

# United States Coast Guard



## T-BOAT INSPECTION BOOK Inspector Reference Guide

<b>MISLE Activity #</b>		
<b>Name of Vessel:</b>		
<b>Official Number:</b>		
<b>Date:</b>	<b>Location:</b>	
<b>Inspectors:</b>		
<b>SOLAS:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		<b>O/N Pax:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Route</b>		
<input type="checkbox"/> Oceans <i>&gt; 20 NM offshore</i>	<input type="checkbox"/> Limited Coastwise <i>≤ 20 NM from harbor or safe refuge</i>	<input type="checkbox"/> Lakes/Bays/Sounds <i>Not beyond demarcation</i>
<input type="checkbox"/> Coastwise <i>≤ 20 NM offshore</i>	<input type="checkbox"/> Great Lakes	<input type="checkbox"/> Rivers
<b>Inspection Type</b>		
<input type="checkbox"/> Certification of Inspection (COI)	<input type="checkbox"/> Annual	<input type="checkbox"/> Drydock/ISE
<input type="checkbox"/> Expanded Annual	<input type="checkbox"/> Reduced Annual	<input type="checkbox"/> Remote - Partial Date:
<b>SIP</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> In Service	<b>SMS</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Voluntary

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## Use of Small Passenger Vessel (SPV) Inspection Aid

This is an evolution of the SPV Training Aid and SPV Inspection Checklist. This Inspection Aid is intended to be used by Coast Guard Marine Inspectors during the inspection of small passenger vessels on Certificate of Inspection (initial/renewal) and Tier I inspections. This Inspection Aid provides a quick reference for all the steps necessary to complete specific tasks with these associated inspections. This Aid also provides quick reference to appropriate CFR/IMO references as well as defined MISLE deficiency codes to increase data standardization.

## References

-Unless specified otherwise, in an effort to save space, a CFR cite will be from 46 CFR. For example, 46 CFR 175.100 will be listed as 175.100. If the cite is from another Title it will be listed as 33-164.30 for 33 CFR 164.30.

-This Inspector Reference cites SOLAS regulations from the 2020 Consolidated Edition (SOLAS 20). In some cases, the regulations in SOLAS 20 may not apply due to the keel laid date of the vessel. Marine Inspectors must pay close attention to the applicability dates of the SOLAS chapters and Subchapter T regulations when conducting inspections on SOLAS applicable vessels. The cites will not list the SOLAS year.

**-CFR cite colors: All Ships – Black, Old-T – Green, New-T – Blue.**

## Word Printing Instructions:

**File>Print>Page Setup> Under Pages – Multiple Pages Select Book Fold  
File>Print>Print Both Sides Flip on Short End**

## Adobe Printing Instructions:

**Page Sizing & Handling Block>Booklet**

**Booklet Subset: Both sides; Binding: Left**

A full job aid is not always needed, use the custom print option to type the page numbers needed as appropriate.

Standard Vessel – COI/Annual Inspection: Pages 1,4-44

Wood Vessel – COI/Annual Inspection: Pages 1,4-44,56-57

Sail Vessel – COI/Annual Inspection: Pages 1,4-44,54-55

- In-Service Minimum Inspection Items
- ◆ Reduced Annual Minimum Inspection Items  
(*Inspection item markings to left of check boxes*)

**This Inspector Reference Guide is maintained by CG-CVC-1. Please submit any change requests to [CG-CVC@uscg.mil](mailto:CG-CVC@uscg.mil).**

When entering a deficiency in the MISLE vessel inspections tab, the associated classification code for an inspection item in this Job Aid shall be used. The classification code denotes the system, subsystem and component. Use the classification code as follows:

Example classification code: **09112**

(This is the specific classification code for items associated with medical equipment.)

To enter the classification code, the first two digits denote the System Name provided in the dropdown menu. In this example **09** corresponds to the System Name of Working and Living Conditions.

The third digit provides the Subsystem Name provided in the dropdown menu. In this example, **1** corresponds to the Subsystem Name of Living conditions.

Finally the last two digits correspond to the Component Name provided in the dropdown menu, in this example **12** corresponds to Medical equipment.

**09** – Working Conditions (System Name)

**1** – Living Conditions (Subsystem Name)

**12** – Medical Equipment (Component Name)

If a classification code contains CG in it; then the listing will be found in the CG specific drop down menu.

Example: CG001

(This is the classification code for Certificates of Inspection)

If the classification code is listed with slash marks between numbers, this signifies that there may be options for that inspection item and it is up to the discretion of the Marine Inspector to choose the most appropriate option.

Example: 02114/5/6

This listing signifies that classification codes 02114, 02115, or 02116 should be used and the Marine Inspector should use their judgement to determine which is the most appropriate.

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♦♦Section 1: Annual Focus Areas

Action	Ref	Code
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

## Section 2: Dockside Assessment (DA)

Action	Ref	Code
□ Initial vessel visual examination.		
○ Presence of anchor(s) ( <i>when visible</i> )	184.300	
○ Draught (draft) marks & load marks (>65' or SOLAS)	185.602	09228
○ Load Line & Deckline (>79' or SOLAS)	175.122	03199
○ IMO Hull marking (SOLAS)	SOLAS XI-1/3	
○ Machinery space marking (SOLAS)	SOLAS XI-1/3	
○ Name and hailing port/State number	185.602	
• <i>Name clearly marked on port and stbd bow and stern; hailing port on stern; NLT 4" Latin alphabet, Arabic /Roman #'s</i>	67.123	02120
• <i>State documented vessels are to be marked as required by the state which is regulated under 33 CFR 173.27.</i>		01310
• <i>State numbers are required on both sides of the bow.</i>		
○ Signs of pollution/illegal discharge on hull	33-173.27	02106
	33-181.23	03113
○ Hull condition	33-151.10	
○ Visible shell damage, bulwarks, rails and guards	33-155.330	
	33-155.350	09223
○ Examine means of embarkation (gangway/ladders)	176.802	09228
	29-1915.74(a)(6)	
○ Condition of mooring lines	184.300	

### Section 3: Certificates & Documents (CD)

Action	Ref	Code
♦ □ Certificate of Inspection (COI)		CG001
○ Presence of original	176.302	
○ Routes & Conditions, and amendments	176.120	
○ Manning	MSM III/B.2.C 15.501	
○ Certificate is endorsed	176.500(b)(1)(ii)	
○ SPV Decal is posted	176.802(a)(3) 176.310	
♦ □ Vessel's stability letter	170.120	01326
○ Presence of stability documents	178.210	
	178.220	01326
○ Required contents	176.306 178.230	
♦ □ Merchant Mariner Credentials (MMCs)		01201
○ MMCs meet COI manning requirements	15.515	
• <i>Route</i>	10.205(g)	
• <i>Position</i>	15.805(a)(4)	
• <i>Tonnage</i>	15.810(b)(1)	
○ Presence of original MMCs	185.402	
○ Validity	10.205(a)	
○ Senior Deckhand ( <i>if applicable</i> )	10.205(b) MSM III B.2.C NVIC 1-91	
□ Drug and alcohol program		18299
○ Currency of Employee Assistance Program (EAP)	16.401	
○ Presence and currency of drug and alcohol testing equipment ( <i>on board or available within 2 hrs</i> )	185.212 185.210	
○ Training of designated testing crewmember ( <i>when applicable</i> )	4.06-15 4.06-20(a)(3) 4.06-20(b)(2)	
○ Random chemical testing program for dangerous drugs	16.230	
○ Pre-employment testing program for dangerous drugs	16.210	
○ Means of post-accident testing chemical testing for dangerous drugs	185.210 185.212 4.06-15	
♦ □ Maintenance and service records		
○ Firefighting service reports	176.810	07199
○ Liferaft servicing reports	185.730	11199
□ Vessel General Permit (VGP) (>79')		99103
○ Notice of Intent (NOI) has been submitted	VGP 1.5.1.1 & 10	
○ Compliance with ballast water record keeping requirements	VGP Table 1 CG-543 Policy Ltr 11-01 VGP 4.3	

### Section 3: Certificates & Documents (CD)

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ Noncompliance &amp; reportable quantity reports have been submitted</li> </ul>	CG-543 Policy Ltr 11-01 VGP 4.4.1 VGP 4.4.2 CG-543 PL 11-01	99103
<ul style="list-style-type: none"> <li>◆ <input type="checkbox"/> Muster lists and emergency instructions                             <ul style="list-style-type: none"> <li>○ Muster lists and emergency instructions are available                                     <ul style="list-style-type: none"> <li>• <i>Fire, heavy weather, man overboard</i></li> </ul> </li> <li>○ Station bill (&gt;65' &amp; ≥ 4 crew)</li> <li>○ Posted at operating station &amp; in a conspicuous location in each crew accommodation space.</li> </ul> </li> </ul>	185.510  185.512 185.510 185.514 185.510(a) 185.514	04108    04108
<ul style="list-style-type: none"> <li>◆ <input type="checkbox"/> Certificate of Documentation (COD) (&gt;5 NT) or Commercial State Registration                             <ul style="list-style-type: none"> <li>○ Presence of original</li> <li>○ Endorsement(s) for current service(s)</li> <li>○ Validity</li> </ul> </li> </ul>	67.313 67.321 67.17 67.19 67.161 67.163	CG003
<ul style="list-style-type: none"> <li><input type="checkbox"/> Federal Communications Commission Marine Radio Operator Permit</li> </ul>	47-80.159(e)	01104
<ul style="list-style-type: none"> <li><input type="checkbox"/> Federal Communications Commission Bridge-to-Bridge Certificate (&gt;65')                             <ul style="list-style-type: none"> <li>○ Presence</li> <li>○ Validity</li> <li>○ Contents                                     <ul style="list-style-type: none"> <li>• <i>The VHF radiotelephone must have operating capability on Channels 13 (156.650 MHz) and 22A (157.100 MHz).</i></li> </ul> </li> </ul> </li> </ul>	47-80.1001 47-80.1005 47-80.1005	01104
<ul style="list-style-type: none"> <li><input type="checkbox"/> Federal Communications Commission Station License                             <ul style="list-style-type: none"> <li>○ Presence</li> <li>○ Other classes of equipment are authorized for operation</li> <li>○ Contents</li> <li>○ Validity</li> </ul> </li> </ul>	47-80.13 47-80.17  47-80.99 47-80.25	05103
<ul style="list-style-type: none"> <li><input type="checkbox"/> Federal Communications Commission Safety Radiotelephony Certificate                             <ul style="list-style-type: none"> <li>○ Presence</li> <li>○ Validity</li> <li>○ Contents</li> </ul> </li> </ul>	47-80.59 (a)(2) 47-80.901 47-80.933 47-80.59	05103

## Section 4: Logs and Manuals (LM)

Action	Ref	Code
♦ □ Vessel's log		01305
♦ ○ EPIRB tests ( <i>high seas, &gt;3nm</i> )	185.728	11199
• <i>Monthly</i>	185.524	CG004
♦ ○ Drills	185.520	11199
• <i>Date/Description</i>	185.702(d)	
• <i>Abandon ship</i>		
• <i>Man Overboard</i>		
• <i>Fire</i>		
• <i>Rescue Boat</i>		
• <i>Security (SOLAS)</i>		
♦ ○ Maintenance of survival craft, rescue boats, and launching appliances		
• <i>Instructions onboard (&gt;65')</i>		
• <i>Falls End-End (30 months)/ Replace (5 years)</i>		
□ Waste/Garbage Management Plan ( <i>Route &gt;3nm, Domestic</i> )	184.702	14503
○ Management Plan (>40')	33-151.51	14502
○ Placard (>26')	33-151.57	01320
○ Placard (>26')	33-151.59	
□ Crew and passenger list maintained (Ocean/Coastwise [O\C] and overnight or disembark or embark at different ports).	185.502	10127
□ Voyage plan prepared (O/C or overnight).	185.503	10127
□ Passenger count.	185.504	10127
♦ □ Safety orientation.	185.506	10127

## Section 5: Bridge/Navigation (BN)

Action	Ref	Code
<ul style="list-style-type: none"> <li>◆□ Operations of internal communication and control systems                             <ul style="list-style-type: none"> <li>○ Means of communication from operating station to propulsion machinery space (<i>Pilothouse, Aux Steering</i>)</li> <li>○ Operation of Public Address System                                     <ul style="list-style-type: none"> <li>• <i>Fixed</i></li> <li>• <i>&lt;65' Bullhorn</i></li> <li>• <i>&lt;65' &amp; &lt;49 pax N/A if Operating Station is suitable</i></li> </ul> </li> <li>○ Two independent means of controlling each propulsion engine                                     <ul style="list-style-type: none"> <li>• <i>Except multiple engine vessels w/independent control systems</i></li> </ul> </li> </ul> </li> </ul>	<p>184.602</p> <p>184.610</p> <p>184.620</p>	<p>04116</p> <p>04101</p> <p>13199</p>
<ul style="list-style-type: none"> <li>□ Radar(s) (<i>&gt;49 pax, O/LC/GL</i>)                             <ul style="list-style-type: none"> <li>○ Safety precautions are followed</li> <li>○ Verify operation</li> </ul> </li> </ul>	<p>Operation Manual</p> <p>184.404</p> <p>184.115(a)</p>	<p>10103</p>
<ul style="list-style-type: none"> <li>□ Magnetic compass (<i>All, except Rivers, Non-self-propelled, short-LBS</i>)                             <ul style="list-style-type: none"> <li>○ Illumination (<i>Nighttime Ops</i>)                                     <ul style="list-style-type: none"> <li>• <i>(New T + OCMI discretion)</i></li> </ul> </li> <li>○ Mounting location</li> <li>○ Operation</li> </ul> </li> </ul>	<p>184.402(c)</p> <p>184.402(a)</p> <p>184.115(a)</p>	<p>10105</p>
<ul style="list-style-type: none"> <li>□ Electronic position-fixing device (satellite navigation (GPS) receiver) (<i>Oceans route</i>)                             <ul style="list-style-type: none"> <li>• <i>(New T + OCMI discretion)</i></li> </ul> </li> </ul>	<p>184.410</p> <p>184.115(a)</p> <p>Operation Manual</p>	<p>10115</p>
<ul style="list-style-type: none"> <li>□ Radio telephone equipment (<i>&gt;20m, power-driven</i>)                             <ul style="list-style-type: none"> <li>○ Installation(s)</li> <li>○ Equipment for operational area(s)</li> <li>○ Emergency broadcast placard</li> <li>○ Functional test                                     <ul style="list-style-type: none"> <li>• <i>(c) If the cognizant OCMI determines that there is no suitable mounting surface aboard the vessel, the emergency instructions need not be posted but must be carried aboard the vessel and be available to the crew for familiarization.</i></li> <li>• <i>46 CFR 185.512 - Recommended emergency instructions format – An emergency instruction placard containing the following information will satisfy the requirements of 185.510.</i></li> </ul> </li> </ul> </li> </ul>	<p>184.502</p> <p>47-80.1003</p> <p>47-80.1015</p> <p>184.506</p> <p>184.510</p> <p>47-80.931</p>	<p>05103</p>

(a) Emergency instructions – (1) rough weather at sea, crossing hazardous bars, or flooding. (2) Man overboard. (3) Fire

## Section 5: Bridge/Navigation (BN)

Action	Ref	Code
IF vessel travels	THEN it MUST carry:	
>1,000 ft from shore but <20 NM	1 VHF	
20 NM to 100 NM	1 VHF and 1 MF	
100 NM to 200 NM	1 VHF, 1 MF, 1 SSB or INMARSAT radio, and 1 NAVTEX receiver.	
> 200 NM	1 VHF, 1 MF, 1 SSB or INMARSAT radio, and 1 NAVTEX receiver, 1 distress frequency receiver, and 1 automatic radiotelephone alarm signal generator	
Vessels $\geq 65'$ , operating in VTS waters, are required at least two VHF radios. One radio must be tuned to the VTS frequency under 33 CFR 161.12 as per 33 CFR 26.03(f)		
<input type="checkbox"/> Navigation and signaling lights, and dayshapes <ul style="list-style-type: none"> <li>○ Operation of navigation and anchor lights</li> <li>○ Dayshapes <ul style="list-style-type: none"> <li>• <i>Certificate of Alternate Compliance</i></li> </ul> </li> </ul>	33-83.20(b) COLREG Rule 20 183.420 33-83.20(d) COLREG Rule 20 33-84.11 33-81.9	10109
<input type="checkbox"/> Sound signaling devices <ul style="list-style-type: none"> <li>○ Presence of signaling device</li> <li>○ Operation of whistle and bell (&gt;12m) <ul style="list-style-type: none"> <li>• <i>NLT 12" for a vsl <math>\geq 65'</math></i></li> <li>• <i>NLT 8" for a vsl 40' – 65'</i></li> <li>• <i>&lt; 36' (12 m) not required to have a bell</i></li> </ul> </li> </ul>	33-83.33 COLREG Rule 33	10109
<input type="checkbox"/> Navigational publications and nautical charts (as appropriate for route) <ul style="list-style-type: none"> <li>○ Charts</li> <li>○ Tide Tables</li> <li>○ River Current publication or Current tables</li> <li>○ Coast Guard Light List</li> <li>○ U.S. Coast Pilot</li> <li>○ COLREGs</li> <li>○ Inland Navigation Rules <ul style="list-style-type: none"> <li>• <i>Copies or excerpts are allowed.</i></li> </ul> </li> </ul>	184.420      COLREG A/1 33-88.05	10111 10112 10116
<input type="checkbox"/> Steering system controls at operating station <ul style="list-style-type: none"> <li>○ Operation and control</li> <li>○ Operation of rudder angle indicator (<i>Power-driven main steering</i>)</li> <li>○ Steering gear transfer instructions are posted (&gt;65', <i>Aux Steering</i>)</li> </ul>	182.610(a)-(c) 176.814 182.610(e)(2)  182.610(g)(2) <i>176.25-35</i>	13199

## Section 5: Bridge/Navigation (BN)

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ Visual means to indicate operation of power unit(s)(<i>&gt;65'</i>)</li> </ul>	182.30-1 182.30-5 182.610(g)(1)	13199
<b>◆ □</b> Alarms and gauges at operating station <ul style="list-style-type: none"> <li>○ Bilge high level alarms (<i>&gt;26'</i>)</li> <li>○ Automatic bilge pump indicator</li> <li>○ Flammable vapor detection system (<i>Gasoline</i>)</li> <li>○ Propulsion engine gauges <ul style="list-style-type: none"> <li>• <i>RPM, JW discharge temp, LO pressure (RPM not required for Old T)</i></li> </ul> </li> <li>○ Audible or visual alarm for exhaust cooling system (<i>Wet Exhaust</i>)</li> </ul>	182.530(a)-(b) 182.530(c) 182.480(a) 182.480(d) 182.410(b) 182.425(b)(5)	08199
<b>◆ □</b> Distress signals <ul style="list-style-type: none"> <li>○ USCG type approval</li> <li>○ Quantity in accordance with vessel's route <ul style="list-style-type: none"> <li>• <i>O/C/LC - 6 hand red flare distress signals &amp; 6 hand orange smoke signals</i></li> <li>• <i>LBS/R - 3 hand red flare distress signals &amp; 3 hand orange smoke signals</i></li> <li>• <i>may substitute red hand flares for orange smoke</i></li> <li>• <i>vsls on short runs limited to 30 mins do not need to carry distress signals</i></li> </ul> </li> <li>○ Expiration date</li> <li>○ Stowed in brightly colored, portable watertight container or pyrotechnic locker</li> <li>○ Marked "Distress Signals"</li> </ul>	180.68 160.121 160.037 160.036 180.68 185.726(c) 180.68(e) 185.614	11116

## Section 6: General Health & Safety (GH)

Action	Ref	Code
□ Upper decks marked for maximum number of PAX as per stability letter	185.602(g)	01310
♦□ Accommodations (Crew & Passenger)		09198
○ Location	177.800	
○ Number of berths	177.25 177.30-7	09114
○ Spaces are of appropriate size	177.710 177.810	
○ Accessibility to escape routes	177.800 177.810 177.500	09117
○ Ventilation	177.15-1	
○ Sanitary condition	177.810(c)	07120
♦○ General alarm is adequate		
• All vsls with overnight accommodations; public address system may be used.	177.600(c) 176.818 183.550	09103 09114 08101
♦○ Overnight accommodation spaces are fitted with an independent modular smoke detection and alarm unit, properly installed	181.405(c) 181.450	07199
○ Proper operation of detectors/alarm units		
□ Structural Fire Protection	177.405	07101/
○ Noncombustible trim	177.410	03/05
○ Fire-resistant furnishings	177.10-1 177.10-5	09116
• Must comply with 116.423		
♦□ Means of escape from accommodation, machinery and other spaces		07120
○ Means of escape (2) – widely separated ( <i>adequate size ≥32"</i> ), operable from either side and open towards expected escape direction	177.500 177.15-1	
• Exemptions for 2 escapes in 177.500(o)		
○ Routes are accessible		
♦○ Emergency lighting	177.500	04103
♦○ Markings	183.432	
• "EMERGENCY EXIT, KEEP CLEAR" 2" Letters	184.30-5 185.606	
□ Mess deck and galley spaces		
○ Sanitary conditions	176.818	09106
○ Cooking fuel restrictions – <i>no gasoline, no open flames</i>	MSM A.6.C 184.202	09124
○ Cooking equipment requirements – <i>Grab rails, locking, fitted for use in heavy seas</i>	184.220 ABYC A-3	09124
○ LPG and LNG cooking systems	NFPA 302 184.240	09124
• Remote shutoff valve (if system in enclosed space)		

## Section 6: General Health & Safety (GH)

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ Condition of vents and ducts                             <ul style="list-style-type: none"> <li>• Ducts above frying vats or grills constructed of &gt;11-gauge steel</li> </ul> </li> <li>○ Structural fire protection surrounding cooking and heating appliances</li> <li>○ Grease extraction hood                             <ul style="list-style-type: none"> <li>• Meet UL 710 &amp; be equipped with a dry or wet chemical fire extinguishing system</li> </ul> </li> </ul>	177.600(d)  177.410(c)(1) 177.10-5 181.425	09201  07101/3/5  07109
<input type="checkbox"/> First aid kit <ul style="list-style-type: none"> <li>○ Marked "First Aid Kit"</li> <li>○ Watertight container</li> <li>○ Easily visible &amp; readily available to crew</li> <li>○ USCG Approved</li> </ul>	184.710    160.041	09112    
<input type="checkbox"/> Portable lights <ul style="list-style-type: none"> <li>○ At least 2 onboard</li> <li>○ Located at operating station &amp; at access to propulsion machinery space</li> </ul>	183.430	04103
<input type="checkbox"/> No unsafe conditions or practices exist <ul style="list-style-type: none"> <li>○ Slips, trips, falls</li> <li>○ Sharp edges</li> <li>○ Swinging loads/gear adrift</li> </ul>	176.830	09298
<input type="checkbox"/> Paint locker(s) <ul style="list-style-type: none"> <li>• Enclosed space used to store paint or other flammables</li> <li>○ Fire protection equipment</li> <li>○ Space construction material                             <ul style="list-style-type: none"> <li>• Steel or equivalent</li> </ul> </li> <li>○ Electrical installations                             <ul style="list-style-type: none"> <li>• Class 1 Div 1 space must be explosion proof or intrinsically safe</li> </ul> </li> <li>○ Means to secure ventilation                             <ul style="list-style-type: none"> <li>• Power ventilation must have means of being shut down from pilot house</li> </ul> </li> </ul>	181.20-1 181.400(a)(7) 177.405(d) 177.10-5(c) 183.530(b) 183.530(c) 111.105  177.600(b)	  07109 07101  02108  09201

## Section 7: Lifesaving Equipment (LS)

Action	Ref	Code
<ul style="list-style-type: none"> <li>◆ □ Emergency Position Indicating Radio Beacon (EPIRB) (<i>High seas or ≥ 3NM on Great Lakes</i>) <ul style="list-style-type: none"> <li>○ Registration <ul style="list-style-type: none"> <li>• 47-</li> </ul> </li> <li>○ Marked with vessel name <ul style="list-style-type: none"> <li>• 80.1061(e)-(f)</li> <li>• 185.604(c)</li> </ul> </li> <li>○ Stowage <ul style="list-style-type: none"> <li>• 180.64</li> <li>• <i>To automatically float free and activate</i></li> </ul> </li> <li>○ Hydro-static release expiration date <ul style="list-style-type: none"> <li>• 185.740</li> </ul> </li> <li>○ Battery date <ul style="list-style-type: none"> <li>• 185.728(b)</li> </ul> </li> </ul> </li> </ul>		05111
<ul style="list-style-type: none"> <li>◆ □ Life jackets <ul style="list-style-type: none"> <li>○ USCG type approval <ul style="list-style-type: none"> <li>• 180.71(c)</li> <li>• 180.25(a)</li> </ul> </li> <li>○ Quantity <ul style="list-style-type: none"> <li>• 180.71(a)-(b)</li> <li>• <i>Adult lifejackets for each person on board; reqs for child size or extended sizes vary</i></li> </ul> </li> <li>○ Stowage <ul style="list-style-type: none"> <li>• 180.78</li> <li>• 185.604(f)</li> <li>• <i>Readily accessible &amp; distributed throughout accommodation spaces</i></li> <li>• <i>Containers not capable of being locked &amp; when practical aloe life jackets to float free</i></li> <li>• <i>Overhead stowage allows quick release</i></li> <li>• <i>If stowed &gt;7' above deck, release must be operable from the deck (not applicable to Old T vessels)</i></li> <li>• <i>Container clearly marked with "Life preservers" &amp; "Child" or "Adult" and quantity</i></li> <li>• <i>Child-sized life jackets stowed separately</i></li> </ul> </li> <li>○ Markings <ul style="list-style-type: none"> <li>• 185.604(b)&amp;(h)</li> <li>• <i>vessel name</i></li> <li>• <i>retro-reflective material</i></li> </ul> </li> <li>○ Lights <ul style="list-style-type: none"> <li>• 180.75</li> <li>• <i>O/C/GL – must have USCG approved light (not required on ferries &amp; vsls that do not operate &gt; 20 NM from harbor of safe refuge)</i></li> </ul> </li> <li>○ Location and information for donning instructions <ul style="list-style-type: none"> <li>• 185.516</li> <li>• 176.808(d)</li> </ul> </li> <li>○ Condition and suitability <ul style="list-style-type: none"> <li>• 160.002</li> <li>• <i>Those found to not meet condition &amp; suitability should be destroyed</i></li> <li>• 160.005</li> <li>• 160.055</li> </ul> </li> <li>○ Inflatable life jackets must be serviced annually by approved facility</li> <li>○ Each life jacket fitted with a whistle (SOLAS)</li> </ul> </li> </ul>		11130 11118
<ul style="list-style-type: none"> <li>□ Personal Floatation Devices (<i>work vests</i>) carried in addition to lifejackets (<i>if present</i>) <ul style="list-style-type: none"> <li>○ USCG approval <ul style="list-style-type: none"> <li>• 180.72</li> <li>• 160.064</li> </ul> </li> </ul> </li> </ul>		11118

## Section 7: Lifesaving Equipment (LS)

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ Serviceable condition</li> <li>○ Inflatable PFDs serviced by an approved facility annually</li> <li>○ Stowed separately and in a manner so as to not be confused with pax lifejackets</li> </ul>	160.053  160.077	11117
◆□ Ring Life Buoys		11117
<ul style="list-style-type: none"> <li>○ USCG type approval</li> <li>○ Quantity &amp; size <ul style="list-style-type: none"> <li>• <math>\leq 26' \rightarrow 1 \times 20''</math></li> <li>• <math>26' &lt; X \leq 65' \rightarrow 1 \times 24''</math></li> <li>• <math>&gt; 65' \rightarrow 3 \times 24''</math></li> </ul> </li> <li>○ Stowage <ul style="list-style-type: none"> <li>• <i>rapidly cast loose</i></li> <li>• <i>not permanently secured</i></li> </ul> </li> <li>○ Lifeline <ul style="list-style-type: none"> <li>• <i>At least 1 fitted with lifeline, if &gt; 1 at least one not fitted with lifeline)</i></li> <li>• <i>Buoyant</i></li> <li>• <math>\geq 60'</math></li> <li>• <i>Non-kinking</i></li> <li>• <i>Dark color if synthetic, or resistant to UV light</i></li> </ul> </li> <li>○ Waterlight <ul style="list-style-type: none"> <li>• <i>Not required when limited to daytime operations</i></li> <li>• <math>\geq 1</math> floating waterlight</li> <li>• <i>3ft-6ft lanyard secured around the body of LB</i></li> <li>• <i>If only one, attached to lanyard w/ corrosion resistant clip</i></li> <li>• <i>Verify batteries</i></li> </ul> </li> <li>○ Markings <ul style="list-style-type: none"> <li>• <i>O/C – orange</i></li> <li>• <i>LBS/R can be white</i></li> <li>• <i>Vessel name in block capital letters</i></li> <li>• <i>Retro-reflective tape</i></li> </ul> </li> <li>○ Condition and suitability</li> </ul>	180.70(b)(1) 160.050 180.70(a) 180.70(b)  180.70(a)  180.70(b)  180.70(c)       180.70(d) 161.010     185.604 180.70(b) 160.050-3(b) & .050-6 180.70 160.050 176.808(d)	
◆□ Inflatable liferaft & inflatable buoyant apparatus installations		11108/27
<ul style="list-style-type: none"> <li>○ USCG type approval</li> <li>○ Quantity (<i>route dependent, always verify with Table 180.200(c)</i>)</li> <li>○ Stowage <ul style="list-style-type: none"> <li>• <i>Secured to vsl by a painter with a float-free link permanently attached to the vsl</i></li> <li>• <i>Floats free and inflates automatically</i></li> </ul> </li> </ul>	  180.200(a)(1) & (3) 180.200(c) Table	  11130 11108/ 27

## Section 7: Lifesaving Equipment (LS)

Action	Ref	Code
<ul style="list-style-type: none"> <li>• <i>Readily accessible to crew for quick launch</i></li> <li>• <i>Fully equipped as required IAW 180.175 (b)&amp;(c)</i></li> <li>• <i>Sheltered from breaking seas and fire damage</i></li> <li>• <i>Stowed to prevent shifting</i></li> </ul>	180.130 180.130 160.151-33	11108/27
○ Markings		
<ul style="list-style-type: none"> <li>• <i>Vessel Name</i></li> <li>• <i>Port of registry</i></li> </ul>		11108/27
○ Annual service dates	185.730(a)	
<ul style="list-style-type: none"> <li>• <i>Every 12 months</i></li> <li>• <i>Immediately if container is damaged or seals or straps are broken</i></li> </ul>		11135
○ Emergency instructions are posted	185.510	
○ CG approved embarkation ladder ( <i>required when embarkation station is &gt;10' from lightest operating waterline</i> )		11131
○ Servicing/expiration of hydrostatic release	185.518 180.150(b)	11130
○ Hydrostatic release installed correctly	185.740	11130
◆ □ Lifefloat & Buoyant Apparatus installations (when present)		11108/27
○ USCG type approval	180.200(a)(2)	11130
○ Quantity ( <i>route dependent</i> )	180.200(c)	11108/27
○ Stowage	Table	
<ul style="list-style-type: none"> <li>• <i>Secured with CG approved weak link that is of proper strength for the capacity of the survival craft &amp; that is attached at one end to the painter and the other end to the vessel</i></li> <li>• <i>Means to secure weak link to vessel must have a breaking strength at least equal to strength of painter; of synthetic be dark colored or UV resistant; and if metal, be corrosion resistant</i></li> <li>• <i>If painter attachment fitting is not provided , a means to attach the painter must be provided by a wire or line that encircles the device's body; will not slip off; has breaking strength ≥ that of the painter; and is dark colored or UV resistant</i></li> <li>• <i>If a single painter is used for ≥ 2 life floats/buoyant apparatus, ensure that:</i> <ul style="list-style-type: none"> <li>▪ <i>The total weight of the devices does not exceed 400lb</i></li> <li>▪ <i>Each device is attached to the painter with a line long enough (and of differing lengths) to ensure devices can float without contacting one another and that</i></li> </ul> </li> </ul>	180.137	11108/27

## Section 7: Lifesaving Equipment (LS)

Action	Ref	Code
<ul style="list-style-type: none"> <li>▪ <i>The strength of the weak link and the breaking strength of the painter is determined by the combined capacity of the devices attached to that painter</i></li> <li>▪ <i>If stowed in tiers, ensure tiers are NOT MORE than 4ft high and that spacers are used between devices (spacer material is not specified)</i></li> </ul>		
○ Markings	185.604(a) 160.010-8	11108/27
<ul style="list-style-type: none"> <li>• Vessel name</li> <li>• Capacity</li> <li>• Retro-reflective tape</li> </ul>		
○ Embarkation ladder ( <i>required when embarkation station is &gt; 10ft from lightest operating waterline</i> )	180.150	11130
○ Required equipment	180.175(d),(e) &(f)	11110
<ul style="list-style-type: none"> <li>• Lifeline and pendants (<i>as furnished by manufacturer, replacements must meet 160.10</i>)</li> <li>• Paddle (<i>≥ 4ft long lashed to LF/BA &amp; buoyant</i>)</li> <li>• Painter (<i>≥ 100ft, not &lt; 3x's distance between stowed deck &amp; waterline; breaking strength of ≥1,500lb unless capacity is ≥ 50 ppl, then ≥ 3,000lb</i>)</li> <li>• Light (<i>Waterlight, attached around body of LF/BA with a UV resistant 3/8in lanyard, ≥ 18ft</i>)</li> </ul>		
○ Emergency instructions are posted	185.512(a)(1)(ix)	11131
◆ □ Rescue boat	180.10-35	
○ > 65ft must carry at least one rescue boat unless OCMI determines:	180.210(a)	11130
<ul style="list-style-type: none"> <li>• Sufficiently maneuverable, arranged &amp; equipped to allow the crew to recover a helpless person from the water</li> <li>• Recovery of a helpless person can be observed from the operating station; and</li> <li>• Not regularly engaged in operations that restrict maneuverability</li> </ul>		
○ ≤ 65ft is NOT required to carry a rescue boat unless:	180.210(b)	
<ul style="list-style-type: none"> <li>• Carries PAX on an open or partially enclosed deck; and</li> <li>• The OCMI determines the vsl is designed, arranged, or involved in operations so that</li> </ul>		

## Section 7: Lifesaving Equipment (LS)

Action	Ref	Code
<i>the vsl itself cannot serve as an adequate rescue craft</i>		
○ USCG type approval ( <i>protected waters 160.056, exposed, partially protected waters 160.156</i> )	180.210(d) 160.056 160.156	11130
○ Stowage		
• <i>Deck where stowed or boarded must be kept clear of obstructions that would interfere with boarding and launching craft</i>	185.700 180.130	11104
• <i>Stowed to prevent shifting</i>		
• <i>Sheltered, as far as practicable, from breaking seas and fire damage</i>		
• <i>Ready for immediate use by crew</i>		
○ Markings		
• <i>Vessel name</i> (each side of bow)	185.604(i)	11104
• <i>Capacity</i> (each side of bow)		
• <i>Retro-reflective tape</i>		
• <i>Information plate</i>		
○ Required equipment		
• <i>Pair of oars &amp; painter ≥ 3/8" &amp; ≥ 30'</i>	160.056-3(b)	11104
• <i>SOLAS requirements for rescue boats</i>		
○ Condition		
• <i>Small, lightweight boat with built-in buoyancy</i>	185.700	11104
• <i>Capable of being readily launched</i>	180.210(c)	
• <i>Easily maneuvered</i>	180.10-35	
• <i>Of adequate proportion to take an unconscious person onboard without capsizing</i>		
• <i>Good working order, ready for immediate use</i>		
○ Adequate means are provided for transferring a victim from a rescue boat or platform to the deck of the vsl ( <i>during MOB drill</i> )	176.808(g)	
○ Embarkation ladder ( <i>required when embarkation station is &gt;10' from lightest operating waterline</i> )	180.150(b)	11130
<b>Note:</b> <i>Vessels that are not required to carry a rescue boat may or may not be required to carry a rescue platform. If the vessel is configured in such a manner as to be able to recover a person from the water without a platform, no platform is required. It will be noted on the COI if the vessel is required to carry a rescue boat or a rescue platform.</i>		

## Section 7: Lifesaving Equipment (LS)

Action	Ref	Code
<ul style="list-style-type: none"> <li>◆□ Launching appliance(s) <i>(davits &amp; winches; provided for any survival craft weighing &gt;200lb that requires lifting &gt;1' vertically to launch or conditions met in 180.150(a) for inflatable survival craft)</i> <ul style="list-style-type: none"> <li>○ Materiel condition                             <ul style="list-style-type: none"> <li>• <i>Wastage, cracks, structural damage, blocks, fasteners, etc.</i></li> </ul> </li> <li>○ Falls have been renewed at least every 5 years or when deteriorated</li> <li>○ Falls have been end for ended at least every 30 months <i>(SOLAS does not allow end for end; falls are replaced every 5 years)</i></li> <li>○ Automatic disengaging apparatus functions correctly</li> <li>○ Operating instructions are posted</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>176.808</li> <li>180.130(c)</li> <li>180.150(c)</li> <li>185.704</li> <li>180.150(c)</li> <li>185.512(a)(1)(ix)</li> </ul>	11112/3

## Section 8: Firefighting System (FF)

Action	Ref	Code
<p>♦ □ Fire main and pump (<i>Piping must be non-ferrous metal IAW 182.710</i>) - <i>A vsl not required to have a power driven fire pump by 181.300 must have ≥ 3 - 2.5 gal. buckets, with an attached lanyard satisfactory to the cognizant OCMI, placed so as to be easily available during an emergency. The words "FIRE BUCKET" must be stenciled in a contrasting color on each bucket IAW 181.610. All vessels shall be provided with a hand operated fire pump with a capacity of at least 5 gpm (may also serve as bilge pump)</i></p> <ul style="list-style-type: none"> <li>○ Capable of providing adequate pressure 181.300(a)</li> <li>○ Vessel ≤ 65 ft &amp; &gt; 49 pax; or vessels &gt; 65 ft – <i>50 GPM &amp; pressure of 60 psi at pump</i> 181.300(c)</li> <li>○ Ferry Vessel ≤ 65 ft &amp; ≤ 49 pax <ul style="list-style-type: none"> <li>• 10 GPM &amp; project a hose stream from the highest hydrant through hose &amp; nozzle a distance of 25' 181.300(c)</li> </ul> </li> <li>○ Self-priming &amp; power driven <ul style="list-style-type: none"> <li>• May be connected to bilge system to meet 182.520 181.310(c) 181.300(b)</li> </ul> </li> <li>○ Fitted with gauge 181.300(e) <ul style="list-style-type: none"> <li>• ≤ 65' &amp; &gt; 49 pax; or &gt; 65'</li> </ul> </li> <li>○ Location of controls and markings 181.300(e) <ul style="list-style-type: none"> <li>• <i>Main operating station and local</i> 181.310</li> </ul> </li> <li>○ Operation of fire pump from remote control(s) 182.710</li> <li>○ Materiel condition of system <ul style="list-style-type: none"> <li>• <i>No excessive leaking</i></li> </ul> </li> </ul>		07110/3
<p>□ Fire stations</p> <ul style="list-style-type: none"> <li>○ A fire hose with a nozzle must be attached to each fire hydrant at all time</li> <li>○ Number of hydrants 181.310(a) <ul style="list-style-type: none"> <li>• <i>A vsl that has a power driven fire pump must have a sufficient number of fire hydrants to reach any part of the vsl using a single length of hose.</i></li> </ul> </li> <li>○ Hoses meet required length, size, markings and quantity 181.310(a) 181.320(b)-(c) 181.15-10 CVC PL 18-04 <ul style="list-style-type: none"> <li>• <i>≤ 65' &amp; &gt; 49 pax; OR &gt; 65' Commercial line fire hose (UL 19), 1.5" in diameter &amp; 50' in length (vsIs with 1.5" hoses require a spanner wrench at each hydrant); Fittings of brass or other suitable (corrosion resistant) material (NFPA 1963); Nozzle must be</i></li> </ul> </li> </ul>	181.15-5	07110/3

## Section 8: Firefighting System (FF)

Action	Ref	Code
<p><i>approved under 46 CFR 162.027 or type recognized by Commandant.</i></p> <ul style="list-style-type: none"> <li>• <i>≤65' &amp; ≤49 pax - May have a garden hose ≥0.625" in diameter &amp; ≥25' but ≤50' with suitable construction; Nozzle must be corrosion resistant &amp; be able to switch from stream to spray.</i></li> </ul> <p>○ Operation of valves at fire stations</p> <ul style="list-style-type: none"> <li>• <i>Each hydrant must have a valve to allow the hose to be removed while F/M is under pressure.</i></li> </ul>	181.310(c)	07110/3
<p>◆ □ Fire Bucket</p> <ul style="list-style-type: none"> <li>○ Verify size – 2.5 Gallons</li> <li>○ Verify quantity – 3</li> <li>○ Verify lanyard – Up to OCMI</li> <li>○ Verify marking – “FIRE BUCKET” in <i>contrasting colors</i></li> </ul>	181.610	07110
<p>◆ □ Portable fire extinguishers</p> <ul style="list-style-type: none"> <li>○ Location and stowage <ul style="list-style-type: none"> <li>• <i>Clearly visible, readily accessible from space being protected to the satisfaction of the OCMI.</i></li> </ul> </li> <li>○ Servicing compliance <ul style="list-style-type: none"> <li>• <i>Annual service IAW NFPA 10</i></li> </ul> </li> <li>○ Condition of cylinder(s) and hose(s)</li> <li>○ Presence of required type &amp; quantity</li> </ul>	181.500 181.520 181.30 176.810 NFPA 10 Ch 4,7,8 NFPA 10 Ch 7 176.810 181.500(b) CVC PL 18-04	07110
<p>◆ □ Semi-portable firefighting equipment</p> <ul style="list-style-type: none"> <li>○ Location and stowage <ul style="list-style-type: none"> <li>• <i>Clearly visible, readily accessible from space being protected to the satisfaction of the OCMI.</i></li> </ul> </li> <li>○ Servicing compliance <ul style="list-style-type: none"> <li>• <i>Annual service IAW NFPA 10</i></li> </ul> </li> <li>○ Condition of cylinder(s) and hose(s)</li> <li>○ Presence of required type &amp; quantity</li> </ul>	181.500 181.520 181.30-12 176.810 NFPA 10 Ch 4,7,8 NFPA 10 Ch 7 176.810 181.500(c)&(d) CVC PL 18-04	07110
<p>□ Fire axe(s)</p> <ul style="list-style-type: none"> <li>• <i>&gt; 65' must have at least one fire axe located in or adjacent to the primary operating station</i></li> </ul>	181.600 181.35-1	07110
<p>◆ □ Fixed fire extinguishing system installed in the required spaces</p> <ul style="list-style-type: none"> <li>○ Fitted with an approved fixed gas system or alternative system</li> </ul>	181.400(a) 181.20-1 NVIC 3-95	07109

## Section 8: Firefighting System (FF)

Action	Ref	Code
<ul style="list-style-type: none"> <li><i>Propulsion machinery space</i></li> <li><i>A space containing an internal combustion engine &gt; 50 hp</i></li> <li><i>Space containing oil-fired boiler</i></li> <li><i>Space containing machinery powered by gasoline or other fuel with a flashpoint of 110°F or lower</i></li> <li><i>A paint locker</i></li> <li><i>A storeroom containing flammable liquids (including liquors of 80 proof or more, packed in individual containers ≥ 2.5 gal)</i></li> <li><i>Alternative system types &amp; exceptions to the requirements</i></li> <li><i>Annual service; Hydrostatic test every 5 years; Testing or renewal of flexible connections/hoses</i></li> </ul>	       181.115(b) 181.400 176.810(a)(5) 147.60 147.65	07109
<ul style="list-style-type: none"> <li>○ An enclosed vehicle space             <ul style="list-style-type: none"> <li><i>Must be fitted w/ an automatic sprinkler system IAW 76.25</i></li> </ul> </li> <li>○ Partially enclosed vehicle spaces must be fitted with a manual sprinkler system that meets the requirements of 46 CFR 76</li> </ul>	  181.405(d)  181.405(e)	
♦□ High pressure CO2 system(s) <ul style="list-style-type: none"> <li>○ Safety precautions are implemented prior to servicing system</li> <li>○ Servicing compliance</li> <li>○ Cylinders are weighed annually</li> <li>○ Cylinders are hydrostatically tested               <ul style="list-style-type: none"> <li><i>Fixed CO2 every 12 years – date stamped on bottle</i></li> </ul> </li> <li>○ Testing or renewal of flexible connections/hoses (46 CFR 147.65)</li> <li>○ Odorizing unit (installed or “altered” after 9 July, 2013)</li> <li>○ Lockout valve on spaces &gt;6000ft<sup>3</sup></li> <li>○ Stowage of cylinders</li> <li>○ Must have manual ventilation closures on protected space</li> <li>○ Materiel condition of system components               <ul style="list-style-type: none"> <li><i>Controls and valves must be located outside the protected space</i></li> <li><i>Must have remote controls in a break glass enclosure</i></li> <li><i>Must have manual controls at the</i></li> </ul> </li> </ul>	181.115(b) 181.410 181.20 MSM II/C.2.1.5 176.810(b)(2) 176.810(a) NVIC 6-72 CH 1 NVIC 3-95       181.410(f)(8) 181.410(f)(7) 181.20-30 181.20-35 181.410(a)(10)  181.20-15 181.410(c) 181.410(b)(4) 176.810(a) 181.410(b)(3)	07109

## Section 8: Firefighting System (FF)

Action	Ref	Code
<i>storage cylinders.</i>		07109
○ Piping and nozzles are clear	176.810(b)(2)	
○ Operational test of time delays, alarms and shutdowns		
○ Markings and warning signs are posted	185.612(b)	
○ Operating instructions are posted	185.612(a)	
◆ □ Pre-engineered fixed gas fire extinguishing systems ( <i>when applicable under – 46 CFR 181.400(b)(2))</i>	181.420(a)(1) 181.420(c)	07109 07124
○ Determine if approved		
• <i>Only one pre-engineered system per protected space.</i>		
○ Presence of manual actuation from outside of the space	181.420(a)(2)	
○ Presence of automatic actuator (heat detector)	181.420(a)(2)	
○ Witness system automatically shuts down power ventilation systems and engines that draw intake air from within protected space	181.420(a)(3)	07116
○ System is installed per manufacturer's instructions	181.420(a)(4) Manufacturer's Inst. 176.810(b)(2)	
○ Servicing requirements		
○ Operation of following from the operating station:	181.420(b)(1) 181.420(b)(2) 181.420(b)(3)	
• <i>Discharge indicating light</i>		
• <i>Discharge audible alarm</i>		
• <i>Means to reset automatically shut down ventilation systems and engines as required</i>		
◆ □ Fire and smoke detection systems		07106
○ Appropriate spaces are equipped		
• <i>Propulsion machinery space</i>	181.405	
• <i>Space containing internal combustion engine &gt; 50hp</i>	181.05-5 177.410(c)(3)	
• <i>Space containing oil-fired boiler</i>		
• <i>Space containing machinery powered by gasoline or other fuel with a flashpoint of 110°F or lower</i>		
• <i>Griddles, boilers &amp; deep fat fryers fitted with grease extraction hood (IAW 181.425)</i>		
• <i>An enclosed vehicle space must be fitted with a fire detection and alarm system of an approved type (installed IAW 46 CFR 76.27 &amp; must be fitted</i>		

## Section 8: Firefighting System (FF)

Action	Ref	Code
<ul style="list-style-type: none"> <li>with a sprinkler system IAW 76.25 – Chapter 25 NFPA 13)</li> <li>Partially enclosed vehicle spaces must be fitted with a manual sprinkler system that meets the requirements of 46 CFR 76.</li> <li>Witness system test</li> <li>Operation of control unit's visual and audible alarms (if applicable)</li> <li>Zoning (if present)</li> <li>Location and spacing of detectors</li> <li>Independent module smoke detection system(s) (Overnight accommodation spaces)</li> </ul>	176.810(a)(7) 181.405(a) 76.27-5 76.27-10 181.405 181.450	07106
<input type="checkbox"/> Structural fire protection on fiberglass hull <ul style="list-style-type: none"> <li>Verify fire retardant resin (when applicable) <ul style="list-style-type: none"> <li>Hull, bulkheads, decks, deckhouse, or superstructure of a vsl is partially or completely constructed of a composite material including FRP</li> </ul> </li> <li>Requirements for general purpose resin are met if used</li> </ul>	177.410(b) 181.115(b) 177.10-5 177.410(c)	07101/ 03/05

## Section 9: Machinery & Auxiliary Machinery (MI)

Action	Ref	Code
□ Steering gear		
○ Electrical, mechanical, and hydraulic connections and linkages of main and auxiliary (emergency) systems	176.814 182.30-1 182.610	02105
♦ ○ Emergency steering required unless:	MSM II/C.4.B 182.620	04106
• <i>Main steering and controls are provided in duplicate;</i>		
• <i>Multiple screw propulsion with independent pilothouse control for each screw and capable of being steered using pilothouse control;</i>		
• <i>No regular rudder is fitted &amp; steering action is obtained by a change of setting of the propelling unit; or</i>		
• <i>Where a rudder &amp; hand tiller are the main steering gear</i>		
○ Operation of communications between bridge and emergency steering station(s)	184.602(b) 184.115(a)	
• <i>Vsl equipped with aux means of steering must have a fixed means of two-way comms from the operating station to the local control of the aux steering control.</i>		
• <i>Hand held portable radios may be accepted as satisfying this requirement</i>	185.320 182.610(b) 182.610(c)	
○ Witness operational test of systems, in all modes of operation from emergency steering station(s)	182.610(f) 182.620	
• <i>Rudder stops, function of limit switches and timing requirements for rudder movements.</i>		
○ Accuracy of rudder angle indicator ( <i>when fitted with power driven main steering gear</i> )	182.610(f)(2)	
○ Steering control transfer procedures ( <i>&gt;65' with power driven main steering gear</i> )	182.610(g)(2)	
○ Witness operational test of auxiliary (emergency) steering arrangement (when fitted with emergency steering)	182.620(a) 182.620(b)	
• <i>15 degrees from one side to 15 degrees to the other in ≤ 60 sec with vsl at ½ max speed or 7 kts</i>	182.620(a)(2)	04106
□ Fuel oil service system		13199
○ Installation, arrangement & condition of piping, manifolds & filters	182.435 182.440 182.455	
• <i>All independent fuel tanks are electrically bonded to a common ground</i>	182.20-22 182.20-25	
• <i>Means to accurately determine amount of fuel in each tank</i>		
• <i>Each tank is fitted with an appropriately</i>	182.450	

## Section 9: Machinery & Auxiliary Machinery (MI)

Action	Ref	Code
<i>sized vent pipe connected to its highest point</i>	182.15-35 182.20-35	13199
<ul style="list-style-type: none"> <li>Approved piping (material &amp; size) is used in the fuel oil service system</li> </ul>	182.445(a)	
<ul style="list-style-type: none"> <li>Shutoff valves fitted at tank connection (remote emergency fuel shutoff valve; if located in machinery space, ≤ 12" w/in the space and shielded from flames) &amp; engine end of fuel line</li> </ul>	182.15-40 182.20-40 182.455(b)(4) 182.15-40(b)(3) 182.20-40(b)(3)	
<ul style="list-style-type: none"> <li>Suitable metal marine type strainer fitted in the engine compartment. Drip pan fitted w/ flame screen must be installed under gasoline strainers.</li> </ul>		
○ Portable fuel system	182.455(b)(6)	
<ul style="list-style-type: none"> <li>Only permitted for portable dewatering pumps or outboard motor installations</li> </ul>	182.15-40(b)(5) 182.20-40(b)(5)	
○ Witness tests of remote shutdown(s)	182.458	
○ Nonmetallic flexible hoses and fittings	ABYC H-25	
<ul style="list-style-type: none"> <li>Double hose clamps, lengths permitted, approved standards</li> </ul>	182.455(b)(4) 182.15-40(b)(3) 182.20-40(b)(5) 182.720(e) 182.410(d) 182.40-5 182.15-40(a) 182.20-40(a)	
□ Main propulsion system(s)		
○ Condition, installation and arrangements of system components	182.200 182.220	13101
<ul style="list-style-type: none"> <li>Steam &amp; electrical propulsion must meet requirements of Subchapter F &amp; Subchapter J</li> </ul>	182.15-1 182.20-1	
<ul style="list-style-type: none"> <li>Water cooled or meets exceptions for air cooling</li> </ul>	182.310 182.420	
<ul style="list-style-type: none"> <li>All engines must have at least 2 means of stopping the engine (the F/O shutoff at the engine will satisfy one means)</li> </ul>	182.15-10 182.20-10	
<ul style="list-style-type: none"> <li>Reliable means of shutting down a propulsion engine at the main pilothouse control station</li> </ul>	182.200(b)	13103/8
○ Foundations for structural integrity	184.620 175.10-29	
○ Installation of protective covers or guards over exposed gears, belts or other rotating machinery	MSM II/B.1.F 176.402(c)(1)	
○ System hull penetrations for structural integrity		09233
<ul style="list-style-type: none"> <li>Keel coolers are fitted with a shutoff valve where the cooler penetrates the hull (not</li> </ul>	179.350	

## Section 9: Machinery & Auxiliary Machinery (MI)

Action	Ref	Code
<ul style="list-style-type: none"> <li><i>required for integral coolers)</i></li> <li><i>All piping outside of shutoff valve is at least schedule 80, any flexible hoses used at machinery connections is approved and double hose clamped</i></li> </ul>		03199
<ul style="list-style-type: none"> <li>○ Operational test of main propulsion machinery <ul style="list-style-type: none"> <li><i>Proper function of following gauges:</i></li> <li><i>Engine RPM</i></li> <li><i>Jacket water temp</i></li> <li><i>Lube oil pressure gauges at the operation station) RPM not required for Old T</i></li> </ul> </li> </ul>	182.422 182.15-10 182.20-10  176.804(a) 182.410(b) 182.20-5	13108
<input type="checkbox"/> Novel systems should be inspected to the Design Basis Agreement approved by the USCG prior to installation of the novel system.	175.540	13199
<input type="checkbox"/> Unfired pressure vessels (UPVs) <ul style="list-style-type: none"> <li>○ Data plate(s) are legible</li> <li>○ Determine if UPV is exempt from inspection</li> <li>○ External exam, internal exam and/or hydrostatic test needs</li> <li>○ External (5 yrs)</li> <li>○ Internal (5 yrs when accessible)</li> <li>○ Witness hydrostatic test (if needed) (1.5 MAWP)</li> <li>○ Installation &amp; operation of pressure gauges</li> <li>○ Installation &amp; operation of pressure-relieving devices <ul style="list-style-type: none"> <li><i>Twice in 5 yrs, no more than 3 yrs between tests; relieves at a pressure ≤ 10% above or below the valve's marked pressure</i></li> </ul> </li> <li>○ Pressure-relieving device setting does not exceed the UPV's MAWP &amp; the device does not relieve at a pressure greater than the MAWP</li> </ul>	54.10-20 182.330 54.01-15  176.812 61.10-5(b) 61.10-5(d)&(e) 61.10-5(b)(1) 61.10-5(b)(2) 54.01-35 MSM II/ B.1.O.4.a 61.10-5(d) 61.10-5(e)(4) MSM II/ B.1.O.4.b 54.15-5(f)	13199
<input type="checkbox"/> Potable water system (when fitted) <ul style="list-style-type: none"> <li>○ Tank vents are fitted with insect screens</li> <li>○ Operation of water pump(s) and pressurization system</li> <li>○ Pressurization system is fitted with safety relief valve(s)</li> </ul>	21-1250.82(c) MSM II/A.C.2.a 21-1250.84(a) 54.01-15(a)  54.01-15(a)	09130

## Section 9: Machinery & Auxiliary Machinery (MI)

Action	Ref	Code
○ Installation and arrangement of piping and valves	21-1250.82	09130
○ Water heaters comply with Parts 53 & 63 EXCEPT:	182.320	
• Electric water heaters rated at not more than 100 psi and 250 °F are acceptable if:		
• Capacity ≤ 120 gallons;		
• Heat input ≤ 200,000 Btu/hour;		
• UL listed (174 or 1453); AND		
• Protected by pressure-temperature relief device	182.320(c)	
○ Water heater must be installed & secured from rolling by straps or other devices		
◆ □ Bilge system		13104
○ Location and operation of pump(s) IAW Table 182.520(a)	176.804(h) 182.115(a)	13104
• If there is a portable hand bilge pump must be:	182.520	
• Capable of pumping water, but not necessarily simultaneously, from all watertight compartments; and	182.25-10	
• Provided with suitable suction hose capable of reaching the bilge of each watertight compartment and discharging overboard		
○ Manifolds, valves and piping		
• ≤ 65ft must have piping ≥ 1in	182.510	
• > 65ft must have piping ≥ 1.5in	182.25-5	
• Bilge suction will be fitted with a suitable strainer with an open area ≥ 3Xs the area of the bilge pipe	182.40-5(b)	
○ Vessels ≥ 26ft in length have a visual & audible alarm at the operating station to indicate a high water level in each of the normally unmanned spaces	182.530	
○ Vessels ≥ 26ft in length has been provided with individual bilge lines and bilge suctions for each watertight compartment with the exception of the space fwd of the collision bulkhead when the arrangement of the vessel is such that ordinary leakage may be removed from this compartment by the use of a hand portable bilge pump or other equipment, & such equipment is provided	182.510(a) 182.25-5(a)	
○ Witness bilge system operational test		
○ Pollution placard is posted (when applicable)	176.804(h) 33-155.450	14502

## Section 9: Machinery & Auxiliary Machinery (MI)

Action	Ref	Code
<input type="checkbox"/> Exhaust system(s) (wet & dry)		13199
<input type="radio"/> Condition	176.804(c)	
• <i>As an alternative vessels may comply with ABYC P-1</i>	182.425 182.430	
<input type="radio"/> Dry Exhaust systems	177.405(b)	
• <i>Exhaust pipes are clear of &amp; suitably insulated from combustible materials and suitably insulated to prevent injuries</i>	177.10-5(b) 182.15-15 182.15-20 182.20-15 182.20-20	
• <i>Exhaust pipes installed on wood and FRP boats are installed IAW ABYC P-1 (designed to arrest sparks; metallic connections are flanged, threaded or welded; and flexible sections are seamless stainless steel)</i>	177.970 177.35-15 182.425(c)	
• <i>Horizontal dry exhaust pipes:</i> <i>-Do not pass through living or berthing areas</i> <i>-Terminate above the deepest load waterline</i> <i>-Are arranged to prevent entry of cold water from rough or boarding seas</i> <i>-Are constructed of corrosion-resisting material at the hull penetration</i>	182.425(a)(2) 182.15-15	
<input type="radio"/> Exhaust systems cooled by water	182.425(b)	13199
• <i>Are provided with cooling water from engine cooling system of from a separate engine driven pump</i>	182.15-15	
• <i>Fitted so cooling water is injected into the exhaust system as close as possible to the engine exhaust manifold and so water passes through the entire length of the exhaust pipe</i>	182.430(g) 182.15-15(b)(4)	
• <i>Fitted with insulation or water jacketed between the exhaust manifold and the point of cooling water injection and if a vertical exhaust pipe, to ensure no water is mixed with exhaust gasses</i>	182.425(b)(5) 182.15-15(b)(5)	
• <i>Provided a suitable warning device, visual or audible, at the operation station to indicate any reduction in water flow when cooling water provided from source other than engine cooling system</i>	182.425(b)(6) 182.15-15(b)(6)	
• <i>Provided with a suitable strainer in the intake line.</i>		
<input type="checkbox"/> Auxiliary boiler(s) (when present)	54.10-20	13199
<input type="radio"/> Maximum allowable working pressure (MAWP)	176.812(b) 61.05-10 Table	
<input type="radio"/> Inspect internally	61.05-15(a)-(d)	
<input type="radio"/> Mounts	61.05-10 Table	

## Section 9: Machinery & Auxiliary Machinery (MI)

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ Columns, gauge glasses and gauge cocks</li> <li>○ Steam gauge</li> </ul>	61.05-15(e)	13199
<ul style="list-style-type: none"> <li>○ Safety valves</li> <li>○ Operation of safety relief valves                             <ul style="list-style-type: none"> <li>• Twice in 5 yrs, no more than 3 yrs between tests; relieves at a pressure <math>\leq</math> 10% above or below the valve's marked pressure</li> </ul> </li> <li>○ Pressure-relieving device setting does not exceed the MAWP &amp; the device does not relieve at a pressure greater than the MAWP</li> </ul>	61.05-15(f) 61.05-10 Table 176.704 61.05-10 Table 61.05-20 54.15-10	

## Section 10: Electrical Systems Inspection (ES)

Action	Ref	Code
<input type="checkbox"/> Alternative Standards <ul style="list-style-type: none"> <li>○ Vessels (other than high speed craft) ≤ 65ft with ≤ 12 PAX may comply with 183.420 and ABYC Projects: E-8, E-9, A-16 instead of Part 183 in its entirety</li> <li>○ Systems &lt; 50V may meet wiring requirements of 33 CFR 183.430 instead of 46 CFR 183.340; &lt; 50V follow 183.05; &gt;50V follow 183.10</li> </ul>	183.130 183.01-15  183.05-1	02108
<input type="checkbox"/> Switchboard(s) & distribution panel(s) <ul style="list-style-type: none"> <li>○ Location, condition and installation <ul style="list-style-type: none"> <li>• Dry, adequately ventilated</li> <li>• Totally enclosed</li> <li>• With drip shield</li> <li>• Dead front type</li> </ul> </li> <li>○ Non-conductive handrail &amp; matting or grating on deck</li> <li>○ Blanks installed (if needed)</li> <li>○ Working area around main switchboards</li> <li>○ Sized correctly</li> <li>○ Overcurrent protection</li> <li>○ Circuit directory/labeling (distribution panels)</li> <li>○ Shore connection ≥ 50 V (box/receptacle shall be permanently installed)</li> <li>○ Multiple generator interlock (switchboard)</li> </ul>	183.330(a)-(e) 183.330(i) 183.10-10  183.330(f) 183.10-15(b)  183.200(b) 183.01-15(a) 183.330(e) 183.10-15(c) 183.330(j) 111.30-19(a)  183.380 183.10-35&40 183.220(d) 183.390 183.10-50 183.322	02108
<input type="checkbox"/> Main service generator(s) & prime mover(s) <ul style="list-style-type: none"> <li>○ Power source(s) requirements <ul style="list-style-type: none"> <li>• Must have two sources of power for Vital systems IAW 182.710</li> </ul> </li> <li>○ Condition of generator(s) &amp; prime mover(s)' components <ul style="list-style-type: none"> <li>• Accessible as possible</li> <li>• Adequately ventilated</li> <li>• Dry as practicable</li> <li>• Mounted above bilges</li> <li>• Drip proof</li> </ul> </li> <li>○ Installation of protective covers or guards</li> <li>○ Generator(s) nameplates are attached</li> <li>○ Required gauges <ul style="list-style-type: none"> <li>• If ≥ 50 Volts, voltmeter &amp; ammeter, for AC generators way to measure</li> </ul> </li> </ul>	183.310(a)  183.320 183.322 183.324 183.10-5  177.960 177.35-15 183.320(d) 183.320(c) 183.10-5	13102      13102 13102

## Section 10: Electrical Systems Inspection (ES)

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ Protected by overcurrent device</li> <li>○ Reverse Power Relay (for parallel ops)</li> </ul>	<p><i>frequency must also be provided</i></p> <p>183.320(f) 183.05-10(d) 183.322</p>	13102
<div>□ Lighting systems</div> <ul style="list-style-type: none"> <li>○ Light fixtures <ul style="list-style-type: none"> <li>• <i>Globe, lens, or diffuser must have a guard or be made of high strength material except:</i></li> <li>• <i>In accommodation space, radio room, galley or similar space</i></li> <li>• <i>Comply with 183.200, UL 595 &amp; series 1570</i></li> </ul> </li> <li>○ Presence of portable lights <ul style="list-style-type: none"> <li>• <i>At least 2 onboard; flashlights count</i></li> <li>• <i>Located at operating station &amp; at access to propulsion machinery space</i></li> </ul> </li> <li>○ Emergency lighting operational test <ul style="list-style-type: none"> <li>• <i>Adequate fitted along line of escape to main deck from pax &amp; crew accommodation spaces located below main deck</i></li> <li>• <i>Automatically actuate upon failure of main lighting system</i></li> <li>• <i>If not equipped with single source of emergency power for emergency lighting, must have individual battery powered lights that:</i></li> <li>• <i>Automatically actuate upon loss of normal power</i></li> <li>• <i>Are not readily portable</i></li> <li>• <i>Are connected to an automatic battery charger; and</i></li> <li>• <i>Have sufficient capacity for ≥ 2 hours of continuous operation</i></li> </ul> </li> <li>○ Overcurrent protection</li> </ul>	<p>183.410 183.10-20(l)</p> <p>183.430 UL1570</p> <p>183.432 184.30-5</p> <p>183.380 UL 489</p>	<p>09203</p> <p>04103</p> <p>04103</p> <p>09209</p>
<div>□ Battery installation</div> <ul style="list-style-type: none"> <li>○ Battery category <ul style="list-style-type: none"> <li>• <i>Large (Charger output &gt; 2 kw)</i></li> <li>• <i>Small (Charger output ≤ 2 kw)</i></li> </ul> </li> <li>○ Ventilation <ul style="list-style-type: none"> <li>• <i>Large (provided IAW 111.15-10)</i></li> <li>• <i>Small (located in a well ventilated space)</i></li> </ul> </li> <li>○ Properly installed and secured <ul style="list-style-type: none"> <li>• <i>Located as high above bilge as practicable &amp; secured</i></li> </ul> </li> </ul>	<p>183.352 183.05-20</p> <p>183.354 111.15-10</p> <p>183.350(b) 183.354</p>	<p>02108</p> <p>02108</p>

## Section 10: Electrical Systems Inspection (ES)

Action	Ref	Code
<ul style="list-style-type: none"> <li>• <i>Large (in a locker, room or enclosed box solely dedicated to the storage of batteries; electrical equipment located within enclosure must be approved for Class I, Div I space)</i></li> <li>• <i>Small (Protected from falling objects; must not be in a closet, storeroom or similar space)</i></li> </ul>		02108
<ul style="list-style-type: none"> <li>○ Space for maintenance and removal</li> <li>○ Ammeter connected in the charging circuit</li> <li>○ Proper ventilation of charger                             <ul style="list-style-type: none"> <li>• <i>When charging batteries, must have natural or induced ventilation to disperse gasses</i></li> </ul> </li> <li>○ Connections to battery terminals are permanent type connectors</li> </ul>	<p>183.350(c)</p> <p>183.350(f)</p> <p>183.350(a)</p> <p>183.350(d)</p>	
<input type="checkbox"/> Lithium Ion (Li-ion) battery installations <ul style="list-style-type: none"> <li>○ Li-ion battery installations should be assessed using the CG-ENG Policy Letter 02-19 "Design guidance for Li-ion battery installations onboard commercial vessels" or the submitted, USCG approved plan for initial installation.</li> </ul>	CG-ENG PL 02-19	02108
<input type="checkbox"/> Electrical cable & fixtures <ul style="list-style-type: none"> <li>○ Supports for vertical &amp; horizontal installations (metal supports spaced no more than 24in and in such a manner as to avoid chafing and other damage)                             <ul style="list-style-type: none"> <li>• <i>Plastic tie wraps may be used as a means of support on vsls ≤ 65'</i></li> </ul> </li> <li>○ No sharp radius of bends</li> <li>○ No hazardous conditions exist (for hazardous area installations see next task)                             <ul style="list-style-type: none"> <li>• <i>Protect pax, crew, other persons and the vessel from electrical hazards including fire caused by or originating in electrical equipment, and electrical shock</i></li> <li>• <i>Protection from wet and corrosive environments</i></li> </ul> </li> <li>○ Cable size and condition                             <ul style="list-style-type: none"> <li>• <i>Individual wires, rather than cable are used in systems &gt; 50V, the wire must be in conduit</i></li> </ul> </li> </ul>	<p>183.05-45&amp;50</p> <p>183.10-20</p> <p>183.340(b)(4)</p> <p>183.340(b)(5)</p> <p>183.200-220</p> <p>183.340</p>	<p>02108</p> <p>09109</p> <p>02108</p>

## Section 10: Electrical Systems Inspection (ES)

Action	Ref	Code
<ul style="list-style-type: none"> <li>• <i>All cable &amp; wire must have stranded copper conductors with sufficient current carrying capacity for the circuit in which they are used</i></li> <li>• <i>Conductors in power &amp; lighting circuits must be ≥ 14 AWG</i></li> <li>• <i>Conductors in control &amp; indicator circuits must be ≥ 22 AWG</i></li> </ul>		02108
<ul style="list-style-type: none"> <li>○ Condition of outlets</li> <li>○ Connection types</li> </ul>	183.340(g) 183.340(h)	
<input type="checkbox"/> Components installed in designated hazardous areas		02108
<ul style="list-style-type: none"> <li>○ Hazardous area(s) <ul style="list-style-type: none"> <li>• <i>Spaces containing machinery powered by, or fuel tanks for, gasoline or other fuels having a flashpoint of ≤ 110 °F</i></li> <li>• <i>Lockers used to store paint, oil, turpentine, or other flammable liquids</i></li> </ul> </li> </ul>	183.530(a)	
Electrical equipment for hazardous area(s) <ul style="list-style-type: none"> <li>• <i>Electrical equipment must be explosion proof or be part of an intrinsically safe system IAW requirements of 111.105</i></li> </ul>	183.530(b)  183.530(c)	
<ul style="list-style-type: none"> <li>○ Integrity of equipment</li> </ul>	111.105	

## Section 11: Structural/Watertight Integrity (SW)

Action	Ref	Code
◆ □ Hatches and Class-1 watertight doors		03104/10
○ Knife edges	171.124 179.330(c)	03107
○ Gasket material		
○ Watertight integrity between gasket and knife edge	MSM II/B.1.E.5	
○ Condition and operation of hinges and dogging devices	170.270	
○ Operation of Class-1 door's quick- acting closing device	MSM II/B.1.E.5	
○ Operation of indicator lights at the control station	179.330(b)	
○ Markings	185.610	
□ Inspect Class 2 & 3 watertight doors		03107
○ Operation of local controls	171.124 179.330(c) 170.270(c)(2)	
○ Operation of remote controls	ASTM F1197/7.1	
○ Replaceable interface between door and frame assembly	ASTM F1197/7.1 170.270(c)(1)	
○ Operation of alarms	ASTM F1196/6.3	
○ Closing times are in compliance	ASTM F1197/11.5	03107
○ Markings	ASTM F1197/11.2 ASTM F1197/11.4 185.610	
○ Watertight integrity	ASTM F1196/11.1	
○ Doors operate under reserve power	ASTM F1196/S4 ASTM F1196/S1 170.270(c)(3) ASTM F1197/S3	
□ Watertight bulkhead penetrations		03199
○ Locations	179.320(c)	03199
• As high up and inboard as possible, number of penetrations should be minimized.	171.114 171.119 182.720(d)(1)	
○ Watertight	MSM II/B.1.B.5	
○ Free of sluice valves	179.320(d)	
□ Hull structure		02199
○ Damage, wastage & fractures	177.300	02106
○ No unauthorized repairs	MSM II/B.1.B.1 176.700	02106

## Section 12: Pollution Prevention Inspection (PP)

Action	Ref	Code
<input type="checkbox"/> Sewage system <ul style="list-style-type: none"> <li>○ Presence of manufacturer's instructions</li> <li>○ Operation</li> <li>○ Capacity</li> <li>○ Piping and wiring</li> <li>○ Marine Sanitation Device (MSD) approval &amp; labeled Type I, II, or III</li> <li>○ Instructions &amp; warning placard posted</li> <li>○ Overboard discharge valve is closed and secure <ul style="list-style-type: none"> <li>• <i>Methods of locking &amp; securing and applicability of locking &amp; securing in 33 CFR 159.7(b) &amp; (c)</i></li> </ul> </li> </ul>	33-159.57 33-159.57 184.704 33-159.57(b)(8) 33-159.97 33-159.7 MSM II/B.6.F.4 33-159.59 33-159.7(b) 33-159.7(c)	14402
<input type="checkbox"/> Garbage handling (MARPOL Annex V) survey (when applicable) <ul style="list-style-type: none"> <li>○ Plan compliance</li> <li>○ Handling of plastics</li> <li>○ Placards posted (&gt;26') <ul style="list-style-type: none"> <li>• <i>Prominent locations</i></li> <li>• <i>Readable by crew &amp; pax</i></li> <li>• <i>Durable, 5in x 8in</i></li> </ul> </li> </ul>	184.702 33-151.51&.57 MARPOL V/9.2 33-151.55 MARPOL V/9.3(b) 33-151.59 MARPOL V/9.1(a)	14503 01320 14502
<input type="checkbox"/> Oil pollution prevention <ul style="list-style-type: none"> <li>○ Oil pollution placard posted (&gt;26') <ul style="list-style-type: none"> <li>• <i>In every machinery space or bilge/ballast pump stations</i></li> <li>• <i>Durable, 5" x 8"</i></li> </ul> </li> <li>◆ ○ Bilges are free of debris &amp; excessive amounts of oil</li> </ul>	33-155.450 176.830	14502 07126
<input type="checkbox"/> Vessel General Permit (VGP) compliance verification (when applicable) <ul style="list-style-type: none"> <li>○ Discharges are in compliance with VGP</li> <li>○ Log entries</li> </ul>	CG-543 PL 11-01 FWPCA Sect. 402 VGP 1.5.1.1 CG-543 PL 11-01 VGP 2.2.3.2 VGP 4.3 VGP 4.1.1.1 VGP 4.2	99103 99103

## Section 13: Topside Equipment Inspection (TE)

Action	Ref	Code
<div>◆ □ Freeing ports and scuppers</div> <div> <div>○ No modifications</div> <div>○ Unobstructed</div> <div>○ Free operation of any flowback device (if applicable)</div> </div>	<div>171 Sbpt H</div> <div>176.700</div> <div>178 Sbpt D</div> <div>178.230</div> <div>Stability Letter</div>	03112/3
<div>□ Ground tackle, mooring lines &amp; related equipment</div> <div> <div>○ Size of anchor(s) required</div> <div>○ Operation of capstan</div> <div>○ Condition of anchoring equipment</div> <div>○ Ability to safely anchor</div> <div>○ Condition of bits, cleats, fairleads &amp; winches</div> <div>○ Mooring lines/wires are adequately sized and in working condition</div> </div>	<div>184.300</div> <div>184.10-1</div>	<div>09228</div> <div>09299</div>
<div>◆ □ Port lights, dead covers &amp; natural vent openings</div> <div> <div>○ Covers are readily available &amp; operational</div> <div>○ Closing devices have proper fit &amp; seal (<i>dogs, rims, seats, hinges and lugs</i>)</div> <div>○ Port lights &amp; dead covers have proper fit &amp; seal</div> </div>	<div>171.119</div> <div>182.460(l)</div> <div>182.465(h)</div> <div>179.350(a)</div> <div>179.350(b)</div>	03106/8
<div>□ Fuel tank venting</div> <div> <div>○ Condition and location</div> <div>○ Installation and condition of flame screen(s)</div> <div>○ Installation of vent piping</div> <div>○ Vent size</div> <div>○ Condition of flexible vent pipe sections</div> </div>	<div>182.20-35</div> <div>182.450(d)</div> <div>182.450(f)</div> <div>ABYC</div> <div>H-33 &amp; H-24</div> <div>182.450(e)</div> <div>182.450(h)</div> <div>182.450(b)&amp;(c)</div> <div>182.450(g)</div>	<div>02107</div> <div>02107</div>
<div>□ Rails and guards</div> <div> <div>○ Rail heights &amp; courses (<i>39.5", 200lb point load, 50lb uniform load minimum</i>)</div> <div>○ Storm rails</div> <div>○ Guards for vehicles</div> </div>	<div>177.900</div> <div>177.35-1</div> <div>177.920</div> <div>177.35-5</div> <div>177.940</div> <div>177.35-10</div>	03103

## ♦♦Sections 14-18: Human Factors & Safety Culture / Drills

*These questions are a sample of potential questions that a marine inspection can use to determine the efficacy of a safety culture aboard a vessel. Vessel crews that are unable to provide satisfactory answers may be considered for a flag state detention.*

- ☐ Check general condition of vessel & hazard mitigation [e.g. extension cords, tripping, clear escape paths].
- ☐ How do you check the weather prior to getting underway?
- ☐ What are your procedures if you suspect inclement weather while you are underway?
- ☐ Do you have procedures for charging non-permanent lithium ion batteries?
- ☐ What is your response to marine casualties?
- ☐ What procedures for [vessel specific ops, e.g. parasail, diving]?
- ☐ What is the process for making alterations to the vessel?
- ☐ Does the vessel create voyage plans?
  - ☐ Who creates them and what are the criteria?
  - ☐ Who monitors the voyage plans and accounts for the vessel(s) underway?
  - ☐ Are your voyage plans verified or reviewed by anyone?
- ☐ How often is lifesaving equipment checked by the crew (rafts, lifejackets, provisions, instructions, Life ring buoys, etc.)?
  - ☐ How are these inspection/checks completed and by whom?
  - ☐ Is there any training for the company's inspector?
  - ☐ Is there any training for operators/crewmembers to spot check equipment?
  - ☐ Are they documented or logged?
  - ☐ How often and by whom are inventories conducted on lifesaving equipment?
  - ☐ Are the documented or logged?
  - ☐ What happens when a piece of lifesaving equipment is found to be unsafe/unusable?
- ☐ What are your procedures if you receive an alarm [smoke, machinery, hi-level, etc]?
- ☐ How often are your alarms tested?
- ☐ How do you track preventative maintenance for the vessel navigation systems?
  - ☐ Who conducts the maintenance?
  - ☐ How is this maintenance shared with the vessel operators and crews?
- ☐ What is the process of reporting/discarding/replacing faulty lifesaving system parts?
- ☐ How do you track preventative maintenance for the lifesaving equipment and systems?
  - ☐ Who conducts the maintenance?
  - ☐ Is it documented or logged?
  - ☐ Is this accessible to all crew?
- ☐ How do you track preventative maintenance for the vessel engineering/machinery systems?

## ♦♦Sections 14-18: Human Factors & Safety Culture / Drills

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- Who conducts the maintenance?
  - Does it align with the manufacturer's manuals?
  - Who reviews the manuals and develops the maintenance scheme?
  - Is it documented or logged?
- How often is the bilge system tested?
  - Who conducts the tests?
  - What procedure is used/ how are the tests conducted?
  - How do you verify the tests have been satisfactorily completed?
  - Is it logged/documentated? If so, where?
- How do you track preventative maintenance for the vessel firefighting systems?
- What is the process for ordering CG approved equipment such as lifejackets, flares or fire extinguishers? Are you aware of the CG MIX database which provides information on all COMDT approved lifesaving and fire protection equipment?
- What is the process for replacing appliances or furniture?
- Does the vessel anchor?
  - What is the process for doing so?
  - Is it documented?
- What procedures and watches are followed for overnight voyages?
- What is the limits of your stability letter and route?
- What is the procedural response if any system or equipment/material condition failures are found?
- What is your response to any injuries that occur onboard?
  - Are these injuries documented?
  - Are these injuries investigated or is any effort conducted to establish the root cause?
  - Are the results appropriately taken into consideration to prevent future injuries?
- What is your response to marine casualties such as fires, flooding, collisions, allisions or groundings?
  - Are these casualties documented?
  - Are these casualties investigated or is any effort conducted to establish the root cause?
  - Are the results appropriately taken into consideration to prevent future casualties?
- What is your response to loss of steering or a loss of propulsion?
  - Are these losses documented?
  - Are these losses investigated or is any effort conducted to establish the root cause?

**Section 15: Emergency Drills General**

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- ☐ How does the crew conduct crowd control during an emergency?
- ☐ How are crew members selected/ how is the crew rotation determined?
- ☐ What training is required for crew members and how often are emergency drills conducted for crew members on each vessel?
- ☐ Are all of your crew members required to complete drills?
  - With what frequency?
- ☐ How do you perform your drills and how are they evaluated?
- ☐ How are they tracked and how do you ensure each crew member has completed all of the required drills within the required time frames?
- ☐ What are the responsibilities for each crew member during emergency situations?
  - Is that posted or documented anywhere?
- ☐ What are the responsibilities for each crew member for the safe operation of the vessel?
- ☐ How often are your emergency systems (emergency lighting, emergency alarms, public address system, etc.) operated and inspected for proper function?
- ☐ How does the crew respond to passenger medical emergencies?
  - Do certain crew members have specific responsibilities?
  - Is this response documented anywhere?
- ☐ What are the training requirements/procedures for new crew members?
- ☐ If there is an emergency while underway, who do you communicate that to?
  - How do you communicate that to them?
- ☐ Please discuss your safety brief you give to passengers when they arrive onboard.
- ☐ How do you check the weather prior to getting underway?
- ☐ What are your procedures if you suspect inclement weather while you are underway?
- ☐ How do you deal with unexpected storms?

## Section 16: Fire Drill

- |  |            |       |
|--|------------|-------|
| <input type="checkbox"/> Evaluate Fire Drill   | 185.524    | 04109 |
| <input type="checkbox"/> Witness fire drill  | 176.810(d) | 07125 |
| <input type="checkbox"/> Verify crew's ability to organize                                       | MSM        | 04118 |
| <input type="checkbox"/> Verify crew's familiarity with their duties                             | II/B.2.D.3 |       |
| <input type="checkbox"/> Verify crew's familiarity with use of equipment                         |            |       |
| <input type="checkbox"/> Verify method of summoning passengers to muster or embarkation stations |            |       |
| <input type="checkbox"/> Verify effective communication with master                              |            |       |
- 
- ☐ Did crew member sound alarm?
  - ☐ Did crew member attempt initial action?
  - ☐ Did the Master turn the vessel into the wind, slow down, etc, and make announcements to crew/pax and make the call to local CG or vessels in surrounding area?
  - ☐ Did Master control situation from helm, make announcements and communicate effectively with the crew?
  - ☐ Did crew members take control of the situation and direct pax as appropriate?
  - ☐ Did crew members communicate effectively with Master, other crew members and pax?
  - ☐ Was a charged fire hose or fire bucket provided?
  - ☐ Did crew member effectively fight fire with portable fire extinguishers, close off ventilation closures, secure power and fuel?
  - ☐ Did the crew know how to operate and deploy the Fixed Fire Extinguishing System and /or fire pump (if available)?
  - ☐ Did the crew understand which agent they were using?
  - ☐ Did the drill follow the SOLAS training and operations manual, the emergency instructions, and/or placards posted?
  - ☐ What are your procedures if you receive a smoke detection alarm?
  - ☐ How often do you charge a fire hose during drills so crew can become familiar with handling the hose? (If applicable)
  - ☐ How often are fire drills completed?
    - ☐ Do you discuss topics with the crew including fire boundaries, containing the fire and activation of suppression systems?
  - ☐ How does the crew conduct crowd control during an emergency?
    - ☐ Which crew member is responsible for this in each location?

### Section 17: Man Overboard Drill

<input type="checkbox"/>	Evaluate Man Overboard Drill	176.808(g)	CG004
<input type="checkbox"/>	○ Verify ability to recover a helpless person	185.520 180.210	
<input type="checkbox"/>	○ Verify crew's ability to organize	185.700	
<input type="checkbox"/>	○ Verify crew's familiarity with their duties	180.10-35	
<input type="checkbox"/>	○ Witness launching of rescue boat (when applicable)		
<input type="checkbox"/>	○ Evaluate crew's proficiency in handling and maneuvering the rescue boat in the water (when applicable)		
<input type="checkbox"/>	○ Verify operational readiness and condition of rescue platform (when applicable)		
<input type="checkbox"/>	Did the crew throw Oscar or fender overboard?		
<input type="checkbox"/>	Did the crewmember call out "man overboard" and which side of the vessel the victim fell over and begin pointing to the victim?		
<input type="checkbox"/>	Did crewmember throw ring life buoy or PFD, fender or other flotsam overboard?		
<input type="checkbox"/>	If at night, was the waterlight attached to the ring life buoy and was it deployed immediately?		
<input type="checkbox"/>	Did the Master approach the victim with a plan and was he successful?		
<input type="checkbox"/>	Did Master sound danger signal, mark position, course and speed, announce situation to crew/pax and make the call to local CG or vessels in surrounding area?		
<input type="checkbox"/>	Did the Master control the situation from helm, make announcements and communicate effectively with crew?		
<input type="checkbox"/>	Did the Master approach the victim with a plan and was he successful?		
<input type="checkbox"/>	Did the crewmembers properly don PFDs, take control of the situation and direct passengers as appropriate?		
<input type="checkbox"/>	Did crew members communicate effectively with the Master, other crewmembers and pax?		
<input type="checkbox"/>	When alongside, did crewmembers have a plan for retrieving the victim?		
<input type="checkbox"/>	○ Did they use a boat hook or fish gaff to retrieve the victim?		
<input type="checkbox"/>	○ Did they use a ring life buoy or other safe lifesaving device to reign in the victim?		
<input type="checkbox"/>	When the victim was recovered, did the crew complete basic first aid that included the ABCs?		
<input type="checkbox"/>	Did the drill follow the training and operations manual or emergency instructions?		

**Section 18: Abandon Ship Drill**

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<input type="checkbox"/>	Evaluate abandon ship drill	176.808(g)	04110
	○ Witness drill	185.520	
	○ Verify means or summoning crew and passengers		
	○ Verify crew's familiarity with assigned duties		
	○ Verify all lifejackets are correctly donned		
	○ Witness means of launching survival craft		
<input type="checkbox"/>	Did the Master simulate broadcasting a mayday on the VHF radio and provide the vessel position, number of persons onboard and type of distress?		
<input type="checkbox"/>	Were life jackets properly donned by crew and pax?		
<input type="checkbox"/>	Did the crew have a plan (demonstrate as necessary) on how to deploy and marshal the vessel's primary lifesaving devices?		
<input type="checkbox"/>	Did the Master simulate activating the EPIRB?		
<input type="checkbox"/>	Did the drill follow the training operations manual or SOLAS training materials or emergency instructions and/or others placards posted?		

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## International Voyages Certificates and Documents (CD)

Action	Ref	Code
<input type="checkbox"/> Passenger Ship Safety Certificate ( <i>Int'l Route, &gt;12 pax</i> ) <ul style="list-style-type: none"> <li>○ Presence</li> <li>○ Validity</li> <li>○ Contents</li> </ul>	SLS.14/Circ.87 Dated 11/15/89 176.910(a) SOLAS I/12(a)(i)  176.910(c) SOLAS I/14 176.910(a)-(b) SOLAS I/15	01103
<input type="checkbox"/> Engine International Air Pollution Prevention (EIAPP) Certificate ( <i>Int'l Route, Marine Diesel &gt;130kW</i> ) <ul style="list-style-type: none"> <li>○ Presence</li> <li>○ Correct engines identified &amp; no changes have been made</li> <li>○ Statement of Compliance (issued by Manufacturer) is accompanied by EPA issued EIAPP</li> </ul>	MARPOL VI/13.1 MARPOL VI/13.8 NOx Code 2.1.1 MARPOL VI/13.1.1  CG-543 PL 09-01 5.b	01125
<input type="checkbox"/> International Air Pollution Prevention Certificate (IAPP) and Supplement Record of Construction and Equipment ( <i>Int'l Route, &gt;400 GT ITC</i> ) <ul style="list-style-type: none"> <li>○ Vessel particulars on IAPP and Record of Construction and Equipment</li> <li>○ Annual, intermediate, renewal, repair and extension endorsements and/or change in anniversary date</li> <li>○ Ozone depleting substances identified</li> <li>○ Nitrogen Oxide emission sources identified</li> <li>○ Sulphur Oxide (fuel oil) requirements identified</li> <li>○ Incinerator installation identified (when applicable)</li> <li>○ Validity of alternatives or equivalents</li> </ul>	MARPOL VI/8  MARPOL VI/8 MARPOL VI/5  MARPOL VI/12 MARPOL VI/13 MARPOL VI/14 CG-543 PL 12-04 MARPOL VI/16 MARPOL VI/4 MARPOL VI/14.5	01124
<input type="checkbox"/> International Anti-Fouling System (IAFS) certificate with Record of Anti-Fouling System ( <i>Int'l route</i> ) <ul style="list-style-type: none"> <li>○ Vessel particulars</li> <li>○ COI has Anti-Fouling endorsement or, if not required, IAFS Certificates</li> <li>○ Identification of applied Anti-Fouling System</li> <li>○ Vessel particulars on Record of Anti-Fouling Systems</li> <li>○ Anti-Fouling Systems details provided</li> </ul>	IMO Res MEPC.195(61) 4 MSM II/B.3.J AFS Article 3 AFS Annex 2 AFS Annex 3 MEPC.195(61) 4.1 MSM II/B.3.J MEPC.195(61) 4.2 & 5	01131

## International Voyages Certificates and Documents (CD)

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ No change in Anti-Fouling System has occurred since issuance of IAFS Certificates</li> </ul>	IMO Res MEPC.195(61) 5.2 MSM II/B.3.J	01131
<ul style="list-style-type: none"> <li>□ International Energy Efficiency Certificate and Record of Construction (<i>Int'l Route, &gt;400 GT ITC, mechanical propulsion</i>) <ul style="list-style-type: none"> <li>○ Vessel particulars</li> <li>○ Energy Efficiency Design Index requirements (<i>New ships after 1/1/17</i>)</li> <li>○ Ship Energy Efficiency Management Plan (SEEMP) is identified</li> <li>○ Technical File requirements are met (<i>&gt;5000 GT ITC</i>)</li> </ul> </li> </ul>	IMO Res MEPC.203(62) Appendix VIII CG-CVC PL 13-02 7 MEPC.203(62) 20.1 CG-CVC PL 13-02 7.b MEPC.203(62) 22 MEPC.203(62) 20.1	01138
<ul style="list-style-type: none"> <li>□ International Oil Pollution Prevention Certificate (IOPP) (<i>Int'l Route, &gt;400 GT ITC</i>) <ul style="list-style-type: none"> <li>○ Vessel particulars</li> <li>○ Vessel type is accurate</li> <li>○ Annual, intermediate, extension renewal, or change in anniversary date</li> <li>○ Record of construction and equipment</li> <li>○ Control requirements for machinery bilge and fuel oil tanks identified</li> <li>○ Retention and disposal requirements for oily bilge water holding tanks</li> <li>○ Standard discharge connection requirement</li> </ul> </li> </ul>	MARPOL I/9 MARPOL I/2.1-.4 MARPOL I/9 33-151.17-.19 MARPOL I/6  33-151.19 MARPOL I/9 MARPOL I/14 MARPOL I/16  MARPOL I/12 33-158.250 MARPOL I/13	01117
<ul style="list-style-type: none"> <li>□ Statement of Voluntary Compliance, MARPOL Annex IV (Sewage) (<i>Int'l Route, &gt;400 GT ITC</i>) <ul style="list-style-type: none"> <li>○ Vessel particulars</li> <li>○ Compliance type</li> <li>○ Discharge rate (draft &amp; speed chart) identified</li> <li>○ Endorsements (extension or renewal)</li> </ul> </li> </ul>	NVIC 1-09 33-159.53 & .55 IMO Res MEPC.227(64)	01119
<ul style="list-style-type: none"> <li>□ Credentials <ul style="list-style-type: none"> <li>○ STCW endorsements</li> <li>○ Vessel Security Officer endorsement</li> <li>○ Transportation Worker Identification Credential (TWIC)</li> <li>○ GMDSS endorsements</li> </ul> </li> </ul>	10.109(d) 11.202 STCW I/2.6 15.1113 10.203(b) CG-543 PL 11-15 47-80.159(d) 47-80.1073 G-MOC PL 04-02	01299   01217 16107/ 01201 01203
<ul style="list-style-type: none"> <li>□ International Load Line Certificate (ILLC) (<i>Int'l Route, &gt;150 GT ITC or ≥79'</i>) <ul style="list-style-type: none"> <li>○ Presence</li> </ul> </li> </ul>	175.122	01108

## International Voyages Certificates and Documents (CD)

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ Validity</li> <li>○ Certificate form</li> <li>○ Confirm load line observed on hull (Task TII-DA01) matches certificate</li> <li>○ Logbook entries are completed</li> <li>○ Record of Conditions of Assignment (Form LL.11) is present and validates issued Load Line</li> </ul>	ICLL Art. 16 42.07-45 ICLL Art. 15 ICLL Art. 19  ICLL Art. 18 42.07-5 ICLL I/9  42.07-20 CG-5212 Policy Notes 5.c	01108
<input type="checkbox"/> Document of Compliance (ISM-DOC) ( <i>Int'l Route, &gt;12 pax</i> ) <ul style="list-style-type: none"> <li>○ Presence</li> <li>○ Validity</li> <li>○ Document form</li> <li>○ Alternate compliance arrangements</li> </ul>	SLS.14/Circ.155 Dated 9/17/98 176.925 33-96.330 SOLAS IX/4.2  176.925 SOLAS IX/5 ISM 13.2-5 ISM 16 175.540 MSM II/E.3.C.5	01106
<input type="checkbox"/> Safety Management Certificate (ISM-SMC)( <i>Int'l Route, &gt;12 pax</i> ) <ul style="list-style-type: none"> <li>○ Presence</li> <li>○ Validity</li> <li>○ Certificate form</li> <li>○ Alternate compliance arrangements</li> </ul>	SLS.14/Circ.155 Dated 9/17/98  176.925 33-96.340 SOLAS IX/4.3  176.925 SOLAS IX/5 ISM 13.5.1 ISM 16 175.540 MSM II/E.3.C.5	01107
<input type="checkbox"/> International Ship Security Certificate (ISSC) & Continuous Synopsis Record (CSR) ( <i>Int'l Route, &gt;12 pax</i> ) <ul style="list-style-type: none"> <li>○ Vessel particulars</li> <li>○ Company name &amp; address match</li> <li>○ International Safety Management documents</li> <li>○ ISSC verification type with date</li> <li>○ ISSC endorsement (Intermediate or additional)</li> </ul>	SOLAS XI-1/5.5.2 ISPS A/19.2.4  SOLAS XI-1/5.3  ISPS A/19  ISPS A/19.1.1  ISPS A/19.1.1 ISPS A/19.3.4	01122

## International Voyages Certificates and Documents (CD)

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ Additional ISSC verifications, extensions, renewals or expiry advancements are completed</li> <li>○ CSR is present &amp; valid</li> <li>○ CSR information matches ISSC</li> </ul>	SOLAS XI-1/5.1 SOLAS XI-1/5.3 SOLAS XI-1/ 5.4.1-.3 SOLAS XI-1/5.3	01122
<input type="checkbox"/> Certificate of Documentation (COD) (>5 NT, Int'l Route) <ul style="list-style-type: none"> <li>○ Registry endorsement</li> </ul>	67.17 67.19	CG003
<input type="checkbox"/> Tonnage Certificate <ul style="list-style-type: none"> <li>○ Presence</li> <li>○ Validity</li> <li>○ Correct measurement system</li> <li>○ Vessel particulars remain valid</li> </ul>	69.69  69.11 NVIC 11-93 69.55 69.105 ICTM Art. 3	01132
<input type="checkbox"/> MARPOL Placards, Garbage Management Plans, & Record Keeping (Int'l Route, >12 pax) <ul style="list-style-type: none"> <li>○ Placard (&gt;12m length)</li> <li>○ Management Plan (≥15 POB)</li> <li>○ Record Book (≥15 POB)</li> </ul>	MARPOL 10.1.1 MARPOL 10.2 MARPOL 10.3	14502 14503 01320

# International Voyages Logs & Manuals Inspection (LM)

Action	Ref	Code
<input type="checkbox"/> Official logbook		01305
○ Presence	185.280(a)	
○ Verify entries	185.280(b)	
<input type="checkbox"/> Maintenance Records		
○ Shore-based maintenance report for EPIRB	SOLAS IV/15 185.722	11199
○ Maintenance & inspections of survival craft	185.724 & .726 SOLAS III/20.7 SOLAS IV/17	05116
○ Annual test reports for VHF-DSC, AIS, LRIT & SSAS		
<input type="checkbox"/> Shipboard Oil Pollution Emergency Plan (SOPEP) (>400 ITC)		01314
○ Applicability	184.702 33-151.09 MARPOL I/2 33-151.27	
○ Approval	MARPOL I/37.1	
○ Annual review	33-151.28(a) 33-151.28(d)	
○ Plan organization	33-151.26	
<input type="checkbox"/> Oil and hazardous liquid transfer procedures ( $\geq 250$ bbls oil/hazmat)		14105
○ Presence	184.702	
○ Person in Charge is identified	33-155.720	
○ Contents	33-155.750(a)(4) 33-155.750	
<input type="checkbox"/> Vessel's training log	SOLAS III/35	01305
○ Presence		
○ Contents		
<input type="checkbox"/> Oil Record Book (ORB) (>400 ITC)		01315
○ Edition	33-151.25(b) IMO Res MEPC.187(59)	
○ Required signatures	33-151.25(h)	
○ Required entries	184.702 33-151.25(h) MARPOL I/Appx III	
○ Compare overboard discharge rate entries with filtering equipment data plate or supplement to IOPP certificate	MARPOL I/7 MARPOL I/Appx III	

# International Voyages

## Bridge/Navigation & Lifesaving/Firefighting

Action	Ref	Code
<input type="checkbox"/> Voyage data recorder ( <i>Int'l Route, &gt;12 pax</i> ) <ul style="list-style-type: none"> <li>○ Presence</li> <li>○ Installation</li> </ul>	SOLAS V/20	10114
<input type="checkbox"/> Automatic identification system (AIS) ( <i>Int'l Route, &gt;12 pax</i> ) <ul style="list-style-type: none"> <li>○ Presence</li> <li>○ Operational</li> </ul>	33-164.46 SOLAS V/19.2.4	10113
<input type="checkbox"/> Bridge navigation equipment ( <i>Int'l Route, &gt;12 pax</i> ) <ul style="list-style-type: none"> <li>○ Spare magnetic compass</li> <li>○ Pelorus or compass bearing device</li> <li>○ Means of correcting heading &amp; bearing to true at all times</li> <li>○ Electronic plotting aide</li> <li>○ Speed &amp; distance measuring device</li> </ul>	SOLAS V/19.2.2.1 SOLAS V/19.2.1.2  SOLAS V/19.2.1.3  SOLAS V/19.2.3.3 SOLAS V/19.2.3.4	10105 10105  10106  10107 10103
<input type="checkbox"/> Communication equipment ( <i>Int'l Route, &gt;12 pax, Sea Area</i> ) <ul style="list-style-type: none"> <li>○ Operation of NAVTEX (<i>All</i>)</li> <li>○ Operation of portable VHF(s) (<i>All</i>)</li> <li>○ Radar transponder (AIS-SART)(<i>All</i>)</li> <li>○ GMDSS radio equipment installation is appropriate for the Sea Area in which the vessel operates <ul style="list-style-type: none"> <li>• <i>Sea Area A1 – covered by ≥1 VHF-DSC coast station</i></li> <li>• <i>Sea Area A2 – excluding A1; covered by ≥1 MF-DSC coast station</i></li> <li>• <i>Sea Area A3 – excluding A1/2; covered by INMARSAT</i></li> <li>• <i>Sea Area A4 – excluding A1/2/3</i></li> </ul> </li> </ul>	47-80.1101(c) SOLAS IV/7.1.4  47-80.1095 SOLAS III/6.2.1  47-80.1095 SOLAS III/6.2.2 46-80 Sub W	05110  05109 11123  05118
<input type="checkbox"/> Long range identification and tracking (LRIT) ( <i>Int'l Route, &gt;12 pax, Except ships w/AIS in Sea Area A1</i> ) <ul style="list-style-type: none"> <li>○ Presence</li> <li>○ Operational</li> <li>○ Conformance test report <ul style="list-style-type: none"> <li>• <i>Check for LRIT exemption in MISLE</i></li> </ul> </li> </ul>	33-169.205(a) SOLAS V/19-1	10137
<input type="checkbox"/> Depth sounding equipment ( <i>Int'l Route, &gt;12 pax</i> ) <ul style="list-style-type: none"> <li>○ Operational</li> </ul>	SOLAS V/19.2.3.1	10117
<input type="checkbox"/> Global Maritime Distress and Safety System (GMDSS) equipment <ul style="list-style-type: none"> <li>○ Station ID numbers on applicable</li> </ul>	47-80.1083 SOLAS IV/6.2.5	05118

## International Voyages Bridge/Navigation & Lifesaving/Firefighting

Action	Ref	Code
equipment	47-80.1075	05115
○ Logs for tests and notations	SOLAS IV/17	05103
○ Equipment for operation areas	47-80.1083-.1095	05109
○ Verify operation of VHF Digital Selective Calling (DSC) radio	SOLAS IV/6.1 NVIC 3-99	
○ Emergency source of power provided	47-80.1085(a)(1) SOLAS IV/7.1.1	05114
○ Compliance with maintenance method(s)	47-80.1099(b) SOLAS IV/13.2 Operations Manual	
<ul style="list-style-type: none"> <li>IV/15.6 Sea Areas A1 &amp; A2 Methods (one) – duplication of equipment, shore-based maintenance, or at-sea maintenance capability</li> </ul>	47-80.1105(c) SOLAS IV/15 NVIC 3-99	05107
<ul style="list-style-type: none"> <li>IV/15.7 Sea Areas A3 &amp; A4 (two) - duplication of equipment, shore-based maintenance, or at-sea maintenance capability</li> </ul>		
<ul style="list-style-type: none"> <li>NVIC 3-99 USCG does not have authority to issue GMDSS deficiencies on US flag vessels. If found restrict route to US only and contact FCC.</li> </ul>		

## International Voyages Lifesaving & Firefighting (LS)(FF)

□ Immersion suit (SOLAS)		11119
○ USCG type approval	180.10	
○ Quantity & size presence	199.70(c)	
○ Verify stowage	SOLAS III/4	
<ul style="list-style-type: none"> <li>Readily accessible</li> </ul>	199.70(c)	
<ul style="list-style-type: none"> <li>Container clearly marked with "IMMERSION SUITS" or "ANTI-EXPOSURE SUITS" &amp; quantity, identity and size</li> </ul>	199.70(c)(2)&(d) 199.70(c)(3)	
○ Markings ( <i>Vessel or person name</i> )	199.70(c)(4)	
○ Attachments & fittings ( <i>life jacket light &amp; whistle</i> )	160.006-2 NVIC 1-08	
○ Condition and suitability		
□ Emergency outfits and equipment (SOLAS)		07111
○ Number of outfits		
○ Spare charges for breathing apparatus	SOLAS II-2/10.10.2	
○ Means of recharging breathing air cylinders	SOLAS II-2/10.10.2.5	
○ Stowage location	SOLAS II-2/10.10.6	
<ul style="list-style-type: none"> <li>Easily accessible</li> </ul>		
<ul style="list-style-type: none"> <li>Permanently &amp; clearly marked</li> </ul>	SOLAS II-2/10.10.3	
<ul style="list-style-type: none"> <li>Separated as widely as possible</li> </ul>	SOLAS II-2/10.10.3.1	07108
○ Markings		
□ Fire Control Plan (SOLAS)	SOLAS II-2/15.3	07122
○ Contents & current		
○ Location ( <i>permanently exhibited</i> )		

**International Voyages**  
**Bridge/Navigation & Lifesaving/Firefighting**

<b>Action</b>	<b>Ref</b>	<b>Code</b>
<ul style="list-style-type: none"> <li>○ Duplicate set of plans provided in a prominent weather tight container outside of deck house for aid of shore side firefighting personnel</li> </ul>	SOLAS II-2/15.3	07122
<ul style="list-style-type: none"> <li>□ International Shore Connection (SOLAS) <ul style="list-style-type: none"> <li>○ Confirm location with Fire Control Plan</li> <li>○ Gaskets and bolts are with the connection</li> <li>○ Size, markings, and proper construction</li> </ul> </li> </ul>	Fire Control Plan SOLAS II-2/ 10.2.1.7 FSS 2.2 IMO Res A.952(23)	07118

## International Voyages Security (SD)

Action	Ref	Code
<input type="checkbox"/> Vessel Security Plan (VSP/ASP)		16103
<input type="checkbox"/> Presence of approval letter for plan type	33-104.120(a)(1) SOLAS XI-2/4.2 ISPS A/9.1	
<input type="checkbox"/> Plan is secured	33-104.400(c) ISPS A/9.7 NVIC 4-03	
<input type="checkbox"/> Contents	33-104.400	
<input type="checkbox"/> Amendment(s) (if applicable)	33-104.415(a)	
<input type="checkbox"/> Implementation	33-104.400(a)	
<input type="checkbox"/> Security records	33-104.235(b)(1)	
<input type="checkbox"/> Record(s) of security training	SOLAS XI-2/4.2	16107
<input type="checkbox"/> Drills have been conducted	ISPS A/10.1.1 33-104.235(b)(7) ISPS A/5.7 NVIC 4-03 Encl. 3 Sect. 10	16106
<input type="checkbox"/> Presence of Declarations of Security (DoS)	33-104.235(b)(2)	16107
<input type="checkbox"/> Record(s) of security drills	ISPS A/10.1.1 33-104.235(b)(2) ISPS A/10.1.1	16107
<input type="checkbox"/> Annual exercise has been conducted	33-104.235(b)(8)	16107
<input type="checkbox"/> Record(s) of annual audit	ISPS A/10.1.6	16107
<input type="checkbox"/> Security equipment	33-104.292(b)(ii)	16107
<input type="checkbox"/> Equipment matches plan	SOLAS XI-2/6 ISPS A/9.4.17	
<input type="checkbox"/> Maintenance records	33-104.260 33-104.235(b)(5) NVIC 4-03 Encl. 3 Sect. 10	
<input type="checkbox"/> Crew's knowledge of security plan		
<input type="checkbox"/> Identify Company Security Officer (CSO)	33-104.200(b)(2) SOLAS XI-2/4.2	16106
<input type="checkbox"/> Identify Vessel Security Officer (VSO)	ISPS A/11.1	
<input type="checkbox"/> VSO knowledge regarding his/her responsibilities	33-104.200(b)(2) ISPS A/12.1 33-104.215(e) ISPS A/12.2	16106 16104
<input type="checkbox"/> Crew's level of knowledge regarding their security responsibilities	NVIC 4-03 Encl. 3 Sect. 9 33-104.220 ISPS A/13.3	16106
<input type="checkbox"/> Compliance with current Maritime Security (MARSEC) level	NVIC 4-03 Encl. 3 Sect. 10 33-104.240 33-104.215(e)(9) ISPS A/12.2.9	16105

## Sail Vessel Addendum

Action	Ref	Code
<b>Certificates &amp; Documents (CD)</b>		
♦ □ Master's Merchant Mariner Credential (MMC)	15.901(d)	01201
○ Auxiliary sail endorsement		
□ Rigging Plan	177.202(b)(12)	99101
○ Vessel information and structure particulars	177.202(c) 177.202(b)(12)	
○ Marked "examined"	NVIC 2-16 Encl 1 IV	
□ Sail Area Plan (Sail Plan)	177.202(b)(12)(ii)	99101
○ Sail Plan arrangement in Rigging Plan	178.210	
○ Sail Plan is incorporated into stability letter	Stability Letter NVIC 2-16 Encl 1 IV	
□ Preventative Maintenance Plan	NVIC 2-16 Encl 1 II	99101
○ Rig discrepancy records		
○ On-going maintenance		
<b>Topside Equipment (TE)</b>		
♦ □ Spar(s) & fittings	NVIC 2-16	99101
○ Rig arrangement and design	Encl 1 III(d) 176.802(a)(3) 177.330 Approved Rig Plan Stability Letter	
○ Material condition of masts, yards, booms and gaffs	176.802(a)(3)	
○ Mast, yard, boom and gaff fittings	176.802(a)(3)	
○ Head rig (bow sprit/jib boom) spars and fittings	176.802(a)(3)	
♦ □ Standing rigging components (stays and shrouds)	176.802(a)(3) NVIC 2-16 Encl 1 III(d)	99101
○ Material condition of shrouds/stays		
○ Shroud/stay terminal end fittings (swaged/swageless)		
○ Fittings associated with rig tune (turnbuckles, cotter & clevis pins)		
○ Fittings associated with rig alignment (tangs, toggles, point loads)		
○ Shroud/stay attachment to hull (chainplates, stem fittings)		
○ Furler fittings (when applicable)		
○ Spreaders (when applicable)		
□ Rail configuration	177.900(f)	03103
○ Approval for rail height and location		
○ Configuration IAW with OCMI approval		
♦ □ Running rigging components (used to handle sails and movable spars)	176.802(a)(3) NVIC 2-16 Encl 1 III(f)	99101

## Sail Vessel Addendum

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ Sheets (lines, blocks, shackles, cleats)</li> <li>○ Halyards (lines, blocks, shackles, cleats)</li> <li>○ Topping lift</li> <li>○ Sail control system (lazyjack, dutchman) (when applicable)</li> <li>○ Furler control sheets/cleats</li> <li>○ Cars, tracks, winches, vang and travelers</li> </ul>	176.802(a)(3) NVIC 2-16 Encl 1 III(f)	99101
<input type="checkbox"/> Rigging/hull components under sail <ul style="list-style-type: none"> <li>○ Condition of sails</li> <li>○ Crew's ability to set/strike sails</li> <li>○ Crew safety aloft</li> <li>○ Passenger safety</li> <li>○ Wire tension and fittings on standing rigging</li> <li>○ Operation of running rigging components</li> <li>○ Hull/mast internal structure</li> </ul>	176.802(a)(3) 176.802(c) 176.404(a) 176.802(a)(5) 177.500(d)(3)(v) 177.15-1 176.802(a)(3) 176.802(c) 176.802(a)(3) 176.802(c) 176.802(a)(3) 176.802(c) NVIC 2-16 Encl 1 III(f)	99101
<input checked="" type="checkbox"/> <input type="checkbox"/> Catamaran forestay load path & hull attachments <ul style="list-style-type: none"> <li>○ Bow tube or beam arrangement</li> <li>○ Gull stay/dolphin striker</li> <li>○ Bridle stays</li> </ul>	176.802(a)(3) NVIC 2-16 Encl 1 III(d)	99101

### Emergency Drill (ED)

<input type="checkbox"/> Man overboard drill under sail <ul style="list-style-type: none"> <li>○ Crew's ability to perform duties</li> <li>○ Witness drill</li> </ul>	185.420 185.510 185.512 185.520 NVIC 2-16 Encl 1 III(i)	CG004
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### Internal Structural Examination (IS)

<input type="checkbox"/> Hull/mast internal support structure <ul style="list-style-type: none"> <li>○ Mast partner</li> <li>○ Mast step structure</li> <li>○ Chain plate backing / reinforcement to hull (when applicable)</li> </ul>	176.802(a)(3) NVIC 2-16 Encl 1 III(g)	02199
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## Wood Vessel Addendum

Action	Ref	Code
<b>Lifesaving Equipment (LS)</b>		
♦ □ Survival craft	180.200(c)	11101/4/8/27
○ Quantity		
<b>Machinery Equipment (MI)</b>		
♦ □ Bilge and high-water alarms	182.530(b)	13104
○ Location		
<b>Hull Inspection (HI)</b>		
□ Subdivision and damage stability requirements		02199/03199
○ Presence of collision bulkhead		
• >65' OR >49 pax OR exposed waters OR wood hull after 2001 & cold water OR >40' & partially protected	179.210 179.210(b)(4) 171.085	
○ Subdivision		
• >65' OR >49 pax OR wood hull after 2001 & >12 pax OR SOLAS	179.212(a) 171.040	
□ Wood hull		02199
○ Condition	176.610(a) NVIC 7-95 4.A-F MSMII/B.1B.1	
• <i>Wood NVIC 7-95 5p. 5-7: When decay is found in any form that adversely affects the structure of the vessel, proper repairs MUST be made. The most common and acceptable repair for decayed wood is to crop out and renew the entire structural member. Other times it is possible to crop out a section of the decayed member, about two feet is a good rule of thumb, and replace it with a new section of wood. A case in point is the procedure for decayed frame heads. The proper method of repair is to crop and renew the frame by cutting out at least two feet past the rot and scarfing in the new section. This method is only used in the event that it is extremely impractical to renew the entire frame.</i>		
○ Stress areas (garboard plank, stem, chine, etc.)	176.610(a) NVIC 7-95 4.N 176.610(a)	02199
○ Bungs for running rust or blisters	NVIC 7-95	
○ Caulking	4.K.1	
○ No unauthorized repairs	NVIC 7-95 4.L 176.700	
□ Wood hull fasteners		02199
○ Location of fasteners to be pulled	NVIC 7-95 4.K.1	
• <i>The routine periodic inspection of fasteners (pulling of fasteners) on wood boats is outlined in NVIC 7-95 and is:</i>		
• <i>Beginning at the 10th year of age and every 5 years thereafter for salt water service:</i>		

## Wood Vessel Addendum

Action	Ref	Code
<ul style="list-style-type: none"> <li>• <i>Beginning at the 20th year of age and every 10 years thereafter for fresh water service:</i></li> <li>• <i>Remove a minimum of 8 fasteners per side below the w/l concentrating at:</i></li> <li>• <i>Garboard seams</i></li> <li>• <i>Stem joint</i></li> <li>• <i>Plank ends in area of bent frames</i></li> <li>• <i>Shaft logs</i></li> <li>• <i>Under engine beds</i></li> </ul>	176.610(a) NVIC 7-95 4.K.1-2 NVIC 7-95 4.K.2 NVIC 7-95 4.K.1-2 NVIC 7-95	02199
<ul style="list-style-type: none"> <li>○ Condition of fastenings</li> <li>○ Document type, condition, material, and location of fastenings</li> <li>○ Through bolts (keel, chine, clamp, double frame, floor timber bolts, etc.) (when needed)</li> <li>○ No unauthorized fastenings</li> </ul>		
<input type="checkbox"/> Internal inspection of wood hull <ul style="list-style-type: none"> <li>○ Condition</li> <li>○ Frames and frame heads</li> <li>○ Sound through bolts (keel, chine, clamp, double frame, floor timber bolts, etc.)</li> <li>○ No unauthorized repairs</li> </ul>	176.610(b) NVIC 7-95 4.A-F MSM II/ B.1.B.1 NVIC 7-95 4.F.1.A NVIC 7-95 4.K.1 176.700	02199
<input type="checkbox"/> Repair(s) <ul style="list-style-type: none"> <li>○ Extent of decay, defect(s) and damage</li> <li>○ Repair proposal</li> <li>○ Repair materials</li> <li>○ Inspect repair(s)</li> </ul>	177.10-1 176.610 NVIC 7-95 2.01-10(a)(2) 176.700 NVIC 7-95 Ch. 5 176.700 & 177.300 NVIC 7-95 Ch. 3 Lloyd's Yachts & Small Craft 176.610 NVIC 7-95 Ch. 5	02199

# Drydock & Internal Structure Examination Addendum

Action	Ref	Code
<b>Hull Inspection (HI)</b>		
<input type="checkbox"/> Steel and aluminum hulls		02106
<ul style="list-style-type: none"> <li>○ Wastage, defect(s) and damage (<i>Shell, Keel and Bilge keel, High stress locations and welds, etc.</i>)</li> </ul>	176.802 176.610 176.802(a)(1)	02106
<ul style="list-style-type: none"> <li>○ Critical areas (<i>stringer plate, sheer plate, etc.</i>)</li> </ul>	NVIC 7-68 IV(B) NVIC 11-80	CG016
<ul style="list-style-type: none"> <li>○ Seachests, piping and overboard discharges for wastage, defect(s) and damage</li> </ul>	176.802(a)(2) NVIC 7-68 II(A) 176.802(a)(7)	03199
<ul style="list-style-type: none"> <li>○ Condition of drydock (bottom) plugs</li> </ul>	NVIC 7-68 II(A) MSM II/B.3.B	
<ul style="list-style-type: none"> <li>○ Wastage/corrosion is within limits</li> </ul>	NVIC 7-68 III(C) ABS 7-A-4/27	02106
<input type="checkbox"/> Hull markings	185.602	03199
<ul style="list-style-type: none"> <li>○ Draught (draft) marks &amp; load marks (&gt;65' or SOLAS)</li> </ul>	175.122 SOLAS XI-1/3	
<ul style="list-style-type: none"> <li>○ Load Line &amp; Deckline (&gt;79' or SOLAS)</li> </ul>		02120
<ul style="list-style-type: none"> <li>○ IMO Hull marking (SOLAS)</li> </ul>		
<ul style="list-style-type: none"> <li>○ Machinery space marking (SOLAS)</li> </ul>	SOLAS XI-1/3	
<ul style="list-style-type: none"> <li>○ Name and hailing port/State number               <ul style="list-style-type: none"> <li>• <i>Name clearly marked on port and stbd bow and stern; hailing port on stern; NLT 4" Latin alphabet, Arabic /Roman #'s</i></li> <li>• <i>State documented vessels are to be marked as required by the state which is regulated under 33 CFR 173.27.</i></li> <li>• <i>State numbers are required on both sides of the bow.</i></li> </ul> </li> </ul>	185.602 67.123  33-173.27  33-181.23	CG014
<input type="checkbox"/> Tailshaft(s), stern bearing(s) and propeller(s)		03199
<ul style="list-style-type: none"> <li>○ Determine if tailshaft(s) needs to be drawn</li> </ul>	176.670 MSM II/B.3.D.3	
<ul style="list-style-type: none"> <li>○ Bearing clearance &amp; inboard seal assembly</li> </ul>	176.670 Manufacturer's Inst	
<ul style="list-style-type: none"> <li>○ Visually examine entire shaft (<i>if in question</i>)</li> </ul>	176.670	
<ul style="list-style-type: none"> <li>○ Non-destructive testing (NDT) of the shaft's taper section and keyway (<i>if in question</i>)</li> </ul>	176.670 MSM II/B.3.D.10	
<ul style="list-style-type: none"> <li>○ NDT of propeller coupling bolts and flange radius (<i>if in question</i>)</li> </ul>		
<ul style="list-style-type: none"> <li>○ Condition and wear/tear of strut bearing(s)               <ul style="list-style-type: none"> <li>• <i>MSM Vol II Sec B Ch. 3-34: With wood or rubber bearings, "feeler" gauges of known thickness can be inserted between the</i></li> </ul> </li> </ul>		03199

## Drydock & Internal Structure Examination Addendum

Action	Ref	Code
<ul style="list-style-type: none"> <li>shaft and the bearing to determine the amount of wear down. Wear down may also be taken on wood bearings with a small wedge. The wedge is inserted between the shaft and then removed. The impressed clearance is measured with a micrometer to determine the wear down. Maximum wear down readings for wood bearings are found in 46 CFR 61.20-23(a). Rubber bearings must be renewed when any water groove is found to be half its original depth.</li> <li>○ Condition of propeller <ul style="list-style-type: none"> <li>• <i>NDT if in question</i></li> </ul> </li> </ul>	176.610(a)	03199
<input type="checkbox"/> Rudder installation <ul style="list-style-type: none"> <li>○ Type of assembly installed</li> <li>○ Examine rudder assembly for deterioration and defects</li> <li>○ Rudder bearing clearance(s) are within limits</li> <li>○ Condition of pintle(s), gudgeon(s), bushing(s), pintle nut(s) and locking device(s)</li> <li>○ Condition of pintle by nondestructive test (NDT) (if in question)</li> </ul>	176.814 MSM II/B.3.E.2 176.610(a)  Manufacturer's Inst  MSM II/B.3.E.2 MSM II/B.3.E.2	02105
<input type="checkbox"/> Hull appendages <ul style="list-style-type: none"> <li>○ Condition and structural integrity of bilge keel</li> <li>○ Condition of keel coolers</li> <li>○ Condition of transducers and other similar appendages</li> <li>○ Bow/stern thrusters</li> <li>○ Shaft &amp; rudder packings</li> </ul>	176.610(a) 182.422	03199
<input type="checkbox"/> Anchor chain(s) <ul style="list-style-type: none"> <li>○ Length of chain for satisfactory condition <ul style="list-style-type: none"> <li>• <i>Such as wastage</i></li> </ul> </li> <li>○ Chain locker for satisfactory condition <ul style="list-style-type: none"> <li>• <i>Such as wastage</i></li> </ul> </li> </ul>	184.300	09228
<input type="checkbox"/> Sea valve(s) <ul style="list-style-type: none"> <li>○ Quantity and type <ul style="list-style-type: none"> <li>• <i>Valves within 6" of waterline on a through hull penetration</i></li> </ul> </li> <li>○ All sea valves are properly identified and are opened for examination</li> <li>○ External and internal components</li> </ul>	176.610 179.350(c)&(d) 176.610  176.25-10 176.610	03199

## Drydock & Internal Structure Examination Addendum

Action	Ref	Code
<ul style="list-style-type: none"> <li>• <i>Verify correct operation of valve components</i></li> <li>• <i>Verify correct seating (blue or pressure test if needed)</i></li> </ul>		03199
<input type="checkbox"/> Anti-Fouling Requirements (SOLAS) <ul style="list-style-type: none"> <li>○ Vessel particulars</li> <li>○ COI has Anti-Fouling endorsement or, if not required, IAFS Certificates</li> <li>○ Identification of applied Anti-Fouling System</li> <li>○ Vessel particulars on Record of Anti-Fouling Systems</li> <li>○ Anti-Fouling Systems details provided</li> <li>○ No change in Anti-Fouling System has occurred since issuance of IAFS Certificates</li> </ul>	IMO Res MEPC.195(61) 4 MSM II/B.3.J AFS Art.3 AFS Annex 2 AFS Annex 3 MEPC.195(61) 4.1 MSM II/B.3.J MEPC.195(61) 4.2 & 5 MEPC.195(61) 5.2 MSM II/B.3.J	14701   14701/3  14702 14701  14702
<input type="checkbox"/> Inspect fiberglass external hull <ul style="list-style-type: none"> <li>○ Condition</li> <li>○ Stress areas</li> <li>○ Area in way of through hull fittings</li> <li>○ Damage/unfairness/delamination</li> <li>○ No unauthorized repairs</li> </ul>	176.610(a) NVIC 8-87 Ch. 5 176.610(a) NVIC 8-87 Ch. 5 176.610(a)-(b) NVIC 8-87 Ch. 5.E 176.610(a)-(b) NVIC 8-87 Ch. 5.C 2.01-15(a)(2) 176.700 NVIC 8-87 Ch. 6	02106
<input type="checkbox"/> Fiberglass internal hull <ul style="list-style-type: none"> <li>○ Condition</li> <li>○ Stress areas</li> <li>○ Area in way of through hull fittings</li> <li>○ Damage/unfairness/ delamination</li> <li>○ No unauthorized repairs</li> </ul>	176.610(a) NVIC 8-87 Ch. 5 176.610(a) NVIC 8-87 Ch. 5 176.610(a)-(b) NVIC 8-87 Ch. 5.E 176.610(a)-(b) NVIC 8-87 Ch. 5.C 2.01-15(a)(2) 176.700 NVIC 8-87 Ch. 6	02199
<input type="checkbox"/> Fiberglass repair(s) <ul style="list-style-type: none"> <li>○ Extent of damage, defect(s) and/or delamination</li> <li>○ Repair proposal</li> <li>○ Repair materials</li> </ul>	176.610 NVIC 8-87 Ch. 6 2.01-15(a)(2) 176.700 NVIC 8-87 Ch. 6 176.700 NVIC 8-87 Ch. 4	02199

## Drydock & Internal Structure Examination Addendum

Action	Ref	Code
○ Inspect repair(s)	176.610 NVIC 8-87 Ch. 4	02199
<b>Internal Structural Examination (IS)</b>		
<input type="checkbox"/> Confined spaces are safe for entry <ul style="list-style-type: none"> <li>○ Marine Chemist certificate</li> <li>○ Competent person has maintained Marine Chemist Certificate, verify competent person credentials, testing methods and logs</li> <li>○ No changes to vessel's condition</li> <li>○ Forced ventilation is provided (IAW Marine Chemist Cert.)</li> <li>○ Condition of space access point</li> </ul>	29-1915.12(f) CIM 5100.47A/6.G.9.c NFPA 306/4.3 29-1915.15 CIM 5100.47A/ 6.G.9.c(3) NFPA 306/4.6.2  29-1915.15(b) 29-1915.13(b)(3) 29-1915.76	99101
<input type="checkbox"/> Internal structures <ul style="list-style-type: none"> <li>○ Internal structures</li> <li>○ Frames</li> <li>○ Floors</li> <li>○ Shelves, brackets, clamps</li> <li>○ Bulkheads</li> <li>○ Tank tops</li> <li>○ Coamings, closures &amp; other fittings</li> <li>○ Wastage is within acceptable limits</li> </ul>	176.610(b) 176.802  MSM II/B.3.B  NVIC 7-68 III(C)	02199
<input type="checkbox"/> Watertight integrity <ul style="list-style-type: none"> <li>○ Hull openings and closures</li> <li>○ Deck openings and closures</li> <li>○ Watertight doors</li> <li>○ Watertight subdivisions/bulkheads</li> </ul>	176.802 179.360 MSM Vol IV Ch 6.I.5 MSM Vol II B.1.5 179.350 171.114 171.119	03199 03104/10 03107 03199
<input type="checkbox"/> Stability <ul style="list-style-type: none"> <li>○ Drainage</li> <li>○ Major changes/modifications</li> <li>○ Solid ballast</li> <li>○ Self-bailers and cockpit freeing ports</li> <li>• <i>Check valves</i></li> <li>• <i>Required area</i></li> </ul>	171 Sbpt H 178 Sbpt D  178.510 178.420	03112/3 01326 01326 03112/3
<b>Structural/Watertight Integrity (SW)</b>		
<input type="checkbox"/> Hatches and Class-1 watertight doors <ul style="list-style-type: none"> <li>○ Condition of knife edges</li> </ul>	171.124 179.330	03104/10 03107

## Drydock & Internal Structure Examination Addendum

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ Condition of gasket material</li> <li>○ Verify watertight integrity between gasket and knife edge</li> <li>○ Condition and operation of hinges and dogging devices</li> <li>○ Operation of Class-1 door's quick-acting closing device</li> <li>○ Operation of indicator lights at the control station</li> <li>○ Markings</li> </ul>	MSM II/B.1.E.5 170.270 MSM II/B.1.E.5 179.330 179.330(b) 185.610	03104/10 03107
<input type="checkbox"/> Inspect Class 2 & 3 watertight doors <ul style="list-style-type: none"> <li>○ Operation of local controls</li> <li>○ Operation of remote controls</li> <li>○ Condition of replaceable interface between door and frame assembly</li> <li>○ Operation of alarms</li> <li>○ Closing times are in compliance</li> <li>○ Markings</li> <li>○ Watertight integrity</li> <li>○ Operation of doors under reserve power</li> </ul>	171.124 179.330(c) 170.270(c)(2) ASTM F1197/7.1 ASTM F1197/7.1 170.270(c)(1) ASTM F1196/6.3 ASTM F1197/11.5 ASTM F1197/11.2 ASTM F1197/11.4 185.610 ASTM F1196/11.1 ASTM F1196/S4 ASTM F1196/S1 170.270(c)(3) ASTM F1197/S3	03107 03107
<input type="checkbox"/> Watertight bulkhead penetrations <ul style="list-style-type: none"> <li>○ Locations – <i>as high up and inboard as possible, number of penetrations should be minimized.</i></li> <li>○ Watertight</li> <li>○ Free of sluice valves</li> </ul>	179.320(c) 171.114 171.119 182.720(d)(1)(ii)(C) MSM II/B.1.B.5 179.320(d)	03199 03199
<input type="checkbox"/> Hull structure <ul style="list-style-type: none"> <li>○ Damage, wastage and fractures</li> <li>○ No unauthorized repairs</li> </ul>	177.300 MSM II/B.1.B.1 176.700 2.15(a)(2) 177.10-1	02199 02106 02199
<b>Welding Repair Inspection (WR)</b>		
<input type="checkbox"/> Steel and aluminum structural repair proposals <ul style="list-style-type: none"> <li>○ Extent of damage and/or wastage/corrosion</li> </ul>	177.10-1 176.700(d) 177.300 NVIC 7-68 IV ABS 2-4-1/5.19 2.01-15(a)(2)	02199

## Drydock & Internal Structure Examination Addendum

Action	Ref	Code
<ul style="list-style-type: none"> <li>○ Repair proposal</li> <li>○ Repair materials</li> <li>○ Welding procedures</li> <li>○ Alternative repair methods for equivalency</li> <li>○ Welder's proficiency &amp; qualifications</li> </ul>	176.700(d) NVIC 7-68 IV 176.700(d) NVIC 7-68 IV 176.700(d) <a href="#">177.340</a> MSM II/A.5.A 176.700(d)	02199
<input type="checkbox"/> Aluminum fit-up <ul style="list-style-type: none"> <li>○ Material &amp; fitted with approved joint detail</li> <li>○ Materials (base, filler, gas)</li> <li>○ Welding processes</li> </ul>	<a href="#">177.10-1</a> <a href="#">177.300(b)</a> NVICs 7-68 & 11-80 ABS 30.1 ABS 30.1 ABS 30.1.3	02199
<input type="checkbox"/> Steel fit-up <ul style="list-style-type: none"> <li>○ Material &amp; fitted with approved joint detail</li> <li>○ Materials (base, filler, gas)</li> <li>○ Welding processes</li> </ul>	<a href="#">177.10-1</a> <a href="#">177.300(b)</a> NVIC 7-68 V ABS 2-4-1/3 176.700(b) ABS 2-1-1/1.1 176.700(b)	02199
<input type="checkbox"/> Defects in welds <ul style="list-style-type: none"> <li>○ Examine welds for uniformity and reinforcement</li> <li>○ Examine welds for porosity, overlap, undercut, cracks, slugging and slag inclusion</li> <li>○ Examine adjacent base metal for injurious arc strikes, spatter and sharp or deep undercut</li> </ul>	176.700(b) <a href="#">177.300(b)</a> ABS 2-4-1/5.15.1 ABS 30.5.8 (Aluminum) NVIC 7-68 V(H) ABS 2-4-1/5.15.1 ABS 30.5.8 (Aluminum) NVIC 7-68 V(H) ABS 2-4-1/5.15.1 ABS 30.5.10 (Aluminum)	02199
<input type="checkbox"/> Back gouge (if used) <ul style="list-style-type: none"> <li>○ Examine welds for defects (discontinuity)</li> <li>○ Proper weld sequencing</li> <li>○ Joints are cleaned between interpasses</li> </ul>	176.700(b) <a href="#">177.300(b)</a> NVIC 7-68 V(G)(2) ABS 2-4-1/5.9 NVIC 7-68 V(F) ABS 2-4-1/5.3 ABS 30.5.5 (Aluminum) NVIC 7-68 V(E) ABS 2-4-1/3.5 ABS 30.5.3 (Aluminum)	02199

## Drydock & Internal Structure Examination Addendum

Action	Ref	Code
<b>Nondestructive Testing (NT)</b>		
<input type="checkbox"/> Verify nondestructive testing (NDT) method <ul style="list-style-type: none"> <li>○ Individual's knowledge of method and/or technician's qualification and certification</li> <li>○ Calibration / preparation</li> <li>○ Technician examine/interpret readings</li> <li>○ Evaluate test results or review technician's report             <ul style="list-style-type: none"> <li>• <i>Magnetic Particle</i></li> <li>• <i>Radiography (x rays)</i></li> <li>• <i>Ultrasonic</i></li> <li>• <i>Hydrostatic</i></li> <li>• <i>Pneumatic</i></li> </ul> </li> </ul>	176.700(d) NVIC 7-68 9(V)(A) ABS 2-4-1/5.17 ABS NDT Guide 4/1          ABS NDT Guide 5/5 ABS NDT Guide 2/9 ABS NDT Guide 3/11 ABS 3-7-1/5.5 ABS 3-7-1/5.7	02199

Subchapter "T" Applicability Chart (46 CFR 175-185) Less than 100 GT Less than 150 PAX Overnight 49 PAX	181.300	181.600	182.600	184.404	184.410	183.420	184.610	185.514	185.602	175.122	179.210	179.212	182.510	182.530	182.520(e)	181.320(c)	181.320(b)	180.210	180.75	180.64	179.330	180.70	180.70	180.70	177.500(j)	182.130	182.500
	Fire pump	Fire axe	Steering indicator	FCC radar	GPS	Nav lights that meet UL 1104	Public address system	Station bill	Hull marks	Load line	Collision Bulkhead (5-15 LBP)	Subdivision	Bilge System	Bilge Alarm	Substitute electric submersible (for bilge)	16mm Garden Hose (for firefighting)	Commercial UL fire hose	Rescue boat	Lifejacket lights	EPIRB	Hinged QAWTD	Ring buoy 1 - 20"	Ring buoy 1 - 24"	Ring buoy 3 - 24"	Alternative, vert latter to scuttle for escape	ABYC compliance	
	X					X					X	X			X	X	X										
											X												X				
												X															
													X														
													X														
		X	X	X		X	X	X	X		X	X	X					X	X								
											X																