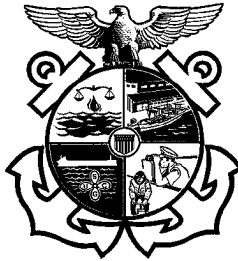


# United States Coast Guard



## Offshore Supply Vessel Inspector Job Aid

|  |                        |
|--|------------------------|
| <b>Name of Vessel</b>  |                        |
| <b>Official Number</b>   | <b>Activity Number</b> |
| <b>Date Completed</b>  | <b>Class</b>           |
| <b>Location</b>  |                        |
| <b>Vessel Built in Compliance with SOLAS:</b> <b>60</b> <b>74</b> <b>74/78</b> <b>NA</b>   |                        |
| <b>Route</b><br><input type="checkbox"/> Oceans <input type="checkbox"/> Limited Coastwise <input type="checkbox"/> Lakes / Bays / Sounds<br><input type="checkbox"/> Coastwise <input type="checkbox"/> Great Lakes |                        |
| <b>Inspection Type</b><br><input type="checkbox"/> Inspection for Certification (COI) <input type="checkbox"/> Annual<br><input type="checkbox"/> Periodic <input type="checkbox"/> Drydocking                       |                        |
| <b>Inspectors</b><br><br>1. _____      3. _____<br>2. _____      4. _____  |                        |

## **Use of Offshore Supply Vessel (OSV) Job Aid:**

This Job Aid is intended for use by qualified Coast Guard OSV Marine Inspectors for use on U.S. flagged OSVs during hull and machinery exams on vessels regulated under Subchapter L. For OSVs built prior to March 15, 1996, Subchapter I or Subchapter T may apply; therefore regulatory cites from the Hull, Machinery or T-Boat Job Aid may be applicable.

The tasks contained within this Job Aid are not intended to limit the scope or depth of inspection. A checked box should be a running record of what has been inspected and 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 and references given are only general guidance to the Marine Inspector. The Marine Inspector will need to refer to other publications such as the International Maritime Organization (IMO) resolutions, U.S. Codes of Federal Regulation (CFR), USCG Navigation and Vessel Inspection Circulars (NVIC) or locally produced guidance during the course of inspection for specific regulatory references. Not all items in this Job Aid are applicable to all vessels.

**NOTE:** *Guidance on how to conduct inspections of U.S. flagged OSVs can be found in MSM Volume II, Section B: Domestic Inspection Programs.*

### **Pre-inspection Items**

- Review MISLE records
- Obtain copies of forms to be issued

### **Post-inspection Items**

- Issue letters/certificates to vessel
- Complete MISLE entries within 48 hours

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## Section 1: Administrative Items

### IMO Applicability Dates:

| Reference                             | Dates              |
|---------------------------------------|--------------------|
| <b>1974 SOLAS (2014 Consolidated)</b> |                    |
| Chapter (I)                           | All Ships          |
| Chapter (II-1)                        | 01 JAN 09          |
| Chapter (II-2)                        | 01 JUL 02          |
| Chapter (III)                         | 01 JUL 98          |
| Chapters (IV-XII)                     | All Ships          |
| <b>1974 SOLAS (2009 Consolidated)</b> |                    |
| Chapter (II-1)                        | 01 JAN 09          |
| Chapter (II-2)                        | 01 JUL 02          |
| Chapter (III)                         | 01 JUL 98          |
| <b>1974 SOLAS (2004 Consolidated)</b> |                    |
| Chapter (II-1)                        | 01 JUL 86          |
| Chapter (II-2)                        | 01 JUL 02          |
| Chapter (III)                         | 01 JUL 98          |
| <b>1974 SOLAS (2001 Consolidated)</b> |                    |
| Chapter (II-1)                        | 01 JUL 86          |
| Chapter (II-2, III)                   | 01 JUL 98          |
| <b>1974 SOLAS (1997 Consolidated)</b> |                    |
| Chapters (II-1, II-2 Part A,C,D, III) | 01 JUL 86          |
| Chapter (II-2 Part B)                 | 01 OCT 94          |
| <b>1974 SOLAS (1981 Amendments)</b>   |                    |
| Chapters (II-1, II-2, III)            | 01 SEP 84          |
| <b>1974 SOLAS (Unamended)</b>         | 25 MAY 80          |
| <b>1960 SOLAS</b>                     | Prior to 25 MAY 80 |

|  |   |
|--|---|
| <p><b>74 SOLAS 2014</b> Consolidated contains all amendments entered into force up-to 01 Jul 14. The following Amendments (resolutions) have entered into force since it was published. <a href="http://www.imo.org">www.imo.org</a></p> <p>MSC 365(93)</p> <p>MSC 366(93)</p>   | <p>01 JUL 15</p> <p>01 JUL 15</p>   |
| <b>FSS CODE (2015 edition)</b>   |   |
| <b>LSA Code (2017 edition)</b>   |   |
| <b>ITC 1969</b>  | 18 JUL 82   |
| <b>Load Line 1966</b>  | 21 JUL 68   |
| <b>Load Line 88 Protocol</b>   | 03 FEB 00   |
| <p><b>Load Line (2005 edition)</b> contains all amendments entered into force up-to 2003 Amendments. The following Amendments (resolutions) have entered into force since it was published. <a href="http://www.imo.org">www.imo.org</a></p> <p>MSC 172(79)</p> <p>MSC 223(82)</p> <p>MSC 270(85)</p> <p>MSC 329(90)</p> <p>MSC 356(92)</p> <p>MSC 375(93)</p> | <p>01 JUL 06</p> <p>01 JUL 08</p> <p>01 JUL 10</p> <p>01 JAN 14</p> <p>01 JAN 15</p> <p>01 JAN 16</p> |
| <p><b>MARPOL 2017</b> Consolidated contains all amendments entered into force up-to 01 JAN 2017 Amendments. The following Amendments (resolutions) have entered into force since it was published. <a href="http://www.imo.org">www.imo.org</a></p>  |   |
| <p><b>STCW (2017 edition)</b> contains all amendments entered into force up-to 2017 Amendments. The following Amendments (resolutions) have entered into force since it was published. <a href="http://www.imo.org">www.imo.org</a></p>  | 28 APR 84   |

**Involved Parties & General Information:**

|                                       |
|---------------------------------------|
| Vessel's Representative:<br><br>_____ |
| _____                                 |
| Phone Numbers:                        |

|                                    |
|------------------------------------|
| Owner                              |
|                                    |
|                                    |
|                                    |
| <input type="checkbox"/> No Change |

|  |
|--|
| Operator – Listed on DOC (if applicable) or COFR |
|  |
|  |
|  |
| <input type="checkbox"/> No Change               |

**Vessel Information:**

|   |  |
|---|--|
| Classification Society  |  |
| ISM Issuer: Same as above?<br><input type="checkbox"/> Yes <input type="checkbox"/> No    If not the same, which<br>Recognized Organization?<br>_____               |  |
| <i><b>NOTE:</b> The period of validity for ISM documents should correspond to the following list. If they do NOT, ISM documents should be further investigated.</i> |  |
| <input type="checkbox"/> 5 years = Full term (SMS and DOC)  | <input type="checkbox"/> 12 months = Interim (DOC)   |
| <input type="checkbox"/> 6 months = Interim (SMC)   | <input type="checkbox"/> 5 months = Short term (SMC) |
| Last Drydocking Date  | Next Drydocking Date                                 |
| Location of Last Drydocking   |  |
| Call Sign   | <input type="checkbox"/> No Change                   |
| Gross Tons  | <input type="checkbox"/> No Change                   |
| Built Date (use delivery date)  | <input type="checkbox"/> No Change                   |
| Overall Length (in feet)  | <input type="checkbox"/> No Change                   |

## Certificates and Documents

| Name of Certificate   | Issuing Agency | ID # | Port Issued/<br>Country | Issue Date | Exp. Date | Endors. Date |
|---|----------------|------|-------------------------|------------|-----------|--------------|
| <b>Certificate of Documentation</b><br><input type="checkbox"/> No Change                   | USCG           |      |                         |            |           |              |
| <b>Classification Document</b><br><input type="checkbox"/> No Change                        |                |      |                         |            |           |              |
| <b>Certificate of Financial Responsibility (COFR)</b><br><input type="checkbox"/> No Change | USCG           |      |                         |            |           |              |
| <b>FCC Station License</b><br><input type="checkbox"/> No Change                            | FCC            |      |                         |            |           |              |
| <b>FCC Safety Certificate</b><br><input type="checkbox"/> No Change                         | FCC            |      |                         |            |           |              |
| <b>FCC Marine Operator's Permit</b><br><input type="checkbox"/> No Change                   | FCC            |      |                         |            |           |              |



| Name of Certificate   | Issuing Agency | ID # | Port Issued/<br>Country | Issue Date | Exp. Date | Endors. Date |
|---|----------------|------|-------------------------|------------|-----------|--------------|
| <b>Cargo Ship Safety Construction</b><br><input type="checkbox"/> No Change   |                |      |                         |            |           |              |
| <b>Cargo Ship Safety Equipment</b><br><input type="checkbox"/> No Change      | USCG           |      |                         |            |           |              |
| <b>Cargo Ship Safety Radio</b><br><input type="checkbox"/> No Change          | USCG           |      |                         |            |           |              |
| <b>International Load Line (ILLC)</b><br><input type="checkbox"/> No Change   |                |      |                         |            |           |              |
| <b>International Tonnage (ITC)</b><br><input type="checkbox"/> No Change      |                |      |                         |            |           |              |
| <b>ISM Document of Compliance (DOC)</b><br><input type="checkbox"/> No Change |                |      |                         |            |           |              |
| <b>ISM Safety Management (SMC)</b><br><input type="checkbox"/> No Change      |                |      |                         |            |           |              |

| Name of Certificate   | Issuing Agency | ID # | Port Issued/<br>Country | Issue Date | Exp. Date | Endors. Date |
|---|----------------|------|-------------------------|------------|-----------|--------------|
| <b>International Oil Pollution Prevention (IOPP)</b><br><input type="checkbox"/> No Change    |                |      |                         |            |           |              |
| <b>International Sewage Pollution Prevention (ISPP)</b><br><input type="checkbox"/> No Change |                |      |                         |            |           |              |
| <b>International Air Pollution Prevention (IAPP)</b><br><input type="checkbox"/> No Change    |                |      |                         |            |           |              |

## Section 2: Inspection Items

### Pre-Inspection

- 1. Research vessel details in MISLE (Marine Information for Safety and Law Enforcement) information system
  - Determine authority, jurisdiction and applicable regulations 46 USC 3301(3)  
46 CFR 125.100
  - Locate vessel in MISLE MSM I/12.G.5
  - Verify documents are current in MISLE MPS-PR-SEC-04  
MSM II/B.1.C.2
  - Review history (narratives, deficiencies & special notes) MPS-PR-SEC-04  
MSM II/B.1.C.2
  - Verify status of user fees MPS-PR-SEC-01  
MSM II/B.1.C.2
  - Enter title and point(s) of contact MSM II/B.1.C.2
  - Vessel General Permit CG-543 Policy Ltr 11-01
  - Verify status of Certificate of Financial Responsibility (e-COFR) 33 CFR 138.15(a)(2)
  - Generate new activity MPS-PR-SEC-04  
MSM I/12.H
  - Prepare folder and required documents MPS-PR-SEC-04
  
- 2. Coordinate inspection with vessel's representative
  - Verify vessel's representative MPS-PR-SEC-01
  - Determine location and time of inspection MPS-PR-SEC-01
  - Discuss inspection expectations 46 CFR 126.430  
MSM II/B.1.D.1 & B.2.A.1
  - Verify vessel's owner/operator information MPS-PR-SEC-04
  - Verify vessel's Classification Society information MPS-PR-SEC-04
  - Review outstanding conditions from third party reports and/or CG-835s MPS-PR-SEC-04
  - Review repairs and alterations 46 CFR 126.150

- 3. Mitigate potential hazards encountered during an inspection
  - Recognize potential hazards encountered during inspection NFPA 306
  - Determine confined spaces MSM I/10 App. A
  - Determine if exam scope will require a Marine Chemist certification for space entry 29 CFR 1915, Part B MSM II/A.5.H
  - Verify Marine Chemist has been scheduled for exam MSM I/10
  - Prepare necessary personal protective equipment for exam MSM I/10 Quattro Operator's Manual
  - Review CG policy for when to leave a space due to hazardous condition MSM I/10

## **Dockside Assessment**

- 4. Initial vessel visual examination (upon arrival)
  - Verify presence of anchor(s) 46 CFR 130.240-.250
  - Verify Load Line markings 46 CFR 125.140  
46 CFR 131.230
  - Verify IMO number 33 CFR 104.297  
SOLAS 14 XI-1/3
  - Verify draught (draft) marks 46 CFR 131.220  
SOLAS 14 II-1/5.6
  - Verify name, hailing port and official number markings 46 CFR 131.210  
46 CFR 67.121
  - Evaluate hull for signs of pollution/illegal discharge 33 USC 1321  
MARPOL I/15
  - Evaluate hull condition 46 CFR 126.140 -.150  
SOLAS 14 II-1/3-1
  - Examine means of embarkation (gangway/ladders) 29 CFR 1915.74(a)(6)  
SOLAS 14 II-1/3-9
  - Examine cargo ports and other similar openings ICLL I/21
  - Examine sidescuttles (windows/skylights) ICLL I/23
  - Verify condition of mooring lines 46 CFR 130.240-.250

# Certificates & Documents

- 5. Review Certificate of Inspection (COI)
  - Verify presence and location 46 CFR 126.240
  - Validate manning 46 CFR 131.920 & 126.220  
46 CFR 15 Subpart D & E
  - Validate number of offshore workers authorized 46 CFR 126.170  
46 CFR 126.220
  - Validate route(s) and service 46 CFR 126.220
  - Validate fire fighting and lifesaving equipment 46 CFR 126.220
  - Validate cargo carriage 46 CFR 126.460  
46 CFR 125.110-.130
  - Review amendment(s) 46 CFR 126.270  
MSM II/A.3.J
  
- 6. Review Certificate of Documentation (COD)
  - Verify presence of original 46 CFR 67.313
  - Verify contact information is correct 46 CFR 67.321
  - Verify endorsement(s) for current service(s) 46 CFR 67.17  
46 CFR 67.19
  - Confirm renewal of endorsement 46 CFR 67.163  
46 CFR 67.7
  
- 7. Examine stability letter, book and loading criteria
  - Verify presence of current stability documents 46 CFR 127.230  
46 CFR 170.105 - .140 (Subpart D)
  - Determine if any modifications or alterations have occurred 46 CFR 126.150
  - Verify modifications or alterations are addressed in current stability Letter or Book 46 CFR 126.150
  - Verify tonnage arrangement is in compliance with stability documents 46 CFR 126.150
  - Verify stability requirements are documented 46 CFR 131.513

- 8. Review Load Line Certificate (International (ILLC) / Coastwise)
  - Verify presence and type ICLL Article 16  
46 CFR 42.03-5
  - Verify validity ICLL Article 15  
ICLL Article 19
  - Verify proper certificate form ICLL Article 18  
46 CFR 42.07-45(e)
  - Confirm load line observed on hull matches certificate ICLL I/9  
46 CFR 42.07-5
  - Verify presence and information contained in the Load Line Survey is valid 46 CFR 42.07-35 g & h  
46 CFR 42.09-1(c) &-15(a)
  
- 9. Review Merchant Mariner Credentials (MMCs), Medical Certificates & Transportation Worker Identification Credential (TWIC)
  - Ensure MMCs, including STCW endorsements, meet COI manning requirements 46 CFR 131.920  
46 CFR 15.515
  - Verify presence of original MMCs 46 CFR 10.205  
46 CFR 131.955
  - Verify Radar Operator endorsement 46 CFR 131.920  
46 CFR 15.815
  - Verify TWIC 46 CFR 10.203
  - Verify Radio Officer/Global Maritime Distress and Safety System (GMDSS) operator endorsements 46 CFR 11.603  
47 CFR 80.155 & .1073
  - Examine Medical Certificates 46 CFR 10.301, 15.401  
NVIC 01-14
  - Verify number of GMDSS Operators 47 CFR 80.1073  
SOLAS 14 IV/16
  
- 10. Inspect compliance of drug and alcohol program
  - Verify compliance with required Employee Assistance Program (EAP), including education and training 46 CFR 16.401(a)  
46 CFR 16.401(b)
  - Verify presence and currency of drug and alcohol testing equipment 46 CFR 4.06-15
  - Verify training of designated testing equipment crewmen 46 CFR 4.06-20(a)(3)  
46 CFR 4.06-20(b)
  - Verify crew are enrolled in a drug testing program 46 CFR 16.210  
46 CFR 16.230

- 11. Review International Noxious Liquid Substance Certificate (International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances (NLS) in Bulk or Certificate of Fitness (COF))
  - Verify vessel particulars MARPOL II/ Appendix III
  - Verify vessel COI authorizes carriage CG-ENG Policy Ltr 03-12/1.5
  - Verify carriage is identified IAW IBC Code MARPOL II/11 IBC Code 17
  - Verify carriage identified by tank numbers and locations MARPOL II/ Appendix III
  - Verify carriage identified by pollution category MARPOL II/ Appendix III.4
  - Verify standard of damage (COF) IBC Code 2.8.2
  - Verify exemptions or compliance to guidelines MARPOL II/4
  - Verify any extension, renewal or change in anniversary date endorsements MARPOL II/8
  - Verify Tank Plan and additional NLS cargoes identified in Cargo Record Book 46 CFR 125.120(c)(3) MARPOL II/15.1
- 12. Examine maintenance and service records (life saving & fire fighting)
  - Review fire fighting service reports 46 CFR 132.350 SOLAS 14 II-2/14.2.2
  - Review lifesaving service report(s) 46 CFR 133.45 SOLAS 14 III/20.8.1
- 13. Examine muster lists and emergency instructions (additional steps found in LS cards)
  - Verify muster lists and emergency instructions are available 46 CFR 133.80 & .90 SOLAS 14 III/8.2
  - Verify muster lists and emergency instructions are posted 46 CFR 133.80 & .90 SOLAS 14 III/8.3
  - Verify information on muster lists and emergency instructions 46 CFR 133.80 & .90 SOLAS 14 III/37.3-6
- 14. Review International Safety Management, Document of Compliance (DOC) and Safety Management Certificate (SMC)
  - Verify presence of DOC (copy) 33 CFR 96.330(a) SOLAS 14 IX/4.2
  - Verify DOC identifies company and vessel type 33 CFR 96.330(e) ISM Code B/13.3

- Verify DOC validity with annual verifications 33 CFR 96.330(f)  
ISM Code B/13.4
- Verify presence of SMC 33 CFR 96.340(d)  
SOLAS 14 IX/4.3
- Verify vessel particulars listed on SMC match DOC ISM Code Appendix
- Verify intermediate verification or additional verifications are complete 33 CFR 96.340.(e)  
IMO Res A.1118 (30)
- Verify extension or renewal endorsements 33 CFR 96.340(f)  
IMO Res A.1118 (30)

15. Review Classification Society Document/Certificates

- Verify validity SOLAS 14 I/6  
NVIC 02-95
- Verify endorsements (notations) SOLAS 14 I/6  
NVIC 02-95

16. Review International Anti-Fouling System (IAFS) certificate with Record of Anti-Fouling System

- Verify vessel particulars IMO Res MEPC.195(61) 4
- Verify COI has Anti-Fouling endorsement or, if not required, IAFS Certificates MSM II/B.3.J
- Verify identification of applied Anti-Fouling System AFS Articles 3 & 4  
AFS Annex 1-3
- Verify vessel particulars on Record of Anti-Fouling Systems IMO Res MEPC.195(61) 4.1  
MSM II/B.3.J
- Verify Anti-Fouling Systems details provided IMO Res MEPC.195(61) 4.2 & 5
- Verify that no change in Anti-Fouling System has occurred since issuance of IAFS Certificates IMO Res MEPC.195(61) 5.2  
MSM II/B.3.J

17. Review Cargo Ship Safety Construction Certificate (CSSCC)

- Verify vessel particulars SOLAS 14 I/15
- Verify ship type is accurate SOLAS 14 I/12(a)(ii)
- Verify presence of previous two dry dock examinations and endorsements SOLAS 14 I/10(a)(v)
- Verify any extension, renewal or change in anniversary date endorsements SOLAS 14 I/14



18. Review Cargo Ship Safety Equipment Certificate (CSSEC) & Form E (Record of Equipment)
- Verify vessel particulars SOLAS 14 I/12(a)(iii)  
SOLAS 14 I/15
  - Verify ship type is accurate SOLAS 14 I/12(a)(iii)
  - Verify alternate design or arrangement (fire safety) SOLAS 14 II-2/17
  - Verify if an exemption certificate has been issued SOLAS 14 I/4
  - Verify annual, intermediate, renewal or hull inspection extension endorsements SOLAS 14 I/10
  - Verify record of equipment matches issued COI for quantities of life-saving appliances MSM II/A.3.H  
SOLAS 14 I/12(a)(iii)
  - Verify record of equipment accurately captures navigational systems and equipment installation SOLAS 14 I/12(a)(iii)  
SOLAS 14 V/19
19. Review Cargo Ship Safety Radio Certificate (CSSRC) & Form R (Record of Equipment) (when applicable)
- Verify presence 46 CFR 2.01-25(a)(4)  
SOLAS 14 I/9 & 12(4)
  - Verify validity SOLAS 14 I/9(a)  
SOLAS 14 I/14
  - Verify vessel particulars SOLAS 14 I/9(a)
  - Verify proper Sea Area identified SOLAS 14 IV/6
20. Review International Ships Security Certificate (ISSC) & Continuous Synopsis Record (CSR)
- Verify vessel particulars SOLAS 14 XI-1/5.5.2  
ISPS Code A/19.2.4
  - Verify Company name and address match International Safety Management documents SOLAS 14 XI-1/5.3
  - Verify ISSC endorsement and type with date (initial, renewal, intermediate & extension). ISPS Code A/19  
ISPS Code A/19.1.1
  - Verify CSR is present and valid SOLAS 14 XI-1/5.1  
SOLAS 14 XI-1/5.3
  - Verify CSR information matches ISSC SOLAS 14 XI-1/5.3

- 21. Review International Oil Pollution Prevention Certificate (IOPP) and Form A (Supplement)
- Verify vessel particulars MARPOL I/9
  - Verify vessel type is accurate MARPOL I/2.1-2.4  
MARPOL I/9
  - Verify annual, intermediate, extension renewal, or change in anniversary date 33 CFR 151.17  
MARPOL I/6
  - Verify record of construction and equipment 33 CFR 151.19(b)(4)  
MARPOL I/9
  - Verify control requirements for machinery bilge and fuel oil tanks identified MARPOL I/14  
MARPOL I/16
  - Verify retention and disposal requirements for oily bilge water holding tanks MARPOL I/12
  - Verify standard discharge connection requirement 33 CFR 155.430  
MARPOL I/13
- 22. Review International Air Pollution Prevention Certificate (IAPP) and Supplement Record of Construction and Equipment
- Verify vessel particulars MARPOL VI/8 & App I
  - Verify annual, intermediate, renewal, repair and extension endorsements and/or change in anniversary date MARPOL VI/5  
MARPOL VI/6
  - Verify ozone depleting substances identified MARPOL VI/12
  - Verify Nitrogen Oxide emission sources identified 40 CFR 1043.10  
MARPOL VI/13
  - Verify Sulphur Oxide (fuel oil) requirements identified 40 CFR 1043.10  
MARPOL VI/14
  - Verify incinerator installation identified 40 CFR 1043.10  
MARPOL VI/16
  - Verify validity of alternatives or equivalents MARPOL VI/4
- 23. Review Engine International Air Pollution Prevention (EIAPP) Certificate
- Verify applicability MARPOL VI/13.1.1-1.3  
CG-543 Policy Ltr 09-01
  - Verify presence MARPOL VI/8  
CG-543 Policy Ltr 09-01

- Verify duration and validity MARPOL VI/9  
CG-543 Policy Ltr 09-01
- Verify engines identified and no changes have been made MARPOL VI/13.1.1
- Verify Statement of Compliance (issued by Manufacturer) is accompanied by EPA issued EIAPP CG-543 Policy Ltr 09-01 5.b.i
- Verify each engine required to comply with the NOx requirements have the corresponding EPA Approved Technical File CG-543 Policy Ltr 09-01 5.b.ii

24. Verify compliance with Vessel General Permit (VGP)

- Verify Notice of Intent (NOI) has been submitted CG-543 Policy Ltr 11-01 Encl 1  
VGP 1.5.1.1 & 10
- Verify compliance with ballast water record keeping requirements VGP 4.3  
CG-543 Policy Ltr 11-01
- Verify noncompliance & reportable quantity reports have been submitted VGP 4.4.1 - 4.4.4  
CG-543 Policy Ltr 11-01

25. Review Certificate of Financial Responsibility (COFR) (when applicable)

- Verify applicability 33 CFR 138.15  
33 CFR 138.65 & .70
- Verify validity 33 CFR 138.15
- Verify contents 33 CFR 138.30(c)

26. Review Tonnage Certificate (International (ITC) / Domestic)

- Verify validity 46 CFR 69.3  
46 CFR 69.69
- Verify correct measurement system 46 CFR 69.11  
NVIC 11-93
- Verify vessel particulars remain valid 46 CFR 69.55  
46 CFR 69.105

27. Review Federal Communications Commission Bridge-to-Bridge Certificate (when applicable)

- Verify presence 47 CFR 80.1001
- Verify validity 47 CFR 80.1005
- Verify contents 47 CFR 80.1005

- 28. Review Federal Communications Commission Station License
  - Verify presence 47 CFR 80.13
  - Verify validity 47 CFR 80.25
  - Verify contents 47 CFR 80.99  
47 CFR 80.405
  - Verify that other classes of onboard equipment are authorized for operation 47 CFR 80.17
  
- 29. Review Federal Communications Commission Safety Radiotelephony Certificate
  - Verify presence 47 CFR 80.59 (a)(2)
  - Verify validity 47 CFR 80.59
  - Verify contents 47 CFR 80.59
  
- 30. Review International Energy Efficiency (IEE) Certificate and Record of Construction
  - Verify applicability MARPOL VI/6.4  
CG-CVC Policy Ltr 13-02
  - Verify presence MARPOL VI/6.4  
CG-CVC Policy Ltr 13-02
  - Verify duration and validity MARPOL VI/9.10-11  
CG-CVC Policy Ltr 13-02
  - Verify vessel particulars MARPOL VI/Appendix VIII
  - Verify Energy Efficiency Design Index requirements MARPOL VI/20  
CG-CVC Policy Ltr 13-02 7.a
  - Verify Ship Energy Efficiency Management Plan is identified MARPOL VI/22  
CG-CVC Policy Ltr 13-02 7.b
  - Verify Technical File requirements are met MARPOL VI/20.1.3  
CG-CVC Policy Ltr 13-02 8.b
  
- 31. Review Statement of Voluntary Compliance, MARPOL Annex IV (Sewage)
  - Verify vessel particulars NVIC 01-09 Encl 3
  - Verify system's compliance type 33 CFR 159.51-131  
NVIC 01-09 Encl 1
  - Verify Discharge Rate (draft & speed chart) identified 33 CFR 159.57  
NVIC 01-09
  - Verify endorsements (extension or renewal) NVIC 01-09 Encl 3

## Logs & Manual

- 32. Verify compliance with STCW watchkeeping standards
  - Review watchstanding schedules STCW VIII  
STCW A-VIII/2
  - Verify compliance with standing orders and other special instructions STCW A-VIII/2
  
- 33. Review logbook
  - Verify log entries 46 CFR 131.610 & .620(b)  
33 CFR 164.25
  - Verify EPIRB tests are logged 46 CFR 131.565(b)  
47 CFR 80.1099(f)(2)
  - Verify sanitary inspections are logged 46 CFR 131.515
  - Verify drills are logged 46 CFR 131.530(e)  
46 CFR 131.535(e)
  - Verify casualties are logged 46 CFR 131.110  
46 CFR 4.05-15
  - Verify applicable signatures 46 USC 11302
  
- 34. Review radio logs
  - Determine applicability of requirements 46 CFR 130.210  
47 CFR 80.409
  - Verify vessel's information marked on log 47 CFR 80.409(a)(3)
  - Verify required entries are documented 47 CFR 80.409(f)  
47 CFR 80.1075 & 1099(f)(2)
  - Verify corrections are documented 47 CFR 80.409(a)(2)
  
- 35. Review lifesaving equipment maintenance record
  - Review liferaft records 46 CFR 131.580  
46 CFR 131.545
  - Review lifeboat records 46 CFR 131.545  
SOLAS 14 III/20
  - Review rescue boat records 46 CFR 131.545  
SOLAS 14 III/20
  - Review records for davits, falls & winches 46 CFR 131.550  
46 CFR 131.570

- 36. Review abandon ship and fire fighting training manual
  - Verify location 46 CFR 131.530 & .535  
SOLAS 14 II-2/15.2.3
  - Verify contents 46 CFR 131.530 & .535  
SOLAS 14 II-2/15.2.3.3
  
- 37. Review cargo securing manual
  - Verify presence SOLAS 14 VI/5.6  
NVIC 10-97
  - Review contents SOLAS 14 VI/5.6  
IMO MSC.1/Circ. 1353, Res  
A.714(17) as amended
  - Verify approval IMO Res A.714(17) as amended
  
- 38. Examine Waste/Garbage Management Plan
  - Verify validity 33 CFR 151.57  
MARPOL V/10.2
  - Verify contents 33 CFR 151.51-.77  
MARPOL V/10.2
  
- 39. Examine Garbage Record Book
  - Verify validity 33 CFR 151.55  
MARPOL V/10.3
  - Verify contents 33 CFR 151.55  
MARPOL V/10.3
  
- 40. Review Oil Record Book (ORB)
  - Verify edition of ORB 33 CFR 151.25(b)  
IMO MEPC.187(59)
  - Verify required signatures 33 CFR 151.25(h)
  - Verify required entries 46 CFR 184.702  
33 CFR 151.25(h)
  - Compare overboard discharge rate  
entries with filtering equipment data  
plate or supplement to IOPP  
certificate MARPOL I/7  
MARPOL I/Appendix II

- 41. Review Shipboard Oil Pollution Emergency Plan (SOPEP)
  - Verify applicability 46 CFR 131.935  
33 CFR 151.09
  - Verify approval 33 CFR 151.27  
MARPOL I/37.1
  - Verify annual review 33 CFR 151.28(a)  
33 CFR 151.28(d)
  - Verify plan organization 33 CFR 151.26(b)(8)
  - Verify combination plan MARPOL I/37.3
  
- 42. Review Non-Tank Vessel Response Plan (NTVRP)
  - Verify applicability 46 CFR 131.935  
33 USC 1321(a)(26)
  - Verify approval 33 USC 1321(j)(5)(F)(i)  
33 CFR 155.5065
  - Verify annual reviews and information is accurate 33 USC 1321(j)(5)(D)  
33 CFR 155.5070
  
- 43. Examine ballast water management documents
  - Verify plan 33 CFR 151.2050(g)  
NVIC 07-04 Ch-1
  - Verify reporting 33 CFR 151.2060  
NVIC 01-18
  - Verify records 33 CFR 151.2070  
NVIC 01-18
  
- 44. Verify oil and hazardous liquid transfer procedures
  - Verify presence 46 CFR 131.935  
33 CFR 155.720
  - Verify Person in Charge is identified 33 CFR 155.750(a)(4)
  - Verify identity of applicable cargoes 33 CFR 155.750(a)(1)
  - Verify contents 33 CFR 155.750
  
- 45. Review Automation Test Procedures and Operations Manual
  - Verify approval 46 CFR 130.480  
46 CFR 127.110(f)
  - Verify accuracy 46 CFR 130.480
  - Review annual tests 46 CFR 130.480  
46 CFR 61.40

- ☐ 46. Examine Crane Record Book
  - Verify presence 46 CFR 126.130  
46 CFR 109.437
  - Verify contents 46 CFR 126.130  
46 CFR 109.437
  
- ☐ 47. Review Shipboard Marine Pollution Emergency Plans (SMPEP)
  - Verify presence MARPOL II/17.1
  - Verify validity MARPOL II/17.1
  - Verify combination plan MARPOL II/17.3
  
- ☐ 48. Review Procedures and Arrangements Manual (P&A)
  - Verify presence MARPOL II/14.1
  - Verify contents MARPOL II/14.2

## Security

- ☐ 49. Review Vessel Security Plan (VSP) or Alternate Security Plan (ASP)
  - Verify presence of approval letter for plan type 33 CFR 104.105, .120 & .140  
33 CFR 101.120(b) & (c)
  - Verify participation with sponsoring organizations NVIC 04-03 Encl 6, 5, C.
  - Verify plan is secured 33 CFR 104.400(c)  
ISPS Code A/9.7
  - Examine contents 33 CFR 104.405
  - Verify amendment(s) 33 CFR 104.415(a)
  - Verify implementation 33 CFR 101.120(b)(2)  
33 CFR 104.140(c) & 400(a)
  - Verify inspection(s)/deficiency(s) documentation NVIC 10-04 Part 1  
MSM II A.2.
  
- ☐ 50. Examine security records
  - Verify record(s) of security training 33 CFR 104.235(b)(1)  
SOLAS 14 XI-2/4.2
  - Verify presence of Declarations of Security (DoS) 33 CFR 104.255 & .235(b)(7)  
ISPS Code A/5.7
  - Verify record(s) of security drills 33 CFR 104.235(b)(2)  
ISPS Code A/10.1.1



- Verify annual exercise has been conducted 33 CFR 104.235(b)(2)  
ISPS Code A/10.1.1
- Verify record(s) of annual audit 33 CFR 104.235(b)(8)  
ISPS Code A/10.1.6
- Verify VSA/SSA is reviewed and revalidated when VSP is submitted for reapproval or revisions 33 CFR 104.310(c)  
NVIC 04-03 Encl (2), 2.C & 2.D

51. Examine security equipment

- Verify location of Ship Security Alert System 33 CFR 101.310 & 104.297  
SOLAS 14 XI-2/6
- Verify maintenance records 33 CFR 104.235(b)(5)  
ISPS Code A/17
- Verify operation 33 CFR 104.260(a)  
ISPS Code A/9.4.15 & 18

52. Evaluate crew's knowledge of security plan

- Identify Company Security Officer (CSO) 33 CFR 104.200(b)(2)  
SOLAS 14 XI-2/4.2
- Identify Vessel/Ship Security Officer (VSO/SSO) 33 CFR 104.200(b)(2)  
ISPS Code A/12.1
- Evaluate VSO's knowledge 33 CFR 104.215(e)  
ISPS Code A/12.2
- Evaluate crew's level of knowledge 33 CFR 104.220  
ISPS Code A/13.3
- Verify compliance with current Maritime Security (MARSEC) level 33 CFR 104.240  
33 CFR 104.220(m)

53. Verify security training & records

- Verify all access points are monitored 33 CFR 104.265(a)  
ISPS A/7.2.2
- Observe gangway watch control of embarkation of persons and effects 33 CFR 104.265(a)  
ISPS A/7.2.3
- Verify security communications 33 CFR 104.245  
ISPS A/7.2.7
- Verify security level 33 CFR 104.240  
ISPS A/7.1
- Verify gangway watch is familiar with their responsibilities as per security plan ISPS A/13.2  
ISPS A/13.3
- Verify signage 33 CFR 104.265(f)(3)

## Bridge & Navigation

- 54. Verify operations of internal communication and control systems
  - Witness operation of engine order telegraph 46 CFR 129.110 & .560  
46 CFR 113.35
  - Witness operation of sound powered phones 46 CFR 130.440  
SOLAS 14 III/6.4.1
  - Witness operation of public address system 46 CFR 113.50  
SOLAS 14 III/6.4.2
  - Verify operation of pilothouse control 46 CFR 130.430  
46 CFR 129.540 (b)(1)
  
- 55. Inspect radar(s)
  - Verify safety precautions are followed Operations Manual
  - Verify operation 46 CFR 130.310  
SOLAS 14 V/19.2
  - Verify operation of Automatic Radar Plotting Aid (ARPA) 33 CFR 164.38  
SOLAS 14 V/19.2
  
- 56. Inspect magnetic compass
  - Verify illumination 46 CFR 130.340  
33 CFR 164.35(b)
  - Verify presence of deviation table 33 CFR 164.35(c)  
SOLAS 14 V/19.2.1.3
  - Verify presence of spare SOLAS 14 V/19.2.2.1
  
- 57. Inspect gyrocompass
  - Verify operation 33 CFR 164.35(d)  
SOLAS 14 V/19.2.5
  - Verify location and illumination of repeaters 33 CFR 164.35(e)
  - Verify operation under emergency power SOLAS 14 II-1/43.2.4.2
  
- 58. Inspect depth sounding/recording equipment
  - Verify sounding equipment is operational 33 CFR 164.35(h)  
SOLAS 14 V/19.2.3.1
  - Verify continuous recording is operational 33 CFR 164.35(i)

- 59. Inspect electronic position-fixing device (satellite navigation (GPS) receiver)
  - Verify equipment is operational 46 CFR 130.320  
33 CFR 164.41(a)
  - Witness functional test Operations manual
  
- 60. Verify operation of Automated Identification System (AIS)
  - Verify AIS information (vessel, type, IMO number, Maritime Mobile Service Identity) 33 CFR 164.46  
SOLAS 14 V/19.2.4.5
  - Verify operation SOLAS 14 V/19.2.4.5  
Operations Manual
  - Verify operation under emergency power SOLAS 14 II-1/43.2.4.2
  
- 61. Verify Long Range Identification and Tracking Information (LRIT) Equipment
  - Verify operation 33 CFR 169.215  
33 CFR 169.230
  - Review conformance test report IMO MSC.1/Circ. 1307
  
- 62. Inspect Global Maritime Distress and Safety System (GMDSS) equipment
  - Verify Station ID numbers on applicable equipment 47 CFR 80.1083  
SOLAS 14 IV/6.2.5
  - Review logs for tests and notations 47 CFR 80.1075  
SOLAS 14 IV/17
  - Verify equipment for operation areas 47 CFR 80.1083-.1095  
SOLAS 14 IV/6.1
  - Verify operation of VHF Digital Selective Calling (DSC) radio 47 CFR 80.1085(a)(1)  
SOLAS 14 IV/7.1.1
  - Verify emergency source of power is provided 47 CFR 80.1099(b)  
SOLAS 14 IV/13.2
  - Verify presence of manuals, tools, spare parts and test equipment 47 CFR 80.1105  
SOLAS 14 IV/15
  - Verify compliance with maintenance method(s) 47 CFR 80.1105(c)  
SOLAS 14 IV/15
  
- 63. Inspect Radiotelephone equipment
  - Verify installation(s) 46 CFR 130.210  
47 CFR 80.1003
  - Verify equipment for operational areas 47 CFR 80.1015

- Verify presence of Operation Manual 47 CFR 80.1011-1013
64. Inspect steering system controls at Operating Station
- Verify steering gear instructions, diagrams & markings 46 CFR 131.845  
46 CFR 131.850
  - Witness operation of rudder angle indicator and illumination 46 CFR 130.130  
46 CFR 130.140
  - Verify operation of steering gear alarms 46 CFR 128.110 & 130.450  
46 CFR 58.25-25, SOLAS 14 II-1/29
  - Verify operation in follow-up and non follow-up mode 46 CFR 130.130 & .140  
46 CFR 58.25
65. Inspect navigation aids
- Verify operation of navigation and anchor lights 46 CFR 129.430  
46 CFR 129.110
  - Examine dayshapes 33 CFR 83.20(d)  
COLREG Rule 20
  - Examine daylight signaling lamp 33 CFR 83.34  
COLREG Rule 34
  - Review Certificate of Alternate Compliance 33 CFR 81.9
66. Inspect sound signaling devices
- Witness operation of ship's whistle 33 CFR 83.33(a)  
COLREG Rule 33
  - Witness operation of ship's bell 33 CFR 83.33(a)  
COLREG Rule 33
  - Witness operation of ship's gong 33 CFR 83.33(a)  
COLREG Rule 33
67. Examine charts and publications
- Verify presence of current, applicable and corrected charts and/or Electronic Chart Display & Information System (ECDIS) 33 CFR 164.33 & 46 CFR 130.330  
SOLAS 14 V/19.2.1.4 & 27
  - Verify presence of current and applicable Tide Tables 33 CFR 164.33  
46 CFR 130.330
  - Verify presence of current and applicable Coast Guard Light List 33 CFR 164.33  
46 CFR 130.330
  - Verify presence of current and applicable Tidal Current Tables 33 CFR 164.33  
46 CFR 130.330

- Verify presence of Inland Navigation Rules 33 CFR 83.01(g)
- Verify presence of COLREGs SOLAS 14 V/27
- Verify presence of current and applicable U.S. Coast Pilot 33 CFR 164.33  
46 CFR 130.330
- Verify presence of International Code of Signals SOLAS 14 V/21.1
- Verify presence and contents of maneuvering fact sheet 33 CFR 164.35(g)  
MSC.137(76)
- Verify presence of International Aeronautical and Maritime Search and Rescue (IAMSAR) manual SOLAS 14 V/21.2

## General Health & Safety

- 68. Inspect accommodation spaces
  - Verify location 46 CFR 127.270
  - Verify number of berths 46 CFR 127.280(a)(1)  
46 CFR 127.280(b)
  - Verify spaces are of appropriate size 46 CFR 127.280(a)(2)(ii)
  - Verify accessibility to escape routes 46 CFR 127.240
  - Verify ventilation 46 CFR 127.260
  - Verify sanitary condition 46 CFR 131.515
  
- 69. Inspect means of escape from accommodation, machinery and other spaces
  - Verify means of escape 46 CFR 127.240(a)  
SOLAS 14 II-2/13.3.3
  - Verify routes are accessible 46 CFR 127.240  
SOLAS 14 II-2/13
  - Examine emergency lighting 46 CFR 129.440 & 131.525  
46 CFR 112
  - Verify markings 46 CFR 131.840  
SOLAS 14 III/11.5
  
- 70. Inspect mess deck and galley spaces
  - Verify sanitary conditions 46 CFR 131.515
  - Verify operation of electric stove & deep fryer overcurrent protection 46 CFR 129.110 & .550  
46 CFR 110.10-1(j)

- Examine fire fighting equipment 46 CFR 132.220  
SOLAS 14 II-2/10
- Examine chill box(s) alarms 46 CFR 113.45-5
- Verify installation of both grab and sea rails on cooking equipment 46 CFR 130.220  
IEEE 45/42.1.1
- Verify ventilation 46 CFR 127.260  
SOLAS 14 II-2/9.7.5.2.1
- Examine condition of vents and ducts 46 CFR 127.220(b)  
MSM II/B.1.N.9

71. Inspect paint locker(s)

- Verify fire protection equipment 46 CFR 132.310  
SOLAS 14 II-2/10.6.3
- Examine space construction material 46 CFR 127.220(c)  
SOLAS 14 II-2/9.2.3.3.2
- Verify electrical installations 46 CFR 129.520(b)
- Verify means to secure ventilation 46 CFR 127.250

## Lifesaving Equipment

72. Inspect Emergency Position Indicating Radio Beacon (EPIRB)

- Verify registration 46 CFR 133.60(a)  
47 CFR 80.1061(e)
- Verify stowage 46 CFR 133.60(a)(2)  
SOLAS 14 IV/7.1.6
- Verify hydro-static release expiration date 46 CFR 133.60(a)(2)  
SOLAS 14 IV/7.1.6
- Verify battery date 46 CFR 131.575(e)  
MSM II/B.1.P.3.I(2)
- Verify markings SOLAS 14 III/9.2.3  
IMO Res A.760(18)
- Witness function test MSM II/B.1.P.3.I(1)

73. Inspect general emergency alarm system

- Verify location and operation of contact makers 46 CFR 129.530  
46 CFR 113.25-5
- Verify location and operation of audible signals 46 CFR 113.25-9  
SOLAS 14 III/6.4.3
- Verify location and operation of emergency red-flashing lights 46 CFR 113.25-10
- Verify markings 46 CFR 113.25-20  
46 CFR 131.805

- Verify operation of Public Address system 46 CFR 113.50-5(c)  
SOLAS 14 III/6.4.2
- Verify operation of loud speakers 46 CFR 113.50-15  
SOLAS 14 III/6.4.3
- Verify operations with emergency power source 46 CFR 113.25-6  
SOLAS 14 III/6.4.2

74. Inspect line throwing equipment

- Verify stowage, quantity and type approval 46 CFR 133.170  
46 CFR 160.031 & 160.040
- Verify presence of appropriate messenger line 46 CFR 133.170(c)(2)(i)  
46 CFR 133.170(c)(2)(ii)
- Verify markings on primer cartridges 46 CFR 160.031-6  
46 CFR 160.040-6
- Verify inventory list and equipment 46 CFR 133.170(c)(1)
- Verify presence of service and maintenance instructions 46 CFR 160.031-4(h)  
46 CFR 160.040-4(h)
- Verify markings SOLAS 14 III/9.2.3  
IMO Res A.760(18)

75. Inspect distress signals

- Verify type approval 46 CFR 133.60(b)(1)  
SOLAS 14 III/34
- Verify quantity 46 CFR 133.60(b)(1)  
SOLAS 14 III/6.3
- Verify expiration date 46 CFR 160.036-5  
LSA Code 1.2.3
- Verify stowage and markings 46 CFR 131.890 & 133.60(b)(2)  
SOLAS 14 III/6.3 & 9.2.3

76. Inspect life jackets

- Verify type approval 46 CFR 133.70(b)  
SOLAS 14 III/4
- Verify quantity 46 CFR 133.70(b)(1)  
SOLAS 14 III/7.2.1
- Verify stowage 46 CFR 133.70(b)(2)  
46 CFR 133.70(d)
- Verify markings 46 CFR 131.875 & 133.70(b)(3)  
SOLAS 14 III/7.2.1 & 9.2.3
- Examine lights 46 CFR 133.70(b)(4)  
SOLAS 14 III/7.2.1

- Verify location and information for donning instructions 46 CFR 133.80(b)(5)  
SOLAS 14 III/35.2
  - Examine condition and suitability 46 CFR 133.45  
46 CFR 160.006-2
77. Inspect work vests
- Verify type approval 46 CFR 131.710
  - Verify stowage 46 CFR 131.730
  - Examine condition and serviceability 46 CFR 131.740  
MSM II/B.1.P.2.I
78. Inspect immersion suits
- Verify type approval 46 CFR 133.70(c)  
SOLAS 14 III/4
  - Verify quantity and size 46 CFR 133.70(c)(1)  
46 CFR 133.70(c)(2)(ii)
  - Verify stowage 46 CFR 133.70(c)(2) & (d)  
SOLAS 14 III/32.3.4
  - Verify markings 46 CFR 131.875 & 133.70(c)(3)  
SOLAS 14 III/9.2.3
  - Examine lights 46 CFR 133.70(c)(4)  
SOLAS 14 III/32.3.2
  - Examine condition and suitability 46 CFR 133.45  
46 CFR 160.171
79. Inspect life buoys
- Verify type approval 46 CFR 133.70(a)  
SOLAS 14 III/4
  - Verify quantity 46 CFR 133.70(a)(1)  
SOLAS 14 III/7.1.1.1
  - Verify stowage 46 CFR 133.70(a)(2)  
SOLAS 14 III/7.1.1.1
  - Verify markings 46 CFR 131.875 & 133.70(a)(3)  
SOLAS 14 III/7.1.4 & 9.2.3
  - Examine attachments and fittings 46 CFR 133.70(a)(4)  
SOLAS 14 III/7.1.2 & .3
  - Verify size/weight 46 CFR 160.050-4(e)  
SOLAS 14 III/7.1.1
  - Examine condition and suitability 46 CFR 133.45  
46 CFR 160.006-2



- ☐ 80. Inspect inflatable liferaft installations
  - Verify type approval 46 CFR 133.105(a)(1)(i)  
SOLAS 14 III/4
  - Verify quantity 46 CFR 133.105(b)  
SOLAS 14 III/31.1.1.2
  - Verify stowage 46 CFR 133.130  
SOLAS 14 III/13
  - Verify markings and symbols 46 CFR 131.865 & 160.151-57(m)  
SOLAS 14 III/9.2.3
  - Verify annual service dates 46 CFR 131.580  
SOLAS 14 III/20.8.1
  - Verify emergency instructions are posted 46 CFR 131.340  
SOLAS 14 III/9
  - Examine embarkation ladder 46 CFR 133.110(f)  
SOLAS 14 III/9.2.3

- ☐ 81. Inspect lifefloat installations
  - Verify type approval 46 CFR 133.105(a)(4)
  - Verify quantity 46 CFR 133.105(c)
  - Verify stowage 46 CFR 133.105(b)
  - Verify markings 46 CFR 131.870
  - Verify emergency instructions are posted 46 CFR 131.340
  - Examine embarkation ladder 46 CFR 133.110(f)

- ☐ 82. Inspect Lifeboats
  - Verify type approval 46 CFR 133.105(a)(6)  
SOLAS 14 III/4
  - Verify stowage 46 CFR 133.105(a)(6)  
46 CFR 199.130
  - Verify markings 46 CFR 131.855  
SOLAS 14 III/9.2.3
  - Examine equipment 46 CFR 199.175  
LSA Code 4.4.8
  - Examine condition 46 CFR 131.540  
SOLAS 14 III/20.2
  - Examine embarkation ladder 46 CFR 133.110(f)  
SOLAS 14 III/11

- 83. Inspect rescue boat
  - Verify type approval 46 CFR 133.135  
SOLAS 14 III/4, 14 & 31.2
  - Verify stowage 46 CFR 133.140  
SOLAS 14 III/14
  - Verify markings 46 CFR 131.855  
SOLAS 14 III/9.2.3
  - Examine equipment 46 CFR 133.175  
LSA Code 5.1.2
  - Verify condition 46 CFR 131.540  
SOLAS 14 III/20.2
  - Examine embarkation ladder 46 CFR 133.110(f)  
SOLAS 14 III/17
  
- 84. Inspect rescue platform(s)
  - Examine condition 46 CFR 131.540
  - Verify crew training 46 CFR 133.135(c)(1)
  - Witness recovery operation 46 CFR 133.135(c)(2)
  
- 85. Inspect davit(s) and appurtenances
  - Examine condition 46 CFR 131.540 & 133.153  
SOLAS 14 III/20.2
  - Verify operating instructions are posted 46 CFR 133.90  
SOLAS 14 III/9
  - Verify required maintenance has been conducted 46 CFR 133.153  
SOLAS III/20 .3, .6, .7 & .11
  
- 86. Witness davit weight test
  - Verify test weights 46 CFR 126.440  
46 CFR 199.190(i)(5)
  - Verify dynamic test of winch brake 46 CFR 199.190(i)(2)  
SOLAS 14 III/20.11.1.3
  - Verify operational test of lifeboat and rescue boat release gear 46 CFR 199.190(i)(5)  
SOLAS 14 III/20.11.2.3
  - Inspect brake pads and stressed structural parts MSM II/B.1.P.2 & P.3  
NVIC 04-07
  - Verify operational test of stored power system 46 CFR 133.150(e)  
SOLAS 14 III/16.1

# Firefighting Systems

- 87. Review approved Safety Plan (Fire-Control Plan)
  - Verify location and approval 46 CFR 127.110(a)(3)  
SOLAS 14 II-2/15.2.4
  - Verify equipment installation to approved plan 46 CFR 131.945  
SOLAS 14 II-2/15.2.4.1
  - Verify use of international symbols SOLAS 14 II-2/15.2.4  
IMO Res A.952(23)
  - Verify structural fire protection is identified 46 CFR 131.945  
SOLAS 14 II-2/15.2.4.1
  
- 88. Inspect areas for compliance with Structural Fire Protection (SFP) requirements
  - Confirm installation in accordance with approved Fire Safety Plan 46 CFR 127.110(a)(3)  
SOLAS 14 II-2/15.2.4
  - Verify boundaries are maintained 46 CFR 127.280  
46 CFR 127.220
  - Verify no unapproved modifications 46 CFR 126.150
  
- 89. Inspect fire boundary closures
  - Witness operation of local and remote controls of dampers and fire doors 46 CFR 129.110 & .540  
46 CFR 111.103
  - Confirm dampers and fire doors close during ventilation shutdowns for machinery and accommodation spaces 46 CFR 127.250  
46 CFR 127.260
  - Verify remote controls and dampers are clearly marked & fitted with open/closed indicators 46 CFR 131.896  
46 CFR 131.899
  
- 90. Inspect fire main and pump(s) - primary and emergency
  - Verify number 46 CFR 132.120(a)  
SOLAS 14 II-2/10.2.2.2.2
  - Verify capable of providing adequate pressure 46 CFR 132.120(a)  
SOLAS 14 II-2/10.2.2.4.1
  - Verify self priming arrangement 46 CFR 132.120(a)
  - Verify fitted with gauge and relief valve(s) 46 CFR 132.120 (b) & (c)  
NVIC 06-72 Encl.1/I.B
  - Verify location of controls and markings 46 CFR 130.420/430  
46 CFR 129.220

- Verify manifolds are labeled correctly 46 CFR 132.110(b)
- Verify materiel condition of system 46 CFR 132.110/120
- Verify operation of remote control(s) 46 CFR 130.430  
NVIC 06-72 Encl.1/I.C.2.4

91. Inspect fire stations

- Verify number of hydrants 46 CFR 132.130(a)  
46 CFR 132.130(b)
- Verify hoses meet required length, size, markings and quantity 46 CFR 132.100 & .130(g), (k) & (n)  
SOLAS 14 II-2/10.2.3
- Verify compliance with periodic hydro testing 46 CFR 132.350(c)(3)  
SOLAS 14 II-2/14.2.2
- Verify operation of valves at fire stations 46 CFR 132.130(i)  
NVIC 06-72 Encl.1/I.C.2.3
- Verify spanner 46 CFR 132.130(f)

92. Inspect portable fire extinguishers

- Confirm locations with approved Safety Plan (Fire Control Plan) 46 CFR 131.945  
SOLAS 14 II-2/15.2.4
- Verify servicing compliance 46 CFR 132.350(c)(1)  
SOLAS 14 II-2/14.2.2
- Verify installation & stowage 46 CFR 132.220  
SOLAS 14 II-2/10.3.2
- Examine condition of cylinder(s) and hose(s) 46 CFR 132.350(c)(1)  
NFPA 10 Chapter 7
- Verify type and quantity 46 CFR 132.220  
SOLAS 14 II-2/10.3.2
- Verify markings 46 CFR 131.835
- Confirm spare charges 46 CFR 132.220  
SOLAS 14 II-2/10.3.3

93. Inspect semi-portable fire extinguishers

- Confirm locations with approved Safety Plan (Fire Control Plan) 46 CFR 131.945  
SOLAS 14 II-2/15.2.4
- Verify servicing compliance 46 CFR 132.350(c)(1)  
SOLAS 14 II-2/14.2.2
- Verify installation & stowage 46 CFR 132.220 & .240  
SOLAS 14 II-2/10.3.2
- Examine condition of cylinder(s) and hose(s) 46 CFR 132.350(c)(2)

- Verify type(s) and quantity(s) 46 CFR 132.220  
CVC Policy Ltr 18-04
  - Verify markings 46 CFR 131.835
94. Inspect fire axes
- Confirm locations with approved Safety Plan (Fire Control Plan) 46 CFR 132.360  
Fire Control Plan
  - Verify markings 46 CFR 131.880
  - Verify quantity 46 CFR 132.360  
SOLAS 14 II-2/10.1.1
  - Examine condition 46 CFR 131.590
95. Inspect fireman's outfit(s)
- Verify type approval SOLAS 14 II-2/10.10.1  
FSS Code 3.2.1
  - Verify stowage SOLAS 14 II-2/10.10.3.1
  - Verify location(s) are marked on Safety Plan (Fire Control Plan) SOLAS 14 II-2/15.2.4
  - Verify quantity and size SOLAS 14 II-2/10.10.2  
SOLAS 14 II-2/18.5.1.6
  - Verify condition SOLAS 14 II-2/14.2
  - Verify spare bottles SOLAS 14 II-2/10.10.2.5
96. Inspect International Shore Connection
- Confirm location with Safety Plan (Fire Control Plan) Fire Control Plan
  - Verify gaskets and bolts are with the connection SOLAS 14 II-2/10.2.1.7  
FSS Code 2.2
  - Verify markings IMO Res A.952(23)  
Fire Control Plan
97. Inspect fire detection system
- Determine applicability 46 CFR 130.400  
SOLAS 14 II-2/1
  - Witness system test 46 CFR 130.480  
SOLAS 14 II-2/7.3.2
  - Verify two sources of power 46 CFR 161.002-9  
46 CFR 129.110 → 113.10-9
  - Verify operation of control unit's visual and audible alarms 46 CFR 161.002-8  
SOLAS 14 II-2/7.2.2

- Verify markings 46 CFR 161.002-4  
FSS Code 9.2.5.1.3 & 4
- Verify alarms sounds in required locations 46 CFR 161.002-10(b)  
SOLAS 14 II-2/7.4.2

98. Inspect high pressure CO2 system(s)

- Ensure safety precautions are implemented prior to servicing system MSM II/C.2.1.5
- Verify servicing compliance 46 CFR 126.450  
46 CFR 132.350(c)(2)(ii)
- Witness weighing of cylinders 46 CFR 132.350(c)(2)(i)  
NVIC 06-72 Encl.1/II.D.2.1
- Inspect stowage of cylinders 46 CFR 132.350(c)(2)(ii)  
SOLAS 14 II-2/10.4.3
- Examine materiel condition of system components 46 CFR 132.350(c)(2)(iii)
- Verify piping and nozzles are clear 46 CFR 132.350(c)(2)(i)
- Witness operational test of time delays, alarms, and shutdowns 46 CFR 132.350(c)(2)(iv)
- Verify markings and warning signs are posted 46 CFR 131.815-.825
- Verify operating instructions are posted NVIC 06-72 Encl.1/II.D.2.4

99. Inspect water mist system(s)

- Verify DIOM 46 CFR 126.450  
46 CFR 132.350(c)(2)(i)
- Witness manual operational test DIOM Manual
- Witness automatic operational test DIOM Manual
- Witness pump operations DIOM Manual

100. Inspect clean agent Fire extinguishing system(s)

- Ensure system plan approval 46 CFR 162.161  
NFPA 2001 Chapter 5
- Verify DIOM for installed system 46 CFR 162.161-5  
DIOM Manual
- Verify servicing as outlined in DIOM DIOM Manual
- Validate agent quantity and pressure of refillable cylinders 46 CFR 162.161  
DIOM Manual

- Examine stowage of cylinders 46 CFR 132.350(c)(2)(ii)  
46 CFR 147.60
- Examine condition of cylinder(s) and system hoses 46 CFR 147.67  
DIOM Manual
- Verify piping and nozzles are clear DIOM Manual
- Witness functional test of time delays, alarms, and shutdowns 46 CFR 132.350(c)(2)(iv)  
DIOM Manual
- Verify warnings signs, markings and operating instructions are posted DIOM Manual

## Dynamic Positioning System

### 101. Check Dynamic Positioning operations

- Verify master awareness of Federal Register Notice 77 FR 62247 77 FR 62247
- Verify Critical Activity Mode of Operation (CAMO) is identified MTS DP Ops Guide 2/4.9
- Verify operations are within an Activity Specific Operating Guideline (ASOG) MTS DP Ops Guide 2/4.9
- Document findings in MISLE MSM II/A.3

## Heli-Deck

### 102. Inspect helideck

- Verify visual aids and markings NVIC 09-81  
46 CFR 108.241
- Examine netting 46 CFR 108.235(e)
- Verify height of obstructions 46 CFR 108.235(d)(4)
- Verify means of escape 46 CFR 108.235(f)  
SOLAS 14 II-2/18.4

### 103. Inspect fire fighting system(s) for helideck

- Verify foam agent 46 CFR 132.320  
46 CFR 108.487
- Verify location(s) of hydrants 46 CFR 108.486  
SOLAS 14 II-2/18.5.1.5
- Verify annual tests reports MSM II/C.2.1.1  
NVIC 06-72 Ch.1

- Examine equipment and condition 46 CFR 99.17
- Examine equipment for refueling facility 46 CFR 108.489(b)  
SOLAS 14 II-2/18.7

## Machinery

### ☐ 104. Inspect steering gear

- Examine electrical, mechanical, and hydraulic connections and linkages of main and auxiliary (emergency) systems 46 CFR 126.430  
MSM II/C.4.B
- Verify operation of communications between bridge and emergency steering station(s) 46 CFR 130.110  
SOLAS 14 II-1/29.10
- Witness operational test of systems, in all modes of operation from emergency steering station(s) 46 CFR 130.130/140  
SOLAS 14 II-1/29.3.2
- Verify accuracy of rudder angle repeaters 46 CFR 130.130(h)  
46 CFR 130.140(b)(12)
- Verify markings and operating instructions 46 CFR 131.845  
SOLAS 14 V/26.3.1
- Witness operational test of auxiliary steering arrangement SOLAS 14 II-1/29.4.2
- Witness operational test of alarms 46 CFR 130.460(a)  
46 CFR 58.25-25

### ☐ 105. Inspect fuel oil service and transfer system

- Verify transfer procedures are posted or available 46 CFR 131.935  
33 CFR 155.720 & .740(c)
- Verify installation, arrangement and condition of piping, manifolds and filters 46 CFR 128.110  
46 CFR 56.50-75
- Verify flange or mechanical joint(s) are fitted with a suitable shield 46 CFR 56.50-60(j)  
SOLAS 14 II-2/4.2.2.5
- Examine nonmetallic flexible hoses and fittings 46 CFR 56.50-75(b)(3)  
46 CFR 56.50-70(b)(2)(i)
- Verify operation of transfer pump(s) and remote shutdown(s) 46 CFR 58.01-25
- Witness test of remotely operated fuel oil system valve(s) 46 CFR 56.50-60(d)



- 106. Inspect main propulsion system(s)
  - Examine condition, installation and arrangements of various system components 46 CFR 126.470  
46 CFR 61.20-3(a)
  - Examine foundations for structural integrity 46 CFR 126.430
  - Verify installation of protective covers or guards 46 CFR 127.330
  - Examine system's hull penetrations for structural integrity 46 CFR 128.230  
46 CFR 128.430
  - Examine condition of air intakes screens and crankcase explosion relief valves 46 CFR 126.430  
46 CFR 58.05-1(a)
  - Verify condition and integrity of propulsion shaft couplings 46 CFR 126.430
  
- 107. Inspect non-metallic expansion joints
  - Examine condition 46 CFR 128.110  
46 CFR 61.15-12(a)
  - Verify compliance with 10 year "in-service" requirement 46 CFR 61.15-12(b)  
MSM II/B.3.F.3
  
- 108. Witness operational test of main propulsion automation
  - Determine applicability 46 CFR 62  
46 CFR 128.110 & 130.400
  - Verify no manual override devices not approved in test procedures 46 CFR 130.480  
46 CFR 62.30-10
  - Witness operation of alarms, shutdowns, controls and internal communications (engineer assistance), IAW approved test procedure 46 CFR 130.450  
46 CFR 61.40
  - Verify bridge controls/alarms function in sync with engineroom control panel 46 CFR 130.460  
46 CFR 61.40
  
- 109. Inspect Unfired Pressure Vessels (UPVs)
  - Verify data plate(s) are legible 46 CFR 128.110  
46 CFR 54.10-20
  - Determine if UPV is exempt from inspection 46 CFR 54.01-15

- Verify external and/or an internal exam and/or hydrostatic test needs 46 CFR 61.10-5(b)  
46 CFR 61.10-5(d)
- Examine externally 46 CFR 61.10-5(b)(1)
- Examine internally (when accessible) 46 CFR 61.10-5(b)(2)  
46 CFR 54.01-35
- Witness hydrostatic test 46 CFR 61.10-5(d)  
46 CFR 61.10-5 (e)(4)
- Verify installation and operation of pressure gauges 46 CFR 54.15-5(f)
- Verify installation and operation of pressure-relieving devices 46 CFR 54.15-5  
46 CFR 61.10-5(i)

110. Inspect refrigeration/air conditioning system(s)

- Examine installation and condition 46 CFR 128.410
- Verify compliance with MARPOL Annex VI MARPOL VI/12

111. Inspect bilge system

- Verify location and operation of pump(s) 46 CFR 128.440  
46 CFR 56.50-55(a)
- Verify emergency bilge suction 46 CFR 56.50-50(f)(3)
- Examine manifolds, valves and piping 46 CFR 56.50-50(c)  
46 CFR 56.50-50(d)
- Verify bilge system pumping capabilities 46 CFR 56.50-50(a)(1)
- Verify remote valve controls are fitted with nameplates 46 CFR 56.50-1(g)(2)(i)
- Verify bilge suction(s) are fitted with strainer(s) 46 CFR 56.50-50(g)
- Verify pollution placard is posted 46 CFR 131.935  
33 CFR 155.450

112. Inspect ballast system

- Verify method for compliance 33 CFR 151.2025(a)  
NVIC 01-18
- Examine pump condition and operation 46 CFR 128.110  
46 CFR 56.50-50
- Examine manifolds, piping, and valve(s) arrangement and structural integrity 46 CFR 56.50-50(h)-(k)
- Verify remote valve controls are fitted with nameplates 46 CFR 56.50-1(g)(2)(i)

# Electrical Systems

- 113. Inspect switchboard(s)
  - Verify location, condition and installation 46 CFR 129.330 (a)  
46 CFR 129.330 (b)
    - Verify non-conductive handrail and matting or grating on deck 46 CFR 129.330 (c)  
46 CFR 129.330 (g)
    - Verify meters, controls and gauges are operational 46 CFR 129.320 (c)
  
- 114. Inspect main service and propulsion generator(s) and prime mover(s)
  - Examine condition of components 46 CFR 126.470  
46 CFR 61.20-3(a)
    - Verify installation of machinery covers and guards 46 CFR 127.330
    - Verify required gauges 46 CFR 129.320(c)
    - Verify set point and operation of over speed shut-down 46 CFR 129.110  
46 CFR 111.12-1(b)
    - Verify set point and operation of lube oil shut-down 46 CFR 129.110  
46 CFR 111.12-1(c)
    - Verify set point and operation of high jacket water temperature alarm 46 CFR 130.460(a)(6)(ii)
    - Verify operation of reverse power relays 46 CFR 129.323  
46 CFR 111.12-11(f)
    - Verify power source(s) requirements 46 CFR 129.310-.315  
SOLAS 14 II-1/41
    - Verify generator(s) nameplates are attached 46 CFR 129.329(d)  
ABS 4-2-1/1.1
  
- 115. Inspect emergency generator(s) and prime mover(s)
  - Determine applicability 46 CFR 129.110  
46 CFR 112.05-05
    - Determine prime mover requirement 46 CFR 112.50-1  
46 CFR 111.12-1
    - Verify starting requirements 46 CFR 129.110  
46 CFR 112.50-1
    - Inspect starting system(s) 46 CFR 112.50-1(e)  
46 CFR 112.50-1(k)
    - Verify operation of auto-start function SOLAS 14 II-1/43.3  
46 CFR 112.50-1(d)

- Examine condition 46 CFR 126.470  
46 CFR 61.20-3(a)
- Verify installation of machinery covers and guards 46 CFR 127.330
- Verify operation of alarm(s) 46 CFR 112.50-1(h) or (i)
- Verify gauges 46 CFR 129.320(c)  
ABS 4-2-1/7.17
- Verify marking and operation of remote fuel shutoff valve(s) 46 CFR 128.110  
46 CFR 56.50-60(d)
- Verify set point and operation of over speed shut-down 46 CFR 129.110  
46 CFR 111.12-1(b) & 112.50-1(g)

116. Inspect emergency generator(s) and prime mover(s)

- Verify set point and operation of lube oil shut-down 46 CFR 129.110  
46 CFR 111.12-1(c)
- Verify generator nameplates attached 46 CFR 129.320(d)

117. Inspect battery installation

- Determine size 46 CFR 129.353
- Verify ventilation 46 CFR 129.356  
46 CFR 111.15-10
- Verify secured 46 CFR 129.350 (b)
- Verify space for maintenance and removal 46 CFR 129.350(c)
- Verify means of charging 46 CFR 129.350 (f)
- Verify operation of power ventilation interlock with charger 46 CFR 111.15-10(b)(4)
- Verify connections 46 CFR 129.350 (d)

118. Inspect motor controllers

- Verify installation 46 CFR 129.110  
46 CFR 111.70-3
- Verify marking(s) 46 CFR 129.110  
46 CFR 111.70-3(d)(1)(vi)
- Verify wiring diagram in enclosure 46 CFR 129.110  
46 CFR 111.70-3(d)(2)
- Verify drip-proof/watertight 46 CFR 129.210
- Verify low voltage release motor controller for vital systems 46 CFR 111.70-3(b)

- 119. Inspect lighting system(s)/fixture(s)
  - Verify lighting 46 CFR 129.110  
46 CFR 111.75-15
  - Examine condition and installation of fixtures 46 CFR 129.410  
46 CFR 111.75-20
  
- 120. Inspect emergency lighting
  - Verify location 46 CFR 129.110 & 46 CFR 112.05-5  
46 CFR 111.75-15(c)(2)
  - Verify markings 46 CFR 131.840
  - Verify operation 46 CFR 129.440(b) & 46 CFR 111.75-15(c)(2)  
46 CFR 131.525
  - Verify operation of embarkation station lighting 46 CFR 129.110  
46 CFR 111.75-16
  
- 121. Inspect distribution panel(s)
  - Verify location and drip proof 46 CFR 129.330
  - Examine condition and installation 46 CFR 129.200-.220
  - Verify blanks are installed 46 CFR 129.200(c)
  - Verify circuit directory 46 CFR 129.220(d)
  
- 122. Inspect electrical cables and fixtures
  - Verify supports for vertical and horizontal installations 46 CFR 129.340(b)  
46 CFR 129.110
  - Verify radius of bends 46 CFR 129.340(b)  
IEEE 45/20.6
  - Verify no hazardous conditions exist 46 CFR 129.200-.220  
46 CFR 111.60-17
  - Verify condition of outlets 46 CFR 129.220(c)  
46 CFR 111.79-1
  
- 123. Inspect components installed in designated hazardous locations
  - Verify hazardous location(s) 46 CFR 129.520  
46 CFR 111.105-9
  - Verify fixtures for hazardous location(s) 46 CFR 129.520  
46 CFR 111.105-9 & -11
  - Verify integrity of system(s) 46 CFR 111.105-5

## Structural & Watertight Integrity

- 124. Inspect hatches and Class-1 watertight doors
  - Verify condition of knife edges 46 CFR 125.140 & 127.230  
46 CFR 42.15-10
  - Verify condition of gasket material MSM II/B.1.E.5
  - Verify watertight integrity between gasket and knife edge 46 CFR 174.210  
46 CFR 170.270
  - Verify condition and operation of hinges and dogging devices MSM II/B.1.E.5
  - Verify design ,operation, installation and testing of quick-acting closing-device 46 CFR 174.210(c)(1)  
46 CFR 170.270(a),(b) & (e)
  - Verify operation of indicator lights at the control station 46 CFR 174.210(c)(3)
  - Verify markings 46 CFR 174.210(d)  
46 CFR 131.893
  - Verify doors are installed in permissible locations 46 CFR 170.255
  
- 125. Inspect Class 2 & 3 watertight doors
  - Verify operation of local controls 46 CFR 127.230  
46 CFR 170.270(c)(2)
  - Verify operation of remote controls ASTM F1197/7.1
  - Verify condition of replaceable interface between door and frame assembly 46 CFR 170.270(c)(1)  
ASTM F1196/6.3
  - Verify operation of alarms ASTM F1197/11.5
  - Verify closing times are in compliance ASTM F1197/11.2 & .4
  - Verify markings 46 CFR 131.893  
ASTM F1196/11.1
  - Verify watertight integrity ASTM F1196/S1
  - Verify operation of doors under reserve power 46 CFR 170.270(c)(3)  
ASTM F1197/S3
  - Verify watertight doors are installed in permissible locations 46 CFR 170.260  
46 CFR 170.265

- ☐ 126. Inspect watertight bulkhead penetrations
  - Verify locations 46 CFR 127.230  
46 CFR 174.190
  - Verify ability to seal 46 CFR 128.230  
46 CFR 56.50-1
  - Verify sealing material approval(s) 46 CFR 56.50-1(a)

- ☐ 127. Inspect hull structure
  - Examine for damage, wastage and fractures 46 CFR 126.430  
MSM II/B.1.B.1
  - Verify no unauthorized repairs 46 CFR 126.150

## Pollution Prevention

- ☐ 128. Inspect Oily Water Separator (OWS)
  - Verify approval 46 CFR 131.935  
33 CFR 155.380
  - Verify overboard discharge valve is closed 33 CFR 151.10  
MARPOL I/14
  - Witness operation 33 CFR 155.380  
MARPOL I/14 & IMO Res A.1120(30)
  - Verify means to retain oily waste 33 CFR 155.330-.370  
MARPOL I/14.3-.5 & IMO Res A.1120(30)

- ☐ 129. Inspect sewage system
  - Verify presence of manufacturer's instructions 33 CFR 159.57
  - Verify operation 46 CFR 131.940  
33 CFR 159.57 & IMO Res A.1120(30)
  - Verify Marine Sanitation Device (MSD) approval 33 CFR 159.7  
MSM II/B6.F.4
  - Verify capacity 33 CFR 159.57(b)(8)
  - Verify piping and wiring 33 CFR 159.97
  - Verify instructions and warning placard posted 33 CFR 159.59

- 130. Conduct garbage handling (MARPOL Annex V) survey
  - Verify plan compliance 46 CFR 131.935  
33 CFR 151.51 & .57
  - Verify handling of plastics 33 CFR 151.55  
MARPOL V/10.3
  - Verify placards posted 33 CFR 151.59  
MARPOL V/10.1
  
- 131. Conduct an International Air Pollution Prevention (IAPP MARPOL Annex VI) survey
  - Verify equipment/systems containing Chloro Fluoro Carbons (CFCs), Hydro CFCs and Volatile Organic Compounds (VOCs) are on certificate MARPOL VI/12
  - Verify presence of equipment on certificate and approvals MARPOL VI/4  
IMO Res A.1120(30)
  - Verify compliance with Emission Control Area (ECA) MARPOL VI/13 & 14  
MARPOL VI/App-VII
  - Review exhaust cleaning systems equivalency documentation MARPOL VI/4
  - Review delivery notes MARPOL VI/18.5 & App V
  - Verify samples MARPOL VI/18.8.1
  - Verify compliance with NOx and SOx MARPOL VI/13 & 14  
40 CFR 1043.30
  - Review notification(s) of fuel oil availability and quality MARPOL VI/18.2.4
  
- 132. Conduct Vessel General Permit (VGP) compliance verification
  - Verify discharges are in compliance with VGP VGP 2.2.3.2  
VGP 4.3
  - Verify log entries VGP 4.1.1.1  
VGP 4.2
  
- 133. Inspect pollution prevention equipment
  - Determine applicability 46 CFR 131.935  
MSM II/B.6.D.1
  - Verify communication between participants in transfer operations 33 CFR 155.785
  - Verify transfer hoses tested and marked 33 CFR 155.800  
33 CFR 154.500



- Verify locations of pollution/MARPOL placards 33 CFR 155.450
- Verify condition of hose and manifold connections 33 CFR 156.170
- Verify condition and size of containment (when applicable) 33 CFR 155.320  
MSM II/B.6.D.6
- Verify containment closures 33 CFR 156.120(n)  
33 CFR 156.120(o)
- Verify sufficient lighting 33 CFR 155.790
- Verify signed copies of Declaration of Inspection are present 33 CFR 156.150(f)  
MSM II/B.6.E.6

134. Conduct an IOPP (MARPOL Annex I) survey

- Verify applicability 46 CFR 131.935  
33 CFR 151.03
- Verify standard discharge connection(s) 33 CFR 155.430  
MARPOL I/13
- Verify oil record book entries 33 CFR 151.25  
MARPOL I/17
- Witness operational test of equipment 33 CFR 155.330-.380  
MARPOL I/14
- Verify piping and tank configuration 33 CFR 155.410-.430  
MARPOL I/12
- Confirm equipment installation matches international certificate IOPP Certificate Supplement  
IMO Res A.1120(30)

## **Topside Equipment**

135. Examine freeing ports and scuppers

- Verify no modifications 46 CFR 127.230  
46 CFR 174.215
- Verify unobstructed 46 CFR 42.15-60  
46 CFR 42.15-70

136. Examine ground tackle and related equipment

- Determine size of anchor(s) required 46 CFR 130.240  
ABS 3-5-1
- Verify operation of windlass 46 CFR 130.240  
ABS 7-3-2/1.1.7
- Verify operation of capstan 46 CFR 130.240  
ABS 7-3-2/1.1.7

- Examine condition of anchoring equipment 46 CFR 130.240  
ABS 7-3-2/1.1.7
- Verify anchors are deployable 46 CFR 130.240  
ABS 7-3-2/1.1.7

137. Inspect mooring system and equipment

- Verify condition of bits, cleats, fairleads and winches 46 CFR 127.210 & 130.250  
SOLAS 14 II-1/3-8.2
- Verify mooring lines/wires sizes and condition 46 CFR 130.250  
46 CFR 184.300

138. Inspect air ports, dead covers and natural vent openings

- Verify covers are readily available and operational 46 CFR 127.250  
46 CFR 125.140
- Examine condition 46 CFR 126.430  
46 CFR 42.15
- Examine covers for proper fit and seal 46 CFR 42.15  
ICLL I/23

139. Inspect tank vents

- Verify condition and location 46 CFR 128.110  
46 CFR 56.50-85
- Verify installation and condition of flame screens (when applicable) 46 CFR 56.50-85(a)(8)  
46 CFR 128.450(b)
- Verify permanently attached means for closing tank vents 46 CFR 56.50-85(a)(7)
- Verify tank vents are fitted with insect screens 21 CFR 1250.82(c)

140. Inspect rails and guards

- Verify rail heights and courses 46 CFR 127.310 - 330  
46 CFR 42.15-75
- Verify storm rails 46 CFR 127.320  
46 CFR 42.15-75

141. Examine cranes

- Verify operation of controls, limits and stops 46 CFR 107.259  
46 CFR 126.130
- Verify posting of load, rigger charts and control markings 46 CFR 109.525  
API RP 2D
- Verify condition of wire rope, hooks, sheaves and blocks API RP 2D

- Examine pedestal mounting API RP 2D
- Examine hydraulic fittings and hoses API RP 2D
- Verify boom angle indicator functions API RP 2D
- Verify and Examine Crane Operator designation letter(s) 46 CFR 109.527(a)

142. Witness 5-year load test on crane(s)

- Verify load test weight 46 CFR 126.130  
46 CFR 107.260
- Verify third party certification or calibration of dynamometer (load cell) 46 CFR 107.259  
API RP 2D
- Verify brake(s) hold with suspended load API RP 2D
- Verify condition of hook API RP 2D

## Cargo Systems

143. Inspect liquid cargo transfer system(s)

- Examine material condition of pump(s), manifold and piping 46 CFR 128.110  
46 CFR 56.50-60
- Verify electrical equipment is appropriate for application and location 46 CFR 129.520
- Verify pump(s) and controls are operational 46 CFR 129.110  
46 CFR 111.70
- Verify operation of remote shutdown(s) 46 CFR 131.935  
46 CFR 129.540

144. Examine portable tank(s)

- Verify tank(s) are approved 46 CFR 125.110(d)
- Verify stowed and segregated 46 CFR 125.130  
49 CFR 172.101
- Verify additional fire fighting equipment 46 CFR 132.370(a)  
46 CFR 98.30-37
- Verify fill and discharge compliance 46 CFR 125.110  
46 CFR 98.31-10
- Verify secured in accordance with vessel's cargo securing manual 46 CFR 125.110(d)  
46 CFR 132.370

- Verify materiel condition 49 CFR 176.340  
49 CFR 173.32 & .241(c)

145. Verify compliance of packaged hazardous materials

- Verify material is packaged, marked and labeled 46 CFR 125.130  
49 CFR 176.3
- Verify material is stored and segregated 49 CFR 176.63

146. Inspect remotely-operated valves and controls

- Verify remote valve control(s) are fitted with name plates 46 CFR 56.50-1(g)(2)(i)
- Verify valve operates freely 46 CFR 126.430
- Verify remote control mechanisms function properly 46 CFR 126.430
- Verify power-operated valve(s) can be operated from all control stations 46 CFR 128.240  
46 CFR 56.50-60(d)(3)

## Emergency Drills

147. Evaluate Fire Drill

- Witness drill 46 CFR 131.535  
SOLAS 14 III/19.2.1
- Verify crew's ability to organize 46 CFR 131.535(c)  
SOLAS 14 III/19.3.4.2.1
- Verify crew's familiarity with their duties and use of equipment 46 CFR 131.535(c)(5)  
SOLAS 14 III/19.3.4.2.1
- Verify firefighting gear is compatible and complete 46 CFR 131.535(c)(5)  
SOLAS 14 III/19.3.4.2.3
- Verify operation of alarms 46 CFR 131.535(c)(1)  
SOLAS 14 III/19.3.4.2.4
- Verify effective communication with master 46 CFR 131.535(c)(1)  
SOLAS 14 III/19.3.4.2.4

148. Evaluate Man Overboard Drill

- Verify vessel's ability to recover a helpless person 46 CFR 133.135(c)(1)  
46 CFR 131.330(b)
- Witness launching of rescue boat (when applicable) 46 CFR 131.530(b)(7)  
46 CFR 133.160(c)

- Evaluate crew's proficiency in handling and maneuvering the rescue boat (when applicable) 46 CFR 131.530(b)(7)  
SOLAS 14 III/19.3.3.6
- Witness recovery of rescue boat 46 CFR 133.160(d)-(f)

149. Evaluate Abandon Ship Drill

- Witness drill 46 CFR 131.530(b)  
SOLAS 14 III/19.3.3
- Verify general alarm and public address announcements 46 CFR 131.530(b)(3)(i)  
SOLAS 14 III/19.3.3.1.1
- Verify crew's familiarity with assigned duties 46 CFR 131.530(b)(3)(iii)  
SOLAS 14 III/19.3.3.1.2
- Evaluate crew and offshore workers are suitably dressed and proficient in donning lifejackets and/or immersion suits 46 CFR 131.530(b)(3)(iv) & (v)  
SOLAS 14 III/19.3.3.1.3 & .4
- Witness operation of davit launching lifeboat or rescue boat 46 CFR 131.530(b)(3)(vi)  
SOLAS 14 III/19.3.3.1.5
- Witness operation of lifeboat or rescue boat engine 46 CFR 131.530(b)(3)(vii)  
SOLAS 14 III/19.3.3.1.6
- Witness operation of davit launching liferafts 46 CFR 131.530(b)(3)(viii)  
SOLAS 14 III/19.3.3.1.7

150. Evaluate Security Drill

- Review procedures contained in security plan 33 CFR 104.230(b)(2)  
ISPS Code A/9.4.4
- Witness drill 33 CFR 104.230(a)  
SOLAS 14 XI-2/4.2
- Evaluate crew's response 33 CFR 104.220  
ISPS Code A/13.3
- Verify control and communication 33 CFR 104.245  
ISPS Code A/7.2.7
- Verify implementation of plan procedures 33 CFR 104.230(a)  
ISPS Code A/9.4

# Hull Inspection

- ☐ 151. Inspect hull
  - Examine for wastage, defect(s), and damage 46 CFR 126.140(a)  
46 CFR 125.140
  - Examine stress areas (stringer plate, sheer plate, etc) NVIC 07-68 IV(B)  
MSM II/B.3.B
  - Examine seachest(s), strainers and emergency bilge suction and overboard discharges for wastage, defect(s), and damage 46 CFR 61.20-5  
NVIC 07-68 II(A)
  - Verify condition of drydock (bottom) plugs NVIC 07-68 II(A)  
MSM II/B.3.B
  - Verify wastage/corrosion is within limits NVIC 07-68 III(C)  
ABS 7-A-4/27
  - Ensure unsatisfactory condition(s) are resolved 46 CFR 42.09-45  
MSM II/B.3.B
  
- ☐ 152. Inspect hull markings
  - Verify placement of hull markings 46 CFR 131.210-.230  
46 CFR 67.120 & 69.177
  - Verify markings are permanently affixed 46 CFR 131.210-.230  
46 CFR 67.121
  - Verify markings are of contrasting colors 46 CFR 131.220(f)  
46 CFR 42.13-40
  
- ☐ 153. Inspect main propulsion propeller(s)
  - Examine condition 46 CFR 126.470  
46 CFR 61.20-5(a)
  - Verify locking nut is installed and secured 46 CFR 58.01-5  
ABS 7-4-1/1
  - Witness NDT of propeller coupling bolts and flange radius 46 CFR 61.20-18(c)  
ABS 7-5-1/3.5
  
- ☐ 154. Inspect tailshaft(s) and stern bearing(s)
  - Determine if tailshaft(s) need to be drawn 46 CFR 126.470 & 61.20-17  
46 CFR 58.01-5 & ABS 7-2-1/13
  - Verify bearing clearance, inboard seal assembly and record of lube oil analysis are within limits 46 CFR 61.20-17(e) & 20-23(c)  
ABS 7-5-1/1 & 3

- Visually examine shaft 46 CFR 61.20-18(a) & .20-23(a)  
ABS 7-5-1/1 & 3
- Witness non-destructive testing (NDT) of shaft's taper section and keyway 46 CFR 61.20-18(b)  
ABS 7-5-1/1
- Verify condition and wear/tear of strut bearing(s) MSM II/B.3.D.10
- Verify condition of blade hardware on Controllable Pitch Propeller (CPP) ABS 7-5-1/3

155. Inspect rudder installation

- Verify type of assembly installed 46 CFR 128.110 & 58.01-5  
ABS 3-2-14/1
- Examine assembly 46 CFR 126.470 & 58.01-5  
ABS 7-4-1/1
- Verify bearing clearance(s) ABS 7-4-1/1
- Verify condition of pintle(s), gudgeon(s), bushing(s), pintle nut(s), and locking device(s) ABS 7-4-1/1  
MSM II/B.3.E.2
- Verify condition of pintle by nondestructive test (NDT) MSM II/B.3.E.2
- Verify tightness of rudder assembly by pneumatic test ABS 7-4-1/1

156. Inspect hull appendages

- Examine condition and structural integrity of bilge keel 46 CFR 126.470  
46 CFR 58.01-5
- Examine condition of coolers (keel or grid) 46 CFR 128.420-.430
- Examine condition of transducers and other similar appendages ABS 7-4-1/1

157. Inspect anchor chain(s) and chain locker

- Verify chain is marked 46 CFR 130.240  
ABS 2-2-2/21
- Examine length of chain ABS 7-3-2/5.1.4
- Examine chain locker NVIC 07-68 III(C)  
ABS 7-A-4/27
- Examine chain's pad eye (holdfast) ABS 7-3-2/5.1.4
- Examine hawse pipe ABS 7-3-2/5.1.4

- 158. Inspect sea valve(s)
  - Determine which are due for examination 46 CFR 126.470  
46 CFR 61.20-5(b)
  - Verify quantity and type 46 CFR 125.140  
46 CFR 42.15–60(e)
  - Verify that all sea valves are identified and are opened for examination 46 CFR 42.15–60(c)  
46 CFR 56.50–95
  - Examine external/internal components 46 CFR 61.20-5(b)  
46 CFR 42.09-25(b)(4)
  
- 159. Inspect non-propulsion thruster(s)
  - Examine propeller 46 CFR 128.110 & 58.01-5  
ABS 7-4-1/1 & 7-9-6/1.3
  - Examine thruster tunnel 46 CFR 125.140 & 127.210  
46 CFR 42.09-30(b)
  - Verify shaft seal or packing gland in place ABS 7-4-1/1 & 7-9-6/1.3
  
- 160. Determine if vessel qualifies to participate in Underwater Survey Program (UWILD)
  - Review application 46 CFR 126.140(f)  
NVIC 01-89
  - Examine condition of hull and protection system NVIC 01-89 Encl.1/1.a
  - Verify reference points 46 CFR 126.140(f)(3)  
NVIC 01-89 Encl.1/1.b
  - Verify hinged gratings are installed on sea chest(s) 46 CFR 126.140(f)(4)  
NVIC 01-89 Encl.1/1.c
  - Verify means for taking shaft-bearing and rudder-bearing clearances 46 CFR 126.140(f)(5)
  - Review hull gauging report 46CFR 126.140 (g)(2)  
NVIC 01-89 Encl.1/3
  - Review reference video NVIC 01-89 Encl.1/1.d
  - Forward application with OCMI's recommendation MSM II/B.9.K.7  
MSM II/G.2.V.6.a
  
- 161. Inspect hull during an underwater survey
  - Review vessel's application for (UWILD) drydocking examination 46 CFR 126.140(f)  
NVIC 01-89 Encl.1/2.a



- Verify procedures to be followed 46 CFR 126.140(f)(1)  
46 CFR 197.400
- Verify suitability of location 46 CFR 126.140(f)(2)  
NVIC 01-89 Encl.1/5.c
- Review reference plans and video 46 CFR 126.140(f)(3)  
NVIC 01-89 Encl.1/2.a(12)
- Meet with vessel's representative and diving supervisor to discuss details of survey NVIC 01-89 Encl.1/4
- Verify vessel's representative submitted a signed letter of vessel's overall condition 46 CFR 126.140(f)  
NVIC 01-89 Encl.1/2.a(7)
- Verify qualification of divers, type of diving equipment, and their nondestructive testing (NDT) and damage repair capabilities 46 CFR 126.140(f)  
NVIC 01-89 Encl.1/5.f
- Verify all areas of the hull have been cleaned NVIC 01-89 Encl.1/5.g
- Witness underwater survey from a video monitor NVIC 01-89 Encl 1/5.l

## Internal Structural Exam

### 162. Verify confined spaces are safe for entry

- Review Marine Chemist Certificate 29 CFR 1915.12(f)  
CIM 5100.47A 13.B.3
- Verify Competent Person has maintained Marine Chemist Certificate 29 CFR 1915.15  
CIM 5100.47A 13.B.8
- Verify no changes to vessel's condition 29 CFR 1915.15(b)
- Verify forced ventilation is provided 29 CFR 1915.13(b)(3)
- Verify condition of space access point 29 CFR 1915.76

### 163. Inspect internal structures

- Examine internal structures 46 CFR 126.140(c)  
46 CFR 125.140 & 42.09-30
- Examine coamings, closures and other fittings 46 CFR 42.09-25(b)(2)  
MSM II/B.3.B
- Verify wastage discovered is within acceptable limits NVIC 07-68 III(C)  
ABS 7-A-4/27

- Verify unsatisfactory condition(s) are resolved 46 CFR 42.09-45

## Welding Repair

- 164. Evaluate structural repair proposals
  - Evaluate extent of damage and/or wastage/corrosion 46 CFR 125.140 & 42.09-45  
46 CFR 127.210 & ABS 7-A-4/17
  - Review repair proposal MSM II/A.1.F.2.a  
NVIC 07-68 IV
  - Verify repair materials 46 CFR 42.09-50(c)  
ABS 7-A-4/29
  - Verify welding procedures 46 CFR 42.09-50(c)  
46 CFR 2.75-70
  - Evaluate alternative repair methods for equivalency 46 CFR 125.170  
MSM II/A.1.F.2.c
  
- 165. Verify welding Procedure Qualification Record(s) (PQR)
  - Confirm need for qualified welding procedure 46 CFR 2.75-70  
46 CFR 128.110(a)
  - Verify variables on PQR(s) to the Welding Procedure Specification (WPS(s)) ASME IX/QW-200.1(b)  
ASME IX/QW-250
  - Verify tests and results ASME IX/QW-200.2(b)
  
- 166. Verify welder is qualified to perform repair work
  - Confirm need for qualified welding procedure 46 CFR 2.75-70  
46 CFR 128.110(a)
  - Verify Welder Performance Qualification (WPQ) is valid ASME IX/QW-322.1
  - Verify variables on WPQ(s) ASME IX/QW-301.2  
ASME IX/QW-301.4
  - Verify tests are satisfactory ASME IX/Art III QW-300 series
  
- 167. Inspect fit-up
  - Examine material and verify it is fitted to approved joint detail 46 CFR 127.210  
ANSI/AWS D3.5-93
  - Verify materials (base, filler, gas) 46 CFR 127.210  
ABS 2-1-1/1.1
  - Verify welding processes 46 CFR 127.210  
ABS 2-4-1/1.7

- 168. Inspect back gouge
  - Examine welds for defects (discontinuity) 46 CFR 127.210  
ABS 2-4-1/5.9
  - Verify weld sequencing NVIC 07-68 V(F)  
ANSI/AWS D3.5-93
  - Verify joints are cleaned between interpasses NVIC 07-68 V(H)  
ABS 2-4-1/3.5

- 169. Inspect welds
  - Examine welds for uniformity and reinforcement 46 CFR 127.210  
ABS 2-4-1/5.15.1
  - Examine welds for defects (discontinuity) ABS 2-4-1/5.15.1  
NVIC 07-68 V(H)
  - Examine adjacent base metal for injurious arc strikes, spatter, undercut, overlap, slag and irregular and/or sharp edges ABS 2-4-1/5.15.1
  - Verify workmanship through an nondestructive test ABS 2-4-1/5.15.2  
ABS 2-4-1/5.17

## Nondestructive Testing

- 170. Inspect nondestructive testing (NDT) using the liquid (dye) penetrant method
  - Verify technician's qualification and certification 46 CFR 127.210  
ABS 2-4-1/5.17
  - Witness application technique ABS NDT Guide 6/5.5
  - Witness application procedures ABS NDT Guide 6/5.7
  - Witness visible penetrant examination ABS NDT Guide 6/7.5
  - Witness fluorescent penetrant examination ABS NDT Guide 6/7.7
  - Evaluate test results or technician's report ABS NDT Guide 6/9 & 11
- 171. Inspect nondestructive testing (NDT) using the magnetic particle method
  - Verify technician's qualification and certification 46 CFR 127.210  
ABS 2-4-1/5.17
  - Verify inspection technique ABS NDT Guide 7/5.5
  - Verify equipment and magnetic field strength ABS NDT Guide 7/5.7.1 & .2

- Witness application of visible magnetic particles ABS NDT Guide 7/5.7.3
- Witness application of fluorescent particles ABS NDT Guide 7/5.7.4
- Witness technician examine/interpret readings ABS NDT Guide 7/5.7 & 9
- Evaluate test results or review technician's report ABS NDT Guide 7/5.7 & 9

172. Inspect nondestructive testing (NDT) using the radiography (gamma rays or x-rays) method

- Verify technician's qualification and certification 46 CFR 127.210  
ABS 2-4-1/5.17
- Verify inspection technique ABS NDT Guide 2/5.3
- Verify film identification markings ABS NDT Guide 2/5.5
- Verify radiography quality level ABS NDT Guide 2/5.7
- Verify image Quality Indicator (IQI) ABS NDT Guide 2/5.9
- Witness technician examine/interpret readings ABS NDT Guide 2/5.15
- Review technician's report ABS NDT Guide 2/9 & 11

173. Inspect nondestructive testing (NDT) using the ultrasonic method

- Verify technician's qualification, certification and techniques 46 CFR 127.210  
ABS 2-4-1/5.17
- Verify calibrate block's material and thickness ABS NDT Guide 5/3.5
- Verify type of equipment/instrument used ABS NDT Guide 5/3.7
- Verify equipment is calibrated ABS NDT Guide 5/3.9
- Witness technician examine/interpret readings ABS NDT Guide 5/3.11
- Evaluate test results or review technician's report ABS NDT Guide 5/3.13

174. Inspect nondestructive testing (NDT) using the hydro-static method (Pressure Vessels)

- Verify requirement for test 46 CFR 126.470  
46 CFR 54.10-10(a)
- Verify ready for testing 46 CFR 54.10-10(b)
- Verify air has been purged 46 CFR 54.10-10(b)
- Verify piping components are isolated 46 CFR 54.10-10(b)

- Verify test pressure 46 CFR 54.10-10(b)  
46 CFR 54.10-20
- Verify test pressure is attained and maintained 46 CFR 54.10-10(c)
- Witness test 46 CFR 54.10-10(c)

175. Inspect nondestructive testing (NDT) using the hydro-static method (Piping Systems)

- Verify test pressure of nonstandard piping components 46 CFR 126.470  
46 CFR 56.97-5
- Verify system is ready for testing 46 CFR 56.97-25
- Verify air has been purged 46 CFR 56.97-30(a)
- Verify test medium 46 CFR 56.97-30(b)
- Verify piping components are isolated 46 CFR 56.97-30(c)
- Verify test pressure 46 CFR 56.97-30(e) & (f)
- Witness test 46 CFR 56.97-30(d)
- Verify test pressure is attained and maintained 46 CFR 56.97-30(g)
- Verify pressures for Installation tests 46 CFR 56.97-40

176. Inspect nondestructive testing (NDT) using the hydro-static method (Tanks and Bulkheads)

- Verify tanks/space is ready for testing 46 CFR 127.210  
ABS 3-7-1/3.5.4(a) & (b)
- Verify test medium being used ABS 3-7-1/3.5.4(a) & (b)
- Verify piping components are isolated ABS 3-7-1/3.5.4(a) & (b)
- Verify test pressure ABS 3-7-1/3.5.4(a) & (b)
- Witness test ABS 3-7-1/3.5.4(a) & (b)

177. Inspect nondestructive testing (NDT) using the pneumatic method (Pressure Vessels)

- Determine suitability for test 46 CFR 126.470  
46 CFR 54.10-15(a) & (b)
- Ensure all safety precaution are taken 46 CFR 54.10-15(g)
- Verify test pressure 46 CFR 54.10-15(c)
- Witness gradual pressure increase 46 CFR 54.10-15(d)
- Witness test 46 CFR 54.10-15(e)

- 178. Inspect nondestructive testing (NDT) using the pneumatic method (Piping Systems)
  - Verify test medium and temperature 46 CFR 126.470  
46 CFR 56.97-35(b)
  - Verify piping components are isolated 46 CFR 56.97-35(c)
  - Verify test pressure 46 CFR 56.97-35(f) & (g)
  - Witness gradual pressure increase 46 CFR 56.97-35(d)
  - Verify test pressure is attained and maintained 46 CFR 56.97-35(h)
  - Witness test 46 CFR 56.97-35(e)
  
- 179. Inspect nondestructive testing (NDT) using the tank air test (pneumatic) method (Tanks and Bulkheads)
  - Verify tanks/space is ready for testing 46 CFR 127.210  
ABS 3-7-1/3.5.4(d)
  - Verify piping components are isolated ABS 3-7-1/3.5.4(d)
  - Verify test pressure ABS 3-7-1/3.5.4(d)
  - Verify presence of leak indicating solution ABS 3-7-1/3.5.4(d)
  - Verify calibration of means to measure pressure ABS 3-7-1/3.5.4(d)
  - Witness initial test ABS 3-7-1/3.5.4(d)
  - Witness secondary test ABS 3-7-1/3.5.4(d)
  
- 180. Inspect nondestructive testing (NDT) using the hose test method (Tanks and Bulkheads)
  - Verify tanks/space is ready for testing 46 CFR 127.210  
ABS 3-7-1/3.5.4(c)
  - Verify nozzle size ABS 3-7-1/3.5.4(c)
  - Verify water pressure ABS 3-7-1/3.5.4(c)
  - Verify nozzle distance from joints/seams during test ABS 3-7-1/3.5.4(c)
  - Witness test ABS 3-7-1/3.5.4(c)
  
- 181. Inspect nondestructive testing (NDT) using the vacuum box method (Tanks and Bulkheads)
  - Verify tanks/space is ready for testing 46 CFR 127.210  
ABS 3-7-1/3.5.4(f)
  - Verify condition of gauge and injector ABS 3-7-1/3.5.4(f)

- Verify presence of leak indicating solution ABS 3-7-1/3.5.4(f)
- Verify test gauge pressure ABS 3-7-1/3.5.4(f)
- Witness test ABS 3-7-1/3.5.4(f)

## Follow-Up

### 182. Verify vessel compliance with the International Safety Management (ISM) Code

- Verify Master's responsibilities, authorities and over-riding authority 33 CFR 96.250  
SOLAS 14 IX/3.1
- Verify maintenance program for vital equipment 33 CFR 96.250  
ISM Code A/10.3
- Verify compliance of Safety and Environmental Policy 33 CFR 96.250  
ISM Code A/2
- Verify record keeping compliance 33 CFR 96.220(a)(3)  
ISM Code A/10.2.4
- Verify company responsibilities and authority are defined. 33 CFR 96.250  
ISM Code A/3
- Verify crew can identify and contact information of designated person(s) ashore 33 CFR 96.250  
ISM Code A/4
- Review audit documentation and ensure follow-up actions 33 CFR 96.250  
ISM Code A1.4.6, A/9

### 183. Issue deficiencies

- Determine deficiency's reference cite 46 USC 3313(b)  
MSM II/A.2.C.4.b
- Discuss deficiencies and corrective measures/timeframe with vessel's master or representative MSM II/A.2.C.2
- Issue signed CG-835V to vessel's master or representative MSM II/A.2.C
- Make entry on the Vessel Inspection Record (CG-2832) MSM II/A.3.Q

### 184. Issue/Endorse vessel's certificates

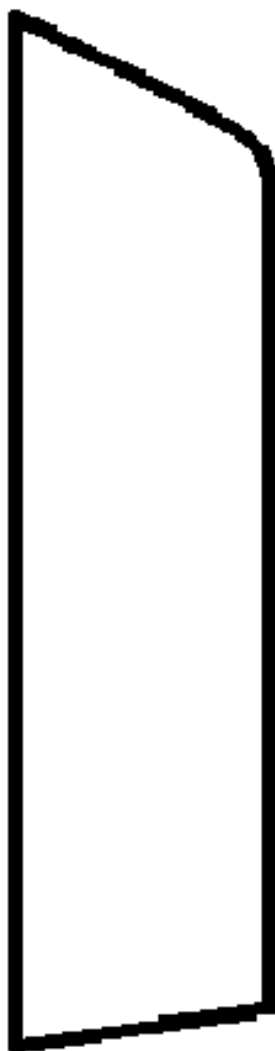
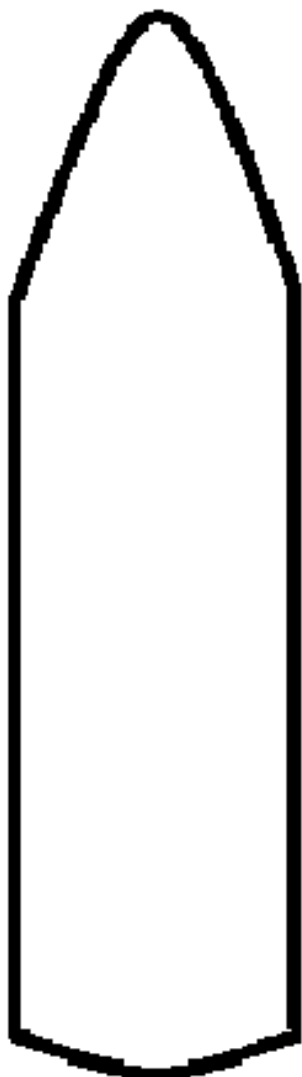
- Issue/Endorse certificates, as applicable 46 CFR 126.510(a)(2)  
SOLAS 14 I/12
- Obtain a copy of all endorsed certificates for the unit's vessel file MSM I/12.E.7

- 185. Complete MISLE Activity
  - Open existing activity in MISLE MSM I/12.G.2.a  
IMO Res A.1120(30)
  - Update inspection results MSM I/12.H.1  
MSM II/A.2.C.2.d
  - Update activity narrative MSM I/12.H.1  
MISLE User Guide
  - Update vessel details MSM I/12.H.1  
MISLE User Guide
  - Amend Certificate of Inspection MSM I/12.H.1  
MISLE User Guide
  - Print new or amended Certificate of Inspection and Deficiency Letter MSM II/A.2.C.6 & II/A.3  
MISLE User Guide
  - Change activity status to "Open - Submitted for Review" MSM I/12.H.1  
IMO Resolution A.1120(30)  
Survey Guidelines Under the Harmonized System of Survey and Certification (HSSC), 2017
  
- 186. Verify deficiency corrections
  - Determine an appropriate verification method for identified deficiency(s) MSM II/A.2.C.4
  - Verify correction(s) meet appropriate regulations MSM II/A.2.C.4.a
  - Clear deficiency(s) in MISLE activity MSM II/A.2.C.2.d  
MISLE User Guide
  - Remove control action MISLE User Guide
  
- 187. Ensure completion of drydock examination
  - Verify completions of all repairs MSM II/A.2.C
  - Issue amended Certificate of Inspection or amendment MPS-PR-SEC-05
  - Endorse SOLAS Cargo Safety Construction Certificate SOLAS 14 I/10



## Appendices

Vessel Layout:



**Recommended U.S. Vessel Deficiency Procedures:**

| Step   | Action  |                |                     |   |   |  |  |  |   |
|--|---|----------------|---------------------|---|---|--|--|--|---|
| 1  | Identify deficiency   |                |                     |   |   |  |  |  |   |
| 2  | Inform vessel representative  |                |                     |   |   |  |  |  |   |
| 3  | Record on the Deficiency Summary Worksheet (next page)  |                |                     |   |   |  |  |  |   |
| 4  | If deficiency is corrected prior to end of inspection, go to step 6   |                |                     |   |   |  |  |  |   |
| 5  | <p>If deficiency is unable to be corrected prior to end of inspection, issue CG-835V in accordance with the table below:</p> <table border="1" data-bbox="187 475 949 1341"> <thead> <tr> <th data-bbox="187 475 578 524">IF deficiency:</th> <th data-bbox="578 475 949 524">THEN issue CG-835V:</th> </tr> </thead> <tbody> <tr> <td data-bbox="187 524 578 760"> <p>Does NOT immediately impact crew/offshore worker safety, hull seaworthiness or the environment, e.g.,</p> <ul style="list-style-type: none"> <li>• Missing placards</li> <li>• Non-metallic expansion joints if more than 10 years in service</li> </ul> </td> <td data-bbox="578 524 949 760"> <p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> <li>• “X” number of days</li> <li>• At next drydock</li> </ul> </td> </tr> <tr> <td data-bbox="187 760 578 1019"> <p>Allows Vessel operations to be MODIFIED to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> <li>• Expired international certificates</li> <li>• Automation defect</li> <li>• Insufficient lifesaving equipment</li> </ul> </td> <td data-bbox="578 760 949 1019"> <p>That restricts operation of vessel to meet current vessel conditions, e.g.,</p> <ul style="list-style-type: none"> <li>• Reduced route</li> <li>• Increased crew</li> <li>• Fewer offshore workers</li> </ul> </td> </tr> <tr> <td data-bbox="187 1019 578 1341"> <p>DOES immediately impact crew/offshore worker safety, hull seaworthiness, or the environment and <u>cannot</u> be modified to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> <li>• Missing or defective firefighting equipment</li> <li>• Structural defect or damage</li> </ul> </td> <td data-bbox="578 1019 949 1341"> <p>That requires the deficiency to be corrected prior to operating vessel (“NO SAIL” item), e.g.,</p> <ul style="list-style-type: none"> <li>• Prior to carrying offshore workers</li> <li>• Prior to carrying cargo</li> </ul> </td> </tr> </tbody> </table> | IF deficiency: | THEN issue CG-835V: | <p>Does NOT immediately impact crew/offshore worker safety, hull seaworthiness or the environment, e.g.,</p> <ul style="list-style-type: none"> <li>• Missing placards</li> <li>• Non-metallic expansion joints if more than 10 years in service</li> </ul> | <p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> <li>• “X” number of days</li> <li>• At next drydock</li> </ul> | <p>Allows Vessel operations to be MODIFIED to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> <li>• Expired international certificates</li> <li>• Automation defect</li> <li>• Insufficient lifesaving equipment</li> </ul> | <p>That restricts operation of vessel to meet current vessel conditions, e.g.,</p> <ul style="list-style-type: none"> <li>• Reduced route</li> <li>• Increased crew</li> <li>• Fewer offshore workers</li> </ul> | <p>DOES immediately impact crew/offshore worker safety, hull seaworthiness, or the environment and <u>cannot</u> be modified to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> <li>• Missing or defective firefighting equipment</li> <li>• Structural defect or damage</li> </ul> | <p>That requires the deficiency to be corrected prior to operating vessel (“NO SAIL” item), e.g.,</p> <ul style="list-style-type: none"> <li>• Prior to carrying offshore workers</li> <li>• Prior to carrying cargo</li> </ul> |
| IF deficiency:   | THEN issue CG-835V:   |                |                     |   |   |  |  |  |   |
| <p>Does NOT immediately impact crew/offshore worker safety, hull seaworthiness or the environment, e.g.,</p> <ul style="list-style-type: none"> <li>• Missing placards</li> <li>• Non-metallic expansion joints if more than 10 years in service</li> </ul>  | <p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> <li>• “X” number of days</li> <li>• At next drydock</li> </ul>   |                |                     |   |   |  |  |  |   |
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| 6  | Enter CG-835V data in MISLE   |                |                     |   |   |  |  |  |   |

**Deficiency Summary Worksheet:**

| <b>Name of Vessel</b> |  |
|-----------------------|--|
| <b>Deficiency</b>     | <b>Req't. Issued/<br/>Date Cleared</b> |
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Notes: \_\_\_\_\_

Blank lined area for notes, consisting of 27 horizontal lines.





## Conversions:

| <b>Distance and Energy</b>   |       |   |                   |                                      |         |   |           |
|--|-------|---|-------------------|--------------------------------------|---------|---|-----------|
| Kilowatts (kW)   | X     | 1.341                                     | =                 | Horsepower (hp)                      |         |   |           |
| Feet (ft)  | X     | 3.281                                     | =                 | Meters (m)                           |         |   |           |
| Long Ton (LT)  | X     | .98421                                    | =                 | Metric Ton (t)                       |         |   |           |
| <b>Liquid</b> ( <i>NOTE: Values are approximate</i> )                              |       |   |                   |                                      |         |   |           |
| Liquid   | bb/LT | m <sup>3</sup> /t                         | bb/m <sup>3</sup> | 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                                 |         |   |           |
| <b>Weight</b>  |       |   |                   |                                      |         |   |           |
| 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 =<br>6.29 m <sup>3</sup> | 1 psi             | = .06895 Bar = 2.3106 ft<br>of water |         |   |           |
| <b>Temperature: Fahrenheit = Celsius</b> (°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     |
| <b>Pressure: Bars = Pounds per square inch</b>                                     |       |   |                   |                                      |         |   |           |
| 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                          |         |   |           |