and night requirements. Examples--the combination of two hand held red flares (160.021), and one parachute red flare (160.024 or 160.036) meets both day and night requirements. Three hand held orange smoke (160.037) with one electric distress light (161.013) meet both day and night requirements. *33 CFR 175.130*

Existing equipment. Launchers manufactured before 1 January 1981, which do not have approval numbers, are acceptable for use with meteor or parachute signals listed in Table 175.130 under Sec. 175.130 as long as they remain in serviceable condition. *33 CFR 175.135*

Training to use your flares: You are authorized and encouraged to ignite flares from a shore side location for training purposes but you must notify the local USCG Station before and after training. **Ensure the local USCG Station knows** who, when, and where the flare evolution will take place. *33 CFR 175.140*

Flare Disposal: The USCG recommends that you dispose of them at your local fire department or contact your closest USCG station and ask if they hold flare training/demonstration days for the public..
http://www.uscg.mil/hq/cg5/cg534/sarfactsinfo/IfYouSeeAflare.asp

Prohibited use. No person in a boat shall display a visual distress signal on waters to which this subpart applies under any circumstance except a situation where assistance is needed because of immediate or potential danger to the persons on board. *33 CFR 175.140*

Table 175.130--Pyrotechnic Signal Devices

Approval number under 46 CFR	Device Description	Meets Requirements for	Number
160.021	Hand Held Red Flare Distress Signals \3\.	Day and Night	3
160.022	Floating Orange Smoke Distress Signals.	Day Only	3
160.024	Parachute Red Flare Distress Signals.	Day and Night \1\	3
160.036	Hand-Held Rocket- Propelled Parachute Red Flare Distress Signals.	Day and Night	3
160.037	Hand-Held Orange Smoke Distress Signals.	Day Only	3
160.057	Floating Orange Smoke Distress Signals.	Day Only	3
160.066	Distress Signal for Boats, Red Aerial Pyrotechnic Flare.	Day and Night \2\	3

\1\ These signals require use in combination with a suitable launching device approved under 46 CFR 160.028.
\2\ These devices may be either meteor or parachute assisted type. Some of these signals may require use in combination with a suitable launching device approved under 46 CFR 160.028.
\3\ Must have a manufacture date of 1 Oct. 1980 or later.

Miscellaneous Regulations:

- Lifesaving equipment required to be worn must be readily accessible. *46 CFR 25.25.9*
- Equipment designed to be thrown must be immediately available. *46 CFR 25.25.9*
- When carried on UPVs, approved buoyant vests (Type III PFD's) shall be stowed separately from the regular stowage of required lifesaving equipment. Such equipment will not be used to substitute other lifesaving equipment (PFDs) required by the Regulations. *46 CFR 26.30.*
- The lifesaving equipment must be CG approved and in serviceable condition. Although not required by regulation, if you carry an inflatable survival craft/life raft, it should be in serviceable condition with a current servicing/inspection date. *46 CFR 25.25-11*

FIRE FIGHTING EQUIPMENT

Applies to:

All UPVs.

Fire Fighting Equipment

- All hand fire extinguishers, semi portable, and fixed fire extinguishing systems shall be USCG approved or Underwriters Laboratory (UL) listed for marine use and marked as such. *46 CFR 25.30-5(b)*

- All required hand portable fire extinguishers and semiportable fire extinguishing systems are "B" type; i.e., suitable for extinguishing fires involving flammable liquids, grease, etc. *46 CFR 25.30-10(b)*

- All UPVs of 65 feet in length and smaller shall carry at least the minimum fire extinguishers as set forth in the table below:

Table 46 CFR 25.30-20(a)(1)

Vessel Length		Minimum number of B-I hand portable fire extinguishers	
Equal Or Over	**Under**	**No fixed FF in Machinery Space**	**Fixed FF in Machinery Space**
---	16'	1	0
16'	26'	1	0
26'	40'	2	1
40'	---	3	2

Note: One B-II fire extinguisher may be used to substitute 2 B-I fire extinguishers.

All UPVs over 65 feet in length shall carry at least the minimum fire extinguishers as set forth in Table on the following page.

FIRE FIGHTING EQUIPMENT (CONTINUED)

Gross tonnage		Minimum number of B-II hand portable fire extinguishers
Over	**Not over**	
----	**50**	**1**
50	**100**	**2**

In addition to the hand portable fire extinguishers required by Table 25.30-20(b)(1) above, a B-II portable fire extinguisher is required for each 1000 B.H.P. of the main engines or fractions thereof. However, no more than 6 such extinguishers need to be carried.

When a fixed fire-extinguishing system is installed, it must be a type approved or accepted by the Lifesaving and Fire Safety Division, commandant (CG-5214) or the Commanding Officer, U.S. Coast Guard Marine Safety Center. If the system is a carbon-dioxide type, then it must be designed and installed in accordance with 46 CFR 76.15. *46 CFR 25.30-15*

FIRE PREVENTION AND SUPPRESSION

Ventilation: UPVs Built *Before 1980*

Applies to:

UPVs built on or before July 31, 1980 that use fuel having a flash point of 110 degrees F or less (gasoline).

- UPVs shall have at least two ventilation ducts, fitted with cowls or their equivalent, for the removal of explosive or flammable gases from the bilges of all engine compartments and all fuel tank compartments.
- At least one exhaust duct shall extend from the open atmosphere to the lower portion of the bilge. At least one intake duct shall extend to a point at least midway to the bilge, or at least below the level of the carburetor air intake. *46 CFR 25-40-1.*

Note. UPVs built after July 31, 1978 are exempt from requirements for fuel tank compartments that (a) contain a permanently installed fuel tank if each electrical component is ignition protected in accordance with 33 CFR 183,410(a), and (b) contain fuel tanks that vent to the outside of the vessel. Vessels that comply with 33 CFR 183 Subsection K (see below, UPVs built after 1980) do not need to comply with this section.

Ventilation: UPVs Built *After 1980*

Applies to:

UPVs built after July 31, 1980 that uses fuel having a flashpoint of 110 degrees F or less (gasoline). *33 CFR 183.601*

Blowers

- UPVs with permanently installed, gasoline engines which are not open to the atmosphere must be ventilated by an exhaust blower system in accordance with the applicable Regulations.

- Each intake duct for an exhaust blower must extend to the lower one-third of the compartment, and above the normal level of accumulated bilge water.

- Each vessel that is required to have an exhaust blower system must also have a label as close to the engine ignition switch as practicable, which says the following:

FIRE PREVENTION AND SUPPRESSION (CONTINUED)

WARNING – GASOLINE VAPORS CAN EXPLODE. BEFORE STARTING ENGINE, OPERATE BLOWER FOR AT LEAST 4 MINUTES AND CHECK ENGINE COMPARTMENT BILGE FOR GASOLINE VAPORS. *33 CFR 183.610*

Natural Ventilation

UPVs must have "natural ventilation" which means an airflow through the following compartments:

- Any compartment that contains a permanently installed gasoline engine;
- Any compartment that has openings between it and compartment that requires ventilation;
- Any compartment that contains a permanently installed fuel tank and an electrical component that is not ignition protected in accordance with 33 CFR 183.410(a);
- Any compartment that contains a non-metallic fuel tank.

Natural ventilation systems must consist of *supply intake* ducts or openings, as well as *exhaust* ducts or openings.

- Natural ventilations systems must have a supply intake opening located on the exterior surface of the UPV, or to another ventilated compartment, or compartment open to the atmosphere.
- Natural ventilation systems' exhaust ducts or openings must originate in the lower one-third of the compartment. Each supply duct and exhaust duct must originate above the normal accumulation of bilge water.
- The minimum internal cross-sectional area of each supply intake and each exhaust duct must be determined in accordance with 33 CFR 183.610(d), but in any case the minimum cross-sectional area of each duct must exceed 3 square inches.

33 CFR 183.630

FIRE PREVENTION AND SUPPRESSION (CONTINUED)

Heating, Lighting, & Cooking Systems

UPV shall not use fuel in any heating, lighting or cooking system without approval from Commandant (CG-521), except for the following: 46 *CFR 25.45-1 & 2*

- Alcohol - solid (containers must be properly secured to a fixed base);
- Alcohol - liquid, combustible (must have a catch pan of not less than ¾ inch depth secured inside the frame of the stove, **and** a ¾" upward flange around the edge of the protection pan underneath the stove);
- Fuel oil - #1, #2, or #3 (must have a catch pan of not less than ¾ inch depth secured inside the frame of the stove, **or** a ¾" upward flange around the edge of the protection pan underneath the stove);
- Kerosene - (must follow the same guidelines as for fuel oil systems);
- Wood - (systems fitted after August 9, 1989 must be installed in accordance with guidelines of chapter 6 of NFPA 302);
- Charcoal - (must follow the same guidelines as for wood-burning systems).
- Liquefied Petroleum Gas (LPG) – **for cooking systems only**; additional requirements apply; see following page.
- Compressed Natural Gas (CNG) – **For cooking systems only**; additional requirements apply; see following page.

FIRE PREVENTION AND SUPPRESSION (CONTINUED)

Cooking Systems Using GNG or LPG

UPVs fitted with cooking systems that use compressed natural gas (CNG) or liquefied petroleum gas (LPG) must comply with additional requirements. *46 CFR 25.45-2*

LPG and CNG cooking systems must meet the compliance standards listed in the table below:

SYSTEM ELEMENT	COMPLIANCE STANDARD
LPG – Design, installation, and testing	ABYC[1] A-1-78, or NFPA[2] 302, ch.. 6
LPG – Odorization[3]	ABYC A-1.5.d
LPG – Cylinder markings and mounting[3]	ABYC A-1.6.b
LPG – Cylinder type (vapor withdrawal) [3]	ABYC A-1.5.b
CNG – Design, installation and testing	ABYC A-22-78, or NFPA 302, ch. 6
CNG – Odorization[3]	ABYC A-22.5.b
CNG – Cylinders, regulating equipment, and safety equipment: stowage, installation and testing4	NFPA 302, ch. 6-5.12

1. *American Boat and Yacht Council.*
2. *National Fire Protection Association.*
3. *Applies only to LPG and CNG systems using NFPA 302, chapter 6 as the installation standard.*
4. *Applies only to CNG systems using ABYC as the installation standard.*

Other Requirements:

- CNG containers shall not be stored in accommodation areas, machinery spaces, bilges, or other enclosed spaces.

- LPG and CNG systems installed using ABYC standards, shall not be fitted with continuous pilot lights or automatic glow plugs.

- No UPV shall have a CNG stove with an attached CNG cylinder stowed in an enclosed space.

- Any fuel line proceeding from a CNG container into an enclosed space shall be fitted with a remote shut-off valve located between the CNG container and the point where the fuel line enters the enclosed portion of the vessel. A power-operated valve must be of a type that will fail closed.

The following deviations from ABYC and/or NFPA standards are allowed:

- The opening to the CNG container's storage locker or housing access need not be located on the top, as otherwise required by ABYC compliance standards.

- The installation of the CNG container's storage locker or housing access need not be above the waterline, as otherwise required by ABYC and NFPA compliance standards.

- Ignition protection need not be provided for LPG or CNG systems, as otherwise required by NFPA compliance standards.

Backfire Flame Control

Applies to engines on all UPVs installed after April 25, 1940, except outboard engines. *46 CFR 25.35-1*

Engines shall be equipped with an acceptable means of backfire flame control. The following are acceptable means of backfire flame control for gasoline engines: *46 CFR 58.10-5(3)*

- Backfire flame arrestors complying with Society of Automotive Engineers (SAE) J-1928 or Underwriters' Laboratories (UL) 1111, marked accordingly. The flame arrestor must be suitably secure to the air intake with a flame-tight connection.

- An engine air and fuel induction system which provides adequate protection from propagation of backfire flame to the atmosphere equivalent to that provided by an acceptable backfire flame arrestor as cited in the previous example. Such systems that do not include an approved flame arrestor must either include a reed valve assembly, or installed in accordance with SAE J-1928.

- An arrangement of the carburetor or engine air induction system that will disperse any flames caused by engine backfire into the atmosphere outside the vessel, such that the discharged flames will not endanger the vessel, nearby vessels or structures, or persons in the immediate area. Flame dispersion may be achieved by attachments to the carburetor or air induction system. All attachments must be of metallic construction with flame-tight connections, and be firmly secured to withstand vibration, shock, and engine backfires. Such systems do not require formal approval and labeling.

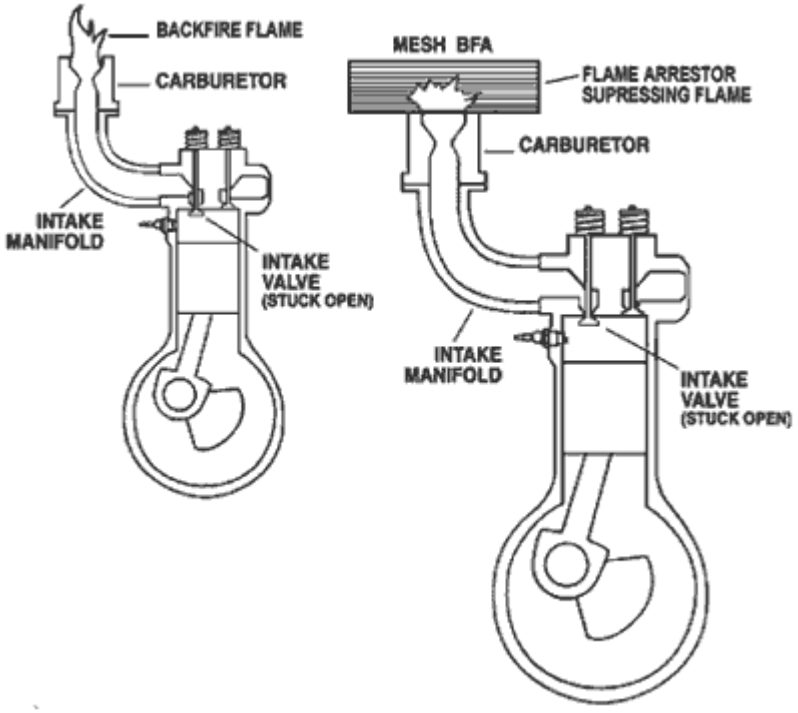
FIRE PREVENTION AND SUPPRESSION (CONTINUED)

Engines installed prior to November 19, 1952 may use an alternate backfire flame control system as long as it is serviceable, and in good working order.

Alternate backfire flame arrestors must bear basic Coast Guard approval numbers 162.015 or 162.041.

Alternate air and fuel induction systems must bear basic Coast Guard approval numbers 162.015 or 162.042.

Subsequent replacements of backfire flame control systems must meet the applicable standards described on the previous page. *46 CFR 25.35-1(b), (c).*



SAFETY INSTRUCTION AND ORIENTATION

Safety Orientation

Applies to all UPVs.

Prior to getting underway, operators of UPVs must ensure public announcements, placards, or both are provided to passengers that address the following topics:

- Stowage locations of life preservers;
- Proper method of donning and adjusting life preservers carried aboard the vessel;
- The type and location of all lifesaving devices carried on the vessel;
- The location of the Emergency Check-off List (described in the next subsection). *46 CFR 26.03.1*

Passenger Counts

All UPVs shall keep a correct count of all passengers received and delivered from day to day. Specifically, the master, owner, charterer, managing operator, or person in charge of the vessel is responsible for ensuring that this is done. *46 USC 3502.*

SAFETY INSTRUCTION AND ORIENTATION (CONTINUED)

Emergency Instructions

Operators of UPVs shall ensure that an emergency check-off list is posted in a conspicuous and continuously accessible place aboard the vessel. The emergency check-off list must include the following minimum information:

Measures to be considered for rough weather or for crossing hazardous bars:

- All water/weather tight hatches, doors, and airports closed to prevent taking water aboard;
- Bilges kept dry to prevent loss of stability
- Passengers seated and evenly distributed;
- All passengers wearing life preservers during rough seas or bar crossings;
- International distress call and call to the Coast Guard over radiotelephone (if so equipped) made if assistance is needed.

Measures to be considered in the event of man overboard

- Ring buoy thrown as close to person-in-the-water (PIW) as possible;
- Lookout posted to keep PIW in sight.
- Crewmember, wearing life preserver and tending line standing by to enter the water to assist in recovery, if necessary;
- Coast Guard and all nearby vessels notified by radiotelephone;
- Search continued until after radiotelephone consultation with the Coast Guard (if possible).

SAFETY INSTRUCTION AND ORIENTATION (CONTINUED)

Measures to be considered in the event of a fire at sea

- Cut off air supply to the fire by closing hatches, ports, doors, and ventilators, etc.
- Portable fire extinguishers discharged at the base of the flames of flammable liquid or grease fires, or water applied to fires of combustible solids.
- If fire is in machinery spaces, fuel supply and ventilation shut off, and any installed fixed firefighting system discharged.
- Vessel maneuvered to minimize the effect of wind on the fire.
- Coast Guard and all vessels in the vicinity notified by radiotelephone (if so equipped) of the fire, and location of the vessel.
- Passengers moved away from the fire, wearing life preservers.
  46 CFR 26.03-2

MARINE SANITATION DEVICES

Applies to:

All UPVs with installed toilets operating the navigable waters of the U.S.

General Requirements:

Type I, II or III Marine Sanitation Devices (MSD) are required. They include any equipment for installation on board a vessel which is designed to receive, retain, treat or discharge sewage, and any process to treat such sewage. *33 CFR 159.3 & .7(a)*

- Type I MSD means a device that produces an effluence (discharge) having a fecal coliform bacteria count not greater than 1,000 per 100 milliliters and no visible solids.

- Type II MSD means a device that produces an effluence having a fecal coliform bacteria count not greater than 200 per 100 milliliters and suspended solids not greater than 150 milligrams per liter.

- Type III MSD means a device that is designed to prevent the overboard discharge of treated or untreated sewage or waste derived from sewage. Holding tanks can be discharged over the side no closer than three nautical miles from land.

Note: If a Type III MSD has a "Y" valve which allows discharge over the deck to a facility or through the hull over the side, it must be secured in U.S. navigable waters (inside 3nm) so as to prohibit accidental discharges overboard inside three nautical miles from land.
33 CFR 159.7(c)

MSD Systems

UPVs with installed toilet facilities must be equipped with a Type II or Type III MSD. *33 CFR 159.7(a))*

Note:

Any UPV 65 feet or under in length may utilize a properly labeled and functioning Type I MSD. 33 CFR 159.7(a)(2)

Portable toilets or "port-a-potties" are not considered installed toilets and are not subject to MSD regulations. Such devices do not "treat" the sewage refuse. (cont)

MARINE SANITATION DEVICES (CONTINUED)

Consequently, discharge of this untreated sewage into coastal waters, estuaries, and other internal waters is prohibited. 40 CFR 140.3(d).

MSD Placard

Each Type I or II MSD must have an identification placard attached that provides;

- the name of the manufacturer,
- the name and model number of the device,
- the month and year of completion of manufacture,
- serial number,
- whether the device is certified for use on an inspected or and uninspected vessel,
- whether the device is Type I, II or III. *33 CFR 159.55*

Types I and II MSDs' must have placards posted, which provide; operating instructions, safety precautions, and warnings pertinent to the MSD. The letters on the placard must be at least one eighth of an inch. Locking the head door only applies to a Type I or Type II toilet. *33 CFR 159.59*

State No Discharge Zones: Some states have established No Discharge Zones for Vessel Sewage. The EPA maintains a current listing of the zones at:
http://www.epa.gov/owow/oceans/vessey_sewage/vsdnozone.html
In a no discharge zone locking the head door only applies to a Type I or Type II toilet. *40 CFR 140.4*

OIL POLLUTION PREVENTION

Applies to:

All UPVs operating on the navigable waters of the U.S.

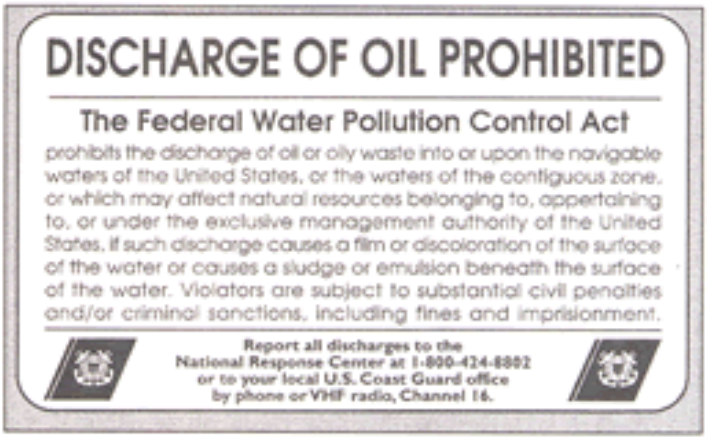
General Requirements

No person may intentionally drain oil or hazardous materials from any source into the bilge. *33 CFR 155.770*

No person may operate a U.S. non-oceangoing UPV in U.S. navigable waters unless it has the capacity to retain on board all oily mixtures and is equipped to discharge the oily mixtures to a reception facility. *33 CFR 155.330*

Oil Placard

UPVs 26 feet or more in length must have a placard posted in each machinery space and bilge system control station. The placard must be at least 5 by 8 inches, made of durable material, and shall state:



33 CFR 155.450

Bilge Slops Retention

Oceangoing UPVs shall have the capacity to retain all oily mixtures on board and be equipped to discharge these to a reception facility, or be equipped with a Coast Guard approved oily-water separator. An oily residue tank is not required on these UPVs. *33 CFR 155.350*

Non-oceangoing UPVs may not be operated in U.S. navigable waters, unless they have the capacity to retain on board all oily mixtures, and are equipped to discharge these oily mixtures to a reception facility. UPVs may retain oily mixtures in the bilges; an oily residue (sludge) tank is not required. 33 CFR 155.330.

SPECIAL PERMIT

Special Permit or Excursion Permit

If an Uninspected Vessel is used for charity for fundraising activities, which would subject it to Coast Guard inspection, and the vessel can be safely operated, the OCMI may issue a special permit to the owner, operator, or agent. Each special permit is valid for only one voyage of a donated vessel, which is used for a charitable purpose. Applications are considered and approved on a case-by-case basis. *46 CFR 176.204*

Each of the following conditions must be met:

- Any charity using a donated vessel must be a bona fide charity or a non-profit organization qualified under section *501 (c)(3) of the Internal Revenue Code of 1986.*
- All donations received from the fundraising must go to the named charity;
- A permit may not be obtained for an individual vessel more than four times in a 12 month period; and
- You must apply to the local OCMI for a special permit prior to the intended voyage, allowing adequate time for processing and approval of the permit.

Nothing here may be construed as limiting the OCMI from making such tests and inspections, both afloat and in dry-dock that are reasonable and practicable to be assured of the vessel's seaworthiness and safety. *46 CFR 26.03-6*

MARINE EVENT OF NATIONAL SIGNIFICANCE

Determining a Marine Event of National Significance

For a Marine Event of National Significance, as determined by the Commandant, U.S. Coast Guard, a vessel may be permitted to engage in excursions while carrying passengers-for-hire for the duration of the event. Event sponsors seeking this determination must submit a written request to the Commandant (CG-54) at least one year prior to the event. *46 CFR 26.03-8*

Special Permits

A vessel that is registered as a participant in a marine Event of National Significance may apply for a special permit to carry passengers-for-hire for the duration of the event. The application is made to the Coast Guard OCMI who has jurisdiction over the vessel's first United States port of call. The OCMI may issue a Form CG-949 "Permit to Carry Excursion Party" if the operation can be undertaken safely. The OCMI may require an inspection prior to issuance of a special permit to ensure that the vessel can safely operate under the conditions for which the permit is issued.

The permit will state the conditions under which it is issued. These conditions must include the number of passengers-for-hire the vessel may carry, the crew required, the number and type of lifesaving and safety equipment required, the route and operating details for which the permit is issued, and dated for which the permit will be valid.

The permit must be displayed in a location visible to passengers.

The carrying of passengers-for-hire during a Marine Event of National Significance must comply with the regulations governing coastwise transportation for passengers under *19 CFR 4.50(b)* and *19 CFR 4.80(a).*
46 CFR 26.03-8

ADDITIONAL RECOMMENDED SAFETY ITEMS

Federal Law or Regulations do not require the following items. However these items will contribute significantly to the safety of the passengers and crew of an Uninspected Passenger Vessel.

Safety Training Program

A UPV should have a safety-training program for all crew members on emergency procedures and safety equipment use. This program ought to include record keeping showing that drills and training are conducted regularly. The following emergency situations should be covered by the training and drills program;

- Fire
- Flooding
- Man overboard
- Abandon Ship
- Emergency /Distress Communications (MAYDAY)
- CPR and First Aid

Bilge Pump and Alarm

A UPV should have a properly installed bilge pump and bilge alarm. *Note: Some vessels are designed without a bilge, or have suitable reserve buoyancy to float the vessel in a totally swamped condition, and will not need the bilge pump and alarm.*

Backup Emergency Communications

A UPV should have some emergency communications capability that does not depend on the normal onboard power system that is located in an area of the vessel away from the normal power source for the vessel. A radio powered by a separate battery, a handheld VHF FM radio with a minimum of 5 watts of power, or a portable satellite phone can be used to provide this level of safety.

ADDITIONAL RECOMMENDED SAFETY ITEMS (CONTINUED)

EPIRB

A 406 MHz Emergency Position Indication Radio Beacon (EPIRB) Category I or II. These need to be properly mounted, registered and serviced.

Survival Craft

A UPV going off shore should have on board, a properly installed and serviced, Coast Guard approved inflatable liferaft or inflatable buoyant apparatus, canister or valise type, with a minimum capacity for all passenger and crew on board. *(Life floats or buoyant apparatus require much more storage space and a reduced level of safety, but may substitute for the above equipment. They should be equipped with lifeline, pendants, painter and floating electric light.)* Survival Craft should be stored so as to be float free or readily accessible.

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