# **UPV REQUIREMENTS:**

# 1. Display of Numbers / Markings

Documented vessels; vessel name and hailing port on stern, minimum 4" lettering	46 CFR 67.123	
Documented vessels; vessel name on port & starboard bow, minimum 4" lettering	46 CFR 67.123	
Documented vessels; Official number permanently on interior structural part of hull,	46 CFR 67.121	
minimum 3" block-type Arabic numerals.		
Not documented; state numbers on port & starboard bow, minimum 3" block letters,	33 CFR 173.27	
permanently marked, contrasting background		
Not documented; validation sticker displayed	33 CFR 173.35	
Inspection notes: Markings clearly visible, contrasting color to background		

Any vessel required to be registered or documented must display its registration number (commonly referred to as AK numbers) or its documented name. The name or AK numbers must be painted on or permanently attached to each side of the forward half of the vessel with plain vertical block characters which contrast with the color of the background and be distinctly visible and legible. Registration numbers must be not less than three inches (3") in height and the documented name must be in 4-inch letters. Spaces or hyphens should be are equal to the width of a letter other than "I" or a number other than "1," (Examples: AK 5678 EF or AK-5678-EF). On vessels so configured that a number on the hull or superstructure would not be easily visible, the number must be painted on or attached to a backing plate that is attached to the forward half of the vessel so that the number is visible from each side of the vessel. In addition, for documented vessels, the vessel's name and hailing port or homeport must be affixed on the stern in 4-inch letters.

## Official Number (46 CFR 67.121)

The official number of the UPV, preceded by the abbreviation "**NO**." must be marked block-type Arabic numerals not less than 3 inches in height on some clearly visible interior structural part of the hull. The number must be permanently affixed so that alteration, removal, or replacement would be obvious

# 2. Navigation Lights (COLREGS72)

The 72 COLREGS apply on all the sounds, bays, harbors and inlets of Alaska. There are no Inland Rules requirement in Alaska.

Proper navigation lights	33 CFR 84
All around anchor light	33 CFR 84

## In order to receive a UPV decal, anchor and running lights must be operational.

Vessels are required to display navigation lights between sunset and sunrise and other periods of reduced visibility (fog, rain, haze etc.). The U.S. Coast Guard Navigation Rules, International-Inland encompasses lighting requirements for every description of watercraft. **The information provided here is intended for power-driven vessels less than 20 meters.** 

A power driven vessel while underway shall display:

- A white masthead light placed over the fore and aft centerline of the vessel and facing forward with an arc of visibility of 225 degrees
- Red and green sidelights (red to port/green to starboard), with an arc of visibility of 112.5 degrees from dead ahead to the stern

• A white stern light facing aft with an arc of visibility of 135 degrees.

The masthead light, or the all-round light of a power-driven vessel of less than 12 meters (39.4ft) in length shall be carried at least one meter (3.3ft) higher than the sidelights. See Navigation Rules, Annex 1

On a power-driven vessel of less than 12 meters (39.4 feet) in length, one all around (360 degrees) white light may be substituted for both the masthead and stern light. See Navigation Rules, Rule 23.

On a vessel of less than 20 meters (65.6 feet) in length, sidelights may be combined in one lantern carried on the fore and aft centerline of the vessel. On vessels of less than 12 meters (39.4 feet), sidelights combined in one lantern shall be placed as nearly as practicable to the fore and aft centerline of the vessel.

Power-driven vessels of less than 20 meters, shall exhibit navigation lights as shown in Figure 1.

Vessels of less than 12 meters in length, may show the lights in either Figure 1 or Figure 2.1

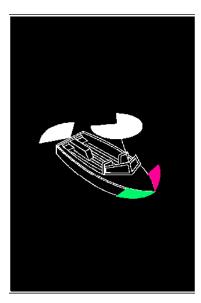


FIGURE 1

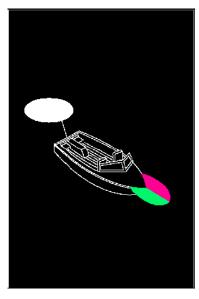


FIGURE 2

Another issue is the placement of the 32-point white stern light that many operators install on their outboard engine covers. Rules 23 states vessels less than 12 meters (36 ft) in length, may in lieu of the lights prescribed in paragraph (a) of Rule 21 display a 32 pt (360 degree) white light along with the sidelights. Let's look at what is happening on the water. Some boaters are buying 32 point (360 deg) white lights and mounting them to the backside of the engine cowling.

When you mount the 32 point light on the engine cover **it must be seen in 360 degrees**. *If you or the boat's structure* block the light then you will be required to either raise the light higher or purchase and display both the proper 12 point (135 deg) stern and 20 point (225 deg) masthead lights.

# 3 and 3a: Sound Producing Device

Less than 12 meters (39.4 ft), must have a means of making an efficient sound signal.	33 CFR 86	
(Whistle or horn)	Rule 33 COLREGS	
12 meters (39.4 ft) or greater, <u>must have a whistle</u> .	33 CFR 86.23	
	Rule 33 COLREGS	
20 meters or greater, must have a whistle and a bell.		
<b>Inspection notes:</b> Athletic whistle not acceptable for vessels $\geq 12$ meters (39.4 ft).		
Inspection notes: Can use equipment having the same sound characteristics in lieu of bell (e.g. electronic device).		

Sound Signals Required (Navigation Rules, Annex III and 33 CFR 86.23)

Every vessel, while underway, shall have sound signaling appliances on board that meet the specifications in the Navigation Rules:

- a. A vessel of less than 12 meters (39.4ft) in length must have a means of making an efficient sound signal. They may carry a whistle or horn to meet this requirement.
- b. A vessel of 12 meters (39.4ft) or more in length <u>must have a whistle.</u>
- c. A vessel of over 20 meters (65.6ft) in length must have a whistle and bell of at least 300 mm (11.8 inches) in diameter.
  - The bell does not have to be mounted but it must be on board the vessel and accessible.

### Whistle Audibility

The audibility of a whistle must meet the following Table distances:

Vessel Length	Audibility Range
12 Meters to less than 20 Meters	Less than 0.5 Nautical mile
20 Meters - 75 Meters	1.0 Nautical mile
75 Meters - 200 Meters	1.5 Nautical mile

# 4. Vessel Documentation and Registration (46 CFR 67)

#### **REGISTRAION / DOCUMENTATION**

Documented vessels; $\geq$ 5 net tons, documented for coastwise trade	46 CFR 67.15
Documented vessels; original documentation certificate on board, properly endorsed (e.g.	46 CFR 67.7/163
coastwise trade, registry) and valid. Document can not be endorsed "recreation"	
Not documented; original state numbering certificate on board and current.	33 CFR 173.21
Number matches those on hull.	

All motorized vessels operated in waters under federal jurisdiction are required to be either registered or documented. This includes ocean waters, rivers, and some large lakes in Alaska.

If the vessel measures more than 5 NET TONS, and carries passengers for hire, it must be "documented" by the Coast Guard for use other than pleasure (either coastwise and/or registry). It must also have a Certificate of Documentation (COD) on board bearing a valid endorsement for the activity

in which it is engaged. Some vessels in the 26 to 30 ft. range may fall under 5 net tons and if so, they can be "state registered" and use state numbers.

## Certificate of Documentation Endorsements (46 CFR 67.163)

Endorsements for CODs are valid for 1 year. Prior to expiration, the owner must renew by executing an original Notice of Expiration (CG-1280) or Final Notice After Expiration (CG-1280-B) certifying that information contained in the COD and endorsements remains accurate and that the COD has not been wrongfully withheld, lost, or mutilated. The forms and information for renewal can be obtained through the Coast Guard's National Vessel Documentation Center at 1-800-799-8362. The owner will receive a renewal decal, which must be affixed to the COD to prove that the COD has been renewed.

### Certificate Of Number (33 CFR 173.21)

An UPV of less than five net tons shall be documented, as described on the previous page, or registered with a State, as evidenced by a State issued Certificate of Number. No person may use a vessel unless it has on board a valid certificate of number or temporary certificate for that vessel issued by the issuing authority in the State in which the vessel is principally used.

### 5. HULL IDENTIFICATION NUMBER

Documented vessels; Official number permanently on interior structural part of	33 CFR 181.23	ABYC T-10
hull, minimum 3" block-type Arabic numerals.		

### 5a. CG CAPACITY PLATE

Visible plate for monohull power vessels <20ft	33 CFR 183.23	ABYC S-7.5	
<b>Inspection notes:</b> This plate must be yellow in color and be marked with the maximum number of persons capacity			
in whole numbers of persons and in pounds, the maximum weight capacity in pounds, and the maximum			
horsepower for that boat or the words "This Boat Not Rated for Propulsion by Motor".			

## 6. USCG Licensing and TWIC Card

Operator has USCG license. Original on board, and not expired.	46 CFR 15.605 & .905	
License is in operator's possession (usually in frame hanging on bulkhead)	46 CFR 26.20-1(a)	
Operator is licensed for waters navigated	46 CFR 15.401	
Sufficient number of operators for two watches (if voyage over 12 hours)	46 USC 8104(b)	
<b>Inspection notes:</b> License must be applicable for vessel operation and tonnage. Original license on board. Match		
identification on license against ID (e.g. driver's license). Record license number. License should be signed.		

All Un-inspected Passenger Vessels that carry passengers for hire, must be under the direction and control of an individual holding one of the following USCG licenses:

- Operator of Uninspected Passenger Vessels (OUPV),
- *Master* (within any restrictions, other than gross tonnage limitations, on their license),
- *Pilot* (within any restrictions, other than gross tonnage limitations, on their license),
- *Mate* (other than Great Lakes, inland, or river vessels of not more than 200 gross tons, within any restrictions, other than gross tonnage limitations, on their license).

The Operator must have their original license onboard and made available for viewing. See 46 CFR 26.20.

There is a misconception that licenses are valid for one year after their expiration date. There is **NO GRACE PERIOD FOR OPERATING.** There is a grace period for license renewal only. You have up to 12 months after your license "expires" to renew without having to retake all of the tests.

**6a. Transportation Worker Identification Credential:** All USCG license holders must have a valid TWIC card available for inspection for the USCG license to be valid.

### 7 VOYAGES OVER 12 HOURS: Clarification on Personnel Watch standing (46 U.S.C. 8104)

Ref: Un-inspected Passenger Vessels. Marine Safety Manual, Volume 3 Chapter 22, 24 and 26

46 CFR 15.605 requires each self-propelled un-inspected passenger vessel to be under the "direction and control" of a licensed individual. Licensed masters, mates, or operators of un-inspected passenger vessels (OUPV) may fill this requirement. The intent is that the vessel must be under the physical control or direct supervision of a licensed individual.

Licensed individuals serving as OUPV may voluntarily work more than 12 hours in a 24-hour period. While an OUPV may work more than 12 hours, he or she must maintain an adequate watch. If the OUPV has no relief and is too fatigued to stand an alert watch, then that individual would be negligent for failure to maintain an adequate watch.

While there may be individuals who can routinely and safely perform work for periods in excess of 12 consecutive hours, the rigors of watch-keeping at sea greatly increase the likelihood of fatigue beyond such a period. Between 12 and 24 hours of operation, there is a gray area in which the OCMI must judge the prudence of the licensed operator's decision to sail without a second licensed individual, based on the specific circumstances.

OCMIs should strongly encourage un-inspected passenger vessels that operate in excess of 12 hours to have at least two licensed individuals assigned to prevent fatigue. Charter fishing and dive vessels routinely operating more than 24 consecutive hours with only one licensed operator present a dangerous situation, raising significant issues of negligence on the part of the OUPV and owner for failure to provide an adequate watch.

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 position is untenable. As noted above, 46 U.S.C. 8903 mandates the vessel be operated by a licensed individual; the Coast Guard does not have the discretion to allow any unlicensed seaman to control the vessel without supervision.

# 8. Personal Flotation Devices (PFDs)

Type I CG approved PFD of suitable size for each person	46 CFR 25.25-5(c)(f)
Type I reflective material on each PFD	46 CFR 25.25-15
PFD device light (make sure batteries have current date mark) if operates beyond the	46 CFR 25.25-13
boundary lines.	
Readily accessible	46 CFR 25.25-9
In serviceable condition	46 CFR 25.25-11
USCG approval numbers visible	46 CFR 25.25-7

**Inspection notes:** Type I – Life preserver/jacket, Type IV – Throwable device/ring buoys/buoyant cushion, Type V – Special use/hybrid inflatable. An approved Type V can be substituted for a Type I if it is worn when the vessel is underway and the wearer is not in an enclosed space.

Type I with one for each person onboard. It must have 31 square inches or 200 sq. cm. of retroreflective material on the front and back. PFDs must be Coast Guard approved, in good and serviceable condition, and of appropriate size for the intended user.

PFDs must be readily accessible, meaning you must be able to put them on in a reasonable amount of time in an emergency (vessel sinking, on fire, etc.). They should not be stowed in plastic bags, in locked or closed compartments or have other gear stowed on top of them

**PFD lights** are required for vessels that transit beyond the boundary lines.

**Child PFD Requirements:** The State of Alaska prevents the transportation of any person under 13 years of age in an open watercraft or on the deck of a watercraft unless the person is wearing a USCG Type I, II, or III PFD. You must have an appropriately sized Child PFD for every child on board.

# 9. & 10 Throwable Device and Life Rings

Type IV throwable device for vessels 16ft or greater and less than 26 ft	33 CFR 175.11
Throwable lifering required for vessels $\geq 26$ ft at least 24 inch size.	46 CFR 25.25-5(d)
Immediately available.	46 CFR 25.25-9
Buoyant 3/8" lifeline line are <i>recommended</i> but not required	46 CFR 160.050
CG Approval	46 CFR 160.050
Type I reflective tape is NOT REQUIRED on the ring life buoy.	46 CFR 25.25-15

#### **Inspection notes:**

Life ring can be orange or white. Must be orange if vessel goes into Canada. Lifeline not required. Grab line should be equally spaced in 4 quadrants. Test beckets and grab line for durability.

Vessels 16ft or greater and less than 26ft and are required to carry aboard at least one Type IV throwable device, e.g. buoyant cushion.

For vessels  $\geq$  65ft, 3 ring life buoys are required.

# 11. Visual Distress Signals (33 CFR part 175.130)

Readily Accessible	33 CFR 175.120
Date Current	33 CFR 175.125
CG Approval	33 CFR 175.128
Inspection notes: 3 day and 3 night or 3 day/night combo. Should l	a in waterproof case

**Inspection notes:** 3 day and 3 night or 3 day/night combo. Should be in waterproof case.

Distress Signals Required (33 CFR 175.110, 175.130 and 175.135)

No person may use a boat 16 feet or more in length or any boat carrying six or less passengers unless visual distress signals are carried and are readily accessible. Any of the following distress signals can be used to meet the distress signal requirements:

- a. An electric distress signal light which is Coast Guard-approved and marked to meet the requirement of 46 CFR 161.013 as a visual night distress signal.
- b. An orange flag which has been certified as Coast Guard-approved and marked meet to the requirements of 46 CFR 160.072 as a visual day distress signal.
- c. Pyrotechnics listed in 33 CFR Table 175.130 below. Any combination of the signal devices selected from subparagraphs a. and b. above and the table, carried in the number required, meets the requirement. 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 orange smoke (160.037) with one electric distress light (160.013) meets both day and night requirements.

Approval # Under 46 CFR	Device Description	Meets Requirements for	Number Required
160.021	Hand-Held Red Flare Distress Signals***	Day and Night	3
160.022	Floating Orange Smoke Distress Signals	Day only	3
160.024	Parachute Red Flare Distress Signals	Day and Night*	3

160.036	Hand-Held Rocket Propelled Parachute Red Flare Distress	Day and Night	3
	Signals		
160.037	Hand-Held Orange Smoke Distress Signals	Day only	3
160.057	Floating Orange Smoke Distress Signals	Day only	3
160.066	Distress Signals for Boats, Red Aerial Pyrotechnic Flares	Day and Night**	3

\* These signals require use in combination with a suitable launching device approved and marked under 46 CFR 160.28.

- \*\* 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 and marked under 46 CFR 160.028.
- \*\*\* Must have manufacture date of 1 October 1980 or later.

# **12.** Fire Extinguishers

USCG approved or CERTIFIED for marine use,	46 CFR 25.30-5(b)	
UL listed for fixed fire extinguishing systems	ABYC A-4.7.1	
Manufacturer name plate attached giving specifications	46 CFR 25.30-10(d)	
Minimum number of portable extinguishers	46 CFR 25.30-	
See table below	20(a)(1)&(b)(1)	
	TABLES	
Pressure gauge or indicating device	46 CFR 25.30-10(h)	
Proper bracket for extinguisher	46 CFR 162.028-3(g)	
<b>Inspection notes:</b> If mfg date before 1/1/65 and not fitted with gauge, must be weighed every 6 months, frangible		
disk intact and not damaged or leaking (46 CFR 25.30-10(g))		

## Fire Extinguishers (46 CFR 25.30)

All fire extinguishers and fixed fire extinguishing systems shall:

- a. Be Coast Guard-approved (CG approval #162.028) or UL listed for marine use and marked as such. Portable fire extinguishers without gauges must have inspection cards attached and must be inspected every 6 months. All pressure filled fire extinguishers must be hydrostatically pressure tested every 5 years. Coast Guard approved extinguishers are hand portable, either B-I or B-II classification and have a specific marine-type mounting bracket. It is recommended the extinguishers be mounted in a readily accessible position
- b. Hand portable extinguishers and semi-portable extinguishers must:
  - (1) Be type "B"; i.e. suitable for extinguishing fires involving flammable liquids, grease, etc.
  - (2) Have a permanently attached metallic nameplate giving the name of the item, rated capacity, the name and address of person or firm for whom approved, and the identifying mark of the manufacturer.
- c. Fixed fire extinguishing systems must be a Coast Guard-approved carbon dioxide type, designed and installed in compliance with the requirements of 46 CFR 25.30-15.
- d. All motorboats (65 ft in length and smaller) shall carry at least the minimum fire extinguishers as required in 46 CFR Table 25.30-20(a)(1) below:

Vessel	Length	Minimum Number of B-I Hand Portable Fire Extinguishers	
Equal or Over	Under	No Fixed FE in Machinery	Fixed FE in Machinery
		Space	Space
	16 ft	1	0
16 ft	26 ft	1	0
26 ft	40 ft	2	1
40 ft	65 ft*	3	2

\*This means 65' and under.

e. All motor vessels (vessels over 65' in length) shall carry at least the minimum fire extinguishers set forth in 46 CFR Table 25.30-20(b)(1) below. In addition to the hand portable fire extinguishers required by Table 25.30-20(b)(1), the following fire extinguishing equipment shall be fitted in the engine space: One B-II portable fire extinguisher is required for each 1000 B.H.P. of the main engines or any fraction thereof, however, not more than six such extinguishers need be carried.

Gross	Tonnage	Minimum Number of B-II Hand Portable
Over	Not Over	Fire Extinguishers
	50 GT	1
50 GT	100 GT	2
100 GT	150 GT	3

# **13. Backfire Flame Control**

For gasoline engines; properly installed and cleaned.46 CFR 25.35-1Inspection notes: CG no longer approves backfire flame arrestors, however, CG approval numbers 162.015 or162.042 can be continued in use if in good condition and serviceable.

Gasoline engines installed in a vessel after April 25, 1940, except outboard motors, must be equipped with an acceptable means of backfire flame control. The device must be suitably attached to the air intake with a flame tight connection and is required to be Coast Guard approved or comply with SAE J-1928 or UL 1111 standards and marked accordingly.

## 14. VENTILATION

Gasoline fuel tanks must be properly ventilated	46 CFR 25.40
Blower warning label near ignition switch	33 CFR 183.610(f)
Exhaust blower duct in lower 1/3 of compartment, above normal bilge water level	33 CFR 183.610(d)

# Inspection notes:

An UPV using fuel having a flash point of 110 degrees F or less (gasoline) shall have:

- a. 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 and fuel tank compartments.
- b. At least one exhaust duct that extends from the open atmosphere to the lower portion of the bilge.
- c. At least one intake duct that extends to a point at least midway to the bilge or at least below the level of the carburetor air intake

See 33 CFR 183.520 and 33 CFR 175.201 for venting fuel tanks. Ensure flame screens on vents are properly fitted and not painted over or gummed over. Vent screens required.

**15. FUEL SYSTEM:** Applies to all boats with <u>gasoline</u> engines, except outboard engines, for electrical generation, mechanical power, or propulsion.

Fuel tank labeled, no leaks	33 CFR 183.514
Fuel pump not leaking	33 CFR 183.524
Fuel stop valve have manual means to operate	33 CFR 183.528

Fuel lines made of metal or "USCG Type A1" hose	33 CFR 183.528		
Each metallic part of fuel system and Fuel tank grounded	33 CFR 183.572		
Inspection notes: Fuel lines should be marine approved, not plastic hoses (ABYC H-24.14.2). Check for holes,			
leaks. Metal fuel hoses can be made of copper, nickel copper or copper nickel.			

# 16. Oil Pollution Placard Requirements (33 CFR 155.450)

	Prohibited discharge warning placard (5"X8"); posted in machinery space or at bilge pump control station (if vessel is over 26ft)	33 CFR 155.450
Are oily mixtures retained on board and then discharged at reception facility?	<b>Inspection notes:</b> Is vessel operator practicing proper retention of bilge slops?	

Vessels 26 ft or more in length must have a placard posted in the machinery space or at the bilge switch. The placard must be at least 5 by 8 inches, made of durable material, and shall state:

## 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 sheen upon or a discoloration of the surface of the water or causes a sludge or emulsion beneath the surface of the water. Violators are subject to a substantial civil penalties and/or criminal sanctions including fines and imprisonment.

## **17. ELECTRICAL SYSTEMS**

Battery terminals are covered, batteries secured not to move more than one inch.	33 CFR 183.420 & 445	
Battery terminals connectors do not use spring tension for connrction.		
Inspection notes: Check shore power connection for evidence of loose or defective connection. Check wiring and		
insulation for frayed wires, missing insulation, frayed insulation, loose wires, etc. Battery should be		
trayed/protected (Secured/constrained)		

## **18. Marine Sanitation Device (MSD)**

Does vessel have certified marine sanitation device? (Will typically see Type III, holding tank)	33 CFR 159.7
Inspection notes: Ensure overboard shut off valve is closed and secured shut inside 3 miles	

No uninspected passenger vessel with an installed toilet may operate in U.S. navigable waters without an approved and operable Type I, II or III MSD:

- Type I means a device that, under the test conditions described in 33 CFR 159.123 and 159.125, produces an effluent (discharge) having a fecal coliform bacteria count not greater than 1,000 per 100 milliliters and no visible solids
- Type II means a device that, under the test conditions described in 33 CFR 159.126 and 159.126a, produces an effluent 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 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.

If a Type III MSD has a "Y" valve that allows discharge over the deck to a facility or through the hull over the side, the valve must be secured in U.S. navigable waters to prohibit accidental discharges overboard

All MSDs must have an identification placard attached. See 33 CFR 159.55

All MSDs must have placards that 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. See 33 CFR 159.59

Portable toilets or "porta-potties" are not considered installed toilets and are not subject to MSD regulations.

## **19. GALLEY / HEATING SYSTEMS**

Approved cooking, heating and lighting systems. No flammable material nearby.	46 CFR 25.45

#### 25.45-1 Heating and lighting systems on vessels carrying passengers for hire.

(a) No fuel may be used in any heating or lighting system on any vessel carrying passengers for hire without the approval of Commandant (CG–521), except—

(1) Alcohol, solid,, (2) Alcohol, liquid, combustible,, (3) Fuel oil, No. 1, No. 2, or No. 3,,(4) Kerosene,

(5) Wood or, (6) Coal.

(b) Heating and lighting systems using alcohol must meet the following requirements:

(1) Containers of solidified alcohol must be properly secured to a fixed base.

(2) Fluid alcohol burners, where wet priming is used, must have-

(i) A catch pan of not less than3/4" depth secured inside the frame of the stove; or

(ii) The metal protection under the stove flanged up at least3/4" to form a pan.

(c) Heating and lighting systems using kerosene or fuel oil must meet the following requirements:

(1) Where wet priming is used, each system must have-

(i) A catch pan of not less than 3/4" depth secured inside the frame of the stove; or

(ii) The metal protection under the stove flanged up at least3/4" to form a pan.

(2) Fuel tanks must be-

(i) Separated from the stove that they serve;

(ii) Mounted in a location open to the atmosphere or mounted inside a compartment that is vented to the atmosphere; and

(iii) Fitted with an outside fill and vent.

#### § 25.45-2 Cooking systems on vessels carrying passengers for hire.

(a) No fuel may be used in any cooking system on any vessel carrying passengers for hire without the approval of Commandant (CG–521) except those listed in §25.45–1, subject to the requirements stated therein, and liquefied petroleum gas (LPG), or compressed natural gas (CNG).

(i) The storage or use of CNG containers within the accommodation area, machinery spaces, bilges, or other enclosed spaces is prohibited.

(ii) LPG or CNG must be odorized in accordance with ABYC A-1.5.d or A-22.5.b, respectively.

(4) Continuous pilot lights or automatic glow plugs are prohibited for an LPG or CNG installation using ABYC A-1 or A-22 as the standard.

(i) The stowage or use of CNG containers within the accommodation area, machinery spaces, bilges, or other enclosed spaces is prohibited.

(iii) The use of stowage of stoves with attached CNG cylinders is prohibited as specified in paragraph 6–5.1 of NFPA 302.

(6) If the fuel supply line of an LPG or CNG system enters an enclosed space on the vessel, a remote shutoff valve must be installed that can be operated from a position adjacent to the appliance. The valve must be located between the fuel tank and the point where the fuel supply line enters the enclosed portion of the vessel. A power operated valve installed to meet this requirement must be of a type that will fail closed.

# 20. Garbage Placards (33 CFR 151.59)

Marine Trash placard posted: Vessel 26 ft or greater	33 CFR 151.59

Vessels 26 feet or more in length must display garbage placards that are;

- Made of durable material and nine inches wide by four inches high with letters at least 1/8" high
- Displayed in prominent locations and in sufficient numbers to be read by the crew and passengers

The placard must notify the reader of the following:

- 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 of the nearest land
- Discharge of dunnage, lining, and packing materials that float is prohibited within 25 nautical miles of the nearest land.
- Other unground garbage may be discharged beyond 12 nautical miles from the nearest land
- Other garbage ground to less than one inch may be discharged beyond three nautical miles of the nearest land.
- Violators are liable for civil penalties up to \$25,000, fines up to \$50,000, and imprisonment for up to five years per violation

#### Garbage Type Discharge

- Plastics includes synthetic ropes, fishing nets, and plastic bags. Prohibited in all areas.
- Floating dunnage, lining and packing materials. Prohibited less than 25 miles from nearest land
- Food waste, paper, rags, glass, metal, bottles, crockery and similar refuse. Prohibited less than 12 miles from nearest land.
- Comminuted or ground food waste, paper, rags, glass, etc. Prohibited less than 3 miles from nearest land.

## 21. OVERALL VESSEL CONDITION

Check for any visible hull damage, not over powered, etc.	
Check engine hoses for leaks	46 CFR 28.215
Excess oil in bilges, excess leaking and bilge activation, etc.	
Inspection notes: If on land, have owner operate sea valves and check engine mount	
bolts, broken rubber mounts.	

# 22. Charts and Publications

Vessels $\geq$ 12 meters (39.4 ft) <u>encouraged</u> to have copy of Navigation Rules Book	33 CFR 88.05
(COLREGS72) on board.	
Updated navigation paper charts, US Coast pilot, USCG light list, tide table and current	46 CFR 26.03-4
tables or extracts or copies of applicable sections	
Inspection note: No inland waters in Alaska and carriage of book not required. All	
vessels must comply with the navigation Rules of the Road and are encouraged to carry	
a copy.	

Many of the pubs are available on line and extracts can be printed.	
http://www.mxak.org/navigation/nav intro.html	

## 23. Communications

Vessels of 65.5 ft and greater, radiotelephone required capable of transmitting on 22A	33 CFR 26.03
If required, valid radio station license	47 CFR 80.403/405

A radiotelephone (VHF-FM) is required on every power driven vessel of 20 meters (65.6 ft) or over. Vessels that are required to have a radiotelephone on board must have a valid Radio Station License issued by the Federal Communications Commission (FCC) posted in the navigation area or on the bridge. Licenses are required on any vessel, including a recreational vessel, on an international voyage.

No station license is required for the typical un-inspected passenger vessel carrying the normal types of transmitting equipment such as VHF-FM marine radios, radar, or an EPIRB.

If you have questions about this please contact the Federal Communications Commission by visiting there website at http://www.fcc.gov/ or their Anchorage office at (907) 271-6343.

## 24. Waste Management Plan

United States oceangoing vessels of <u>40 feet or longer</u>, which are engaged in commerce or are equipped with a galley and berthing, must have a written Waste Management Plan describing the procedures for collecting, processing, storing and discharging garbage, and designate the person who is in charge of carrying out the plan.

Oceangoing vessels operate any time seaward of the outermost boundary of the territorial seas (3 NM) of the U.S.

## Sample Waste Management Plan

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

Solid Waste Management Procedures:

• All vessel refuse is put in garbage bags and stored on board until it can be disposed of in dumpsters on shore. This policy is reviewed with all crew members.

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 crew member.

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.

Crew Education:

• At the beginning of each season all crew members 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.

# **25. Safety Orientation and General Safety**

<ul> <li>Prior to getting underway, the operator shall ensure that suitable public announcements, instructive placards or both are provided in a manner which affords all passengers the opportunity to become acquainted with:</li> <li>1. Stowage locations of life preservers.</li> <li>2. Proper method of donning and adjusting life preservers.</li> <li>3. The type and location of all lifesaving devices carried aboard.</li> <li>4. The location and contents of the emergency checkoff list.</li> </ul>	46 CFR 26.03(a)&(b)
<ul> <li>Recommended means to check this requirement is to have operator provide an example of announcement or copy of instructive placards.</li> <li>Aware of proper sexual offense reporting</li> <li>Sexual Offense: The master in charge shall report to the Coast Guard a complaint of any sexual offense prohibited under 18 U.S.C. 2241-2248. A master or individual in charge who knowingly fails to report in compliance with this section could face a civil penalty of not more than \$5,000. Any report of sexual offenses made to a Boarding Officer shall be immediately forwarded to the cognizant Marine Safety Office. See 46 U.S.C. 10104</li> </ul>	46 USC 10104

#### 26. EMERGENCY INSTRUCTIONS. 46 CFR 26.03

Ensure that an Emergency Check-off List is posted in a <u>conspicuous</u>, <u>continuously accessible place</u> to serve as notice to the passengers, and a reminder to the crew, of precautionary measures which may be necessary in the event of an emergency situation. Except where any part of the emergency instructions is deemed unnecessary by the OCMI, the Emergency Check-off List must contain the applicable portions of the three Emergency Check-off Lists for: (Examples below)

- a. Rough Weather
- b. Man Over board
- c. Fire at sea

#### (a) Rough weather at sea or crossing hazardous bars.

□ All weathertight and watertight doors, hatches 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 in conditions of very rough seas or if about to cross a bar under hazardous conditions.

□ An international distress call and a call to the Coast Guard over radiotelephone made if assistance is needed (if radiotelephone equipped).

#### (b) Man overboard.

□ Ring buoy thrown overboard as close to the victim as possible.

Lookout posted to keep the victim in sight.

Crewmember, wearing a life preserver and lifeline, standing by ready to jump into the water to assist the victim back aboard.

Coast Guard and all vessels in the vicinity notified by radiotelephone (if radiotelephone equipped).

Search continued until after radiotelephone consultation with the Coast Guard, if at all possible.

#### (c) Fire at Sea.

□ Air supply to the fire cut off by closing hatches, ports, doors, and ventilators, etc.

□ Portable extinguishers discharged at the base of the flames of flammable liquid or grease fires or water applied to fires in combustible solids.

if fire is in machinery spaces, fuel supply and ventilation shut off and any installed fixed firefighting system discharged.

Uversel maneuvered to minimize the effect of wind on the fire.

□ Coast Guard and all vessels in the vicinity notified by radiotelephone of the fire and vessel location (if radiotelephone equipped).

□ Passengers moved away from fire and wearing life preservers.

## 27. Passenger Counts Taken: 46 CFR 3502

**Passenger Counts:** The master or operator of a vessel carrying passengers shall keep a correct count of all passengers received and delivered. The total number of passengers shall be provided to the Coast Guard upon request.

**Recommendation:** Passenger Manifest: Owners and operators of charter vessels are encouraged to file a float plan with a full passenger manifest and leave it with someone ashore prior to departing. In case of an accident, this manifest gives the Coast Guard a definite number of people they should be searching for. This practice only takes a few minutes and can make the difference between life and death.

## 28. Notice of Marine Casualty (46 CFR 4.05-1)

Aware of proper accident and casualty reporting	33 CFR 173.59 &
	46 CFR 4.05

Immediately after addressing safety concerns, the owner, master, operator, or person in charge shall notify the nearest Marine Safety Office, Marine Inspection Office or Coast Guard Group Office whenever a vessel is involved in a marine casualty consisting of:

 $\Box$  An unintended grounding, or an unintended strike of a bridge

 $\Box$  An intended grounding or an intended strike of a bridge, that creates a hazard to navigation, the environment, or safety of a vessel

 $\Box$  A loss of main propulsion, primary steering, or any associated component or control system that reduces the maneuverability of the vessel.

□ An occurrence adversely affecting the vessel's seaworthiness or fitness for service or route, including but not limited to fire, flooding, or failure of or damage to fixed fire-extinguishing systems, lifesaving equipment, auxiliary power generating equipment, or bilge-pumping systems □ A loss of life

 $\Box$  An injury that requires professional medical treatment (treatment beyond first aid) and, if the person is engaged or employed on board a vessel in commercial service, that renders the individual unfit to perform his or her routine duties

 $\Box$  An occurrence causing property damage in excess of \$25,000, this damage including the cost of labor and material to restore the property to its condition before the occurrence, but not including the cost of salvage, cleaning, gas freeing, dry-docking, or demurrage

#### Substance of Marine Casualty Notice (46 CFR 4.05-5)

The notice must include the following information:

- a. Name and official number of the vessel involved;
- b. Name of the vessel's owner or agent;
- c. Nature and circumstances of the casualty;
- d. Locality in which it occurred;
- e. Nature and extent of injury to persons; and
- f. Damage to property.

#### Written Report of Marine Casualty (46 CFR 4.05-10)

The owner, agent, master, operator, or person in charge shall, within five days, file a written report of any marine casualty. This written report is in addition to the immediate notice required by 46 CFR 4.05-1 and must:

□ Be delivered to a Coast Guard Marine Safety Office or detachment

Be provided on Form CG-2692 (Report of Marine Accident, Injury or Death)

□ Be supplemented as necessary by appended Forms CG-2692A (Barge Addendum) and CG-2692B (Report of Required Chemical Drug & Alcohol Testing following a Serious Marine Incident)

The Marine Casualty Report Forms (CG-2692) are available at any Marine Safety Office or detachment. They are also available on the Internet at www.uscg.mil/hq/g-m/moa/repor.htm.

#### Serious Marine Incident (46 CFR 4.03-2)

A serious marine incident involving a vessel in commercial service includes any marine casualty or accident that results in any of the following:

 $\Box$  One or more deaths

□ An injury to a crewmember, passenger, or other person which requires professional medical treatment (treatment beyond first aid) and, in the case of a person employed on board a vessel in commercial service, which renders the individual unfit to perform his or her routine duties
 □ An occurrence causing property damage in excess of \$100,000, this damage including the cost of labor and material to restore the property to its condition before the occurrence, but not including the cost of salvage, cleaning, gas-freeing, dry-docking, or demurrage
 □ Actual or constructive total loss of any self-propelled vessel of 100 gross tons or more

 $\Box$  A discharge of oil of 10,000 gallons or more into the navigable waters of the United States, as defined in 33 U.S.C. 1321, whether or not resulting from a marine casualty

 $\Box$  A discharge of a reportable quantity of a hazardous substance into the navigable waters of the United States, or a release of a reportable quantity of a hazardous substance into the environment of the United States, whether or not resulting from a marine casualty

A serious marine incident requires action by the marine employer to conduct the chemical testing required by 46 CFR 16.240.

# 29. CHEMICAL TESTING REQUIREMENTS

#### DRUG TESTING PROGRAM

Employer drug testing program, name of consortium noted	46 CFR 16.205
Aware of regulation against operating a vessel while intoxicated	33 CFR 95
Means for 2 hour alcohol test available	
<b>Inspection notes:</b> If not enrolled in a program, seek additional guidance from	
Prevention Department.	

#### **Occasions for Drug and Alcohol Testing**

The regulations require five types of testing:

**Pre-employment**: (46 CFR 16.210) A crewmember must pass a drug test before an employer may employ him/her. A prospective crewmember who submits a urine sample cannot be employed until a negative test result is confirmed.

**Periodic**: (46 CFR 16.220) Periodic tests are the responsibility of the individual mariner, not the marine employer, for transactions involving licenses. Drug test results must be submitted to the Coast Guard Regional Exam Center at the time of the transaction.

**Random**: (46 CFR 16.230)An employer must conduct random drug testing of certain crewmembers at an annual rate of not less than 50%.

**Reasonable cause**: (46 CFR 16.250)An employer shall require any crewmember who is reasonably suspected of using drugs to be tested for drugs and/or alcohol.

**Serious Marine Incident Post accident**: (46 CFR 16.240)A person (not necessarily a crewmember) who is directly involved in a serious marine incident must be tested for drugs and

alcohol. Post-accident testing applies to all serious marine incidents involving commercial vessels regardless of flag of origin. More specifically, this includes crewmembers aboard foreign flag vessels who are directly involved in serious marine incidents occurring in U.S. waters.

Any crewmember who fails any required drug test must be removed from duties which directly affect the safe operation of the vessel as soon as practicable (or denied employment in the case of a preemployment test). Marine employers must report positive tests to the Coast Guard for persons holding licenses or documents. Those personnel should expect revocation of their Coast Guard papers for drug use, and revocation or suspension of their Coast Guard papers for alcohol intoxication. That person may not return to work aboard a vessel until the Medical Review Officer determines that person is drug free and at low risk to return to drug use and any administrative hearing concerning their license or documents has been resolved. The marine employer must also establish an Employee Assistance Program (EAP) for the employees, which includes drug and alcohol education and training. For more detailed information on the chemical testing requirements please visit the web site at http://www.uscg.mil/hq/g%2Dm/moa/dapihis.htm#toc or call the Seventeenth District Drug and Alcohol Program Inspector at (907) 271-6714.

# **5 Star Requirements:**

**Note:** The basic pre-requisite for any 5 star rating is the compliance with existing regulations. This can be demonstrated through obtaining a CG Auxiliary UPV decal or through voluntarily submitting to an inspection by other qualified CG personnel.

#### **1 Star Requirements:**

1. In addition to the requirements for a UPV decal, the operator must additionally have an "in-house" safety-training program established. An acceptable safety-training program includes, at a minimum, drills on:

- a. Dewatering
- b. Abandon ship
- c. Donning of PFDs
- d. First aid
- e. Deployment of the liferaft or IBA, when carried,
- f. Emergency hailing procedures.

2. It will also include a record of drills conducted and maintenance of emergency equipment in a bridge log or record book.

**Notes:** Having verified compliance with 46 CFR Subchapter C, the inspector will review the safetytraining program. It's up to the inspector to determine that all areas are covered to his/her satisfaction.

#### 2 Star Requirements:

1. In addition to the above, UPVs must have a bilge pump with high water bilge alarm installed.

or

2. If the vessel is designed without a bilge, suitable reserve buoyancy to float the vessel in a totally swamped condition.

A bilge alarm gives early warning of flooding below deck where a breach in the hull can often go unnoticed until it is too late, and a bilge pump can often make the difference between getting back to port or sinking at sea.

*Notes:* Ask the vessel operator to activate the high water bilge alarm to verify alarm is working. For those vessels with no bilge – they must provide proof of "suitable reserve buoyancy."

#### **3 Star Requirements**:

1. In addition to the above, emergency communications, specifically a handheld VHF FM radio with a minimum of 5 watts of power communications must be provided. (If a vessel's primary radio shorts out due to flooding, this handheld radio will allow the operator to call for help. VHF radios allow CG rescue units to use a direction finder to locate the vessel in distress. Additionally, VHF radio provides the ability to notify all vessels in the area via a MAYDAY broadcast. Handheld radios are required because a handheld can be taken into the liferaft or IBA if the vessel is abandoned.)

2. A portable satellite phone (not a cell phone) that can be carried off the boat during an abandon ship is considered an equivalent level of safety.

3. Batteries for secondary communications equipment should be replaced or charged regularly to ensure adequate power.

#### 3 Star Requirements: (cont)

**Notes:** If the vessel operator is using a handheld VHF radio wattage, ensure output equals or exceeds 5 watts. Have operator turn on equipment to verify battery is charged. Ask if operator has backup batteries. Ask if equipment is checked prior to getting underway with passengers.

#### 4 Star Requirement:

1. In addition to the above, a registered 406 MHz EPIRB (Emergency Position Indicating Radio Beacon), Class I or II, shall be on board, with charged batteries and properly mounted.

*Notes:* Check EPIRB registration and battery expiration date. For those mounted with a hydrostatic release, check HR expiration date. <u>No credit given if EPIRB is not 100% "ready-to-go.</u>"

#### **5 Star Requirements:**

1. In addition to the above, the vessel shall have on board a properly mounted CG approved Liferaft or IBA (Inflatable Buoyant Apparatus) or equivalent (see below) with a minimum capacity for all <u>passengers</u> on board. (Liferafts and IBA's can be of the canister or valise type and must be serviced annually.)

2. An equivalent level of safety for vessels whose design or arrangement do not provide space for a liferaft or IBA are vessels constructed with level floatation that meet CG standards. (This determination will be made by a qualified examiner in discussion with the owner or operator.)

3. Many operators have been carrying commercial quality inflatable skiff for many years as a selfimposed increase in the level of safety they provide to their customers. In an effort to recognize their efforts, an inflatable skiff may be counted as an equivalent level of safety <u>only</u> if all of the following are met:

- (a) The skiff is carried in a fully inflated condition
- (b) The skiff is stowed and secured to allow immediate deployment
- (c) The vessel only operates <u>within the boundary line</u>
- (d) The capacity of the raft equals the total number of passengers carried

#### Notes:

1. This "commercial quality inflatable skiff" alternative to Coast Guard approved Liferafts or IBA's is for <u>existing</u> rafts only, not new purchases.

2. New IBA's and liferafts do not have to be serviced until two years have passed, then every year thereafter

- 3. Verify IBA or Liferaft is Coast Guard Approved should be marked on equipment. If not, have operator provide documentation providing proof.
- 4. If the operator is requesting credit based on level flotation, ensure operator provides proof that vessel was built with level flotation.
- 5. If the operator is requesting credit based on an existing "commercial quality inflatable skiff," the inspector will verify items (a) (d) are being met. Recommendation: A more effective method for verifying item (c) might be to as the operator if he/she operates inside the boundary line exclusively, rather than telling him/her the requirement first. If they answer anything other than "always," no credit can be given. It's only for vessels that operate "exclusively" within the boundary line (Boundary Line information for Alaska can be found in 46CFR7.150-.180). You may also remind an operator granted this credit that if discovered operating outside the boundary line while exhibiting a 5 Star Decal and/or Pennant, the decal will be scraped and the pennant taken down.

#### Five Star Rating System

	CG Aux. UPV decal	Safety Training Program	Bilge Pump High water alarm	Handheld VHF radio	EPIRB (406 MHz Cat I or II)	Liferaft or IBA for 100% POB
One Star	*	*				
Two Star	*	*	*			
Three Star	*	*	*	*		
Four Star	*	*	*	*	*	
Five Star	*	*	*	*	*	*

#### General Requirements Note:

- 1. Some of the requirements are simple enough (like the one for an EPIRB) while others have several options/variables to consider. In those cases where some flexibility is built into the system, the 5 Star Inspector will determine if the safety equipment is appropriate to the particulars of the individual vessel. The Inspector will also determine whether the equipment in question is "serviceable" = adequate and able to perform its intended function.
- 2. Ask the operator if the 5 Star equipment is checked and, if so, how often. If they don't check daily or prior to getting underway with passengers, recommend they make that part of their normal daily/pre-underway checks.
- 3. Do not give credit for equipment that is not serviceable/operating as designed or intended.
- 4. The list of items is not meant to be in a fixed, specific order, where in order to get to the next level you need t obtain all preceding safety gear. The vessel should be given credit for the safety gear that is installed regardless of order.
- 5. If the operator was awarded 5 stars, please provide him/her with a "post card" (signed by you) to mail to D17. That ensures they'll get their pennant faster.

Section 6 February 2009