### United States Coast Guard



# TANKSHIP INSPECTION BOOK

Name of Vessel								
Off	Class							
Date Completed				Location				
Vessel Built in Compliance with SOLAS: 60 74 74/78 N/A								N/A
Ro	ute							
	Oceans		Limited Coas	stwise		Lakes	/Bays/So	unds
	Coastwise		Great Lakes			Rivers		
Ins	pection Type							
	Inspection for	Cer	tification (COI)	)		Reinsp	ection	
Ins	pectors							
1.				3				
2				4				

# **Total Time Spent Per Activity:**

Regular Personnel (Active Duty)							
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI				

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS

Reserve Personnel								
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI					

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS

Auxiliary Resources						
TOTAL BOAT HOURS	TOTAL AIRCRAFT HOURS					

# **Conversions**:

n									
Distance and Energy									
Kilowatts (kW)		)	Х	1.341		Horsepower (hp		(hp)	
Feet (ft	·)		Χ	3.281	=	Meters (m)			
Long T	on (LT	)	Χ	.9842	1 =	Metric Ton (t)			
Liquid (NOTE: Values are approximate.)									
Liqu	id		bbl/LT		m³/t	bb	I/m³		bbl/t
Freshw	ater		6.40		1.00	6	.29		6.29
Saltwat	ter		6.24		.975	6	.13		5.98
Heavy	Oil		6.77		1.06	6	.66		7.06
DFM			6.60		1.19	7	.48		8.91
Lube O	il		7.66		1.20	7	.54		9.05
Weig	ht								
1 Long	Ton	= 224	10 lbs	1 Metric Ton = 2204 lbs					
1 Short	Ton	= 200	00 lbs	1 Cubic Foot = 7.48 gal					
1 Barre	el (oil)	= 5.6 6.2	1 ft = 42 gal = 9 m <sup>3</sup>		1 psi	=	.06895 of water		: 2.3106 ft
Temp	eratu	ı <b>re</b> : Fal	nrenheit = Ce	elsius	(°F = 9/5 °C	+ 32	and °C =	= 5/9	(°F – 32))
0	=	-17.8	80	=	26.7		200	=	93.3
32	=	0	90	=	32.2		250	=	121.1
40	=	4.4	100	=	37.8		300	=	148.9
50	=	10.0	110	=	43.3		400	=	204.4
60	=	15.6	120	=	48.9		500	=	260
70	=	21.1	150	=	65.6		1000	=	537.8
Press	sure:	Bars = F	Pounds per s	quare	e inch				
1 Bar	=	14.5 psi	5 Bars	=	72.5 psi		9 Bars	=	130.5 psi
2 bars	=	29.0 psi	6 Bars	=	87.0 psi		10 Bars	=	145.0 psi
3 Bars	=	43.5 psi	7 Bars	=	101.5 psi				
4 Bars	=	58.0 psi	8 Bars	=	116.0 psi				

Deficiency	MSIS Code	Req't. Issued/ Date Completed
	_	

Deficiencies identified should be listed with MSIS codes. At completion of inspection/examination, any outstanding deficiencies shall be entered in MIDR or PSDR as appropriate. All deficiencies found (outstanding and completed) shall be entered in the Deficiency Summary. Worklist items, which serve only as memory joggers to complete inspection/examination (e.g., test emergency fire pump), should not be coded as deficiencies.

### **MSIS Codes for Deficiencies:**

BS	Ballast	DC	Dry Cargo	IC	I/C Engine
ВІ	Bilge	ES	Electrical	LS	Lifesaving
ВА	Boiler, Aux.	FF	Firefighting	MI	Miscellaneous
вм	Boiler, Main	FL	Fuel	NS	Navigation
cs	Cargo	GS	General Safety	PP	Propulsion
DM	Deck Machinery	НА	Habitation	SS	Steering
DL	Doc., Lics., Pmts.	HU	Hull		

### **Use of Tankship Inspection Book:**

This inspection book is intended to be used as a job aid by Coast Guard marine inspectors during inspections of U.S. flagged tankships. The lists contained within this book are not intended to limit the inspection. Each marine inspector should determine the depth of inspection necessary. A checked box should be a running record of what has been inspected. It does not imply that the entire system has been inspected or that all or any items are in full compliance. This job aid does not constitute part of the official inspection record.

This document does not establish or change Federal laws or regulations. References given are only general guides. Refer to IMO publications, CFRs, NVICs or any locally produced cite guides for specific regulatory references. Not all items in this book are applicable to all vessels.

**NOTE:** Guidance on how to conduct inspections of U.S. flagged tankships can be found in the Marine Safety Manual (MSM) Volume II, Chapter B1: Inspection of Vessels for Certification. All MSM cites listed in this book refer to MSM Volume II unless otherwise indicated.

#### **Guide to Examinations:**

- □ All vessels
- O Vessels carrying dangerous cargoes in bulk

### **Pre-inspection Items:**

- on Items: <u>Post-inspection Items</u>:
- Review MSIS records.
  - MIPIP
  - MICOI
- Obtain copies of forms to be issued.
- Issue letters/certificates to vessel.
- Complete MSIS entries.
  - MIAR
  - MSDS
  - MIDR
  - VFLD
  - VFID
- Initiate Report of Violation (ROV) if necessary.

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### **Deficiency Summary Worksheet:**

Name of Vescel

Name of vesser	VIII	
Deficiency	MSIS Code	Req't. Issued/ Date Completed

VIN

### **Recommended US Vessel Deficiency Procedures:**

Step	Action								
1	Identify deficiency.								
2	Inform vessel representative.								
3	Record on the <i>Deficiency Summary Worksheet</i> (next page).								
4	If deficiency is corrected prior to end of inspection, go to Step 7.								
5	If deficiency is unable to be corrected prior to end of inspection, issue CG-835 in accordance with table below.								
	IF deficiency: THE	N issue CG-835:							
	impact crew/passenger safety, hull seaworthiness, or the environment, e.g.,	t provides a specific for correcting ciency, e.g., number of days next drydock							
	be MODIFIED to meet less stringent requirements, e.g.,  • Expired international certificates • Re	That restricts operation of vessel to meet current vessel conditions, e.g.,  • Reduced route • Increased crew							
	crew/passenger safety, hull seaworthiness, or the environment, and cannot be	t requires the ciency to be corrected to operating vessel D SAIL" item), e.g., or to carrying cargo							
	F + 00 005   + : MIDD								
6		Enter CG-835 data in MIDR.							
7	Enter deficiency data in MSDS.								
8	Initiate Report of Violation (ROV) if necessary.								

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### **Section 1: Administrative Items**

### **IMO Applicability Dates**:

Reference	Date
SOLAS 1960	26 MAY 65
SOLAS 1974	25 MAY 80
1978 Protocol to SOLAS 1974	01 MAY 81
1981 Amendments (II-1 & II-2)	01 SEP 84
1983 Amendments (III)	01 JUL 86
Various additional amendments to SOLAS	
MARPOL 73/78 Annex I	02 OCT 83
MARPOL 73/78 Annex II	06 APR 87
MARPOL 73/78 Annex III	01 JUL 92
MARPOL 73/78 Annex V	31 DEC 88
IBC Code	After 01 JUL 86
BCH Code	Prior to 01 JUL 86
IGC Code	After 01 JUL 86
IGC Code (for existing vessels)	Prior to 01 JUL 86
COLREGS 1972	15 JUL 77
Various additional amendments to COLREGS	
Load Line 1966	21 JUL 68
STCW 1978	28 APR 84
1991 Amendments	01 DEC 92
1994 Amendments 1995 Amendments	01 JAN 96 01 FEB 97

### **Involved Parties & General Information:**

Vessel's Representatives
Phone Numbers
Phone Numbers
Owner—Listed on DOC or COFR
OWNER Elsted on DOC of COTTA
□ No Chango
☐ No Change
0
Operator
☐ No Change
☐ No Change

### **Prohibited Chemical Cargoes:**

The following cargoes have been determined to be too hazardous to be carried in U.S. waters:

- 1. Acrolein
- 2. Chlorine (on self-propelled vessels)
- 3. Ethylenimine
- 4. Hydrofluoric Acid
- 5. Hydrogen
- 6. Hydrogen Chloride
- 7. Hydrogen Fluoride
- 8. Methylcyclopentadienyl Manganese Tricarbonyl
- 9. Nitric Acid (in concentrations > 70%)
- 10. Nitrogen Tetroxide
- 11. Oxygen
- 12. Phosphorus Trichloride
- 13. (Beta) Propiolactone

# Cargoes Requiring a Response Plan:

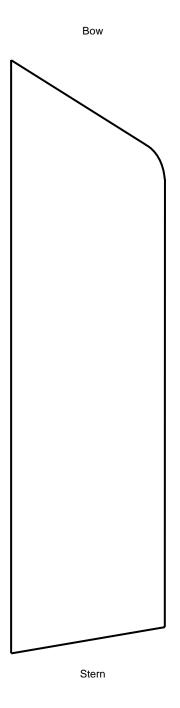
Type of Cargo		Name of Cargo	
Asphalt Solution	Blending stocks	Roofers stock	<ul> <li>Straight run residue</li> </ul>
Animal Oils	Tallow Lard Stearic acid	<ul><li>Olive acid</li><li>Sperm oil</li></ul>	<ul><li>Fish oil</li><li>Fish liver</li></ul>
Distillates	Flashed feed stocks	Straight run	
Easenal Oils	Pinene	Turpentine	• Dipentine
Edible Oils	<ul><li>Corn</li><li>Coconut</li></ul>	<ul><li>Soybean</li><li>Olive</li></ul>	Cotton seed
Gasolines	<ul><li>Automotive</li><li>Aviation</li><li>Casinghead</li></ul>	<ul><li>Polymer</li><li>Straight run</li><li>Gas, oil cracked</li></ul>	<ul><li>Akylates</li><li>Reformates</li></ul>
Naptha	Aromatic     Cracking fraction     Heavy	<ul><li>Paraffinic</li><li>Petroleum</li><li>Solvent</li></ul>	<ul><li>Stoddard solvent</li><li>Varnish makers</li></ul>
Oils	<ul> <li>Clarified oil</li> <li>Crude oil</li> <li>Fuel oils [# 1 (Kerosene), # 2, # 2D, # 4, # 5, # 6]</li> <li>Residual fuel oil</li> <li>Transformer oil</li> <li>Lube oil and blending stock</li> </ul>	<ul> <li>Aromatic oil (excluding vegetable oil)</li> <li>Mineral oil</li> <li>Motor oil</li> <li>Penetrating oil</li> <li>Spindle oil</li> <li>Turbine oil</li> <li>Octene</li> </ul>	<ul> <li>Olefin</li> <li>Animal</li> <li>Range</li> <li>Residual</li> <li>Resin</li> <li>Road</li> <li>White (mineral)</li> </ul>

### **Vessel Information:**

Classification Society		
ISM Issuer: Same as above?		
☐ Yes ☐ No If not the same, which Recognized Organization?		
<b>NOTE:</b> The period of validity for ISM documents should correspond If they do NOT, ISM documents should be further investigated.	to the	following list.
5 years = Full term (SMS and DOC) 12 months = Inte	erim (L	DOC)
☐ 6 months = Interim (SMC) ☐ 5 months = Shor	t term	(SMC)
Gross Tons		No Change (VFMD)
Net Tons		No Change (VFMD)
Built Date (use delivery date)		No Change (VFCD)
Overall Length (in feet)		No Change (VFMD)
Does vessel meet double-hull requirements?	•	
☐ Yes ☐ No If not, vessel must meet requirement in accordance with 33 CFR Part 157 App		
Last Three Cargoes		
1		
2		
3		
Is pumproom gas-free? ☐ Yes ☐ No		□ N/A
<u>Vessel Description</u> :		
□ Crude Carrier □ Combination		
□ Product Carrier □ Oil / Bulk / Ore	Э	
☐ Chemical Carrier ☐ Other		

### **Section 2: Certificates and Documents**

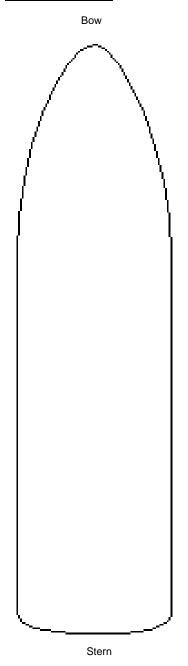
Name of Certificate	Issuing Agency	# QI	Port Issued	Issue Date	Exp. Date	Endorse Date
Certificate of Documentation ☐ No Change	nsce					
Classification Document ☐ No Change						
Certificate of Financial Responsibility (COFR) □ No Change	nsce					
Safety Construction (SLC) ☐ No Change						
Safety Equipment (SLE) ☐ No Change	nsce					
Safety Radio (SLT) ☐ No Change						



# **Section 6: Appendices**

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### **Vessel Layout:**



- Double hull/bottom/sides
- Ballast tanks (SBT/CBT)
- Chemical tank type: I II III
- Tank arrangement
- Deckhouse location
- External/internal framing
- Layout of pumps type

Name of Certificate	Issuing Agency	ID#	Port Issued	Issue Date	Exp. Date	Endorse Date
International Load Line ☐ No Change						
International Oil Pollution Prevention w/Form B (IOPP) ☐ No Change						
Certificate of Fitness (COF) ☐ No Change	90SN					
International Tonnage (ITC) ☐ No Change						
Safety Management (SMC) ☐ No Change						
Document of Compliance (DOC) ☐ No Change						

### **Certificates:**

	COI posted	46 CFR 31.05-5
	All pages visible	46 CFR 153.901
	ISM Code  • Safety Management System	SOLAS 74/78 IX/3
	<ul> <li>Shipboard Operations Plan</li> <li>Stability letter posted</li> </ul>	46 CFR 35.08-1
	Waste management plan (oceangoing vessels ≥ 40 feet)	33 CFR 151.57
	Annual drug and alcohol program audit	46 CFR Part 16
	Officers' licenses current	46 CFR 35.05-1
	GMDSS endorsement  ☐ FCC Station License ☐ Safety Radio Certificate	47 CFR Part 80
	GMDSS maintenance personnel  1st Class Radiotelegraph Operator's Certificate 2nd Class Radiotelegraph Operator's Certificate 3rd Class Radiotelegraph Operator's Certificate	47 CFR 80.1074
	Required international safety convention certificates posted and valid	46 CFR 31.40-35
	Liferaft servicing certificates  • Annual service  Cargo Gear Certificate	46 CFR 160.151-57(p) SOLAS 74/78 III/19.8 46 CFR 31.37-75
Note	es:	

### □ Abandon Ship Drill:

General alarms / signals	Familiarity with duties	Boat release
Muster lists	Provide equipment	Boat operation
Muster of crew	Familiarity with equipment	Egress procedures
Crew response	Lower lifeboat	Davit-launched liferaft drill
Language understood by crew	Brake operation	Communication w/ bridge
Lifejackets	Engine start	Lighting
(SOLAS 74/78 III/18.3; MSM Vo	ol. II/D5.C.7.h)	
Location:	Tim	e to Water:
Notes:		
-		
-		

### Section 5: Drills

□ Fire Drill:		
Initial notifications	Familiarity with duties	Space isolation
General alarms / signals	Familiarity with equipment	Smoke control
Crew response	Fire pumps started	Communications w/bridge
Properly dressed / equipped	Two jets of water	
Language understood by crew	Fire doors and dampers	
(SOLAS 74/78 III/18.3; MSM Vo	I. II/D5.C.7.i; NVIC 6-91)	
Location:		Time on Scene:
Notes:		
-		

### **Logs and Manuals:**

<u> </u>	gs and Mandais.	
	Lifesaving equipment maintenance record	46 CFR 199.190(e)
	<ul> <li>Periodic checks as required</li> <li>Visual inspection of survival craft / rescue boat and launching appliances</li> <li>Operation of lifeboat / rescue boat engines</li> <li>Lifesaving appliances, including lifeboat equipment examined</li> </ul>	SOLAS 74/78 III/19
	Emergency training and drills     Onboard training in use of lifesaving equipment (all crew members)     SOLAS training manual	SOLAS 74/78 III/18
	<ul> <li>Logbook records</li> <li>Fire and lifeboat drills</li> <li>General alarm tested</li> <li>Bridge log</li> </ul>	46 CFR 199.180 SOLAS 74/78 III/18.5 SOLAS 74/78 III/25
	<ul> <li>Pre-arrival tests conducted</li> <li>Casualties (navigation equipment and steering gear failures reported)</li> </ul>	SOLAS 74/78 V/19 STCW 95 I/14 33 CFR 164.25 33 CFR 164.53
	<ul><li>Steering gear drills</li><li>Emergency steering drills</li></ul>	46 CFR 35.07
	Information available to master (as required)  • Loading manual  • Trim and stability book  Cargo and ballast system instruction manual	46 CFR 42.15-1 46 CFR 31.10-32 46 CFR 45.105(a) 33 CFR 157.23 46 CFR 153.806
<u>Po</u>	Ilution Prevention Records:	
	<ul> <li>Oil record book</li> <li>Each operation signed by person-in-charge</li> <li>Each complete page signed by master</li> <li>Book maintained for 3 years</li> </ul>	MARPOL Ax. I/20 33 CFR 151.25
	<ul> <li>Shipboard oil pollution emergency plan</li> <li>Approved by Coast Guard / class society</li> <li>Contact numbers correct</li> </ul>	MARPOL Ax. I/26.1 33 CFR 151.26
Note	Immediate Actions List  PS:	

	Vessel response plan	33 CFR 155.1030	O Cable	
	<ul><li>Approved by Coast Guard</li><li>Annual review by owner / operator</li></ul>	33 CFR 155.1035 33 CFR 155.1065 33 CFR 155.1070	Condition     Electrical fixtures on deck	
	Verify vessel has access to shore-based computerized damage stability programs	33 CFR 155.240	Explosion-proof or intrinsically safe     No frayed or exposed wires	C 2-89
	<ul> <li>Oil transfer procedures</li> <li>Posted</li> <li>List of products carried by vessel</li> </ul>	33 CFR 155.720 MARPOL 73/78 I/20	Material condition	
	<ul> <li>Description of transfer system including a line diagram of piping</li> </ul>		Gas Detection:	
	<ul> <li>Number of persons required on duty</li> </ul>		O Portable gas detectors	
	Duties by title of each person		Number	
	Means of communication		• Type	
	<ul><li>Procedures to top off tanks</li><li>Procedures to report oil discharges</li></ul>		☐ Flammable gas detectors  ■ Calibrated  46 C	FR 153.465
Ch	emical Cargo Records:		<ul><li>Tested</li><li>Toxic gas detectors</li></ul>	
	Approved Procedures & Arrangement Manual	46 CFR 153.490(a) 46 CFR 153.490(b)	<ul> <li>Capable of measuring all toxic cargoes authorized to be carried</li> </ul>	FR 153.526
0	Cargo record book	46 CFR 153.490	Calibrated  Calibrated	
0	Cargo information cards	46 CFR 153.907		FR 153.526
0	Cargo location plan		Calibration  Crow knowledges bla in exerction	
	Cargo compatibility	46 CFR 153.907	<ul><li>Crew knowledgeable in operation</li><li>Span gas available</li></ul>	
0	Cargo piping plan	46 CFR Part 150	- Zeroing	
0		46 CFR 153.910	Calibration curves available for all cargoes carried	
0	Shipping document	46 CFR 153.907	Tested	
0	Waiver letters carried	46 CFR 153.10		
0	<ul> <li>Certificate of inhibition or stabilization</li> <li>Date added to cargo</li> <li>Length of time effective</li> <li>Temperature limitations</li> </ul>	46 CFR 153.912		
0	Current copy of 46 CFR Parts 35, 150, and 153 aboard	46 CFR 153.905		
Note	98:			
			Notes:	

### **Pumprooms:** O Ventilation WARNING: Pumproom must be adequately ventilated prior to personnel entry. Forced exhaust 46 CFR 153.310 Termination of external openings 46 CFR 153.312 Intake below and above floor plates Operable from outside pumproom Adequate volume Material condition of ducting Pumps Pressure gauges outside pumproom and operable 46 CFR 153.333 Type of drive \_ Material condition O Shaft seals (where motor rooms are installed) Leakage Vapor-tight Adequate supply of oil (where required) General Hoisting arrangement 46 CFR 153.332 Bilge pumping system 46 CFR 153.334 Operational Remote controls - High-level alarm **Electrical Systems: NOTE**: Requirements for inspecting the following electrical items are detailed in Subchapter J as per 46 CFR 153.466. O Explosion-proof lighting fixtures 46 CFR 111.105 Tight globe Heavy construction Explosion-proof seals around cables

Notes:

### **Section 3: Inspection Items for All Vessels**

### **Navigation Equipment:**

	Navigation publications (as applicable)  Current and corrected charts  U.S. Coast Pilot Great Lakes Pilot Sailing directions Coast Guard Light List Notice to mariners Tide tables Tidal current tables	46 CFR 35.20-1 33 CFR 164.33 SOLAS 74/78 V/20
	<ul> <li>International Rules of the Road</li> <li>Inland Rules of the Road</li> </ul>	
	Operationally test radar(s) and ARPA  • 2 required if over 10,000 GT  • Operate independently  • ARPA acquires targets	46 CFR 32.15-30 33 CFR 164.35 33 CFR 164.37 33 CFR 164.38 SOLAS 74/78 V/12
	Compasses  Illuminated gyrocompass with repeater at stand Illuminated magnetic compass Current deviation table	46 CFR 32.15-35 33 CFR 164.35 SOLAS 74/78 V/12
	Test electronic depth sounding device and recorder  • Accurate readout • Test all transducers • Continuous recorder (chart)	46 CFR 32.15-10 33 CFR 164.35 SOLAS 74/78 V/12
	Speed and distance indicator	33 CFR 164.40 SOLAS 74/78 V/12
	Propulsion shaft tachometer	SOLAS 74/78 V/12
Note	9S:	

	Radio equipment		O Vent outlets	
	Radio equipment  Radios, RDF, Loran Electronic position fixing device tested GMDSS meets requirements for vessel operating area  Internal communications and control system EOT failure alarms Telephones Voice tubes Emergency loudspeaker system Public address system Bell pulls	47 CFR Part 80 33 CFR 26.03 SOLAS 74/78 V/7 SOLAS 74/78 V/12 33 CFR 164.41 NVIC 9-93 46 CFR 113.30 46 CFR 113.35 MSM Ch. B1.J.4	<ul> <li>Vent outlets         <ul> <li>Height above highest cargo area working level</li> <li>Directed vertically upward</li> <li>Flame arrestor (where required)</li> <li>Weather hood</li> <li>Flame screens</li> <li>Located away from air intakes and openings to accommodation spaces</li> </ul> </li> <li>O P/V valves         <ul> <li>Material condition</li> <li>Operation</li> <li>Flame screens</li> </ul> </li> </ul>	46 CFR 153.350 46 CFR 153.351 46 CFR 153.352 46 CFR 153.368 46 CFR 153.463
	Pilothouse controls	46 CFR 113.50		
	Navigation lights and signals  Control panels Running lights Anchor lights Special day and night signals Distress signals and stowage Flag signals, international code Whistle, light, bells, gongs Day and night signal devices Certificate of Alternate Compliance  Steering gear Main gear tested (all stations) Auxiliary gear tested (all stations) Instructions and markings Rudder angle indicator Illumination Alarms Block diagram	72 COLREGS 46 CFR 111.75-17 MSM Ch. B1.J.5.c MSM Ch. C2.J  46 CFR 32.15-5  33 CFR 81.9  46 CFR 31.10-15 46 CFR 61.20-1 46 CFR 58.25 33 CFR 164.35 33 CFR 164.39 46 CFR 113.43 SOLAS 74/78 II-1/29 SOLAS 74/78 II-1/30 SOLAS 74/78 V/19-1 SOLAS 74/78 V/19-2 MSM Ch. C4.F NVIC 1-69 NVIC 1-81	Gauging:  Type of gauging system  Depen Restricted Closed  High-level alarms  Operation Audible and visual signals Last tested and inspected Markings  Overfill controls Set points  Cargo samples Designated stowage locations Ventilation	46 CFR 153.409 46 CFR 153.408 46 CFR 153.935(a)
Note	s:			

Quick-closing Valves:			Maneuvering facts sheet with warning statements	33 CFR 164.35
NOTE: Requirements for quick-closing valves are detailed in 4	6 CFR 153.284.			
<ul> <li>Operation</li> <li>Tested from at least 2 remote locations</li> <li>Closure time &lt; 30 seconds</li> <li>All valves fully closed</li> </ul>			<ul> <li>Float-free arrangement</li> <li>Battery date current</li> <li>Hydrostatic release</li> </ul>	SOLAS 74/78 IV/7.1.6 46 CFR 199.510 NVIC 2-93
<ul> <li>Pumps automatically shut off</li> <li>Capable of local manual operation</li> <li>Reasonably short time</li> </ul>			GMDSS lifeboat radios (VHF)  • 3 if over 500 GT  • Operable condition	SOLAS 74/78 III/6.2 NVIC 9-93
<ul> <li>Under emergency conditions</li> <li>Fusible elements</li> <li>Located at tank domes and loading manifold</li> <li>No paint on face of plug</li> </ul>			<ul> <li>Vessels &gt; 300 GT and &lt; 500 require 1</li> <li>Vessels &gt; 500 GT require 2</li> <li>Stowed so to be rapidly placed in survival craft, or stowed in survival craft</li> </ul>	
Venting:		_	TWW TEX	SOLAS 74/78 IV/7.1.4
O Type of vent system		G	eneral Health and Safety:	
Open, gooseneck			Hospital and first aid equipment	46 CFR 32.40-35
High velocity	46 CFR 153.355 46 CFR 153.353		Operating room explosion-proof	46 CFR 111.105-37
<ul><li>Vent piping</li><li>No stop valves allowed</li></ul>	40 OF IX 100.000		Emergency lighting	46 CFR 112.43 46 CFR 35.10-15 SOLAS 74/78 II-2/43.2
<ul> <li>Bypass capability</li> <li>Material condition</li> <li>Segregation         <ul> <li>Independent</li> <li>Common</li> <li>Portable</li> </ul> </li> <li>Agreement with plans</li> <li>Suitable connections for flushing and draining</li> <li>Coated or lined same as tank</li> <li>Prohibited materials</li> </ul>	46 CFR 153.361 46 CFR 153.362 46 CFR 153.236		<ul> <li>Size</li> <li>Lighting and wiring</li> <li>Heating</li> <li>Ventilation</li> <li>Sanitation</li> <li>Screens</li> <li>Insulation</li> <li>Fire retardant</li> </ul>	46 CFR 32.40 46 CFR 31.10-45
Natari		Not	es:	
Notes:				

	Galley	MSM Ch. B1.N.8	0	Spe	cial tank linings	46 CFR 153.266
	• Equipment		0	Hea	ating system	46 CFR 153.430
	<ul> <li>Sanitation</li> <li>Ventilation</li> </ul> Means of escape from accommodation,	46 CFR 32.02-1		•	If toxic cargoes only, system must be separate from vessel's heating system and contamination detection must be available	
	machinery, and other spaces	SOLAS 74/78 II-2/45	0	Coo	oling system	46 CFR 153.432
	<ul><li>Two required (some exceptions)</li><li>Dead end corridors</li><li>Absence of locks</li></ul>		0	Caro	go high pressure and temperature alarms  Audible	46 CFR 153.438
	Notices and markings where required  Conspicuous  Legible	46 CFR 35.40		•	Visual Location	
	<ul> <li>Proper size</li> <li>Gas freeing for repairs</li> </ul>		<u>Ca</u>	rgo	<u>Piping</u> :	
_	Current Gas Chemist Certificate for areas as	MSM Ch. A5.H	0	Mate	erial condition	
	required  Date			•	Annual hydrostatic test Properly marked	33 CFR 156.170 46 CFR 15.294
	Chemist No.  Doint stowage		0	Valv	ves .	46 CFR 153.283
J	Paint stowage  Closures Fireproof / metal lined Lighting / electrical Fire protection Markings	46 CFR 32.85 SOLAS 74/78 II-2/18.7	0	•	Tank valves Hose connection points eement with plans New piping No unauthorized modification	46 CFR 153.910
	Storerooms      Stowage     Fire hazards     Lighting and wiring		O	Prof	hibited materials  Aluminum or aluminum alloys  Copper or copper alloys  Zinc, galvanized steel, or alloys having > 10% zinc  Magnesium	46 CFR 153.236
	Oxygen sensor (oxygen analysis equip.)	SOLAS 74/78 VI/3.1		•	Lead	
	Combustible gas indicator	46 CFR 35.30-15 NVIC 12-86		•	Silver or silver alloys Mercury	
	LPG systems, cylinders, tests	46 CFR 61.15-10	Note	es: _		

0	Crew respiratory/eye protection	46 CFR 153.527	☐ Pilot ladder and hoists in good condition	
	EEBD > 15-minute duration	40 CFR 153.527	-	46 CFR 32.90-1 SOLAS 74/78 V/17
_			Spreaders	
	rgo Operations:		☐ Intrinsically safe portable radios	46 CFR 35.30-30
0	Warning signs and signals		☐ Safe access to tanker bows	+0 CFK 35.30-30
	<ul> <li>Red signal visible, light/flag</li> </ul>	46 CFR 153.953	(vessels built prior to 1 JUL 98 not required to comply until	SOLAS 74/78 II-1/3-3
	<ul><li>Warning signs at gangway</li><li>"Warning"</li></ul>	46 CFR 153.955	1 JUL 2001)	
	<ul><li>"Dangerous Cargo"</li></ul>		Structural Integrity	
	<ul><li>"No Smoking"</li><li>"No Open Lights"</li></ul>		Structural Integrity:	
0	Portable cargo hose	40.050.450.040	Hull structure (list inaccessible compartments	46 CFR 31.10-15
	Marked or stenciled	46 CFR 153.940	or areas)	ICLL 66 Reg. 1
	Date		• Decks	
	Tested		• Shell	
	Test pressure		Bulkheads     Table took	
	<ul> <li>MAWP</li> </ul>		<ul><li>Tank tops</li><li>Strength members</li></ul>	
	Service temperature		Δnnroved plans on hoard	
	<ul><li>Maximum</li><li>Minimum</li></ul>			46 CFR 31.10-22
	Test pressure		Hull openings and closures	46 CFR 42.13-20
0	Cargo discharge methods			46 CFR 42.15 MSM Ch. B1.E.5
	Pumproom		Air ports and dead covers	ICLL 66 Regs. 12 - 23
	Deepwell pump		Refuse chutes	NVIC 5-82
	Submerged pump		-	NVIC 10-82, Change 1
	Gas pressurization	46 CFR 153.964	<ul><li>Butterworth plates</li><li>Closing devices, gaskets</li></ul>	
	Liquid displacement	46 CFR 153.966	Light/water test	
<b>~</b> -			Deck openings and closures	
	rgo Tanks:		· · · · · · · · · · · · · · · · · · ·	MSM Ch. B1.E.5 ICLL 66 Regs. 12 - 20
0	Trunks and hatches, ullage openings	46 CFR 153.256	<ul> <li>Closing devices</li> <li>Gaskets</li> </ul>	011 00 Nogo. 12 10
	• Condition		Light/water test	
	Gaskets		☐ Guards ladders rails and gangways	
	• Closure		(in alcoding a consume alatic a la delega on allat	46 CFR 32.02-10 46 CFR 32.02-15
	Butterworth openings     Closed		· •	ICLL 66 Reg. 25
	☐ Fitted with flame screens		Mater	
lote	S:		Notes:	

	Catwalks, lifelines at hazardous places, cable traveler	46 CFR 32.02-10
	Elevators	46 CFR 111.91
	Watertight doors in subdivision bulkhead tested by:  • Local and remote control	46 CFR 111.97 46 CFR 170.248 46 CFR 170.270
	<ul><li>Local and remote control</li><li>Alarms</li><li>Markings</li></ul>	
	Cargo gear examined (in absence of Cargo Gear Certificate)	46 CFR 31.10-16 46 CFR 31.37
	<ul><li>Records</li><li>Safe Working Load markings</li></ul>	
	<ul><li>Exercise valves and controls</li><li>Bilge valves</li></ul>	46 CFR 38.10
	<ul><li>Overboard discharge valves</li><li>Equalizing valves</li></ul>	
	Emergency shutoff valves	
	<ul><li>Scupper valves</li><li>Remote control</li></ul>	
	Reach rods	
	Bilge wells, cofferdams, and suctions	46 CFR 56.50-50
	Bulkhead penetrations	MSM Ch. B1.E.6
	Piping protection	MSM Vol. IV Ch. 3.G.2.b
	<ul><li>Removable guards (where required)</li><li>Baggage spaces</li></ul>	
	Hull marks	46 CFR 67.120
	<ul><li>Name</li><li>Hailing port</li></ul>	46 CFR 32.05-10
	Official number	
	Net tonnage	
Note	es:	

# Section 4: Additional Inspection Items for Vessels Carrying Dangerous Chemicals in Bulk

### **Emergency Equipment:**

- O Safety gear lockers
  - Proper locations (minimum of 2)
  - Labeled "Safety Equipment"
  - Proper type and amount of safety equipment

46 CFR 153.214

Familian	Amount Required per Safety Gear Locker Location			
Equipment	Primary Shutdown Station	Secondary Shutdown Station		
2 stretchers with lifting equipment	1	1		
30-minute SCBA	3	2		
SCBA refill tanks	11	6		
First aid equipment	2	1		
Overalls or long apron	2	1		
Boots	2	1		
Long-sleeved gloves	2	1		
Goggles	2	1		
Steel-cored lifeline with harness	2	1		
Explosion-proof flashlight	2	1		

- O Self-contained breathing apparatus
  - Material condition
  - Operation
- O Decontamination showers and eye wash on deck

46 CFR 153.216

Operation

Notes:

Suitably marked

_					
-					
-					

	<ul> <li>MARPOL Annex I survey</li> <li>Discharge of cargo residue</li> <li>Approved monitoring and control system</li> <li>MARPOL Annex II survey</li> <li>Discharge of cargo residue</li> <li>Approved monitoring and control system</li> </ul>	33 CFR 151.09 33 CFR 151.30	● Prope □ Load line r	ole erly sized erly spaced marks orm to certificate	46 CFR 32.05-1 46 CFR 31.25-1 46 CFR 42.07-5 46 CFR 42.13-20 ICLL 66 Regs. 4 - 9
Ма	rine Sanitation Devices:		Ground Tac	<u>:kle</u> :	
NOT Cha	TE: Guidance for inspecting marine sanitation devices is deterpter C2.K.  Marine sanitation device  Type I Type II Type III Certified for inspected vessels  Capacity satisfactory  Installation  Operation Ventilation Wiring and piping Maintenance Placard posted Safety Accessibility to parts requiring routine servicing Manufacturer's instructions available	ailed in MSM Volume II,  33 CFR 159.55 MSM Ch. B6.F  MSM Ch. B6.F.4 MSM Ch. C2.K.7.d  33 CFR 159.57 MSM Vol. IV Ch. 3.K.1	Anchors  Teste Windl Capsi — At Mooring, s gear cover Emergency (vessels ≥ 20 Appro  Appro  Cargo Oper Warning no Pumproom Pump Relief Coffe Ventil Bulkh Bilges Free o Closu Remo	ed class stans cutomatic tensioning device standing and running gear (other than red by Cargo Gear Certificate) cy towing arrangements 0,000 DWT only) oved by Administration  rations: cotices and signals posted cons/pumps ps and controls of valves crdams clation nead penetrations cs clean of excessive vapors	46 CFR 32.15-15 ABS Rules  46 CFR 32.15-15 ABS Rules  SOLAS 74/78 II-2/3-4  46 CFR 32.60-20 46 CFR 32.50-1 46 CFR 32.55-1 46 CFR 32.55-1 46 CFR 32.55-1 46 CFR 32.55-1 46 CFR 32.50-1 46 CFR 32.50-1 46 CFR 32.50-1 46 CFR 32.50-35 46 CFR 32.50-35 46 CFR 111.105
lote	es:		Notes:		

☐ Carg	o tanks			Oily waste retention	33 CFR 157.17
•	Trunks and hatches Ullage openings Liquid level gauges  Open Restricted Closed	46 CFR 32.20-20 46 CFR 39.20-3		<ul> <li>Bilge</li> <li>Tank</li> <li>Ballast discharge</li> <li>Acceptable processing equipment</li> </ul>	MSM Ch. B6.D.7  33 CFR 155.330 33 CFR 155.350 33 CFR 155.360 33 CFR 155.370 MSM Ch. B6.D.10
•	Liquid level devices  Deck penetrations  Heating coils  Explosion-proof electrical fittings  Overfill device	46 CFR 32.22T 46 CFR 32.50-15 46 CFR 111.105 33 CFR 155.840		Oily bilge discharge  Piping system Stop valve Standard discharge connection Pump stop	33 CFR 155.380 33 CFR 155.430
Carg	Expansion joints Controls Supports Hoses Valves	46 CFR 32.50-15 33 CFR 156.170 46 CFR 56.30 46 CFR 56.35 46 CFR 56.20 46 CFR 32.50-30 33 CFR 155.800 33 CFR 156.170		Prohibited oil spaces  Emergency shutdown  Discharge removal equipment	33 CFR 155.470 33 CFR 155.780 33 CFR 155.205 33 CFR 155.210
Carg	Markings o oil containment Size Drains Scupper closures	33 CFR 154.500 33 CFR 155.310 SOLAS 74/78 II-2/59		<ul> <li>Non-sparking portable pump</li> <li>Deck lighting</li> <li>Garbage         <ul> <li>Shipboard garbage properly disposed</li> </ul> </li> <li>Discharge from machinery space bilges         <ul> <li>Approved monitoring and control system</li> <li>Approved oil water separating equipment</li> </ul> </li> </ul>	33 CFR 155.790 33 CFR 151.63 MARPOL Ax. V/3 33 CFR 151.10
Notes:			Note:	es:	

	Firemen's outfits  • Two lockers	46 CFR 35.30-20 SOLAS 74/78 II-2/17.3 NVIC 2-63	☐ Cargo tank venting ☐ Common header system	46 CFR 32.55-20
	<ul> <li>Four outfits</li> <li>Protective clothing</li> <li>Helmet, boots, and gloves</li> <li>Lamp</li> <li>Axe</li> </ul>	NVIC 4-68	<ul> <li>P/V valves</li> <li>Flame arrestors</li> <li>Flush and drain connections</li> <li>Inert gas controls</li> <li>Piping</li> </ul>	46 CFR 32.20-5 46 CFR 32.20-10 46 CFR 151.15-5
	<ul> <li>Self-contained breathing apparatus and lifeline</li> <li>Spare charges</li> </ul>		☐ Independent PV valves  • Flame screen ☐ Independent goosenecks	46 CFR 32.55-20 46 CFR 32.20-10
0	<ul><li>Water spray system</li><li>Coverage (all tank domes, cargo manifolds, deck</li></ul>	46 CFR 34.25	Flame screen     Closure device	46 CFR 32.55-25 46 CFR 32.20-10
	tanks)  Operation		<ul><li>Explosion-proof fixtures</li></ul>	46 CFR 111.105
	<ul> <li>Local/remote control</li> <li>Manual or automatic</li> <li>Tested</li> <li>Can operate simultaneously with fire main systems</li> <li>Controls marked</li> <li>Material condition</li> </ul>		<ul> <li>Independent tanks</li> <li>External examination</li></ul>	46 CFR 32.60-30 46 CFR 153.251
Pol	lution Prevention:		<ul><li>Relief valves</li><li>Securing devices</li></ul>	
NOT	E: Guidance for inspecting pollution prevention items is det ter 31.	ailed in MSM Volume II,	<ul><li>Cargo hose</li><li>Electrical grounding</li></ul>	
	Pollution placard posted	33 CFR 155.450	Authorized cargo	
	MARPOL V placard posted	33 CFR 151.59	<ul><li>Weather decks</li><li>Sources of vapor ignition</li></ul>	46 CFR 111.105
	Person-in-charge designation  Fuel oil containment	33 CFR 155.700 33 CFR 155.820	<ul> <li>Doors, ports, scuttles,, gaskets, and closures satisfactory</li> <li>Portable window air conditioners and fans</li> </ul>	46 CFR 32.56-21
_	Portable	33 CFR 155.320	Ventilation systems	
	<ul><li>Fixed</li><li>Fuel tank vents</li><li>Flame screens</li></ul>	46 CFR 56.50-85	<ul><li>Air compressor intakes</li><li>Prohibited locations</li></ul>	46 CFR 32.35-15
	• Closures		Notes:	
lote	s:			

Inert Gas Systems:		☐ Fire stations	46 CFR 34.10-10
□ Purity of nitrogen	46 CFR 32.53 SOLAS 74/78 II-2/62 MSM Ch. C5	<ul> <li>Hydrants (2 effective streams)</li> <li>Nozzles and spanners</li> </ul>	NVIC 6-72, Change 1 SOLAS 74/78 II-2/4 SOLAS 74/78 II-2/21
<ul><li>% concentration of nitrogen in vapor space</li></ul>		• Hose	MSM Ch. 18.I.9 MSM Ch. 19.I.7 46 CFR 34.25-20
□ % oxygen vapor		Correct length	46 CFR 34.25-20
<ul> <li>Provisions for hold space and tank pad</li> </ul>		Markings	46 CFR 32.05-5
□ Sampling/testing of gas pad		Equipment compatible  Tatal have the fall have a test at	
☐ Gas generator or spare gas on board☐ General	46 CFR 32.53-20	<ul><li>Hydrostatically tested to at least 100 psi</li><li>Proper threads</li></ul>	46 CFR 34.10-10 MSM Ch. 18.I.6 46 CFR 31.10-18(g)
<ul><li>Supply capacity adequate</li><li>Positive pressure</li></ul>		Approved hose	
<ul> <li>Independent blowers</li> <li>Oxygen detector and recorder</li> <li>Pressure indicator and recorder</li> <li>Portable detecting instruments</li> <li>Alarms and controls         <ul> <li>High oxygen alarm (&gt; 8%)</li> </ul> </li> </ul>	46 CFR 32.50-30 46 CFR 32.53-45 46 CFR 32.53-60 46 CFR 32.53-70	<ul><li>Bulkheads</li><li>Insulation</li></ul>	46 CFR 32.56 46 CFR 32.57 46 CFR 34.05 46 CFR 34.10 46 CFR 34.15 46 CFR 35.10-3 SOLAS 74/78 II-2/42
<ul> <li>Low pressure alarm (&lt; 100mm)</li> <li>Loss of water supply to deck water seal alarm and shutdown</li> <li>High inert gas temperature (&gt; 150°F) alarm and shutdown</li> <li>Loss of water supply to scrubber alarm and shutdown</li> <li>Automatic shutdown valve</li> <li>Instruction manual</li> </ul>	46 CFR 32.53-75 46 CFR 32.53-85	<ul> <li>Fire doors and controls tested</li> <li>Machinery space and stair towers</li> <li>Not tied or blocked open</li> <li>Installed closure devices working</li> <li>Remote controls to power ventilation marked and tested</li> </ul>	46 CFR 32.56-35 46 CFR 111.103-1 SOLAS 74/78 II-2/46 SOLAS 74/78 II-2/47 46 CFR 111.103-1
Vapor Control Systems:		<ul> <li>Closures for spaces protected by fixed smothering systems</li> </ul>	
☐ Piping	46 CFR 39.20-1		46 CFR 34.10-15(d) SOLAS 74/78 II-2/19
<ul> <li>Drain lines</li> <li>Electrically bonded to hull</li> <li>Flange stud</li> <li>Vapor connection painted red / yellow / red and</li> </ul>		☐ Fire axe	46 CFR 34.60 46 CFR 32.05-5
labeled vapor in 2-inch black letters		Notes:	
Notes:		110103.	
	_		

	Fixed fire extinguishing systems  Controls, instructions, marking Alarms tested Piping Heads, distribution Bottles weighed annually Bottles hydrostatically tested (every 12 years) Flexible loops tested or replaced (10% per year) Deck foam system Sea suction, strainers Fixed system tested	46 CFR 34.05-5 46 CFR 34.15 46 CFR 34.17 SOLAS 74/78 II-2/21 MSM Ch. C2.I NVIC 6-70 NVIC 6-72, Change 1 NVIC 8-73 46 CFR 31.10-18(a) 46 CFR 34.20 SOLAS 74/78 II-2/61	☐ Closed gauging arrangement ☐ Liquid overfill protection ☐ High-level and tank overfill alarms ☐ Alarm with automatic shutdown system ☐ Spill valve ☐ Rupture disk ● Intrinsically safe ● Audible and visual alarms ● Operational test	46 CFR 39.20-3 46 CFR 39.20-9
	• Storage space/door  Type of system: (circle appropriate type)  Low Pressure CO <sub>2</sub> High Pressure CO <sub>2</sub> Halon	Foam	<u>Lifesaving Equipment</u> :  NOTE: Exemptions and alternatives for vessels not subject to \$46 CFR 199.600.  ☐ General alarms	SOLAS can be found in 46 CFR 32.25
	Foam tanks  Markings Test Analysis Refilled Polar/non-polar foam Cargo compatible	46 CFR 34.17 46 CFR 35.40-10 SOLAS 74/78 II-2/61 NVIC 6-72 NVIC 11-82	<ul> <li>Controls</li> <li>Batteries and fuses</li> <li>Tested</li> <li>Markings</li> <li>Bell locations audible</li> <li>Type of lifeboat</li> <li>Davit launched</li> <li>Free fall</li> </ul>	46 CFR 32.25 46 CFR 113.25 SOLAS 74/78 III/6.4 46 CFR 35.40
	Fire main system  Pumps Piping Cut-off valves Drains	46 CFR 34.05 46 CFR 31.10-18(g) 46 CFR 34.10-5 46 CFR 34.10-18(f) 46 CFR 34.10-15(c) NVIC 6-72, Change 1 SOLAS 74/78 II-2/4 SOLAS 74/78 II-2/21 MSM Ch. C2.I.9 MSM Ch. C2.I.8	□ Lifeboats stripped, cleaned and inspected  • Date of annual servicing	46 CFR 199.190(f)  46 CFR 199.201 46 CFR 199.202 46 CFR 199.261 46 CFR 199.262 SOLAS 74/78 III/19.2 SOLAS 74/78 III/26 MSM Ch. C2.H.2  46 CFR 199.176
lote	s:		Notes:	

Lifeboat equipment and stowage (use table below to determine required equipment)

46 CFR 199.175 SOLAS 74/78 III/41

Item	Item		ational age	Short International Voyage	
Number		Lifeboat	Rescue Boat	Lifeboat	Rescue Boat
1	Bailer <sup>1</sup>	1	1	1	1
2	Bilge pump <sup>2</sup>	1		1	
3	Boathook	2	1	2	1
4	Bucket <sup>3</sup>	2	1	2	1
5	Can opener	3		3	
6	Compass	1	1	1	1
7	Dipper	1		1	
8	Drinking cup	1		1	
9	Fire extinguisher	1	1	1	1
10	First aid kit	1	1	1	1
11	Fishing kit	1			
12	Flashlight	1	1	1	1
13	Hatchet	2		2	
14	Heaving line	2	2	2	2
15	Jackknife	1		1	
16	Knife <sup>1,4</sup>		1		1
17	Ladder	1	1	1	1
18	Mirror, signalling	1		1	
19	Oars, units 5,6	1	1	1	1
20	Painter	2	1	2	1
21	Provisions (units/persons)	1			
22	Pump <sup>7</sup>		1		1
23	Radar reflector	1	1	1	1
24	Rainwater collection device	1		1	
25	Repair kit <sup>7</sup>		1		1
26	Sea anchor	1	1	1	1
27	Searchlight	1	1	1	1
28	Seasickness kit (units/person)	1		1	

	Immersion suits  • Condition	46 CFR 199.273 SOLAS 74/78 III/27.3
	Retro-reflective material	SOLAS 74/78 III/30.2.7 MSM Ch. C2.H.5
	Placard of lifesaving signals	46 CFR 35.12 SOLAS 74/78 V/16
	Pilot ladder and hoists in good condition	46 CFR 32.90-1 SOLAS 74/78 V/17
	Station bill posted	46 CFR 35.10-1 46 CFR 199.80 SOLAS 74/78 III/8.3
	Distress signals	46 CFR 199.60
	12 rocket parachute flares	SOLAS 74/78 III/6.3
<u>Fir</u>	e Protection Equipment:	
	Fire control plan	46 CFR 35.10-3
	Permanently posted	SOLAS 74/78 II-2/20
	<ul> <li>Copy permanently stored in weathertight container outside deckhouse</li> </ul>	
	Portable extinguishers	46 CFR 34.05-10
	Annually serviced	46 CFR 34.50
	<ul> <li>Bottles hydrostatically tested (every 5 years)</li> </ul>	46 CFR 31.10-18(a) SOLAS 74/78 II-2/6
	<ul><li>Markings (weight and hydrostatic test date)</li><li>Spare charges, spare extinguishers</li></ul>	SOLAS 74/78 II-2/21 MSM Ch. C2.I.3 NVIC 7-70
		NVIC 13-86
	Semiportable extinguishers	46 CFR 34.05-10
	Annually serviced	46 CFR 34.50
	Bottles hydrostatically tested (every 12 years)	46 CFR 31.10-18(a) SOLAS 74/78 II-2/6
	<ul> <li>Controls, instructions, markings</li> <li>Hose and diffuser</li> </ul>	SOLAS 74/78 II-2/21
	Flexible loops tested or replaced (same as bottle)	MSM Ch. C2.I.4 NVIC 13-86
Note	S:	

	Lifefloats and buoyant apparatus	46 CFR 199.640		
	<ul> <li>Equipment</li> </ul>	10 0111 100.010		
	<ul> <li>Stowage</li> </ul>			
	<ul> <li>Markings</li> </ul>			
	Line-throwing apparatus	46 CFR 199.170		
	Equipment	SOLAS 74/78 III/17		
	Required drills held	NVIC 8-69		
	Magazine			
	• Type	_		
	Lifebuoys	40 OFD 400 70(-)		
	• Lights	46 CFR 199.70(a) SOLAS 74/78 III/7		
	• Lines	SOLAS 74/78 III/27		
	Smoke signals			
	Stowage			
	Markings			
	Lifejackets			
	•	46 CFR 199.70(b) SOLAS 74/78 III/7.2.2		
	Adult Children	MSM Ch. 6.R.3.m		
	Retro-reflective tape	NVIC 2-63		
	<ul><li>Lights</li></ul>	MSM Ch. 6.R.3.q		
	<ul> <li>Whistles</li> </ul>			
	<ul> <li>Work vests</li> </ul>			
	<ul> <li>Stamped passed</li> </ul>			
	<ul> <li>Number of lifejackets rejected by inspector</li> </ul>			
	Lifejacket stowage	40.0ED 400.70(I)		
_	· •	46 CFR 199.70(b) SOLAS 74/78 III/7.2		
	<ul><li>Required notices and markings</li><li>Stowage lockers</li></ul>	46 CFR 199.80(c)		
	Wearing instructions	46 CFR 199.70(b)(2)		
	<ul> <li>Location instructions (passenger vessels)</li> </ul>	46 CFR 199.80(c)		
	Location instructions (passenger vessels)	46 CFR 199.217		
	Work vests	46 CFR 35.03		
	<ul> <li>Approved type</li> </ul>	46 CFR 35.03-5		
	Stowage	46 CFR 35.03-15		
	Stateroom notices posted	40.0ED 400.00( )		
\lote	·	46 CFR 199.80(c)		
Note	9S:			

Item Number	ltem	International Voyage		Short International Voyage	
Number		Lifeboat	Rescue Boat	Lifeboat	Rescue Boat
29	29 Signal, smoke			2	
30	30 Signal, hand flare			6	
31 Signal, parachute flare		4		4	
32	Skates and fenders <sup>8</sup>	1	1	1	1
33	Sponge <sup>7</sup>		2		2
34	Survival instructions	1		1	
35	Table of lifesaving signals	1		1	
36	Thermal protective aids <sup>9</sup>	10%	10%	10%	10%
37	Tool kit	1		1	
38	Tow line <sup>10</sup>	1	1	1	1
39	Water (liters/person)	3		3	
40	Whistle	1	1	1	1

#### Footnotes:

- 1 Each rigid liferaft equipped for 13 persons or more must carry two of these items.
- 2 Not required for boats of self-bailing design.
- 3 Not required for inflated or rigid-inflated rescue boats.
- 4 A hatchet counts towards this requirement in rigid rescue boats.
- 5 Oars are not required on a free-fall lifeboat; a unit of oars means the number of oars specified by the boat manufacturer.
- 6 Rescue boats may substitute buoyant paddles for oars, as specified by the manufacturer.
- 7 Not required for a rigid rescue boat.
- 8 Required if specified by the boat manufacturer.
- 9 Sufficient thermal protective aids are required for at least 10% of the persons the survival craft is equipped to carry, but not less than two.
- 10 Required only if the lifeboat is also the rescue boat.

Notes:			
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	Disengaging apparatus examined or tested and marked as required	46 CFR 199.45(b) SOLAS 74/78 III/41	☐ Lifeboat winches	46 CFR 199.199(i) SOLAS 74/78 III/19
	<ul> <li>Universal joints</li> <li>Safety latches</li> <li>Hooks</li> <li>Locking knuckles</li> <li>Frame</li> <li>Motor lifeboats*</li> </ul>	MSM Ch. C2.H.b	<ul> <li>Brakes</li> <li>Controls</li> <li>Cranks</li> <li>Covers</li> <li>Limit switches and electrical controls</li> <li>Embarkation aids</li> </ul>	MSM Ch. C2.H.2.b 46 CFR 199.190(f)
<b>J</b>	<ul> <li>Engine operating test</li> <li>Cooling water pump</li> <li>Ahead and astern test</li> <li>Fuel tanks</li> <li>Searchlight test (passenger vessels)</li> <li>Annual fuel changed</li> </ul>	46 CFR 199.45(b) SOLAS 74/78 III/41 MSM Ch. C2.H.2	<ul> <li>Ladders</li> <li>Access</li> <li>Spans and lifelines</li> <li>Illumination</li> <li>Frapping and tricing lines</li> <li>Lifeboat weight test</li> </ul>	SOLAS 74/78 III/11 46 CFR 199.45(b)
	<ul> <li>Extinguishers serviced</li> <li>Hand-propelled lifeboats</li> </ul>	46 CFR 199.45(b)	<ul><li>Light load</li><li>Full load: date</li></ul>	SOLAS 74/78 IIÌ/19
	<ul> <li>Flemming gear</li> <li>Transmission oil</li> <li>Radio installation for lifeboats complies with</li> <li>FCC and/or international convention (where required)</li> </ul>	46 CFR 199.60 SOLAS 74/78 III/6	<ul> <li>Liferafts</li> <li>Launching instructions posted</li> <li>Equipment and stowage</li> <li>Annual service dates</li> </ul>	46 CFR 199.190 SOLAS 74/78 III/19 SOLAS 74/78 III/26 MSM Ch. C2.H.3 46 CFR 199.190(g)
	<ul><li>Portable</li><li>Fixed</li></ul>			_
	Lifeboat operational test <sup>*</sup>	46 CFR 199.45(b) SOLAS 74/78 III/19 MSM Ch. C2.H.2.b	Hydro release service dates	46 CFR 199.190(h)
	Davits      Foundations     Moving parts     Fittings     Fairleads, cleats, or cruciform bits  Falls (data last represented or and for ended)	46 CFR 160.032 SOLAS 74/78 III/48 MSM Ch. C2.H.2.b	<ul> <li>Weak link</li> <li>Float free</li> <li>Illumination</li> </ul>	
	Falls (date last renewed or end-for-ended)	46 CFR 199.190(j) SOLAS 74/78 III/48 MSM Ch. C2.H.8	<ul> <li>Markings</li> <li>Capacities</li> </ul>	
* Ite	ems tested in conjunction with Abandon Ship Drill.		Launching devices tested	MSM Ch. 6.R.3.d
Vote	es:		Notes:	
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