The **Inspection Criteria References (ICR)** are grouped in pre-developed forms by the subchapter in Title 46 applicable to the vessel the Vessel Action Plan (VAP) is being developed for. They are comprised of four sections.

- **Section One** identifies the System, Subsystem, and the ICR Number for referencing the item.
- **Section Two** identifies the authorities—Who is the authorized inspector, what the specific reference for requiring the inspection item, and what the inspection frequency is for that item.
- **Section Three** provides the inspection criteria—how to determine if the item is in compliance.
- **Section Four** identifies what actions are required if the item is found deficient.

In order to prepare the form, the Company SIP Agent will:

- Delete those ICR items that do not apply to the vessel in question.
- Add ICRs for vessel systems that are not provided for in the subchapter specific package, but remain required elements for the vessel inspection program.
- Note all changes on the Record of Changes page.

CAVEAT: Under no circumstances is the list contained here to be considered complete for all vessels that may be enrolled in SIP. It is provided as a template only. ICRs are to be provided for all vessel systems required to be inspected. This would include relevant sections of Titles 33, 46, and 49 CFR, and amplifying policy or regulations, such as IMO Conventions, Treaties, Navigation and Inspection Circulars (NVIC), The Marine Safety Manual, and Official Coast Guard Policy Letters. These documents should be reviewed periodically for currency and revised as the underlying regulations or policy changes.

STREAMLINED INSPECTION PROGRAM

INSPECTION CRITERIA REFERENCE

(ICR)

For U.S. inspected passenger vessels

(Subchapter K)

TABLE OF CONTENTS

G. NAVIGATION EQUIPMENT
- 01 Radar
- 02 Magnetic Compass
- 03 Depth Sounder *(Not required by Subchapter K)*
- 04 Radio
- 05 Navigation Lights
- 06 Internal Communication Control
- 07 Charts & Publications
- 08 Dayshapes & Whistle
- 09 Electronic Positioning Equipment
- 10 Logbooks Maintained

H. GROUND TACKLE
- 01 Anchor System
- 02 Bitts, Cleats, Fairleads

I. HULL,DECKS,FITTINGS,WATERTIGHT INTEGRITY
- 01 Watertight Doors
- 02 Watertight Bulkhead Penetrations
- 03 Stuffing Tubes, Sealants
- 04 Remote Valves & Controls
- 05 Hull & Deck Openings
- 06 Freeing Ports & Self Bailers
- 07 Windows and Airports, Port Lights
- 08 Shell Plating/Internal Structural
- 09 Steel & Aluminum Hulls
- 10 FRP Hulls & Structure
- 11 Wood Hulls & Structure
- 12 Markings

J. ACCOMMODATIONS/RELATED SPACES
- 01 Passenger & Crew Accommodations
- 02 Heating & Cooking Equipment
- 03 Pollution Placards
- 04 Marine Sanitation
- 05 Emergency Checklist
- 06 Washer & Dryer *(Not required by Subchapter K)*
- 07 Berthing Accommodations
- 08 Mess Deck Spaces
- 09 Paint Locker
- 10 Ladders, Rails Guards & Embarkation Stations

K. EMERGENCY DRILLS
- 01 Crew Training and Drills Properly Conducted
- 02 Crew Training and Drills Properly Logged

L. FORMS,NOTICES,PUBLICATIONS,CREW REQUIREMENTS
- 01 Pollution/MARPOL
- 02 Coast Guard/SOLAS Forms
- 03 Vessel Manning

M. STEAM POWER SYSTEMS
- 01 External Exam of Boilers
- 02 Waterside Exam of Watertube Boilers
- 03 Fireside Exam of Watertube Boilers
- 04 Fireside Exam of Firetube Boilers
- 05 Waterside Exam of Firetube Boilers
- 06 Required Mounts
- 07 Hydrostatic Test
- 08 Safety Valves
- 09 Condensate System
- 10 Feedwater System
- 11 Main Engines
- 12 Insulation

N. DIESEL POWER SYSTEMS
- 01 Remote Engine Shutdowns
- 02 Condition & Installation of Engines
- 03 Air Starting Systems
- 04 Hydraulic Starting Systems
- 05 Electric Starting Systems
- 06 Fuel Systems

O. UNFIRED PRESSURE VESSELS
- 01 External Exam of UPV
- 02 Internal Exam of UPV
- 03 Hydrostatic Testing
- 04 Test Pressure Relief Valves

P. AUXILIARY MACHINERY & EQUIPMENT
- 01 Steering Gear Components
- 02 Operational Test of Steering Gear
- 03 Fuel Oil & Transfer System
- 04 Bilge System
- 05 Refrigeration & Air Conditioning
- 06 Potable Water System *(Not required by Subchapter K)*

Q. ELECTRICAL SYSTEMS
- 01 Switchboards
- 02 Service Generators
- 03 Emergency Generators
- 04 Emergency Batteries/Batteries
- 05 Motor Controllers *(Not required by Subchapter K)*
- 06 Lighting Systems
- 07 Receptacle Outlets
- 08 Distribution Panels
- 09 Wiring
- 10 Internal Communication System
- 11 Engineers Call & Alarm Systems *(Not required by Subchapter K)*
- 12 Components of Hazardous Locations

RECORD OF CHANGES

CHANGE NUMBER	DATE OF CHANGE	DATE ENTERED	BY WHOM ENTERED

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.302, 115.306, 121.502, 121.702, 122.402
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

Verify that the following documents are on board and current:

a. Certificate of Inspection
b. FCC Certificate/ License
c. Certificate of Financial Responsibility
d. Certificate of Documentation
e. Stability Letter
f. Officers License's
g. Vessel Action Plan available
h. SOLAS Passenger Ship Safety Certificate

DEFICIENCY ACTION

OBTAIN CURRENT DOCUMENT AND PLACE ONBOARD PRIOR TO OPERATION.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.420
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

Verify that the following publications or appropriate extracts are onboard and currently corrected for the intended operating area as determined by the OCMI:

a. Navigation Rules
b. Coast Pilot
c. Charts
d. Notice to Mariners
e. Tide Tables
f. Current Tables
g. Light Lists

DEFICIENCY ACTION

OBTAIN CURRENT PUBLICATIONS AND PLACE ONBOARD.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.810, 122.730, 122.740
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

Verify the following annual servicing reports:

a. Fire extinguishing equipment servicing.

b. Life raft servicing

c. Hydrostatic release unit servicing

DEFICIENCY ACTION

CONTACT SERVICING COMPANY AND HAVE SYSTEM SERVICED PRIOR TO CARRIAGE OF PASSENGERS.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.808, 117.71, 117.75, 117.78, 122.516, 122.604
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

a. Retroreflective material on both sides, at least 31 sq. inches on each side.

b. Type I, CG approved.

c. Verify PFD lights work. If chemical type, check expiration date. If battery type, check battery expiration date, lens and seal.

d. Vessel name clearly labeled on each PFD.

e. Check straps, snaps, jacket fabric for signs of wear, deterioration.

f. Verify KAPOX pliability. If other type, i.e. cork, contact your local OCMI for inspection criteria.

g. Stowed in proper location & labeled.

h. Wearing instructions posted.

i. Adequate number onboard. 1 for every person allowed by the COI.

- Additional 10% of total is required to be children's PFDs, or
- 5%, where all extended size PFDs are used on board; unless adult passengers only

DEFICIENCY ACTION

REMOVE DEFICIENT PFD FROM THE VESSEL, AND REPLACE WITH A SERVICEABLE PFD. IF UNABLE TO REPLACE, IMMEDIATE NOTIFICATION OF COGNIZANT OCMI REQUIRED, AND PASSENGER TOTAL REDUCED TO NUMBER OF SERVICEABLE PFD'S ONBOARD.

SYSTEM: LIFESAVING EQUIPMENT **ICR NUMBER:** **B**
SUBSYSTEM: RING BUOYS **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 117.70, 122.604
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

a. Verify proper size onboard: 20" for vessel less than 26’ or 24” for all others

b. Verify free of cracks and weathering.

c. Vessel name stenciled on each.

d. Proper number onboard. Total count of all including those with lights and lines.

e. Ensure properly mounted in racks for easy deployment.

f. Check operation of attached waterlights. Check battery expiration date and replace as necessary.

DEFICIENCY ACTION

REPLACE DEFICIENT ITEM. ENSURE IT IS STENCILED AND PROPERLY STOWED. IF UNABLE TO CORRECT DEFICIENCY PRIOR TO CARRIAGE OF PASSENGERS, NOTIFY COGNIZANT OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 117.210, 122.520, 122.604, 122.702, 122.720, 122.722, 122.724, 122.726
REGULATORY INSPECTION FREQUENCY: ANNUALLY/MONTHLY/WEEKLY

INSPECTION CRITERIA

a. Check launching davit for signs of cracking, deterioration, structural defects.

b. Verify that davit and winch are operable. Ensure release hook is operational.

c. Inspect the hull of the rescue boat for soundness; watertight, rivets and welds, flotation.

d. Ensure boat plug is in place with a chain attached. Oarlocks onboard and permanently attached.

e. Rescue boat must have vessels name stenciled in 3" letters. Oars must also have vessels name on them.

f. Conduct an operational test of the rescue boat.

g. Ensure maintenance is carried out in accordance with the manufacturer’s instructions.

DEFICIENCY ACTION

OPERATIONAL DEFICIENCIES SHOULD BE CORRECTED ON THE SPOT. STRUCTURAL DEFICIENCIES WILL REQUIRE A WRITTEN REPAIR PROPOSAL, IMMEDIATE NOTIFICATION TO THE COGNIZANT OCMI AND NO PASSENGERS BEING CARRIED UNTIL THE SITUATION IS CORRECTED.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 117.137, 117.175, 117.200, 122.604
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Correct number & capacity in accordance with COI.

B. Stowed in tiers no more than 4 high. When stowed in tiers, spacers installed between each life float or buoyant apparatus.

C. Stowage is such that units will float free. Approved weak link is attached.

D. Painter is in good condition, secured to float and weak link. Weak link is attached to deck.

E. Stenciled with vessel name in 3” letters and total capacity in 1.5" letters. Life float paddles also stenciled with vessel name.

F. Body of unit is in good condition, lifelines and netting are in serviceable condition.

G. Each lifefloat shall be equipped with 2 paddles, water light, lifeline, pennants and a painter. Each buoyant apparatus shall be fitted with a water light, lifeline, pennants and a painter.

DEFICIENCY ACTION

IMMEDIATELY CORRECT DISREPANCY. IF UNABLE TO DO SO PRIOR TO CARRIAGE OF PASSENGERS CONTACT COGNIZANT OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 117.130, 117.150, 117.175, 117.200, 122.518, 122.722, 122.730, 122.740
REGULATORY INSPECTION FREQUENCY: ANNUALLY/MONTHLY

INSPECTION CRITERIA

A. Verify correct number & capacity in accordance with COI.

B. Verify annual servicing is current and done by approved servicing facility.

C. INSTALLATION

1. Sea painter in good condition; properly secured.
2. Support foundations not wasted; matches raft container, cleat attached.
3. Container bands punched.
4. Weak link secured to vessel and painter. Properly rigged for float free operation.
5. Launching Instructions posted; match raft type and capacity; readily visible.

D. HYDROSTATIC RELEASES

1. Hydrostatic release unit tested and marked (annual for RAFTGO). Disposable releases not expired.
2. Properly tensioned in accordance with manufacturer's specifications.
3. Clear of any obstructions.
4. Manual release accessible and facing inboard.

E. EMBARCATION ARRANGEMENTS

1. Embarkation ladder is approved.
2. Ladder ropes are not deteriorated.
3. Ladder rungs are rot cracked or broken.

DEFICIENCY ACTION

IF PAST SERVICING DATE, REPLACE WITH CURRENT LIFE RAFT. IF UNABLE TO DO SO PRIOR TO THE CARRIAGE OF PASSENGERS, CONTACT THE COGNIZANT OCMI. REPAIR/REPLACE/SERVICE HYDROSTATIC RELEASE UNITS AND EMBARCATION LADDERS PRIOR TO CARRYING PASSENGERS.

SYSTEM: FIRE PROTECTION EQUIPMENT **ICR NUMBER:** **C**
SUBSYSTEM: FIXED CO2 SYSTEM **01**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.810, 118.410, 122.612
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Servicing report current; within last year. All cylinders & flexible loops within hydro requirement (12 yrs.).

B. Diffusers are clear of obstructions.

C. Alarms in protected spaces are labeled, warning labels posted.

D. Cable pulls are marked.

E. Instructions are posted.

F. Cylinder brackets fixed and in good condition.

G. Cylinders free of corrosion.

H. Closure for protected spaces; provided; conduct operational test.

I. Ventilation and engine shutdowns operational.

J. Witness operational test of system by servicing company.

DEFICIENCY ACTION

CONTACT COGNIZANT OCMI PRIOR TO CARRIAGE OF PASSENGERS; CONTACT SERVICING COMPANY FOR REPAIRS.

SYSTEM: FIRE PROTECTION EQUIPMENT **ICR NUMBER:** **C**
SUBSYSTEM: FIXED HALON SYSTEM **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.810, 118.410, 118.420, 122.612
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Servicing report current; within last year. All cylinders & flexible loops within hydro requirement (12 yrs.).

B. Diffusers are clear of obstructions.

C. Alarms in protected spaces are labeled, warning labels posted.

D. Cable pulls are marked.

E. Instructions are posted.

F. Cylinder brackets fixed and in good condition.

G. Cylinders free of corrosion.

H. Closure for protected spaces; provided; conduct operational test.

I. Ventilation and engine shutdowns operational.

J. Witness operational test of system by servicing company.

DEFICIENCY ACTION

CONTACT COGNIZANT OCMI PRIOR TO CARRIAGE OF PASSENGERS; CONTACT SERVICING COMPANY FOR REPAIRS.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.810, 118.500, NFPA 10
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Approved type V, frame support welded or otherwise permanently attached to the bulkhead or deck.

B. Cylinder corrosion free.

C. Discharge hose is flexible; no signs of wear, deterioration; discharge nozzle intact; hose reel operates freely.

D. Hydro test dates current: 5 yrs. for CO2, 6 yrs. for dry chemical.

E. Location in accordance with table 181.500(a).

F. Verify written documentation of annual servicing.

DEFICIENCY ACTION

REPLACE WITH SERVICEABLE EXTINGUISHERS PRIOR TO THE CARRIAGE OF PASSENGERS.

SYSTEM: FIRE PROTECTION EQUIPMENT **ICR NUMBER:** **C**
SUBSYSTEM: PORTABLE FIRE EXTINGUISHERS **04**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.810, 118.500, 118.520, NFPA 10
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Approved type, mounted in approved bracket.

B. Cylinder corrosion free.

C. Discharge hose is flexible; no signs of wear, deterioration; discharge nozzle intact.

D. Hydro test dates current: 5 yrs for CO2, 6 yrs for dry chemical.

E. Location in accordance with table 181.500(a).

F. Verify written documentation of annual servicing.

DEFICIENCY ACTION

REPLACE WITH SERVICEABLE EXTINGUISHERS PRIOR TO THE CARRIAGE OF PASSENGERS.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 118.300, 118.310, 118.320, NVIC 6-72
REGULATORY INSPECTION FREQUENCY: ANNUALLY/QUARTERLY

INSPECTION CRITERIA

A. Operate fire pumps; operating properly?
   1. No excessive leaks.
   2. Foundation/ pump and motor secure.
   3. Shaft bearing- no play.
   4. Coupling guard in place.
   5. Remote operation.

B. All required hoses onboard, compatible threads, satisfactory condition.

C. Fire hydrant- Hose at hydrant and attached, spanner wrench, nozzle, low velocity fog applicator where applicable. All equipment compatible.

D. Hoses correct length (50') and size, based on COI.

E. Satisfactory hydrostatic test of hoses to fire pump shutoff head pressure.

F. Check pressure gauge on discharge side of pump to make sure it is functioning properly.

G. Verify all valves at fire hydrants are operable.

H. Verify compatibility of equipment at each hydrant.

I. Determine that relief valves (where installed) are set properly and discharge to acceptable location.

DEFICIENCY ACTION

IF UNABLE TO SATISFY OPERATION REQUIREMENTS, CONTACT COGNIZANT OCMI PRIOR TO CARRIAGE OF PASSENGERS.

SYSTEM:	FIRE PROTECTION EQUIPMENT	**ICR NUMBER:**	**C**
SUBSYSTEM:	FIRE DETECTION SYSTEM		**06**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 118.400
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Witness operational test of fire detection system.
B. Assure all sensors are free of obstruction and functioning.
C. Verify alarms and indicators are functioning correctly; visible and audible from the pilot house or fire control station.
D. Verify audible alarms in engine room are functioning properly, if provided.
E. Ensure engine room, pilothouse, and fire control station alarms are conspicuously marked in clearly legible letters.
F. Manual alarm systems functioning properly.

DEFICIENCY ACTION

REPLACE/REPAIR DEFICIENT ITEMS. IF A DEFICIENCY CANNOT BE CORRECTED, NOTIFY THE COGNIZANT OCMI PRIOR TO THE CARRIAGE OF PASSENGERS.

SYSTEM:	FIRE PROTECTION EQUIPMENT	**ICR NUMBER:**	**C**
SUBSYSTEM:	FIRE DAMPERS AND REMOTE SHUTDOWNS		**07**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 118.410, 119.465
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Verify manual operation of all fire dampers.

B. Test remote operation of all remote ventilation shutdowns.

DEFICIENCY ACTION

REPLACE/REPAIR DEFICIENT ITEMS. IF A DEFICIENCY CANNOT BE CORRECTED, PRIOR TO THE CARRIAGE OF PASSENGERS, NOTIFY THE COGNIZANT OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.439, 116.440, 118.400
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Remove several sprinkler heads in each zone to inspect the general condition of the head and piping.

B. Test operation of the sprinkler system from each zones test station.

DEFICIENCY ACTION

REPLACE/REPAIR DEFICIENT ITEMS. IF A DEFICIENCY CANNOT BE CORRECTED, PRIOR TO THE CARRIAGE OF PASSENGERS, NOTIFY THE COGNIZANT OCMI.

SYSTEM: FIRE PROTECTION EQUIPMENT **ICR NUMBER:** **C**
SUBSYSTEM: FIRE CONTROL PLAN **09**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.530
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Verify fire control plan complies with regulations. Current fire control plan posted and approved.

B. Verify information on fire control plan is current and correct.

C. Equipment listed on fire control plan located in proper place on vessel.

D. Ensure storage of plan is clearly marked and crew is aware of location.

DEFICIENCY ACTION

ALL DEFICIENCIES NOTED ON THE FIRE PLAN SHOULD BE CORRECTED OR UPDATED ON THE PLAN. ENSURE THAT DEFICIENCIES DO NOT CONFLICT WITH THE MINIMUM REQUIRED EQUIPMENT ON THE COI. SUBMIT UPDATED PLAN TO COGNIZANT OCMI FOR APPROVAL.

SYSTEM: FIRE PROTECTION EQUIPMENT **ICR NUMBER:** **C**
SUBSYSTEM: FIRE AXES **10**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 118.600
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Proper number of fire axe(s) in accordance with Certificate of Inspection.

B. Stowed at the primary operating station.

DEFICIENCY ACTION

REPLACE/REPAIR DEFICIENT ITEMS. IF A DEFICIENCY CANNOT BE CORRECTED, PRIOR TO THE CARRIAGE OF PASSENGERS, NOTIFY THE COGNIZANT OCMI.

SYSTEM:	FIRE PROTECTION EQUIPMENT	**ICR NUMBER:**	**C**
SUBSYSTEM:	GALLEY HOOD EXTINGUISHING SYSTEM		**12**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED ENGINEER or his designated representative
REFERENCES: 46 CFR 118.425
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

Verify that grease extraction hood chemical fire extinguishing system has been properly serviced within the last year.

DEFICIENCY ACTION

REPAIR OR REPLACE SYSTEM AS REQUIRED.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.530
REGULATORY INSPECTION FREQUENCY: ANNUAL

INSPECTION CRITERIA

CRITICAL NOTE: Structural fire protection is addressed closely during the new construction of a vessel. Over time changes may be made that adversely alter the degree of protection offered by the structural fire protection. The following areas should be examined/considered each year and prior to modification work.

- Review fire control plan and general arrangement plan to determine space, bulkhead, and deck designations.

DEFICIENCY ACTION

IMMEDIATELY CONTACT COGNIZANT OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.415
REGULATORY INSPECTION FREQUENCY: ANNUAL

INSPECTION CRITERIA

CRITICAL NOTE: Structural fire protection is addressed closely during the new construction of a vessel. Over time changes may be made that adversely alter the degree of protection offered by the structural fire protection. The following areas should be examined/considered each year and prior to modification work.

- Verify that integrity of all A class bulkheads remains intact; check to see that insulation is in place and not compromised.

DEFICIENCY ACTION

IMMEDIATELY CONTACT COGNIZANT OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.405, 116.422, 116.423, 116.425, 116.427, 116.430, 116.433, 116.435
REGULATORY INSPECTION FREQUENCY: ANNUAL

INSPECTION CRITERIA

CRITICAL NOTE: Structural fire protection is addressed closely during the new construction of a vessel. Over time changes may be made that adversely alter the degree of protection offered by the structural fire protection. The following areas should be examined/considered each year and prior to modification work.

A. Verify that no non-approved or unacceptable material has been used as a finish or covering in a space.

B. Fire resistant furnishings, flame resistant draperies, and rugs of 100% wool or equivalent are used

C. No fire hazard exists.

D. Waste receptacles made of noncombustible materials unless otherwise approved by OCMI.

E. Verify proper operation of fire screen doors locally and from the bridge.

F. Check fire load calculations against actual material in space; change will usually occur in this area.

DEFICIENCY ACTION

IMMEDIATELY CONTACT COGNIZANT OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 117.64, 122.604
REGULATORY INSPECTION FREQUENCY: ANNUALLY/MONTHLY

INSPECTION CRITERIA

A. Tested monthly using visual or audio output indicator.

B. Stowed in a manner so that it will float free should the vessel sink & auto activate.

C. Replace battery if EPIRB is used for purposes other than testing. Replace battery on or before the expiration date marked on the battery.

D. Vessel name shall be marked on EPIRB.

DEFICIENCY ACTION

REPLACE BATTERY /EPIRB AND/OR MARK ACCORDINGLY. IF A DEFICIENCY CANNOT BE CORRECTED, PRIOR TO THE CARRIAGE OF PASSENGERS, NOTIFY THE COGNIZANT OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 120.550
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. General Alarm contact makers and alarm bells are located and marked in accordance with the regulations.

B. Energize system from each contact maker. Ensure contact makers are all operable, ensure alarm bells are all operable and that none have been deliberately disabled.

C. Ensure alarm bells are sufficiently loud to be easily heard above the ambient noise of the space in which they are placed.

D. Ensure operation of any flashing red lights installed in addition to alarm bells.

DEFICIENCY ACTION

MAKE APPROPRIATE REPAIRS; IF UNABLE TO REPAIR PRIOR TO THE CARRIAGE OF PASSENGERS CONTACT COGNIZANT OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 117.68
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Verify correct number.

ROUTE	REQUIRED PYROTECHNICS
For Ocean, Coastwise, Limited Coastwise or Great Lakes Service:	• 6 hand red & 6 hand orange smoke; or • 12 rocket parachute; or • 12 hand red;or • 6 hand red & 6 orange float; or, • combination allowed by regulation.
For Lakes, Bays and Sounds Service:	• 3 hand red & 3 hand orange smoke; or • 6 rocket parachute; or • 6 hand red; or • 3 hand red & 3 orange float; or, • combination allowed by regulation.

B. The service life of the distress signals shall be stamped by the manufacture on the distress signal.

C. The distress signals shall be stowed in a portable watertight container at the operating station or a pyrotechnic locker secured above the freeboard deck in the vicinity of the operating station.

DEFICIENCY ACTION

REPLACE PRIOR TO OR ON EXPIRATION DATE PRIOR TO THE CARRAIGE OF PASSENGERS.

SYSTEM:	EMERGENCY EQUIPMENT	**ICR NUMBER:**	**E**
SUBSYSTEM:	PUBLIC ADDRESS SYSTEM		**04**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.610
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Must be audible during normal operating conditions throughout accommodations and other normally manned spaces.

B. Must be operable from operation station when required.

C. When allowed, bullhorn batteries continually maintained.

DEFICIENCY ACTION

MAKE APPROPRIATE REPAIRS; IF UNABLE TO REPAIR PRIOR TO THE CARRIAGE OF PASSENGERS CONTACT COGNIZANT OCMI.

SYSTEM: EMERGENCY EQUIPMENT **ICR NUMBER:** **E**
SUBSYSTEM: FIRST AID / MEDICAL **05**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.710
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Verify first aid kit is approved under the series 160.041 or other standard specified by the Commandant.

B. Ensure “First Aid Kit is stenciled on container.

C. Ensure first aid kit is visible and readily available to the crew.

D. Ensure contents of kit are adaquate.

DEFICIENCY ACTION

MAKE APPROPRIATE REPAIRS

SYSTEM: VENTILATION **ICR NUMBER:** **F**
SUBSYSTEM: VENTILATION SHUTDOWN **01**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.600, 116.610
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. If power ventilation is installed, it must be capable of being shutdown from the pilot house.

B. Test all ventilation and fire dampers; check proper operation and labeling.

DEFICIENCY ACTION

REPAIR IF UNABLE TO DO SO IN A TIMELY MANNER, CONTACT COGNIZANT OCMI.

SYSTEM: VENTILATION **ICR NUMBER:** **F**
SUBSYSTEM: FUEL TANK VENTS **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.450
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Vent line not holed or excessively corroded.

B. Flame screen or flame arrester is clean, in good condition and firmly attached to the vent.

C. Flame screen is a single screen of 30x30.

D. Containment is available, clean, dry and in good condition.

DEFICIENCY ACTION

REPAIR AS APPROPRIATE, CONTACT COGNIZANT OCMI IF UNABLE TO REPAIR IN A TIMELY MANNER.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.600
REGULATORY INSPECTION FREQUENCY: ANNUALLYY

INSPECTION CRITERIA

A. Vent line not holed of excessively corroded.

DEFICIENCY ACTION

REPAIR IN APPROPRIATE MANNER.

SYSTEM: VENTILATION **ICR NUMBER:** **F**
SUBSYSTEM: GALLEY VENTS **04**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.600, 118.400, 118.425
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Grease extraction hood UL listed.

B. Vent trunk not holed or excessively corroded.

C. Interior of vent free of grease.

DEFICIENCY ACTION

MAKE APPROPRIATE REPAIRS.

SYSTEM: NAVIGATION EQUIPMENT **ICR NUMBER:** **G**
SUBSYSTEM: RADAR **01**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.404
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Examine radar for acceptable picture quality.

B. Verify operator controls and adjustments function properly.

C. Examine for excessive noise, vibration, or wear. Ensure secure mounting.

D. Verify controls illuminate.

E. Verify display at several ranges.

DEFICIENCY ACTION

IF RADAR REQUIRED NOTIFY THE COGNIZANT OCMI PRIOR TO SAILING WITH PASSENGERS. IF NOT, MAKE TIMELY REPAIRS.

SYSTEM: NAVIGATION EQUIPMENT **ICR NUMBER:** **G**
SUBSYSTEM: MAGNETIC COMPASS **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 184.402
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Check for illumination.

B. Ensure compass can be read from main steering position.

C. Ensure deviation table is current, and no major structural changes have been made.

DEFICIENCY ACTION

CORRECT PRIOR TO CARRIAGE OF PASSENGERS, IF UNABLE TO DO SO, NOTIFY COGNIZANT OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 120.310, 120.392, 121.502, 121.506, 121.510
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Must be capable of operating in 156-162 MHz range. Capable of transmitting and receiving VHF FM Channels 13, 16, 22A.

TEST: Obtain radio checks.

B. Separate circuit with overcurrent protection at the main distribution panel.

C. Supplied by two sources of electricity or batteries with a capacity for three hours.

D. Verify that FCC certificates are valid.

E. Verify that Emergency Broadcast Placard is posted near all radio installations.

DEFICIENCY ACTION

REPAIR OR REPLACE DEFECTIVE ITEM. IF UNABLE TO DO SO PRIOR TO CARRIAGE OF PASSENGERS, CONTACT COGNIZANT OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 120.310, 120.420
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Verify that navigation lights are operable. Test on emergency power if installed.

B. Proper bulbs installed.

C. If navigation light indicator panel installed; operating properly- check all fuses and alarms.

D. Verify lights are installed in accordance with Navigation rules.

E. Reflective screens in place and painted matte black?

F. Lenses clean, wiring free of splices; no deterioration, installation appears sound.

G. Supplied by two sources of electricity or batteries with a capacity for three hours.

DEFICIENCY ACTION

CORRECT PRIOR TO GETTING UNDERWAY DURING DARKNESS OR PERIODS OF REDUCED VISIBILITY.

SYSTEM:	NAVIGATION EQUIPMENT	**ICR NUMBER:**	**G**
SUBSYSTEM:	INTERNAL COMMUNICATION AND CONTROL SYSTEMS		**06**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.602
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. If sound powered telephones or voice tubes are installed verify operation.

B. Test ringers, and operation of each voice tube or sound powered phone in a location required by the regulations. Ensure each can be heard above the ambient noise of that location.

C. If hand held portable radios are used verify operation.

D. Verify operation from operating station to location for controlling propulsion machinery.

DEFICIENCY ACTION

MAKE APPROPRIATE REPAIRS, CONTACT COGNIZANT OCMI IF UNABLE TO REPAIR PRIOR TO CARRIAGE OF PASSENGERS.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.420
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

Verify the following are up-to-date and adequate for the route intended;

1. Large scale charts,
2. Coast Pilot,
3. Light List,
4. Tide Tables,
5. CurrentTables or River Current Publications.

NOTE: Extracts of any of the above are permitted.

DEFICIENCY ACTION

OBTAIN RECENT PUBLICATIONS AND UPDATE CHARTS WITH THE MOST RECENT LOCAL NOTICE TO MARINERS.

SYSTEM: NAVIGATION EQUIPMENT **ICR NUMBER:** **G**
SUBSYSTEM: DAYSHAPES & WHISTLE **08**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 33 CFR 81, 84, 86
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. All dayshapes shall be black.

B. If shape is a ball, it shall not have a diameter of over 0.6 meter.

C. If shape is a cone, it shall have a base diameter of over 0.6 meters, and a height equal to its diameter.

D. If the shape is a cylinder, it shall have a diameter of at least 0.6 meters, and a height of twice the diameter.

E. A diamond shape shall consist of cones as defined above, having a common base.

F. The vertical distance between shapes shall be at least 1.5 meters.

G. The frequency of a whistle shall be as required by Table 86.05.

H. The whistle shall be installed with it's forward axis directed forward and placed as high as practicable.

DEFICIENCY ACTION

TAKE ACTION TO CORRECT DEFICIENCY. REPAIR FOG SIGNAL PRIOR TO SAILING DURING PERIODS OF REDUCED VISIBILITY.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.410
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

For vessels on Ocean routes:

- Test the electronic position fixing device for accuracy by comparing a fix on the device to a charted location.

DEFICIENCY ACTION

MAKE TIMELY REPAIRS, IF UNABLE TO DO SO PRIOR TO CARRIAGE OF PASSENGERS, CONTACT COGNIZANT OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 122.280, 282
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

FOREIGN VOYAGES

- Official logbooks shall be maintained for vessels on a voyage from a port in the U.S. to a foreign port except to a port in Canada.

VESSELS MORE THAN 19.8 METERS IN LENGTH WITH OVERNIGHT ACCOMODATIONS FOR MORE THAN 49 PASSNEGERS

- Logs or records shall be maintained in any form.
- Verify logbooks have been maintained and that information required by law and regulation are contained within.

NOTE: Provided information regarding casualties, injuries, fatalities, etc. has been given to the Coast Guard, logbook entries more than one year old may be discarded.

DEFICIENCY ACTION

CORRECT LOGBOOK ENTRIES AS REQUIRED.

SYSTEM: GROUND TACKLE **ICR NUMBER:** **H**
SUBSYSTEM: ANCHOR SYSTEM **01**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.300
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Anchor sized in accordance with industry standards or as required by OCMI.

B. Ensure all anchor releasing and retrieval equipment is operable and in good working condition (line/chain, winch/davit or windlass foundation, stopper, brake).

C. Anchor winch or windlass should be tested to let out and retrieve chain.

DEFICIENCY ACTION

MAKE APPROPRIATE REPAIRS.

SYSTEM: GROUND TACKLE **ICR NUMBER:** **H**
SUBSYSTEM: BITTS, CLEATS, FAIRLEADS **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.300
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Bits, cleats and fairleads not excessively corroded or grooved; no scale build-up.

B. Cleat/bit horns not missing, broken or excessively.

C. Foundations not fractured.

D. All guy wires taut, no slack; turnbuckles, wire rope not wasted.

DEFICIENCY ACTION

MAKE APPROPRIATE REPAIRS.

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY
ICR NUMBER: I 01
SUBSYSTEM: WATERTIGHT DOORS 2

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 122.610, 171.112
REGULATORY INSPECTION FREQUENCY: QUARTERLY

INSPECTION CRITERIA

HINGED-TYPE WATERTIGHT DOORS

A. Ensure knife-edges are intact and not warped or corroded and do not have excessive paint buildup.

B. Ensure gasket material is intact, continuous, and still pliable.

C. Ensure door closes completely around entire perimeter and gasket makes contact with knife-edge (chalk test as necessary).

D. Examine all hinges and hardware for general condition, wear, fit, etc.

E. Ensure that all dogs are operable and grease fittings still work.

F. Check wedges on doorframe for excessive wear and that match-up with dogs is adequate.

G. Test operation of quick-action closing device from both sides.

H. Ensure markings are clearly legible in a minimum of 1” high letters on both sides with “WATERTIGHT DOOR - KEEP CLOSED”.

I. Verify proper operation of door status indicator lights in the pilothouse.

DEFICIENCY ACTION

REPLACE DETERIORATED/WORN GASKET, DOGS, PINS, ETC. ON HINGED DOORS. IF UNABLE TO DO SO PRIOR TO CARRIAGE OF PASSENGERS, CONTACT COGNIZANT OCMI.

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY
ICR NUMBER: I 01
SUBSYSTEM: WATERTIGHT DOORS 2

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 122.610, 171.112
REGULATORY INSPECTION FREQUENCY: QUARTERLY

INSPECTION CRITERIA

SLIDING-TYPE WATERTIGHT DOORS

A. Test operation of door locally (both sides) by manual power and also hydraulic or electric power if so fitted.

B. Test operation of door from remote manual location and verify door status indicator at the same location.

C. Test operation of door from bridge panel (close/reset only).

D. Verify operation of door status indicator on bridge (open/closed).

E. Ensure operation of local audible alarm when door is in motion.

F. Test operation of power operated doors on emergency generator power.

G. Examine metal to metal sealing surfaces for nicks, dents or other obstructions.

H. Ensure all door guides and channels are free from debris and other obstructions.

I. Ensure markings are clearly legible in a minimum of 1” high letters on both sides with “WATERTIGHT DOOR - KEEP CLOSED”.

DEFICIENCY ACTION

REPLACE DETERIORATED/WORN GASKET, DOGS, PINS, ETC. CONSULT MANUFACTURER'S INSTRUCTIONS FOR REPAIR/ADJUSTMENTS TO SIDING WATERTIGHT DOORS. IF UNABLE TO DO SO PRIOR TO CARRIAGE OF PASSENGERS, CONTACT COGNIZANT OCMI

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY
SUBSYSTEM: WATERTIGHT BULKHEADS

ICR NUMBER: **I 02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 171.085, 090, 095
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Examine all watertight bulkheads to ensure they are intact and watertight. Foam flotation (if required & installed) not waterlogged.

B. Examine collision bulkhead ensuring it is intact and watertight.

C. Ensure electrical cable and piping penetrations maintain watertight integrity and are kept to a minimum.

D. Examine for signs of corrosion or deterioration.

E. Ensure sluice valves have not been installed.

DEFICIENCY ACTION

REPAIR/REPLACE DEFICIENT ITEMS. IF BULKHEADS SHOW SIGNS OF DETERIORATION CONTACT COGNIZANT OCMI

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY
ICR NUMBER: **I 03**
SUBSYSTEM: STUFFING TUBES, SEALANTS

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 171.114
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Ensure electrical cable and piping penetrations maintain watertight integrity i. e. stuffing tubes still serviceable.

B. If sealant is used in penetrations, it must be a non-flammable product designed for such use.

DEFICIENCY ACTION

REPAIR/REPLACE DEFICIENT ITEMS

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY **ICR NUMBER:** **I 04**

SUBSYSTEM: REMOTE OPERATED VALVES AND CONTROLS

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.455, 119.500, 119.510
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Verify operation of all remote fuel shutoff valves. Ensure markings on the weather deck are legible and unobstructed.

B. Ensure all valves adequately lubricated and operate freely.

C. Operate each reach-rod and other manual remote control mechanisms function properly.

D. Verify each power operated valve operates properly from control station.

DEFICIENCY ACTION

LUBRICATE, REPAIR OR REPLACE AS NECESSARY. IF UNABLE TO CORRECT PROMPTLY NOTIFY COGNIZANT OCMI.

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY
ICR NUMBER: I 05
SUBSYSTEM: HULL AND DECK OPENINGS

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.1160
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Ensure all dogs are properly lubricated and operate freely.

B. Ensure all gaskets are in place and clean. (i.e., free of paint, not deteriorated.)

C. Ensure all knife-edges are clean and free of nicks and paint.

D. Ensure hinges and bolts are in good condition; no sagging of door due to worn hinge bolts.

E. Ensure dogging wedges are not excessively worn.

F. Ensure all hatches have retaining devices.

DEFICIENCY ACTION

LUBRICATE, CLEAN, REPAIR OR REPLACE AS NECESSARY.

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY
ICR NUMBER: I 06
SUBSYSTEM: FREEING PORTS AND SELF-BAILERS

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 178.420, 178.430, 178.440
REGULATORY INSPECTION FREQUENCY: MONTHLY

INSPECTION CRITERIA

A. Ensure self-bailers, scuppers or free ports allow rapid clearing of water.

B. Ensure they are free of debris.

C. Ensure all scuppers operate freely.

D. No modifications made that reduce required freeing port area.

DEFICIENCY ACTION

CLEAN OR FREE UP AS NECESSARY.

SYSTEM:	HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY	**ICR NUMBER:**	**I 07**
SUBSYSTEM:	WINDOWS AND AIRPORTS, PORT LIGHTS		

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 171.119
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Ensure all dogs are properly lubricated and operate freely.

B. Ensure all gaskets are in place and clean. (i.e. free of paint, not deteriorated).

C. Ensure hinged dead cover closes properly.

D. Ensure all knife-edges are clean and free of paint and nicks.

DEFICIENCY ACTION

LUBRICATE, CLEAN, REPAIR OR REPLACE AS NECESSARY.

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY **ICR NUMBER: I 08**

SUBSYSTEM: SHELL PLATING/ INTERNAL STRUCTURE JOINT AREA

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.402, 115.404
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Visually inspect hull to waterline; pay close attention to wind and waterline.

B. Investigate any significant insets for internal damage.

C. Check for wastage around overboard discharges.

D. Visually examine accessible welds to ensure they are not 'washing out' .

E. Sheer Strake, Stringer Plate, Center Vertical Keel, Hatch Corners- Examine for wastage, pitting, fracture, excessive inset.

F. Deck Beams, Underdeck Longs, Deck Girders, Side and Bottom Longs, Keel, Framing, Ladders- Examine for fractured welds, fractures in structural members, wastage, distortion.

DEFICIENCY ACTION

SUBMIT WRITTEN REPAIR PROPOSAL TO COGNIZANT OCMI PRIOR TO UNDERTAKING REPAIRS.

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY **ICR NUMBER: I 09**
SUBSYSTEM: STEEL AND ALUMINUM HULLS

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.700, 802, 116.300, NVIC 7-68, 11-80
REGULATORY INSPECTION FREQUENCY: COI INTERVAL

INSPECTION CRITERIA

REFERENCES
STEEL structural design in accordance with:
• Lloyd's Rules & Regulations for the Classification of Yachts & Small Craft; or • ABS Rules for Building & Classing Steel Vessels Under 61 meters (200') in Length
ALUMINUM structural design in accordance with:
• Lloyd's Rules & Regulations for the Classification of Yachts & Small Craft; • ABS Rules for Building & Classing Aluminum Vessels(if more than 100'); or • ABS Rules for Building & Classing Steel Vessels Under 61 meters (200') Length with appropriate conversions

A. Hull Shell/Plate- Examine for wastage, pitting, fractured weld seams. Note excessive upsetting.

B. Framing, Stiffeners- Examine for fractured welds, separation from hull plate. Note deformation and fracture in structure, strength value retained.

C. Repair and modification procedures- Note proper weld procedures, special metals involved. Examine plate and framing replacement fit-up for alignment, proper corner radius, insert size. Modifications to original structure approved by USCG or Class Society.

D. A written repair proposal must be submitted to the cognizant OCMI prior to beginning repairs.

DEFICIENCY ACTION

SUBMIT WRITTEN REPAIR PROPOSAL TO COGNIZANT OCMI PRIOR TO UNDERTAKING REPAIRS.

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY
ICR NUMBER: I 10
SUBSYSTEM: FRP HULLS AND STRUCTURE

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.700, 115.802, 177.300
REGULATORY INSPECTION FREQUENCY: COI INTERVAL

INSPECTION CRITERIA

REFERENCES
FRP structural design in accordance with:
• Lloyd's Rules & Regulations for the Classification of Yachts & Small Craft; or • ABS Rules for Building & Classing Reinforced Plastic Vessels

A. Fasteners—examine for loose fit or wasted material.

B. Laminate material—Examine for delaminations due to impact or water intrusion. Note: fractures at corners, around fasteners and machinery mounts. Examine extent of blistering.

C. Repair and Modification Procedures—Check for proper procedures, materials and repair environment (humidity, temperature, etc.) . Examine repair preparation and sequence. Procedures approved or accepted industry standard.

D. A written repair proposal must be submitted to the cognizant OCMI prior to beginning repairs.

DEFICIENCY ACTION

SUBMIT WRITTEN REPAIR PROPOSAL TO COGNIZANT OCMI PRIOR TO UNDERTAKING REPAIRS.

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY **ICR NUMBER: I 11**

SUBSYSTEM: WOOD HULLS AND STRUCTURE

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 176.700, 802, 177.300, NVIC 7-95
REGULATORY INSPECTION FREQUENCY: COI INTERVAL

INSPECTION CRITERIA

REFERENCES
WOOD structural design in accordance with:
• Lloyd's Rules & Regulations for the Classification of Yachts & Small Craft

A. Fasteners- Examine hull for loose or wasted fasteners. Note "backed out wood screw plugs, rust trails in hull.

B. Damage- Examine hull, framing for evidence of impact or mechanical damage (cracked frames, split planks, etc.) .

C. Wastage and Rot- Examine hull, framing for wet or dry rot. Examine keel (worm) shoe and planking for evidence of marine borers. Check hull planking for loose or sprung planks, loose or missing caulking. Check for proper space ventilation, unpainted bilges.

D. Repair and Modification Procedures- Use of proper materials and woodworking techniques in fit up and repair. Proper plank sizing, joint and fastener placement. Use of sister frames appropriate.

E. A written repair proposal must be submitted to the cognizant OCMI prior to beginning repairs.

DEFICIENCY ACTION

SUBMIT WRITTEN REPAIR PROPOSAL TO COGNIZANT OCMI PRIOR TO UNDERTAKING REPAIRS.

SYSTEM: HULL, DECKS, FITTINGS & WATERTIGHT INTEGRITY
ICR NUMBER: I 12
SUBSYSTEM: MARKINGS

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 122.602
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

MARKINGS: *Must be* Conspicuous and Legible

1. Draft markings
2. Loading marks
3. International Load Line markings
4. Vessel's and Hailing Port

DEFICIENCY ACTION

TAKE CORRECTIVE ACTION IN TIMELY MANNER.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.500, 116.730, 116.800, 116.810, 116.820, 122.514, 122.606
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Adequate heating and lighting in crew and passenger accommodation spaces.

B. Washroom and Toilet facilities:

1. Toilets operate properly.
2. Cleanliness.
3. Drains operating.

C. Insect screens not holed.

D. Space for Passengers- (if alterations to seating or passenger space furnishings, recalculate permitted passengers in accordance with 46 CFR 115.113).

E. Means of escape:

1. Verify a minimum of two escapes.
2. Labeled "EMERGENCY EXIT, KEEP CLEAR".
3. Not locked; free of obstructions.

F. Passenger Safety Bill posted in each stateroom.

DEFICIENCY ACTION

TAKE CORRECTIVE ACTION IN TIMELY MANNER.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.100, 121.202, 121.210, 121.220, 121.240; ABYC A-1, A-22, NFPA 302
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

Inspect condition and test safety features:

A. Heating Equipment:
   1. Verify installation will not come in contact with combustible materials.
   2. Verify each electric space heater is provided with a thermal cutout.
   3. Verify heater element is of an enclosed type and element case is corrosion resistant.

B. Cooking Equipment:
   1. Verify door hinges and locking devices prevent accidental opening.
   2. Verify grills have a means to collect grease or fat.
   3. Verify grab rails are sufficient if required by OCMI.
   4. Verify sea rails are secure on cooking range to prevent pot spillage.
   5. Verify general cleanliness.

C. Verify that all LPG/CNG units are maintained as installed and the following:
   1. Verify storage or use of CNG containers is not within an accommodation area, machinery space, bilge, or other enclosed space.
   2. Verify LPG or CNG has been odorized.
   3. Verify the operation of the remote shutoff valve if the fuel supply line enters an enclosed space.

DEFICIENCY ACTION

TAKE CORRECTIVE ACTION IN TIMELY MANNER.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.702, 33 CFR 155.450, 151.59, MARPOL 73/78
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

The following apply to a vessel that is 26’ or more in length.

A. Verify the legibility of the MARPOL Annex I -"DISCHARGE OF OIL PROHIBITED" placard, as displayed in the machinery space or bilge and ballast pump control station.

B. Verify the legibility of the MARPOL Annex V- "GARBAGE" placard as displayed in a prominent location and in sufficient numbers to be visible to passengers and crew.

DEFICIENCY ACTION

OBTAIN CURRENT PLACARD AND POST.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.704, 33 CFR 159
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

If the vessel has an installed toilet facility a MSD must be installed.

A. For Type I and II:

1. Verify manufactures nameplate posted on device.
2. Verify the device has a placard containing the operating instructions, safety precautions and warnings pertinent to the device.
3. Verify operation of chemical level indicator.
4. Verify operation of sewage level indicator if device is designed as a sewage retention device.
5. Verify momentary loss of power does not allow discharge.
6. Verify vents are free and open.

B. For Type III:

1. Verify operation of sewage level indicator.
2. Verify overboard discharge valve is closed within three miles of shore.

DEFICIENCY ACTION

ENSURE ACCIDENTAL DISCHARGE OF SEWAGE IS PREVENTED. CORRECT DEFICIENCY; NOTIFY COGNIZANT OCMI IF UNABLE TO DO SO IN A TIMELY MANNER

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 122.510, 122.512
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Verify that the emergency instructions posted at the operating station contain actions to be taken in the event of fire, heavy weather, and man overboard conditions.

B. Verify that these instructions are vessel specific and remain current to the vessel layout and crew compliment.

DEFICIENCY ACTION

UPDATE EMERGENCY INSTRUCTIONS AS NEEDED AND PLACE ONBOARD.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 114.400, 116.700, 116.800, 116.810
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Ensure space is adequate for the personnel assigned.

B. Accommodation maintained to minimize and safety hazards and to preserve sanitary conditions.

C. Aisles kept clear of obstructions.

D. Passenger berths constructed of approved material and not stacked more than three high.

E. A suitable means of access is provided for each berth located more than 60” above the deck.

F. Arrangement of berths and other furniture allows free and unobstructed access to each berth.

DEFICIENCY ACTION

TAKE CORRECTIVE ACTION IN TIMELY MANNER.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.730
REGULATORY INSPECTION FREQUENCY: MONTHLY

INSPECTION CRITERIA

A. Galley, food storage and dining areas clean, sanitary. Pesticides stored separately from food stores. No insects or rodents evident.

B. Cooking facilities, vents free of grease buildup, no fire hazards evident. Stove shut off switch separate from stove, clearly marked for emergency use. Adequate fire extinguishers in place and serviced as required by COI, regulations.

C. Reefer boxes clean and functioning properly. Reefer doors equipped with inside release that is not lockable and/or an alarm operable from inside reefer box operable.

DEFICIENCY ACTION

CORRECT DEFICIENCY, IF UNABLE TO DO SO CONTACT COGNIZANT OCMI.

SYSTEM: ACCOMMODATIONS/RELATED SPACES **ICR NUMBER:** **J**
SUBSYSTEM: PAINT LOCKERS **09**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.405, 116.610, 118.400
REGULATORY INSPECTION FREQUENCY: MONTHLY

INSPECTION CRITERIA

A. All paint and related flammables stored in paint locker.

B. Fixed fire-fighting equipment serviced and proper.

C. Structure of locker intact, metal lined or constructed.

D. Ventilation to locker adequate, not blocked- closure or fire extinguishing functional.

DEFICIENCY ACTION

EFFECT PROPER REPAIRS, NOTIFY LOCAL OCMI IF PROBLEMS CAN NOT BE CORRECTED PRIOR TO CARRYING PASSENGERS FOR HIRE.

SYSTEM:	ACCOMMODATIONS/RELATED SPACES	**ICR NUMBER:**	**J**
SUBSYSTEM:	LADDERS, RAILS, GUARDS AND EMBARCATION STATIONS		**10**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.510, 900, 920, 940, 960
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Verify adequate lighting in way of embarkation area.

B. Verify rails are all bolted or welded securely.

C. Verify wire mesh or equivalent securely attached to rails.

D. Verify access to the ladders is not hindered by obstructions and free of protrusions.

E. Verify free of corrosion, sharp edges or cracks (check where rails are welded to deck closely and supporting structure).

F. Verify guards are in place in way of rotating machinery.

DEFICIENCY ACTION

TAKE CORRECTIVE ACTION PRIOR TO CARRIAGE OF PASSENGERS.

SYSTEM: EMERGENCY DRILLS **ICR NUMBER: K**
SUBSYSTEM: CREW TRAINING, DRILLS; PROPERLY CONDUCTED **01**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 122.420, 122.520, 122.524
REGULATORY INSPECTION FREQUENCY: AT LEAST QUARTERLY

INSPECTION CRITERIA

CREW TRAINING
• Verify crewmembers are familiar with their assigned responsibilities in an emergency.
ALL DRILLS
A. All drills are to be conducted as if an actual emergency existed. B. Verify method of summoning the crew (and passengers if on an overnight voyage) is adequate. C. Verify crew reports to assigned stations (as on station bill if required) and is prepared for the emergency.
ABANDON SHIP/ MAN OVERBOARD
A. Check for the proper donning of lifejackets. B. Check operation of all davits used for launching liferafts. C. Witness instruction on the deployment of survival craft. D. Each rescue boat must be launch and operated by its assigned crew.
FIREFIGHTING
A. Witness instruction on the use of all types of firefighting equipment onboard.

DEFICIENCY ACTION

TAKE CORRECTIVE ACTION PRIOR TO CARRIAGE OF PASSENGERS. PROVIDE NEEDED INSTRUCTION UNTIL DRILLS ARE CONDUCTED SATISFACTORILY

SYSTEM: EMERGENCY DRILLS **ICR NUMBER: K**
SUBSYSTEM: CREW TRAINING, DRILLS; PROPERLY LOGGED
02

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 122.420, 122.520, 122.524
REGULATORY INSPECTION FREQUENCY: AS DRILLS ARE CONDUCTED

INSPECTION CRITERIA

A. Verify drills and training have been logged or otherwise documented.

B. Entries shall include the date of the drill and training and a general description of the drill scenario and training topics.

DEFICIENCY ACTION

MAKE APPROPRIATE CORRECTIONS.

SYSTEM: FORMS, NOTICES, PUBLICATIONS & CREW REQUIREMENTS
ICR NUMBER: **L 01**
SUBSYSTEM: POLLUTION/MARPOL

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.702, 33 CFR 155.450, 151.59, MARPOL 73/781
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

The following apply to a vessel that is 26' or more in length.

A. Verify the legibility of the MARPOL Annex I -"DISCHARGE OF OIL PROHIBITED" placard, as displayed in the machinery space or bilge and ballast pump control station.

B. Verify the legibility of the MARPOL Annex V- "GARBAGE" placard as displayed in a prominent location and in sufficient numbers to be visible to passengers and crew.

> **NOTE:** All oceangoing U.S. vessels of 40 feet or more in length are required to maintain a written waste management plan onboard.

DEFICIENCY ACTION

PROVIDE PLACARD AND/OR WASTE MANAGEMENT PLAN ONBOARD.

SYSTEM:	FORMS, NOTICES, PUBLICATIONS & CREW REQUIREMENTS	**ICR NUMBER:**	**L 02**
SUBSYSTEM:	COAST GUARD AND SOLAS FORMS		

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.302, 306
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Certificate of Inspection
   1. Must be displayed under glass in a conspicuous place.
   2. Posted where observation of passengers is likely.

B. Stability Letter (if issued)
   1. Must be displayed under glass.
   2. Must be visible from the operating station.

C. SOLAS Passenger Ship Safety Certifications Certificates (international voyage)
   1. Must be displayed under glass in a conspicuous place.
   2. Posted where observation of passengers is likely.

DEFICIENCY ACTION

OBTAIN AND POST FORMS PRIOR TO ENTERING THE VESSEL IN A PASSENGER CARRYING SERVICE

SYSTEM:	FORMS, NOTICES, PUBLICATIONS & CREW REQUIREMENTS	**ICR NUMBER:**	**L 03**
SUBSYSTEM:	VESSEL MANNING		

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 10; 12; 15; SOLAS CHAPTER I
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Number of officer and unlicensed crew required
   1. Certificate of Inspection
   2. Safe Manning Document

B. Licenses valid, endorsed, posted
   1. Date of issue and/or expiration
      i. Licensed Officers- Deck, Engineer
      ii. Tonnage, route, radar observer, firefighting, horsepower- steam or diesel, etc.

C. MMDs are appropriate for jobs
   1. Able seamen, QMED, etc.
      i. Endorsements such as : lifeboat man, lookout, etc.

D. Reduced manning requirements are being met. (If applicable).
   1. As per local OCMI, Administrative organization, Classification society.

DEFICIENCY ACTION

OBTAIN PROPERLY QUALIFIED PERSONNEL. IF VESSEL MUST SAIL SHORT CONTACT COGNIZANT OCMI PRIOR TO BEGINNING VOYAGE

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 61.01, 61.05, 61.10 AND 62
REGULATORY INSPECTION FREQUENCY: ANNUALLY

> **NOTE:** Annual examination to be witnessed by a Coast Guard Marine inspector and conducted during hydrostatic test

INSPECTION CRITERIA

1. Inner casing, outer casing and wind box:
   a. Examine all for distortion, bulging, fractures, burned and sagging areas.

2. Lagging:
   a. Examine for proper fit, condition, burned or missing sections, etc.
   b. Check for exhaust leaks around flanges on boiler and exhaust stacks under lagging joints.

3. Tank tops beneath boiler:
   a. Examine for corrosion, pitting, distortion, cleanliness of tank top and oil wetted areas (fracture indication).

4. Condition of foundation/sliding feet:
   a. Examine boiler foundation frames for corrosion, distortion and fractures.
   b. Examine sliding feet for alignment, binding, fractures, corrosion and cleanliness.

5. Headers/Handholes evidence of leakage:
   a. Externally examine headers and handholes for signs of leakage around gasket and welds.
   b. Internally for foreign objects and cracking around tubes.

6. Automation Test Procedures:
   a. Using approved automation test procedures, test all alarms and shutdowns.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY.

SYSTEM: STEAM POWER SYSTEMS **ICR NUMBER:** **M**
SUBSYSTEM: WATERSIDE EXAMINATION OF WATER TUBE BOILERS **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 61.05, 10
REGULATORY INSPECTION FREQUENCY: TWICE IN FIVE-YEAR PERIOD

NOTE: Examination to be witnessed by a Coast Guard Marine Inspector.

INSPECTION CRITERIA

1. Steam drum, mud drum, headers (waterwall, superheater) :
   a. Remove baffle plates in steam drum.
   b. Internally examine for fractures, missing/loose bolts or brackets, foreign objects and signs of corrosion, erosion and leakage.

2. Drum internals including :
   a. Dry pipe, examine for corrosion of pipe and support brackets.
   b. Main and chemical feed lines, examine for corrosion; hammer test flanged connections.
   c. Desuperheater and control desuperheater, examine for corrosion; hammer test flanged connections.
   d. Surface blow, examine connection for fractures and corrosion.
   e. Baffle plates, examine for fractures in plates and brackets/missing bolts.
   f. Tube sheet connections/ligament, examine for fractures and leaks.
   g. Connections and attachments, examine for fractures and pitting.
   h. Surface conditions, examine for scaling, pitting, corrosion, erosion and fractures.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY.

SYSTEM: STEAM POWER SYSTEMS **ICR NUMBER: M**
SUBSYSTEM: WATERSIDE EXAMINATION OF WATER TUBE BOILERS **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 61.05, 10
REGULATORY INSPECTION FREQUENCY: TWICE IN FIVE-YEAR PERIOD

NOTE: Examination to be witnessed by a Coast Guard Marine Inspector.

INSPECTION CRITERIA

3. Verify number of tubes plugged, i.e.- Row 4, tubes 5,6&13, Stbd. steam drum.

4. Headers, (Remove every 5th hand hole cover):
   a. Hand hole seats, examine seats in header and cover plates for corrosion, pitting and erosion.
   b. Tube connections, with a light and mirror, examine tube connections for leakage and fractures
   c. Welded connections, examine for fractures and erosion.
   d. Division plates, examine for fractures and erosion.
   e. Surface conditions, examine header for pitting, erosion, scaling and foreign debris, i.e.; gasket pieces.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

SYSTEM: STEAM POWER SYSTEMS **ICR NUMBER: M**
SUBSYSTEM: FIRESIDE EXAMINATION OF WATER TUBE BOILERS **03**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 61.05
REGULATORY INSPECTION FREQUENCY: TWICE IN FIVE-YEAR PERIOD

NOTE: Examination to be witnessed by a Coast Guard Marine Inspector. Boiler to be at 1.25 MAWP (Hydro Pressure for this examination).

INSPECTION CRITERIA

1. Brick work:
   a. Examine for loose, broken, missing or eroded bricks. Repair as needed.
   b. Examine floors for heaving, excess slag build-up.

2. Corbel:
   a. Examine for loose, broken or missing corbel (Burner cones).

3. Waterwall, screen, generating, and floor tubes : (if fitted) :
   a. Examine for sagging and blistering, married and burned out tubes.

4. Superheater tubes and supports:
   a. Examine for sagging and blistering, married and burned out tubes.
   b. Examine for burned out supports that cause sagging sections of tubes.

5. Burner:
   a. Examine for excess slag build-up (indication of dribbling nozzle).
   b. Examine for fractures in the air registers and diffusers.
   c. Externally examine for fuel leakage.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

SYSTEM: STEAM POWER SYSTEMS **ICR NUMBER:** **M**
SUBSYSTEM: FIRESIDE EXAMINATION OF WATER TUBE BOILERS **03**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 61.05
REGULATORY INSPECTION FREQUENCY: TWICE IN FIVE-YEAR PERIOD

NOTE: Examination to be witnessed by a Coast Guard Marine Inspector. Boiler to be at 1.25 MAWP (Hydro Pressure for this examination).

INSPECTION CRITERIA

6. Amount of slag accumulation:
   a. Internally examine for excessive slag build-up on tubes, brick work and corbel. (This causes poor heat transfer, loss of efficiency and internal damage).

7. Uptake and economizer:
   a. Examine for excessive soot accumulation on tubing fins.
   b. Examine for fractures, corrosion and exhaust leaks.

8. Soot blowers:
   a. Examine for proper operation, leaks, fractures or excessive soot deposits.

9. Air heaters:
   a. Examine for soot build up, leaks and unrestricted operation.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

SYSTEM: STEAM POWER SYSTEMS **ICR NUMBER: M**
SUBSYSTEM: FIRESIDE EXAMINATION OF FIRE TUBE BOILERS **04**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 61.05, 59.15-1
REGULATORY INSPECTION FREQUENCY: ANNUALLY IF $\geq$ 150psi / TWICE IN FIVE YEAR PERIOD IF < 150psi

NOTE : Examination to be witnessed by a Coast Guard Marine Inspector. Boiler to be at 1.5 x MAWP. (Hydro pressure for this examination.)

INSPECTION CRITERIA

1. Furnace (distortion):
   a. Measure with a tram bar to detect distortion.
   b. Repair as needed as per 46 CFR 59.15-1(a) or 46 CFR 59.15-1(c).

2. Combustion chamber: (crown sheet, wrapper sheet, back sheets) (distortion).

3. Boiler shell and heads :
   a. All portable sections and any suspect or wet areas of lagging shall be removed while boiler is under hydrostatic pressure to determine the source of leaks.
   b. Examine shell and heads for corrosion and wastage.

4. Stay bolts:
   a. Examine for corrosion, wastage and necking.

5. Riveted seams and rivets (if applicable):
   a. Examine for stress corrosion cracking around rivets, especially around loose or missing rivet holes.
   b. Examine for leakage at seams and rivets.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

SYSTEM: STEAM POWER SYSTEMS **ICR NUMBER:** **M**
SUBSYSTEM: FIRESIDE EXAMINATION OF FIRE TUBE BOILERS **04**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 61.05, 59.15-1
REGULATORY INSPECTION FREQUENCY: ANNUALLY IF ≥ 150psi / TWICE IN FIVE YEAR PERIOD IF < 150psi

NOTE : Examination to be witnessed by a Coast Guard Marine Inspector. Boiler to be at 1.5 x MAWP. (Hydro pressure for this examination.)

INSPECTION CRITERIA

6. Boiler saddles and foundations :
   a. Hammer test saddles, collision chocks, and foundation to detect deterioration.

7. Plating in way of mountings : (wastage due to leaking valves and fittings).
   a. Examine for wastage due to leaks from mounts.

8. Cracks in the plating due to flexing of the heads or leakage:
   a. Cracks, wastage or evidence of leaks shall require further examination of the inside of the head.

9. Wastage around the manhole gaskets:
   a. Examine for corrosion or wastage due to gasket leaks.

10. Note heat number and condition (sat/unsat) of fusible plugs.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 61.05 AND PART 59
REGULATORY INSPECTION FREQUENCY: ANNUALLY IF ≥ 150psi / TWICE IN FIVE YEAR PERIOD IF < 150psi

NOTE: Examination to be witnessed by a Coast Guard Marine Inspector.

INSPECTION CRITERIA

1. Straps and rivets attaching the heads to the shell: (if applicable).
   a. Sound or “ring” with hammer to check for tightness.
   b. NDT for cracks, any rivet holes with loose or missing rivets.

2. Necked stays, loose rivets, and fracture:
   a. Examine stays for corrosion, wastage and necking, renew as needed.
   b. Loose or missing rivets require NDT and repair as per 46CFR part 59.
   c. Fractures require NDT and repair as per 46CFR part 59.

3. Tubes : (Pitting- determine general depth and tube type).
   a. Examine for deep pits over a large area, shallow widely scattered pits over a large area can usually be disregarded.
   b. A distinction must be made between plain and stay tubes, stay tubes have a greater initial wall thickness.

4. Internal surface conditions : (scaling, pitting, corrosion and erosion).
   a. Examine for excessive scale, small amounts are common.
   b. Examine for corrosion and erosion to plating due to leaks, defective internal feed line gaskets are a frequent cause.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY.

SYSTEM: STEAM POWER SYSTEMS **ICR NUMBER:** **M**
SUBSYSTEM: REQUIRED MOUNTS (open/inspect) **06**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 61.05-15
REGULATORY INSPECTION FREQUENCY: FIVE YEARS (VALVES) TEN YEARS (BOLTS AND MOUNTINGS)

NOTE: Examination to be witnessed by a Coast Guard Marine Inspector.

INSPECTION CRITERIA

A. Each valve shall be opened for examination. If the valve can not be satisfactorily examined in place it must be removed for examination. The following is summary of the valves requiring examination:

- Main steam stop valve
- Generator steam stop valve
- Auxiliary steam stop valve
- Main and auxiliary feed stop valves
- Surface and bottom blowdown valves
- Superheater vent valve
- Superheater drain valve
- Soot blower stop valve
- Economizer inlet and outlet valves

B. Examine the valves for the following:

1. Seat- no grooves, gouges, pitting, corrosion or scale
2. Disc- no grooves, gouges, pitting, corrosion or scale
3. Stem- check for free operation, straightness and wear
4. Integrity of valve body- check for guide and body wear
5. Condition of stem packing gland- check for wear/distortion and install new packing
6. Gland ring bolts- check for stretched, bent, or broken bolts

C. Examine all studs bolts for cracks, deterioration and necking down.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS WORKING PROPERLY.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 61.05 & 61.15
REGULATORY INSPECTION FREQUENCY:

SYSTEM	INSPECTION INTERVAL
FIRETUBE PROPULSION	ANNUALLY
OTHERS	TWICE IN FIVE YEARS
PIPING	EVERY FIVE YEARS

NOTE: Examination to be witnessed by a Coast Guard Marine Inspector.

INSPECTION CRITERIA

A. Conduct tests in conjunction with required fireside exam.

B. Ensure safety valves are secured by gags or clamps.

C. Verify water temperature is correct:

Watertube =	not less than 70° F. and not more than 160° F
Firetube =	not more than 100° F

D. Verify appropriate test pressure:

Watertube =	1¼ X MAWP
Firetube =	1½ X MAWP

E. Test all main steam piping from the boiler drum to the throttle. No piping with a nominal size of 3” or less need be tested.

1. Verify appropriate test pressure = 1 ¼ MAWP
2. The test pressure is held for a minimum of 10 minutes.

F. Examine all tube joints, header connections and handhole plates for leakage.

NOTE: Any leaks to be repaired *AFTER* pressure is released from boiler or piping.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 52.01-120, 61.05-20 AND 52.01-55
REGULATORY INSPECTION FREQUENCY:

BOILER TYPE	INSPECTION INTERVAL
FIRETUBE	ANNUALLY
WATERTUBE	COI

NOTE: Examination to be witnessed by a Coast Guard Marine Inspector.

INSPECTION CRITERIA

Witness the lifting and reseating of each safety valve for the drum, superheater, or reheater of a boiler:

a. Determine the MAWP (Maximum Working Pressure). This can be found on the boiler nameplate or in the manufacturer's specification manual.

b. During the testing of the safety valve ensure that the valve is set no higher than the MAWP, but above the normal steaming range

c. Ensure that the superheater safety valve is set correctly in relation to the drum safety valve. The drum safety has the highest setting followed by the superheater safety (1) or safeties (2) and the pilot operated safety valve if installed.

d. Ensure that the "blow-down" range falls within 2-4% of the set pressure for each valve, but not falling into the steaming range of the boiler.

e. Ensure that there is no simmering or chattering during the lifting or reseating of any safety valve.

f. A Coast Guard Marine Inspector shall seal all safety valves.

g. Operationally test all hand relieving gear to ensure all safety valves work manually.

h. Examine all escape piping to ensure it's integrity and free from leaks.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY.

SYSTEM: STEAM POWER SYSTEMS **ICR NUMBER:** **M**
SUBSYSTEM: CONDENSATE SYSTEM **09**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 56.50-35 AND 56.50-45
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Examine sea water piping, valves and expansion joints for corrosion, leakage, broken bolts in flanges, support brackets, and integrity of expansion joint ground straps.

B. Examine condensers for corrosion, leakage, broken/missing bolts or studs and wastage of the condenser body.

C. Examine condensate piping for leakage, corrosion, broken/missing flange bolts and over-all condition of piping and supports.

D. Operationally test all seawater circulating and condensate pumps in modes, operating all local and remote shutdowns, if installed. Check for proper operation of steam engine or electric motor, seals, foundations, wiring and over all condition of pump.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 56.50-30
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Examine feedwater piping, valves and expansion joints for corrosion, leakage, broken bolts in flanges, support brackets, and integrity of system.

B. Ensure that two methods of determining boiler water levels are operable. This includes, but not limited to, sight glasses and alarms.

C. Operationally test all feed pumps in all modes, to ensure the stand-by pump operates when the primary fails. Operating all local and remote shutdowns, if installed. Check for proper operation of steam engine or electric motor, seals, foundations, wiring and overall condition of pumps.

D. Inspect make-up feed evaporator externally, if installed, to ensure proper operation and that there are no leaks or wastage.

E. Operationally test feedwater regulators if not part of the automation test procedure.

F. Externally inspect feedwater heaters for corrosion, wastage and leaks.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.220, 58.01-20
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Inspect main engine foundations for fractures, wastage, and corrosion. Hammer test, "Ring", and foundation bolts to check for loose bolts or nuts.

B. Operational test engine to check governor operation, examine piping for leaks and fractures, test for trip on overspeed and low/low L/O pressure.

C. Operational test engine to check throttle for ease of operation and leaks.

D. Operational test engine to check that all instrumentation is working properly and not leaking steam, oil or air, all wiring is in proper condition and no broken gauges or alarms.

E. Operational test lube oil system to ensure there are no leaks and all pumps are operational in all modes, all local and remote controls operate properly and filters are not leaking and operating within their pressure range.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY. NOTIFY OCMI IF ALARMS OR TRIPS ARE NOT OPERATING PROPERLY PRIOR TO CARRYING PASSENGERS FOR HIRE

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 116.970, 119.220, 56.50-1
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Inspect all steam piping and machinery insulation to ensure it is intact, all wire hooks/ wire and blankets (if installed) are in place to minimize the risk of personnel hazards.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS APPRORIATE.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.200, 455
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Test each remote fuel shutoff valve located in the fuel line at the tank from outside the compartment in which the valve is installed. Ensure any and all reach rods function freely and properly and the valve closes fully.

B. Test the other means of remotely shutting down each engine.

DEFICIENCY ACTION

IF ANY COMPONENT OR TEST FAILS, EFFECT REPAIRS PRIOR TO THE CARRIAGE OF PASSENGERS

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.410, 420, 422, 425, 430
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Ensure flexible hoses (where installed) have not deteriorated or suffered mechanical damage. Double hose clamps are installed where required.

B. Examine all fuel supply and return piping, fittings and hoses for leaks, and signs of chafing.

C. Determine that all engine instruments/indicators function normally, without undue fluctuation, gage faces are clean and intact, properly labeled, calibrated, are visible, measure the value in a range useful to the operator.

D. Ensure all personnel safety devices (guards, rails, spray shields, insulation) are in place, properly maintained. Secured in the correct location and labeled, stenciled, or color-coded as required.

E. Any location that poses a slip-trip-fall hazard, machine or equipment that may trap or ensnare a person or persons clothing must be immediately corrected.

F. Engine exhaust systems shall be inspected for leaks, wasted gaskets, loose, saturated, or missing lagging, proximity to combustible materials, overheating adjacent structures, and potential personnel injury in the event of accidental contact.

G. Verify adequate flow of cooling water through wet exhaust system.

H. Examine engine foundation and tank tops for signs of fatigue, stress, fractures, flexing while operating, indication of misalignment, and unusual noise and vibration.

I. Examine engine air intakes to ensure that devices are installed to prevent the entrance of harmful foreign materials and the device is in good repair.

J. Ensure crankcase vents are clear and that the accumulation of oil and vapors are contained and removed.

K. Ensure engine crankcase explosion covers are installed correctly and maintained in a serviceable condition.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS APPRORIATE.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46CFR 54, 61.10, 115.812, 119.330
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Verify all valves, gauges, and pressure controls function as designed.

B. Test the relief valve by increasing the system pressure until the valve "pops" or the MAWP on the receiver is reached. *NOTE:* If the valve does not lift. The valve must be replaced or adjusted to lift at the specified pressure not to exceed that marked on the receiver data plate.

C. Examine accumulators to determine that the accumulator can be isolated. That it is protected on the gas and fluid side by relief valves set to relieve at pressures not to exceed the MAWP.

DEFICIENCY ACTION

CORRECT, REPAIR OR ADJUST ANY COMPONENT AS REQUIRED.

SYSTEM:	DIESEL POWER SYSTEMS	**ICR NUMBER:**	**N**
SUBSYSTEM:	HYDRAULIC STARTING SYSTEM		**04**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46CFR 54, 58.30, 61.10,, 115.812, 115.330
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

1. Examine hydraulic system with system under operating pressure. Verify that all joints, connections are tight and leak free. Examine non-metallic hoses for signs of chafing.

2. Verify system functions normally, accumulator recharges and all gauges, valves and controls function.

3. Examine accumulator for signs of leaks or physical damage.

DEFICIENCY ACTION

CORRECT, REPAIR OR ADJUST ANY COMPONENT AS REQUIRED.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.410, Part 183
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Ensure starting system wiring is properly supported, protected from chafing, and routed away from moving machinery.

DEFICIENCY ACTION

CORRECT, REPAIR OR ADJUST ANY COMPONENT AS REQUIRED

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.435, 440, 445, 455
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Examine external condition of the fuel tanks, piping, fittings, hoses and support braces.

B. Ensure all fuel tanks are electrically bonded to a common ground.

C. All flexible nonmetallic hoses are of suitable type and double clamped.

D. Flame screens are in good condition and made of a corrosion resistant material.

E. Ensure method of determining the amount of fuel in each tank is appropriate.

DEFICIENCY ACTION

CORRECT, REPAIR OR ADJUST ANY COMPONENT AS REQUIRED

SYSTEM: UNFIRED PRESSURE VESSELS **ICR NUMBER:** **O**
SUBSYSTEM: EXTERNAL EXAM OF UPS **01**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.812, 61.10-5
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

Examine each pressure vessel on the ship to verify the following:

1. Pressure gauge installed is accurate, visible, and in good working condition.

2. Verify that the nameplate on the vessel is intact and legible. Ensure that the data plate on the relief valve is also intact and the valve is suitable for the application and rated capacity of the receiver and MAWP.

3. Determine that the vessel itself is securely mounted to the ship's structure and all piping to receiver is adequately supported.

4. Verify externally that the pressure vessel is in sound condition and that there is no evidence of structural damage.

DEFICIENCY ACTION

EFFECT REPAIRS TO CORRECT ANY DEFICIENCY. NOTIFY THE OCMI IF STRUCTURAL DAMAGE IS NOTICED PRIOR TO TAKING CORRECTIVE ACTION.

SYSTEM: UNFIRED PRESSURE VESSELS **ICR NUMBER:** **O**
SUBSYSTEM: INTERNAL EXAM OF UPS **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 115.812, 61.10-5
REGULATORY INSPECTION FREQUENCY: TWICE IN ANY FIVE-YEAR PERIOD

INSPECTION CRITERIA

This ICR applies to each UPV that is fitted with a manhole or other inspection opening so it can be satisfactorily examined internally.

- Examine inside of UPV especially all welded connections looking for gauging or pitting.
- If any defect is noticed with in the UPV it must be hydrostatically tested to 1 ½ times the MAWP.
- If no defect is noted, the UPV does not need to be hydrostatically tested.

DEFICIENCY ACTION

NOTIFY THE OCMI IF STRUCTURAL DAMAGE IS NOTICED PRIOR TO TAKING CORRECTIVE ACTION.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.812, 61.10-5
REGULATORY INSPECTION FREQUENCY: TWICE IN ANY FIVE-YEAR PERIOD

INSPECTION CRITERIA

Each UPV which cannot be internally examined must be hydrostatically tested and each UPV which has been internally examined with noted deficiencies.

- Hydrostatic test pressure is to be 1 ½ times the MAWP of the UPV.
- Examine for leaks and seepage.

DEFICIENCY ACTION

NOTIFY THE OCMI IF STRUCTURAL DAMAGE IS NOTICED PRIOR TO TAKING CORRECTIVE ACTION.

SYSTEM:	UNFIRED PRESSURE VESSELS	**ICR NUMBER:**	**O**
SUBSYSTEM:	TEST PRESSURE RELIEF VALVES		**04**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46CFR 176.812, 61.10-5
REGULATORY INSPECTION FREQUENCY: COI INTERVAL

INSPECTION CRITERIA

A. Verify the setting of the safety or relief valve is at or below the MAWP of the pressure

B. Function test the hand-lifting device.

C. Verify that after testing the valve that it seats tightly.

DEFICIENCY ACTION

ANY RELIEF VALVE THAT FAILS SHALL BE REPAIRED OR REPLACED PRIOR TO SYSTEM BEING PLACED IN SERVICE.

SYSTEM: AUXILIARY MACHINERY & EQUIPMENT **ICR NUMBER: P**
SUBSYSTEM: STEERING GEAR COMPONENTS **01**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 111.93, 115.814, 119.600
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Verify all foundations, and all equipment mounting bolts are intact and secured properly.

B. Check piping systems and attachments, equipment-securing brackets, protective guards, wire runs and cages, and other items prone to corrosion and vibration fatigue.

C. Inspect control linkages and linkage pins, and ram guides for wear.

D. Verify feedback devices, differential units, or other components that may cause single point failure and make sure they are in good condition.

E. Ensure that all vital connections, pins, couplings and control linkages have securing devices, such as cotter pins or double-nut locking arrangements, to prevent loosening from heavy vibration.

F. Verify emergency steering procedures and steering transfer diagrams are posted, clear and correct.

G. Inspect the carrier bearing for undue wear and leakage of water through the rudder post packing or vent ducts.

H. Inspect the insides of motor controller and switch gear boxes for general condition/ safe wiring practice, loose connections and any signs of corrosion, excessive condensation or electrical arcing.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFECTIVE ITEM. ENSURE IT IS OPERATING PROPERLY PRIOR TO CARRYING PASSENGERS FOR HIRE

SYSTEM: AUXILIARY MACHINERY & EQUIPMENT **ICR NUMBER: P**
SUBSYSTEM: STEERING GEAR COMPONENTS **01**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 111.93, 115.814, 119.600
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

I. Inspect pumps and motors by hand rotating each motor and pump assembly, being alert for unusual noise, binding or a feeling of roughness during rotation. Couplings should be examined for excessive play and evidence of grease slinging. Check motor ventilation openings for cleanliness.

J. Ensure all hydraulic hoses and connections are intact and the oil reservoir is properly filled.

K. Inspect the steering gear space for fire and personnel hazards, i.e.. oily rags, dangerous electrical connections, adequate lighting, etc.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFECTIVE ITEM. ENSURE IT IS OPERATING PROPERLY PRIOR TO CARRYING PASSNGERS FOR HIRE

SYSTEM: AUXILIARY MACHINERY & EQUIPMENT **ICR NUMBER: P**
SUBSYSTEM: STEERING GEAR OPERATIONAL TEST **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 111.93, 115.814, 119.600, 122.320
REGULATORY INSPECTION FREQUENCY: DAILY/ANNUALLY

INSPECTION CRITERIA

A. To properly conduct an operational test of the steering gear it is best done with one crew member on the bridge and the other in the steering gear room.

B. Ensure that operating instructions are properly posted and accurate at all operating platforms.

C. During operation be alert for unusual noise, vibration, oil leakage, water leakage and abnormal hydraulic pressures. Hunting of the system may indicate feedback problems.

D. Check for overheating of the pumps and motors.

E. Test all systems alarms and indicators. Both visual and audible. (The operation test should be conducted on each pump and on each system follow-up and non-follow- up modes).

F. Operate each motor and pump assembly from the bridge, the alternate control station, and steering gear room through the full range of the rudder travel. The range of rudder movement should be from 35 degrees to 30 degrees in 28 seconds.

G. Operate each motor and pump assembly on the normal, alternate and emergency power supplies, checking for proper operation of the manual feeder transfer switch and automatic bus transfers.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY PRIOR TO CARRYING PASSENGERS FOR HIRE

SYSTEM: AUXILIARY MACHINERY & EQUIPMENT **ICR NUMBER: P**
SUBSYSTEM: STEERING GEAR OPERATIONAL TEST **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 111.93, 115.814, 119.600, 122.320
REGULATORY INSPECTION FREQUENCY: DAILY/ANNUALLY

INSPECTION CRITERIA

H. Control should be switched from bridge control to engine room control and vice versa using posted instructions.

I. Auxiliary steering arrangements should be tested by stimulating a power failure. The system should then be switched and tested. The time limit for the auxiliary system is 60 seconds from 15 degrees to 15 degrees. When power is secure d the loss of power alarm should operate. This should be tested on both controllers.

J. Ensure proper indication is obtained by the helmsman by using the trick wheel (where installed).

K. Ensure proper rudder angle indications is provided at all control stations. Where synchro steering repeaters are used ensure the indications are the same. Visibility from the steering station and night lights shall also be checked. Emergency lighting should be checked as well.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

SYSTEM: AUXILIARY MACHINERY & EQUIPMENT **ICR NUMBER: P**
SUBSYSTEM: FUEL OIL AND TRANSFER SYSTEMS **03**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED ENGINEER or his designated representative
REFERENCES: 46CFR 119.455, 458, 33CFR 155.750
REGULATORY INSPECTION FREQUENCY: QUARTERLY/ANNUALLY

INSPECTION CRITERIA

A. The engineer conducting this inspection should be very knowledgeable in the layout and operation of this system. Ensure accurate and legible diagrams of the fuel oil systems and transfer systems are available. Ensure valves and pumps are accurately and legibly labeled.

B. Piping, including all valves, flanges, pumps and should be visually inspected. Items with cracking, leakage, loose fittings, etc. should be repaired.

C. The high pressure and low-pressure strainers should be inspected. These strainers and or baskets should be in good physical condition. The crossover for dual strainers should be operated to ensure they are free to operate. Excessive force or cheater bars shouldn't be necessary to operate the strainers.

D. Ensure strainer and filter bowls are installed and intact.

E. Ensure valves fitted in water traps or filters have plugs installed to prevent leakage.

F. Ensure F.O. Relief valves operate at the appropriate pressure and the discharge is routed to the discharge side of the pump. This should be done on all F.O. pumps including transfer pumps.

G. Ensure excessive leakage is not present at the pump.

H. Ensure spray shields on flanged fittings are correctly installed and in good physical condition.

DEFICIENCY ACTION

REPLACE OR REPAIR ITEM. NOTIFY OCMI.

SYSTEM: AUXILIARY MACHINERY & EQUIPMENT **ICR NUMBER: P**
SUBSYSTEM: FUEL OIL AND TRANSFER SYSTEMS **03**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED ENGINEER or his designated representative
REFERENCES: 46CFR 119.455, 458, 33CFR 155.750
REGULATORY INSPECTION FREQUENCY: QUARTERLY/ANNUALLY

INSPECTION CRITERIA

I. Inspect the F.O. pumps while it is running and make sure it is operating at correct pressures, without overheating or excessive vibration. The instrumentation for the pumps should be inspected as well, such as pump running indicators, suction, and discharge pressure gauges and flow meters.

J. When equipped, F.O. heaters should be externally examined for instrumentation and leakage. Where steam heaters are used ensure the drains are free from any fuel contamination.

K. Test all remote operated F.O. valves and ensure they operate freely and are actually connected to the appropriate valves.

L. Ensure all tank vents are in good physical condition and are routed to the appropriate vent areas. Adequate containment should be around all F.O. vents. Flame screens should be inspected and installed in all F.O. vents. Flame screens should be of corrosion resistant wire of at least 30x30 mesh, or two screens of at least 20 mesh spaced not less than one-half inch apart nor more than 1-1/2 inches apart.

M. Test all remote shutdowns of F.O. pumps.

DEFICIENCY ACTION

REPLACE OR REPAIR ITEM. NOTIFY OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 119.500, 510, 520, 530
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Ensure the bilge system is capable of pumping from and draining any watertight compartment except for ballast, oil and water tanks which have acceptable means for filling and emptying independent of the bilge system.

B. Ensure all standing water drains to bilge suction pipes.

C. Ensure that there are independent valves for each watertight compartment and they are easily accessible and operable and clearly marked for which compartment they control. Ensure the crew understands the reason for these valves and where they are located.

D. If the bilge systems is equipped with strainers adequate means shall be made to ensure the strainers are unobstructed and in good condition.

E. Any remote reach-rods controlling the bilge system should be operated and ensured they are actually connected to the appropriate valve.

F. Instrumentation for determining pump suction and pressure should be accurate and in good working order.

G. If equipped with a portable hand bilge pump, verify proper operation.

H. Test all bilge level alarms and make sure they operate properly.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY PRIOR TO CARRYING PASSENGERS FOR HIRE.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED ENGINEER or his designated representative
REFERENCES: 46 CFR 116.960, 116.970, 120.220
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Ensure that all rotating machinery has adequate guards and the guards are in good condition.

B. Look at the whole system for signs of leakage of oil and refrigerant. Ensure the condition of pipes and fittings are in good repair and satisfactorily installed.

C. Ensure all insulation is intact and is of adequate thickness.

D. Check fluid levels.

E. Ensure the compressor motor is operating properly without overheating or excessive vibration.

F. Ensure proper instrumentation is available and correct readings are shown.

G. Verify that all electrical connections are intact and are properly installed in electrical boxes. Ensure there are no exposed hot connections.

H. Examine the pressure vessels associated with the refrigeration system and ensure they are in good repair.

I. Vessels equipped with refrigeration spaces, should have some appropriate form of breathing apparatus stowed in a convenient, but outside of, the spaces containing refrigeration equipment.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY. NOTIFY LOCAL OCMI.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED ENGINEER or his designated representative
REFERENCES: 46CFR 54.15, U.S. DEPT. OF HEALTH
REGULATORY INSPECTION FREQUENCY: QUARTERLY/ANNUALLY

INSPECTION CRITERIA

A. Ensure a designated potable water hose is available for filling tanks. If the hose is not stored in a cabinet the ends should be capped.

B. Ensure the filling line is clearly marked. "POTABLE WATER FILLING".

C. Ensure vents to potable water tanks are in non contaminated area or contaminates are not stored next to vents. The vent should be screened with #16 mesh or finer corrosion resistant wire.

D. Potable water tanks shall be designated tanks, and clearly marked. These tanks should be treated or coated to assist in the protection of the water.

E. Ensure the water pumps and pressurization system is operable and in good repair.

F. Ensure housekeeping is adequate around all components of the potable water system.

G. Ensure the pressure in the system is not above the MAWP of the tank or the system. Press on air fittings should not be permanently attached to the tank.

H. Verify the entire system is in good repair.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY. NOTIFY LOCAL OCMI.

SYSTEM: ELECTRICAL SYSTEMS **ICR NUMBER:** **Q**
SUBSYSTEM: SWITCHBOARDS **01**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46CFR 111.30, 120.330
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. A general overview of the physical condition should be given to the entire switchboard.

B. Ensure there is a non-conductive mat or non-conducting grating in each working area in front of and behind each board.

C. Non-conducting handrails and guardrails shall be present on the board face.

D. Dripshields shall be present and in good physical condition.

E. All ground detection lights shall be in working order and no grounds should be indicated.

F. All instrumentation (meters) shall be in good working order and recently calibrated. All controls and meters should be clearly and accurately identified.

G. Where the generators can be paralleled all synchronizing controls and associated equipment for synchronizing generators should be functioning properly

H. Overcurrent devices should be clearly and accurately identified.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

SYSTEM: ELECTRICAL SYSTEMS **ICR NUMBER: Q**
SUBSYSTEM: SHIP'S SERVICE GENERATORS **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46CFR 120.320, 322, 324
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

EACH INDIVIDUAL GENERATOR

A. Ensure the location of the generator is receiving adequate ventilation and is as dry as possible.

B. Verify the operation of the voltmeter and ammeter for each generator rated at 50 volts or more.

C. Verify the operation of the frequency-measuring device for each AC generator.

D. Verify a nameplate containing the information required by Article 445 or Article 430 of the NEC is attached.

E. Verify each generator is protected by an overcurrent device with a set value not exceeding 115% of full lad rating.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY.

SYSTEM: ELECTRICAL SYSTEMS **ICR NUMBER:** **Q**
SUBSYSTEM: SHIP'S SERVICE GENERATORS **02**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46CFR 120.320, 322, 324
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

MULTIPLE GENERATOR INSTALLATIONS

A. For non-parallel systems; verify the operation of the interlock which prevents simultaneous connection to the switchboard.

B. For parallel systems;

1. test the operation of the reverse-power or reverse-current trips,
2. verify the operation of the switchboard speed control for each prime mover,
3. verify the operation of the wattmeter for each generator, and
4. verify the operation of the synchroscope and synchronizing lamp that has a selector switch to show synchronization for paralleling generators.

DUAL VOTAGE GENERATORS

A. Verify the neutral of the voltage system is solidly connected to the switchboard's neutral bus.

B. Verify the neutral bus is connected to ground.

C. Verify ground detection;

1. For AC systems verify the ammeter indicates the current in the ground connection and has a scale that accurately measures in the 0 to 10 ampere range, and verify the ammeter switch is of the spring return-to-on type.
2. For DC systems verify that the zero center ammeter is in the ground connection, has a scale range of 150% of the neutral current rating and has the polarity of the ground marked.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY.

SYSTEM: ELECTRICAL SYSTEMS **ICR NUMBER: Q**
SUBSYSTEM: EMERGENCY GENERATORS **03**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46CFR 111.05, 120.312, 320, 322, 324
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

EACH INDIVIDUAL GENERATOR

A. Ensure the location of the generator is receiving adequate ventilation and is as dry as possible.

B. Verify the operation of the voltmeter and ammeter for each generator rated at 50 volts or more.

C. Verify the operation of the frequency-measuring device for each AC generator.

D. Verify a nameplate containing the information required by Article 445 or Article 430 of the NEC is attached.

E. Verify each generator is protected by an overcurrent device with a set value not exceeding 115% of full lad rating.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY.

SYSTEM: ELECTRICAL SYSTEMS **ICR NUMBER:** **Q**
SUBSYSTEM: EMERGENCY GENERATORS **03**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46CFR 111.05, 120.312, 320, 322, 324
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

MULTIPLE GENERATOR INSTALLATIONS

A. For non-parallel systems; verify the operation of the interlock which prevents simultaneous connection to the switchboard.

B. For parallel systems;

1. test the operation of the reverse-power or reverse-current trips,
2. verify the operation of the switchboard speed control for each prime mover,
3. verify the operation of the wattmeter for each generator, and
4. verify the operation of the synchroscope and synchronizing lamp that has a selector switch to show synchronization for paralleling generators.

DUAL VOTAGE GENERATORS

A. Verify the neutral of the voltage system is solidly connected to the switchboard's neutral bus.

B. Verify the neutral bus is connected to ground.

C. Verify ground detection;

1. For AC systems verify the ammeter indicates the current in the ground connection and has a scale that accurately measures in the 0 to 10 amperes range, and verify the ammeter switch is of the spring return-to-on type.
2. For DC systems verify that the zero center ammeter is in the ground connection, has a scale range of 150% of the neutral current rating and has the polarity of the ground marked.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY.

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46CFR 120.350, 352, 354
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Verify connections to battery terminals are of the permanent type.

B. Examine battery trays to ensure serviceability. Verify lining or construction is of a material that is resistant to damage by electrolyte.

C. Test the ammeter connected in the charging circuit.

For a LARGE battery installation consisting of a charger having an output of more than 2kw:

1. Verify the locker, room or enclosed box used for the batteries is dedicated.
2. Verify the electric motors for the battery installation power ventilation system are Class I, Division 1, Group B or are at least 10' form the exhaust end of duct.
3. Test the interlock between the battery charger and the ventilation system to ensure the batteries can not be charged without ventilation.

For a SMALL battery installation consisting of a charger having an output of 2kw or less:

1. Verify ventilation is sufficient to dissipate the gases generated during charging.

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DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46CFR 120.410, 430, 432, 434
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Ensure each lighting fixture globe, lens or diffuser has a guard or is made of high strength material except in a location where it is not subject to damage.

B. Ensure each lighting fixture is not being used as a connection box for a circuit other that the branch circuit supplying the fixture.

C. Ensure each table lamp, desk lamp, floor lamp, or similar equipment is secured in place.

D. Ensure the portable battery operated lights located at the operating station and the access to the propulsion machinery space are operational.

E. Test the emergency lighting fitted along the line of escape to the main deck from all passenger and crew accommodation spaces located below the main deck. Ensure it is adequate.

F. Test the automatic activation of the emergency lighting system upon loss of the main lighting system.

G. Test lighting in way of liferaft embarkation stations to ensure proper illumination of the area.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

SYSTEM: ELECTRICAL SYSTEMS **ICR NUMBER:** **Q**
SUBSYSTEM: RECEPTACLE OUTLETS **07**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED ENGINEER or his designated representative
REFERENCES: 46CFR 120.370
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

Ensure each receptacle outlet that operates at 100 volts or more has a grounding pole and that the poles are adequately grounded.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY.

SYSTEM: ELECTRICAL SYSTEMS **ICR NUMBER:** **Q**
SUBSYSTEM: ISTRIBUTION PANELS **08**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 120.330
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

Ensure each distribution panel is adequately ventilated and protected form falling debris and dripping or splashing water. See Q 01 for more details.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

SYSTEM: ELECTRICAL SYSTEMS **ICR NUMBER:** **Q**
SUBSYSTEM: WIRING **09**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 120.340
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Examine cable and wires for signs of mechanical damage, jury-rigs, dead-end cables, splices, etc.

B. Examine cable and wire supports for corrosion or deterioration. Supports should not be spaced more than 24” apart and should not cause chafing or other damage to the cable or wire.

C. Ensure portable cables and wires are used in appropriate situations and are not used for a “temporary fix”.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

SYSTEM:	ELECTRICAL SYSTEMS	**ICR NUMBER:**	**Q**
SUBSYSTEM:	INTERNAL COMMUNICATION SYSTEM		**10**

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 121.602
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

Test the fixed means of two-way communications between the operating station and the location where the means of controlling the propulsion machinery is located. This can take the form of direct voice communications, OCMI approved portable radio installation or fixed communication installation.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY

AUTHORIZATION

AUTHORIZED INSPECTOR: LICENSED OFFICER or his designated representative
REFERENCES: 46 CFR 120.530
REGULATORY INSPECTION FREQUENCY: ANNUALLY

INSPECTION CRITERIA

A. Examine electrical equipment in spaces containing machinery powered by, or fuel tanks for, gasoline or other fuels having a flashpoint of 110F or lower. Ensure electrical equipment is explosion-proof or ignition-protected, or part of an intrinsically safe system.

B. Examine lockers used to store paint, oil, turpentine, or other flammable liquids. Ensure electrical equipment is explosion-proof or ignition-protected, or part of an intrinsically safe system.

DEFICIENCY ACTION

REPLACE OR REPAIR DEFICIENT ITEM. ENSURE IT IS OPERATING PROPERLY