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



#### K-BOAT INSPECTION BOOK Inspector Reference Guide

MISLE Activity #		
Name of Vessel:		
Official Number:		
Date:	Locati	on:
Inspectors:		
SOLAS:  Ves	□ No <b>O/N</b>	Pax: □ Yes □ No
	Route	
Oceans 20 NM offshore	□ Limited Coastwise ≤ 20 NM from harbor or safe refuge	Lakes/Bays/Sounds <i>Not beyond demarcation</i>
□ Coastwise ≤ 20 NM offshore	□ Great Lakes	□ Rivers
	Inspection T	уре
□ Certification of Inspection (COI)	□ Annual	□ Drydock/ISE
□ Expanded	□ Reduced	Remote - Partial
Annual	Annual	Date:
SIP	□ In Service	SMS
□ Yes □ No		
		Inspection Aid KI

Rev. 5 Feb 2021 CVC-FM-840K(1) 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 116.100 will be listed as 116.100. 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 2020Consolidated 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 K regulations when conducting inspections on SOLAS applicable vessels. The cites will not list the SOLAS year.

CFR cite colors: All Ships – Black, Old T-L – Green, K – 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 1,4-45

- 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 <u>CG-CVC@uscg.mil</u>.

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

Action	Ref	Code
Initial vessel visual examination.		
Presence of anchor(s) (when visible)	121.300	09228
Draught (draft) marks & load marks	122.602	03199
(>65' or SOLAS)		
Load Line & Deckline (>79' or SOLAS)	114.122	
IMO Hull marking (SOLAS)	SOLAS XI-1/3	02120
Machinery space marking (SOLAS)	SOLAS XI-1/3	
Name and hailing port	122.602	01310
<ul> <li>Name clearly marked on port and stbd</li> </ul>	67.123	
bow and stern; hailing port on stern; NLT		
4" Latin alphabet, Arabic /Roman #'s		
Signs of pollution/illegal discharge on	33-151.10	14199
hull	33-155.330	
Hull condition	115 802	02106
Visible shell damage, bulwarks, rails and	110.002	02100
duarde		00110
guarus Examine means of embarkation	29-1915 74(a)(6)	09223
(appaway/ladders)	$20^{-1010.7}$ $+(a)(0)$	00220
(yai iyway/iauuels) Condition of mooring lines	121 300	09228
	121.000	03220

# Section 2: Dockside Assessment (DA)

	Action	Ref	Code
٠	Certificate of Inspection (COI)		CG001
	Presence of original	115.302	
	Routes & Conditions, and amendments	115.120	
	Manning	MSM III/B.2.C	
	5	15.501	
	Certificate is endorsed	115.500(b)(1)(ii)	
		115.802(a)(3)	
	SPV Decal is posted	115.310	
•	Vessel's stability letter	170.120	01326
	Presence of stability documents	115.306	
	Required contents	170.110(d)	
••	Merchant Mariner Credentials (MMCs)		01201
	MMCs meet COI manning requirements	15.515	
	Route	15.805(a)(4)	
	Position		
	• Tonnage		
	Presence of original MMCs	122.402	
	Validity	10.205	
	Senior Deckhand ( <i>if applicable</i> )	MSM III B.2.C	
		NVIC 1-91	
	Verify Vessel Security Officer endorsement	33-104.215	
	(>150 pax or SOLAS)	15.1113	
	Verify Transportation Worker Identification	10.203(b)	
	Credential (TWIC)		
	Drug and alcohol program		18299
	Currency of Employee Assistance Program	16.401	
	(EAP)		
	Presence and currency of drug and alcohol	122.212	
	testing equipment ( <i>on board or available</i>	122.210	
	within 2 hrs)	4.06-15	
	Training of designated testing aroumember	4.00-20(D)(Z)	
		4.00-20(a)(3)	
	(When applicable)	16 220	
	Random chemical testing program for	10.230	
	Dro employment testing program for	16 210	
	depareus druge	10.210	
	Magerous drugs	100 010	
	Means of post-accident testing chemical	122.210	
	testing for dangerous drugs	4 06-15	
•	Maintenance and service records	1.00 10	
·	Firefighting service reports	115.810	07199
	Liferaft servicing reports	122 730	11199
	Vessel General Permit (VGP) (>70')	CG-543 Policy Ltr	99103
		11-01	55105
	Notice of Intent (NOI) has been submitted	VGP 1.5.1.1 & 10	
	Compliance with ballast water record	VGP Table 1	

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

		()	
	Action	Ref	Code
	keeping requirements	VGP 4.3	
	Noncompliance & reportable quantity reports	VGP 4.4.1	
	have been submitted	VGP 4.4.2	
٠	Muster lists and emergency instructions		04108
	Muster lists and emergency instructions are	122.510	
	available	122.512	
	• Fire, flooding, heavy weather, man overboard	122.502	
		122.504	
	Station bill (>65' & >49 overnight OR $\geq$ 4 crew)	122.514	
	Posted at operating station & a conspicuous	122.510(a)	
	location in each crew accommodation space	122.514	
•	Certificate of Documentation (COD) (>5 $NT$ )		CG003
	Presence of original	67.313	
	Endorsement(s) for current service(s)	67.17	
		67.19	
	Validitv	67.161	
	Federal Communications Commission Marine	47-80.159(e)	01104
	Radio Operator Permit	( )	
	Federal Communications Commission Bridge-to-		01104
	Bridge Certificate (>65')	47-80.1001	
	Presence	47-80.1005	
	Validity		
	Contents		
	• The VHF radiotelephone must have operating		
	capability on Channels 13 (156.650 MHz) and		
	22A (157.100 MHz).		
	Federal Communications Commission Station		05103
	License		
	Presence	47-80.13	
		47-80.17	
	Other classes of equipment are authorized		
	for operation		
	Contents	47-80.99	
	Validity	47-80.25	
	Federal Communications Commission Safety	47-80.901	05103
	Radiotelephony Certificate	47-80.933	
	Presence	47-80.59	
		(a)(2)	
	Validity		
	Contents	47-80.59	

# Section 3: Certificates & Documents (CD)

	Action	Ref	Code
••	Vessel's log (International, >65' with >49	122.282	01305
	Overnight)		
	EPIRB tests (high seas, >3nm)	122.728	01305
	Monthly		
	Drills	122.520	11199
	Date/Description	122.524	CG004
	Abandon ship		
	Man Overboard		
	• Fire		
	Rescue Boat		
	Security (SOLAS)		
	Maintenance of survival craft, rescue boats,	122.702(d)	11199
	and launching appliances	122.722	
	<ul> <li>Instructions onboard (&gt;65')</li> </ul>	122.720	
	• Falls End-End (30 months)/ Replace (5 years)		
	Monthly inspections		
	Quarterly inspections (winches, motor		
	controllers, inflit switches)		
	<ul> <li>Annual inspections (rescue boat, davit, batteries)</li> </ul>		
	Waste/Garbage Management Plan (Route >3nm	121,702	
	Domestic)	33-151.51	
	Record Book	33-151.55	01320
	Management Plan (>40°)	33-151.57	14503
	Placard (>26')	33-151.59	14502
	Crew and passenger list maintained	122 502	10127
	$(\Omega_{cean}/\Omega_{coastwise} [\Omega \cap C])$ and overnight or	122.002	10121
	disembark or embark at different ports)		
	Vovage plan prepared (Q/C or overnight)	122.503	10127
	Passenger count.	122.504	10127
	Communicated verbally or in writing to rep		
	onshore		
••	Safety orientation.	122.506	10127
	Placards may substitute on ferries on vovages	122.506(c)	
	<15 mins.		
	<ul> <li>Voyages &gt;24 hours, passengers are required</li> </ul>	122.506(e)	
	to don lifejackets and head to embarkation		
	station.		

#### Section 4: Logs and Manuals (LM)

Section 5: Bridge/Navigation (BN)			
	Action	Ref	Code
•	Operations of internal communication and control		
	systems		
	Fixed means of communication from	121.602	04116
	operating station to propulsion machinery		
	space ( <i>Pilothouse, Aux Steering</i> )		
	Operation of Public Address System	121.610	04101
	• Fixed		
	<ul> <li>&lt;65' &amp; OCMI Approval - Bullhorn</li> </ul>		
	Operable from operating station on vessels		
	with >1 deck or overnight passengers	101 600	12100
	I wo independent means of controlling each	121.020	13199
	propulsion engine		
	Except multiple engine vessels w/independent     control systems		
	$\frac{1}{2} \frac{1}{2} \frac{1}$	121 404	10103
		121.115(a)	10100
	Safety precautions are followed		
	Verify operation	Operation	
		Manual	
	Magnetic compass (All, except Rivers, Non-self-	121.402(a)	10105
	propelled, short-LBS)	121.115(a)	
	Illumination (Nightting One)	184.20-1	
	illumination ( <i>Nignttime Ops</i> )	121.402(0)	
	Old 1-L at OCMI discretion     Not required if limited to doutime and		
	Not required in infined to daytime ops		
	Operation		
	Electronic position fixing device (satellite	121 410	10115
	navigation (GPS) receiver) (Oceans)	121.115(a)	10110
	navigation (OFO) receiver) (Oceans)	Operation	
		Manual	
	<ul> <li>Old T-L at OCMI discretion</li> </ul>		
	Radio telephone equipment (>20m, power-driven)	121.502	05103
	Installation(s)	47-80.1003	
		47-80.1015	
	Equipment for operational area(s)	404 500	
	Emergency broadcast placard	121.506	
	46 CFR 121.510 - Recommended emergency instructions format	121.010	
	Functional test	47-80 931	
		11-00.001	

# Section 5: Bridge/Navigation (BN)

Action	-	Ref	Code
IF vessel travels	THE	N 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 M radio, and	F, 1 SSB or INM d 1 NAVTEX rec	IARSAT eiver.
> 200 NM	1 VHF, 1 M radio, and distress fre automatic sig	F, 1 SSB or INM 1 NAVTEX rece quency receiver radiotelephone gnal generator	ARSAT eiver, 1 , and 1 alarm
Vessels ≥ 65', operating in VTS waters, a One radio must be tuned to the VTS frequ CFR 26.0	are required a ency under 3 03(f)	t least two VHF 3 CFR 161.12 as	radios. s per 33
Navigation and signaling lights, and da	yshapes	33-83.20(b)	10109
Operation of navigation and anch <ul> <li>&gt;65' must also meet UL1104</li> <li>Davsbanes</li> </ul>	nor lights	120.420 33-84.13	
Certificate of Alternate Compliar	nce	33-81.9	
Sound signaling devices		33-83.33 COLREG Rule 33	10109
Presence of signaling device Operation of whistle and bell (>1 • <i>NLT</i> 12" diameter for a vsl ≥ 65' • <i>NLT</i> 8" diameter for a vsl 40' – 6 • <100m gong required	2m) 5'		
Navigational publications and nautical	charts ( <i>as</i>	121.420	
appropriate for route) Charts Tide Tables			10111 10112
River Current publication or Curr Coast Guard Light List U.S. Coast Pilot	ent tables		10116
COLREGS		COLREG A/1 33-88.05	
<ul> <li>Copies or excerpts are allowed.</li> </ul>		121.420(D)	
Steering system controls at operating s	station	119.600 182.30-1 115.814	13199
Operation and control Operation of rudder angle indicat driven main steering) • Provided at main steering station and in steering gear compartme	tor ( <i>Power-</i> n in pilothouse	113.40-5 113.40-5 113.40-10	
	Action         IF vessel travels         >1,000 ft from shore but <20 NM	ActionIF vessel travelsTHE>1,000 ft from shore but <20 NM	Action         Ref           IF vessel travels         THEN it MUST carry           >1,000 ft from shore but <20 NM

# Section 5: Bridge/Navigation (BN)

	Action	Ref	Code
	Audible and visible alarm in pilothouse	58.25-25(d)	13199
	Failure of electric power to control		
	Failure of power to power unit		
	Low oil level		
	Auto restart for control systems after	58.25-30	
	electrical power is restored after is has failed		
	Engine order telegraph required unless no	113.35-5	
	means of normal engine control is available		
	from engine room		
•	Alarms and gauges at operating station		08199
	Visual and audible bilge high level alarms	119.530(a)-(b)	
	for:		
	<ul> <li>Spaces with through-hull fitting below deepest load waterline</li> </ul>		
	<ul> <li>Machinery space bilge, bilge well, shaft alley</li> </ul>		
	bilge		
	<ul> <li>Space with non-watertight closure</li> </ul>		
	Automatic bilge pump indicator	119.530(b)	
	Propulsion engine gauges	119.410(b)	
	<ul> <li>RPM, JW discharge temp, LO pressure (RPM not required for Old T-L)</li> </ul>		
	Audible or visual alarm for exhaust cooling	119.425(b)(5)	
	system (Wet Exhaust)		
•	Distress signals		11116
	USCG type approval	160 series	
	Quantity in accordance with vessel's route	117.68	
	<ul> <li>O/C/LC - 6 hand red flare distress signals &amp; 6</li> </ul>		
	hand orange smoke signals		
	<ul> <li>LBS/R - 3 hand red flare distress signals &amp; 3</li> </ul>		
	hand orange smoke signals		
	May substitute red parachute flares for red		
	nand flares.		
	May substitute red hand hares, rocket     parachute for grange smoke		
	<ul> <li>Vals on short runs limited to 30 mins do not</li> </ul>		
	need to carry distress signals		
	Expiration date	122.726(c)	
	Stowed in brightly colored portable	117.68(e)	
	watertight container or pyrotechnic locker	122.61À ́	
	Marked "Distress Signals"	122.614	

	Actior	1	Ref	Code
	Upper PAX a	decks marked for maximum number of as per stability letter	122.602(f)	01310
••	Accor	nmodations (Crew & Passenger)	116.800 177.25 177.30 7	09198
		Location	177.30-7	09114
		Number of berths	116,710	09117
		No more than 3 high	116.810	
		<ul> <li>Berth &gt;60" above deck must have fitted access</li> </ul>		
		Wood, FRP, metal construction		
		<ul> <li>Required for crew if vessel is operated &gt;12hrs in a 24hr period.</li> </ul>		
		Spaces are of appropriate size	116.800	09117
		• 74" L x 24" W x 24" H	116.810	
		<ul> <li>Ceilings ≥74" for accommodations, aisles, passageways</li> </ul>		
		Accessibility to escape routes	116.500 177.15-1	07120
			116.810(c)	
		Ventilation	116.600(c)	09103
		Sanitary condition	166.800(c) 115.818	09127
	••	General alarm is adequate	120.550	08101
		All vsls with overnight accommodations		
		Public address system may be used.		
	••	• Vessels >65' alarm must meet 113.25	119 100(a)	07406
	••	overnight accommodation spaces are litted	116.400(e)	07106
		detection evotom		
		Dreper operation of datasters/slarm units	115 810(a)(7)	07106
••	Moon	s of oscope from accommodation	113.010(a)(7)	07100
•	machi	s of escape from accommodation,		07120
	macm	Means of escape (2) – widely senarated	116 500	
		(adequate size > 32") operable from either	177.15-1	
		side and open towards expected escape		
		direction		
		<ul> <li>Exemptions for 2 escapes in 116 500(p)</li> </ul>		
		Routes are accessible	116.500	
	••	Emergency lighting	120.432	04103
		Auto-start upon failure of main power	184.30-5	
		• May be individual battery powered lights if:		
		-Auto-start		
		-Not readily portable		
		-Connected to battery charger		
		-Capacity for 2 hours operation		
		<ul> <li>vessel &gt;600° with &gt;600 passengers must</li> </ul>		

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

Action	Pof	Code
ACTION most Sub I pert 199	Ret	Code
Markings	122 606	07120
	122.000	07120
EIVIERGENUT EAH, REEF CLEAR 2     Letters		
Mess deck and dalley spaces		
Sanitary conditions	115 818	09106
Salitary conditions	MSM II/A.6.C	03100
Cooking fuel restrictions	121.202	09124
No gasoline, no open flames		
Cooking equipment requirements	121.220	09124
Grab rails, locking, fitted for use in heavy	121.200	
seas	ABYC A-3	
LPG and LNG cooking systems	121.240	09124
Remote shutoff valve (if system in enclosed	NFPA 302	
space)		
Condition of vents and ducts	116.600(d)	09201
<ul> <li>Ducts above frying vats or grills constructed</li> </ul>		
of >11-gauge steel		
Structural fire protection surrounding	NVIC 9-97	07101/3/5
cooking and heating appliances	Ch-1, 3.11.1	
Crosse systemation band	116.415	07100
Grease extraction mood	NFPA 17/17A	07109
Meet UL 710 & De equipped With a dry or     wet chemical fire extinguishing system		
First aid kit	121,710	09112
Marked "First Aid Kit"		
Watertight container		
Fasily visible & readily available to crew		
USCG Approved	160.041	
Portable lights	120.430	04103
At least 2 onboard		
Located at operating station & at access to		
propulsion machinery space		
No unsafe conditions or practices exist	115.830	09298
Slips, trips, falls		
Sharp edges		
Swinging loads/gear adrift		
Paint locker(s)	118.400(a)(5)	
Fixed gas fire extinguishing system	181.20-1	07109
Space construction material	116.405(d)	07101
Steel or equivalent		
Electrical installations	120.530(a)	02108
Class 1 Div 1 space must be explosion	111.105	
proof or intrinsically safe		
Means to secure ventilation	116.600	09201
Power ventilation must have means of being		
shut down from pilot house		

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

## Section 7: Structural Fire Protection

	Action	Ref	Code
	Confirm installation in accordance with approved	116.202(b)	07122
	Fire Safety Plan	177.10-5	
•	Verify boundaries are maintained	116.405	07101
	Verify general arrangement & outfitting	NFPA 701	07101
		NVIC 9-97 Ch-1,	
	Inspect ceilings linings trim interior finish &	116.422	07101
	decorations	NVIC 9-97 Ch-1,	
	Combustible veneers may not be used in	2.9.1	
	passageways, stairway enclosures or in low-		
	risk accommodation spaces		
	<ul> <li>May not be used in or extend into hidden</li> </ul>		
	spaces such as behind linings or ceilings	440 405(1)	07405
•	Inspect doors (other than WI doors)	116.435(b)	07105
	Within fire control boundary, must be     consult of operating from other side by one		
	person may width not to exceed 48"		
	Within A-class boundary, must meet A-15		
	class bulkhead, latch with min throw of 0.75",	116.435(c)	
	no rugs or carpets allowed to pass through		
	doorways, no double-swing doors allowed		
	except between food prep spaces		
	Within B-class boundary, latch with min     throw of 0.275" no muse or compete allowed	116.435(d)	
	to pass through deenways, undergut must	( )	
	not be more than 1" above door sill		
	Within C-class bulkhead, must be		
	noncombustible material.	116.435(e)	
	Inspect balconies	116.439	07105
	Confirm operation of draft stops	116.415(e)	07115
	<ul> <li>Located not more than 45' apart in horizontal</li> </ul>	116.415(f)	
	direction; B-class material		
	Passageways/stairways only to contain fire	116.423(b)	07101
<u> </u>	resistant furnishings	110.100()	07404
	When containing "fire resistant furnishings":	116.423(a)	07101
	Ensure furniture meets UL 1056, CAL TB	NIVIC 9-97 Ch-1	
	Draneries/curtain have been tested IAW	2.12.1.1	
	Diapenes/cuitain have been tested iAW     NFPA 701		
	<ul> <li>Rugs do not extend more than 4" above</li> </ul>		
	deck		
	<ul> <li>Type approvals are normally not issued for</li> </ul>		
	domestic vsls. Test reports, manufacturer's		
	certs should be provided by shipyard to		
	Continue acceptability of materials	116 (05/i)	00116
	with 16 CEP 1632 Mattrasses with polyurethane	IMO Res	09110
	form must comply with CPSC flammability	A.688(17)	
	ioan must comply with CF3C hammability		

#### Section 7: Structural Fire Protection

Action	Ref	Code
standards in 16 CFR 1632/1633		
Wire inserted glass allowed should be less than	116.435(c)(10)	07105
100in <sup>2</sup> for A-class doors, and less than 1296 in <sup>2</sup>		
for B-class doors (no dimension exceeding 54")		
Ensure through-penetration fire stops are tested	NVIC 9-97 Ch-1,	07103
to the FTP Code under 164.138	2.13.1	
<ul> <li>A-class bulkhead penetrations must prevent</li> </ul>		
passage of flame & smoke for 1 hour		
<ul> <li>B-class bulkhead penetrations must prevent</li> </ul>		
passage of flame & smoke for 30 mins		
C-class bulkhead penetrations must		
preserve smoke-tight integrity of boundary		
Consult table 116.415(bulkheads) or table	116.415(b)	07103
116.415(c) (decks) for required Class		
construction between types of adjacent spaces		
Atriums	116.440	07104
<ul> <li>Entire main vertical zone must be protected</li> </ul>		
with auto sprinkler system meeting NFPA 13		
<ul> <li>Contain smoke detector system</li> </ul>		
<ul> <li>Smoke extraction system, exhaust entire</li> </ul>		
volume of space within 10 mins		

	<b>8</b> 1 1	<b>\</b>	
	Action	Ref	Code
٠	Emergency Position Indicating Radio Beacon	117.64	05111
	(EPIRB) (High seas or $\geq$ 3NM on Great Lakes)		
	Registration	47-80.1061	
	0	(e)-(f)	
	Marked with vessel name	122.604(c)	
	Stowage	117.64	
	To automatically float free and activate		
	Hydro-static release expiration date	122,740	
	Battery date	122.728(b)	
•	Life jackets		
•		117 71(c)	11130
		117.71(0)	11100
	Quantity	117.71(a)-(b)	11118
	<ul> <li>Adult lifeiackets for each person on board:</li> </ul>		
	regs for child size or extended sizes vary		
	Stowage	117.78	
	Readily accessible & distributed throughout		
	accommodation spaces		
	<ul> <li>Containers not capable of being locked &amp;</li> </ul>		
	when practical aloe life jackets to float free		
	<ul> <li>Overhead stowage allows quick release</li> </ul>		
	<ul> <li>If stowed &gt;7' above deck, release must be</li> </ul>	117.78(a)(4)	
	operable from the deck (not applicable to Old	117.70(a)( <del>4</del> )	
	T-L vessels)		
	Container clearly marked with "Life	122.604(f)	
	preservers" & "Child" or "Adult" and quantity		
	Child-sized life jackets stowed separately	400 CO4/b)8/b)	
	Markings	122.604(D)&(N)	
	Vessel name		
	Retro-reflective material		
	Lights	117.75	
	<ul> <li>O/C/GL – must have USCG approved light</li> </ul>		
	(not required on ferries & vsis that do not		
	operate > 20 NM from harbor of safe refuge)	100 516	
	Location and information for donning	122.310	
	Instructions	115 000(4)	
		115.606(u)	
	<ul> <li>I hose tound to not meet condition &amp; suitability aboutd be destroyed.</li> </ul>		
	suitability snould be destroyed		
	annually by approved facility		
	Each life jacket fitted with a whistle		
	(SULAS)		44440
	Personal Floatation Devices (work vests) carried in		11118
	addition to lifejackets (if present)		
	USCG approval	117.72	

#### Section 8: Lifesaving Equipment (LS)

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	Section 6: Litesaving Equipment	l (LS)	
	Action	Ref	Code
	Serviceable condition		
	Inflatable PFDs serviced by an approved		
	facility annually		
	Stowed separately and in a manner so as to	160.077	
	not be confused with pax lifejackets		
•	Ring Life Buoys		11117
	USCG type approval	117.70(b)(1)	
		160.050	
	Quantity & size	117.70(a)	
	• $\leq 26' \rightarrow 1x \ 20''$		
	<ul> <li>26'&lt; X ≤ 65' → 1x 24"</li> </ul>		
	<ul> <li>&gt;65' → 3x 24"</li> </ul>		
	Stowage	117.70(b)	
	<ul> <li>Rapidly cast loose</li> </ul>		
	<ul> <li>Not permanently secured</li> </ul>		
	Lifeline	117.70(c)	
	<ul> <li>At least 1 fitted with lifeline, if &gt; 1 at least one not fitted with lifeline)</li> </ul>		
	Buoyant		
	<ul> <li>≥ 60'</li> </ul>		
	Non-kinking		
	<ul> <li>Dark color if synthetic, or resistant to UV light</li> </ul>		
	Waterlight	117.70(d)	
	<ul> <li>Not required when limited to daytime operations</li> </ul>	161.010	
	<ul> <li>≥1 floating waterlight</li> </ul>		
	<ul> <li>3ft-6ft lanyard secured around the body of LB</li> </ul>		
	<ul> <li>If only one, attached to lanyard w/ corrosion resistant clip</li> </ul>		
	Verify batteries		
	Markings	122.604	
	• O/C – orange	117.70(D) 160.050.3(b)	
	• LBS/R can be white	& 050-5(D)	
	Vessel name in block capital letters	117 70	
	Retro-retilective tape	115.000(d)	
		115.606(u)	
•	Inflatable liferatt & inflatable buoyant apparatus		
	Installations	160 aariaa	11120
	USCG type approval	100 Series	11130
	Quantity (route dependent, always verify with	117.200(a)(1) & (3)	27
	Stowage	(3)	∠ı 1110₽/07
	Secured to yel by a pointer with a fleet free	Table	11100/21
	link permanently attached to the vsl		
	<ul> <li>Floats free and inflates automatically</li> <li>Readily accessible to crew for quick launch</li> </ul>	117.130(a)(2) 117.130(a)(3)	

#### Section 8. Lifesaving Eg ont (IS) . . .

	(10)	
Action	Ref	Code
<ul> <li>Fully equipped as required IAW 117.175 (b)&amp;(c)</li> <li>Sheltered from breaking seas and fire damage</li> </ul>		
Stowed to prevent shifting     Markings     Vessel Name     Part of registrat	160.151-33	11108/27
<ul> <li>Port of registry</li> <li>Annual service dates <ul> <li>Every 12 months, may be delayed 5 months</li> <li>Immediately if container is damaged or seals</li> </ul> </li> </ul>	122.730(a)	11135
Emergency instructions are posted	122.510 122.518	11131
CG approved embarkation ladder (required when embarkation station is >10' from lightest operating waterline)	117.150(b)	11130
Servicing/expiration of hydrostatic release Hydrostatic release installed correctly	122.740	11130
Lifefloat & Buoyant Apparatus installations (when		11108/27
<ul> <li>ÚSCG type approval Quantity (route dependent)</li> <li>Stowage <ul> <li>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</li> <li>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</li> <li>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</li> </ul> </li> </ul>	117.200(a)(2) 117.200(c) Table 117.137	11130 11108/27 11108/27
<ul> <li>If a single painter is used for ≥ 2 life floats/buoyant apparatus, ensure that:         <ul> <li>The total weight of the devices does not exceed 400lb</li> <li>Each device is attached to the painter with a line long enough (and of differing lengths) to ensure devices can float without</li> </ul> </li> </ul>		
	Action         • Fully equipped as required IAW 117.175 (b)&(c)         • Sheltered from breaking seas and fire damage         • Stowed to prevent shifting         Markings         • Vessel Name         • Port of registry         Annual service dates         • Every 12 months, may be delayed 5 months         • Immediately if container is damaged or seals or straps are broken         Emergency instructions are posted         CG approved embarkation ladder (required when embarkation station is >10' from lightest operating waterline)         Servicing/expiration of hydrostatic release Hydrostatic release installed correctly         Lifefloat & Buoyant Apparatus installations (when present)         USCG type approval Quantity (route dependent)         Stowage         • Secured with CG approved weak link that is of proper strength for the capacity of the survival craft & that is attached at one end to the painter and the other end to the vessel         • 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.         • If painter attachment fitting is not provided , a means to attach the painter, and is dark colored or UV resistant.         • If a single painter is used for ≥ 2 life floats/buoyant apparatus, ensure that:         • The total weight of the devices does not exceed 400lb         • Each device is attached to the painter with a line long enough	Action       Ref <ul> <li>Fully equipped as required IAW 117.175 (b)&amp;(c)</li> <li>Sheltered from breaking seas and fire damage</li> <li>Showed to prevent shifting</li> <li>Markings</li> <li>Vessel Name</li> <li>Port of registry</li> </ul> 160.151-33 <ul> <li>Vessel Name</li> <li>Port of registry</li> </ul> 122.730(a) <ul> <li>Every 12 months, may be delayed 5 months</li> <li>Immediately if container is damaged or seals or straps are broken</li> <li>Emergency instructions are posted</li> <li>I22.510 122.518</li> <li>CG approved embarkation ladder (required when embarkation station is &gt;10' from lightest operating waterline)</li> <li>Servicing/expiration of hydrostatic release Hydrostatic release installed correctly</li> </ul> <li>Lifefloat &amp; Buoyant Apparatus installations (when present)</li> <li>USCG type approval Quantity (route dependent)</li> <li>Stowage         <ul> <li>USCG type approval or 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</li> <li>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</li> <li>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</li> <li>If a single painter is used for ≥ 2 life floats/buoyant apparatus, ensure that:             <ul> <li>The tota</li></ul></li></ul></li>

#### Section 8: Lifesaving Equipment (LS)

Ref	Code
122.604(a)	11108/27
160.010-8	
117.150(b)	11130
. ,	
117.175(d), (e)	11110
& (f)	
122.512(a)(1)(ix)	11131
117.210(a)	11104
180.10-35	
117.210(c)	11130
160.056	
160.156	
117.130	11104
122,700	···-•
	Ref         122.604(a)         160.010-8         117.150(b)         117.175(d), (e)         & (f)         122.512(a)(1)(ix)         117.210(a)         180.10-35         117.130         122.700

#### Section 8: Lifesaving Equipment (LS)

	Coolion C. Encouving Equipment	(10)	
	Action	Ref	Code
	clear of obstructions that would interfere with		
	boarding and launching craft		
	<ul> <li>Stowed to prevent shifting</li> </ul>		
	<ul> <li>Sheltered, as far as practicable, from</li> </ul>		
	breaking seas and fire damage		
	<ul> <li>Ready for immediate use by crew</li> </ul>		
	Markings	122.604(i)	11104
	<ul> <li>Vessel name (each side of bow)</li> </ul>		
	<ul> <li>Capacity (each side of bow)</li> </ul>		
	Retro-reflective tape		
	Information plate		
	Required equipment	160.056-3(b)	11104
	<ul> <li>Pair of oars &amp; painter ≥ 3/8" &amp; ≥ 30'</li> </ul>		
	<ul> <li>SOLAS requirements for rescue boats</li> </ul>		
	Condition		11104
	Small, lightweight boat with built-in buoyancy		
	<ul> <li>Capable of being readily launched</li> </ul>		
	<ul> <li>Easily maneuvered</li> </ul>		
	<ul> <li>Of adequate proportion to take an</li> </ul>		
	unconscious person onboard without		
	capsizing		
	<ul> <li>Good working order, ready for immediate</li> </ul>		
	use	100 700	
	Adequate means are provided for	122.700	11104
	transferring a victim from a rescue boat or	117.210(C) 190.10.25	
	platform to the deck of the vsl (during MOB	160.10-35	
	drill)		
	Embarkation ladder (required when	117.150(b)	11130
	embarkation station is >10' from lightest		
	operating waterline)	445.000	44440/0
•	Launching appliance(s)	115.808	11112/3
		117.150(c)	
	Matorial condition	117.130(0)	
	• Wasiaye, clacks, siluciulal dallaye, blocks,		
	Falls have been renewed at least every 5	122 70/	
	Pails liave been renewed at least every 5	122.704	
	Fells have been and far and at least	100 704	
	Fails have been end-lor-ended at least	122.704	
	every 30 months (SOLAS does not allow end		
	tor end; talls are replaced every 5 years)	117 150/~)	
	Automatic disengaging apparatus functions	117.150(C)	
	correctly	100 5101 1111	
	Operating instructions are posted	122.512(a)(1)(ix)	

	Section 9: Firefighting Syst	tem (FF)	
	Action	Ref	Code
•	Fire main and pump ( <i>Piping must be ferrous metallic piping meeting 56.60</i> )	118.300(b)-(c) 119.710(c) 181.10-1	07110/3
	Capable of providing adequate		
	pressure		
	<ul> <li>Vessel &gt;600 pax or ≥49 Overnight – two highest outlets must have pitot tube</li> </ul>	118.300(b) 76.10-5	
	<ul> <li>Vessel with &lt;49 Overnight - highest hydrant must have pitot tube pressure &gt;345 kPA [50 psi]</li> </ul>	118.300(b)	
	<ul> <li>Old T-L – 50 gpm at 60 psi at pump outlet</li> </ul>	181.10-1(c)	
	Self-priming & power driven	118.300(d)	
	May be connected to bilge system to meet 119.520	181.10-1(e)	
	<ul> <li>Old T-L required to have additional hand fire pump</li> </ul>	181.10-5	
	Fitted with discharge-side pressure	118.300(b)	
	gauge	76.10-5	
	<ul> <li>Vessel &gt;600 pax or ≥49 Overnight</li> <li>Old T-I</li> </ul>	181.10-1(c)	
	Location of controls and markings	118.300(e)	
	Main operating station and local		
	Operation of fire pump from remote	118.300(e)	
	control(s)		
	Materiel condition of system	119.710	
	No excessive leaking	118.310	
	<ul> <li>Vessel &gt;600 pax or ≥49 Overnight –</li> </ul>		
	main and hydrants must meet 76.10-10		07440/0
	Fire stations	110.000/-)	07110/3
	A fire nose with a nozzie must be	118.320(a) 181.15-10(a)	
	Allached to each life hydrant at all time	101.13-10(g)	
	<ul> <li>A vsl must have a sufficient number of fire hydrants to reach any part of the vsl</li> </ul>	118.310(a)	
	<ul> <li>using a single length of hose.</li> <li>Old T-L – At least 2 stations, sufficient number to reach any part with single length of hose.</li> </ul>	181.15-5	
	Hoses meet required length, size,		
	markings and quantity	110.000 (1.)	
	• UL 19 or equivalent (IBR 114.600)	118.320(b)	
	• 50 ft length, 1.5" diameter,	UVU PL 10-04	
	<ul> <li>Fittings of brass or other suitable (corrosion resistant) material (NFPA 1963); Nozzle must be approved under</li> </ul>	118.320(c)	

Section 9: Firefighting Sys	stem (FF)	
Action	Ref	Code
46 CFR 162.027 or type recognized by Commandant.		
<ul> <li>Old T-L – hose must be 50' length and 1.5" diameter: UL 19 Standard</li> </ul>	181.15-10(c)	
Operation of valves at fire stations	118.310(c)	
allow the hose to be removed while fire		
Portable fire extinguishers		07110
Location and stowage     Clearly visible, readily accessible from     space being protected to the     satisfaction of the OCMI	118.500 118.520	
<ul> <li>Servicing compliance</li> <li>Annual service IAW NFPA 10; Hydrostatic test every 5 years; Testing or renewal of flexible connections/hoses (46 CER 147 65)</li> </ul>	115.810 NFPA 10 Ch 4,7,8 114.600	
Condition of cylinder(s) and hose(s) • No excessive corrosion Presence of required type & quantity • Vehicle deck without fixed sprinkler must have 1 B-40 for every 10 vehicles	115.810 NFPA 10 Ch 7 118.500(b) Table 118.500(c) CVC PL 18-04	
<ul> <li>Semi-portable firefighting equipment Location and stowage         <ul> <li>Clearly visible, readily accessible from space being protected to the satisfaction of the OCMI.</li> <li>Frame/support for each must be weld or permapertly attached to deck or</li> </ul> </li> </ul>	118.500 118.520 118.500(d)	07110
<ul> <li>Annual service IAW NFPA 10; Hydrostatic test every 5 years; Testing or renewal of flexible connections/hoses</li> </ul>	115.810 NFPA 10 Ch 4,7,8 114.600	
Condition of cylinder(s) and hose(s) Presence of required type & quantity	115.810 NFPA 10 Ch 7 118.500(b)&(c)	
	CVC PL 18-04	07440
<ul> <li>Fire axe(s)</li> <li>Vessels &gt; 65' must have at least one fire axe located in or adjacent to the primary operating station</li> </ul>	118.600	07110

		Def	Codo	
	Action		Code	
•	Fixed fire extinguishing systems	118.400(a)	07109	
		NVIC 3-95		
	Safety precautions are implemented	118,410(a)	07109	
	prior to servicing system	MSM II/C.2.1.5		
	phon to convioling dystern	181.20-1		
	Required spaces fitted with an	118.400		
	approved fixed gas system or	181.20-1		
	alternative system			
	<ul> <li>Propulsion machinery space</li> </ul>			
	<ul> <li>A space containing an internal</li> </ul>			
	combustion engine > 50 hp			
	Space containing oil-fired boiler			
	<ul> <li>Space containing combustible cargo or stores increasible during variant.</li> </ul>			
	stores, inaccessible during voyage			
	• A paint locker			
	<ul> <li>A storeroom containing naminable liquids (including liquors of 80 proof or</li> </ul>			
	more, packed in individual containers >			
	2.5 gal)			
	Alternative system types & exceptions			
	to the requirements			
	Servicing compliance	115.810(a)(5)		
		147.60-67		
	Cylinders are weighed annually	1 15.8 10(a)(5) 147 60 67		
	Cylinders are hydrostatically tested	147.00-07 115.810(a)(5)		
	<ul> <li>Eixed CO2 every 12 years – date</li> </ul>	147.60-67		
	stamped on bottle			
	Testing or renewal of flexible	115.810(a)(6)		
	connections/hoses	147.60-67		
	Odorizing unit (CO2 installed or	118.410(h)		
	"altered" after 9 July, 2013)			
	Stowage of cylinders	118.410(c)		
	<ul> <li>Stowed outside space protected by</li> </ul>			
	system.			
	Must have manual ventilation closures	118.410		
	on protected space			
	Materiel condition of system			
	components	110 /10/h)		
	<ul> <li>Controls and valves must be located</li> </ul>	110.410(b)		
	outside the protected space			
	<ul> <li>IVIUST NAVE TEMOTE CONTROLS IN A Dreak glass enclosure</li> </ul>			
	• Must have manual controls at the			
	storage cylinders	118.410(c)		
	Piping and nozzles are clear	115.810(b)		
	Operational test of time delays, alarms	115.810(b)		
		· · /		

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#### Section 9: Firefighting System (FF)

	Section 9. Thenghung Syst		
	Action	Ref	Code
	and shutdowns		
	Markings and warning signs are posted	122.612	
	Operating instructions are posted	122.612	
	Enclosed vehicle space	118.410(g)	07109
	• Must be fitted w/ an automatic sprinkler		
	system that meets 46 CFR 76		
	Partially enclosed vehicle spaces	118.410(h)	
	<ul> <li>must be fitted with a manual sprinkler</li> </ul>		
	system that meets 46 CFR 76		
٠	Pre-engineered fixed gas fire extinguishing		07109
	systems (when applicable under – 46 CFR		
	118.400(b)(2))		
	Determine if approved	118.420(a)(1)	
	Only one pre-engineered system per	118.420(c)	
	protected space.		
	Presence of manual actuation from	118.420(a)(2)	
	outside of the space		
	Presence of automatic actuator (heat	118.420(a)(2)	
	detector)		
	Witness system automatically shuts	118420(a)(3)	07116
	down power ventilation systems and	110.120(0)(0)	01110
	ongines that draw intake air from within		
	protocted apage		
	protected space	119,420(a)(4)	07100
	System is installed per manufacturers	Manufacturer's Inst	07109
	Instructions		07404
	Servicing requirements	115.610(b)(2)	07124
	Operation of following from the	118.420(b)(1)	07109
	operating station:	118.420(b)(2)	
	Discharge indicating light	118.420(b)(3)	
	<ul> <li>Discharge audible alarm</li> </ul>		
	Means to reset automatically shut down		
	ventilation systems and engines as		
	required		
٠	Fire and smoke detection systems	118.400	07106
	, ,	181.05-5	
	Appropriate spaces are equipped	118.400(c)	
	Propulsion machinery space		
	Space containing internal combustion		
	engine > 50hp		
	<ul> <li>Space containing oil-fired boiler</li> </ul>		
	<ul> <li>Accommodation space, control space</li> </ul>	110 100(-)	
	and service space – except for	118.400(e)	
	continuously manned stations		
	<ul> <li>An enclosed vehicle space must be</li> </ul>	118.400(a)	
	fitted with a fire detection and alarm	10.400(9)	
	system of an approved type installed		

Section 9: Firefighting System (FF)		
Action	Ref	Code
per 46 CFR 76 & must be fitted with a smoke detection system that meets 46 CFR 76		
Witness system test	115.810(a)(7) 76.27-5 76.27-10	07106
Operation of control unit's visual and audible alarms (if applicable)	115.810(a)(7)	
Zoning (if present)	118.400(c) 76.27-30	
Location and spacing of detectors	118.400(c) 76.27-15 76.27-35	

Actior	· · · · · · · · · · · · · · · · · · ·	Ref	Code
Steeri	ng gear		
	Electrical, mechanical, and hydraulic connections and linkages of main and auxiliary (emergency) systems found in subchapter F and J.	115.814 119.600 <i>182.30-1</i>	02105
	<ul> <li>Main steering gear and rudder from 35 degrees to 30 degrees in under 28 secs</li> </ul>	58.25-10(b)(2)	
	<ul> <li>Auxiliary steering gear capable of moving rudder from 15 degrees to 15 degrees in not more than 60 secs</li> </ul>	58-25-10(c)(2)	
	Operation of sound-powered telephone system between bridge and steering gear	58.25-15	04106
	Witness operational test of systems, in all modes of operation from emergency steering station(s)	115.814	02105
	Accuracy of rudder angle indicator, ensure alignment with mechanical rudder angle indicator	113.40-10 MSM II/C.4.C.4	
••	Witness operational test of auxiliary	115.814	
	Ensure all vital connections, pins, couplings have securing devices Examine rudder post, packing, and tiller for	MSM II/C.4.B.1.e	
	excessive wear and leakage		
	Emergency power to support loads for steering gear failure alarms required by 113.43 and rudder angle indicators	112.05-5 112.15-5(h) 112.15-5(p)	
Fuel c	il service system		13199
	<ul> <li>Gasoline prohibition except for outboard engines.</li> </ul>	119.405	
	Installation, arrangement & condition of	119.435	13199
	piping, manifolds & filters	119.440	
	All independent fuel tanks are electrically	119.455	
	bonded to a common ground	182 20-25	
	<ul> <li>Means to accurately determine amount of fuel in each tank</li> </ul>	102.20 20	
	<ul> <li>Each tank is fitted with an appropriately sized vent pipe connected to its highest point</li> </ul>	119.450 182.20-35	
	<ul> <li>Approved piping (material &amp; size) is used in the fuel oil service system</li> <li>Shutoff valves fitted at tank connection</li> </ul>	119.455(a) 182.20-40	
	(remote emergency fuel shutoff valve; if located in machinery space, ≤ 12" w/in the space and shielded from flames) & engine end of fuel line	119.455(b)(3) 182.20-40(b)(3)	

Action	Ref	Code
Suitable metal marine type strainer fitted in	119 455(b)(5)	0000
the engine compartment. Drip pan fitted w/	182.20-40(b)(5)	
flame screen must be installed under		
gasoline strainers.		
Portable fuel system	119.458	13199
<ul> <li>Only permitted for portable dewatering</li> </ul>	ABYC H-25	
pumps or outboard motor installations		
Witness tests of remote shutdown(s)	115.840	
Nonmetallic flexible hoses and fittings	119.455	
<ul> <li>Double hose clamps, lengths permitted,</li> </ul>	56.60-25	
approved standards		
Main propulsion system(s)		13101
Condition, installation and arrangements of	119.200	
system components	119.220	
<ul> <li>Must meet requirements of Subchapter F &amp;</li> </ul>	182.20-1	
Subchapter J	119.310	
<ul> <li>Water cooled or meets exceptions for air</li> </ul>	119 420	
cooling	182.20-10	
<ul> <li>All engines must have at least 2 means of stepping the engine (the E/O shuteff at the</li> </ul>		13108
stopping the engine (the F/O shuton at the	119.200(b)	
Reliable means of shutting down a		
propulsion engine at the main pilothouse	121.620(b)	
control station	175.10-29	
Foundations for structural integrity	115 804	13101
r oundations for structural integrity	MSM II/B.1.F	10101
Installation of protective covers or quards	115 830	09233
over exposed dears belts or other rotating	110.000	00200
machinery		
System bull penetrations for structural	119 422	03199
integrity	182.20-10	00100
Keel coolers are fitted with a shutoff valve		
where the cooler penetrates the hull (not	119.422(b)	
required for integral coolers)		
All piping outside of shutoff valve is at least		
schedule 80, any flexible hoses used at	119.422(c)	
machinery connections is approved and		
double hose clamped		
Operational test of main propulsion	115.804(a)	13108
machinery	119.410(b)	
<ul> <li>Proper function of following gauge at the</li> </ul>	182.20-5	
operation station:		
Engine KPM		
Jacket water terrip		
RPM not required for Old T-I		

, , , , , , , , , , , , , , , , , , ,		
Action	Ref	Code
Novel systems should be inspected to the	114.540	13199
Design Basis Agreement approved by the USCG		
prior to installation of the novel system.		
Unfired pressure vessels (UPVs)	119.330	13199
Data plate(s) are legible	54.10-20	
Determine if UPV is exempt from	119.330	
inspection	54.01-15	
External exam, internal exam and/or	115.812	
hydrostatic test needs	61.10-5(b)	
	61.10-5(d)&(e)	
External (5 yrs)	61.10-5(b)(1)	
Internal (5 yrs when accessible)	61.10-5(b)(2)	
	54.01-55 MSM II/	
	B.1.0.4	
Witness hydrostatic test (if needed)	61.10-5(d)	
(1.25 MAWP)	61.10-5(e)(4)	
Installation & operation of pressure-	54.15-5(f)	
relieving devices		
• Twice in 5 yrs, no more than 3 yrs between		
tests; relieves at a pressure $\leq$ 10% above or		
below the valve's marked pressure	EA 4E E	
Pressure-relieving device setting does not	54.15-5 61.10-5(i)	
exceed the UPV S MAWP	54.15-10(a)&(g)	
Potable water system	5 (/( <b>5</b> /	09130
Tank vents are fitted with insect screens	21-1250.82(c)	
Operation of water pump(s) and	MSM II/	
pressurization system	A.6.C.2.a	
	21-1250.84(a)	
Pressurization system is fitted with safety	54.01-15(a)	
relief valve(s)	21 1250 22	
volves	21-1250.62	
Water beaters comply with Parts 53 & 63	110 320	
EXCEPT.	119.520	
Electric water beaters rated at not more		
than 100 psi and 250 °F are acceptable if:		
<ul> <li>Capacity ≤ 120 gallons:</li> </ul>		
<ul> <li>Heat input ≤ 200,000 Btu/hour;</li> </ul>		
• UL listed (174 or 1453); AND		
Protected by pressure-temperature relief		
device		
Water heater must be installed & secured	119.320(c)	
from rolling by straps or other devices		

	Action	I CI	Code
•	Bilge system	115.804(h)	13104
	Verify location and operation of pump(s)	182.25-10	
	Must comply with required pumps listed in	119.520(c)	
	table 56 50-55(a)	( )	
	<ul> <li>Emergency bilge pump shall not be fwd of collision bulkhead</li> </ul>	56.50-55(e)(3)	
	<ul> <li>If &lt;65 feet, must have a portable hand bilge pump or second power pump with source independent of first power bilge pump.</li> </ul>	119.520(b)	
	Manifolds, valves and piping		
	<ul> <li>Capable of operation under all practicable conditions whether listed or upright</li> <li>Each bilge suction must lead from a</li> </ul>	56.50-50(a) 182.25-5 182.40-5(b)	
	manifold	56.50-50(c)(1)	
	diameter of bilge suction pipes in 56.50-		
	<ul> <li>&gt;150 GT: main piping not less than 2.5" ID</li> </ul>	56.50-50(d)(3)	
	<ul> <li>≤65' pipe: size must be greater than 1" nominal</li> </ul>	56.50-50(d)(4)	
	<ul> <li>Bilge suction will be fitted with a suitable strainer with an open area ≥ 3Xs the area of the bilge pine</li> </ul>	56.50-50(g)	
	Visual & audible alarm at the operating station to indicate a high-water level in	119.530(a)	
	each of the normally unmanned spaces Visual indicator at operating station when	119.530(b)	
	Witness bilge system operational test Pollution placard is posted (when	115.804(h) 33-155.450	14502
	Explored events and a second events and a second event	115 904(a)	12100
	Exhaust system(s) (wet & dry)	110.004(0)	13199
	Condition	119.420	
	<ul> <li>As an alternative, vessels may comply with ABXO B 4</li> </ul>	119.430 119.425(c)	
	ABYC P-1	116.405(b)	
	Dry Exnaust systems	110.405(D) 177.10.5(b)	
	<ul> <li>Exhaust pipes are clear of &amp; suitably</li> </ul>	116 070	
	insulated from combustible materials and	110.970	
	suitably insulated to prevent injuries		
	<ul> <li>Horizontal dry exhaust pipes:</li> <li>Do not pass through living or berthing</li> </ul>	119.425(a)(2)	
	areas	182 20-10	
	- I erminate above the deepest load waterline	182.15-15	
	-Are arranged to prevent entry of cold water from rough or boarding seas -Are constructed of corrosion-resisting material at the bull penetration	102.13-20	

Action	Ref	Code
<ul> <li>Exhaust systems cooled by water</li> <li>Are provided with cooling water from engine cooling system of from a separate engine driven pump</li> </ul>	119.425(b) 182.20-15 182.15-15	13199
<ul> <li>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</li> </ul>	119.425(b)(2) 182.15-15(b)(2)	
<ul> <li>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</li> </ul>	119.425(b)(3) 182.15-15(b)(3)	
<ul> <li>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</li> </ul>	119.425(b)(5) 182.15-15(b)(5)	
intake line.	119.425(b)(6) 182.15-15(b)(6)	
Auxiliary boiler(s) (when present) Maximum allowable working pressure (MAWP)	115.812(b) 54.10-20	13199
Inspect internally Mounts	61.05-10 Table 61.05-15(a)-(d) 61.05-10 Table	
Columns, gauge glasses and gauge cocks Steam gauge Safety valves Operation of safety relief valves • Twice in 5 yrs, no more than 3 yrs between tests; relieves at a pressure ≤ 10% above or below the valve's marked pressure	61.05-15(e) 61.05-15(f) 61.05-10 Table 115.704 61.05-10 Table 61.05-20	
Pressure-relieving device setting does not exceed the MAWP & the device does not relieve at a pressure greater than the MAWP	54.15-10	

A stinu	Dof	Codo
	Nei	00100
Switchboard(s) & distribution panel(s)	400.000(.)(.)	02108
Location, condition and installation	120.330(a)-(e)	
Dry, adequately ventilated	120.330(1)	
I otally enclosed	183.10-10 183.10-15/h)	
With drip shield	103.10-13(b)	
Dead front type	100.000(1)	
Non-conductive handrail & matting or	120.200(b)	
grating on deck	120.330(T)	
	103.01-13(a)	
Blanks installed (if needed)	120.330(e)	
Working area around main	120.330(j)	
switchboards	183.10-15(c)	
Sized correctly	120.340	
	111.30-19(a)	
Overcurrent protection	120.380	
	183.10-35 & 40	
Circuit directory/labeling (distribution	120.220(d)	
panels)		
Shore connection ≥ 50V	120.390	
<ul> <li>Box/receptacle shall be permanently</li> </ul>		
installed		
Multiple generator interlock	183.10-50	
(switchboard)	120.322	
Main service generator(s) & prime mover(s)		13102
Power source(s) requirements	120.310(a)	
<ul> <li>Must have two sources of power for</li> </ul>		
Vital systems IAW 119.710		
Condition of generator(s) & prime	120.320	
mover(s)' components	120.322	
<ul> <li>Accessible as possible</li> </ul>	120.324	
<ul> <li>Adequately ventilated</li> </ul>	183.10-5	
<ul> <li>Dry as practicable</li> </ul>		
<ul> <li>Mounted above bilges</li> </ul>		
Drip proof		
Installation of protective covers or	116.960	
guards	177.35-15	
Generator(s) nameplates are attached	120.320(d)	
Required gauges	120.320(c)	
• If $\geq$ 50 Volts, voltmeter & ammeter, for	183.10-5(g)	
AC generators way to measure		
trequency must also be provided	400.000(5)	
Protected by overcurrent device	120.320(1)	
Reverse Power Pelay (for parallel opc)	120 322	
Neverse Fower Neray (101 parallel ops)	120.022	

Action	Ref	, Code
Lighting systems	-	09203
Light fixtures	120 410	00200
Globe lens or diffuser must have a		
auard or be made of high strength		
material except: in accommodation		
space, radio room, galley or similar		
space		
<ul> <li>Comply with 120.200, UL 595 &amp; series 1570</li> </ul>	183.10-20(l)	
Presence of portable lights	120.430	04103
<ul> <li>At least 2 onboard; flashlights count</li> </ul>	UL1570	
<ul> <li>Located at operating station &amp; at</li> </ul>		
access to propulsion machinery space		
Emergency lighting operational test	120.432	04103
Adequate fitted along line of escape to	184.30-5	
main deck from pax & crew		
accommodation spaces located below		
main deck		
Automatically actuate upon failure of		
main lighting system		
<ul> <li>If not equipped with single source of</li> </ul>		
emergency power for emergency		
ngnung, must nave morvidual ballery		
powered lights that.		
Automatically actuate upon loss of normal power		
Are not readily portable		
Are connected to an automatic battery		
charger: and		
• Have sufficient capacity for $\geq 2$ hours		
of continuous operation		
<ul> <li>&gt;65' &amp; 600 pax OR &gt;49 Overnight –</li> </ul>		
Emergency lighting must meet Sub J		
Part 112		
Overcurrent protection	120.380 UL 489	09209
Battery installation	120.350	02108
	183.05-20	
Battery category	120.352	
• Large (Charger output > 2 kw)		
• Small (Charger output ≤ 2 kw)		
Ventilation	111 15 10	
• Large (provided IAW 111.15-10)	111.15-10	
<ul> <li>Small (located in a well-ventilated</li> </ul>	120.354	
Space) Droportly installed and accurred	120.007	
Property installed and secured	120.350(D)	
<ul> <li>Located as nigh above blige as practicable &amp; secured</li> </ul>	120.004	

Dection 11. Electrical Dystems i		
Action	Ref	Code
<ul> <li>Large (in a locker, room or enclosed</li> </ul>		
box solely dedicated to the storage of		
batteries; electrical equipment located		
within enclosure must be approved for		
Class I, Div I space)		
<ul> <li>Small (Protected from falling objects;</li> </ul>		
must not be in a closet, storeroom or		
similar space)	400.050(-)	
Space for maintenance and removal	120.350(C)	
Ammeter connected in the charging	120.350(1)	
circuit		
Proper ventilation of charger	120.350(a)	
<ul> <li>When charging batteries, must have</li> </ul>		
natural or induced ventilation to		
disperse gasses	400.050(1)	
Connections to battery terminals are	120.350(d)	
permanent type connectors		
Lithium Ion (Li-ion) battery installations		02108
Li-ion battery installations should be	CG-ENG	
assessed using the CG-ENG Policy	PL 02-19	
Letter 02-19 "Design guidance for Li-		
ion battery installations onboard		
commercial vessels" or the submitted,		
USCG approved plan for initial		
installation.		
Electrical cable & fixtures	183.05-45 & 50	
	183.10-20	
Supports for vertical & horizontal	120.340(b)(4)	02108
installations (metal supports spaced no		
more than 24" and in such a manner		
as to avoid chafing and other damage)		
Plastic tie wraps may be used for		
bundling NOT as a means of support		
No sharp radius of bends	120.340(b)(5)	09109
No hazardous conditions exist (for	120.200-220	02108
hazardous area installations see next		
task)		
<ul> <li>Protect pax, crew, other persons and</li> </ul>		
the vessel from electrical hazards		
including fire caused by or originating		
in electrical equipment, and electrical		
shock		
<ul> <li>Protection from wet and corrosive</li> </ul>		
environments		
Cable size and condition	120.340	02108
Individual wires, rather than cable are	183.05-45	
used in systems > 50V, the wire must		

<b>,</b>	• •	,	
Action	Ref	Code	
be in conduit			
<ul> <li>All cable &amp; wire must have stranded</li> </ul>			
copper conductors with sufficient			
current carrying capacity for the circuit		02108	
in which they are used			
Conductors in power & lighting circuits			
must be $\geq$ 14 AWG			
Conductors in control & indicator			
circuits must be $\geq 22 AWG$	100.010()		
Condition of outlets	120.340(g)		
Connection types	120.340(h)		
Components installed in designated		02108	
hazardous areas			
Hazardous area(s)	120.530(a)		
Spaces containing machinery powered			
by, or fuel tanks for, gasoline or other			
fuels having a flashpoint of $\leq$ 110 °F			
<ul> <li>Lockers used to store paint, oil,</li> </ul>			
turpentine, or other flammable liquids			
Electrical equipment for hazardous	120.530(b)		
area(s)			
<ul> <li>Electrical equipment must be explosion</li> </ul>			
proof or be part of an intrinsically safe			
system IAW requirements of 111.105			
Integrity of equipment	120.530(b)		
· ·	111.105-5		

	Action	Ref	Code
•	Hatches and Class-1 watertight doors	171.124	03104/10 03107
	Knife edges Gasket material Watertight integrity between gasket and	MSM II/B.1.E.5 116.1160	
	knife edge	170.270 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	174.210	
	Operation of indicator lights at the control station	174.210	
	Markings <ul> <li>Marked both sides – 1" height</li> </ul>	122.610	
	• WATERTIGHT DOOR – KEEP CLOSED -or-		
	WATERTIGHT HATCH – KEEP CLOSED	474.404	00407
	Operation of local controls	171.124 170.270(c)(2) ASTM F1197/7.1	03107
	Operation of remote controls	ASTM F1197/7.1 170 270(c)(1)	
	frame assembly	ASTM F1196/6.3	
	Operation of alarms	ASTM F1197/11.5	
	Closing times are in compliance	ASTM F1197/11.2 ASTM F1197/11.4	
	Markings	122.610	
	5	ASTM F1196/11.1	
	Watertight integrity	ASTM F1196/S4	
	Doors operate under reserve power	170 270(c)(3)	
		ASTM F1197/S3	
	Watertight bulkhead penetrations	171.114	03199
	Locations		
	<ul> <li>As high up and inboard as possible, number of papatrations aboutd be</li> </ul>		
	minimized.		
	Watertight		
	Free of sluice valves		
	Hull structure		02199
	Damage, wastage & fractures	116.300 MSM II/B.1.B.1	02106
	No unauthorized repairs	115.700	02106

### Section 12: Structural/Watertight Integrity (SW)

Action	Ref	Code
Sewage system	121.704	14402
	MSM II/B.6.F.4	
Presence of manufacturer's instructions	33-159.57	
Operation	33-159.57	
	33-159.57	
Piping and winng Marine Caritation Device (MCD) entrovel	33-159.57	
	33-159.97	
a labeled Type I, II, of III	00 100.1	
Instructions & warning placard posted	33-159.59	
Overboard discharge valve is closed and	33-159.7(b)	
secure	33-159.7(c)	
<ul> <li>Methods of locking &amp; securing and</li> </ul>		
applicability of locking & securing in 33		
CFR 159.7(b) & (c)	121 702	
(when applicable)	33-151.51	
	MARPOL V/9.2	
Plan compliance	33-151.57	14503
		01320
Handling of plastics	33-151.55	
	MARPOL V/9.3(b)	14500
Placards posted (>26')	33-151.59 MARPOL V/9 1(2)	14502
Prominent locations     Peadable by crew & pay		
Durable Sin v 8in		
Oil pollution prevention		
Oil pollution placard posted (>26')	33-155.450	14502
<ul> <li>In every machinery space or bilde/ballast</li> </ul>		
pump stations		
• Durable, 5" x 8"		
<ul> <li>Bilges are free of debris &amp; excessive</li> </ul>	115.830	07126
amounts of oil		
Vessel General Permit (VGP) compliance	CG-543 PL 11-01	99103
verification (when applicable)		
Discharges are in compliance with VGP	VGP 2.2.3.2	
	VGP 4.3	
Log optriog	VGP 4.1.1.1 VGP 4.2	
	VGF 4.Z	

## Section 13: Pollution Prevention Inspection (PP)

		- ( ) = (	<u> </u>
	Action	Ket	
•	Freeing ports and scuppers	Stability Letter 171 Sbpt H	03112/3
	No modifications	115.700	
	Unobstructed		
	Free operation of any flowback device (if		
	applicable)		
	Ground tackle, mooring lines & related equipment	121.300	09228/ 99
	Size of anchor(s) required		
	Operation of capstan		
	Condition of anchoring equipment		
	Ability to safely anchor		
	Condition of bits cleats fairleads & winches		
	Mooring lines/wires are adequately sized and		
	in working condition		
•	Port lights, dead covers & natural vent openings	116 600	03106/8
·	Covers are readily available & operational	171 117	00100/0
	Closing devices have proper fit & soal (deep	110 /65(h)	
	rims, seats, hinges and lugs)	113.400(11)	
	Port lights & dead covers have proper fit &	171 116	
	seal	171.117	
	Fuel tank venting	182 20-35	02107
	Condition and location	119450(c)	02101
	Installation and condition of flamo scroon(s)	119.450(d)	
	Installation of yeart piping	119.450(u)	
		119.450 110.450(b)	
	Venil Size	119.450(b) 110.450(c)	
	Condition of nexible vent pipe sections	119.430(e)	02102
	Rails and guards	116.000	03103
	Rail heights & courses	177 35-1	
	<ul> <li>2000 point load, 5000 uniform load minimum</li> <li>40% common second</li> </ul>	177.55-1	
	12 course max     20 5" beinht for ICLL forming eventuation tring		
	<ul> <li>39.5 height for ICLL, ternes, excursion trips, sighteesing, diper/party/eversight ervices</li> </ul>		
	a 26" boight for all also		
	Open/sail vessels OCML discretion		
	Storm raile	116 920	
		177.35-5	
	Cuarda far vahialaa	116.040	
	Gualus IUI Verlicies	177 35-10	

### Section 14: Topside Equipment Inspection (TE)

#### Section 15: Security (SD) International / >150 Passengers

Action		Ref	Code
Vesse	l Security Plan (VSP/ASP)		16103
	Presence of approval letter for plan type	33-104.120(a)(1) SOLAS XI-2/4.2 ISPS A/9.1	
	Plan is secured	33-104.400(c) ISPS A/9.7 NVIC 4-03	
	Contents	33-104.400	
	Amendment(s) ( <i>if applicable</i> )	33-104.415(a)	
	Implementation	33-104.400(a)	
Secur	ity records		
	Record(s) of security training	33-104.235(b)(1) SOLAS XI-2/4.2 ISPS A/10.1.1	16107
	Presence of Declarations of Security (DoS)	33-104.235(b)(7) ISPS A/5.7 NVIC 4-03 Encl 3 Sect 10	16107
	Record(s) of security drills	33-104.235(b)(2) ISPS A/10.1.1	16106
	Annual exercise has been conducted	33-104.230	16106
	Record(s) of annual audit	33-104.235(b)(8) ISPS A/10.1.6	16106
Secur	ity equipment		16107
	Equipment matches plan	33-104.292(b)(ii) SOLAS XI-2/6 ISPS A/9.4.17	
	Maintenance records	33-104.260 33-104.235(b)(5) NVIC 4-03 Encl. 3 Sect. 10	
Crew's	s knowledge of security plan		
	Identify Company Security Officer (CSO)	33-104.200(b)(2) SOLAS XI-2/4.2 ISPS A/11.1	16106
	Identify Vessel Security Officer (VSO)	33-104.200(b)(2) ISPS A/12.1	16106
	VSO knowledge regarding his/her responsibilities	33-104.215(e) ISPS A/12.2 NVIC 4-03 Encl. 3 Sect. 9	16104
	Crew's level of knowledge regarding their security responsibilities	33-104.220 ISPS A/13.3 NVIC 4-03 Encl. 3 Sect. 10	16106
	Compliance with current Maritime Security (MARSEC) level	33-104.240 33-104.215(e)(9) ISPS A/12.2.9	16105

#### ••Sections 16-20: 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?

#### •+Sections 16-20: Human Factors & Safety Culture / Drills

How do you track preventative maintenance for the vessel engineering/machinery systems?

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/documented? 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 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 17: Emergency Drills General

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?

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 18: Fire Drill			
Evaluate Fire Drill	122.524	04109	
Witness fire drill	115.810(d)	07125	
Verify crew's ability to organize	II/B.2.D.3	04110	
Verify crew's familiarity with their duties			
Verify method of summoning passengers to			
muster or embarkation stations			
Verify effective communication with master			
Did arow member sound alarm?			
Did crew member attempt initial action?			
Did the Master turn the vessel into the wind slow do	wn etc and	make	
announcements to crew/pax and make the call to loo	al CG or ves	ssels in	
surrounding area?			
Did Master control situation from helm, make annou	ncements an	d	
communicate effectively with the crew?			
Did crew members take control of the situation and o	lirect pax as		
appropriate?			
Did crew members communicate effectively with Master, other crew			
members and pax?			
Did crew member effectively fight fire with portable fi	re extinguist	ners close	
off ventilation closures, secure power and fuel?	re extinguisi		
Did the crew know how to operate and deploy the Fi	xed Fire Exti	nguishing	
System and /or fire pump (if available)?		• •	
Did the crew understand which agent they were usin	g?		
Did the drill follow the SOLAS training and operation	s manual, th	е	
emergency instructions, and/or placards posted?		•	
What are your procedures if you receive a smoke de	tection alarn	n?	
How often do you charge a fire nose during drills so	crew can be	come	
How offen are fire drills completed?			
Do you discuss topics with the crew including f	ire houndarie	ic i	
containing the fire and activation of suppressio	n systems?	.0,	
How does the crew conduct crowd control during an	emergencv?	)	
Which crew member is responsible for this in e	ach location	?	
•			

Section 19: Man Over	board Drill	
Evaluate Man Overboard Drill Verify ability to recover a helpless person Verify crew's ability to organize Verify crew's familiarity with their duties	115.808(g) 122.520 117.210 122.700 180.10-35	CG004
Witness launching of rescue boat (when applicable) Evaluate crew's proficiency in handling and maneuvering the rescue boat in the water (when applicable)		
Verify operational readiness and condition of rescue platform (when applicable)		
Did the crew throw Oscar or fender overbo Did the crewmember call out "man overbo the victim fell over and begin pointing to th Did crewmember throw ring life buoy or P overboard?	oard? oard" and which s ne victim? FD, fender or oth	side of the vessel ner flotsam
If at night, was the waterlight attached to t deployed immediately?	he ring life buoy	and was it
Did the Master approach the victim with a Did Master sound danger signal, mark pos announce situation to crew/pax and make surrounding area?	plan and was he sition, course an the call to local	e successful? d speed, CG or vessels in
Did the Master control the situation from h	ielm, make anno	uncements and
Did the Master approach the victim with a Did the crewmembers properly don PFDs direct passengers as appropriate?	plan and was he , take control of t	e successful? the situation and
Did crew members communicate effective crewmembers and pax?	ely with the Maste	er, other
When alongside, did crewmembers have Did they use a boat hook or fish gaf Did they use a ring life buoy or othe the victim?	a plan for retriev f to retrieve the vi r safe lifesaving c	ing the victim? ictim? levice to reign in
When the victim was recovered, did the cuincluded the ABCs?	rew complete ba	sic first aid that

Did the drill follow the training and operations manual or emergency instructions?

Section 20: Abandon Ship Dhi		
Evaluate abandon ship drill	115.808(g)	04110
Witness drill	122.520	
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		
Did the Master simulate broadcasting a m provide the vessel position, number of per distress?	ayday on the VH rsons onboard a	IF radio and nd type of
Were life jackets properly donned by crew	/ and pax?	
Did the crew have a plan (demonstrate as and marshal the vessel's primary lifesavin Did the Master simulate activating the EP	necessary) on I g devices? IRB?	now to deploy

Did the drill follow the training operations manual or SOLAS training materials or emergency instructions and/or others placards posted?

### tion 20: Abandon Shin Drill

Certificates and Documents (CD)			
Action	•	Řef	Code
Passe pax)	nger Ship Safety Certificate (Int'l Route, >12	SLS.14/Circ.87 Dated 11/15/89	01103
	Presence	115.910(a) SOLAS I/12(a)(i)	
	Validity	115.910(c) SOLAS I/14	
	Contents	115.910(a)-(b) SOLAS I/15	
Engino (EIAP >130k	e International Air Pollution Prevention P) Certificate ( <i>Int'l Route, Marine Diesel</i> <i>W</i> )		01125
	Presence	MARPOL VI/13.1	
	Correct engines identified & no changes have been made	MARPOL VI/13.8 NOx Code 2.1.1 MARPOL VI/13.1.1	
	Statement of Compliance (issued by Manufacturer) is accompanied by EPA issued EIAPP	CG-543 PL 09-01 5.b	
Intern (IAPP) and E	ational Air Pollution Prevention Certificate ) and Supplement Record of Construction quipment ( <i>Int'l Route, &gt;400 GT ITC</i> ) Vessel particulars on IAPP and Record of	MARPOL VI/8	01124
	Construction and Equipment		
	Annual, intermediate, renewal, repair and extension endorsements and/or change in anniversary date	MARPOL VI/8 MARPOL VI/5	
	Ozone depleting substances identified	MARPOL VI/12	
	Nitrogen Oxide emission sources identified	MARPOL VI/13	
	Sulphur Oxide (fuel oil) requirements identified	MARPOL VI/14 CG-543 PL 12-04	
	Incinerator installation identified (when applicable)	MARPOL VI/16	
	Validity of alternatives or equivalents	MARPOL VI/4 MARPOL VI/14.5.5	
Interna with R	ational Anti-Fouling System (IAFS) certificate ecord of Anti-Fouling System ( <i>Int'l route</i> )	IMO Res MEPC.195(61) 4 MSM II/B.3.J AFS Article 3	01131
	Vessel particulars	AFS Reg 5	
	COI has Anti-Fouling endorsement or, if not required, IAFS Certificates	AFS Article 10 AFS Reg 2	
	Identification of applied Anti-Fouling System	AFS Annex 2 AFS Annex 3	

# International Voyages

#### International Voyages Certificates and Documents (CD)

Certificates and Documents (C	U)	
Action	Ref	Code
Vessel particulars on Record of Anti-Fouling Systems	MEPC.195(61) 4.1 MSM II/B.3.J	
Anti-Fouling Systems details provided	MEPC.195(61) 4.2 & 5	
No change in Anti-Fouling System has occurred since issuance of IAFS Certificates	IMO Res MEPC.195(61) 5.2	01131
	MSM II/B.3.J	
International Energy Efficiency Certificate and Record of Construction ( <i>Int'l Route, &gt;400 GT ITC, mechanical propulsion</i> )	IMO Res MEPC.203(62) Appendix VIII	01138
Vassal particulars	CG-CVC FL 13-02	
Energy Efficiency Design Index requirements	MEPC.203(62) 20.1	
	CG-CVC PL 13-02 7.b	
Ship Energy Efficiency Management Plan (SEEMP) is identified	MEPC.203(62) 22	
Technical File requirements are met (>5000 GT ITC)	MEPC.203(62) 20.1	
International Oil Pollution Prevention Certificate (IOPP) (Intl' Route, >400 GT ITC)	MARPOL I/2.14	01117
Vessel particulars	MARPOL I/9	
Vessel type is accurate	MARPOL I/9	
Annual, intermediate, extension renewal, or change in anniversary date	33-151.1719 MARPOL I/6	
Record of construction and equipment	33-151.19 MARPOL I/9	
Control requirements for machinery bilge and fuel oil tanks identified	MARPOL I/14 MARPOL I/16	
Retention and disposal requirements for oily	MARPOL I/12	
Dige water holding tanks	22 155 120	
	MARPOL I/13	
Statement of Voluntary Compliance, MARPOL Annex IV (Sewage) ( <i>Intl' Route, &gt;400 GT ITC</i> )	NVIC 1-09 33-159.53 & .55 IMO Res MEPC.227(64)	01119
Vessel particulars	. ,	
Compliance type		
Discharge rate (draft & speed chart) identified		
Endorsements (extension or renewal)		

Certificates and Documents (C	JU)	
Action	Ref	Code
Credentials		01299
STCW endorsements	10,109(d)	
	11 201	
	STCW 1/2 6	
Vessel Security Officer endorsement	33-104 215	01217
vessel becanty Onicer endorsement	15 1113	01217
Transportation Worker Identification	10.1110 10.203(b)	16107
	CC-5/3 PL 11-15	10107
GMDSS endorsements	47-80.159(d)	01201
	47-80.1073	01203
	G-MOC PL 04-02	
International Load Line Certificate (ILLC)	114.122	01108
(Int'l Route, >150 GT ITC or ≥79')	ICLL Art. 16	
	42.07-45	
Presence		
Validity	ICLL Art. 15	
-	ICLL Art. 19	
Certificate form	ICLL Art. 18	
Confirm load line observed on hull matches	42.07-5	
certificate		
Lochook entries are completed		
Beard of Conditions of Assignment (Form	1011 1/3	
Record of Conditions of Assignment (Form	42.07-20	
LL.11) is present and validates issued Load	Deliev Neteo F.o.	
Line	Folicy Notes 5.0	
Document of Compliance (ISM-DOC) (Int'l Route,	SLS.14/Circ.155	01106
>12 pax)	Dated 9/17/98	
	33-96.330	
	SOLAS IX/4.2	
Presence	115.925	
Validity	115.930	
Document form	115.925	
	SOLAS IX/5	
	ISM 13.2-5	
Alternate compliance arrangements	ISM 16	
1 5	114.540	
	MSM II/E.3.C.5	
Safety Management Certificate (ISM-SMC)(Int'l	SLS.14/Circ.155	01107
Route >12 nax)	Dated 9/17/98	
Dresence	115 025	
Flesence	33-06 3/0	
	SOLAS 12/4 3	
Volidity	115 025	
valiuity	SOLAS 12/5	
Cortificato form	ISM 16	
	114 540	
Alternate compliance arrangements		04400
International Ship Security Certificate (ISSC) &	SOLAS XI-1/5.5.2	01122

#### International Voyages Certificates and Documents (CD)

International Voyages			
	Certificates and Documents (C	D)	
	Action	Ref	Code
	Continuous Synopsis Record (CSR) (Int'l Route,	ISPS A/19.2.4	
	>12 pax)		
	Vessel particulars	SOLAS XI-1/5.3	
	Company name & address match	ISPS A/19	
	International Safety Management documents		
	ISSC verification type with date	ISPS A/19.1.1	
	ISSC endorsement (Intermediate or	ISPS A/19.1.1	
	additional)		
	Additional ISSC verifications, extensions,	ISPS A/19.3.4	
	renewals or expiry advancements are		
	completed		
	CSR is present & valid	SOLAS XI-1/5.1	
		SOLAS XI-1/	
		5.4.13	
	CSR information matches ISSC	SOLAS XI-1/5.3	
	Certificate of Documentation (COD) (>5 NT, Int'l	67.17	CG003
	Route)	67.19	
	Registry endorsement		
	Tonnage Certificate		01132
	Presence	69.69	
	Validity		
	Correct measurement system	69.11	
		69.55	
		NVIC 11-93	
	Vessel particulars remain valid	69.105	
	Vessel particulars remain valid	ICTIM AIL 3	
	MARPOL Placards, Garbage Management Plans,		
	& Record Keeping (Int I Route, >12 pax)		
	Placard (>12m longth)		1/1502
	$r_{12}$ Management Plan (>15 POR)		1/502
	$\frac{1}{2} = \frac{1}{2} = \frac{1}$		01320
	Recold DOOK (< 13 POD)		01520

Logs & Manuals Inspection (LM)			
Action	Ref	Code	
Official logbook		01305	
Presence	122.280(a)		
Verify entries	122.280(b)		
Maintenance Records			
Shore-based maintenance report for EPIRB	122.728 SOLAS IV/15	05111	
Maintenance & inspections of survival craft	122.722 122.724 & .726 SOLAS III/20.7	11199	
Annual test reports for VHF-DSC, AIS, LRIT & SSAS	SOLAS IV/17	05116	
Shipboard Oil Pollution Emergency Plan (SOPEP) (>400 ITC)	121.702	01314	
Applicability	33-151.09 MARPOL I/2		
Approval	33-151.27 MARPOL I/37.1		
Annual review	33-151.28(a) 33-151.28(d)		
Plan organization	33-151.26		
Oil and hazardous liquid transfer procedures	121.702	14105	
(≥250 bbls oil/hazmat)	~~ /		
Presence	33-155.720		
Person in Charge is identified	33-155.750(a)(4)		
	33-155.750	01205	
Vesseis training log	30LA3 11/33	01305	
Contents			
Oil Record Book (ORB) (>400 /TC)	121 702	01315	
Edition	33-151.25(b)	01010	
Required signatures	33-151.25(h) IMO Res MEPC.187(59)		
Required entries	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

International Voyages		
Bridge/Navigation & Lifesaving/Firefighting		
Action	Ref	Code
Voyage data recorder ( <i>Int'l Route, &gt;12 pax</i> )	SOLAS V/20	10114
Presence		
Installation		
Automatic identification system (AIS) (Int'l Route,	33-164.46	10113
>12 pax)	SOLAS V/19.2.4	
Presence		
Operational		
Bridge navigation equipment (Int'l Route, >12		
pax)		
Spare magnetic compass	SOLAS V/19.2.2.1	10105
Pelorus or compass bearing device	SOLAS V/19.2.1.2	10105
Means of correcting heading & bearing to	SOLAS V/19.2.1.3	10106
true at all times		
Electronic plotting aide	SOLAS V/19.2.3.3	10107
Speed & distance measuring device	SOLAS V/19.2.3.4	10103
Communication equipment (Int'l Route, >12 pax,		
Sea Area Dependent)		
Operation of NAVIEX (All)	SOLAS IV/7.1.4	05110
Operation of portable $VHE(s) (\Lambda I)$	47-60.1101(C)	11123
Operation of portable vire(s) (All)	47-80 1095(a)	11125
Radar transponder (AIS-SART)(A//)	SOLAS III/6.2.1	11123
	47-80.1095	
GMDSS radio equipment installation is	47-80.1095	05118
appropriate for the Sea Area in which the	SOLAS III/6.2.2	
vessel operates	46-80 Sub W	
<ul> <li>Sea Area A1 – covered by ≥1 VHF-DSC</li> </ul>		
coast station		
<ul> <li>Sea Area A2 – excluding A1; covered by ≥1</li> </ul>		
MF-DSC coast station		
<ul> <li>Sea Area A3 – excluding A1/2; covered by INMADSAT</li> </ul>		
INMARSAT		
• Sea Area A4 – excluding A 1/2/3		
Long range identification and tracking (LRIT)	33-169,205(a)	10137
(Int'l Route > 12 nax Excent shins w/AIS in Sea	SOLAS V/19-1	
$\Delta reg \Delta 1$		
Presence		
Operational		
Conformance test report		
Check for LRIT exemption in MISLE		10117
Depth sounding equipment (Int'l Route, >12 pax)	SULAS V/19.2.3.1	10117
		05440
Global Maritime Distress and Safety System		05118
(GMDSS) equipment		

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

Action	Ref	Code
Station ID numbers on applicable	47-80.1083	05118
equipment	SOLAS IV/6.2.5	
Logs for tests and notations	47-80.1075 SOLAS IV/17	05115
Equipment for operation areas	47-80.10831095 SOLAS IV/6.1 NVIC 3-99	05103
Verify operation of VHF Digital Selective Calling (DSC) radio	47-80.1085(a)(1) SOLAS IV/6.3 SOLAS IV/7.1.1	05109
Emergency source of power provided	47-80.1099(b) SOLAS IV/13.2 Operations Manual	05114
<ul> <li>Compliance with maintenance method(s)</li> <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> <li>IV/15.7 Sea Areas A3 &amp; A4 (two) -</li> </ul>		
duplication of equipment, shore-based		
maintenance, or at-sea maintenance capability		
<ul> <li>NVIC 3-99 USCG does not have authority to</li> </ul>		
issue GMDSS deficiencies on US flag		
vessels. If found restrict route to US only		
and contact FCC.		
International voyages	=\	
Litesaving & Firengnung (LS)(Fr	<b>-)</b> 117.10	11110
	160 171	11119
	100.171 100.70(c)	
Qualitity & size presence	SOLAS III/4	
Verify stowage	199.70(c)	
Readily accessible	199.70(c)(2)&(d)	
Container clearly marked with "IMMERSION SUITS" or "ANTI-EXPOSURE SUITS" &		
quantity, identity and size		
Markings (Vessel or person name)	199.70(c)(3)	
Attachments & fittings (life jacket light &	160.006-2	
whistle)	199.70(c)(4)	
Condition and suitability	NVIC 1-08	
Emergency outfits and equipment (SOLAS)		07111
Number of outfits	SOLAS II-2/10.10.2	
Spare charges for breathing apparatus	SOLAS II-2/10.10.2.5	
Means of recharging breathing air cylinders	SOLAS II-2/10.10.2.6	
Stowage location	SOLAS II-2/10.10.3	07108
Easily accessible	SOLAS II-2/10.10.3.1	

# International Voyages Bridge/Navigation & Lifesaving/Firefighting n Ref Code

Action	Ref	Code
<ul> <li>Permanently &amp; clearly marked</li> </ul>		
<ul> <li>Separated as widely as possible</li> </ul>		
Markings		
Fire Control Plan (SOLAS)	SOLAS II-2/15.3	07122
Contents & current		
Location (permanently exhibited)		
Duplicate set of plans provided in a	SOLAS II-2/15.3	
prominent weather tight container outside		
of deck house for aid of shore side		
firefighting personnel		
International Shore Connection (SOLAS,	SOLAS II-2/	07118
>500GT)	10.2.1.7	
Confirm location with Fire Control Plan	Fire Control Plan	
Gaskets and bolts are with the connection	FSS 2.2	
Size, markings, and proper construction	IMO Res	
· · · · · · · · · · · · · · · · · · ·	A.952(23)	

# Wood Vessel Addendum

	Old I-L Vessels				
	Action	Ref	Code		
	Lifesaving Equipment (LS)				
••	Survival craft	117.200(c)	11101/		
	Quantity		4/8/27		
	Machinery Equipment (MI)				
••	Bilde and high-water alarms	119 530	13104		
·	L ocation	110.000	10101		
	Hull Inspection (HI)				
	Subdivision and damage stability requirements	116 100	02100/		
	Subdivision and damage stability requirements	116 115	03199		
	Presence of collision bulkhead	171 085	00100		
	Subdivision	171.060			
	Subamaion	171.000			
		171.070			
	Wood hull		02199		
	Condition <ul> <li>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.</li> </ul>	115.610(a) NVIC 7-95 4.A-F MSMII/B.1B. <sup>2</sup>	L		
	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.	MSMII/B.1B.			
	Stress areas (garboard plank, stem, chine, etc.)	115.610(a) NVIC 7-95 4 N			
	Bungs for running rust or blisters	115.610(a) NVIC 7-95			
	Caulking	4.K.1 NVIC 7-95 4.L			
	No unauthorized repairs	115.700			
	Wood hull fasteners Location of fasteners to be pulled • The routine periodic inspection of fasteners (pulling of fasteners) on wood boats is outlined in NVIC 7-95 and is:	NVIC 7-95 4.K.1	02199		
	Devices in a state of the second of second S				

• Beginning at the 10th year of age and every 5

#### Wood Vessel Addendum Old T-L Vessels

Action		Ref	Code
•	years thereafter for salt water service: Beginning at the 20th year of age and every 10 years thereafter for fresh water service:		
•	Remove a minimum of 8 fasteners per side below the w/l concentrating at:		
•	Stem joint Plank ends in area of bent frames		
•	Shaft logs Under engine beds		
Co	ndition of fastenings	115.610(a) NVIC 7-95 4.K.1-2	
Do loca	cument type, condition, material, and ation of fastenings	NVIC 7-95 4.K.2	
Thr frar	rough bolts (keel, chine, clamp, double me, floor timber bolts, etc.) (when needed)	NVIC 7-95 4.K.1-2	
No	unauthorized fastenings	NVIC 7-95 115.700	
Internal in: Co	spection of wood hull ndition	115.610(b) NVIC 7-95 4.A-F MSM II/ B.1.B.1	02199
Fra	mes and frame heads	NVIC 7-95 4.F.1.A	
Soi dou No	und through bolts (keel, chine, clamp, uble frame, floor timber bolts, etc.) unauthorized repairs	NVIC 7-95 4.K.1 115.700	
Repair(s)		177.10-1	02199
Ext	ent of decay, defect(s) and damage	115.610 NVIC 7-95 2.01-10(a)(2)	)
Re	pair proposal	115.700 & 116.300 NVIC 7-95 Ch 5	,
Re	pair materials	NVIC 7-95 Ch. 3	
Ins	pect repair(s)	Lloyd's Yachts & Small Craft 115.610 NVIC 7-95 Ch. 5	ι

Action	Ref	Code
Hull Inspection (I	HI)	
Steel and aluminum hulls Wastage, defect(s) and damage (Shell, Keel and Bilge keel, High stress locations and welds, etc.)	115.802 115.610	02106
Critical areas (stringer plate, sheer plate, etc.)	115.802(a)(1) NVIC 7-68 IV(B) NVIC 11-80	02106
Seachests, piping and overboard discharges for wastage, defect(s) and damage	115.802(a)(2) NVIC 7-68 II(A)	02106
Condition of drydock (bottom) plugs	115.802(a)(7) NVIC 7-68 II(A) MSM II/B.3.B	03199
Wastage/corrosion is within limits	NVIC 7-68 III(C) ABS 7-A-4/27	02106
Hull markings		
Draught (draft) marks & load marks Load Line & Deckline	122.602 114.122 122.602	03199 02120
IMO Hull marking (SOLAS) Machinery space marking (SOLAS) Name and hailing port/State number • Name clearly marked on port and stbd bow and stern; hailing port on stern; NLT	SOLAS XI-1/3 SOLAS XI-1/3 122.602 67.123	02120
<ul> <li>4" Latin alphabet, Arabic /Roman #'s</li> <li>State documented vessels are to be marked as required by the state which is regulated under 33 CFR 173.27.</li> </ul>	33-173.27	
<ul> <li>State numbers are required on both sides of the bow.</li> </ul>	33-181.23	
Tailshaft(s), stern bearing(s) and propeller(s) Determine if tailshaft(s) needs to be drawn	115.670 MSM II/B.3.D.3	03199
Bearing clearance & inboard seal assembly	115.670 Manufacturer's Inst	
question)	115.670	
Non-destructive testing (NDT) of the shaft's taper section and keyway ( <i>if in question</i> )	115.670	
NDT of propeller coupling bolts and flance radius ( <i>if in question</i> )	115.670 MSM II/B.3.D.10	
Condition and weardown of strut	115.610(a)	

Drydock & ISE Addendum			
Actior	1	Ref	Code
	bearing(s)		
	MSM Vol II Sec B Ch. 3-34: With wood or		
	rubber bearings, "feeler" gauges of known		
	thickness can be inserted between the		
	shaft and the bearing to determine the		03199
	amount of weardown. Weardown 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 weardown.		
	Maximum weardown 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 nall its		
	Condition of propollor		
	NDT if in question		
Pudd			02105
Ruuu	Type of accomply installed	115 81/	02100
	Type of assembly installed	MSM II/B 3 E 2	
	Examina ruddar accombly for	115 610(a)	
	deterioration and defeate	115.010(a)	
	Dudder beering electronee(e) are within	Monufacturar'a Inst	
	Condition of pintle(s), guageon(s),	IVISIVI II/D.3.E.Z	
	bushing(s), pintle nut(s) and locking		
	device(s)		
	Condition of pintle by nondestructive test	MSM II/B.3.E.2	
	(NDT) (if in question)		
Hull a	ppendages	115.610(a)	03199
		119.422	
	Condition and structural integrity of bilge		
	keel		
	Condition of keel coolers		
	Condition of transducers and other similar		
	appendages		
	Bow/stern thrusters		
	Shaft & rudder packings		
Ancho	or chain(s)	121.300	09228
	Length of chain for satisfactory condition		
	<ul> <li>Such as wastage</li> </ul>		
	Chain locker for satisfactory condition		
	Such as wastage		
Sea v	alve(s)		03199
	Quantity and type	115.610	
	<ul> <li>Valves within 6" of waterline on a through</li> </ul>	179.350(c)&(d)	

	<b>,</b>		
Actior	1	Ref	Code
	<i>hull penetration</i> All sea valves are properly identified and	115.610	03199
	<ul> <li>are opened for examination</li> <li>External and internal components</li> <li>Verify correct operation of valve components</li> <li>Verify correct seating (blue or pressure)</li> </ul>	176.25-10 115.610	
Anti E	test if needed)		
Anu-F	Vessel particulars	IMO Res MEPC.195(61) 4	14701
	COI has Anti-Fouling endorsement or, if not required, IAFS Certificates	MSM II/B.3.J	14701/3
	Identification of applied Anti-Fouling System	AFS Art.3 AFS Annex 2 AFS Annex 3	14702 14701
	Anti-Fouling Systems details provided No change in Anti-Fouling System has occurred since issuance of IAFS Certificates	MEPC.195(61) 4.2 & 5 MEPC.195(61) 5.2 MSM II/B.3.J	14702
Inspe	ct fiberglass external hull		02106
(Old T	T-L Vessels)		
	Condition Stress areas	115.610(a) NVIC 8-87 Ch. 5 115.610(a) NVIC 8-87 Ch. 5	
	Area in way of through hull fittings damage/unfairness/delamination No unauthorized repairs	115.610(a)-(b) NVIC 8-87 Ch. 5.E 115.610(a)-(b) NVIC 8-87 Ch. 5.C 2.01-15(a)(2) 115.700 NVIC 8-87 Ch. 6	
Fiberg	alass internal hull (Old T-L Vessels)		02199
	Condition	115.610(a) NVIC 8-87 Ch. 5	
	Stress areas	115.610(a) NVIC 8-87 Ch. 5	
	Area in way of through hull fittings damage/unfairness/ delamination No unauthorized repairs	115.610(a)-(b) NVIC 8-87 Ch. 5.E 115.610(a)-(b) NVIC 8-87 Ch. 5.C 2.01-15(a)(2) 115.700 NVIC 8-87 Ch. 6	
Fiberç	glass repair(s) (Old T-L Vessels)		02199
	Extent of damage, defect(s) and/or	115.610 NVIC 8-87 Ch. 6	

Action	Ref	Code
delamination	2.01-15(a)(2)	
Repair proposal	115.700 NVIC 8-87 Ch. 6	02199
Repair materials	115.700 NVIC 8-87 Ch. 4	
Inspect repair(s)	115.610 NVIC 8-87 Ch. 4	

#### Internal Structural Examination (IS)

Confined spaces are safe for entry		99101
Marine Chemist certificate	29-1915.12(f)	
	CIM 5100.47A/6.G.9.c	
	NFPA 306/4.3	
Competent person has maintained	29-1915.15	
Marine Chemist Certificate, verify	CIM 5100.47A/	
competent person credentials, testing	6.G.9.c(3)	
methods and logs	NFPA 306/4.6.2	
No changes to vessel's condition	29-1915.15(b)	
Forced ventilation is provided (IAW	29-1915.13(b)(3)	
Marine Chemist Cert.)		
Condition of space access point	29-1915.76	
Internal structures	115.610(b)	02199
	115.802	
	NVIC 7-68 III	
	MSM II/B.3.B	
Internal structures		
Frames		
Floors		
Shelves, brackets, clamps		
Bulkheads		
Tank tons		
Coomings closures & other fittings		
Westers is within accentable limits		
Wastage is within acceptable limits	115 902	
waterlight integrity	170.260	
Hull openings and elecures	171.110	02100
Huil openings and closures	179 350	03199
Dock openings and closures	MSM Vol IV	03104/
Deck openings and closures		10
Watertight doors	MSM Vol II B 1 5	03107
Watertight subdivisions/bulkbeads	171 114	03100
Stability	171.117	00100
Drainago	171 Shot H	03112/3
Dialiaye	170.005	0112/3
iviajor changes/modifications	170.005	01320
	470.005	04000
Solid ballast	170.235	01326

Drydock & ISE Addendum			
Action	Ref	Code	
Self-bailers and cockpit freeing ports	171.145	03112/3	
Check valves			
Required area			
Structural/Watortight Int	oarity (SWI)		
Hatches and Class-1 watertight doors	171.124	03104/10	
	MSM II/B.1.E.5 170.270	03107	
Condition of knife edges			
Condition of gasket material			
Verify watertight integrity between			
gasket and knife edge			
Condition and operation of hinges and			
aogging devices	170.270(a)		
operation of Class-1 door s quick-	170.270(a)		
Operation of indicator lights at the	170.270(e)		
control station			
Markings	122.610		
Inspect Class 2 & 3 watertight doors	171.124 170.270(c)	03107	
On emotion of least constrain	170.270(C)		
Operation of local controls	ASTM F1197/7.1		
Condition of replaceable interface	170 270(c)(1)		
between door and frame assembly	ASTM F1196/6.3		
Operation of alarms	ASTM F1197/11.5		
oporation of alarmo			
Closing times are in compliance	ASTM F1197/11.2		
	ASTM F1197/11.4		
Markings	122.610 ASTM F1196/11.1		
Watertight integrity	ASTM F1196/S1		
Operation of doors under reserve	170.270(c)(3)		
power	ASTM F1197/S3		
Watertight bulkhead penetrations	171.114	03199	
Locations – as high up and inboard as			
possible, number of penetrations should be			
Minimizea.			
Free of sluice values			
Hull structure	116.300	02199	
	MSM II/B.1.B.1		
	115.700		
	2.15(a)(2)		
Damage wastage and fractures	177.10-1	02106	
Damaye, wastaye and natures		02100	
00			

Drydock & ISE Addendum			
Action	Ref	Code	
No unauthorized repairs		02199	
Welding Repair Inspec	tion (WR)		
Steel and aluminum structural repair	177.10-1	02199	
proposals	115.700(d)		
	NV/IC 7-68 IV/		
	ABS 2-4-1/5 19		
	2.01-15(a)(2)		
Extent of damage and/or	115.700(d)		
wastage/corrosion	NVIC 7-68 IV		
Repair proposal	115.700(d)		
	NVIC 7-68 IV		
Repair materials	115.700(d)		
	NVIC 7-68 IV		
Welding procedures	115.700(d)		
Alternative repair methods for	116.340		
equivalency			
Welder's proficiency & qualifications	115.700(d)	00400	
Aluminum fit-up	116.300(b)	02199	
Material & fitted with approved joint	ABS 30 1		
detail	//B0 00.1		
Materials (base filler gas)	ABS 30 1		
Welding processes	ABS 30.1.3		
Steel fit-up	116.300(a)	02199	
Material & fitted with approved joint	NVIC 7-68 V		
detail	ABS 2-4-1/3		
Materials (base, filler, gas)	115.700(b)		
Welding processes	ABS 2-1-1/1.1		
	115.700(b)		
Defects in welds	115.700(b)	02199	
Examine welds for uniformity and			
reinforcement	ABS 2-4-1/5.15.1 ABS 30 5 8 (Aluminum)		
Examine welds for porosity, overlap,	NVIC 7-68 V(H)		
undercut, cracks, slugging and slag	ABS 2-4-1/5.15.1		
inclusion	ABS 30.5.8 (Aluminum)		
Examine adjacent base metal for	NVIC 7-68 V(H)		
injurious arc strikes, spatter and sharp	ABS 2-4-1/5.15.1 ABS 30 5 10 (Aluminum)		
or deep undercut		00400	
Back gouge (if used)	115.700(b)	02199	
Examine welds for defects	110.300 NIVIC 7-68 V/(C)(2)		
(discontinuity)	ABS 2-4-1/5.9		

Action	Ref	Code
Proper weld sequencing	NVIC 7-68 V(F)	
	ABS 2-4-1/5.3	
	ABS 30.5.5 (Aluminum)	
Joints are cleaned between	NVIC 7-68 V(E)	
interpasses	ABS 2-4-1/3.5	
	ABS 30.5.3 (Aluminum)	

#### Nondestructive Testing (NT)

Verify nondestructive testing (NDT) method		02199
Individual's knowledge of method	115.700(d)	
and/or technician's qualification and	NVIC 7-68 9(V)(A)	
certification	ABS 2-4-1/5.17	
	ABS NDT Guide 4/1	
Calibration / preparation		
Technician examine/interpret readings		
Evaluate test results or review	ABS NDT Guide 5/5	
technician's report	ABS NDT Guide 2/9	
Magnetic Particle	ABS NDT Guide	
Radiography (x rays)	3/11	
Ultrasonic	ABS 3-7-1/5.5	
Hydrostatic	ABS 3-7-1/5.7	
<ul> <li>Proumation</li> </ul>		