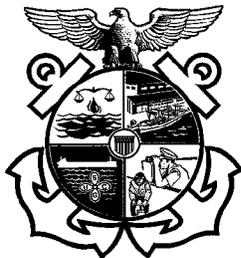


United States Coast Guard



**OFFSHORE SUPPLY VESSEL
INSPECTION BOOK**

Name of Vessel		
Official Number	Class	
Date Completed	Location	
Vessel Built in Compliance with SOLAS: 60 74 74/78 N/A		
Route		
Oceans	Limited Coastwise	Lakes / Bays / Sounds
Coastwise	Great Lakes	Rivers
Inspection Type		
Inspection for Certification (COI)		Reinspection
Inspectors		
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

Use of Offshore Supply Vessel Inspection Book:

This inspection book is intended to be used as a job aid by Coast Guard marine inspectors during hull and machinery inspections of U.S. flagged offshore supply vessels (OSVs) subject to Subchapter L. For OSVs built prior to March 15, 1996, Subchapter I or Subchapter T may apply; therefore, cites from CG-840 HI, CG-840 MI, or CG-840 T may be referenced. 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, CFR's, NVIC's 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 offshore supply vessels can be found in the Marine Safety Manual (MSM) Volume II, Chapter 6: Inspection of Vessels for Certification. All MSM cites listed in this book refer to MSM Volume II unless otherwise indicated.*

Pre-inspection Items:

- Review MSIS records.
 - MIPIP
 - MICOI
- Obtain copies of forms to be issued.

Post-inspection Items:

- Issue letters/certificates to vessel.
- Complete MSIS entries.
 - MIAR
 - MSDS
 - MIDR
 - VFLD
 - VFID
- 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
<i>Various additional amendments to SOLAS</i>	
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
COLREGS 1972	15 JUL 77
<i>Various additional amendments to COLREGS</i>	
Load Line 1966	21 JUL 68
STCW 1978	28 APR 84
1991 Amendments	01 DEC 92
1994 Amendments	01 JAN 96
1995 Amendments	01 FEB 97

Involved Parties & General Information:

Vessel's Representatives _____ _____
Phone Numbers

Owner
No Change

Operator—Listed on DOC (if applicable), or COFR
No Change

Vessel Information:

Classification Society	
ISM Issuer: Same as above?	
Yes	No If not the same, which Recognized Organization? _____
<p>NOTE: The period of validity for ISM documents should correspond to the following list. If they do NOT, ISM documents should be further investigated.</p> <p><input type="checkbox"/> 5 years = Full term (SMS and DOC) <input type="checkbox"/> 12 months = Interim (DOC)</p> <p><input type="checkbox"/> 6 months = Interim (SMC) <input type="checkbox"/> 5 months = Short term (SMC)</p>	
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)

Section 2: Certificates and Documents

Name of Certificate	Issuing Agency	ID #	Port Issued	Issue Date	Exp. Date	Endors. Date
Certificate of Documentation No Change	USCG					
Classification Document No Change						
Certificate of Financial Responsibility (COFR) No Change	USCG					
Safety Construction (SLC) No Change						
Safety Equipment (SLE) No Change	USCG					
Safety Radio (SLT) No Change						
Passenger Ship Safety (PSS) No Change	USCG					
International Load Line (ILL) No Change						

Name of Certificates	Issuing Agency	ID #	Port Issued	Issue Date	Exp. Date	Endors. Date
International Oil Pollution Prevention (IOPP) No Change						
International Tonnage (ITC) No Change						
Safety Management (SMC) No Change						
Document of Compliance (DOC) No Change						
FCC Station License No Change	FCC					
FCC Safety Certificate No Change	FCC					
FCC Operations Permit No Change	FCC					
FCC Marine Radio Operator Permit No Change	FCC					

Certificates:

- | | | |
|--------------------------|--|--|
| <input type="checkbox"/> | COI posted | 46 CFR 126.220
46 CFR 126.240 |
| | <ul style="list-style-type: none">• All pages visible• Number of offshore workers | 46 CFR 126.170 |
| <input type="checkbox"/> | Stability letter posted | 46 CFR 131.930
ICLL Reg. 10(2) |
| <input type="checkbox"/> | Waste management plan
(oceangoing vessels ≥ 40 feet) | 33 CFR 151.57 |
| <input type="checkbox"/> | Annual drug and alcohol program audit | 46 CFR Part 16 |
| <input type="checkbox"/> | Officers' licenses current | |
| <input type="checkbox"/> | GMDSS endorsement | 47 CFR Part 80 |
| | FCC Station License | |
| | Safety Radio Certificate | |
| <input type="checkbox"/> | GMDSS maintenance personnel | 47 CFR 80.1074 |
| | 1 st Class Radiotelegraph Operator's Certificate | |
| | 2nd Class Radiotelegraph Operator's Certificate | |
| | 3rd Class Radiotelegraph Operator's Certificate | |
| <input type="checkbox"/> | Required international safety convention
certificates posted and valid | |
| <input type="checkbox"/> | Liferaft servicing certificates | 46 CFR 160.151-57(p)
46 CFR 131.580
SOLAS 74/78 III/19.8 |
| | <ul style="list-style-type: none">• Annual service | |

Logs and Manuals:

- | | | |
|--------------------------|--|--|
| <input type="checkbox"/> | Bridge logbook | 46 CFR 131.620 |
| | <ul style="list-style-type: none">• Casualties (navigation equipment and steering gear failures reported)• Steering gear test• Communications• Draft / load lines• Stability• Sanitary accommodations• Watertight fittings• Emergency lights / power• Fire and lifeboat drills | 46 CFR 131.110
46 CFR 131.505
46 CFR 131.510
46 CFR 131.513
46 CFR 131.515
46 CFR 131.520
46 CFR 131.525
46 CFR 131.530 |

Notes: _____

-
- Lifesaving equipment maintenance record 46 CFR 131.545
SOLAS 74/78 III/19
 - SOLAS training manual SOLAS 74/78 III/18.2
 - Lifboat operating manual 46 CFR 134.170
 - Coast Guard approved
 - Understandable to crew
 - Information available to master 46 CFR 78.17-20
46 CFR 97.15-5
SOLAS 74/78 II-1/22.1
 - Loading manual
 - Trim and stability book

Pollution Prevention Records:

- Oil record book (Part 1) MARPOL Ax. I/20
33 CFR 151.25
 - Each operation signed by person-in-charge
 - Each complete page signed by master
 - Book maintained for 3 years
- Shipboard oil pollution emergency plan MARPOL Ax. I/26.1
33 CFR 151.26
 - Approved by Coast Guard / class society
 - Contact numbers correct
 - Immediate Actions List
- Vessel response plan 33 CFR 155.1030
(vessels carrying oil as secondary cargo)
 - Approved by Coast Guard 33 CFR 155.1065
 - Annual review by owner / operator 33 CFR 155.1070
- Oil transfer procedures 33 CFR 155.720
 - Posted
 - List of products carried by vessel
 - Description of transfer system including a line diagram of piping
 - Number of persons required on duty
 - Duties by title of each person
 - Means of communication
 - Procedures to top off tanks
 - Procedures to report oil discharges

Notes: _____

Section 3: Inspection Items

Navigation Equipment:

- | | | |
|--------------------------|--|---|
| <input type="checkbox"/> | Navigation publications (as applicable) | 46 CFR 130.330
SOLAS 74/78 V/20 |
| | <ul style="list-style-type: none">• Current and corrected charts• U.S. Coast Pilot• Coast Guard Light List• Notice to mariners• Tide tables• Tidal current tables | |
| <input type="checkbox"/> | Radar | 46 CFR 130.310
SOLAS 74/78 V/12 |
| <input type="checkbox"/> | Compasses | 46 CFR 130.340
SOLAS 74/78 V/12 |
| | <ul style="list-style-type: none">• Lighted magnetic compass• Current deviation table | |
| <input type="checkbox"/> | Test electronic depth sounding device | SOLAS 74/78 V/12 |
| <input type="checkbox"/> | Speed and distance indicator | SOLAS 74/78 V/12 |
| <input type="checkbox"/> | Propulsion shaft tachometer | SOLAS 74/78 V/12 |
| <input type="checkbox"/> | Radio equipment | 33 CFR 26.03
SOLAS 74/78 V/7
SOLAS 74/78 V/12 |
| | <ul style="list-style-type: none">• Radios, RDF, Loran• Electronic position fixing device tested• GMDSS meets requirements for vessel operating area | 46 CFR 133.60
NVIC 9-93 |
| <input type="checkbox"/> | Internal communications and control system | 46 CFR 113.30 |
| | <ul style="list-style-type: none">• EOT failure alarms• Telephones• Voice tubes• Emergency loudspeaker system• Public address system• Pilothouse controls | 46 CFR 113.35
46 CFR 113.50 |

Notes: _____

- Navigation lights and signals
 - Control panels 46 CFR 111.75-17(d)
 - Running lights 46 CFR 129.430
 - Anchor lights 72 COLREGS
 - Special day and night signals
 - Distress signals and stowage 46 CFR 133.60
 - Whistle, light, bells, gongs
 - Day and night signal devices
 - Certificate of Alternate Compliance 33 CFR 81.9

- Steering gear
 - Main gear tested (all stations) 46 CFR 130.130
 - Auxiliary gear tested (all stations) 46 CFR 130.140
 - Instructions and markings MSM Ch. C4.F
 - Rudder angle indicator 46 CFR 131.845
 - Illumination 46 CFR 131.850
 - Alarms 46 CFR 130.460
 - Block diagram

- EPIRB (406 MHz)
 - Float-free arrangement 46 CFR 133.60
 - Battery date current SOLAS 74/78 IV/7.1.6
 - Hydrostatic release
 - Marked with vessel name 46 CFR 131.890

- 9 GHz radar transponder (SART)
 - Vessels > 300 GT and < 500 require 1 SOLAS 74/78 III/6.2
 - Vessels > 500 GT require 2 NVIC 9-93
 - Stowed so to be rapidly placed in survival craft, or stowed in survival craft

General Health and Safety:

- Emergency lighting
 - Markings 46 CFR 112.43
 - 46 CFR 131.840

Notes: _____

- Accommodations
 - Size 46 CFR 127.280
 - Berthing
 - Seating
 - Ventilation 46 CFR 127.260
 - Lighting and wiring
 - Sanitation 46 CFR 131.515
 - Fire retardant

- Galley MSM Ch. B1.N.8
 - Equipment
 - Sanitation
 - Ventilation 46 CFR 127.260

- Means of escape from accommodation, machinery, and other spaces 46 CFR 127.240
SOLAS 74/78 II-2/45
 - Two required (some exceptions)
 - Dead end corridors
 - Absence of locks

- Gas freeing for repairs MSM Ch. A5.H
 - Current Gas Chemist Certificate for areas as required
 - Date _____
 - Chemist No. _____

- Liquefied petroleum gases for cooking and heating 46 CFR 129.550
46 CFR 61.15-10
 - Approved type
 - Cylinder
 - Test dates
 - Stowage
 - Safety relief device
 - Regulators
 - Piping and fittings
 - Location

Notes: _____

- Paint stowage
 - Fireproof / metal lined 46 CFR 127.220
 - Lighting / electrical 46 CFR 129.520
 - Fire protection 46 CFR 132.310
- Storerooms
 - Stowage
 - Fire hazards
 - Lighting and wiring

Structural Integrity:

- Hull structure (list inaccessible compartments or areas) 46 CFR 126.430
ICLL 66 Reg. 1
 - Decks
 - Shell
 - Bulkheads
 - Tank tops
 - Strength members
 - Approved plans available 46 CFR 126.150
- Hull openings and closures 46 CFR 42.15
MSM Ch. B1.E.5
ICLL 66 Regs. 12 - 23
 - Air ports and dead covers
 - Closing devices, gaskets
 - Light / water test
 - Closed prior to departure 46 CFR 131.520
- Deck openings and closures MSM Ch. B1.E.5
ICLL 66 Regs. 12 - 20
 - Closing devices, gaskets
 - Light / water test
 - Closed prior to departure 46 CFR 131.520
- Guards, ladders, rails, and gangways (including accommodation ladders or pilot ladders) 46 CFR 127.310
46 CFR 127.320
46 CFR 127.330
ICLL 66 Reg. 25

Notes: _____

- Watertight doors in subdivision bulkhead tested 46 CFR 170.270
 - Local and remote control
 - Alarms
 - Markings 46 CFR 131.893
- Exercise valves and controls 46 CFR 115.804
 - Bilge valves
 - Overboard discharge valves
 - Emergency shutoff valves
 - Scupper valves
 - Remote controls
 - Reach rods
- Bilge wells, cofferdams, and suction 46 CFR 56.50-50
- Bulkhead penetrations 46 CFR 128.230
MSM Ch. B1.E.6
- Hull marks 46 CFR 67.120
 - Name
 - Hailing port
 - Official number
 - Net tonnage
- Draft marks 46 CFR 131.220
 - Legible
 - Properly sized
 - Properly spaced
- Load line marks 46 CFR 131.230
ICLL 66 Regs. 4 - 9
 - Conform to certificate
 - Legible
- Cranes in absence of Cargo Gear Certificate 46 CFR 126.130
 - Records
 - Safe Working Load markings

Notes: _____

Liftboats:

NOTE: Guidance for inspecting liftboats on OSVs is detailed in NVIC 8-91.

- Legs 46 CFR 134.140
 - Jacking points
 - Pin holes
- Jacking systems 46 CFR 134.150
 - Loss of power alarm
 - Low hydraulic fluid level alarm
- Freeboard markings 46 CFR 134.160
- Firemain suction 46 CFR 134.180
 - Distortion
 - Flanged
 - Attachments

Bulk Tanks:

- Bulk cargo pressure tanks internally examined 46 CFR 61.10
 - Pumps and controls
 - Relief valves
 - Piping-valves
 - Lighting and wiring
 - Cofferdams

Service	MAWP	Date Tested or Examined Internally	Relief Valve Tested

Notes: _____

Integral Cargo Tanks:

- Pumps
 - Pumps and controls 33 CFR 155.780
 - Relief valves
 - Piping-valves

- Cargo piping 46 CFR 56.30
 - Expansion joints 46 CFR 56.35
 - Supports
 - Hoses 33 CFR 155.800
 - Valves 46 CFR 56.20

- Cargo tank venting 46 CFR 32.55
 - Independent goosenecks
 - Flame screen
 - Closure device

- Explosion-proof fixtures 46 CFR 111.105

- Independent tanks, fixed, portable, or marine portable
 - 46 CFR 125.110
 - 46 CFR 125.120
 - Approved marine portable tank 46 CFR Part 64
 - Approved IM portable tank 46 CFR 98.30-2
 - External examination
 - Date of internal examination _____
 - Date of hydrostatic test _____
 - Metal information plate
 - Marking and labeling
 - Saddles; foundation and stowage
 - Piping and valves
 - Relief valves
 - Lifting fittings
 - Securing devices
 - Pump and controls
 - Cargo hose
 - Electrical grounding
 - Firefighting requirements 46 CFR 132.370
 - Authorized cargo
 - Firefighting

Notes: _____

Ground Tackle:

- Anchors 46 CFR 130.240
ABS Rules
 - Tested
 - Windlass
 - Capstans

- Mooring and towing gear 46 CFR 130.250

Lifesaving Equipment:

NOTE: General maintenance and tests and inspections of lifesaving equipment is detailed in 46 CFR 131.545 and 46 CFR 133.45, respectively.

- General alarms 46 CFR 113.25
46 CFR 129.530
 - Controls
 - Batteries and fuses
 - Tested
 - Markings 46 CFR 131.805
46 CFR 131.810
 - Bell locations audible
 - Lights for high-noise areas 46 CFR 113.25-10

- Lifeboats stripped, cleaned, and inspected 46 CFR 133.105(a)(6)
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. C.2.H.2
46 CFR 199.176
 - Date of annual servicing _____
 - Hull and fittings
 - Tanks and fittings
 - Cradles
 - Gripes
 - Compressed air cylinders
 - Markings

- Rescue boat 46 CFR 133.135
 - Approved
 - Required equipment 46 CFR 133.175

Notes: _____

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

46 CFR 133.175
SOLAS 74/78 III/41

Item Number	Item	International (LB)/ Oceans (RB)		Short International (LB)/ Coastwise (RB)	
		Lifeboat (LB)	Rescue Boat (RB)	Lifeboat (LB)	Rescue Boat (RB)
1	Bailer	1	1	1	1
2	Bilge pump ¹	1		1	
3	Boathook	2	1	2	1
4	Bucket ²	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 ³		1		1
17	Ladder	1	1	1	1
18	Mirror, signalling	1		1	
19	Oars, units ⁴	1	1	1	1
20	Painter	2	1	2	1
21	Provisions (units/persons)	1			
22	Pump ⁵		1		1
23	Radar reflector	1	1	1	1
24	Rainwater collection device	1		1	
25	Repair kit ⁵		1		1
26	Sea anchor	1	1	1	1
27	Searchlight	1	1	1	1
28	Seasickness kit (units/person)	1		1	

Item Number	Item	International (LB)/ Oceans (RB)		Short International (LB)/ Coastwise (RB)	
		Lifeboat (LB)	Rescue Boat (RB)	Lifeboat (LB)	Rescue Boat (RB)
29	Signal, smoke	2		2	
30	Signal, hand flare	6		6	
31	Signal, parachute flare	4		4	
32	Skates and fenders ⁶	1		1	
33	Sponge ⁵		2		2
34	Survival instructions	1		1	
35	Table of lifesaving signals	1		1	
36	Thermal protective aids ⁷	10%	10%	10%	10%
37	Tool kit	1		1	
38	Tow line ⁸	1	1	1	1
39	Water (liters/person)	3		3	
40	Whistle	1	1	1	1

Footnotes:

- 1 Not required for boats of self-bailing design.
- 2 Not required for inflated or rigid-inflated rescue boats.
- 3 A hatchet counts towards this requirement in rigid rescue boats.
- 4 Oars are not required on a free-fall lifeboat; a unit of oars means the number of oars specified by the boat manufacturer.
- 5 Not required for a rigid rescue boat.
- 6 Required if specified by the boat manufacturer.
- 7 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.
- 8 Required only if the lifeboat is also the rescue boat.

- Disengaging apparatus examined or tested and marked as required 46 CFR 199.45(b)
SOLAS 74/78 III/41
MSM Ch. C2.H.2.b
- Universal joints
 - Safety latches
 - Hooks
 - Locking knuckles
 - Frame

Notes: _____

- Radio installation for lifeboats complies with FCC and/or international convention (where required)*
 - Portable
 - Fixed

- Lifeboat operational test*
 - Engine operating test
 - Cooling water pump
 - Ahead and astern test
 - Fuel tanks
 - Searchlight test (passenger vessels)
 - Annual fuel changed
 - Extinguishers serviced

46 CFR 199.60
SOLAS 74/78 III/6

46 CFR 199.45(b)
SOLAS 74/78 III/19
MSM Ch. C2.H.2.b

* Items tested in conjunction with Abandon Ship Drill.

- Davits
 - Foundations
 - Moving parts
 - Fittings
 - Fairleads, cleats, or cruciform bits

- Falls (date last renewed or end-for-ended)

- Lifeboat winches
 - Brakes
 - Controls
 - Cranks
 - Covers
 - Limit switches and electrical controls

- Lifeboat weight test
 - Light load
 - Full load: date _____

46 CFR 160.032
SOLAS 74/78 III/48
MSM Ch. C2.H.2.b

46 CFR 199.190(j)
SOLAS 74/78 III/48
MSM Ch. C2.H.8

46 CFR 199.199(i)
SOLAS 74/78 III/19
MSM Ch. C2.H.2.b

46 CFR 199.45(b)
SOLAS 74/78 III/19
MSM Ch. C2.H.2.b

Notes: _____

- Embarkation aids
 - Ladders
 - Access
 - Spans and lifelines
 - Illumination
 - Frapping and tricing lines

46 CFR 199.190(f)
SOLAS 74/78 III/11

- Liferafts
 - Releasing gear
 - Launching instructions posted
 - Equipment and stowage
 - Annual service dates

46 CFR 133.105
SOLAS 74/78 III/19
SOLAS 74/78 III/26
MSM Ch. C2.H.3
46 CFR 133.90
46 CFR 131.130
46 CFR 133.45
46 CFR 131.580

- Hydro release service dates

46 CFR 133.45
46 CFR 131.585

- Weak link
- Float-free
- Illumination
- Markings
- Capacities
- Launching devices tested

46 CFR 133.130
46 CFR 112.43-11
46 CFR 131.865

- Lifefloats and inflatable buoyant apparatus
 - Equipment
 - Markings
 - Stowage
 - Weak link
 - Float-free
 - Sea painter

46 CFR 133.105
46 CFR 131.865
46 CFR 131.870
46 CFR 133.130

Notes: _____

- | | |
|---|--|
| <input type="checkbox"/> Ring lifebuoys <ul style="list-style-type: none"> • Lights • Lines • Smoke signals • Markings | 46 CFR 133.70
SOLAS 74/78 III/7
SOLAS 74/78 III/21
SOLAS 74/78 III/27

46 CFR 131.875 |
| <input type="checkbox"/> Line-throwing apparatus <ul style="list-style-type: none"> • Equipment • Required drills held • Magazine • Type | 46 CFR 133.170 |
| <input type="checkbox"/> Lifejackets
Total _____ | 46 CFR 133.70
SOLAS 74/78 III/7.2.2
MSM Ch. C2.H.4 |
| <ul style="list-style-type: none"> • Retro-reflective tape • Lights • Whistles • Stowage • Number of lifejackets rejected by inspector _____ | 46 CFR 131.875 |
| <input type="checkbox"/> Lifejacket stowage <ul style="list-style-type: none"> • Required notices and markings • Wearing instructions | 46 CFR 133.70
SOLAS 74/78 III/7.2
46 CFR 131.875
46 CFR 133.80 |
| <input type="checkbox"/> Work vests <ul style="list-style-type: none"> • Approved type • Stowage | 46 CFR 131.720
46 CFR 131.710
46 CFR 131.730 |
| <input type="checkbox"/> Immersion suits <ul style="list-style-type: none"> • Condition • Retro-reflective tape • Markings | 46 CFR 133.70
SOLAS 74/78 III/21.4,
27.3, 30.2.7
MSM Ch. C2.H.5
46 CFR 131.875 |
| <input type="checkbox"/> Placard of lifesaving signals | 46 CFR 131.950
SOLAS 74/78 V/16 |
| <input type="checkbox"/> Emergency instructions | 46 CFR 133.80 |
| <input type="checkbox"/> Station bill posted | 46 CFR 131.350 |

Notes: _____

Fire Protection Equipment:

NOTE: General maintenance, and test and inspection requirements of firefighting equipment are detailed in 46 CFR 131.590 and 46 CFR 132.350, respectively.

- Fire control plan
 - Permanently posted
 - Copy permanently stored in weathertight container outside deckhouse
 46 CFR 131.945
SOLAS 74/78 II-2/20

- Fire detection systems
 - Smoke / fire alarms
 - Remote pull stations
 - Smoke / flame / heat detectors and sensors
 SOLAS 74/78 II-2/13
SOLAS 74/78 II-2/11.8
SOLAS 74/78 II-2/53
NVIC 7-80
46 CFR 130.470

- Portable extinguishers
 - Annually serviced
 - Bottles hydrostatically tested (every 5 years)
 - Markings (weight and hydrostatic test date)
 - Spare charges, spare extinguishers
 46 CFR 132.210
46 CFR 132.220
SOLAS 74/78 II-2/6
SOLAS 74/78 II-2/21
MSM Ch. C2.1.3
NVIC 7-70&NVIC 13-86
46 CFR 131.835
46 CFR 132.230

Location	Required		On Board	
	Number	Class	Number	Class

- Semiportable extinguishers
 - Bottles weighed annually
 - Bottles hydrostatically tested (every 12 years)
 - Controls, instructions, markings
 - Hose and diffuser
 - Flexible loops tested or replaced (same as bottle)
 46 CFR 132.210
46 CFR 132.220
SOLAS 74/78 II-2/6
SOLAS 74/78 II-2/21
MSM Ch. C2.1.4

Notes: _____

- Fixed fire extinguishing systems
 - Controls and instructions
 - Alarms tested
 - Piping
 - Heads, distribution
 - Bottles weighed annually
 - Bottles hydrostatically tested (every 12 years)
 - Flexible loops tested or replaced (10% per year)
 - Markings
 - Storage space / door
 - Vent stops

- Fire main system and stations
 - Pumps
 - Piping
 - Cut-off valves
 - Drains

- Fire stations
 - Hydrants (2 effective streams)
 - Nozzles and spanners
 - Fog applicators (<6 feet in length, in engineroom)
 - Hose
 - UL approved
 - Correct length
 - Markings
 - Equipment compatible

- Total length of all hose tested _____
 - Hydrostatically tested to at least 100 psi
 - Approved hose
 - Markings

- Pumps
 - Controls and gauges
 - Relief valves

46 CFR 132.350
 SOLAS 74/78 II-2/21
 MSM Ch. C2.I.9
 NVIC 6-72, Change 1
 NVIC 8-73

46 CFR 131.815
 46 CFR 131.820
 46 CFR 131.825
 46 CFR 131.899

46 CFR 132.100
 NVIC 6-72, Change 1
 SOLAS 74/78 II-2/4
 SOLAS 74/78 II-2/21
 46 CFR 132.110
 46 CFR 132.130

46 CFR 132.100
 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.7

46 CFR 131.830

46 CFR 132.130
 46 CFR 132.350
 MSM Ch. C2.I.6

46 CFR 131.880

46 CFR 132.120

Notes: _____

- Structural fire protection
 - Bulkheads
 - Insulation
 46 CFR 127.220
SOLAS 74/78 II-2/42
- Remote controls to power ventilation marked and tested
 46 CFR 111.103-1
46 CFR 129.540
46 CFR 131.896
- Closures for spaces protected by fixed smothering systems
 46 CFR 127.250
- International shore connection
 SOLAS 74/78 II-2/19
- Fire axe
 46 CFR 132.360
 - Markings
 - 1 axe if vessel is < 100 GT
 - 2 axes if vessel is > 100 GT
 46 CFR 131.880

Pollution Prevention:

NOTE: Guidance for inspecting pollution prevention items is detailed in MSM Volume II, Chapter B6. Vessels inspected under Subchapter L are required to meet 33 CFR Parts 151, 155, and 156.

- Pollution placard posted
 33 CFR 155.450
MSM Ch. B6.D.13
- MARPOL V placard posted
 33 CFR 151.59
- Person-in-charge designation
 33 CFR 155.700
- Fuel oil containment
 33 CFR 155.320
 - Portable
 - Fixed
- Cargo oil containment
 - Size
 - Scupper closures
 - Drains

Notes: _____

- Oily waste retention MSM Ch. B6.D.7
 - Bilge
 - Tank
- Ballast discharge 33 CFR 155.330
33 CFR 155.350
33 CFR 155.360
33 CFR 155.370
MSM Ch. B6.D.10
 - Acceptable processing equipment
- Oily bilge discharge 46 CFR 155.380
 - Piping system
 - Stop valve
 - Outlet
 - Pump stop
- Prohibited oil spaces 33 CFR 155.470
- Emergency shutdown 33 CFR 155.780
- Oil transfer hose 33 CFR 155.800
 - Condition
 - Markings
 - Hose assembly requirements
 - Record of tests and inspections
- Garbage 33 CFR 151.63
MARPOL Ax. V/3
 - Shipboard garbage properly disposed
- Discharge removal equipment 33 CFR 155.220

Notes: _____

Section 4: Machinery Inspection Items

Diesels:

- Propulsion machinery
 - Safety devices
 - Foundations
 - Guards
 - Propulsion controls46 CFR 58.05
SOLAS 74/78 II-1/27

46 CFR 130.120
- Main propulsion diesels
 - Fuel lines
 - Air starting lines
 - Exhaust system
 - Protective devices
 - Lube oil system
 - Engine protection
 - Remote shutdowns
 - Overspeed protection
 - Low lube oil
 - High temperature
 - Crank case
 - Explosion covers46 CFR 58.05
46 CFR 58.10
SOLAS 74/78 II-1/27

46 CFR 128.320
- Fuel systems
 - Service and transfer pumps
 - Remote shutoff valves46 CFR 56.50-65
- Automation
 - Reduced manning
 - Yes
 - No
 - Approved test procedure
 - Satisfactory test
 - Reviewed logs/records
 - Interviewed personnel46 CFR Part 62
SOLAS 74/78 II-1/46-54
MSM Vol. IV Ch. 3.L
NVIC 1-78, Change 1
NVIC 1-69
NVIC 6-84
46 CFR 62.50
46 CFR 62.30-10

Notes: _____

Electrical Systems:

NOTE: Guidance for inspecting electrical system items is detailed in NVIC 2-89.

- | | | |
|--------------------------|--|--|
| <input type="checkbox"/> | Ship's service generators | 46 CFR 110.10
46 CFR 111.12
46 CFR 129.315
46 CFR 129.320
SOLAS 74/78 II-1/41
MSM Vol. IV Ch. 3.D.2 |
| | <ul style="list-style-type: none">• Protective guards• Reverse power relay• Overspeed trip (> 110% < 115%)• Low oil pressure alarm / shutdown | |
| <input type="checkbox"/> | Switchboards (including emergency) | 46 CFR 129.330
MSM Ch. B1.J.4.g
MSM Ch. B1.J.5.g |
| | <ul style="list-style-type: none">• Automatic bus transfer• Ground detectors• Personnel safeguards (guards, rails, mats, etc.)• Drip shields• Warning notices posted• Circuit breaker ratings | |
| <input type="checkbox"/> | Panelboards | 46 CFR 129.330 |
| | <ul style="list-style-type: none">• Overcurrent devices• Circuit directory• Locking device | |
| <input type="checkbox"/> | Motor controllers | 46 CFR 111.70
MSM Ch. B1.J.4.i |
| | <ul style="list-style-type: none">• Drip shields• Disconnect switch• Wiring diagram posted• Remote shutdowns tested | |
| <input type="checkbox"/> | Ventilation systems | 46 CFR 127.250
SOLAS 74/78 II-1/48 |
| | <ul style="list-style-type: none">• Remote shutdown tested• Machinery space fans | |
| <input type="checkbox"/> | Ship's service lighting systems | 46 CFR 111.75
46 CFR 111.40
46 CFR 129.410 |
| | <ul style="list-style-type: none">• Panelboards• Circuit directory• Circuit breakers• Globes and guards• Explosion-proof or watertight (where required) | |

Notes: _____

- | | |
|---|---|
| <input type="checkbox"/> Emergency generator tested <ul style="list-style-type: none"> • Starting system • Fuel system • Overspeed trip (> 110% < 115%) • Low oil pressure alarm / shutdown • High jacket water temperature alarm • Fixed firefighting system shutdown | 46 CFR 112.25
46 CFR 112.50
SOLAS 74/78 II-1/42-44 |
| <input type="checkbox"/> Batteries <ul style="list-style-type: none"> • Protection • Charger • Ventilation | 46 CFR 129.350
46 CFR 129.356 |
| <input type="checkbox"/> Adequate emergency power and lighting <ul style="list-style-type: none"> • Tested | 46 CFR 129.440
46 CFR 129.450
MSM Ch. B1.C |
| <input type="checkbox"/> Internal communications and control system <ul style="list-style-type: none"> • General alarms <ul style="list-style-type: none"> – Power supply • Telephones • Fire detection and alarm systems • Steering gear alarm and indicator | 46 CFR 133.60

46 CFR 113.25
46 CFR 129.530

46 CFR 113.30

46 CFR 113.10

46 CFR 113.43
46 CFR 130.110 |
| <input type="checkbox"/> General electrical installation <ul style="list-style-type: none"> • Cable / wiring • Jury rigs • Connection boxes • Dead-end cables • Splices • Grounding • Personnel safeguards • Hazardous locations • Portable electrical equipment | 46 CFR 111.01-1
SOLAS 74/78 II-1/40
46 CFR 129.340

MSM Ch. B1.J.5.h
46 CFR 111.60-17

46 CFR 111.60-19

46 CFR 111.05
46 CFR 129.370
46 CFR 129.375
46 CFR 111.105
MSM Vol. IV Ch.
3.C.2.f
MSM Ch. B1.J.5.i |

Notes: _____

Pressure Vessels:

- Pressure vessels hydrostatically tested or internally examined 46 CFR 61.10
MSM Ch. B1.O
MSM Vol. IV Ch. 3.I.7

Service	MAWP	Date Tested or Examined Internally	Relief Valve Tested

- Relief valve springs set within range 46 CFR 54.15-10(g)

Boilers:

- Automatic auxiliary boilers MSM Ch. B1.H
 - Controls and safety devices 46 CFR 63.15-1
 - Fuel systems 46 CFR 63.20
 - Alarms 46 CFR 63.15-3
 - Inspections / test 46 CFR 63.15-7
46 CFR 63.15-9

- Periodic test and inspection of boilers in accordance with 46 CFR Table 61.05-10

Boiler ID Number	Date Hydrostatically Tested	Date Mountings Opened	Date Mountings Removed and Studs Examined	Fireside	Waterside	External

Notes: _____

- Safety valves
 - Escape pipes
 - Drains

46 CFR 52.01-120
 MSM Vol. IV Ch. 3.I.2.c
 46 CFR 56.50-25

Boiler	Date Set and Sealed	Pressure Setting

- Fusible plugs
 - Examined
 - Renewed at this inspection

46 CFR 52.01-50
 46 CFR Table 61.05-10
 MSM Vol. IV Ch. 3.I.3.b

- Boiler repairs in accordance 46 CFR Part 59

- Low pressure heating boilers
 - Safety or relief valves
 - Gauges
 - Thermometers
 - Automatic controls
 - Bottom blow off
 - Water level indicator
 - Connections
 - Refractory

46 CFR 53.01
 46 CFR 53.05
 46 CFR 53.12

- Periodic test and inspection of low pressure heating boilers in accordance with 46 CFR Table 61.05-10

Boiler Number	Date Hydrostatically Tested	Fireside	Waterside	External

Notes: _____

Auxiliary Machinery:

- Bilge and ballast systems 46 CFR 128.440
 - Pumps
 - Eductors
 - Emergency bilge pump
 - Manifold, valves, and piping
 - Remote controls (hydraulic, pneumatic, manual, electric)
 - Strainers
 - Sounding and vent piping
 - Markings and indicators
 - Alarm 46 CFR 130.460
- Sea suction and overboard discharges MSM Ch. B3.F
- Nonmetallic expansion joints 46 CFR 61.15-12
MSM Ch. B3.F.3
 - External exam
 - 10-year service replacement
- Compressed air system 46 CFR 58.30
 - Compressor
 - Controls and gauges
 - Relief valves
- Refrigeration and air conditioning systems 46 CFR 128.410
- Freshwater systems
 - Pumps
 - Valves and controls
 - Air cushion supply line

Notes: _____

Marine Sanitation Devices:

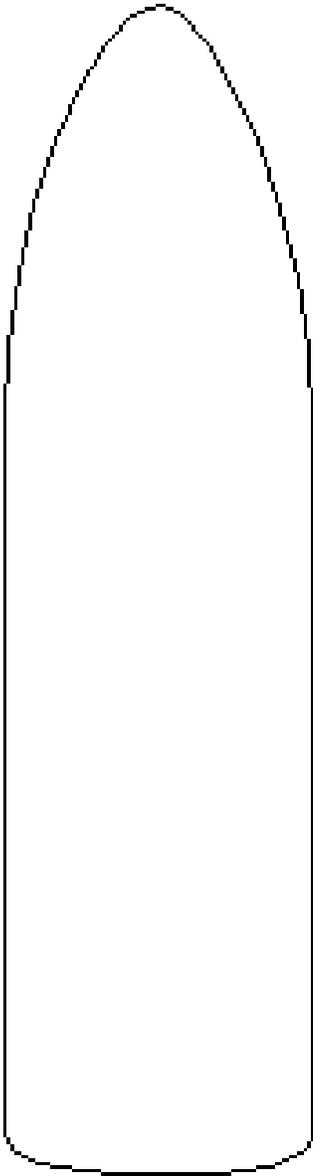
NOTE: Guidance for inspecting marine sanitation devices is detailed in MSM Volume II, Chapter C2.K. Vessels inspected under Subchapter L are required to meet 33 CFR Part 159.

- | | | |
|--------------------------|--|--|
| <input type="checkbox"/> | Marine sanitation device | 33 CFR 159.55
MSM Ch. B6.F |
| | Type I | |
| | Type II | |
| | Type III | |
| <input type="checkbox"/> | Certified for inspected vessels | MSM Ch. B6.F.4 |
| <input type="checkbox"/> | Capacity satisfactory | MSM Ch. C2.K.7.d |
| <input type="checkbox"/> | Installation | 33 CFR 159.57
MSM Vol. IV Ch. 3.K.1 |
| | • Operation | |
| | • Ventilation | |
| | • Wiring and piping | |
| | • Maintenance | |
| | • Placard posted | 33 CFR 159.59 |
| | • Safety | |
| | • Accessibility to parts requiring routine servicing | |
| | • Manufacturer's instructions available | |

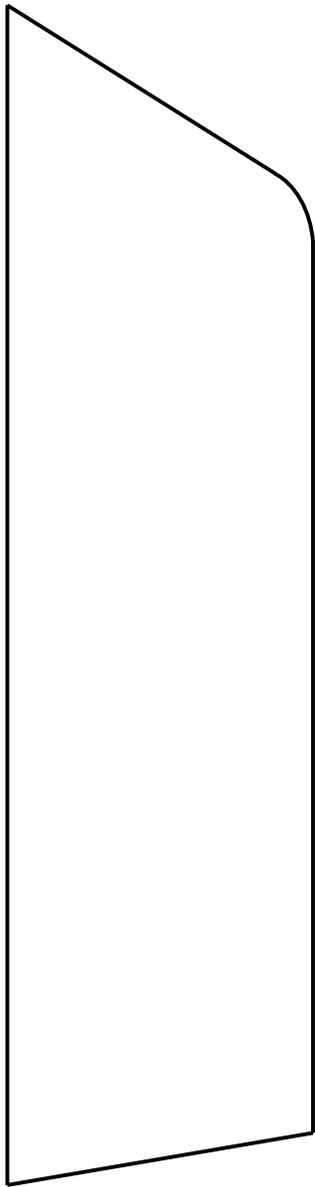
Notes: _____

Section 6: Appendices

Vessel Layout:



- Ballast tanks
- Deckhouse location
- Deck cranes
- Fuel tanks
- Cargo tanks
- Peak tanks
- Legs



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	<p>If deficiency is unable to be corrected prior to end of inspection, issue CG-835 in accordance with table below.</p> <table border="1" data-bbox="224 955 930 1766"> <thead> <tr> <th data-bbox="224 955 581 1003">IF deficiency:</th> <th data-bbox="581 955 930 1003">THEN issue CG-835:</th> </tr> </thead> <tbody> <tr> <td data-bbox="224 1003 581 1249"> <p>Does NOT immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g.,</p> <ul style="list-style-type: none"> • Missing placards • Non-metallic expansion joints if more than 10 years in service </td> <td data-bbox="581 1003 930 1249"> <p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> • “X” number of days • At next drydock </td> </tr> <tr> <td data-bbox="224 1249 581 1465"> <p>Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Expired international certificates • Automation defect • Insufficient lifesaving equipment </td> <td data-bbox="581 1249 930 1465"> <p>That restricts operation of vessel to meet current vessel conditions, e.g.,</p> <ul style="list-style-type: none"> • Reduced route • Increased crew • Fewer offshore workers </td> </tr> <tr> <td data-bbox="224 1465 581 1766"> <p>DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Missing or defective firefighting equipment • Structural defect or damage </td> <td data-bbox="581 1465 930 1766"> <p>That requires the deficiency to be corrected prior to operating vessel (“NO SAIL” item), e.g.,</p> <ul style="list-style-type: none"> • Prior to carrying offshore workers • Prior to carrying cargo </td> </tr> </tbody> </table>	IF deficiency:	THEN issue CG-835:	<p>Does NOT immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g.,</p> <ul style="list-style-type: none"> • Missing placards • Non-metallic expansion joints if more than 10 years in service 	<p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> • “X” number of days • At next drydock 	<p>Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Expired international certificates • Automation defect • Insufficient lifesaving equipment 	<p>That restricts operation of vessel to meet current vessel conditions, e.g.,</p> <ul style="list-style-type: none"> • Reduced route • Increased crew • Fewer offshore workers 	<p>DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Missing or defective firefighting equipment • Structural defect or damage 	<p>That requires the deficiency to be corrected prior to operating vessel (“NO SAIL” item), e.g.,</p> <ul style="list-style-type: none"> • Prior to carrying offshore workers • Prior to carrying cargo
IF deficiency:	THEN issue CG-835:								
<p>Does NOT immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g.,</p> <ul style="list-style-type: none"> • Missing placards • Non-metallic expansion joints if more than 10 years in service 	<p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> • “X” number of days • At next drydock 								
<p>Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Expired international certificates • Automation defect • Insufficient lifesaving equipment 	<p>That restricts operation of vessel to meet current vessel conditions, e.g.,</p> <ul style="list-style-type: none"> • Reduced route • Increased crew • Fewer offshore workers 								
<p>DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> • Missing or defective firefighting equipment • Structural defect or damage 	<p>That requires the deficiency to be corrected prior to operating vessel (“NO SAIL” item), e.g.,</p> <ul style="list-style-type: none"> • Prior to carrying offshore workers • Prior to carrying cargo 								
6	Enter CG-835 data in MIDR.								
7	Enter deficiency data in MSDS.								
8	Initiate Report of Violation (ROV) if necessary.								

Conversions:

Distance and Energy					
Kilowatts (kW)	X	1.341	=	Horsepower (hp)	
Feet (ft)	X	3.281	=	Meters (m)	
Long Ton (LT)	X	.98421	=	Metric Ton (t)	
Liquid (NOTE: Values are approximate.)					
Liquid	bb/LT	m ³ /t	bb/m ³	bb/t	
Freshwater	6.40	1.00	6.29	6.29	
Saltwater	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 Oil	7.66	1.20	7.54	9.05	
Weight					
1 Long Ton	= 2240 lbs	1 Metric Ton	= 2204 lbs		
1 Short Ton	= 2000 lbs	1 Cubic Foot	= 7.48 gal		
1 Barrel (oil)	= 5.61 ft = 42 gal = 6.29 m ³	1 psi	= .06895 Bar = 2.3106 ft of water		
Temperature: Fahrenheit = Celsius ($^{\circ}\text{F} = 9/5\ ^{\circ}\text{C} + 32$ and $^{\circ}\text{C} = 5/9 (^{\circ}\text{F} - 32)$)					
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
Pressure: Bars = Pounds per square 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		