

Pt. 109

46 CFR Ch. I (10-1-11 Edition)

(iv) Keeping order in the passageways and on the stairways and generally controlling the movements of the visitors and other persons on board;

(8) Each muster list must specify substitutes for key persons if they are disabled, taking into account that different emergencies require different actions.

(c) *Emergency instructions.* Illustrations and instructions in English and any other appropriate language, as determined by the OCMI, must be posted in each cabin used for persons who are not members of the crew or industrial personnel. They must be conspicuously displayed at each muster station and in other accommodation spaces to inform personnel of—

- (1) The fire and emergency signal;
- (2) Their muster station;
- (3) The essential actions they must take in an emergency;
- (4) The location of lifejackets, including child-size lifejackets;
- (5) The method of donning lifejackets;
- (6) If immersion suits are provided, the location of the immersion suits; and
- (7) Fully illustrated instructions on the method of donning immersion suits.

[CGD 84-069, 61 FR 25299, May 20, 1996, as amended at 63 FR 52815, Oct. 1, 1998]

PART 109—OPERATIONS

Subpart A—General

- Sec.
- 109.101 Applicability.
 - 109.103 Requirements of the International Convention for Safety of Life at Sea, 1974.
 - 109.105 Incorporation by reference.
 - 109.107 Designation of master or person in charge.
 - 109.109 Responsibilities of master or person in charge.
 - 109.121 Operating manual.

Subpart B—Tests, Drills, and Inspections

- 109.201 Steering gear, whistles, general alarm, and means of communication.
- 109.203 Sanitation.
- 109.205 Inspection of boilers and machinery.
- 109.209 Appliances for watertight integrity.
- 109.211 Testing of emergency lighting and power systems.
- 109.213 Emergency training and drills.

- 109.223 Fire fighting equipment.
- 109.227 Verification of vessel compliance with applicable stability requirements.

Subpart C—Operation and Stowage of Safety Equipment

- 109.301 Operational readiness, maintenance, and inspection of lifesaving equipment.
- 109.323 Manning of survival craft and supervision.
- 109.329 Fire pumps.
- 109.331 Firehoses and hydrants.
- 109.333 Fire main cutoff valves.
- 109.334 Working over water.
- 109.335 Stowage of work vests.
- 109.337 Fireman's outfit.
- 109.339 Location of fire axes.
- 109.347 Pilot boarding equipment.

Subpart D—Reports, Notifications, and Records

REPORTS AND NOTIFICATIONS

- 109.411 Notice and reporting of casualty.
- 109.415 Retention of records after casualty.
- 109.419 Report of unsafe machinery.
- 109.421 Report of repairs to boilers and pressure vessels.
- 109.425 Repairs and alterations: Fire detecting and extinguishing equipment.

RECORDS

- 109.431 Logbook.
- 109.433 Logbook entries.
- 109.435 Record of fire fighting equipment inspection.
- 109.437 Crane record book.
- 109.439 Crane certificates.

Subpart E—Emergency Signals

- 109.503 Emergency signals.

Subpart F—Cranes

- 109.521 Cranes: General.
- 109.525 Cranes: Working loads.
- 109.527 Cranes: Operator designation.

Subpart G—Miscellaneous

- 109.555 Propulsion boilers.
- 109.557 Flammable and combustible liquids: Carriage.
- 109.559 Explosives and radioactive materials.
- 109.563 Posting of documents.
- 109.564 Maneuvering characteristics.
- 109.565 Charts and nautical publications.
- 109.573 Riveting, welding, and burning operations.
- 109.575 Accumulation of liquids on helicopter decks.
- 109.577 Helicopter fueling.
- 109.585 Use of auto pilot.

Coast Guard, DHS

§ 109.121

APPENDIX A TO PART 109—NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 4-78—INSPECTION AND CERTIFICATION OF EXISTING MOBILE OFFSHORE DRILLING UNITS

AUTHORITY: 43 U.S.C. 1333; 46 U.S.C. 3306, 6101, 10104; Department of Homeland Security Delegation No. 0170.1.

SOURCE: CGD 73-251, 43 FR 56828, Dec. 4, 1978, unless otherwise noted.

Subpart A—General

§ 109.101 Applicability.

No unit may be operated unless it complies with the regulations in this part.

§ 109.103 Requirements of the International Convention for Safety of Life at Sea, 1974.

No self-propelled unit of more than 500 gross tons may embark on an international voyage unless it is issued the appropriate Convention certificate as described in §§ 107.401 through 107.413 of this subchapter.

§ 109.105 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). To enforce any edition other than that specified in paragraph (b) of this section, the Coast Guard must publish notice of change in the FEDERAL REGISTER and make the material available to the public. All approved material is on file at the U.S. Coast Guard, Office of Design and Engineering Standards (CG-521), 2100 2nd St. SW., Stop 7126, Washington, DC 20593-7126 or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. All material is available from the sources indicated in paragraph (b) of this section.

(b) The material for incorporation by reference in this part and the sections affected are:

American Society for Testing and Materials (ASTM)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM Adjunct F 1626, Symbols for Use in Accordance with Regulation II-2/20 of the 1974 SOLAS Convention as amended PCN: 12-616260-01 (1996)—109.563

International Maritime Organization (IMO)

Publications Section, 4 Albert Embankment, London, SE1 7SR United Kingdom.
Resolution A.654.(16), Graphical Symbols for Fire Control Plans—109.563

[CGD 95-028, 62 FR 51208, Sept. 30, 1997, as amended by USCG 1998-4442, 63 FR 52191, Sept. 30, 1998; USCG 1999-5151, 64 FR 67182, Dec. 1, 1999; USCG-2009-0702, 74 FR 49233, Sept. 25, 2009]

§ 109.107 Designation of master or person in charge.

The owner of a unit or his agent shall designate an individual to be the master or person in charge of the unit.

§ 109.109 Responsibilities of master or person in charge.

(a) The master or person in charge shall—

(1) Ensure that the provisions of the Certificate of Inspection are adhered to; and

(2) Be fully cognizant of the provisions in the operating manual required by § 109.121.

(b) Nothing in this subpart shall be construed as limiting the master or person in charge, at his own responsibility, from diverting from the route prescribed in the Certificate of Inspection or taking such steps as he deems necessary and prudent to assist vessels in distress or for other emergency conditions.

§ 109.121 Operating manual.

(a) Each unit must have on board an operating manual approved by the Coast Guard as meeting the requirements of this section.

(b) The operating manual must be available to, and written in a manner that is easily understood by, the unit's operating personnel and include the following:

(1) A table of contents and general index.

(2) A general description of the unit, including major dimensions, tonnages,

dry bulk capacities, damage stability standard to which designed, hook load capacity, rotary table capacity, set back load capacity, drilling derrick capacity, and the identification, the maximum deadweight in pounds and kilograms, and the rotor size in feet and meters of the helicopter used for the design of the helicopter deck.

(3) Limiting design data for each mode of operation, including draft, air gap, wave height, wave period, wind, current, temperature, and other environmental factors.

(4) Instructions on the use of the stability data.

(5) Lightweight data with a comprehensive listing of the inclusions and exclusions of semi-permanent equipment, together with guidance for the routine recording of lightweight alterations.

(6) Information identifying the type, location, and quantities of permanent ballast.

(7) Hydrostatic curves or tables.

(8) The maximum allowable deck loadings either listed or shown on a plan.

(9) A capacity plan showing the capacities and the vertical, longitudinal, and transverse centers of gravity of tanks and bulk material stowage spaces.

(10) Tank sounding tables or curves showing capacities, the vertical, longitudinal, and transverse centers of gravity in graduated intervals, and the free surface data of each tank.

(11) Stability information setting forth the maximum allowable height of the center of gravity in relation to draft data, displacement, and other applicable parameters unique to the design of the unit to determine compliance with the intact and damage stability criteria.

(12) Examples of loading conditions for each mode of operation and instructions for developing other acceptable loading conditions.

(13) Information concerning the use of any special crossflooding fitting for each operating condition which, if damage occurs, may require crossflooding for survival (surface units only) and the location of any valve that may require closure to prevent progressive flooding (all units).

(14) Guidance for preparing the unit for the passage of a severe storm and the specific actions and approximate length of time to complete them or to attain a designated level of preparedness.

(15) Guidance for operating the unit while changing its mode of operation and for preparing the unit to make a move and, for self-elevating units in the transit mode, information for preparing the unit to avoid structural damage during heavy weather, including the positioning and securing of legs, cantilever structures, and heavy cargo or large equipment which might shift position.

(16) A description of any inherent operational limitations for each mode of operation and for each change in mode of operation.

(17) Guidance for the person in charge to determine the cause of unexpected list and trim before taking corrective action.

(18) For column stabilized units, a description, a schematic diagram, and guidance for the operation of the ballast system and of the alternate means of ballast system operation, together with a description of their limitations, such as pump capacities at various angles of heel and trim.

(19) A description, a schematic diagram, and guidance for the operation of the bilge system and of the alternate means of bilge system operation, together with a description of their limitations, such as spaces not connected to the bilge system.

(20) General arrangement plans showing the location of: Watertight and weathertight compartments, and openings in the hull and structure; vents, closures, and mechanical, ventilating, and electrical emergency shutdowns; flooding alarms and fire and gas detectors; and access to different compartments and decks.

(21) A list of emergency shutdowns and guidance on restarting all mechanical, ventilating, and electrical equipment after activation of the emergency shutdowns.

(22) Procedures for evacuating personnel from the unit.

(23) A plan showing the hazardous locations described in §111.105-33 of this chapter.

(24) A schematic diagram of the emergency power system.

(Approved by the Office of Management and Budget under control number 1625-0038)

[CGD 83-071, 52 FR 6979, Mar. 6, 1987; 52 FR 9383, Mar. 24, 1987, as amended by CGD 95-028, 62 FR 51208, Sept. 30, 1997; USCG-2006-25697, 71 FR 55746, Sept. 25, 2006]

Subpart B—Tests, Drills, and Inspections

§ 109.201 Steering gear, whistles, general alarm, and means of communication.

The master or person in charge shall ensure that—

(a) Steering gear, whistles, general alarm bells, and means of communication between the bridge or control room and the engine room on self propelled units are inspected and tested—

(1) Within 12 hours before getting under way; and

(2) At least once each week if under way or on station; and

(b) Whistles and general alarm bells on all other units are inspected examined and tested at least once each week.

§ 109.203 Sanitation.

(a) The master or person in charge shall insure that the accommodation spaces are in a clean and sanitary condition.

(b) The chief engineer, or engineer in charge if no chief engineer is required, shall insure that the engineering spaces are in a clean and sanitary condition.

§ 109.205 Inspection of boilers and machinery.

The chief engineer or engineer in charge, before he assumes charge of the boilers and machinery of a unit shall inspect the boilers and machinery, other than industrial machinery, and report to the master or person in charge and the Officer in Charge, Marine Inspection, any parts that are not in operating condition.

§ 109.209 Appliances for watertight integrity.

(a) Before getting underway, the master or person in charge shall insure

that each appliance for watertight integrity is closed and watertight.

(b) If existing conditions warrant, the master or person in charge may permit appliances for watertight integrity to be open while afloat.

§ 109.211 Testing of emergency lighting and power systems.

(a) The master or person in charge shall insure that—

(1) Each emergency lighting and each emergency power system is tested at least once each week;

(2) Each emergency generator is tested at least once each month by operating it under load for at least 2 hours; and

(3) Each storage battery for emergency lighting and power systems is tested every six months under actual connected load for a period of at least 2 hours.

(b) After the 2 hour test period required in paragraph (a)(3) of this section, the voltage values under load or specific gravity of electrolyte must be measured. Measured values must be extrapolated to approximate the values that would result following a 12 hour test period. The test must be extended if a trend cannot be determined to allow extrapolation. The capacity of the battery corresponding to the extrapolated values of voltage or specific gravity must be sufficient to supply the actual connected load.

§ 109.213 Emergency training and drills.

(a) *Training materials.* Abandonment training material must be on board each unit. The training material must consist either of a manual of one or more volumes, written in easily understood terms and illustrated wherever possible, or audiovisual training aids, or both as follows:

(1) If a training manual is used, a copy must be made available to each person on board the unit. If audiovisual training aids are used, they must be incorporated into the onboard training sessions described under paragraph (g) of this section.

(2) The training material must explain, in detail—

§ 109.213

46 CFR Ch. I (10–1–11 Edition)

(i) The procedure for donning life-jackets, immersion suits, and anti-exposure suits carried on board;

(ii) The procedure for mustering at the assigned stations;

(iii) The procedure for boarding, launching, and clearing the survival craft and rescue boats;

(iv) The method of launching from within the survival craft;

(v) The procedure for releasing from launching appliances;

(vi) The method and use of water spray systems in launching areas when required for the protection of aluminum survival craft or launching appliances;

(vii) Illumination in launching area;

(viii) The use of all survival equipment;

(ix) The use of all detection equipment for the location of survivors or survival craft;

(x) With illustrations, the use of radio lifesaving appliances;

(xi) The use of sea anchors;

(xii) The use of engine and accessories;

(xiii) The recovery of survival craft and rescue boats, including stowage and securing;

(xiv) The hazards of exposure and the need for warm clothing;

(xv) The best use of the survival craft for survival;

(xvi) The methods of retrieval, including the use of helicopter rescue gear (slings, baskets, stretchers), and unit's line throwing apparatus;

(xvii) The other functions contained in the muster list and emergency instructions; and

(xviii) The instructions for emergency repair of the lifesaving appliances.

(b) *Familiarity with emergency procedures.* Each of the crew members and industrial personnel with assigned emergency duties on the muster list must be familiar with their assigned duties before working on the unit.

(c) *Drills—general.* (1) Drills must, as far as practicable, be conducted as if there were an actual emergency.

(2) Each of the crew members and industrial personnel must participate in at least one abandonment drill and one fire drill every month. Drills must take place within 24 hours of a change in

crew or industrial personnel if more than 25 percent of the persons on board have not participated in an abandonment and fire drills on board the unit in the previous month.

(3) Drills must be held before the unit enters service for the first time after modification of a major character, or when a new crew is engaged.

(d) *Abandonment drills.* (1) Abandonment drills must include the following:

(i) Each drill must include summoning of industrial personnel and crew to muster stations with the general alarm, followed by drill announcements on the public address or other communication system, and ensuring that all on board are made aware of the order to abandon ship.

(ii) Each drill must include reporting to stations and preparing for the duties described in the muster list.

(iii) Each drill must include checking that industrial personnel and crew are suitably dressed.

(iv) Each drill must include checking that lifejackets or immersion suits are correctly donned.

(v) Each drill must include lowering of at least one lifeboat after any necessary preparation for launching.

(vi) Each drill must include starting and operating the lifeboat engine.

(vii) Each drill must include operating davits used for launching the lifeboats.

(2) Different lifeboats must, as far as practicable, be lowered in compliance with the requirements of paragraph (d)(1)(v) of this section at successive drills.

(3) Each lifeboat must be launched with its assigned operating crew aboard, and maneuvered in the water at least once every 3 months, during an abandonment drill.

(4) As far as is reasonable and practicable, rescue boats other than lifeboats which are also rescue boats, must be launched each month with their assigned crew aboard and maneuvered in the water. In all cases this requirement must be complied with at least once every 3 months.

(5) If a unit is fitted with marine evacuation systems, drills must include an exercising of the procedures required for the deployment of such a system up to the point immediately

preceding actual deployment of the system. This aspect of drills should be augmented by regular instruction using the on board training aids. Additionally, members of the crew or industrial personnel assigned to duties involving the marine evacuation system must be further trained by participation in a full deployment of a similar system into water, either on board a unit or ashore, at intervals normally not longer than 2 years, but in no case longer than 3 years.

(6) Emergency lighting for mustering and abandonment must be tested at each abandonment drill.

(7) On a unit carrying immersion suits or anti-exposure suits, immersion suits or anti-exposure suits must be worn by crew members and industrial personnel in at least one abandonment drill in any three-month period. If wearing the suit is impracticable due to warm weather, the crew members must be instructed on its donning and use.

(e) *Line-throwing appliance.* A drill must be conducted on the use of the line-throwing appliance at least once every 3 months. The actual firing of the appliance is at the discretion of the person in charge.

(f) *Fire drills.* (1) Fire drills must, as far as practicable, be planned in such a way that due consideration is given to regular practice in the various emergencies that may occur depending on the type of unit.

(2) Each fire drill must include—

(i) Reporting to stations, and preparing for the duties described in the muster list for the particular fire emergency being simulated;

(ii) Starting of fire pumps and the use of two jets of water to determine that the system is in proper working order;

(iii) Checking the fireman's outfits and other personal rescue equipment;

(iv) Checking the relevant communication equipment;

(v) Checking the operation of watertight doors, fire doors, and fire dampers and main inlets and outlets of ventilation systems in the drill area;

(vi) Checking the necessary arrangements for subsequent abandonment of the unit; and

(vii) Simulated operation of remote controls for stopping ventilation and fuel supplies to machinery spaces.

(3) The equipment used during drills must immediately be brought back to its fully operational condition, and any faults and defects discovered during the drills must be remedied as soon as possible.

(g) *Onboard training and instruction.*

(1) Except as provided in paragraph (g)(2) of this section, onboard training in the use of the unit's lifesaving appliances, including survival craft equipment, and in the use of the unit's fire-extinguishing appliances must be given to each member of the crew and industrial personnel as soon as possible but not later than 2 weeks after they join the unit.

(2) If crew or industrial personnel are on a regularly scheduled rotating assignment to the unit, onboard training in the use of the unit's lifesaving appliances, including survival craft equipment, and in the use of the unit's fire-extinguishing appliances must be given not later than 2 weeks after the time of first joining the unit.

(3) The crew and industrial personnel must be instructed in the use of the unit's fire-extinguishing appliances, lifesaving appliances, and in survival at sea at the same interval as the drills. Individual instruction may cover different parts of the unit's lifesaving and fire-extinguishing appliances, but all the unit's lifesaving and fire-extinguishing appliances, must be covered within any period of 2 months.

(4) Crew and industrial personnel must be given instructions which include, but are not limited to—

(i) The operation and use of the unit's inflatable liferafts;

(ii) The problems of hypothermia, first aid treatment for hypothermia and other appropriate first aid procedures;

(iii) The special instructions necessary for use of the unit's lifesaving appliances in severe weather and severe sea conditions; and

(iv) The operation and use of fire-extinguishing appliances.

(5) Onboard training in the use of davit-launched liferafts must take place at intervals of not more than 4 months on each unit with davit-

§ 109.213

46 CFR Ch. I (10–1–11 Edition)

launched liferafts. Whenever practicable this must include the inflation and lowering of a liferaft. If this liferaft is a special liferaft intended for training purposes only, and is not part of the unit's lifesaving equipment, this liferaft must be conspicuously marked.

(6) Each of the industrial personnel without designated responsibility for the survival of others on board, must be instructed in at least—

- (i) The emergencies which might occur on that particular type of unit;
- (ii) The consequences of panic;
- (iii) The location and actuation of fire alarm controls;
- (iv) The location and proper method of use of firefighting equipment;
- (v) Fire precautions;
- (vi) The types of all lifesaving appliances carried on the unit and proper methods of using them, including—
 - (A) The correct method of donning and wearing a lifejacket, and if provided an immersion suit;
 - (B) Jumping into the water from a height while wearing a lifejacket and, if provided, an immersion suit;
 - (C) How to board survival craft from the unit and from the water;
 - (D) Operation and use of the unit's inflatable liferafts;
 - (E) Special instructions necessary for use of the unit's lifesaving appliances in severe weather and severe sea conditions;
 - (F) Swimming while wearing a lifejacket; and
 - (G) Keeping afloat without a lifejacket.
- (vii) Where appropriate, how to survive in the water—
 - (A) In the presence of fire or oil on the water;
 - (B) In cold conditions; and
 - (C) If sharks may be present.
- (viii) Problems of hypothermia, first aid treatment for hypothermia and other appropriate first aid procedures;
- (ix) The need to adhere to the principles of survival; and
- (x) The basic methods of boarding helicopters.

(7) Each member of the crew and each of the industrial personnel with designated responsibility for the survival of others on board must be instructed in at least the items covered in paragraph (g)(6) of this section, and—

- (i) Methods of detection, isolation, control, and extinguishing of fire;
- (ii) Checking and maintaining fire fighting equipment;
- (iii) Marshaling of personnel; and
- (iv) Abandonment of the unit, including—
 - (A) Launching survival craft;
 - (B) Getting survival craft quickly and safely clear of the unit; and
 - (C) Righting a capsized survival craft.
- (v) Handling all survival craft and their equipment, including—
 - (A) Checking and maintaining their readiness for immediate use;
 - (B) Using equipment to the best advantage;
 - (C) Using the sea anchor;
 - (D) Remaining, as far as practicable, in the general vicinity of the unit, well clear of but not downwind of any hydrocarbons or fire;
 - (E) Recovering and, as far as practicable, caring for other survivors;
 - (F) Keeping a lookout;
 - (G) Operating equipment provided to aid in the detection of the survival craft by others, including radio distress alerting and radio emergency procedures; and
 - (H) Making proper use of food and drinking water and using protective measures in survival craft such as those for preventing exposure to cold, sun, wind, rain, and sea, and for preventing seasickness.
- (vi) Cautioning on the preservation of body fluids and the dangers of drinking seawater;
- (vii) Transferring personnel from survival craft to helicopters or to work boats;
- (viii) Maintaining morale; and
- (ix) Methods of helicopter rescue.
- (h) *Records.* (1) When musters are held, details of abandonment drills, fire drills, other lifesaving appliances, and onboard training must be recorded in the unit's official logbook. Logbook entries must include the following:
 - (i) Logbook entries must identify the date and time of the drill, muster, or training session.
 - (ii) Logbook entries must identify the survival craft and fire-extinguishing equipment used in the drills.
 - (iii) Logbook entries must identify the inoperative or malfunctioning

equipment and the corrective action taken.

(iv) Logbook entries must identify crew members and industrial personnel participating in drills or training sessions.

(v) Logbook entries must identify the subject of the onboard training session.

(2) If a full muster, drill, or training session is not held at the appointed time, an entry must be made in the logbook stating the circumstances and the extent of the muster, drill, or training session held.

[CGD 84-069, 61 FR 25299, May 20, 1996, as amended at 63 FR 52815, Oct. 1, 1998]

§ 109.223 Fire fighting equipment.

The master or person in charge shall insure that each hand portable fire extinguisher, semi-portable fire extinguisher, and fixed fire-extinguishing system is tested and inspected at least once each twelve months.

§ 109.227 Verification of vessel compliance with applicable stability requirements.

(a) The master or person-in-charge shall determine that the vessel complies with all applicable stability requirements in the vessel's trim and stability book, operating manual, stability letter, Certificate of Inspection, and Load Line Certificate, as the case may be, and then enter an attestation statement of the verification in the log book, at the following times:

(1) Prior to transitioning from the transit condition to the operating condition;

(2) Prior to transitioning from the operating condition to the transit condition;

(3) Prior to significant changes in deck load or ballast;

(4) At other times as required by the vessel's trim and stability book or operating manual; and

(5) At all other times necessary to assure the safety of the vessel.

(b) When determining compliance with applicable stability requirements the vessel's draft, trim, and stability must be determined as necessary and any stability calculations made in support of the determination must be retained on board the vessel for a one

month period or until a change of location, if shorter.

[CGD 89-037, 57 FR 41823, Sept. 11, 1992]

Subpart C—Operation and Stowage of Safety Equipment

§ 109.301 Operational readiness, maintenance, and inspection of life-saving equipment.

(a) *Operational readiness.* Except as provided in § 109.301(b)(3), each life-saving appliance must be in good working order and ready for immediate use at all times when the unit is in operation.

(b) *Maintenance.* (1) The manufacturer's instructions for onboard maintenance of lifesaving appliances must be onboard and must include the following for each appliance—

(i) Checklists for use when carrying out the inspections required under § 109.301(e);

(ii) Maintenance and repair instructions;

(iii) A schedule of periodic maintenance;

(iv) A diagram of lubrication points with the recommended lubricants;

(v) A list of replaceable parts;

(vi) A list of sources of spare parts; and

(vii) A log for records of inspections and maintenance.

(2) In lieu of compliance with paragraph (b)(1) of this section, The OCMI may accept a planned maintenance program that includes the items listed in that paragraph.

(3) If lifeboats, rescue boats or rigid liferafts are maintained and repaired while the unit is in operation, there must be a sufficient number of lifeboats and liferafts remaining available for use to accommodate all persons on board.

(c) *Spare parts and repair equipment.* Spare parts and repair equipment must be provided for each lifesaving appliance and component subject to excessive wear or consumption and that needs to be replaced regularly.

(d) *Weekly inspections and tests.* (1) Each survival craft, rescue boat, and launching appliance must be visually inspected to ensure its readiness for use.

(2) Each lifeboat engine and rescue boat engine must be run ahead and astern for a total of not less than 3 minutes, unless the ambient air temperature is below the minimum temperature required for starting the engine. During this time, demonstrations should indicate that the gear box and gear box train are engaging satisfactorily. If the special characteristics of an outboard motor fitted to a rescue boat would not allow the outboard motor to be run other than with its propeller submerged for a period of 3 minutes, the outboard motor should be run for such period as prescribed in the manufacturer's handbook.

(3) The general alarm system must be tested.

(e) *Monthly inspections.* (1) Each lifesaving appliance, including lifeboat equipment, must be inspected monthly using the checklists required under paragraph (b) of this section to make sure it is complete and in good working order. A report of the inspection, including a statement as to the condition of the equipment, must be recorded in the unit's official logbook.

(2) Each EPIRB and each SART other than an EPIRB or SART in an inflatable liferaft, must be tested monthly. The EPIRB must be tested using the integrated test circuit and output indicator to determine that it is operative.

(f) *Annual inspections.* Annual inspection and repair must include the following:

(1) Each survival craft, except for inflatable liferafts, must be stripped, cleaned, and thoroughly inspected and repaired, as needed, at least once in each year, including emptying and cleaning each fuel tank, and refilling it with fresh fuel.

(2) Each davit, winch, fall and other launching appliance must be thoroughly inspected and repaired, as needed, once in each year.

(3) Each item of survival equipment with an expiration date must be replaced during the annual inspection and repair, if the expiration date has passed.

(4) Each battery clearly marked with an expiration date, that is used in an item of survival equipment must be replaced during the annual inspection

and repair, if the expiration date has passed.

(5) Except for a storage battery used in a lifeboat or rescue boat, each battery without an expiration date that is used in an item of survival equipment must be replaced during the annual inspection and repair.

(g) *Servicing of inflatable lifesaving appliances, inflated rescue boats, and marine evacuation systems.* (1) Each inflatable lifesaving appliance and marine evacuation system must be serviced—

(i) Within 12 months of its initial packing; and

(ii) Within 12 months of each subsequent servicing, except when servicing is delayed until the next scheduled inspection of the unit, provided the delay does not exceed 5 months.

(2) Each inflatable lifejacket must be serviced in accordance with servicing procedures meeting the requirements of part 160, subpart 160.176 of this chapter. Each hybrid inflatable lifejacket must be serviced in accordance with the owners manual and meet the requirements of part 160, subpart 160.077 of this chapter.

(3) An inflatable liferaft must be serviced at a facility specifically approved by the Commandant for the particular brand, and in accordance with servicing procedures meeting the requirements of part 160, subpart 160.151, of this chapter—

(i) No later than the month and year on its servicing sticker affixed under 46 CFR 160.151–57(n), except that servicing may be delayed until the next scheduled inspection of the unit, provided that the delay does not exceed 5 months; and

(ii) Whenever the container is damaged or the container straps or seals are broken.

(4) Each inflated rescue boat must be repaired and maintained in accordance with the manufacturer's instructions. All repairs to inflated chambers must be made at a servicing facility approved by the Commandant, except for emergency repairs carried out on board the unit.

(h) *Periodic servicing of hydrostatic release units.* Each hydrostatic release unit, other than a disposable hydrostatic release unit, must be serviced—

(1) Within 12 months of its manufacture and within 12 months of each subsequent servicing, except when servicing is delayed until the next scheduled inspection of the unit, provided the delay does not exceed 5 months; and

(2) In accordance with repair and testing procedures meeting the requirements of part 160, subpart 160.062 of this chapter.

(i) *Periodic servicing of launching appliances and release gear.* (1) Launching appliances must be serviced at the intervals recommended in the manufacturer's instructions, or as set out in the shipboard planned maintenance program.

(2) Launching appliances must be thoroughly examined at intervals not exceeding 5 years and upon completion of the examination, the launching appliance must be subjected to a dynamic test of the winch brake.

(3) Lifeboat and rescue boat release gear must be serviced at the intervals recommended in the manufacturer's instructions, or as set out in the planned maintenance program.

(4) Lifeboat and rescue boat release gear must be subjected to a thorough examination by properly trained personnel familiar with the system at each inspection for certification.

(5) Lifeboat and rescue boat release gear must be operationally tested under a load of 1.1 times the total mass of the lifeboat when loaded with its full complement of persons and equipment, whenever overhauled, or at least once every 5 years.

(j) *Maintenance of falls.* (1) Each fall used in a launching appliance must be turned end-for-end at intervals of not more than 30 months and must be renewed when necessary due to deterioration or at intervals of not more than 5 years, whichever is earlier.

(2) As an alternative to paragraph (j)(1) of this section, each fall may be inspected annually and renewed whenever necessary due to deterioration or at intervals of not more than 4 years, whichever is earlier.

(k) *Rotational deployment of marine evacuation systems.* In addition to or in conjunction with the servicing intervals of marine evacuation systems required by paragraph (g)(1) of this sec-

tion, each marine evacuation system must be deployed from the unit on a rotational basis. Each marine evacuation system must be deployed at least once every 6 years.

[CGD 84-069, 61 FR 25301, May 20, 1996, as amended by CGD 85-205, 62 FR 35392, July 1, 1997; CGD 84-069, 63 FR 52816, Oct. 1, 1998; USCG-2001-11118, 67 FR 58541, Sept. 17, 2002]

§ 109.323 Manning of survival craft and supervision.

(a) There must be a sufficient number of trained persons on board the survival craft for mustering and assisting untrained persons.

(b) There must be a sufficient number of deck officers, able seamen, or certificated persons on board to operate the survival craft and launching arrangements required for abandonment by the total number of persons on board.

(c) There must be one person placed in charge of each survival craft to be used. The person in charge must—

(1) Be a deck officer, able seaman, or certificated person. The OCMI, considering the number of persons permitted on board, and the characteristics of the unit, may permit persons practiced in the handling and operation of liferafts or inflatable buoyant apparatus to be placed in charge of liferafts or inflatable buoyant apparatus;

(2) Have another person designated second-in-command of each lifeboat permitted to carry more than 40 persons. This person should be a deck officer, able seaman, or certificated person; and

(3) Have a list of the survival craft crew and must see that the crewmembers are acquainted with their duties. The second-in-command of a lifeboat must also have a list of the lifeboat crew.

(d) There must be a person assigned to each motorized survival craft who is capable of operating the engine and carrying out minor adjustments.

(e) The person in charge must make sure that the persons required under paragraphs (a), (b), and (c) of this section are equitably distributed among the unit's survival craft.

[CGD 84-069, 61 FR 25302, May 20, 1996]

§ 109.329

46 CFR Ch. I (10–1–11 Edition)

§ 109.329 Fire pumps.

The master or person in charge shall insure that at least one of the fire pumps required in §108.415 is ready for use on the fire main system at all times.

§ 109.331 Firehoses and hydrants.

The master or person in charge shall insure that—

(a) At least one length of firehose with a combination nozzle is connected to each fire hydrant required by this subchapter, at all times, except that during heavy weather a firehose in an exposed location may be temporarily removed from the fire hydrant and stowed in an accessible, nearby location;

(b) A fire hose required by this subchapter is not used for any purpose other than firefighting, fire drills, and testing;

(c) Access to each fire hydrant is not blocked;

(d) Each firehose, except a firehose temporarily removed from an exposed location, is stowed on a rack or reel required by this subchapter; and

(e) Each low velocity spray applicator for a fire hose nozzle is attached to the nozzle or stowed next to the fire hydrant to which the fire hose is attached.

§ 109.333 Fire main cutoff valves.

The master or person in charge shall insure that each fire main cutoff valve is open and sealed to prevent closing, except that a cutoff valve may be closed to protect the portion of the fire main system on an exposed deck from freezing.

§ 109.334 Working over water.

The master or person in charge shall insure that each person working over the water is wearing a life preserver or a buoyant work vest.

§ 109.335 Stowage of work vests.

The master or person in charge shall insure that no work vest is stowed where life preservers are stowed.

§ 109.337 Fireman's outfit.

The master or person in charge shall insure that—

(a) At least 2 persons who are trained in the use of the fireman's outfit are on board at all times; and

(b) Each fireman's outfit and its spare equipment is stowed in a separate and accessible location.

(c) A fireman's outfit is not used for any purpose other than fire fighting except as provided in §108.703.

§ 109.339 Location of fire axes.

The master or person in charge shall insure that the fire axes required in §108.499 of this subchapter are located in the enclosures for fire hoses marked in accordance with §108.633 of this subchapter, if the fire axes are not located in plain view.

§ 109.347 Pilot boarding equipment.

(a) The master or person in charge shall ensure that pilot boarding equipment is maintained as follows:

(1) The equipment must be kept clean and in good working order.

(2) Each damaged step or spreader step on a pilot ladder must be replaced in kind with an approved replacement step or spreader step, prior to further use of the ladder. The replacement step or spreader step must be secured by the method used in the original construction of the ladder, and in accordance with manufacturer instructions.

(b) The master or person in charge shall ensure compliance with the following during pilot boarding operations:

(1) Only approved pilot boarding equipment may be used.

(2) The pilot boarding equipment must rest firmly against the hull of the vessel and be clear of overboard discharges.

(3) Two man ropes, a safety line and an approved lifebuoy with an approved water light must be at the point of access and be immediately available for use during boarding operations.

(4) Rigging of the equipment and embarkation/debarkation of a pilot must be supervised in person by a deck officer.

(5) Both the equipment over the side and the point of access must be adequately lit during night operations.

(6) If a pilot hoist is used, a pilot ladder must be kept on deck adjacent to

Coast Guard, DHS

§ 109.431

the hoist and available for immediate use.

[CGD 79-032, 49 FR 25455, June 21, 1984]

Subpart D—Reports, Notifications, and Records

REPORTS AND NOTIFICATIONS

§ 109.411 Notice and reporting of casualty.

The requirements for providing notice and reporting of marine casualties are contained in Part 4 of this chapter.

[CGD 84-099, 52 FR 47536, Dec. 14, 1987]

§ 109.415 Retention of records after casualty.

(a) The owner, agent, master, or person in charge of a unit for which a report of casualty is made under § 109.411 shall insure that all records maintained on the unit are retained on board the unit for at least 3 months after the report of casualty is made or until advised by the Officer in Charge, Marine Inspection, that records need not be retained on board.

(b) The records which must be retained in accordance with paragraph (a) of this section include:

- (1) Rough and smooth deck log.
- (2) Rough and smooth engine room log.
- (3) Tour reports.
- (4) Bell books.
- (5) Navigation charts in use at the time of casualty.
- (6) Navigation work books.
- (7) Compass deviation cards.
- (8) Gyrocompass records.
- (9) Storage plans.
- (10) Record of drafts.
- (11) Notices to mariners.
- (12) Radiograms sent and received.
- (13) The radio log.
- (14) Personnel list.
- (15) Crane record book.

(c) The owner, agent, master, or person in charge shall, upon request, make the records described in this section available for examination by any Coast Guard official authorized to investigate the casualty.

§ 109.419 Report of unsafe machinery.

If a boiler, unfired pressure vessel, or other machinery on a unit is unsafe to

operate, the master or person in charge shall report the existence of the unsafe condition to the Officer in Charge, Marine Inspection.

§ 109.421 Report of repairs to boilers and pressure vessels.

Before making repairs, except normal repairs and maintenance such as replacement of valves or pressure seals, to boilers or unfired pressure vessels in accordance with § 50.05-10 of this chapter, the master or person in charge shall report the nature of the repairs to the Officer in Charge, Marine Inspection.

§ 109.425 Repairs and alterations: Fire detecting and extinguishing equipment.

(a) Before making repairs or alterations, except for routine maintenance, minor repairs, or emergency repairs or alterations to fire detecting and extinguishing equipment, the master or person in charge must report the nature of the repairs or alterations to the OCMI.

(b) When emergency repairs or alterations, other than minor emergency repairs, have been made to fire-detecting or fire-extinguishing equipment, the master or person in charge must report the nature of the repairs or alterations to the OCMI.

[CGD 84-069, 63 FR 52816, Oct. 1, 1998]

RECORDS

§ 109.431 Logbook.

(a) The master or person in charge of a unit, that is required by 46 U.S.C. 11301 to have an official logbook, shall maintain the logbook on Form CG-706. When the voyage is completed, the master or person in charge shall file the logbook with the Officer in Charge, Marine Inspection.

(b) The master or person in charge of a unit that is not required by 46 U.S.C. 11301 to have an official logbook, shall maintain, on board, an unofficial logbook for making the entries required by this subpart. This logbook must be retained on board until the unit's next reinspection or inspection for certification.

[CGD 73-251, 43 FR 56828, Dec. 4, 1978, as amended by CGD 95-028, 62 FR 51208, Sept. 30, 1997; USCG-1999-6216, 64 FR 53227, Oct. 1, 1999]

§ 109.433

46 CFR Ch. I (10–1–11 Edition)

§ 109.433 Logbook entries.¹

The master or person in charge shall insure that the following applicable entries are made in the logbook required by this subpart:

(a) The date of each test of the steering gear, whistle, general alarm, and communications equipment and the condition of the equipment.

(b) The time and date of each opening and closing, while the unit is afloat, of each required appliance for watertight integrity not fitted with a remote operating control or alarm system and the reasons for the action.

(c) The date of each test of emergency lighting and power systems and the condition and performance of the equipment.

(d) The logbook must include information on emergency training drills required in §109.213(h).

(e) Prior to getting underway, the fore and aft drafts, the position of the loadline marks in relation to the surface of the water, and the density of the water in which the vessel is floating, if in fresh or brackish water.

(f) After loading and prior to getting underway and at all other times necessary to assure the safety of the vessel, a statement verifying vessel compliance with applicable stability requirements as required by §109.227.

(g) The date of each inspection of each accommodation space.

(h) The date of each inspection required in §109.573 if performed by the master or person in charge.

[CGD 73–251, 43 FR 56828, Dec. 4, 1978, as amended by CGD 83–067, 49 FR 39162, Oct. 4, 1984; CGD 89–037, 57 FR 41824, Sept. 11, 1992; CGD 84–069, 61 FR 25303, May 20, 1996]

§ 109.435 Record of fire fighting equipment inspection.

(a) The master or person in charge shall ensure that a record of each test and inspection required in §109.223 is maintained on board, until the unit is reinspected or inspected for certification.

¹NOTE: 46 U.S.C. 11301 requires that certain entries be made in an official logbook, in addition to the entries required by this section; and 46 U.S.C. 11302 prescribes the manner of making those entries.

(b) The record required in paragraph (a) of this section must show—

(1) The date of each test and inspection;

(2) The number or other identification of each item of equipment tested or inspected; and

(3) The name of the person, and the company he represents if any, who conducts the test or inspection.

§ 109.437 Crane record book.

The master or person in charge shall ensure that the following are maintained in a crane record book:

(a) Descriptive information which will identify each crane including—

(1) The API name plate data required by Section 11 of API Spec. 2C, Second Edition, February 1972; and

(2) The rated load chart for each line reeving and boom length which may be utilized.

(b) Information required by Section 3 of the American Petroleum Institute *Recommended Practice for Operation and Maintenance of Offshore Cranes*, API RP 2D, First Edition (October 1972) with supplement 1.

(c) Dates and results of frequent inspections and tests required in paragraph (b) of this section.

(d) Dates and results of periodic inspections and tests required in paragraph (b) of this section.

(e) Date and result of each rated load test.

(f) Date and description of each replacement or renewal of wire rope, hooks, and other load components.

(g) Date and description of each failure of the crane, or any component or safety feature.

(h) Date and description of each repair to the crane structure, boom, or equipment.

§ 109.439 Crane certificates.

The master or person in charge shall insure that the following certificates and records for each crane are maintained on the unit:

(a) Each certificate issued by a crane certifying authority.

(b) Each record and original certificate, or certified copy of a certificate, or manufacturers or testing laboratories, companies or organizations for—

Coast Guard, DHS

§ 109.557

- (1) Loose gear;
- (2) Wire rope; and
- (3) The annealing of wrought iron gear.

Subpart E—Emergency Signals

§ 109.503 Emergency signals.

(a) Emergency stations signals are established as follows:

(1) The signal to man emergency stations is a rapid succession of short soundings of both the general alarm bell and the whistle, if a whistle is installed, for a period of not less than 10 seconds.

(2) The signal to secure from emergency stations is the sounding of both the general alarm bell and the whistle, if a whistle is installed, three times.

(b) The abandon unit stations signals are established as follows:

(1) The signal to man abandon unit stations is a continuous sounding of both the general alarm and the whistle, if a whistle is installed.

(2) If whistle signals are used to direct the handling of lifeboats and davit-launched liferafts, they must be—

- (i) One short blast to lower the lifeboats and davit-launched liferafts; and
- (ii) Two short blasts to stop lowering the lifeboats and davit-launched liferafts.

(3) The signal to secure from abandon unit stations is the sounding of both the general alarm bell and the whistle, if a whistle is installed, three times.

[CGD 73-251, 43 FR 56828, Dec. 4, 1978, as amended by CGD 84-069, 61 FR 25303, May 20, 1996]

Subpart F—Cranes

§ 109.521 Cranes: General.

The master or person in charge shall ensure that each crane is operated and maintained in accordance with the API *Recommended Practice for Operation and Maintenance of Offshore Cranes*, API RP 2D, First Edition (Oct. 1972) with supplement 1.

§ 109.525 Cranes: Working loads.

The master or person in charge shall ensure that tables indicating the maximum safe working loads for the var-

ious working angles of the boom, where the boom is rated at varying capacities depending on the radius, and the maximum and minimum radius at which the boom may be safely used, are conspicuously posted near the controls and are visible to the operator when working the crane.

§ 109.527 Cranes: Operator designation.

(a) The master or person in charge shall designate, in writing, each crane operator.

(b) The master or person in charge shall ensure that only designated operators operate cranes.

(c) The master or person in charge shall ensure that each designated operator is familiar with the provisions of the API *Recommended Practice for Operation and Maintenance of Offshore Cranes*, API RP 2D, First Edition (Oct. 1972) with supplement 1.

Subpart G—Miscellaneous

§ 109.555 Propulsion boilers.

The master or person in charge and the engineer in charge shall ensure that—

(a) Steam pressure does not exceed that allowed by the certificate of inspection; and

(b) The safety valves, once set, are not tampered with or made inoperative.

[CGD 73-251, 43 FR 56828, Dec. 4, 1978, as amended by CGD 95-028, 62 FR 51208, Sept. 30, 1997]

§ 109.557 Flammable and combustible liquids: Carriage.

The master or person in charge shall ensure that—

(a) Flammable and combustible liquids in bulk are not carried, except as allowed by endorsement to the Certificate of Inspection;

(b) Portable tanks are handled and stowed in accordance with subparts 98.30 and 98.33 of this chapter and the provisions of 49 CFR parts 171 through 179 that apply to portable tanks; and

(c) Grades B and lower liquids are—
(1) Authorized, by the Commandant, to be carried; and

§ 109.559

(2) Carried only in fixed independent or integral tanks.

[CGD 73-251, 43 FR 56828, Dec. 4, 1978, as amended by CGD 84-043, 55 FR 37413, Sept. 11, 1990]

§ 109.559 Explosives and radioactive materials.

Except as authorized by the master or person in charge, no person may use explosives or radioactive materials and equipment on a unit.

§ 109.563 Posting of documents.

The master or person in charge shall ensure that the following are posted under glass in the pilot house or control center:

- (a) General arrangement plans for each deck showing—
 - (1) Each fire retardant bulkhead;
 - (2) Each fire detecting, manual alarm, and fire extinguishing system;
 - (3) Each fire door;
 - (4) Each means of ingress to compartments; and
 - (5) Each ventilating system, including the location of each damper, fan, and remote means of stopping the fans.
- (6) For units constructed on or after September 30, 1997, and for existing units which have their plans redrawn, the symbols used to identify the aforementioned details shall be in accordance with IMO Assembly resolution A.654(16). The identical symbols can be found in ASTM Adjunct F 1626 (incorporated by reference, see §109.105).
- (b) The stability letter issued by the Coast Guard.
- (c) Each SOLAS and Coast Guard certificate issued to the unit.

[CGD 73-251, 43 FR 56828, Dec. 4, 1978, as amended by CGD 95-028, 62 FR 51208, Sept. 30, 1997; USCG-2000-7790, 65 FR 58462, Sept. 29, 2000]

§ 109.564 Maneuvering characteristics.

(a) The master or person in charge of each self-propelled unit of 1,600 gross tons and over shall ensure that a maneuvering information fact sheet is prominently displayed in the pilot-house.

(b) For surface type units, the maneuvering information in Subpart 97.19 of this chapter must be displayed.

(c) The maneuvering information requirements for column stabilized, self-

46 CFR Ch. I (10-1-11 Edition)

elevating, and other units of unusual design will be specified on a case by case basis.

§ 109.565 Charts and nautical publications.

The master or person in charge of a self-propelled unit shall ensure that the unit has the following adequate, up to date, and appropriate items for the intended voyage:

- (a) Charts.
- (b) Sailing directions.
- (c) Coast pilots.
- (d) Light lists.
- (e) Notices to mariners.
- (f) Tide Tables.
- (g) Current Tables.
- (h) All other nautical publications necessary.¹

§ 109.573 Riveting, welding, and burning operations.

Except as allowed by this section—

(a) The master or person in charge shall ensure that there is no riveting, welding, or burning—

- (1) In a fuel tank;
- (2) On the boundary of a fuel tank;
- (3) On pipelines, heating coils, pumps, fittings, or other appurtenances connected to fuel tanks; or
- (4) On the boundary of spaces adjacent to tanks carrying Grades A, B, or C flammable liquids in bulk.

(b) The operations prohibited in paragraph (a) of this section may be allowed if—

(1) An inspection conducted in accordance with the “Standard for the Control of Gas Hazards on Vessels to be Repaired,” N.F.P.A. No. 306-1974, is made—

(i) In ports or navigable waters of the United States, its territories and possessions, by—

(A) A marine chemist certified by the National Fire Protection Association; or

(B) If a certified marine chemist is not available, a person designated by the Officer in Charge, Marine Inspection; or

(ii) In all other locations by—

(A) A marine chemist certified by the National Fire Protection Association;

¹NOTE: For U.S. units in or on the navigable waters of the United States. See 33 CFR 164.33.

(B) If a certified marine chemist is not available, a person designated by the Officer in Charge, Marine Inspection; or

(C) If the persons required in paragraphs (b)(1)(ii) (A) and (B) of this section are not available, the master or person in charge; or a welding supervisor designated, in writing, by the master or person in charge; and

(2) A certificate is issued by the person conducting the inspection stating—

(i) That he conducted the inspection in accordance with the standard in paragraph (b)(1) of this section;

(ii) The operations that may be conducted; and

(iii) A list of precautions to be followed during the operations;

(c) The master or person in charge shall ensure that the precautions in paragraph (b)(2)(iii) of this section are followed.

§ 109.575 Accumulation of liquids on helicopter decks.

The master or person in charge shall ensure that no liquids are allowed to accumulate on the helicopter decks.

§ 109.577 Helicopter fueling.

(a) The master or person in charge shall designate persons to conduct helicopter fueling operations.

(b) Portable tanks are handled and stowed in accordance with subparts 98.30 and 98.33 of this chapter and the provisions of 49 CFR parts 171 through 179 that apply to portable tanks; and

[CGD 73-251, 43 FR 56828, Dec. 4, 1978, as amended by CGD 84-043, 55 FR 37413, Sept. 11, 1990]

§ 109.585 Use of auto pilot.

Except as provided in 33 CFR 164.15, when the automatic pilot is used in areas of high traffic density, conditions of restricted visibility, and all other hazardous navigational situations, the master or person in charge shall ensure that—

(a) It is possible to immediately establish manual control of the unit's steering;

(b) A competent person is ready at all times to take over steering control; and

(c) The changeover from automatic to manual steering and vice versa is

made by, or under the supervision of, the officer of the watch.

APPENDIX A TO PART 109—NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 4-78—INSPECTION AND CERTIFICATION OF EXISTING MOBILE OFFSHORE DRILLING UNITS

1. *Purpose.* To promulgate instructions for the inspection and certification of existing mobile offshore drilling units. This NVIC is also being published as appendix A of 46 CFR Subchapter IA.

2. *Background.* Mobile Offshore Drilling Units are recognized internationally through the Intergovernmental Maritime Consultative Organization as being a "special purpose ship" designed and operated to carry out an industrial function at sea. Contemporary U.S. Vessel regulations in Title 46 CFR do not adequately cover the safety considerations which are unique to the hull and structural designs, industrial equipment and operating procedures incorporated in drilling vessels. To provide appropriate and adequate standards, the Coast Guard with the assistance of the National Offshore Operations Advisory Committee, and following the provisions of the Administrative Procedures Act, developed Subchapter IA, Regulations for Mobile Offshore Drilling Units, 46 CFR Parts 107-109 and amendments to 46 CFR Subchapters "F", Marine Engineering Regulations, and "J", Electrical Engineering Regulations. These regulations, published in FEDERAL REGISTER (43 FR 56788 December 4, 1978) will apply to all units contracted for on or after the effective date of the regulations.

3. *Discussion.* a. This NVIC elaborates the "grandfather provisions" of 46 CFR 107.211 and 107.215 in applying Subchapter IA to the approximately 150 *existing* ocean-going U.S. flag mobile offshore drilling units. "Existing" Mobile Offshore Drilling Units are those vessels which have been contracted for before the effective date of the regulations including:

(1) Units in Service.

(2) Units under construction.

(3) Units contracted for which are to be constructed and delivered prior to January 1, 1981.

b. Existing *uncertificated* mobile drilling units of which there are approximately 92 of the bottom bearing configuration, i.e., jack-up and submersible types, have not previously been required to comply with vessel inspection regulations. Some units have met the load line requirements of Subchapter "E" for International Voyages. Many of the older units are not classed by a classification society. Bottom bearing units operating on the Outer Continental Shelf of United States

have been required to meet the safety requirements of 33 CFR Subchapter “N” as artificial islands. On January 3, 1979, existing bottom bearing units are subject to the “grandfather provisions” in §107.211(c) of Subchapter IA.

c. Existing *certificated* mobile offshore drilling units, for the purposes of this NVIC, are column-stabilized and ship-shape types of which approximately 58 are currently certificated, or have made application for an original Certificate of Inspection or intend to make application for an original inspection for certification under 46 CFR Subchapter “I” on the basis of the unit being contracted for prior to the effective date of the new regulations. These units may continue to meet the structural, equipment, material and arrangement standards which were applicable to the hull, engineering, electrical and industrial systems when the units were contracted for. In addition they must meet the provisions of d.(1), d.(4)(d), d.(7)(b), d.(8), d.(9), d.(10)(b), d.(11) and d.(12) of paragraph 3 of this NVC in accordance with §107.215(c)(2) of Subchapter IA.

d. *Inspection Provisions for Existing Uncertificated Units.* The intent of the “grandfather” provisions of this NVIC for existing uncertificated units is to ascertain through inspection that the material condition of the unit and its equipment meet reasonable levels of safety. To this end, the following determinations will be made:

- The design, construction and arrangements of the hull, machinery electrical and industrial systems do not reveal manifestly unsafe aspects.
- There is no excessive deterioration of the hull structure or equipment foundations.
- There are no intrinsic fire or explosion hazards.
- There are no personnel hazards such as unguarded moving machinery, potential electrical shock conditions or lack of handrails.
- The unit is seaworthy and exhibits satisfactory stability.

(1) *General.* (a) Repairs and minor alterations to hull structure or equipment may be made to the same standards as the original installation. However, new installations or major alterations which affect vessel or personnel safety shall meet the applicable standards of Subchapter IA.

(b) Existing items of safety equipment not meeting the applicable specifications or requirements set forth in Subchapter IA may be continued in service as long as they are maintained in good working order to the satisfaction of the OCMI. Such safety equipment and installations requiring extensive repairs shall be replaced and shall meet the applicable specifications and requirements of Subchapter IA.

(c) The OCMI has discretion to accept alternatives or equivalents which meet the es-

tablished standards, and to give special consideration to departures from the regulations when it can be shown that special circumstances warrant such departures.

(2) *Plan Submittal.* (a) For units not classed by the American Bureau of Shipping or other recognized classification society, (see 46 CFR 108.109) the OCMI must have sufficient plans and information submitted to him which will describe such things as the unit’s size, construction, configuration, arrangement of tanks, decks and spaces; and the machinery and electrical installation. In addition, the OCMI may require submittal of any additional data he considers necessary in order to proceed with the original inspections.

(b) For units classed by the American Bureau of Shipping or other recognized classification society, the plans and information described in Subchapter IA §107.305 (a), (b), (v), and (ii) and a general description of the machinery and electrical installation shall be submitted to the OCMI for information. The OCMI may accept continued classification as proof of structural, mechanical, and electrical sufficiency. However, the OCMI may require additional plans and information if necessary.

(3) *Hull Structure.* (a) No structural changes will be required unless manifestly unsafe conditions exist.

(b) Existing uncertificated units must be drydocked or have a special examination in lieu of drydocking as required by 46 CFR, 107–261.

(c) Achievement of one compartment subdivision is not required where extensive modification of the original design would be necessary; however, watertight integrity of the hull and structural boundaries must be maintained. Bulkheads and decks designed to be watertight must be maintained as such where they are penetrated by pipes, electrical cable, reach rods, ventilation systems, etc.

(4) *Stability.* (a) The stability of each existing unit will be reviewed by the Coast Guard. The plans indicated in 46 CFR Subchapter IA §107.305(q) through (u-1) must be submitted to the cognizant OCMI or Merchant Marine Technical Office.

(b) Lightship data from a Coast Guard witnessed and approved stability test is required for each existing, uncertificated unit. Alternatively other evidence of lightship values will be considered on a case by case basis.

(c) In general, compliance with the intact stability standards of 46 CFR Subchapter IA, §§108.303 through 108.309 is required. Where existing units were designed to a lesser standard of stability than that specified in §§108.303 through 108.309, some relaxation based on proven past performance may be granted at the discretion of the OCMI and limiting conditions, if any, set forth in the

operating manual. In no case will the minimum wind speed for adequate stability be reduced below 50 knots.

(d) An operating manual shall be prepared for each unit. Each operating manual must contain the information indicated in 46 CFR Subchapter IA, §109.121(d) and be submitted to the cognizant OCMI or Merchant Marine Technical Office for review.

(5) *Load Line.* (a) All units are required to obtain and maintain a valid Load Line Certificate. The structure and stability of the unit must be proven adequate for the voyages and areas of operation intended.

(b) The American Bureau of Shipping or other recognized classification society will issue Load Line Certificates and conduct initial and annual load line surveys. Coast Guard and the American Bureau of Shipping inspections may be conducted simultaneously, but it is the owner's responsibility to arrange coordinated inspection schedules.

(c) The structural review conducted by the American Bureau of Shipping or other recognized classification society for load line assignment may be accepted by the Coast Guard as proof of structural adequacy of the hull.

(d) The stability review must be completed prior to issuance of a Load Line Certificate. The Coast Guard will inform the American Bureau of Shipping or other recognized classification society of the results of the stability review, and will indicate any stability limitations to be placed on the Load Line Certificate.

(e) Freeboard calculations for self-elevating units with barge type hulls will be made in accordance with 46 CFR, Part 42. The bow height requirements of 46 CFR 42.20-70 may be relaxed to approximately 33% of the normal requirement for barge shapes moving at speeds less than 6 knots. No relaxation of the addition to freeboard for deficiency in sheer is allowed. The freeboard for units other than self-elevating units with barge type hulls will be based upon compliance with the intact and damage stability standards applicable at the time the unit was contracted for.

(f) All units *delivered after the date of this NVIC* regardless of contract date, must obtain a Load Line Certificate as soon as operationally feasible.

(6) *Route and Operating Area Limitations.* (a) Units classed by the American Bureau of Shipping or other recognized classification society for ocean service generally will be certificated by the Coast Guard for ocean routes.

(b) Unclassed units which have proven structural and stability adequacy by continued safe operation in a specific geographic area, such as the Gulf of Mexico, will be limited by the Certificate of Inspection and Load Line Certificate to that area. To qualify for an unlimited oceans route, such a

unit must be reviewed for adequacy of the structure and stability by the Coast Guard and meet the Load Line requirements of d. (5) above.

(c) Any unit which intends to move or operate outside the geographical area indicated on the Certificate of Inspection must receive prior approval from the OCMI.

(7) *Fire Protection.* (a) *Structural fire protection.* All units must meet the provisions of §108.123, Insulation of Combustible Materials and §108.127, Storage Lockers for Combustibles. All existing interior stairways which are open at each end must be enclosed at one level. On units where wood was utilized in the construction of accommodation spaces, each space must be equipped with a smoke or heat detector either battery powered or operating on the AC power supply. All detectors must have the Underwriters Laboratories, Inc., label (UL) or the Factory Mutual Laboratories (FM) label.

(b) *Fire Extinguishing Systems.* Systems and equipment must be provided which will meet or be equivalent to the applicable specifications and provisions required by Subchapter IA. Installed fire extinguishing systems, which provide equivalent or greater protection than systems required by Subpart E, Subchapter IA may be continued in use as long as they are in good material condition and will function as designed. Where practicable, existing washdown systems may be utilized as the firemain. Where wood was utilized in the construction of accommodation spaces, the applicable requirements of 46 CFR Subchapter IA, Table 108.495(a) should be doubled.

(8) *Lifesaving Equipment.* (a) Each unit must have lifesaving equipment (lifeboats and davit launched liferafts) for 200 percent of the total persons allowed on board. Except for submersible type units, the installation of lifeboats for 100 percent of the persons (on board) is required in accordance with 46 CFR 108.503 of Subchapter IA. Consideration will be given to those units where existing arrangement and structure do not provide sufficient room for installation of the lifeboats or where the added weight of the lifeboats, davits and winches will materially reduce the variable load capacity of the unit. In such cases, davit launched inflatable liferafts with a combined personnel capacity of the required lifeboats, and a rescue boat approved by the OCMI may be acceptable equivalents. Submersible type units may substitute Coast Guard approved throw over type inflatable liferafts and an approved rescue boat for the required lifeboats.

(b) For the second part of the total 200 percent primary lifesaving requirement, lifeboats installed in accordance with 33 CFR, Subchapter "N" Part 144 or Coast Guard approved life floats may be retained as provided for in 3.d(1)(b) of this Circular. They will be considered collectively with the

Coast Guard approved liferafts for calculating the amount of equipment to provide for 100 percent of personnel on board.

(c) Adequate access to all lifesaving equipment must be provided.

(9) *Cranes.* (a) Plan approval will not normally be required of any crane which conforms to the specifications of the manufacturer as originally installed. A rated load test as described in §107.260 of Subchapter IA will be required unless the crane has been load tested while under certification by an approved certifying authority as provided for in 46 CFR 107.258. Prior to the rated load test, the crane should be identified by manufacturer and model number to determine that the correct load rating chart is being used. The owner must submit to the OCMI details and calculations of any alterations to a crane which were accomplished without manufacturer's documentation in order to verify the rated load of the crane.

(10) *Electrical.* (a) Multiple power sources do not require an emergency generator; however, storage batteries or approved relay-controlled battery operated lanterns are required to be installed for the emergency lighting system and provide 12 hours of lighting.

(b) Electrical equipment installed in Class I, division 1 and 2 locations, as defined in Subchapter IA, §108.170 must be of a suitable type and in good material condition.

(11) *Unfired Pressure Vessels.* (a) Unfired pressure vessels built and stamped in accordance with Section VIII of the ASME Code may be continued in service as long as they remain in satisfactory condition. At the original and subsequent inspections for certification, ASME Code pressure vessels must be tested and examined in accordance with the requirements in 46 CFR 61.10-5.

(b) Unfired pressure vessels which cannot be identified as being constructed to any recognized standard may be continued in service provided that no obvious defects are noted. These pressure vessels shall be hydrostatically tested to one and one half times the working pressure. For pressure vessels that can not be reasonably hydrostatically tested, nondestructive testing may be used to verify the pressure vessels condition for continued serviceability. These pressure vessels will then be stamped with a Coast Guard identification number and periodically tested and examined in accordance with the requirements in 46 CFR 61.10-5.

(12) *Marine Sanitation Devices.* (a) All units must meet the provisions of 33 CFR Part 159, Coast Guard Marine Sanitation Devices Regulations. The discharge requirements are compatible with the OCS Orders of the U.S. Geological Survey.

4. *Action.* a. The owner of each *existing certified* unit must provide the cognizant OCMI a proposed plan to accomplish the re-

quirements in paragraph 3. c. of this NVIC within 60 days from the effective date of the regulations. Most items should be approved at the unit's next inspection for certification; however, where major equipment installations are concerned, the owner may be allowed up to two years to comply with the requirements from the time the OCMI completes his assessment of the proposals.

b. *Application for Original Inspection for Certification.* Not later than sixty days from January 3, 1979, application for original inspection for certification of all *existing uncertificated units*, shall be submitted to the appropriate OCMI. The plans or descriptive data specified in paragraph 3.d(2) of this NVIC along with a proposed plan to bring the unit into compliance should, if possible, be submitted with the application for inspection. If not feasible to assemble all required information in this time frame, an estimated date of submittal shall be indicated on the application. Arrangements should be made to commence the original inspection for certification with due consideration for the unit's operating situation.

c. To the extent possible the same inspection team will conduct the inspection of all existing uncertificated units in a geographical area. It may be advantageous to conduct the original inspection in conjunction with an impending special or periodic survey, drydocking or availability period. Units under construction will receive primary consideration by the OCMI for the allocation of time and personnel so that any problems can be identified while the unit is in the most advantageous situation to apply corrections.

d. The variety of designs and arrangements presented by existing uninspected MODU's makes it impractical to prescribe detailed standards for all existing units. The procedures followed to implement this NVC must provide the necessary flexibility. Items which must be taken into consideration in applying this NVIC are listed below. Categorizing units into groups to which the same items apply will be of value during the inspection process. These items are:

- Type
- Builder
- Model
- Date build
- Classed by ABS or other classification society
- Load Line assignment
- Operating history (including geographical areas)
- Present location

e. *Issuance of the Original Certificate of Inspection.* The intent of the original inspection of *existing uncertificated units* is to identify and commence correction of any unsafe conditions and/or equipment deficiencies and to issue the unit an original Certificate of Inspection. A reasonable period of time will

Coast Guard, DHS

Pt. 109, App. A

be permitted to correct minor deficiencies. Those items directly affecting personnel safety and health will require immediate attention to correct the unsafe condition. Extensive deficiencies, such as those involving structural aspects or equipment may require up to two years to remedy. Additional times may be allowed if repair facilities are not available to coastal areas adjacent to the unit's area of operation. Where manifestly unsafe conditions are found, the OCMI may

require that the unit discontinue operations until such conditions are corrected. If the owner or operator feels aggrieved by the decision of the OCMI, the appeals procedures of 46 CFR 2.01-70 are applicable.

f. Questions concerning this NVIC should be referred to the Commandant (CG-543).

[CGD 73-251, 43 FR 56828, Dec. 4, 1978, as amended by CGD 96-041, 61 FR 50730, Sept. 27, 1996; USCG-2009-0702, 74 FR 49233, Sept. 25, 2009]