

MARINE SAFETY: OUTER CONTINENTAL SHELF ACTIVITIES



**COMDTINST 16000.76
September 2021**



COMDTCHANGENOTE 16000
20 SEP 2021

COMMANDANT CHANGE NOTICE 16000

Subj: CH-3 TO MARINE SAFETY MANUAL VOLUME II, COMDTINST M16000.7B

1. PURPOSE. This Commandant Change Notice publishes the cancellation of Marine Safety Manual Volume II, COMDTINST M16000.7B, and replacement with separate Commandant Instructions, one for each chapter of the existing Manual.
2. ACTION. All Coast Guard unit commanders, commanding officers, officers-in-charge, deputy/assistant commandants, and chiefs of headquarters staff elements shall comply with the provisions of this Commandant Change Notice. Internet release is authorized.
3. DIRECTIVES AFFECTED. With the addition of this Commandant Change Notice, Marine Safety Manual Volume II, COMDTINST M16000.7B, is cancelled.
4. DISCUSSION. The content of Marine Safety Manual remains intact. The primary reason for this change is to allow for timely revision and re-publication of the individual Commandant Instructions.
5. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is intended to provide operational guidance for Coast Guard personnel and is not intended to nor does it impose legally-binding requirements on any party outside the Coast Guard.
6. MAJOR CHANGES. Sections A through G of Marine Safety Manual Volume II, COMDTINST M16000.7B, are now individual and independent Commandant Instructions. They are listed below.
 - a. Marine Safety: Marine Inspection Administration, COMDTINST 16000.70 (pages A1-1 - A7-43)

DISTRIBUTION - SDL No. 170

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NON-STANDARD DISTRIBUTION:

- b. Marine Safety: Domestic Inspection Programs, COMDTINST 16000.71 (pages B1-1 – B10-3)
- c. Marine Safety: Inspection of Engineering Systems, Equipment, and Materials, COMDTINST 16000.72 (pages C1-1 – C5-31)
- d. Marine Safety: Port State Control, COMDTINST 16000.73 (pages D1-1 – D7-38)
- e. Marine Safety: International Conventions, Treaties, Standards, and Regulations, COMDTINST 16000.74 (pages E1-1 – E4-3)
- f. Marine Safety: Carriage of Hazardous Materials, COMDTINST 16000.75 (pages F1-1 – F5-35)
- g. Marine Safety: Outer Continental Shelf Activities, COMDTINST 16000.76 (pages G1-1 – G6-24)

7. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS.

- a. Commandant CG-47 reviewed the development of this Instruction, and the general policies contained within it, and determined that this policy falls under the Department of Homeland Security (DHS) categorical exclusion A3. No further environmental analysis is necessary in accordance with the U.S. Coast Guard Environmental Planning Policy, COMDTINST 5090.1 (series).
- b. This Instruction will not result in any substantial change to existing environmental conditions or violation of any applicable federal, state, or local laws relating to the protection of the environment. It is the responsibility of the action proponent to evaluate all future specific actions resulting from this policy for compliance with the National Environmental Policy Act (NEPA), other applicable environmental mandates, and the U.S. Coast Guard Environmental Planning Policy, COMDTINST 5090.1(series).

8. DISTRIBUTION. No paper distribution will be made of this Commandant Change Notice. An electronic version will be located on the following Commandant (CG-612) web sites. Internet: <http://www.uscg.mil/directives/>, and CGPortal: <https://cg.portal.uscg.mil/library/directives/SitePages/directives.aspx>

9. PROCEDURE. Cancel Marine Safety Manual Volume II, COMDTINST M16000.7B and replace with COMDTINSTs 16000.70 thru 16000.76.

10. RECORDS MANAGEMENT CONSIDERATIONS. Records created as a result of this Instruction, regardless of format or media, must be managed in accordance with the records retention schedules located on the Records Resource Center CGPortal site: <https://cg.portal.uscg.mil/units/cg61/CG611/SitePages/Home.aspx>.

11. FORMS/REPORTS. The forms called for in this Commandant Change Notice are available in USCG Electronic Forms on the Standard Workstation or on the Internet: <https://www.dcms.uscg.mil/forms/>; CGPortal at <https://cgportal.uscg.mil/library/forms/SitePages/Forms.aspx>; and Intranet at <https://www.dcms.uscg.mil/forms/>.

12. REQUEST FOR CHANGES. Request for changes to the previous mentioned Commandant Instructions may be sent to Commandant (CG-CVC) at HQS-SMB-COMDT-CG-CVC@uscg.mil.

/J. W. MAUGER/
Rear Admiral, U. S. Coast Guard
Assistant Commandant for Prevention Policy

USCG Marine Safety Manual, Vol. II: Materiel Inspection

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CHAPTER 1: Regulations, Policy and Guidance for a Unit Conducting OCS Activity**A. INTRODUCTION**

This chapter consists of policies that implement the regulation of offshore activities on the U.S. Outer Continental Shelf (OCS) and the inspection of U.S. and foreign flagged units operating in the mineral and oil industry both in U.S. and foreign waters, to include vessels, MODUs, floating and fixed offshore facilities/platforms falling under Coast Guard jurisdiction.

In accordance with the Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. § 1331 et. seq., and numerous Memorandum of Understanding and Agreement with the Bureau of Safety and Environmental Enforcement (BSEE) and the Occupational Safety and Health Administration (OSHA), the Coast Guard promulgates and enforces safety and security regulations governing units, including vessels, facilities, fixed and floating production platforms, and Mobile Offshore Drilling Units (MODUs) when operating on the U.S. OCS.

With regard to MODUs specifically, the Coast Guard is responsible for the inspection of the MODUs hull structure, electrical system safety, lifesaving and fire fighting systems and equipment, and for verifying the unit's crew is capable of conducting satisfactory abandon ship (unit) and fire drills. BSEE is responsible for the inspection and testing of the production and drilling systems and production operations of the MODU from the unit's drill floor to the subsea well.

Foreign floating production units and MODUs may not conduct OCS activities on the U.S. OCS without a valid Coast Guard Certificate of Compliance (COC). In order to maintain a valid COC these units must undergo a Coast Guard examination annually. Additionally, each foreign vessel involved in OCS activities would also be subject to Port State Control authorities if the vessel enters within 12 nautical miles of the U.S. coast line.

B. SCOPE OF EXAMS

There are three basic regulatory authorities the Coast Guard uses to regulate MODUs and other units operating on the OCS: flag state, port state, and coastal state authority.

1. Flag State

- a. The Coast Guard serves as the flag state for U.S. flagged units. Marine Inspectors (MIs) conduct inspections verifying the units meet domestic requirements and issue certificates attesting to the unit's compliance with these standards. Additionally, for U.S. MODUs operating internationally and meeting the standards of the International Maritime Organization Code for the Construction and Equipment of MODUs (IMO MODU Code), an authorized classification society acting on behalf of the U.S. Coast Guard issues the IMO MODU Code Safety Certificate.

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- b. A flag state inspection is an in depth inspection based on U.S. rules and regulations. These inspections include extensive testing of systems and issuance of certificates.
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2. Port State

- a. The Port State Control (PSC) program was initiated to remove substandard ships from U.S. waters which extend to 12 nautical miles (NM) offshore. More detailed information on Coast Guard examinations conducted under the port state control authority can be found in MSM Vol II, Section D: Port State Control. Because MODUs seldom operate within the 12 NM range; however, they typically fall under “coastal state” authority.
 - b. The scope of an exam performed under port state control authority on a foreign entity is more limited than one performed on a U.S. or undocumented entity. This limited scope is based on units having on board valid international documents issued by or on behalf of its flag state.
-

3. Coastal State

- a. In accordance with the 2009 IMO MODU Code, the coastal state is defined as the government of the state exercising administrative control over the drilling operations of the unit. OCSLA gives the Coast Guard the jurisdiction as the coastal state over the “subsoil and seabed of the OCS appertain to the United States.” This is the authority most often exercised by the Coast Guard over foreign flagged MODUs.
 - b. In accordance with 33 CFR 140.101(e) the Coast Guard will recognize and accept valid international certificates issued by signatories to international instruments and will verify compliance by spot checking compliance of any accepted certificate. Depending on the conditions found on an OCS unit, these coastal state examinations may be more in depth than a traditional PSC examination, but will not be as stringent as flag state inspections.
 - c. The U.S. as a coastal state allows for three inspection options for foreign flagged MODUs entering the OCS to conduct OCS activities. These options, a, b, and c are further discussed in Section G, Chapter 2 of this Manual.
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C. EXAMINATION/INSPECTION TEAMS**1. Coastal State Exams/Inspections**

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Offshore teams should, at a minimum, contain two members for routine examinations/inspections. One member must be a MODU Inspector certified with the appropriate competency (qualification). The second member should be certified as a Port State Control Examiner (PSCE). When deciding the size of the team necessary (including trainees) to perform an examination/inspection, the Marine Inspector should consider the type of exam and unit particulars (type, size, location offshore, transportation acquired, etc). Deviations may be authorized at the discretion of the OCMI when determining the number and qualification level of the marine inspectors conducting the examination/inspection.

In some instances, a National Center of Expertise member, Coast Guard travelling inspector, auditor, or other technical expert may be participating in an exam/inspection. These additional participants do not count towards the size of the team.

2. Overseas Exams/Inspections for Issuance of a COC/COI for MODUs & Floating OCS Facilities

- a. **Definitions:** For the purposes of this section of the Marine Safety Manual Volume II, COMDTINST 16000.7 (series) the following definitions applies:
 - i. **Receiving OCMI/Marine Inspector (MI)** –Officer in Charge, Marine Inspections (OCMI) zone in the contiguous United States where an OCS unit will be receiving its COC or COI.
 - ii. **Originating OCMI /Marine Inspector (MI)** – OCMI zone in which initial inspections/exams will be conducted (generally overseas).
- b. **Travel to a Foreign Port.** In preparation for the arrival of a new MODU or Floating OCS Facility onto the U.S. OCS, it may be necessary for Marine Inspectors (MIs) from a receiving Officer in Charge, Marine Inspections (OCMI) office, to visit the vessel in the overseas shipyard while it is being constructed. Such visits may occur as a result of a request from the owner/operator or have been initiated by the receiving OCMI/marine inspector on an as needed basis. These visits can minimize delays for vessels that operate for the first time on the U.S. OCS, expediting the inspection process; they also open up lines of communication between industry and the Coast Guard, ensuring optimum safety compliance while construction occurs and promoting consistent enforcement of existing standards.

The receiving OCMI must coordinate travel and inspection activities with the originating OCMI. It is critical that the receiving OCMI and the originating OCMI coordinate inspection activities. Receiving MIs may attend the vessel to address and verify District and receiving OCMI policies, procedures and concerns. Also, if the OCS vessel is applying for the In Service Inspection Plan (ISIP) or Underwater Exam In Lieu of Drydock (UWILD) process, the approval process can begin in the shipyard where internal inspections and photos of critical inspection points (that may be exposed during construction versus when

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onsite and in water) can be completed most efficiently. The Coast Guard will not normally perform examinations with the vessel underway.

- c. **Travel Costs.** Inspector travel and subsistence costs must be reimbursed by the company. Inspectors traveling overseas for inspections must obtain TONOs from DCO-832(UF) and must provide billing information upon completion of travel. Inspectors shall contact the overseas marine inspection office or DCO-832(UF) for more information. For further information on the foreign travel request process see Foreign Travel, Passports and Visas, COMDTINST 5000.5 (series).
- d. **User Fees and Reimbursable Expenses.**
 - (1) **46 CFR 2.10-120; Overseas Inspection Fee.** Overseas fee (46 U.S.C. 2110, 46 CFR 2.10-120): The overseas fee is applicable for these inspections/examinations. The fee should be charged for each group of inspectors traveling from the states to the overseas location. The local OCMI should ensure the fee is paid prior to travel. There is no billing for this fee; a proof of payment receipt is provided by the company to the OCMI, (usually the lead inspector).
 - (2) **46 CFR 2.10; COI or COC Fee.**
 - i. **COI fee (46 U.S.C. 2110, 46 CFR 2.10):** The COI fee is billed by FINCEN based on the unit having a valid COI. The COI fee isn't charged for an initial COI.
 - ii. **COC fee (46 U.S.C. 2110, 46 CFR 2.10)** The COC fee should be paid when the local OCMI office begins their examinations. The fee is paid without billing from FINCEN. In order to prevent inadvertent interest and penalties for non-payment, a COC examination should NOT be entered in MISLE until the fee is paid.
 - (3) **46 U.S.C. 3317, Reimbursable travel expenses.** Reimbursable Travel (46 U.S.C. 3317): Travel for inspections/examinations conducted overseas must be reimbursed by the requesting company. DCO-832(UF) manages the TONOs for this travel and publishes guidance annually for obtaining tonos and providing billing information for Coast Guard reimbursement.

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(1) Foreign units. The owner or builder of a foreign flagged vessel being built overseas and applying for an examination to obtain a COC should do so at least 6 months prior to engaging in U.S. OCS activities by submitting:

- i. A written or e-mailed request for COC examination to the receiving OCMI, of the marine inspection zone in which the unit intends to operate in the U.S.;
- ii. and to the originating OCMI zone in which the inspections/exams will be coordinated; and
- iii. provide evidence that all applicable user fees have been paid in full.

(2) U.S. Flagged and Undocumented Units. The owner or builder of a vessel being built overseas and applying for an inspection to obtain a COI should do so prior to commencing any construction or fabrication of vessels that intend to engage in U.S. OCS activities by submitting:

- i. a completed Application for Inspection of U.S. Vessel, Form CG-3752 to the OCMI of the marine inspection zone in which the unit intends to operate in the U.S.;
- ii. and to the originating OCMI zone in which the inspections/exams will be coordinated; and
- iii. submit all plans and information listed in subpart C of 46 CFR part 107 which relate to the facility.

f. Full COC/COI exams for OCS vessels are not conducted overseas; however, certain portions of new vessel trials may be witnessed by overseas Coast Guard inspectors as resources allow. These pre-inspection opportunities and subsequent results shall be coordinated and communicated with the receiving OCMI. All activities shall be documented in MISLE.

g. Inspection Teams. The members of the teams conducting initial or pre-COC/COI examinations at overseas locations should be coordinated through the overseas originating USCG offices (FEACT/ACTEUR). Close coordination between both the receiving and originating OCMI is necessary to maximize resource use and minimize operational delays. Receiving OCMI should not authorize travel without coordination with overseas originating offices. Visits by receiving Marine Inspectors could last 1 to 2 weeks depending on the testing

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being conducted and how many inspectors participate. The number of receiving marine inspectors travelling to the overseas location should be based on the technical difficulty and type of equipment exams/inspections the team is expected to complete during their visit. The inspection team should be comprised of 4 to 6 Coast Guard MIs. The inspection team should consist of at least one MI from the receiving OCMI office and any other personnel deemed necessary by the receiving OCMI to complete the necessary inspections, which may include members from the Marine Safety Center (MSC), CG Headquarters (HQ), the OCS National Center of Expertise (NCOE) and the overseas MI offices. Coordination with the originating OCMI managing project officer should be a priority.

- h. **Scope of the exams/inspections.** The first of these pre-exams/inspections during the construction phase has been known to commence as far in advance as 6 months prior to arrival on the OCS, with the last two months prior to arrival being the most critical in that MIs can witness testing of critical systems (such as life saving and firefighting). At the final exam/visit, by receiving MIs, a handoff from the originating OCMI to the receiving OCMI should occur. Any MISLE activities generated by the originating offices should be marked closed and transferred to the receiving OCMI.
- i. **Request for Examination/Inspection.** The vessel owner/operator considering an overseas examination should submit a request in writing to the originating OCMI and the receiving OCMI in the zone the unit will eventually be located. Vessel operators requesting a COI should utilize the Application for Inspection of U.S. Vessel, Form CG-3752. Requests for a COC exam should include the following information:
 - (1) Status of plan review by MSC, including any unresolved plan review comments;
 - (2) Stage of vessel construction and delivery date;
 - (3) Suggested location and dates for the inspection;
 - (4) One Company point of contact (to represent the company and all subcontractors);
 - (5) Acknowledgment to reimburse the Coast Guard for all expenses incurred; and
 - (6) The general information about the vessel:

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- (a) Name of vessel (including former name(s) for existing vessels);
- (b) Vessel type (class notation being issued: FPSO, MODU, etc...)
- (c) IMO Number;
- (d) Building contract date, keel laying date, delivery date;
- (e) Country of registry;
- (f) Classification Society;
- (g) Total numbers of passengers (if any) and crew;
- (h) Gross tonnage, length, breadth, depth, and speed;
- (i) Fire Protection Method and SOLAS Convention to which the vessel was built, including amendments; and
- (j) Major modification information (if any) to include: dates, locations, and SOLAS Convention to which the vessel was modified;

When a new construction project is beginning, the originating overseas CG inspections offices (FEACT/ACTEUR) shall be the initial point of contact for inspections and questions. If the area on the U.S. OCS in which the vessel will be operating is known, the receiving OCMI office should also be contacted for any specific District or OCMI policy questions.

- j. **Inspection Schedule Plan.** The receiving and originating MIs should coordinate a written plan for conducting the expected exams on the overseas visit to provide the sequence of examinations such that the inspectors, flag state, classification society, owner's representatives and all other interested parties will be ready to perform their duties and responsibilities efficiently during the visit. It is understood that this schedule is subject to change due to weather and unpredictable phases of construction of the unit at the building site. Before the examinations/inspections take place aboard the vessel/unit, the inspectors, Administration representatives, designers, or owner's representatives should meet to discuss the scope of the examination/inspection and preparation details. Receiving OCMI MIs should not limit their exam/inspection to a job aid; if there is reason to believe that the vessel's safety equipment or material condition is substandard, a more in depth exam/inspection/drill should be conducted.
- k. **Issuance of Certificates.** NO formal paperwork is issued to the owner or operator by the receiving or originating OCMI during these overseas pre-

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inspection/exam visits. These visits are in preparation for issuance of the COC/COI once the vessel gets to the U.S. OCS.

- I. **MISLE**. One MISLE activity shall be opened for the vessel by the originating OCMI. All Team members shall be included in the entry. Do NOT create a COC exam in MISLE until the unit/vessel is located within the receiving unit's AOR and the COC fee has been paid. Starting this casework early causes the USCG Finance Center (FINCEN) to create a bill, which immediately accrues interest and penalties, which are not warranted if the unit is under construction. Initial MISLE Inspection Type entries shall be as follows:

- i. For a COI Inspection: New Construction
- ii. For a COC-MODU: Admin
- iii. For a COC FPSO: New Construction

There shall not be any pre-COC exams for foreign flagged MODUs. For all other inspection types listed above, as the originating MIs visit the vessel, a running log shall be maintained, with all documents and photographs scanned into MISLE, to document the progress and give the receiving unit's MIs a current and coordinated inspection documentation package. Once the vessel departs the originating unit's AOR then the activity shall be closed and the receiving unit can begin the normal COC/COI Inspection process. Casework shall follow as directed in the MISLE Data Entry Requirements for Foreign Vessel Arrivals, Examinations and Operational Controls and the MISLE Data Entry Requirements for Outer Continental Shelf (OCS) Inspections.

- m. **Appeals**. If an owner or operator of a vessel does not agree with a Coast Guard decision resulting from plan review or from an examination, a formal appeal of that decision may be made in accordance with the procedures contained in 46 CFR 1.03. Commandant (CG-CVC-2) will serve as the point of contact for questions related to the procedures and guidance contained herein.

D. REGULATORY AUTHORITIES

1. OCSLA: 43 U.S.C. § 1331

The Outer Continental Shelf Lands Act (OCSLA) (43 U.S.C. § 1333(d)(1) et seq.) gives the Coast Guard jurisdiction over the subsoil and seabed of the OCS appertain to the United

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States and waters adjacent to including vessels engaged in OCS activities.

More specifically, 43 U.S.C. § 1333(d) (1), authorizes the Coast Guard to create and enforce regulations to ensure safety of life and property on the OCS.

2. Vessels subject to inspection: 46 U.S.C. § 3301

This statute requires that seagoing motor vessels be inspected by the Coast Guard. These vessels must meet the requirements of 46 CFR Subchapter I-A and 33 CFR Subchapter N when working on the U.S. OCS.

3. Classification Societies: 46 U.S.C. § 3316

The Coast Guard may accept certain flag State statutory certificates issued to U.S. flagged vessels by authorized classification societies or recognized organizations (ROs), such as the American Bureau of Shipping (ABS). The Coast Guard retains the responsibility for issuing the Certificate of Inspection (COI); however, a RO may participate in the plan review and inspections necessary for issuance of this certificate. Title 46 CFR Part 8 provides detailed regulations for the Alternate Compliance Program (ACP). See this Manual, Section G, Chapter 2, for additional information.

E. INTERAGENCY AGREEMENTS

1. OSHA and Coast Guard MOU History

- a. On 19 December 1979, the Coast Guard and Occupational Safety and Health Administration (OSHA) signed an MOU that gave the agencies joint responsibility for the occupational safety and health of personnel on OCS facilities. The purpose of this MOU was to establish procedures to increase consultation and coordination between the Coast Guard and OSHA with respect to matters affecting the occupational safety and health of personnel working on the OCS of the United States. The two agencies agreed to observe the following procedures in carrying out their responsibilities regarding development and promulgation of standards and enforcement of regulations and standards.
- b. In 1983, the two agencies entered into a second MOU that defined the responsibilities of each agency with respect to Coast Guard certificated vessels. The 1983 MOU outlined the statutory authorities of each agency to prescribe and enforce standards or regulations affecting the occupational safety and health of seamen aboard vessels, including MODUs that are inspected and certificated by the Coast Guard.

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The 1983 MOU also clarifies the Coast Guard will enforce the Occupational Safety and Health Act with respect to the working conditions of seamen aboard inspected vessels. However, OSHA retained the authority over discrimination cases on inspected vessels.

A foreign MODU operating under the authority of a COC issued by the Coast Guard is considered "an inspected and certificated vessel" for the purposes of the 1983 MOU with OSHA.

- c. The Coast Guard has primary authority for OCS worker safety; however, OSHA is available to assist in areas of their expertise.

2. BSEE and Coast Guard MOU/MOA History

- a. A Memorandum of Understanding (MOU) was signed November 27, 2012 between the Director of the BSEE and the Deputy Commandant for Operations (DCO) of the United States Coast Guard. The purpose of the MOU is to promote interagency consistency in the regulation of OCS activities, facilities and units under the respective jurisdiction of the BSEE and Coast Guard, minimize duplication of effort and aid participating agencies in the successful completion of their assigned missions and responsibilities. The goal is to promote safety of life and property and the protection of the environment. On 1 October 2011, the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), formerly the Minerals Management Service (MMS), was replaced by the Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE) as part of a major reorganization.
- b. Key regulators from the Coast Guard and BSEE headquarters meet quarterly to discuss the following objectives as it relates to the MOU:
 - (1) Fostering communication and cooperation between the participating agencies.
 - (2) Promoting compliance with applicable regulations.
 - (3) Optimizing use of expertise and resources, as well as coordinating efforts with respect to offshore safety and environmental protection.
 - (4) Developing common, compatible regulations and policies.
 - (5) Encouraging adoption of similar codes and standards.

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- (6) Providing appropriate oversight and taking effective enforcement actions.
- c. To help meet the above objectives and that of the MOU, and to address lessons learned from the collection of Deepwater Horizon investigations and after-action reports, the Coast Guard and BSEE formed both a Response workgroup (charter signed in 11 January 2011) and a Prevention workgroup (charter signed 11 August 2012).
 - (1) The Response Workgroup's ultimate goal is to improve national oil discharge planning, preparedness, and response for facilities located seaward of the coastline through improved alignment of BSEE and Coast Guard regulatory authorities and preparedness oversight activities.
 - (2) The Prevention Workgroup's goal is to optimize the safety of those engaged in oil and gas exploration, development, and production on the OCS through focused interagency communications and alignment of Coast Guard and BSEE operations and activities.
- d. The MOU established the framework for six Memorandums of Agreement (MOAs).
 - (1) OCS-01 Agency Responsibilities (effective 30 September 2004)
 - (2) OCS-02 Civil Penalties (effective 12 September 2006)
 - (3) OCS-03 Oil Discharge Planning, Preparedness, and Response (effective 03 April 2012)
 - (4) OCS-04 Floating Offshore Facilities (effective 28 February 2008)
 - (5) OCS-05 Incident Investigations (effective 27 March 2009)
 - (6) OCS-06 Offshore Renewable Energy Installations on the OCS (effective 27 July 2011)
 - (7) OCS-07 Safety and Environmental Management Systems (SEMS) and Safety Management Systems (SMS) (effective 30 April 2013)
 - (8) OCS-08 Mobile Offshore Drilling Units (MODUs) (effective 04 June 13)

F. VESSEL CERTIFICATES OF FINANCIAL RESPONSIBILITY (COFRs) AND OIL SPILL FINANCIAL RESPONSIBILITY (OSFR)

The COFR program is managed by the Coast Guard and inspectors should be verifying that a vessel has on board the documentation required by 33 CFR 138, Subpart A. For more

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information on the COFR see the National Pollution Fund Center website at: <http://www.uscg.mil/npfc/COFRs/>. This part only applies to vessels, which includes MODU's when they meet the applicability found in **33 CFR 138.15(b)**.

Pollution liability for offshore facilities is covered under BOEM's regulations found in 30 CFR 553 - Oil Spill Financial Responsibility (OSFR) for Offshore Facilities. For more information on the OSFR see: www.boem.gov/Oil-Spill-Financial-Responsibility-OSFR/. A facility that meets the definition of a "covered offshore facility (COF)" as defined in 30 CFR 553.3 must meet the requirements of this part as applicable (30 CFR 553.10). It is important to note that MODU's may be required to meet the requirements in 33 CFR part 138 and 30 CFR part 553 depending on their operations.

BOEM does not issue any type of documentation nor do they require the owner/operator of COF's to maintain proof of financial responsibility on board. Their process involves an annual verification that financial responsibility remains intact. If an inspector questions whether or not a COF has OSFR coverage they may contact BOEM at 504-736-2600 for confirmation.

G. JONES ACT

The Jones Act applies only to the carriage of U.S. goods between U.S. ports. A foreign vessel can provide any service to one or more U.S. ports if that service does not include the transport, loading and offloading of U.S. merchandise. Current interpretation and application of the Jones Act by the Customs and Border Patrol (CBP), the agency responsible for determinations on Jones Act applicability, permits both foreign and domestic vessels to engage in activity on the OCS. Although the Jones Act prohibits the transportation of merchandise by foreign vessels between coastwise places (including between the U.S. and offshore drilling facilities), the standing CBP ruling determines that OCS supply vessels move "vessel equipment" rather than transport "merchandise".

See this Manual, Section B, Chapters 1 and 4 for additional information on coastwise trade and Jones Act Status.

H. PERSONNEL

1. Determining Which Personnel May be Employed on a Unit Engaged in an OCS Activity

- a. Applicability. OCSLA and its implementing regulations in 33 CFR 141 set forth the restrictions on employment of personnel on an OCS unit when that unit is engaged in an OCS Activity. The regulations apply to majority U.S.-owned units that are

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foreign-flagged. They may also apply to a foreign-flagged vessel that is owned or controlled by a foreign company if the Commandant determines that there is a majority U.S. interest in any company in the chain-of-ownership or control of that vessel. The regulations do not apply to U.S. documented vessels subject to the citizenship requirements of 46 U.S.C. 8103; therefore, these requests will be denied.

- b. Authorization to Employ Certain Persons. In general, the regulations authorize the Coast Guard to determine the use of a foreign national by an employer on a unit engaged in an OCS Activity. Specifically, where a determination is made, it will conclude whether or not a position to be filled by a foreign national is part of the regular complement of the OCS unit. If a position is part of the regular complement, then Commandant (CG-CVC) will process the employer's request; if, however, the position is determined not to be regular complement, then the OCMI will be responsible for processing the request in accordance with H.2.d. of this chapter, below.

2. Guidance for Processing a Determination Request

In addition to the regulations, the following guidance has been published:

- a. NVIC 7-84 addresses the applicability of the regulations to a) a vessel with a majority U.S. interest (either ownership or control) and b) to the employment of a foreign national in a position determined to be part of the regular complement of the unit. These requests will be processed by Commandant (CG-CVC).
- b. Commandant (CG-CVC) is responsible for processing the four classes of exemptions listed in NVIC 7-84, as these exemptions require a Coast Guard legal determination or coordination with the Department of Labor. Commandant (CG-CVC) also receives exemption requests from industry to determine whether or not personnel are considered "specialists, professionals or technically trained personnel called in to handle emergencies or other temporary operations" as defined in 33 CFR 141.15(b). 33 CFR 141.15(c) authorizes the OCMI to determine whether a particular individual or position is part of the regular complement of a unit as defined in 33 CFR 141.15(b).
- c. Commandant (CG-CVC) will forward all OCS "regular complement of crew" determination request to the local OCMI for determination per 33 CFR 141.15(c). If a unit receives an exemption request that falls into any of the other classes listed in NVIC 7-84, forward it to Commandant (CG-CVC).
- d. Specialists, professionals and technically trained personnel called in to handle emergencies; temporary operations; or repairs are typically NOT considered to be part of the regular crew complement of a unit. However, each request shall be

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handled on a case-by-case basis. Some of the factors that shall be considered when making these determinations are:

- (1) job description relative to the unit;
- (2) the period of time requested or anticipated;
- (3) type of operations (i.e., emergency, specialized);
- (4) degree of expertise or training needed; and
- (5) safety considerations.

e. The following examples are provided for clarification:

- (1) A commercial diver temporarily aboard a MODU or platform for emergency repairs or inspection services would NOT be considered a part of the regular crew complement of a unit. However, a commercial diver aboard a dive support vessel (DSV) would be considered a part of the regular crew complement since commercial divers are normally employed aboard DSV's.
- (2) A weld inspection technician periodically aboard a pipe-lay barge to ensure quality assurance or to operate equipment that requires specialized training would NOT be considered a part of the regular crew complement of a unit. However, a welder aboard a pipe-lay barge would be considered a part of the regular crew complement since welders (industrial personnel) are normally employed on this type of vessel.
- (3) A petroleum engineer or consultant temporarily aboard a MODU during well logging or specialized drilling operations would NOT be considered a part of the regular crew complement of a unit. However, an assistant driller or rig electrician would be considered a part of the regular crew complement of a unit since these positions are normally employed aboard this type of vessel.

f. The OCMI letter of determination on a position(s) shall be sent to the requestor. **The local OCMI will maintain a file of all letters issued for future accessibility, in accordance with the CG correspondence manual and unit needs.**

I. POST HURRICANE AND NATURAL DISASTER INSPECTION REQUIREMENTS

In order to ensure offshore structures in hurricane-affected areas remain in good working order in the aftermath of a hurricane or natural disaster, BSEE and the Coast Guard have established

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criteria that trigger a post hurricane inspection and the degree of exam to be required. This information is applicable to all MODUs and certificated floating production facilities operating on the U.S. OCS. This does not apply to Floating Production, Storage, and Offloading (FPSO) vessels or other ship-shaped OCS facilities, including drill ships.

1. Fixed OCS Facilities

- a. Per 33 CFR 140.101, the Department of Interior (Bureau of Safety and Environmental Management (BSEE)), may perform inspections on behalf of the Coast Guard on all fixed OCS platforms and structures engaged in OCS activities.
 - b. BSEE will consult with Coast Guard District Offices or the cognizant OCMI with issues regarding interpretation or application of these regulations.
 - c. Chapter 5 of this Section (G) provides guidance and clarifies the Coast Guard and BSEE responsibilities with respect to Fixed Platform Inspections.
-

2. Floating Facilities and MODU's

- a. Floating facilities such as Semi-submersibles, Tension Leg Platforms (TLPs), Mini TLPs and SPARs, will initiate an out of cycle underwater and internal structural inspection to assess the post storm condition if that facility experienced a passing weather system that:
 - (1) causes an evacuation of a facility and
 - (2) had wave damage to topside structures.
 - b. 25% of underwater critical areas and 25% of internal structures must be examined within 30 days of return of a facility to operation. The areas selected for examination should give consideration to the aspect of the storm relative to the facility or topside damage.
 - c. At the discretion of the OCMI, there may be a credit for these post-storm inspections towards the next scheduled underwater hull and internal structural inspections.
 - d. If a weather event causes the evacuation of a facility, the inspection can be waived at the discretion of the local OCMI if the company can provide evidence that the local wave heights were not extreme as compared to normal operations.
-

3. Bureau of Safety and Environmental Enforcement (BSEE)

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- a. BSEE has issued a post-hurricane inspection and reporting requirements Notice to Leasees (NTL) No.2009-G30: <http://www.bsee.gov/Regulations-and-Guidance/Notices-to-Lessees/2009/09-G30/>.
- b. Pursuant to 30 CFR 250.919(b), if any structure has been exposed to a natural occurrence such as a hurricane, tropical storm, or earthquake, the BSEE Regional Supervisor may require the facility to submit an initial report of all structural damage, followed by additional updates.
- c. **Following the passage of a hurricane, BSEE will define and issue, via NTL, the affected area. All inspected floating production facilities in the affected area are subject to the policy. Facilities outside the affected area are also required to report any damage sustained per 33 CFR Part 146.30.**

J. CONFINED SPACE ENTRY

1. Regulations

- a. Confined space entry is discussed in Marine Safety Manual, Volume 1, Administration and Management, COMDINST M16000.6 (series), Chapter 10.
- b. Confined space entry by Marine Safety personnel is covered under OSHA's regulations governing shipyard employment, specifically 29 CFR 1915, Subpart B; Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment. The applicability of this regulation includes all shipyard employment, including vessels, vessel sections and shore side operations, regardless of location.
- c. The general Coast Guard policy for entry and work by personnel in confined spaces **and** atmospheric testing requirements are found in Chapter 6 of the Safety and Environmental Health Manual, COMDTINST M5100.47 (series). See also Appendix D of MSM Vol 1 Chapter 10 for the Commandant Office of Commercial Vessel Compliance (CG-CVC) confined space entry policy questions and answers.
- d. Appendix A of MSM Vol I Chapter 10 contains standard Safe Work Practices (SWPs), however, experience has shown that due to area specific or local conditions these SWP's do not necessarily cover all hazards that may be associated with specific activities. Commanding Officers have the authority to develop alternative SWP's based on local conditions. All alternative SWP's must be reviewed by a Coast Guard health and safety professional from the respective Health, Safety, Work-Life Commandant (CG-11) staff or the detached Safety and Environmental Health Officer (SEHO) located at the HSWL Service Center Field Office (HSWL SCFO) <http://www.uscg.mil/hswlsc/> Any alternative

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SWP that is developed should also be included in the unit's written safety and occupational health program.

2. Marine Chemist Availability for Overseas Inspections

Overseas inspections present a unique problem, in that NFPA Marine Chemists are not always readily available to certify spaces overseas. When no Marine Chemist or other authorized person designated by the OCMI is available, the inspection should be made by the senior vessel officer present.

- a. When none of the vessel's officers are present, as in the case of most vessels in foreign shipyards, the inspector must be extremely cautious. A confined space must not be entered unless it has been satisfactorily tested.
- b. It is the responsibility of the owner to make his or her vessel available for inspection, and this includes ensuring safe atmospheres for internal inspections.
- c. While almost all foreign yards employ persons to inspect and certify conditions in and adjacent to those spaces undergoing repair, their level of expertise varies widely. In this environment, marine inspectors must be provided the training and equipment that allow them to make independent decisions on confined space entry.
- d. OCMI's should be keenly aware of the unique hazards which their inspectors face when working overseas and endeavor to ensure adequate training is afforded personnel working in this environment.
- e. Local Policy. Per MSM Vol I, Chapter 10, Appendix D: When a Marine Chemist is not available, such as for overseas inspections, inspections in remote areas or inspections on small passenger vessels, fishing vessels, etc., Commanding Officers may develop local policy following the guidelines in Appendix B (of Vol I, Chapter 10) to train and designate unit personnel to perform as competent persons. The requirements of 29 CFR 1915 still apply and must be adhered to in developing local policy. The cognizant SEHO shall be consulted when developing this policy and is required to review and approve the policy before it is implemented.

K. PORTABLE ACCOMMODATION MODULES

With the increased activity in the exploration and exploitation of mineral and oil resources on the Outer Continental shelf regions of the U.S., there has been an increase in the use of portable accommodation modules on vessels operating in support of these activities such as MODUs and floating OCS facilities (SPAR, TLPs, etc.). Due to the hazards associated with the offshore industry, the safety of the host vessel and the personnel on board must not be compromised by the installation and occupation of portable accommodation modules. Personnel that occupy

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portable accommodation modules should be afforded the same level of safety as personnel that occupy similar spaces located in permanent accommodations on board the host vessel.

A portable accommodation module is any non-integral enclosed space that is installed on a host vessel, which may be any Coast Guard inspected vessel or floating facility. They are often living quarters, medical treatment rooms, recreational spaces, toilets and washrooms, offices, or other similar spaces.

1. Plan Review

All plan review will be conducted and guidelines for the design and construction of portable accommodation modules can be obtained from the USCG Marine Safety Center. The Coast Guard does not conduct plan review of portable crew shelters for exclusive use on fixed platforms. The exception to this policy is any portable shelter installation aboard any fixed OCS facility maintaining a Coast Guard COI.

2. OCMI Inspection Standards

The OCMI should ensure portable accommodation modules are properly designed and constructed. The modules must satisfy the minimum structural, fire protection, habitability, egress, electrical, piping, fire detection, general alarm, and other safety design standards applicable to the host vessel. If a module is intended for use on board different types of host vessels, the owner of the module should design the module to meet the most stringent host vessel standards (e.g., If the host vessel is certificated under Subchapter I-A, then the portable accommodation modules onboard, must meet the standards of I-A as well. If the host vessel is certificated for standards under subchapter L and I, then the more stringent of the two standards will apply to the accommodation modules onboard.).

The OCMI should ensure portable accommodation modules are properly installed on board a host vessel before the vessel is permitted to operate and the modules are occupied. This includes the arrangement of the modules relative to other existing equipment (e.g., ventilation and hazardous areas), means of securing, suitability of the supporting deck structure, impact on the host vessel's stability, and integration with the host vessel's electrical, fire detection, general alarm system, water supply and other hotel services. In addition, OCMI's and vessel operators should be aware that the installation or removal of a portable accommodation module may have tonnage implications and the host vessel may need to be re-measured.

3. MISLE Data Entry

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Each portable accommodation module is assigned a Coast Guard Number, and is tracked in MISLE. All documentation for approval of the portable accommodation modules, including approval letters and any plans submitted for approval, shall be included in the documentation section in MISLE, by whoever approves and reviews such written material. Similarly, all documentation for the installation of the portable accommodation modules shall be included in the documentation section of the host vessel.

A notation in the narrative of the MISLE casework is sufficient documentation that the MI inspected the unit or the installation. An example narrative entry for an installation in the MISLE Activity for the COI or COC may be:

“The (insert CG number) portable accommodation modules on (insert vessel/unit name) were inspected on (insert date) and the installation met the host vessel inspection requirements for subchapter (insert inspection subchapter (I/I-A/N/L etc...)).

L. MISLE CASEWORK DOCUMENTATION

This section is not intended to provide a detailed instruction on how to use MISLE, as the MISLEnet (<http://mislenet.osc.uscg.mil/>) website provides various user guides and “how to” tutorials. See also the MISLE Data Entry Requirements for Foreign Vessel Arrivals, Examinations and Operational Controls and the MISLE Data Entry Requirements for Outer Continental Shelf (OCS) Inspections.

M. PROCESSING OF VIOLATION CASES

Violation cases must be processed in accordance with the procedures in Marine Safety Manual, Volume V, Investigations and Enforcement, COMDTINST M16000.10 (series). All suspected violations discovered during Coast Guard inspection activities or through other means must be thoroughly investigated by the Coast Guard following the guidance in 33 CFR Subpart 1.07, 33 CFR 140.40 and USCG Marine Safety Manual Volume V, Investigations and Enforcement, COMDTINST M16000.10 (series).

N. POLLUTION PREVENTION**1. MARPOL Requirements**

To clarify the MARPOL requirements for MODUs on the OCS the diagram 1 on page G1-18. A larger printable version of the MARPOL Job Aid can be found on the Commandant

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(CG-CVC-2) website within the Outer Continental Shelf mission on CG Homeport:
<https://homeport.uscg.mil>.

Definitions for diagram 1 below:

Ship means a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushioned vehicles, submersibles, floating craft and fixed or floating platforms.

Oil tanker means a ship constructed or adapted primarily to carry oil in bulk in its cargo spaces and includes combination carriers, any "NLS tankers" as defined in Annex II and any gas carrier as defined in regulation 3.20 of chapter II-1 of SOLAS 74 (as amended), when carrying a cargo or part cargo of oil in bulk.

Fixed or floating platforms including drilling rigs, floating production, storage and offloading facilities (FPSOs) used for the offshore production and storage of oil, and floating storage units (FSUs) used for the offshore storage of produced oil.

2. Oil Record Books (ORB)/Oily Water Separators (OWS) and the International Oil Pollution Prevention Certificate (IOPP)

Most offshore units have OWS onboard which must comply with the IOPP certificate. These OWS's are onboard to process deck drains related to the industrial process. If onboard strictly to process deck drains or by-products of the industrial process, the OWS may not fall under the definition of 'Machinery Space Operations' or the provisions associated with the same. Marine Inspectors should ensure that, like ensured during a Port State Exam, the "on deck" machinery matches the documentation provided. Larger MODUs are known to have multiple OWSs and the IOPP should denote this. Note the current IOPP Certificate Supplement has no place for additional OWS units. The Marine Inspector should indicate on the Certificate Supplement any additional OWSs onboard and their rated throughputs.

Examples: Some Semi-Sub MODUs have 4 OWS installations (one in each column) which are the same. Some other Semi-Subs have 2 OWS units (one in the center column of each side) and 1 or 2 units installed on the deck (one may process machinery space operations related fluids and the other may only process industrial process fluids). Drillships will typically have 2 OWS units (one aft and one forward, often different sized units). Jack-Ups may have OWS units installed strictly for the industrial side.

Marine Inspectors should look at the ORB entries on offshore units carefully. 550-Gal 'Tote Tanks' are used to transport oils, fuels, chemicals and wastes to/from MODUs. These are often overlooked within ORB entries. The tote is technically cargo while stored onboard. Striking oil from the tote tank into the vessel should be logged as a bunkering operation, but

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often it is not. Oil changes sometimes go directly to a waste oil tote tank; this should also be logged in the ORB, but often is not.

3. MARPOL Annex V

This Annex applies to all ships, which includes, but is not limited to MODUs, fixed and floating platforms. The discharge into the sea of *any* garbage is prohibited from fixed or floating platforms, and from all other ships when alongside *or* within 500 m of such platforms. Food waste may be discharged into the sea from fixed or floating platforms located more than 12 NM from the nearest land and from all other ships when alongside or within 500 m of such platforms, but only when the wastes have been passed through a comminuter or grinder. Such comminuted or ground food waste shall be capable of passing through a screen with openings no greater than 25mm. The record keeping (garbage record book) requirement may be waived by the Administration for fixed or floating platforms while they are engaged in exploration and exploitation of the sea-bed.

The requirements for garbage pollution found in 33 CFR 151.51-151.77 apply to all U.S. registered vessels and foreign vessels while in the navigable waters of the United States or the Exclusive Economic Zone. These regulations do NOT apply to any other ship specifically excluded by MARPOL 73/78. Where U.S. regulations differ from MARPOL is the requirement to maintain a garbage record book. Per 33 CFR 151.55, all manned ocean going vessels of 400 GT and above engaged in commerce and documented under the laws of the United States and every manned fixed or floating platform subject to the jurisdiction of the United States must maintain a garbage record book.

For additional information on Annex V requirements see this Manual, Section E, Chapter 1, diagram 2 below and the 2012 IMO Guidelines for the Implementation of MARPOL Annex, V.

4. Additional Restrictions

There are no additional equipment requirements for MODUs or fixed OCS facilities. However the following restrictions apply:

- a. The EPA issues National Pollution Discharge Elimination (NPDES) permits to MODUs and Fixed Platforms in accordance with 40 CFR 122.2 and the EPA / Coast Guard MOU (dated February 11, 2011). MODUs and Fixed Platforms that operate in accordance with their NPDES permits are in full compliance with MARPOL 73/78.**

- (1) Marine Inspectors are encouraged to review a MODU's or Fixed Platform's NPDES permit. Extreme caution should be used in determining whether or not they are in compliance with their permit. The NPDES permit is very**

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specific as to the types of substances (both oils and Noxious Liquid Substances (NLS)) allowed to discharge and the amounts.

- (2) If a MODU or Platform is not operating under its NPDES permit, all provisions of MARPOL 73/78 and the limitations found in 33 CFR 151.10 are applicable.
 - b. Control of Oil Discharges. All MODUs operating (not en route) within 12 nautical miles of nearest land or within a special area and all fixed platforms within 12 nautical miles of nearest land must:
 - (1) Have a means by which to retain all machinery oily mixtures from the platform machinery space and be equipped to discharge oily mixtures for transport to a reception facility; or,
 - (2) Be equipped to discharge in accordance with 33 CFR 151.10 paragraphs (b)(3), (b)(4) and (b)(5).
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Diagram 1: MARPOL Annex Applicability (*Larger diagram available on HOMEPOR.*)

MARPOL Annex Applicability						
MARPOL Annex	CATEGORY	EFFECTIVE DATE	APPLICATION	COMPLIANCE	OCS Applicable	Requirements for fixed or floating platforms.
I	Prevention of pollution by OIL	02-Oct-83	Applies to all ships	Mandatory	YES	MARPOL Annex I, Regulation 39 contains special requirements for fixed or floating platforms when engaged in the exploration, exploitation and associated offshore processing of sea-bed mineral resources. However, ships when operating on the United States Outer Continental Shelf (U.S. OCS) are subject to the jurisdiction of the United States and therefore the requirements within 33 CFR § 151.25 to maintain an ORB apply, unless the fixed or floating drilling rig or other platform is operating in compliance with a valid National Pollutant Discharge Elimination System (NPDES) permit. [See 33 CFR § 151.25(m)] When a fixed or floating drilling rig or other platform departs the U.S. OCS and is not operating in the navigable waters of the United States; the ship is no longer subject to the specific requirements in 33 CFR Subchapter O, but must now comply with MARPOL Annex I.
II	Control of pollution by Noxious Liquid Substances (NLS) in bulk	06-Apr-87	Applies to all ships <i>certified</i> to carry NLS in bulk, regardless of GT.	Mandatory	YES, if <i>certified</i> to carry NLS.	None.
III	Prevention of pollution by harmful substances carried by sea in PACKAGED form	01-Jul-92	Applies to all ships. ¹	Optional ²	Optional ²	None.
IV	Prevention of pollution by SEWAGE from ships	Not Yet Signatory	Not Applicable	Optional	Optional	As of the creation of this job aid, the U.S. is NOT signatory to this requirement. Applicable U.S. regulations apply: 33 CFR 151, Subchapter "O". See also NVIC 01-09 for further information.
V	Prevention of pollution by GARBAGE from ships	31-Dec-88	Applies to all ships, regardless of tonnage.	Mandatory	YES	<u>Reg 5:</u> 1.) Subject to the provisions of paragraph 2 of this regulation, the discharge into the sea of <i>any</i> garbage is prohibited fixed or floating platforms, and from all other ships when alongside or within 500 m of such platforms. 2.) Food waste may be discharged into the sea from fixed or floating platforms located more than 12 NM from the nearest land and from all other ships when alongside or within 500 m of such platforms, but only when the wastes have been passed through a comminuter or grinder. Such comminuted or ground food waste shall be capable of passing through a screen with openings no greater than 25mm. *Note: See also CVC Policy Letter 13-01 and 33 CFR 151. <u>Reg 10.4:</u> (4) The Administration may waive the requirements for Garbage Record Books for: (.2) fixed or floating platforms.
VI	Prevention of AIR pollution from ships	01-Jan-10 ECA Regs: 01-Aug-12 (See CVC Policy Letter 12-04)	Applies to all ships. 400 GT and above & platform and drilling rigs engaged in voyages to waters under the sovereignty or jurisdiction of other Parties. (Except where expressly provided otherwise in regs 3, 5, 6, 13, 15, & 18.) 3: Exemptions; 5: Surveys; 6: Certificates; 13: Nitrogen Oxides (NO _x); 15: Volatile organic compounds (VOCs); and 18: Fuel oil availability and quality	Mandatory	YES, but see "Special Requirements"	<u>Reg 3.1:</u> Emissions from sea-bed mineral activities. Emissions directly arising from the exploration, exploitation and associated offshore processing of sea-bed mineral resources are EXEMPT from the provisions of this Annex. Such emissions include: .1) emissions resulting from the incineration of substances that are solely and directly the result of exploration, exploitation and associated offshore processing; .2) the release of gases and volatile compounds entrained in drilling fluids and cuttings; .3) emissions associated solely and directly with the treatment, handling or storage of sea-bed minerals; and .4) emissions from marine diesel engines that are solely dedicated to the exploration, exploitation and associated offshore processing... <u>Reg 3.2:</u> The requirements of regulation 18 shall not apply to the use of hydrocarbons that are produced and subsequently used on site as fuel. *Note: Emissions arising from the operation of Dynamic Positioning equipment do not fall under the Regulation 3.1 exemption, whether the MODU is transiting to location or is maintaining position on location during exploration, exploitation and associated offshore processing of sea-bed mineral resources. <u>Reg 18.3:</u> Fuel Oil Quality 18.3.1.1 The fuel oil shall be blends of hydrocarbons derived from petroleum refining. This shall not preclude the incorporation of small amounts of additives intended to improve some aspect of performance;

1. U.S. law accepts the International Maritime Dangerous Goods (IMDG) code as an alternative to 49 CFR, for packaging and stowage, regardless of GT.
2. Adopted by U.S. and incorporated into 49 CFR 172 and 176.

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Diagram 2: MARPOL Annex V

MARPOL Annex V			
Type of Garbage	Ships outside special areas	Ships within special areas	Offshore Platforms (more than 12 NM from land) and all ships within 500 M of such platforms
Food waste comminuted or ground	Discharge permitted ≥ 3 NM from the nearest land, en route and as far as practicable	Discharge permitted ≥ 12 NM from the nearest land, en route and as far as practicable	Discharge Permitted
Food waste not comminuted or ground	Discharge permitted ≥ 12 NM from the nearest land, en route and as far as practicable	Discharge Prohibited	Discharge Prohibited
Cargo residues not contained in wash water	Discharge permitted ≥ 12 NM from the nearest land, en route and as far as practicable	Discharge Prohibited	Discharge Prohibited
Cargo residues contained in wash water		Discharge permitted ≥ 12 NM from the nearest land, en route and as far as practicable	Discharge Prohibited
Cleaning agents and additives contained in cargo hold wash water	Discharge Permitted	Discharge permitted ≥ 12 NM from the nearest land, en route and as far as practicable	Discharge Prohibited
Cleaning agents and additives in deck and external surfaces wash water		Discharge Permitted	Discharge Prohibited
Carcasses of animals carried onboard as cargo and which died during the voyage	Discharge permitted as far from the nearest land as possible and en route	Discharge Prohibited	Discharge Prohibited
All other garbage including plastics, sythetic ropes, fishing gear, plastioc garbage bags, incinerator ashes, clinkers, cooking oil, floating dunnage, lining and packing materials, paper, rags, glass,	Discharge Prohibited	Discharge Prohibited	Discharge Prohibited
Mixed garbage	When garbage is mixed with or contaminated by other substances prohibited from discharge or having different discharge requirments, the more stringent requirments shall apply.		

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O. TRAINING WITH THE BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT

The Coast Guard and the BSEE have formed a partnership to enhance interagency cross-familiarization training.

The Coast Guard is responsible for inspections of the hull structure, electrical system safety, lifesaving and fire fighting systems and equipment, and for verifying the unit's crew is capable of conducting satisfactory emergency drills on MODUs and floating OCS Facilities operating on the U.S. OCS.

BSEE regulates the sub platform drilling and production systems, exploration drilling, well work over, and well servicing operations for these OCS units, as well as for the OCS fixed platforms.

The critical interface between subsea and surface operations necessitates coordination and collaboration between the two agencies and is the thrust of this initiative.

Field commanders should prioritize engagements with their respective BSEE OCS inspection offices to increase opportunities to accompany each other on OCS inspections. Optimal interactions should consist of optimizing cross training at the BSEE training center and inspection ride alongs, as operations and funding permit. The goal is not to conduct joint inspections, but rather for each agency to have opportunities to observe one another's inspections. Participants should work to identify over-lapping inspection areas and gaps as well as build local partnerships. Over time, the coordination should evolve in ways to maximize the benefits of the partnership.

The goal of this effort is to institute an environment of increased interagency cooperation and knowledge with respect to offshore drilling and production safety as well as inspection processes.

Coast Guard-BSEE coordination at the headquarters level is ongoing and is centered on working groups focused on updating interagency agreements and cross training. Engagement and coordination at the field level will further strengthen our partnerships and increase the level of oversight on the OCS, resulting in a safer environment for maritime vessels and personnel.

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Note: Any references to IMO MODU Code are the 1979 Code unless otherwise noted.

A. EXISTING VERSUS NEW U.S. FLAGGED MODUS

1. Existing

U.S. units built, under construction or contracted for before April 5, 1982, are considered *existing*, and are regulated to the design requirements applicable to the unit on April 4, 1982, until the unit is rebuilt.

2. New

A *new* U.S. flag MODU is one that was built, constructed, or contracted for, on or after April 5, 1982.

B. EXISTING MODUS

Existing U.S. flag MODUs are subject to the requirements of NVIC 4-78, SOLAS 74/78, if propelled by mechanical means, and 33 CFR Subchapter N, if operating on the U.S. OCS.

NVIC 4-78, Change 1, was developed to elaborate on the grandfather provisions of MODU regulations for the then estimated 150 existing, oceangoing U.S. flag MODUs. The standard that this NVIC applied to existing units was less stringent than that applied to new units.

The NVIC did include a stipulation that certain equipment must be replaced to the standards prescribed in 46 CFR Subchapter I-A once the existing equipment is considered no longer serviceable.

The grandfather provisions of NVIC 4-78 are no longer available to any MODU seeking its initial COI.

C. NEW MODUS

New U.S. flag MODUs are inspected and certificated under the provisions of 46 CFR Subchapter I-A, SOLAS 74/78 (if propelled by mechanical means and certificated for international service), and 33 CFR Subchapter N, if operating on the U.S. OCS.

CHAPTER 2: Procedures Applicable to MODUs (U.S.)

U.S. flag MODUs operating on the U.S. OCS are also required to have annual on-site inspections, in accordance with 46 CFR subpart B. Unless in a laid-up status, these vessels must maintain compliance with their COIs regardless of location or of being in the floating or bottom bearing mode.

D. COI AMENDMENTS

An amended COI may be issued to an operator at the completion of an inspection if minor items are being changed on the vessel. This includes changes to the owner or operators address or name, next or last inspection dates for hull, cargo tank internal or internal structural examinations; or next or last inspection dates for boilers, steam piping, pressure vessels, tail shaft or lifesaving equipment.

An Amended COI must be reprinted/re-issued if changes are made to the vessels manning; the vessels operating details change in MISLE; the firefighting or lifesaving equipment required onboard changes; or the cargo authority or conditions of carriage change.

An amended COI shall be re-issued after In Service Inspection Plan (ISIP) inspections, hull, cargo tank internal or internal structural exams have been completed and the next or last inspection dates have changed.

The following statement shall be included at the end of each certificate amendment:

“This/These amendment(s) shall automatically appear on the next COI that is issued for the vessel. Please attach this form to the current COI for reference by any concerned parties.”

All changes, regardless if a COI is amended or not, shall be entered into MISLE.

E. SOLAS AND IMO MODU CODE PROCEDURES

1. SOLAS

U.S. flag MODUs of 500 or more GT, propelled by mechanical means and engaged in international voyages, are subject to the requirements of SOLAS 74/78.

U.S. flag MODUs propelled by mechanical means of 500 GT or more, engaged in international voyages, will depart the U.S. with a valid COI and have all applicable SOLAS certificates, which may include an IMO MODU Code Safety Certificate.

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There is a large number of MODUs not subject to SOLAS that may be eligible to receive IMO MODU Code Safety Certificates. These include jack-ups and units not propelled by mechanical means. Currently, a unit which complies with Subchapter I-A does not necessarily comply with the IMO MODU Code.

2. Written Requests

Owners or operators of U.S. flag MODUs who desire an inspection for compliance with the IMO MODU Code should request this service from an authorized Classification Society. Specifics regarding authorizations can be found in 46 CFR Part 8.

- a. Builders and owners of new MODUs should specify, at the time of plan review, whether or not they desire an IMO MODU Code Safety Certificate.
 - b. IMO MODU Code inspections are normally conducted in conjunction with inspections for certification.
 - c. When conflicts exist between the IMO MODU Code and the provisions of 46 CFR Subchapter I-A, the owner may request an exemption or equivalency under 46 CFR 108.105 as appropriate.
 - d. Written requests for exemptions and equivalencies must be forwarded to Commandant (CG-CVC) for action.
 - (1) The owner must provide sufficient justification in order for the request to be given consideration.
 - (2) OCMI should endorse all requests for exemptions or equivalencies as requested prior to submitting to Commandant.
 - (3) Once exemptions or equivalencies have been approved by the Commandant, the IMO will be advised in accordance with the IMO MODU Code. Exemptions must be listed on the IMO MODU Code Safety Certificate.
 - (4) Deviations from the IMO MODU code should be discouraged.
 - (5) Upon satisfactory completion of the inspection, an IMO MODU Code Safety Certificate will be issued by a Class Society authorized to do so in accordance with 46 CFR 8.320. Typically the expiration date of the MODU Code Safety Certificate will align with the expiration of the COI. When issued to a MODU, propelled by mechanical means, it is considered a substitute for the SOLAS Safety Equipment Certificate and Safety Construction Certificate.
-

CHAPTER 2: Procedures Applicable to MODUs (U.S.)**F. LAID-UP MODUS**

MODUs are often laid-up in coastal areas for extended periods of time, pending drilling contracts. The following guidelines are to be followed when a MODU is placed in laid-up status.

1. Notification

The owners of the MODU should notify the OCMI in whose zone the MODU is to be laid up. A stacking plan should be submitted and reviewed by the OCMI. As a minimum, the stacking plan should contain the following information:

- a. Location.
 - b. Crew onboard, if any.
 - c. Tank levels.
 - d. Anchor arrangements.
 - e. Communications.
 - f. Maintenance of firefighting/lifesaving equipment.
 - g. Means to evacuate personnel in case of emergency.
 - h. Emergency response procedures.
-

2. COI Status

U.S. flag MODUs may be laid-up offshore or in protected waters. It is not required that an owner or operator surrender or deposit the unit's COI.

- a. All units laid-up in U.S. waters must meet the lighting and sound signal requirements of 33 CFR Part 67, or, when laid-up overseas, the 72 International Regulations for Preventing Collisions at Sea (COLREGS) or rules of the Coastal state government exercising jurisdiction over the waters where the rig is to be stacked.
- b. When an owner or operator advises the cognizant OCMI that a MODU is to be laid-up in U.S. waters, the COTP must determine that the unit is not obstructing any designated navigation lanes or channels.

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- c. Additionally, the District navigation office must be notified for the purpose of publishing a local notice to mariners.

3. Reduced Maintenance Crew, Certificated MODU

When a reduced maintenance crew will be aboard a certificated MODU, the OCMI may amend the COI to permit a reduction in required crew. Lifeboatmen must be provided in accordance with 46 CFR 109.323.

4. Reduced Maintenance Crew, Surrendered or Expired COI

- a. When a reduced maintenance crew will be aboard a MODU with a surrendered or expired COI, the owner/operator must agree, in writing, to maintain the lifesaving, fire fighting, communications and other equipment determined necessary by the cognizant OCMI, to ensure the safety of personnel.
- b. The owner must provide further written assurance to the OCMI that the unit will be manned with a sufficient number of persons capable of maintaining the unit in a safe condition under all circumstances, particularly if the unit is in the floating mode.
- c. Failure to abide by this agreement may be subject to penalties under 46 U.S.C § 2302

5. Reactivation

Prior to placing a stacked MODU back into service, all outstanding deficiencies and worklist items should be completed to the satisfaction of the OCMI.

- a. When a COI is reissued, the MODU must meet the same inspection requirements that were imposed when it was last inspected; any grandfather provisions previously afforded the MODU will remain intact. However, the MODU must meet any newly promulgated requirements applicable to existing MODUs that would have applied to the MODU had it remained in continuous service.
- b. Vessels that surrendered their COIs will be required to complete an inspection for certification, including a drydocking or special underwater examination, if due.

6. No Extensions

When COIs are not surrendered, owners or operators should be advised that when the MODU is returned to service NO additional extensions of drydock requirements will be

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granted other than what is permitted under current regulations.

G. CLASS SOCIETY EXAMS

1. NVIC 10-82 Ch. 2

NVIC 10-82 Ch.2 sets forth procedures established by a MOU between the Coast Guard and The American Bureau of Shipping (ABS). The Coast Guard will accept ABS plan review and inspection for new construction or major modifications of U.S. Flag vessels, which includes MODUs.

- a. This requirement is only applicable to vessels classed by ABS. Plan review and inspections performed by ABS on behalf of the Coast Guard will replace those actions by the Coast Guard. Inspections for cause are permitted and oversight inspections shall be carried out. Inspections for cause are conducted when the OCM I becomes aware of any circumstance which indicates active Coast Guard inspection of items falling under the provisions of NVIC 10-82 is required, in the interest of safety.
- b. MODUs inspected under NVIC 10-82, require internal structural exams. Spud can and mat tank internal structural examinations are some of the most hazardous activities conducted due to the decay of residual organic matter which has the potential to create oxygen deficient atmospheres or toxic hydrogen sulfide gases.

2. Acceptance of ABS/Recognized Organization (RO) inspections

OCMI's are also authorized to accept ABS and other recognized organization (RO) inspections of spud cans and mat tanks during special exams in lieu of drydocking (SEILOD) for independent leg and mat supported jack up mobile offshore drilling units.

- a. Inspectors should continue to examine the external surface of the spud cans and mat tanks, specifically in high stress areas around leg joint connections.
 - b. When an external exam or class society internal inspection warrants an entry by a Coast Guard Inspector, the space shall be considered a confined space and current safety requirements by a Certified Marine Chemist shall be followed prior to entry.
-

CHAPTER 2: Procedures Applicable to MODUs (U.S.)**H. REFLAGGING AND CERTIFICATION OF EXISTING FOREIGN MODUS**

NVIC 10-81 Ch. 1 was developed to allow certain categories of existing foreign flag vessels to be brought under U.S. flag in a manner consistent with the principles and levels of safety in current Coast Guard regulations or, in some cases, to the Coast Guard standards in effect at the time of the vessel's construction.

I. ALTERNATE COMPLIANCE PROGRAM (ACP)

The Alternate Compliance Program (ACP) is a voluntary alternative process for a U. S. documented vessel to obtain a Coast Guard Certificate of Inspection (COI) by complying with the standards of an authorized classification society, International Conventions and a U.S. Supplement in lieu of the Code of Federal Regulations. It provides for vessel inspections using inspectors employed by a recognized classification society. It is also an alternative to complying with the vessel inspection regulations in Title 46 Code of Federal Regulations. It is available only to vessels capable of operating on international voyages and classed through a recognized classification society. NVIC 02-95 Ch. 2, discusses the Alternative Compliance Program which is currently available to MODUs and other types of vessels (see 46 CFR 8).

J. STREAMLINED INSPECTION PROGRAM (SIP)

The Streamlined Inspection Program (SIP) is a voluntary alternate method of inspecting documented or registered U.S. flag vessels to ensure regulatory compliance. The goal of the SIP is to keep the participants in continual compliance rather than cyclical peaks as associated with traditional annual inspections. NVIC 02-99 Part 1 and NVIC 02-99 Part 2 provide guidance on the implementation and enforcement of the SIP as promulgated in 46 CFR Part 8.

Instead of the traditional Coast Guard inspection by a marine inspector, the SIP allows onboard and shore side vessel operating personnel to conduct the majority of the inspections required by the CFR's and to have the adequacy of these inspections verified by the Coast Guard on a regular basis (see 46 CFR part 8).

K. CONVERSION OF A SELF-ELEVATING MODU TO A FIXED PRODUCTION FACILITY

Owners of self-elevating MODUs that will be converted into production facilities may utilize one of the three options discussed below with respect to certification of the proposed unit.

In each case, the owner shall notify the cognizant OCMI, in writing, of their intention. After reviewing a proposal, the OCMI shall notify the owner of what plan review and inspection actions are necessary.

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Units originally certificated under NVIC 4-78 Ch. 1 that are converted into fixed OCS facilities or are re-certificated under 46 CFR Subchapter I will not be able to retain the MODU grandfather status allowed under the NVIC.

Any systems which fall under Coast Guard jurisdiction as outlined in the Coast Guard and BSSE, Memorandum of Understanding (MOU), signed on 27 Nov 2012, will be the subject of Coast Guard review and approval (On October 1, 2011, the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), formerly the Minerals Management Service (MMS), was replaced by the Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE) as part of a major reorganization.

Once the conversion is approved, it will be subject to the requirements of 33 CFR Parts 140-147. If the facility received a Coast Guard inspection within 6 months of the conversion, it will not have to undergo an initial inspection and the owner/operator must complete the self-inspection at the next annual inspection date.

1. Option 1 - Surrendered COI

A self-elevating unit that is converted into a production facility and is no longer capable of engaging in drilling, as a result of removal of all or part of its drilling equipment may be considered a fixed OCS facility by the Coast Guard.

- a. Fixed OCS Facility. In order to be considered a fixed OCS facility, the unit's COI and Certificate of Documentation (COD) must be surrendered and the jacking gear must be disabled so that the unit cannot be easily lowered to the water. In addition, two of the following three items must be removed from the unit: 1.) the derrick, 2.) mud pumps, or 3.) rotary. Facilities will be subject to the requirements of 33 CFR Subchapter N pertaining to fixed OCS facilities, as appropriate.
- b. Such units will not be subject to inspection as a MODU. Additionally, the facility will be subject to BSEE requirements.
- c. Moving a Fixed OCS Facility. A unit that surrenders its COI may be moved after a period of time to another location without losing its status as a fixed OCS production facility. However, if the unit must be refloated in order to be moved to a new location, it must undergo an inspection by the cognizant OCMI for change of employment.
 - (1) Such units must comply with the 46 CFR Subchapter I inspection requirements. As part of this inspection, the unit must undergo a drydock or special underwater examination to ensure the hull is watertight and sound, unless evidence is presented of a satisfactory drydock or special exam within the past 3 years.

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- (2) The unit will be required to comply with the appropriate load line regulations.
- (3) A Coast Guard review of the unit's plans and stability may also be required.
- (4) Upon completion of a satisfactory inspection, the unit should be issued a limited or short-term certificate in accordance with 46 CFR 91.01-10(c).
- (5) Upon completion of the move and once the unit is elevated on its new location, the unit will be required to disable its jacking gear to the satisfaction of the OCMI.
- (6) If the OCMI determines that the normal operation of the unit will require it to be frequently refloated, then the unit will not be eligible for consideration as a fixed OCS facility. Such units will be required to remain vessels and be subject to the vessel inspection laws. If the unit changes its employment and becomes a fixed OCS facility, it cannot retain any of the grandfather status allowed in NVIC 4-78 Ch. 1, titled Inspection and Certification of Existing Mobile Offshore Drilling Units.

2. Option 2 - Unit Re-Certificated Under 46 CFR Subchapter I

A self-elevating unit that is converted to a production facility and is no longer capable of engaging in drilling, as a result of removal of all or part of its drilling equipment, may be re-certificated as a miscellaneous self-elevating vessel under 46 CFR Subchapter I.

This option is appropriate if the owner does not want to relinquish the vessel's COI or if the MODU requires frequent relocating, as mentioned in Option 1.

- a. The unit must undergo periodic inspections as required by 46 CFR Subchapter I, including hull examinations.
- b. The unit must also meet certain requirements of 46 CFR Subchapter I-A. These items include design and operation of cranes, stability, hazardous areas, lifesaving equipment, firefighting equipment, and helicopter decks.
- c. Where systems serve both production and ship's service, an interface point must be identified during review to establish jurisdiction between the Coast Guard and BSEE.
- d. A unit operating under this option loses its grandfather status allowed in NVIC 4-78 Ch. 1.
- e. If the unit stores oil in bulk it is considered a tank vessel and must comply with 46

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CFR Subchapter D, Tank Vessels, and 33 CFR Part 157, Rules for the Protection of the Marine Environment Relating to Tank Vessels Carrying Oil in Bulk.

- f. When a MODU undergoes such a change, an inspection note entry must be made in MISLE identifying the date of change and whether or not the tank vessels rules apply.

3. Option 3 - Status Unchanged

Self-elevating units that are converted into production facilities but retain their drilling equipment on board and remain capable of engaging in drilling will remain certificated as MODUs.

- a. These units are allowed to maintain their grandfather status as found in NVIC 4-78 Ch. 1.
- b. Such units must continue to meet all requirements of 46 CFR Subchapter I-A.
- c. Some production systems on these units will also be subject to review by the Coast Guard when they are common with a ship's service system. In these systems, an interface point must be established during review in order to delineate jurisdiction.
- d. As in Option 2, any unit that is used for storing oil in bulk is considered a tank vessel and must comply with 46 CFR Subchapter D, Tank Vessels and 33 CFR Part 157, Rules for the Protection of the Marine Environment Relating to Tank Vessels Carrying Oil in Bulk.

L. CONVERSION OF A MODU TO FIXED ENTERTAINMENT FACILITY

A submersible or self-elevating MODU that is converted to a fixed entertainment facility (**as defined in 33 CFR 101.105: Public Access Facility**) is subject to the following:

The unit will no longer be considered a vessel for the purposes of vessel inspection if it is converted in such a manner as to be incapable of being used as a means of water transportation in any manner and it is substantially permanently moored or fixed.

A converted MODU used for the purpose of entertainment will no longer be considered as engaging in the development, exploitation, exploration or production of oil or mineral resources on the U.S. OCS. Once the conversion is completed, such a unit will not be subject to the provisions of 33 CFR Subchapter N, but must continue to comply with 33 CFR Subchapter O (Pollution) and the provisions of 33 CFR Subchapter C (Aids to Navigation).

Any floating dock intended to be used as a boarding platform for the facility will be considered a

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permanently moored vessel, not subject to vessel inspection laws, provided it is substantially moored such that it cannot be moved without special effort. Specifications and detailed drawings of the floating platform and its associated mooring systems must be submitted to the cognizant OCMI for review and final determination of its status for inspection purposes.

A MODU that is converted to a wind farm platform will no longer be under Coast Guard jurisdiction as an inspected vessel or facility. A MOU with Bureau of Ocean Energy Management (BOEM) is being promulgated to clarify jurisdictional boundaries pertaining to these non-OCS Activity structures.

M. REVIEW OF MODU OPERATING MANUALS

Review and approval of the new and existing MODU operating manuals should be accomplished through the following procedures.

1. Marine Safety Center (MSC)

The Marine Safety Center (MSC) will review manuals of existing units for compliance with 46 CFR 109.121(b)(1), (3)-(7), (9)-(18) and, if acceptable, forward the manual, the results of the review, and an undated stability letter to the OCMI.

2. OCMI

The OCMI will then review the remaining sections of the manual, accepting MSC's review for compliance with the aforementioned sections as appropriate, and if satisfied, approve the manual, as well as date and issue the stability letter.

3. Stability Letter

After issuing the stability letter, the OCMI will forward a copy of both the stability letter and the letter approving the manual to the MSC. If, during the life of the unit, the OCMI becomes aware of changes to the manual or unit which would affect stability or conditions under which the stability letter was developed, MSC should be notified.

4. Operations Manual

The MSC will review the entire operating manual in the case of new units.

CHAPTER 2: Procedures Applicable to MODUs (U.S.)

N. REVIEW OF EMERGENCY EVACUATION PLANS (EEPs)

To improve efficiency and consistency throughout the Coast Guard, OCMIs are encouraged to exercise their authority under 33 CFR Subchapter 140.15(a) and permit alternate procedures to those specified in 33 CFR Subchapter N for submission and approval of EEPs under 33 CFR 146.140 and 146.210. Further, OCMIs may opt to no longer require review and approval of EEPs that have been submitted due to minor changes in the plan. All EEPs will continue to be checked in the normal course of platform and MODU inspections, and deficiencies will be reported as Vessel/Facility Inspection Requirements, Form CG-835, items. Regional EEPs may also be submitted for multiple OCS facilities operated by the same company but in different geographic areas, as long as the EEP is submitted to each of the cognizant OCMIs for review and approval.

O. ELECTRICAL INSTALLATIONS ON MODUS

NVIC 2-89 should be used as a guide for electrical installations on MODUs. The NVIC was prepared to provide industry with information on regulatory intent, background, and common practices which have been found to provide a level of safety equivalent to that provided for by specific regulations. Enclosure (1) to NVIC 2-89 is a guide to Coast Guard Electrical Engineering Regulations, 46 CFR 110 - 113, and provides details on acceptable methods of complying with the regulations as well as other important information related to electrical installations.

P. NAVIGATION LIGHTING

MODUs are required to comply with the Navigation Rules, International-Inland, COMDTINST M16672.2C (series). Per Navigation Rule 3 and as defined in 33 CFR 140.10, MODUs are vessels and shall abide by the Navigation Rules and properly display navigation lights and shapes (i.e., Rules 22, 23(a), 27(d), etc.). MODUs, particularly when drilling, are also subject to other regulations denoted in Title 33 CFR, parts 67 and 140-147 (Subchapter N).

Note: A vessel being propelled by a dynamic positioning system (e.g., MODU) may be considered underway even when hovering on location, but, may also be "restricted in her ability to maneuver" as defined by Navigation Rule 3 (International-Inland).

Q. ACCEPTANCE OF TEMPORARY INDUSTRIAL EQUIPMENT INSTALLED ON U.S. FLAG MODUS OPERATING IN FOREIGN WATERS

CHAPTER 2: Procedures Applicable to MODUs (U.S.)**1. Discussion**

U.S. flag MODUs operating in foreign waters are sometimes subject to coastal state requirements and equipment availability problems unique to their location.

- a. Subcontractor services, including well logging, cementing, casing perforation, etc., often require temporary installations. These installations may include electrical equipment, pressure vessels, packaged boilers, etc.
 - b. Temporary industrial installations provided by local contractors sometimes meet local equipment listing (certification) or design code requirements. From a practical standpoint, it has become necessary to acknowledge coastal state requirements and logistical problems and permit temporary installations that are approved by the coastal state, when it is safe to do so.
 - c. The goal of this policy is to fulfill the safety principals and features embodied in U.S. regulations, while recognizing the operational constraints in some geographical areas.
-

2. Coastal State Requirements

Where temporary equipment or systems are installed, those items listed by an independent laboratory or constructed to a recognized design standard may be permitted by the OCMI in whose zone the vessel is operating.

- a. In making a decision to permit temporary installations, a review of records relating to design, testing, and inspection of equipment such as boilers and pressure vessels shall be conducted by the Coast Guard. The frequency and scope of recorded inspections should approximate U.S. regulations.
- b. Upon return to U.S. waters and prior to engaging in OCS activities, MODUs must fully comply with equipment listing requirements in U.S. regulations.

CHAPTER 2: Procedures Applicable to MODUs (U.S.)**R. SINGLE VOYAGE LOAD LINE AUTHORIZATIONS****1. Applicability**

46 CFR 42.03-30 (f) provides that a vessel that does not usually engage on domestic voyages by sea but that, in exceptional circumstances, is required to undertake a single voyage between two specific ports is:

- a. Subject to 46 U.S.C. 5101 – 5116 and the applicable regulations of Subchapter E; and
- b. issued a single voyage load line authorization by the Commandant that states the conditions under which the voyage may be made and any additional safety measures for a single voyage.

2. Exceptional Circumstances

- a. Examples of “exceptional circumstances” as it pertains to the issuance of single voyage load line authorizations.
 - (1) Where the owner changes the location of his or her business operations, and desires merely to move his or her craft to the new base of operations and not in fulfillment of any contract;
 - (2) Where the owner sells his or her business or one of his or her vessels to another and it is necessary to move the vessel or vessels to the location specified by the new owner;
 - (3) Where a voyage is necessary to deliver a new vessel to its owner at a port other than where the craft was constructed;
 - (4) Where a voyage is made to another port for the purpose of making repairs or alterations; and
 - (5) Where a vessel that is not otherwise subject to the loadline provision (because it operates exclusively inside the Boundary Line) must make a single transit outside the Boundary Line to reach a new location for operations exclusively inside the Boundary Line.

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- b. The above clarification of “exceptional circumstances” does not change the applicability of load line regulations for types of vessels that are currently exempt from such requirements (such as small passenger vessel on a domestic voyage).
- c. A table of required load lines for U.S. vessels can be found as Figure 1-1 on page 1-3 in the CG-ENG-2 (formerly CG-5212) Load Line Policy Notes. This document can be located online at: <http://www.uscg.mil/hq/cg5/cg5212/docs/LLPN.pdf>. It provides appropriate load line types for international voyages, domestic voyages and other types of voyages and for certain routes encompassed by those voyages.
- d. For further details on the “exceptional circumstances” as it pertains to the issuance single voyage load line authorizations and voyage requirements for seagoing barges and other vessels, see CG-543 Policy Letter 10-01.

Vessel Service (see note 1.)	Vessel Particulars	COI needed/cite	LoadLine needed/ cite	Draft/ Voyage Requirements needed/ cite
Seagoing motor vessel (See note 2.)	Vsl 300 grt or more; 79' or more.	YES 46 U.S.C 3301	YES 46 U.S.C 5102	N/A (Issued Load Line)
Non-seagoing motor vessel (See note 3.)	Vsl 300 grt or more; 79' or more; COE (part of trip is beyond Boundary Line)	YES 46 U.S.C 3301	N/A 46 U.S.C 5102	YES MSM Vol. IV, pages 6-92 & 6-94
Non-seagoing motor vessel (See note 3.)	Vsl less than 300 grt but greater than 150 grt or 79' or more; COE (part of trip is Beyond Line).	N/A 46 U.S.C 3301	N/A 46 U.S.C 5102	YES MSM Vol. IV, pgs 6-92 & 6-94
Non-seagoing motor vessel	Vsl less than 150 grt or less than 79'; COE (part of trip beyond Boundary Line).	N/A 46 U.S.C 3301	N/A 46 U.S.C 5102	N/A (Not issued load line)

Notes:

1. All vessels in this table are commercial vessels conducting domestic voyages.
2. “Seagoing” means voyages beyond the boundary line in the course of normal employment.
3. “Non-seagoing” means the vessel cannot operate beyond the Boundary Line w/out CG Authorization.
4. Acceptable types of load lines for a given voyage can be found in Figure 1-1 on page 1-3 in CG 5212's Load Line Policy Notes.

CHAPTER 2: Procedures Applicable to MODUs (U.S.)**3. Load Line Authorization**

As noted in Marine Safety Manual Volume IV - Technical, COMDTINST M16000.9 (series), Chapter 6.F.3.a; assigning authority for load lines on U.S Vessels has been granted to the American Bureau of Shipping (ABS), or other recognized classification society as approved by Commandant.

- a. **International Load Line (Single Voyage) Exemption Certificates and Coastwise Single Voyage Load Line Authorization Letters.** The cognizant OCMI may issue two different but distinct load line authorizations: the International Load Line (Single Voyage) Exemption Certificate and the Coastwise Single Voyage Load Line Authorization Letter. See Marine Safety Manual Volume IV - Technical, COMDTINST M16000.9 (series), Chapter 6.F.3.c. for details on each type of certificate and the processes for application.
- b. **Extensions of Load Line certificates and all other requests for Load Line exemptions.** Approval of an extension for a Load Line Certificates (not to exceed 150 days) originally issued by class (ABS), or requests for exemptions other than single voyage must be received in writing from the owner/operator to Commandant (CG-CVC-2). The request should include the name of the unit, official number, and duration of request and description of why the unit should receive the extension or exemption certificate versus a permanent certificate.
- c. **Load Line Certificate Forms.** The forms of the various Load Line Certificates are specified in the regulation as follows:
 - (1) **International Load Line Certificate (1966):** 46 CFR 42.50-5
 - (2) **International Load Line Exemption Certificate:** 46 CFR 42.07-45(e)(f) and (h)
 - (3) **Load Line Certificate (Form B):** 46 CFR 42.50-10(b)
 - (4) **Coastwise Load Line Certificate (Form C1):** 46 CFR 42.50-15
 - (5) **Loadline Certificate for a Special Service Coastwise or Inter-Island Voyage:** 46 CFR 44.05-35
 - (6) **Subdivision Load Lines:** 46 CFR 46.10-30, Subdivision load lines are indicated by making specific entries on the appropriate load line certificate. There is no special form for subdivision load lines.

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- (7) Short Term Conditional Load Line : Marine Safety Manual Volume II, COMDINST 16000.7 (series), Section E, Chapter 4.D, allows ABS to use certain non-exclusive surveyors to sign the annual endorsement or provide a provisional or short term conditional load line certificate on behalf of the Coast Guard. Requests to use a non-exclusive surveyor should be forwarded to COMDT (CG-CVC-2) for approval. NOTE: Under this policy, it is ABS's responsibility to establish and validate a potential non-exclusive surveyor.**

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S. LIFESAVING EQUIPMENT

1. Excess Capacity of Lifeboats

Lifeboat capacity in excess of that required by 46 CFR 108.503 may be substituted for life rafts subject to the following provisions:

- a. No single lifeboat or liferaft may be credited with more than 100 percent of persons allowed on the MODU.
 - b. Lifeboats must provide for at least 100 percent capacity.
 - c. Lifeboats and life rafts combined must provide for at least 200 percent capacity.
 - d. Lifeboats and life rafts must be arranged so that a limited area fire or other casualty does not immobilize lifeboats or liferafts accommodating more than 100 percent capacity.
-

2. IMO MODU Code Compliance

The above policy satisfies the intent of 46 CFR 108, Subpart E, i.e., to require each MODU to have a total combined lifeboat and liferaft capacity to accommodate 200 percent of the persons allowed on board.

- a. MODUs equipped with lifeboats and liferafts in accordance with U.S. regulations may not necessarily be in compliance with the IMO MODU Code. Therefore, when certificating units for operation in other than domestic service, the operator should be cautioned that a COI does not certify compliance with the IMO MODU Code.
- b. The IMO MODU Code requires certain survival craft be arranged for float free operation.
- c. The IMO MODU Code does not specifically provide for substituting lifeboats for liferafts. When verifying compliance with the IMO MODU Code Certificate, additional lifeboats or liferafts may be necessary to meet the requirements of both 46 CFR Subchapter I-A (davitt launch capability) and IMO (float free).
 - (1) If davitt launched liferafts are also arranged for float free operation and accommodate 100 percent of the persons allowed on board, then they meet the requirements of both U.S. regulations and the IMO MODU Code.

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- (2) An alternative approach may be installing lifeboats to accommodate 200 percent capacity (meeting 46 CFR 108.515 - with substitution) and float-free, throw-over rafts for 100 percent capacity (meets IMO MODU Code requirement for float-free).

3. Throw-over Liferafts

Throw-over liferafts are only permitted on submersible MODUs. NVIC 4-78 Ch. 1 permits submersible MODUs may substitute Coast Guard-approved throw-over inflatable liferafts and an approved rescue boat for the required davit launched lifeboats.

T. MODU DRYDOCKING INTERVAL AND REQUESTS FOR EXTENSION

1. Drydock Intervals

Under current Coast Guard regulations, all other class of vessels require the twice in a five year interval for dry docking or special examination. Coast Guard guidance allows MODUs the same option with drydock examinations conducted in the presence of a Coast Guard inspector. These may be conducted at least twice within any 5-year period after issuance of a COI or COC with no more than 3 years elapsing between any two examinations.

2. Extensions

Requests for an extension of a drydock or special underwater survey on a MODU should be considered on a case by case basis using the following additional guidance.

- a. The beginning of the 5-year period is the credit date of the previous hull exam. Every effort should be made to encourage owners and operators of MODUs to complete the next hull exam between the 2nd and 3rd year anniversary (1 year window) and in conjunction with a rig move, when both the upper hull and underwater portions of the exam can be conducted. Intervals between any two surveys should not exceed 36 months.
 - (1) In cases where this is not practical, (independent leg jack-up, on location) the upper hull exam should be conducted and credit given, with a requirement to complete the underwater examination at the next rig move. Such a procedure should alleviate the need for hull exam extensions, even at the end of the 5-year period.

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- (2) Outstanding requirements must be closely monitored to ensure they do not remain outstanding for excessive periods (typically 90 days or more depending on requirement).
- c. Near the end of the 5-year interval, operators should be encouraged to complete the hull exam early, if necessary, so that it may be accomplished during a rig move, when both the upper hull and underwater portions of the exam can be completed. Such exams may be credited as of the date the 5-year cycle would end even though conducted early.

U. RAW WATER TOWERS

The raw water tower if utilized is would be the source of supply water for vital systems, including firewater and engine cooling, and should be given close scrutiny during drydock inspections or special underwater surveys in lieu of drydocking on all MODUs that still use this system.

At this inspection, the tower should be raised and lowered to the extent necessary to allow a complete inspection to ensure its structural integrity. Particular attention should be paid to the rack to chord connections.

If the tower is of two piece construction with a flanged midsection, the area in way of the flange should be closely examined for fracturing.

V. UNDERWATER INSPECTION IN LIEU OF DRYDOCKING (UWILD)

1. Discussion

Owners/operators have the option of alternating drydock exams with underwater surveys under the following regulations: 46 CFR 31.10-21(d) (Subchapter “D” – Tank Vessels), 91.40-3(d) (Subchapter “I” – Cargo and Misc Vessels) and 189.40-3(d) (Subchapter “N” – Oceanographic Research Vessels). Underwater examinations in 46 CFR 107, for column-stabilized and self-elevating MODUs is also allowed. Vessels over 15 years old may be allowed to remain in the program provided the requirements in NVIC 1-89 are met.

A UWILD is different from a Special Exam in Lieu of Drydocking (SEILOD). A vessel enrolled in the UWILD program is permitted to conduct a UWILD in lieu of every other drydock. For example, a vessel would be required to drydock a vessel at year 2.5, 5, 7.5, 10 and 12.5; they would be permitted a UWILD at year 2.5, 7.5 and 12.5.

Special Examinations in lieu of Drydock (SEILOD) exams are alternatives to the traditional

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drydock intervals and allow a vessel to conduct a SEILOD at *EVERY* dry-dock interval versus every other as in the case of UWILD's. See Part "X" of this Chapter for a description of the SEILOD Program.

2. Approval

Many factors are to be considered before approving UWILD requests, including rig operations, weather, and diving conditions. NVIC 1-89 offers guidance on the procedures for approval and conduct of an UWILD exam. The process for conducting an UWILD should be in accordance with this NVIC.

- a. Prior to the UWILD, there should be a pre-inspection meeting between the Coast Guard and owner/operator of the MODU. The owner/operator must also submit an inspection plan to the OCMI for approval.
- b. The owner/operator must provide the OCMI with a set(s) of plans detailing the MODUs hull design, showing all through hull fittings and original scantlings.
- c. The following items should be discussed during the meeting.
 - (1) A hull gauging strategy should be agreed upon, detailing the method to be employed and critical locations to be examined.
 - (2) The contract divers should be presented to the OCMI for approval. The divers should be experienced in conducting UWILDs. Any divers that have been certified by ABS will meet this requirement.
 - (3) Agreement should be reached concerning which through hull fittings are to be opened for inspection. If a partial inspection of through hull fittings are opened for inspection, an exact listing must be made in the diary entry and an inspection note in MISLE must be made detailing which valves were examined must be made.
- d. The marine inspector must carefully review the plans and video tapes of the previous exam (if available) prior to conducting the UWILD.
- e. The MODU must be placed in the lightest working draft within acceptable stability limits. The area above the waterline will receive a traditional examination.
 - (1) Particular attention should be paid to high stress areas such as the joints of structural members.
 - (2) All internal compartments must be entered and visually examined. Before anyone

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enters a confined space, the space must be certified gas free by an NFPA-certified Marine Chemist.

- (3) All through hull fittings and sea valves must be given the same examination as during a regular drydock examination.
- f. The hull must be cleaned and free of marine growth.
- g. The gauging of the hull may be internal or underwater. If acceptable to the OCMI, at every second examination, the owner may have the examination conducted while the unit is at its working draft. This examination must be conducted as above with the following exceptions.
 - (1) The hull gauging must, of necessity, be accomplished using underwater ultrasonic techniques.
 - (2) A representative number of welds in stress areas must be examined using underwater ultrasonic techniques acceptable to the OCMI. Records of indications, such as sketches of detected flaws, must be maintained in sufficient from to be used for comparative purposes during subsequent inspections.
 - (3) Only the internal compartments which are accessible in the working condition will be entered and examined.

3. Calibrate NDT

The Marine Inspector must be satisfied that the non- destructive testing equipment is properly calibrated prior to use.

4. Post-Inspection Actions

The owner/operator or private contractors must provide the Marine Inspector with the following:

- a. Copy of underwater hull survey video.
 - b. Copy of diver's report.
 - c. Copy of hull gauging report.
 - d. Copy of results of non-destructive testing.
-

CHAPTER 2: Procedures Applicable to MODUs (U.S.)**5. Liveboating**

Underwater exams performed during rig movements may involve liveboating. Liveboating means the support of a surfaced-supplied diver from a vessel underway without DP ability. (DP operations are described in Chapter 6 of this Manual.). When the rig owner or operator submits a request and plan for the underwater exam, they should be directed to also request a variance for liveboating, should one be needed.

- a. See 46 CFR Part 197 for a discussion of liveboating.
- b. All requests for a liveboating “variance”, or alternative to the regulations, must be forwarded to Commandant (CG-CVC) for approval.

6. Approval Authority for Plans

- a. Requests for approval of underwater examination in lieu of drydocking for surface type units should be forwarded to Commandant (CG-CVC), via the District Commander, with the OCMI’s recommendation. If conceptual approval is granted by Commandant, the OCMI will review and approve the details of the plan using NVIC 12-69 and NVIC 1-89 as a guide.
- b. All underwater survey plans must specifically address methods of testing confined spaces for toxic vapors and oxygen content and rescue equipment/methods available for removing an unconscious person from a confined space. Normally, this requires some portable lifting equipment.
- c. In all cases, the class society should be contacted for concurrent approval and a class representative should be on hand to witness the UWILD examination.

7. Internal Inspection of MODU Spud Cans

46 CFR 107.261 and 107.267 require dry docking or SEILOD for self elevating units.

- a. The MODU structural regulations in 46 CFR Part 108 recognize ABS Rules for Building & Classing Offshore Mobile Drilling Units, 1978.
- b. Coast Guard Standard policy is to use the ABS "Survey after Construction" rules and those for "SELOID" in evaluating and conducting SEILOD inspections.
- c. For consistency purposes, OCMIs will not normally require internal examinations of spud cans until the MODUs second special survey (10th year) and at least 5-year

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intervals thereafter, in conjunction with each special survey.

- d. The marine inspector must conduct external examinations of the MODUs spud cans in accordance with the regulations. Nothing in this section prohibits the equipment listing (certification) or design code on a MODU from requiring an earlier internal examination if conditions warrant further scrutiny.

W. SPECIAL EXAM IN LIEU OF DRYDOCKING (SEILOD)

If a MODU is column-stabilized, self-elevating, or is a surface type, it may be specially examined in lieu of drydocking in accordance with 46 CFR 107.265 and .267, in the presence of a Coast Guard inspector.

Delegation of approval authority for SEILOD's, permitted by 46 CFR 107.261, is extended to district (OCS) offices. Commandant (CG-CVC) retains approval authority for surface type units only.

NVIC 12-69 offers guidance on the procedures for approval and conducting a SEILOD exam.

X. COMMERCIAL DIVING

Commercial diving equipment and operations, including those conducted on USCG inspected vessels, platforms, MODUs, or foreign flag vessels engaged in OCS activities shall be in accordance with 46 CFR Part 197, Subpart B. Commandant (CG-CVC) will coordinate with appropriate Coast Guard Headquarters offices (e.g., CG-ENG and CG-OES) as needed to ensure that any substitution of required equipment, materials, apparatus, arrangements, procedures or tests provides an equivalent level of safety.

In general, pressure vessels for human occupancy (PVHOs) must be designed, constructed, inspected and stamped in accordance American Society of Mechanical Engineers (ASME) PVHO-1, "Safety Standard for Pressure Vessels for Human Occupancy." Piping systems must be designed in accordance with 46 CFR Subchapter F and electrical equipment must be designed in accordance with 46 CFR Subchapter J. Dive equipment requirements are specified in 46 CFR 197.300 through 197.346 and dive operational requirements are specified in 46 CFR 197.400 through 197.488.

Alternatives to the specified requirements will be considered on a case by case basis. Authorized Classification Society Dive Safety Certificates and International Diving system Safety Certificates are not considered as equivalent to 46 CFR subpart 197 requirements; however,

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these certificates will be considered in making an equivalency determination.

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Note: Any reference to IMO MODU Code is the 1979 Code unless otherwise noted.

A. CERTIFICATE OF COMPLIANCE (COC)

The regulations prescribed in 33 CFR, Subchapter N, establish minimum standards for all MODUs operating on the U.S. OCS, including undocumented MODUs and those documented under the laws of a foreign nation. The purpose of these regulations is to ensure that all MODUs operating on the U.S. OCS are designed, equipped, and operated at a level of safety generally equivalent to or greater than that of U.S. MODUs certified in accordance with Title 46 CFR, Parts 107, 108 and 109. Prior to engaging and when engaged in OCS activities, each foreign MODU must have onboard a valid Coast Guard issued Certificate of Compliance (COC), Form CG-3585.

Note: Some current U. S. vessel inspection laws and regulations include several references to the Certificate of Compliance (COC), Form CG-3585. Unfortunately, other out dated regulations specify the use of a Letter of Compliance (LOC). Coast Guard policy in the CFR, NVICs and elsewhere, has not been changed completely to account for this newer terminology. For the purposes of the OCS, LOC shall be taken to mean COC and shall be valid for a period of two years.

1. Application

It is highly recommended the owner or builder of a foreign MODU apply for an examination for obtaining a COC at least 6 months prior to engaging in U.S. OCS activities by submitting:

- a. A written or e-mailed request for COC examination to the Officer in Charge, Marine Inspection (OCMI), of the marine inspection zone in which the unit intends to operate; and
- b. evidence that all applicable user fees have been paid in full.

Full COC exams are not normally conducted overseas, however, certain portions of new vessel trials (DP) may be witnessed by overseas Coast Guard inspectors as resources allow. All efforts should be made to coordinate these pre-inspection opportunities with an overseas inspection office and communicate the results with the local OCMI where the unit will eventually receive its COC. All activities should be documented in MISLE. **See Chapter 1.C. Examination/Inspection Teams, for more information on conducting overseas exams/inspections.**

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2. Administration

- a. All documents submitted to the Coast Guard must be accompanied by an English translation if the originals are in a foreign language. An example of a COC pre-inspection information sheet is located at the end of this section and may be used to request vessel data when scheduling a COC exam. **The OCMI shall NOT schedule or conduct a COC exam until the appropriate user fees have been paid.**
- b. COC's are valid for 2 years, or until the unit departs the U.S. OCS, provided the MODU undergoes an annual examination within 3 months before or after the COC anniversary date and continues to meet the requirements of 33 Subchapter N. The COC is to be maintained onboard the vessel and be readily available to Coast Guard personnel upon request.
- c. To avoid delays, the OCMI is encouraged to complete COCs when requested within three months of their expiration date. At the discretion of, and with the prior approval from, the local OCMI, MODUs with expired COCs (renewal or annual) that are not more than three months past due, and with no indications that the vessel is not in compliance with applicable laws and regulations, should not be restricted from commencing operations prior to an examination. Vessel owners, operators and agents are required by 46 CFR 146.202 to provide notice to the District Commander of the area in which it intends to operate at least 14 days in advance of arrival on the OCS.
- d. Current U.S. vessel inspection laws, regulations and documents include references to both "Certificate of Compliance (COC)" and "Letters of Compliance (LOC)". The Certificate of Compliance (COC) may be used in lieu of Letters of Compliance (LOC). While the terminology has changed, the scope of the exam remains the same.
- e. The COC may be issued with certain outstanding discrepancies permitted at the discretion of the cognizant OCMI. The discrepancies will be noted in the examination record section of the COC and documented in MISLE. The COC will NOT be issued with uncorrected discrepancies if during the course of the inspection the ship or the crew is unable to navigate safely (if applicable), maintain the fire fighting and lifesaving equipment, prevent pollution of the environment, maintain adequate stability, watertight integrity, and safely engage in OCS activities. Discrepancies left uncorrected from an initial COC exam will be cause for denial of subsequent COCs.

3. Options A, B, or C.

Foreign Flagged MODUs engaged in OCS activities must comply with one of the following

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options per 33 CFR Subchapter N, except for those exempted from design and equipment requirements by 33 CFR 143.201:

- a. Option A: U.S. Standards (33 CFR 143.207(a) and 146.205(a)): The MODUs design equipment, and operating standards must comply with 46 CFR Parts 108 and 109.
- b. Option B: Equivalent Standards of Documenting Nation (33 CFR 143.207(b) and 146.205(b)). The MODU must comply with the design, equipment, and operating standards of the MODUs documenting nation, if they provide a level of safety equivalent to or greater than that set forth in 46 CFR Parts 108 and 109. Currently Marshall Islands and Panama have been accorded this status.
- c. Option C: IMO MODU Code Compliance (33 CFR 143.207(c) and 146.205(c)). The MODU must comply with the standards for design, equipment and operations standards as set forth in the 1979 IMO MODU Code IMO Assembly Resolution A.414 (XI).

Coast Guard policy determined the design and equipment standards of the 2009 MODU Code to be as least as effective as the design and equipment standards of the 1979 and 1989 MODU Codes (see CG-ENG Policy Letter 02-12). Therefore, a foreign MODU in compliance with the design and equipment standards of the 2009 MODU Code may be accepted under 33 CFR 143.207(c).

Foreign flag MODUs are issued IMO MODU Code Safety Certificates by their respective governments or third party organizations designated by their governments.

4. Load Line Certificate

Each MODU documented in a country signatory to the 1966 International Convention on Load Lines (ICLL) shall have a valid ICLL certificate. If the MODU does NOT have a valid ICLL certificate or is documented under the laws of a nation not signatory to the 1966 convention the owner must apply for and obtain a Form "B" certificate in accordance with the provisions of 46 CFR Part 42. Owners and operators should be cognizant of the annual survey requirements. Un-classed units built prior to 1969 will not be required to obtain a load line but will require a freeboard assignment. Applications for a freeboard assignment should be directed to the Marine Safety Center.

5. U.S. Territorial Sea/Contiguous Zone Restrictions

The COC permits operation of a unit only upon the U.S. OCS. Units entering the U.S. contiguous zone (33 CFR 2.28) or territorial sea (33 CFR 2.22) must be in compliance with applicable pollution prevention regulations (33 CFR 156 and 155), marine sanitation device

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regulations (33 CFR 159), navigation safety regulations (33 CFR 164) and the requirements for financial responsibility for water pollution (33 CFR 138 or 30 CFR 553). Units not in compliance with these regulations are prohibited from entry into these areas and restrictions will be noted in MISLE and on the COC.

6. Financial Responsibility for Oil Pollution

Prior to issuance of the COC, the owner or operator of each foreign documented MODU must obtain a Certificate of Financial Responsibility and provide proof of Oil Spill Financial Responsibility for Offshore Facilities in accordance with 33 CFR 138 or 30 CFR 553 respectively.

7. Prevention of Oil Pollution and IOPP Compliance

All units must comply with the provisions of 33 CFR Parts 151 and 155 for the prevention of oil pollution. All ocean going units 400 gross tons and above must comply with the equipment requirements on the International Oil Pollution Prevention (IOPP) certificate (MARPOL 73/78).

8. Discharges of Pollutants from OCS Facilities

When engaged in drilling operations, each unit must have a valid National Pollution Discharge Elimination System (NPDES) Permit, as required, issued by the Environmental Protection Agency (EPA).

9. IMO MODU Code

All MODUs electing to comply with 33 CFR Subchapter N with an International Maritime Organization (IMO) Certification may be determined to be in compliance with 33 CFR Subchapter N if it is in full compliance with the IMO MODU Code. Exceptions, exemptions, equivalencies, or modifications must be reviewed and accepted by the cognizant OCMI prior to conducting operations on the OCS. All requests and approvals or denials should be documented in MISLE as a special note.

10. SOLAS Certificates

- a. Foreign flagged MODUs "propelled by mechanical means" and over 500 GTs, must hold valid SOLAS **and** IMO certifications.

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- (1) Safety Construction
 - (2) Safety Equipment
 - (3) Radiotelephony or Radiotelegraphy (if applicable)
 - (4) International Safety Management (ISM) Certificate/Document of Compliance (DOC) **(not applicable to MODUs that are not propelled by mechanical means)**
 - (5) International Ship Security Certificate (ISSC) (*Note per SOLAS Chapter XI-2 reg 1.5, it does not apply to a MODU "on location" but they need it to move from location to location, so a MODU should have all of the required equipment and certificates). Inspectors should carefully consider the applicability of 33 CFR 104 and 106 depending on the MODUs location and operations.
 - (6) International Oil Pollution Prevention Certificate (IOPP)
 - (7) Shipboard Oil Pollution Emergency Plan (SOPEP)
 - (8) International Air Pollution Prevention Certificate (IAPP)
 - (9) National Pollution Discharge Elimination System (NPDES) Permit (as applicable)
- b. A valid, IMO MODU Code Certificate may be accepted in lieu of the required SOLAS certificates for those matters covered by the MODU Code. In NO case will a MODU Code Certificate containing exemptions or exceptions be accepted as an adequate substitute for the required SOLAS certificates.
- c. **Individuals required to hold Standards of Training, Certification and Watchkeeping (STCW) certificates (applicable to MODUs propelled by mechanical means) must make them available for examination.**

CHAPTER 3: Procedures Applicable to MODUs (Foreign)**Pre-Inspection Information Sheet for a Certificate of Compliance (COC)**

Cognizant OCMI: _____ Requested exam date: _____

Name of Vessel: _____ IMO Number: _____

Type (semi-submersible, jack-up, drillship, etc...) _____

Call Sign: _____ Nation of Registry: _____

Is the unit Classed?: Yes _____ or No _____

Classification Society: _____

IMO MODU Code Certificate?: Yes _____ No _____ SOLAS Certificates?: Yes _____ No _____

Issuing Authority: _____

Owner/ Operator: _____

Total Persons to be Accommodated: _____

Equipped with Dynamic Positioning: Yes _____ No _____ DP Class notation: _____

(If yes, include Safe Manning Certificate information (or include copy of document))

Intended Area of Operation: _____

Location of exam: _____

Inspection Option Desired:

Check one:

33 CFR 143.207 (a) _____

33 CFR 143.207 (b) _____

33 CFR 143.207 (c) _____

Check one:

Initial _____

Renewal _____

Annual _____

User Fees Paid?: Yes _____ No _____

Owner/Operator representative: _____ Contact Number: _____

Signature: _____ Date: _____

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B. SPECIFIC REQUIREMENTS PERTAINING TO OPTIONS A, B, OR C PRESCRIBED UNDER 33 CFR §143.207 AND 146.205

1. Units Applying for a COC under Option A

- a. *New MODUs* – All new units must comply with the design, equipment and operating standards contained in 46 CFR Parts 108 and 109.
- b. *Existing MODUs* – All existing units will be inspected as in the above paragraph. However, units contracted for before January 3, 1979, and issued a Certificate of Inspection (COI) under 46 Subchapter I may continue to meet the requirements in force at the time of the COI issuance but must also meet the applicable requirements of 46 Subchapter I-A as specified in Navigation and Vessel Inspection Circular, “Inspection and Certification of Existing Mobile Offshore Drilling Units” (Appendix A of 46 CFR Part 109) until the unit is rebuilt. After a rebuild, the unit must meet the requirements of 46 CFR Subchapter I-A. The definition for REBUILT can be found in 33 CFR 140.10.
- c. *Acceptance of Foreign Equipment* – foreign equipment may be accepted by the OCMI in accordance with Part H of this Chapter (3).

2. Units Applying for a COC under Option B

- a. The owners of a new or existing MODU seeking a COC under this option should ascertain whether the flag state’s MODU standards have received a statement of equivalency from Commandant (CG-CVC). The flag state’s MODU standards are compared against Coast Guard inspection standards and the equivalency is granted when it is determined the flag state’s standard provide a level of safety and is generally equal to those of U.S. MODUs.
- b. If not, the flag state must submit its MODU standards to Commandant (CG-CVC) for review and approval. The submittal should be made at least six months prior to commencing a COC inspection under this option.
- c. The units must meet the operating requirements specified in 33 CFR 146.205(b). Until the Coast Guard has determined that the standards of the flag state are generally equivalent to those of the U.S., a foreign flagged MODU may not obtain a COC under this option. Questions concerning acceptance of equivalencies should be addressed to Commandant (CG-CVC).

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- d. See Parts C and D of this Section (G) for information on equivalencies for Panama and Marshall Islands.

3. Units Applying for a COC under Option C

- a. The owner of a new or existing unit should present the cognizant OCMI with a valid, full compliance IMO MODU Code Certificate issued by the flag state or agent authorized by the documenting nation to act on its behalf.
- b. Certificates with exemptions or exceptions will be reviewed by the OCMI to ensure the spirit of the Code has been met. Units must meet the operating requirements specified by 33 CFR 146.205(c). The OCMI may deny any exemption or exception issued by a flag state.

C. EQUIVALENCY OF PANAMA'S EXISTING MODU RULES

1. Applicability

- a. Panama's MODU rules are based on the IMO MODU Code.
- b. Panama's Technical Note 1/83 modified its MODU rules for existing units that cannot comply with the IMO MODU Code. An evaluation of Panama's Technical Note 1/83 determined that, the rules for existing units are generally equivalent to those provided under 46 CFR Part 108, as applied to existing U.S. flag units with the exception of those items listed in paragraph 3 below.

2. Notification

Commandant (CG-CVC) must be notified if examinations of Panamanian MODUs for issuance of COCs under either 33 CFR 143.207(b) or 33 CFR 143.207(c) reveal a significant or an inordinate number of discrepancies.

3. Issuance of a COC

Existing Panamanian MODUs are eligible to receive an COC under 33 CFR 143.207(b) provided that--

- a. They were built, under construction, or contracted for prior to 5 April 1982 and are documented under the laws of Panama;

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- b. They hold and are in compliance with a valid Panamanian MODU Safety Certificate issued under the provisions of Technical Note 1/83;
- c. The unit's boilers and pressure vessels have been satisfactorily internally examined or hydrostatically tested within 12 months of the date of application for a COC;
- d. A dry dock or special underwater examination in lieu of drydock has been satisfactorily conducted within 24 months of the date of the COC application;
- e. All units (except those unclassified units built prior to 1969) have a valid loadline;
- f. Units comply with the 70 and 100 knot wind intact stability criteria. A relaxation to a minimum 50 knot wind criteria may be permitted based on satisfactory previous service and appropriate limitation;
- g. Units comply with the applicable operating requirements of 33 CFR 146.205;
- h. All equipment installed in Zone 1 (Class 1, Division 1) or Zone 2 (Class 1, Division 2) hazardous areas, as defined in 46 CFR 108.170 through 177, is explosion-proof, intrinsically safe, or purged and pressurized, and in good material condition;
- i. All units comply with the provisions of 46 CFR 108.123 and 108.127, in addition to meeting the structural fire safety requirements for interior stairways and wood construction in Technical Note 1/83;
- j. All units are in substantial compliance with the helo deck fire safety equipment standards found in 46 CFR 108.486 through 108.496 and 46 CFR 108.653;
- k. The unit's lifeboats are rigid, totally enclosed, motor-propelled, fire protected, davit launched survival craft, and are constructed to comply with the requirements of SOLAS 74, Chapter III Regulations 5, 6 and 7 for lifeboats or the provisions of 46 CFR 160.035.
- l. Lifeboat equipment is in accordance with 46 CFR 108, subpart E or the provisions of SOLAS 74, Chapter III, for lifeboats.
- m. Life rafts are equipped for ocean service in accordance with 46 CFR 108, Subpart E or the provisions of SOLAS 74, Chapter III, for life rafts;
- n. Lifesaving appliance launching devices have been satisfactorily weight tested within 12 months of the date of the COC application; and
- o. Life preservers are provided for 125 percent of the persons allowed on board and are

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equipped with whistles, lights and retro-reflective material in accordance with 46 CFR 108, subpart E.

- p. All units comply with the requirements of 33 CFR 144.30 pertaining to exposure suits.

D. EQUIVALENCY OF MARSHALL ISLAND'S EXISTING MODU RULES

1. Applicability

MODUs possessing a valid Marshall Islands' MODU Safety Certificate of Compliance issued in accordance with the Republic of the Marshall Islands "Mobile Offshore Drilling Unit Standards", Publication MI-293 must also meet the requirements identified below before a COC will be issued. Compliance with these requirements will be verified at the discretion of the OCMI to which application for a COC has been made.

2. Issuance of a COC

- a. All units shall comply with the applicable provisions of 33 CFR Subchapter N. This includes, but is not limited to inspections, investigations, citizenship requirements, restrictions on employment, workplace safety and health, and operational requirements for foreign MODUs.
- b. All units shall comply with the applicable provisions for pollution prevention. This includes, but is not limited to the Act to Prevent Pollution from Ships, and MARPOL 73/78.
- c. All units shall comply with the applicable provisions of 33 CFR Part 164 – Navigation Safety Regulations. This includes, but is not limited to charts, publications, navigation equipment, testing, maintenance and reporting requirements.
- d. Testing and Inspection of Pressure Vessels and Relief Valves – Pressure vessels shall be internally examined once every five years and relief valves shall be tested twice in five years with no interval more than three years in accordance with 46 CFR 61.10.
- e. Additional Lifesaving Equipment – All units shall comply with the additional lifesaving requirements contained in 46 CFR 108.503. Drillships not in possession of a valid MODU Safety Certificate (1989) shall comply with the requirements of 46 CFR Subchapter W.

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- f. Maintenance, Testing & Inspection of Lifesaving Equipment – All units shall comply with the maintenance, testing and inspection requirements contained in 46 CFR 109.301. All required maintenance, tests and inspections shall be documented.
- g. Testing & Inspection of Fire Fighting Equipment – All units shall ensure that each hand and semi-portable fire extinguisher, fixed fire-extinguishing system and gas detection system shall be tested and inspected annually in accordance with the requirements contained in 46 CFR 109.223. All required tests and inspections shall be documented.
- h. Hospital Space, First Aid Kit & Litter – All units carrying 12 or more persons on a voyage, that is more than three days, shall have a dedicated hospital space on board that complies with 46 CFR 108.209 or 46 CFR 108.210. All units shall have a first aid kit that complies with 46 CFR 108.707, and a litter capable of being used on the type of helicopter that services the unit in accordance with the requirements of 46 CFR 108.709.
- i. Hazardous Locations – All units shall comply with the electrical wiring materials and methods required by 46 CFR 111.60 for the hazardous locations listed in 46 CFR 111.105-33.
- j. The OCMI may require a unit to carry specialized or additional equipment if the conditions, arrangement or service of the unit present uniquely hazardous circumstances that are not adequately addressed by existing requirements or standards.

E. STABILITY

A Load Line Certificate is NOT sufficient to verify adequate stability of a unit. Acceptance of stability will be based on one of the following criteria:

Review and approval of the stability calculations and data contained in the operating manual by the Marine Safety Center to the standards contained in 46 CFR Parts 170 and 174.

Examination of stability data contained in the operating manual accepted under full IMO MODU Code standards by the flag state. In cases when a unit's stability has been determined under less than full IMO criteria, a stability test may be required to verify lightship data. An operating manual not containing supporting calculations and inclining experiment/deadweight survey data, submitted to the Coast Guard for approval will be determined to be inadequate.

Examination of alternative stability criteria accepted by the flag state that provides an equivalent level of safety as permitted by Section 3.3.3 of the IMO MODU Code.

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F. FOREIGN MODU OPERATING MANUALS

All foreign units should have operating manuals complying with the applicable provisions specified in 33 CFR 146.205. The unit's operating manual must be submitted to the cognizant OCMI for review. The contents of the manual must be in English in addition to any other languages understood by personnel routinely onboard.

No Coast Guard "approval" or "examined" stamps shall be applied to these manuals.

It should be noted that principal approval of the manual comes from the flag state or their designated representative. If an operations manual is not flag state approved, the Marine Inspector must issue a deficiency requiring Flag State approval of the manual within 30 days.

G. GENERAL SAFETY REQUIREMENTS

1. Workplace Safety

Owners and operators of all foreign flagged MODUs operating on the U.S. OCS are responsible for maintaining those units in compliance with workplace safety and health regulations and free from recognized hazards as specified in 33 CFR 142. The Coast Guard and OSHA share joint responsibility for the occupational safety and health of personnel on OCS facilities per an MOU signed in 1982. See MSM Vol II Section G, Chapter 1, Part D, for further discussion on the Coast Guard/OSHA MOU.

2. Drydock Examination/Special Exam in Lieu of Drydocking

In order to verify the unit's structural integrity and continued compliance with the design standard as specified by 33 CFR 143.201 and .207, all MODUs should undergo a drydock or special exam at the following intervals:

- (a) *Units applying for a COC under Option A* – Under current Coast Guard regulations, all other class of vessels require the twice in a five year interval for dry docking or special examination. Coast Guard guidance allows MODUs the same option with drydock examinations conducted in the presence of a Coast Guard inspector. These may be conducted at least twice within any 5-year period after issuance of a COI or COC with no more than 3 years elapsing between any two examinations. Documentation of recent drydock examinations or special exams in lieu of drydocking witnessed by classification societies recognized by the Coast Guard may be accepted.

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- (b) *Units applying for a COC under Option B* – Units must comply with the requirements of the flag state which have been determined by Commandant to provide a level of safety equivalent to those provided by U.S. requirements. Unit owners must present evidence to the satisfaction of the cognizant OCMI that a drydock examination or a special exam in lieu of drydock was conducted in accordance with the flag state's standards.
- (c) *Units applying for a COC under Option C* - Evidence of full compliance with provisions of the IMO MODU Code pertaining to all required surveys must be presented to an accepted by the cognizant OCMI.

The Coast Guard will NOT normally conduct drydock examinations or special exams in lieu of drydocking on foreign units. However, if the unit's structural integrity is in question, the cognizant OCMI may require an examination to be conducted by the flag state with Coast Guard inspectors in attendance.

3. Cranes

All pedestal mounted revolving cranes must be in compliance with the design requirements and operating standards as outlined below:

- a. *Units applying for a COC under Option A* – Cranes aboard units are to be inspected, tested and operated in compliance with the requirements contained in 46 CFR Parts 108 and 109.
- b. *Units applying for a COC under Option B* – The cranes may be inspected, tested and operated in accordance with the flag state's standards for cranes if those standards are determined by Commandant to provide a level of safety generally equivalent to or greater than that provided in 46 CFR Parts 107, 108 and 109.
- c. *Units applying for a COC under Option C* – The cranes should be inspected, tested and operated in accordance with Chapter 12 of the MODU Code. The unit owners should present evidence that the cranes have been examined and accepted by the flag state or its authorized representative within 12 months of the date of application for a COC.

All crane testing and inspections should be witnessed and conducted by the American Bureau of Shipping (ABS), Det Norske Veritas (DNV), or the International Cargo Gear Bureau, Inc. (ICGB) for cranes under certification by these organizations. Certification of cranes on units examined under Option A; should be conducted by a recognized organization (RO) or other authority designated by the flag state to conduct such testing and inspections.

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4. Pressure Vessel Internal Exams

All Options - Regardless of which Option A, B, or C that an owner chooses for their MODU, the inspection frequency regulations contained 46 CFR 61.10 for pressure vessels apply.

Foreign flagged MODUs operating on the OCS shall have pressure vessels internally examined once every five years. In addition, all relief valves shall be tested twice in five years with no intervals more than three years. The only exception to this requirement is per 33 CFR 143.207 paragraph (b), Option B, where the accepted standard of a unit's flag state or documenting nation are more stringent.

It is the responsibility of the unit's owner to present sufficient documentation demonstrating such inspections and tests have been conducted and witnessed by authorized representatives within the specified intervals. If sufficient evidence is not available, they will need to be inspected or tested to the satisfaction of the cognizant OCMI prior to issuance of the COC. Marine Inspectors shall ensure that the internal exam and relief valve tests dates are documented in MISLE.

All fired and unfired pressure vessels should be designed, fabricated, and identified in accordance with the requirements of the ASME Code, the Coast Guard, or other authority recognized by the flag state. Additionally, each pressure vessel must have a relieving device set in accordance with the provisions contained in 46 CFR 54.15-5(c). Relief devices should be ASME Code stamped or built to an equivalent standard recognized by the flag state.

5. Lifesaving Appliances

All Options – To meet the compliance requirements for foreign MODUs, all units must be equipped with life saving appliances equal to or greater than the requirements of 46 CFR Subpart E. A unit in compliance with the 2009 MODU Code may be determined to be in compliance with these requirements.

- a. All lifeboats on units must be approved survival craft constructed to comply with the provisions of SOLAS 74, Chapter III as amended, the IMO Lifesaving Appliances (LSA) Code, or have a Coast Guard approval in the 160.135 series.
- b. All lifeboats must be equipped in accordance with the provisions of the IMO LSA Code or the provisions of 46 CFR Table 108.575(b).
- c. All life rafts must be constructed and approved in accordance with the provisions of SOLAS 74, Chapter III, as amended by the IMO LSA Code, or have a Coast Guard approval in the 160.118 or 160.151 series.

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- d. Rigid life rafts must be equipped to the SOLAS A or B standard or to 46 CFR Table 108.575(b).
- e. All units must provide life jackets in accordance with the IMO MODU Code or 46 CFR 108.580(b).
- f. The units owners must present evidence acceptable to the OCMI that the lifesaving appliance launching devices were satisfactorily weight tested in accordance with the provisions of 46 CFR 109.301(i) within 12 months of the application for a COC. Additional weight tests of these devices will be required in accordance with 46 CFR 109.301(i).
- g. All survival equipment locations shall be marked in accordance with SOLAS 74, Chapter III, Regulation 9. (NVIC 3-87) offers guidance for the types of placards.

6. Carriage of Exposure Suits

All Options – Foreign units on the U.S. OCS operating north of 32 degrees North latitude shall carry immersion suits approved meeting SOLAS 74, Chapter III, LSA Code or the Coast Guard under approval series 160.171

7. Fire Safety

All Options – All fire extinguishing systems, fire extinguishers, fire detection systems and sprinkler systems are to be inspected annually. In absence of adequate documentation that such testing has been made by the flag state or its authorized representatives, testing will be required by the Coast Guard to the satisfaction of the cognizant OCMI. On all units where wood is utilized in construction of the accommodation spaces, each space must be equipped with a smoke or heat detector satisfactory to the cognizant OCMI.

8. Alarms, Remote Controls, and Other Safety Devices

All Options – The satisfactory operation of installed machinery and switchboard safety devices, all remote closures and shutdowns, and all alarms should be demonstrated at each examination for issuance of the COC.

CHAPTER 3: Procedures Applicable to MODUs (Foreign)**9. Emergency Lighting Systems**

All Options – An emergency lighting system capable of a minimum of 12 continuous hours of operation is to be installed in passageways, stairways, escape routes to lifesaving craft, galleys, pantries, emergency power rooms, mess rooms, recreation rooms, manned machinery spaces, and control rooms. Additional emergency lights should be installed to provide adequate illumination for the entire launching process of lifeboat/capsules and liferafts from the stowed position to the water. Relay controlled battery powered lanterns are acceptable for these purposes, and should be specifically required when a MODU is equipped with an emergency total rig shutdown system.

10. Helicopter Facilities

- a. Helicopter facilities aboard all foreign MODUs are to meet one of the following standards including requirements for helicopter deck firefighting equipment and helicopter fueling facilities:
 - (1) Option A – The requirements of 46 CFR Parts 108 and 109.
 - (2) Option B – The requirements of the flag state if they are accepted by COMDT and provide a level of safety equivalent to or exceeding those specified by 46 CFR Parts 108 and 109.
 - (3) Option C – The requirements of the IMO MODU Code, Chapters 9 and 13.
- b. Green Perimeter lights: The Coast Guard considers the helicopter lighting scheme of the 2009 MODU Code, Chapter 13 "perimeter lights" to be at least as effective as the requirements of 46 CFR 108.241. CG-ENG has documented the acceptance of the international "green light" scheme on foreign MODUs (see CG-ENG Policy Letter 02-12). An OCMI should use these CG-ENG policy letters as evidence of compliance for the purpose of issuing a COC to a MODU under 143.207; an individual waiver should not be required.

11. Navigation Lighting

MODUs are required to comply with the Navigation Rules. Per Navigation Rule 3 and as defined in 33 CFR 140.10. MODUs are vessels, and as such shall abide by the Navigation Rules and properly display navigation lights and shapes accordingly (i.e., Rules 22, 23(a), 27(d), etc.). MODUs, particularly when drilling, are also subject to other regulations denoted in Title 33 CFR, parts 67 and 140-147 (Subchapter N)

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Note: A vessel being propelled by a dynamic positioning system (e.g., MODU) is considered underway even when hovering on location, but, may also be "restricted in her ability to maneuver" as defined by Navigation Rule 3 (International-Inland).

H. ACCEPTANCE OF FOREIGN EQUIPMENT

Where Coast Guard approved equipment is specifically required, foreign equipment may be accepted in accordance with the provisions of 33 CFR 140.15. The OCMI may require additional equipment as necessary to ensure that a general level of safety equivalent to 46 CFR 108 and 109 is maintained. To ensure a level of safety equal to or greater than required by U.S. regulations, any equipment specifically prohibited on U.S. units will be prohibited on foreign units.

I. FOREIGN FLAGGED UNITS STACKED OR LAID-UP ON THE U.S. OCS, CONTIGUOUS ZONE, OR TERRITORIAL WATERS

Foreign flagged units stacked or laid-up on the U.S. OCS, or contiguous zone or in territorial waters, should comply with applicable Coast Guard requirements applied to U.S. flag units when in this status. Owners and operators of foreign flagged units should contact the cognizant OCMI prior to stacking the unit in the aforementioned areas to discuss the applicable requirements. Owners and operators are further advised that should the units reside in U.S. state waters, they may be subject to additional requirements imposed by the cognizant state authorities.

J. CITIZENSHIP REQUIREMENTS

Prior to commencing drilling operations on the U.S. OCS, the owner/operator of a foreign flagged MODU shall ensure that the citizenship requirements set forth in 33 CFR 141, are met. Amplifying guidance for compliance with the aforementioned regulations can be found in NVIC 7-84.

K. EMERGENCY EVACUATION PLAN

All foreign units should have an approved Emergency Evacuation Plan (EEP) complying with the applicable provisions specified in 33 CFR 146.210. Prior to the initial COC, the EEP shall be submitted to the cognizant OCMI for review. The contents of the manual must be in English in addition to any other language understood by personnel routinely onboard. History has shown that emergency evacuations are required from time to time and a well thought out EEP can save lives.

CHAPTER 3: Procedures Applicable to MODUs (Foreign)**L. COC: FAILURE TO MEET REQUIREMENTS**

If at any time the OCMI determines the unit is NOT in compliance with the requirements for the purpose of obtaining a COC, regardless of the Option chosen, the Coast Guard may:

1. Withhold issuance of the original COC until the requirements are met;
2. Withhold issuance of a subsequent COC until the requirements are met;
3. Suspend an unexpired COC after a reinspection is initiated due to crew complaint or casualty investigation until requirements are met;
4. Revoke an unexpired COC after re-inspection if the unit operates without complying with Coast Guard orders to correct serious discrepancies or unlawful conditions; or
5. Initiate civil penalty procedures against the owner, operator, or person-in-charge if violations of 33 CFR 142.1 or other deficiencies remain uncorrected after official notification is given and a reasonable time for corrections expires.

The Coast Guard **cannot detain** a MODU on the OCS, but when deciding whether deficiencies warrant a MI to withhold or revoke a COC, use the IMO Procedures for Port State Control (Resolution A.787(19) as amended by resolution A.882(21)) as (Appendix 1) guidance. In all instances where the COC is revoked or withheld, The Bureau of Safety and Environmental Enforcement (BSEE) shall be notified by the Coast Guard.

M. MARPOL ANNEX VI

This section clarifies exemptions on vessel emissions directly arising from the exploration, exploitation and associated offshore processing of sea-bed mineral resources. (MARPOL Annex Reg 3.3.1)

Note: MODUs do not have to comply with the Vessel General Permit unless they operate in covered waters (generally within the territorial sea).

1. Applicability

Fixed and floating drilling rigs and other platforms are required to comply with the provisions of MARPOL Annex VI, *Regulations for the Prevention of Air Pollution from Ships*. (Per Chapter 1, Reg 1, the provisions of this Annex shall apply to all ships, except where expressly provided by otherwise in regulations 3, 5, 6, 13, 15, 16, and 18 of this Annex.)

CHAPTER 3: Procedures Applicable to MODUs (Foreign)

2. Definitions

For the purposes of this regulation, fixed and floating drilling rigs and other platforms means MODUs and FPSOs, involved in the exploration, exploitation and associated offshore processing of sea-bed mineral resources.

3. Inspections

Fixed and floating drilling rigs (ex. MODUs) and other platforms will be inspected for compliance with MARPOL Annex VI. Per Chapter 2, Regulation 5; every ship of 400 gross tonnage and above and every fixed and floating drilling rig and other platforms shall be subject to the surveys specified in this Annex.

4. Certificates

Fixed and floating MODUs and other platforms will receive an IAPP certificate. Per MARPOL Annex VI, Chapter 2, Regulation 6; an IAPP Certificate shall be issued, after an initial or renewal survey in accordance with the provisions of regulation 5 of this Annex, to platforms and drilling rigs **engaged in voyages to waters** under the sovereignty or jurisdiction of other Parties. Therefore a MODU (without DP) coming from Norway is required to have an IAPP and meet all applicable regulations while engaged in the voyage to U.S. waters. But, once it gets to the Gulf of Mexico and it begins drilling it is exempt from the following items in section 5 below.

5. Exceptions/Exemptions

Revised MARPOL Annex VI (2009 edition), Chapter 1, Regulation 3 allows for exceptions and exemptions. Specifically regulation 3.3.1: "Emissions from sea-bed mineral activities" - Emissions directly arising from the exploration, exploitation and associated offshore processing of sea-bed mineral resources are exempt from the provisions of this Annex.

CHAPTER 3: Procedures Applicable to MODUs (Foreign)

Note: Emissions from marine diesel engines that are solely dedicated to the exploration, exploitation and associated offshore processing of sea-bed mineral resources *are* exempt from the MARPOL Annex VI regulations (see Reg 3 for list of exempted emissions).

Engines utilized for DP, ship service generators providing power for propulsion, navigation equipment, hotel services, etc. are **NOT** exempt from MARPOL Annex VI." One example might be a Cement Unit.

6. Underway

While a fixed or floating drilling rig or platform is underway and “**engaged in voyages to waters**”, it and all vessels associated (as applicable) are required to meet the requirements of MARPOL Annex VI. Once the fixed or floating drilling rig or platform begins **exploration, exploitation and associated offshore processing** of sea-bed mineral resources, they are exempt from the MARPOL Annex VI regulations.

7. Vessels with Dynamic Positioning (DP)

The Coast Guard considers a vessel operating in DP mode to be a vessel propelled by mechanical means. Any vessel holding position solely through the use of its DP system is considered “underway” and cannot be considered “on location”. “On location” means that a MODU is bottom bearing or moored with anchors placed in the drilling configuration. Per 46 CFR 10.107 “underway” is defined as when “a vessel is not at anchor, made fast to the shore, or aground.” When referring to a MODU, underway means that the MODU is not in an on-location or laid-up status and includes that period of time when the MODU is deploying or recovering its mooring system. Because a MODU operating under DP is not at anchor, nor is it made fast to shore or the ocean bottom it is by definition “underway” and the equipment not directly associated with the **exploration, exploitation and associated offshore processing** of sea-bed mineral resources, (engines utilized for DP, Ships Generator utilized to operate navigation equipment, accommodations, etc...) a MODU cannot be exempted under Regulation 3 from the provisions of MARPOL Annex VI.

N. RISKED-BASED TARGETING OF FOREIGN FLAGGED MODUS

1. Introduction

This section provides procedures for risk-based targeting of foreign flagged Mobile Offshore Drilling Units (MODU) operating on the United States Outer Continental Shelf (OCS). For

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general guidelines on required documentation of foreign flagged MODU examinations and how to enter activities in MISLE refer to MSM Vol II, Section G, Chapter 1.

Every foreign flagged MODU must meet the requirements of 33 CFR Subchapter N, Parts 143 and 146, and undergo a Coast Guard examination, to be issued a COC in accordance with 33 CFR 143.210 prior to engaging in OCS activities.

2. The Matrix

The *Mobile Offshore Drilling Unit (MODU) Safety and Environmental Protection Compliance Targeting Matrix* (located at the end of this Chapter) has been developed based on the *Port State Control Safety and Environmental Protection Compliance Targeting Matrix*; which has been successful in targeting substandard vessels for over 10 years. The matrix will enable the Coast Guard to rationally and systematically determine the probable risk posed by foreign flagged MODUs operating on the U.S. OCS.

- (1) The first three columns/entities of the matrix remain the same with minor changes made to terminology specific to MODUs.
- (2) These entities are: I) MODU Management (to include lease holder), II) Flag State and III) Recognized Organizations/ Classification Societies.
- (3) If any of these entities fail to fully undertake their responsibilities for the safe operation of an associated foreign flagged MODU, then that MODU, based on its final targeting matrix score, may be identified as requiring more stringent Coast Guard oversight.
- (4) Column IV takes into account the Coast Guard's 12 month-cumulative experience with a particular MODU.
- (5) Finally, Column V applies points based on a MODUs propulsion type, design particulars, and or age. Targeting points will be assigned in each of the five columns, and then totaled for the final point score.
- (6) A MODUs matrix point score will determine if it warrants additional oversight through more frequent Coast Guard examinations.

3. PROCEDURES

- a. MODUs will be scored manually by each OCMI each time an Advanced Notice of Arrival (ANOA) is submitted on their behalf, which includes arrival on the U.S. OCS and movement between OCS blocks in accordance **33 CFR 146.215**. The National

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Vessel Movement Center (NVMC) will initially collect, review, and verify specific MODU information including MODU type and size, cargo, crew list, MODU management information, and security and safety compliance documentation, etc. The NVMC then makes the ANOA available to the National Maritime Intelligence - Integration Office (NMIO) and to the OCMI's through the Ship Arrival Notification System (SANS). The NVMC also makes the ANOA accessible through MISLE. The NMIO analyzes MODU owner, operator, charterer, crew composition, history, etc. to determine whether there is pertinent intelligence regarding the MODU. The NMIO will then issue a daily message for Vessels of Intelligence Interest (VOII).

- b. The OCMI will prioritize and coordinate the examination of MODUs entering their AOR. The OCMI will review each MODU arrival in MISLE paying close attention to the MODU matrix score. The calculated score may be raised or lowered based on amplifying information available and at the discretion of the OCMI. The MISLE vessel arrivals screen must also be updated to record a MODUs arrival and departure from the AOR. After completing the above steps, the OCMI will create an inspection activity in MISLE for each MODU that requires an examination. A full tutorial on processing arrivals and scheduling exams for foreign vessel (same process for MODUs) arrivals can be accessed at http://mislenet.osc.uscg.mil/User_Guides/Tutorials/SchedForeignVsl_Arrvl.htm.

4. MODU Safety and Environmental Protection Compliance Targeting Matrix Scoring

- a. Column I: Management. This column is based on Port State Control (PSC) or Comandant (CG-CVC) targeting. A targeted vessel management company includes any owner, operator, lessee, charterer, or managing operator whose vessels have been “detained” (since MODUs outside 12 NM cannot be “detained” this data will come from PSC detention information) or sustained major Coastal State control actions in the U.S. more than once within the previous 12 months under the provisions of an international Convention. (A major Coastal State control action would include non-issuance, revocation or suspension of a COC, SMS audit or based on a decision by Commandant (CG-CVC). Commandant (CG-CVC-2) will maintain a current listing of targeted ship management companies based on detention reports received from Coast Guard field units; this list is updated monthly. Commandant (CG-CVC-2) will remove a targeted management company once their vessels are associated with less than two detentions within a 12 month period.
 - (1) If the owner, lessee, managing operator, or charterer of a MODU is included on the current Targeted Vessel Management Company List provided by Commandant (CG-CVC-2), assign 5 points. Although listed in the same column the owner, lessee, managing operator, and charterer should be scored separately.

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- (2) The OCMI may assign a maximum total of 5 points for this column. Proceed to Column II.
- b. Column II: Flag. A targeted Flag Administration is a country with a safety-related detention ratio exceeding the average safety detention ratio for all Flag Administration's with vessels operating in U.S. waters. This data is based on PSC and Coastal State figures.
- (1) Commandant (CG-CVC-2) compiles a list consisting of targeted Flag Administrations on an annual basis for use with the *PSC Safety and Environmental Protection Compliance Targeting Matrix*. This list can be found on the Web, accessible at: <http://www.uscg.mil/hq/cgcv/cvc2/safety.asp>
- (2) The OCMI assigns either 7 points or 2 points to vessels registered with a targeted Flag Administration in Column II of the *PSC Safety and Environmental Protection Compliance Targeting Matrix*. The list provided on the Web, lists the number of points applicable to the various targeted Flag Administrations. This list is accessible at: <http://www.uscg.mil/hq/cgcv/cvc2/safety.asp>
- c. Column III: Recognized Organization. Commandant (CG-CVC-2) evaluates Recognized Organizations (ROs) based on their performance over the previous three years (based on PSC and Coastal State data).
- (1) If they have a 3-year safety detention ratio that exceeds the fixed 3-year safety detention ratio (0.5%), then that Organization will receive points.
- (2) The Targeted Organization List contains the names of ROs that will receive points on the *MODU Safety and Environmental Protection Compliance Targeting Matrix*. This list is accessible at <http://homeport.uscg.mil/mycg/portal/ep/browse.do?channelId=-18371>. Table 1 below, shows the RO detention ratio and the matrix points that should be assigned based on PSC and Coastal state data collected.
- (5) Check the vessel's RO against the current targeted list. If the list shows the RO as being targeted assign the appropriate number of points as indicated. See <http://homeport.uscg.mil/mycg/portal/ep/browse.do?channelId=-18371>.
- d. Column IV: Vessel History.
- (1) If MISLE data indicates the Coast Guard has not performed a COC exam in the past 12 months or the MODU has never been to the United States, then assign PRIORITY status. If the OCMI determines, after the initial exam and issuance of the COC, that the MODU meets all applicable safety requirements then they may

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“downgrade” the MODU to Non-Priority, eliminating the six month examination requirement. (See section 5, below, for more details on the six month exam.)

- (2) If MISLE data indicates that the MODU has been the subject of an exam resulting in non-issuance of a COC within the past 12 months, assign 5 points for each occurrence. Commandant (CG-CVC-2) will enter an inspection note after reviewing reports received from field units. This notice will assist in identifying MODUs not receiving their COC during the inspectors initial examination within the previous 12 months, *but may not include very recent examinations*. Field units must check the MISLE Vessel Critical Profile to determine whether any recent exams resulting in non-issuance of a COC have occurred.
 - (3) If MISLE data indicates that the MODU has been the subject of any other form of operational control within the past 12 months (i.e., COC suspension, COTP Order, Letter of Deviation, etc.), assign 1 point for each incident. Do not assign multiple points if the field unit took more than one control action for a single incident.
 - (4) If MISLE data indicates that the MODU has been involved in a reportable marine casualty or pollution case, as defined in 33 CFR 140.201, within the past 12 months, assign 1 point for each case.
 - (5) If MISLE data indicates that the MODU has been the subject of a marine violation, except for pollution, within the past 12 months, assign 1 point for each violation case.
 - (6) If MISLE data indicates the MODU has an outstanding deficiency which was not satisfactorily corrected by the required due date, assign 1 point each. The total points in Column IV are unlimited.
- e. Column V: MODU Particulars. For purposes of this matrix the following definitions and points apply. MODU details should be verified through Class or International documents and entered in vessel particulars in MISLE.
- (1) Self-Propelled (propelled by mechanical means) – MODU has propulsion machinery (including a Dynamic Positioning system) that provides for independent underway navigation. Assign 5 points.
 - (2) Semi-Submersible – a column stabilized MODU designed for offshore operations; either afloat or supported by the sea bed. Assign 3 points.
 - (3) Jack-Up (self-elevating unit) – a MODU with movable legs capable of raising its hull above the surface of the sea. The hull has sufficient buoyancy to transport the unit to the desired location. Once on location, the hull is raised to a predetermined

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elevation above the sea surface on its legs, which are supported by the sea bed. The legs of such units may be designed to penetrate the bed, may be fitted with enlarged sections or footings, or may be attached to a bottom mat. Assign 2 points.

- (4) Submersible – a column stabilized MODU designed for offshore operations solely when supported by the sea bed. Assign 1 point.
 - (5) Age – delivery date of the MODU shall be used for age determination. Assign the following points based on age: 0-4 years (subtract 3 points), 5-9 years (subtract 2 points), 10-14 years (add 0 points), 15-19 years (add 3 points), 20-24 years (add 5 points), and 25+ years (add 7 points).
- f. Total Targeting Matrix Score/Priority Assignment.
- (1) 12 or more points = Priority MODU
 - (2) 11 or fewer = Non-Priority MODU

5. Targeting Decision and Examination Frequency

The *MODU Safety and Environmental Protection Compliance Targeting Matrix* evaluates a vessel's relative risk of non-compliance with maritime safety standards and results in the assignment of points. Each matrix will provide a total that corresponds to the designations of Priority or Non-Priority.

OCMIs should consider placing Priority MODUs on a 6 month exam schedule and/ or increasing scope of regular COC exam as resources allow.

6. Priority Downgrade Clause

If a MODU has undergone a satisfactory annual exam within the past 6 months with no serious deficiencies, and all of the deficiencies issued during the exam have been corrected to the Coast Guard's satisfaction, the OCMI may downgrade the MODU to Non-Priority. If the exam priority of a MODU is downgraded to Non-Priority, it shall be added to the unit's pool of potential random examinations.

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7. Stacked MODUs

Upon receiving notification, either through ANOA or otherwise, that a MODU will be or has been in a “stacked” condition, the OCMI will contact the owner/operator to advise them on the provisions contained in this Manual, Section G, Chapter 3: MODUs in layup status and Drydock exam extensions

8. Random Examinations

Units will conduct additional random examinations on 10% of their entire (priority and non-priority) fleet. For example, if a unit has 25 foreign flag MODUs operating in their zone then they should aim for conducting an additional 2 -3 MODU examinations annually as unit resources allow. For information on how to document this type of activity in MISLE see MISLE Management System (MMS) Work Instruction – MISLE Data Entry Requirements for Outer Continental Shelf (OCS) Inspections.

9. Documentation of Foreign-Flagged MODU Exam Activities

- a. MISLE. All units conducting foreign-flagged MODU exams must use the MISLE MMS Work Instructions, MISLE Data Entry Requirements for OCS Inspections and MISLE Data Entry Requirements for Foreign Vessel Arrivals, Examinations and Operational Controls to accurately document MODU exams/activities within MISLE. To enable the proper use of the MODU Safety and Environmental Protection Compliance Targeting Matrix, it is of paramount importance every unit responsible for conducting foreign-flagged MODUs accurately document all MODU exam information and enter this data in MISLE in accordance with this policy and the MMS Work Instruction – MISLE Data Entry Requirements for OCS Inspections. Of particular note - units must enter all exam deficiencies, including those cleared on-site, into the MISLE activity. Deficiency MISLE entry must include the applicable regulatory cite the deficiency is based on and the date for required correction, or date it was corrected if corrected on the spot.
- b. Reports of Inspection (Forms A and B). For COC's issued to a foreign vessel within U.S. territorial waters (inside 12 nm), the process remains relatively unchanged. A valid COC form will be issued and the examination record section completed. The Coast Guard Marine Inspector (MI) or Port State Control Officer (PSCO) shall continue to issue a Port State Control Report of Inspection, Form A, documenting the examination and a Form B, detailing any discrepancies identified during the exam. If no deficiencies are identified, a Form B will not be issued and a simple statement of

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no deficiencies issued will be entered in the examination record section. The deficiency report contained within the new COC form will not be utilized during these exams (within 12 nm). Port State “control action” codes (detention, prior to departure, etc.) located at the bottom of the Form B, remains the appropriate means to document actions taken for an examination conducted inside U.S. territorial waters (within 12 nm).

- c. Certificate of Compliance, Form CG-3585. For COC’s issued to a foreign vessel beyond U.S. territorial waters (outside 12 nm), the Coast Guard MI/PSCO shall issue a valid COC form, complete the examination record section and utilize the deficiency report for deficiencies identified in lieu of the U.S. Coast Guard Port State Control Report of Inspection Form A, Form CG-5437A and U.S. Coast Guard Port State Control Report of Inspection Form B, Form CG-5437B. To clarify, the deficiency report shall be used to document deficiencies identified during COC exams occurring overseas, in lightering zones, and on the OCS (exams occurring outside 12 nm). The deficiency report is very similar to the U.S. Coast Guard Port State Control Report of Inspection Form B, Form CG-5437B and instructions for its use are located on the “Instructions/Notices” page of the updated COC form. If no deficiencies are identified, the deficiency report will not be utilized and a simple statement of “no deficiencies issued” will be entered in the examination record section. Additionally, due to the unique nature of MODUs and FI’s, three new “Action Codes” have been added to the Deficiency Report (which is not included on the U.S. Coast Guard Port State Control Report of Inspection Form B, Form CG-5437B): Code 66 - Rectify deficiency prior to drilling operations (issue to units who have not yet commenced drilling ops), Code 67 - Rectify deficiency prior to continuing drilling operations (issued to units who have had to cease drilling ops in order to rectify defs), and Code 34 - Operations Restricted. The Coast Guard does not have the authority to invoke an IMO detention on a vessel outside 12 nm. Therefore, other operational controls may be utilized under existing COTP authority which may include not issuing, suspending or invalidating the COC.
- d. Issuance of COC. Once the Marine Inspector determines the foreign-flagged MODU is fit for its intended service, a Certificate of Compliance, Form CG-3585, will be issued. The MODU particulars must be indicated in the applicable section on the form.
- e. Endorsement of COC. During the foreign-flagged MODUs required annual exam, once the Marine Inspector determines the unit to be fit for its intended service, the Certificate of Compliance, Form CG-3585, will be dated and endorsed with the attending Marine Inspector’s signature in the appropriate block on page 1 of the form.
- f. Non-issuance/revocation of a Certificate of Compliance, Form CG-3585. Coast Guard units will notify Commandant (CG-CVC-2) via email (CGCVC@uscg.mil) when it is determined that a foreign-flagged MODU does not or no longer meets the

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applicable safety requirements warranting issuance of a Certificate of Compliance, Form CG-3585, either during the required annual exam or deficiency check, etc. Commandant (CG-CVC-2) will enter a special note in MISLE regarding the specific deficiencies identified during the exam, and the reason for non-issuance or revocation of the COC. This special note will remain “active” and be reflected on the MODUs critical profile for a period of five years. The email to Commandant (CG-CVC-2) should include, at a minimum, name of MODU, official number or IMO number, and MISLE activity number. Units should also scan the Certificate of Compliance, Form CG-3585 and deficiency report forms into MISLE and attach them to the activity.

- g. Access Control and Closure of Activities. A 2011 Office of the Inspector General (OIG) audit revealed that MISLE lacks sufficient internal controls to ensure accuracy and validity of data entered. To address this issue, Chiefs of the Inspection Division (CID) will review each activity for accuracy and compliance with Commandant, District and local unit administrative policies. Following appropriate review, CID’s (or their representative) may close each activity.
- h. Continuous Improvement. Industry members and OCMI’s are encouraged to provide suggestions and feedback on MODU risk-based targeting via email to CGCVC@uscg.mil.

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10. MODU Matrix



Downgrade Clause. If a MODU has undergone a Coast Guard Certificate of Compliance (COC) or a required COC annual exam within the past 6 months with no serious deficiencies, the OCMI may downgrade the MODU to non-priority. If the OCMI downgrades a MODU exam priority, it will be added to the pool of random examinations.

Priority MODU

12 or more points on the Matrix; MODUs involved in a marine casualty that may have affected seaworthiness; Coast Guard Officer in Charge, Marine Inspection (OCMI) determines a MODU to be a potential hazard to the OCS, port or the environment; MODUs whose Recognized Organization (classification society) has a detention ratio equal to or greater than 2%. Port or OCS entry may be restricted until the Coast Guard examines the MODU.

Non-Priority MODU

11 or fewer points on the Matrix. MODU poses a low safety and environmental risk. The Coast Guard may select and examine MODU using a random selection process.

CHAPTER 3: Procedures Applicable to MODUs (Foreign)**O. CROSS REFERENCE OF REGULATIONS PERTAINING TO U.S. AND FOREIGN FLAG MODUS**

The following is a cross reference guide of regulations pertaining to U.S. and foreign documented units. Unless otherwise indicated, all U.S. cites reference Title 46 of the Code of Federal Regulations (CFR), and all International cites reference applicable sections of the IMO MODU Code.

The * indicates no equivalent standard.

Item	U.S. (46 CFR XXX)	79 MODU CODE	89 MODU CODE	2009 MODU CODE	SOLAS 74, 2009 consol'd ed.
<u>HULL STRUCTURE</u>					
Hull Structure/ watertight integrity	108.113 - .115	2.3 - 2.6, 3.6	2.3 - 2.6, 3.6	2.4 - 2.7, 3.6	
<u>STRUCTURAL FIRE PROTECTION</u>					
Structural Fire protection	108.123 - .147	9.1 - 9.2	9.1 - 9.2	9.1 - 9.3	
<u>MEANS OF ESCAPE</u>					
Means of Escape	108.151 - .167	9.3	9.3	9.4	Chapter II-2, Reg 13
Additional means of abandonment	108.540	10.11.1.2	10.3.8	10.4.8	
Stairways and ladders	108.159 - .160	*	*	*	
Means of embarkation for lifeboat/life raft	108.540	10.1.3; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.1.3; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.4.7	SOLAS 74, Chapter III, Reg 11
<u>CLASSIFIED LOCATIONS</u>					
Hazardous Locations	108.170 - .177 111.105	6.1 - 6.7	6.1 - 6.7	6.1 - 6.7	
<u>VENTILATION</u>					
Ventilation system	61.20-3, 108.181 - .187, 111.103	6.3 - 6.4	6.3 - 6.4	6.3 - 6.4	
<u>ACCOMMODATION SPACES</u>					
Accommodation spaces	108.193 - .215	*	*	*	

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Accommodation spaces inspected	109.433	*	*	*	
Hospital space	108.209	*	*	*	
<u>RAILS</u>					
Rails and guards	58.01-20, 108.217 - .223	10.10	*	*	Loadlines 2005 ed. Annex I, Reg 25 (2)
<u>HELICOPTER FACILITIES</u>					
Heliport	108.231 - .241	13.1 - 13.3	13.1 - 13.4	13.1 - 13.5	
Visual Aids	108.241	13.4	13.5	13.5	
Heliport fueling	108.237 - .239	9.11	9.11	9.16	
Markings	108.653	13.4	13.5	13.5	
<u>FIRE EXTINGUISHING SYSTEMS</u>					
Fire detection systems	108.404 - .413	9.7	9.7	9.10	
Fire main system and stations	108.419 - .427	9.4; SOLAS 74 Chapter II- 2, Reg 4	9.4; SOLAS 74 Chapter II-2, Reg 4	9.7	SOLAS 74 Chapter II-2, Reg 10.2 - .3
Fixed extinguishing system	108.431	9.5; SOLAS 74 Chapter II- 2, Reg 5	9.5; SOLAS 74 Chapter II-2, Reg 5	9.8	SOLAS 74 Chapter II-2, Reg 10.4 - .5
Pressure relief system for air/vapor type space with fixed CO2 system	108.457	*	*	*	
Closures for spaces protected by fixed fire protection	108.455	9.10.1	9.10.1	9.15.1	
Semi-portable extinguishers	108.491 - .496	*	*	*	
Portable extinguishers	108.491 - .495	9.6; SOLAS 74 Chapter II- 2, Reg 6	9.6; SOLAS 74 Chapter II-2, Reg 6	9.9	
Firemen's outfits	108.497	9.9; SOLAS 74 Chapter II- 2, Reg 17	9.9; SOLAS 74 Chapter II-2, Reg 17	9.13	
Fire axes	108.499	*	*	*	
<u>LIFESAVING EQUIPMENT</u>					

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Lifeboats	108.520, 108.525	10.1.3; SOLAS 74, 97 consol. ed., Chapter III, Reg 44, 45, and 46	10.1.3; SOLAS 74, 97 consol. ed., Chapter III, Reg 44, 45, and 46	10.3	SOLAS 74 Chapter III, Reg 4 and 5
Lifeboat equipment	108.575 Table 108.575 (b), 109.301 (f)	10.1.3; SOLAS 74, 97 consol. ed., Chapter III, Reg 41	10.1.3; SOLAS 74, 97 consol. ed., Chapter III, Reg 41	10.18.8	SOLAS 74 Chapter III, Reg 34; LSA Code Chapter IV, 4.4.8
Lifeboat davit assembly	108.550 - .557, 109.301 (f)	10.1.3; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.1.3; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.7	SOLAS 74 Chapter III, Reg 16
Lifeboat winches	108.550, 109.301(f), 111.95	SOLAS 74, 97 consol. ed., Chapter III, Reg 48	SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.7	SOLAS 74 Chapter III, Reg 16
Lifeboat falls	108.553, 109.301(j)	10.5; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.5; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.6	SOLAS 74 Chapter III, Reg 16 and Reg 20.4
Lifeboat launching system	108.555 - .557	10.5; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.6; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.7	SOLAS 74 Chapter III, Reg 16
Inflatable life rafts	108.520, 108.525	10.1; SOLAS 74, 97 consol. ed., Chapter III, Reg 39	10.2; SOLAS 74, 97 consol. ed., Chapter III, Reg 39	10.3	SOLAS 74 Chapter III, Reg 8 and 31
Inflatable life raft launching system	108.530, 108.550 - .553	10.5; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.6; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.7	SOLAS 74 Chapter III, Reg 16

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Arrangements of lifeboats and life rafts	108.525, 108.530	10.5; SOLAS 74, 97 consol. ed., Chapter III, Reg 28	10.4 and 10.5; SOLAS 74, 97 consol. ed., Chapter III, Reg 28	10.5 and 10.6	SOLAS 74 Chapter III, Reg 11
Means of embarkation	108.540	10.11; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.3; SOLAS 74, 97 consol. ed., Chapter III, Reg 48	10.4	SOLAS 74 Chapter III, Reg 11
Life floats	NVIC 4-78	*	*	*	*
Immersion Suits	108.580(c); 33 CFR 140.20-5	SOLAS 74, 97 consol. ed., Chapter III, Reg 33	10.11; SOLAS 74, 97 consol. ed., Chapter III, Reg 33	10.12	SOLAS 74 Chapter III, Reg 7.3
Lifejackets	108.580(b)	10.3; SOLAS 74, 97 consol. ed., Chapter III, Reg 32	10.10; SOLAS 74, 97 consol. ed., Chapter III, Reg 32	10.11	SOLAS 74 Chapter III, Reg 7.2
Ring life buoys	108.580(a)	10.4; SOLAS 74, 97 consol. ed., Chapter III, Reg 31	10.12; SOLAS 74, 97 consol. ed., Chapter III, Reg 31	10.13	SOLAS 74 Chapter III, Reg 7.1
Rescue boat	NVIC 4-78; 108.560 - .575	10.2; SOLAS 74, 97 consol. ed., Chapter III, Reg 47	10.7, 10.8, and 10.9; SOLAS 74, 97 consol. ed., Chapter III, Reg 47	10.8, 10.9, and 10.10	SOLAS 74 Chapter III, Reg 14, 17, and 31
Distress signals	108.595(b)	10.8; SOLAS 74, 97 consol. ed., Chapter III, Reg 35, 36 and 37	10.14; SOLAS 74, 97 consol. ed., Chapter III, Reg 35, 36 and 37	10.15	SOLAS 74 Chapter III, Reg 6.3
EPIRB	108.650	11.4.1.4 and 11.5; SOLAS 74, 97 consol. ed., Chapter IV, Reg 7.1.6	11.4.2.2 and 11.5.1; SOLAS 74, 97 consol. ed., Chapter IV, Reg 7.1.6	11.4.2.2 and 11.5.1	SOLAS 74 Chapter III, Reg 7.1.6

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Portable emergency radio	108.595 (a); 47 CFR 80.1095	10.7; SOLAS 74, 97 consol. ed., Chapter III, Reg 6.2	10.13; SOLAS 74, 97 consol. ed., Chapter III, Reg 6.2	10.14	SOLAS 74 Chapter III, Reg 6.2
Portable emergency radio stowage location	108.595 (a); 47 CFR 80.1095	10.7; SOLAS 74, 97 consol. ed., Chapter III, Reg 6.2	10.13; SOLAS 74, 97 consol. ed., Chapter III, Reg 6.2	10.14	SOLAS 74 Chapter III, Reg 6.2
Line throwing appliance	108.597	SOLAS 74, 97 consol. ed., Chapter III, Reg 17	10.15; SOLAS 74, 97 consol. ed., Chapter III, Reg 17	10.16	SOLAS 74 Chapter III, Reg 18; LSA Code Chapter 7.1

Cranes	108.601	12.1	12.1	12.1	
Cranes examined/approved	107.258 - .259	12.1	12.1	12.1	

Unit Markings	67.120 - .123; 108.661 - .663	*	*	*	
Load line and draft marks	108.661 - .663; 42.07- 5	3.7; 1966 Load Line Convention , Article 3	3.7; 1966 Load Line Convention, Article 3	3.7	1966 Load Line Convention, Article 3
Heliport markings	108.241	13.4.2	13.5	13.5	
Portable extinguisher markings	108.637	*	*	*	
Location of self-contained breathing apparatus	108.635	*	*	*	
General alarm switch and bells marked	108.623 - .625	*	*	*	
Lifeboat markings	108.645	10.1.4; SOLAS 74, 97 consol. ed., Chapter III, Reg 41.9	10.2; SOLAS 74, 97 consol. ed., Chapter III, Reg 41.9	10.3	SOLAS 74 Chapter III, Reg 34; LSA Code Chapter IV, 4.4.9

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Inflatable life raft markings	108.647	10.1.4; SOLAS 74, 97 consol. ed., Chapter III, Reg 39.8	10.2; SOLAS 74, 97 consol. ed., Chapter III, Reg 39.8	10.3	SOLAS 74 Chapter III, Reg 34; LSA Code Chapter IV, 4.2.7
Ring buoy markings	108.649	10.4	10.12.4	10.13.4	
Inflatable life raft launching instructions	108.655	*	10.17	10.17	
Watertight doors marked Inflatable life raft launching instructions "Keep Closed"	108.665	3.6.3.2.1	3.6.5.1	3.6.6	
Buoyant work vest	108.636, 109.335, 160.053	*	*	*	
International shore connection	108.427	9.4.5; SOLAS 74, 97 consol. ed., Chapter III, Reg 19	9.4.22; SOLAS 74, 97 consol. ed., Chapter III, Reg 19	9.7.23	SOLAS 74 Chapter II-2, Reg 10-2.1.7
First aid kit	108.707	10.9	*	*	
Obstruction lights	33 CFR 67	14.7.2	14.7.2	14.8.2	
Fog signal	33 CFR 67	14.7.2	14.7.2	14.8.2	
Litter capable of being used in helo	108.709	10.9	*	*	
Signal light	111.75-18	SOLAS 74, 97 consol. ed., Chapter V, Reg 11	SOLAS 74, 97 consol. ed., Chapter V, Reg 11		SOLAS 74, 97 consol. ed., Chapter V, Reg 19.2.2.2
General Alarms	113.25, 109.201	9.7.2, 10.6.4	10.16, 10.18.6.3	10.18.7.4	LSA Code Chapter IV, 7.2
Hot work	109.573	*	*	*	
Illuminated magnetic steering compass	108.715, 33 CFR 164.35	*	*	*	
Magnetic compass deviation card	33 CFR 164.35	*	*	*	
Maneuvering information fact sheet	109.564, 33 CFR 164.35	*	*	*	

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Navigation publications	109.565, 33 CFR 164.35	*	*	*	
Sounding equipment	108.701, 33 CFR 164.35	*	*	*	
Navigation light indicator panel	111.75-17 (b)	*	*	*	
International code of signals	108.713	SOLAS 74, 97 consol. ed., Chapter V, Reg 21	SOLAS 74, 97 consol. ed., Chapter V, Reg 21	SOLAS 74, 97 consol. ed., Chapter V, Reg 21	

Propulsion machinery	58.05, 111.35	4.1 - 4.7, 7.1 - 7.4	4.1 - 4.7, 7.1 - 7.4	4.1 - 4.8, 7.1 - 7.4	
Propulsion and auxiliary boilers	Part 52	4.1 - 4.5, 7.1 - 7.4	4.1 - 4.5, 7.1 - 7.4	4.1 - 4.6, 7.1 - 7.4	
Boiler fuel systems	56.50-65, 58.01-15	4.7	4.7	4.8	
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CHAPTER 4: Procedures Applicable to Floating OCS Facilities**A. INTRODUCTION**

The term floating OCS facility means a buoyant OCS facility securely and substantially moored so that it cannot be moved without special effort. This term includes, but is not limited to tension leg platforms (TLP's), SPARs, and permanently moored semisubmersibles or shipshaped hulls such as floating production systems (FPS), floating production storage and offloading systems (FPSO), floating storage and offloading systems (FSO), and tanker conversions. The term floating OCS facility does not include mobile offshore drilling units (MODUs) and other vessels.

The authority to inspect all facilities on the OCS comes from the Outer Continental Lands Act (OCSLA), 43 U.S.C. 1333 (d) (1), 1348 (c) and 1356. The inspection and examination of these facilities is covered in the Memorandum of Agreement (MOA) OCS-04 between the Minerals Management Service (MMS), now referred to as the Bureau of Safety and Environmental Enforcement (BSEE), and the Coast Guard, dated 28 February 2008, (still current, but under revision))to determine system jurisdiction and the application of appropriate inspection regulations, both during construction and following installation. On October 1, 2011, the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), formerly the Minerals Management Service (MMS), was replaced by the Bureau of Ocean Energy Management (BOEM) and BSEE as part of a major reorganization.

Before construction is started on a proposed OCS facility of novel design or contains unusual equipment, the owner or operator must submit to Commandant (CG-ENG) for review plans and information for approval and issuance of design basis agreement. **See Chapter 1.C. Examination/Inspection Teams, for more information on conducting overseas exams/inspections.**

B. PLANS

The owner/operator of each floating facility must submit plans to the Coast Guard for approval in accordance with 46 CFR 107, Subpart C, as related to the facility. If construction of the facility is initiated prior to Coast Guard plan review and approval, discrepancies may require correction prior to placing the facility in operation.

C. STANDARDS

Each OCS floating facility must comply with following requirements:

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1. 46 CFR Subchapter F, Marine Engineering.
 2. 46 CFR Subchapter J, Electrical Engineering.

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3. 46 CFR Subchapter I-A, Part 107, Subpart C Plan Review.
4. 46 CFR Subchapter I-A, Part 108, Design and Equipment.
5. 33 CFR Part 67, Aids to Navigation on Artificial Islands and Fixed Structures.
6. 33 CFR Subchapter O, Pollution.
7. 33 CFR Subchapter N, Outer Continental Shelf Activities.

Once a facility meets the requirements found in this section, the cognizant OCMI will issue a Certificate of Inspection (COI) or a Certificate of Compliance (COC) to the facility depending on the documenting nation.

As an alternative, units may meet the alternative design and equipment standards for FOI and FPSO units on the U.S. OCS outlined in CG-ENG Policy Letter No. 01-13 dated 26 June 2013. The Coast Guard has determined that the standards in this letter provide a level of safety comparable to or greater than required by 33 CFR 140.120(b).

D. DRYDOCK EXAM REQUIREMENTS

Each floating OCS facility must undergo a satisfactory drydock examination in the presence of a Coast Guard marine inspector prior to initial certification. Thereafter, the facility must be examined to the satisfaction of the cognizant OCMI, in accordance with its drydocking plan.

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1. Except as provided in paragraphs below, each floating facility must undergo an examination, at least twice within any 5-year period. No more than 3 years may elapse between any two examinations.
 2. The owner or operator of a floating facility may request to the cognizant OCMI, to have an In Service Inspection Plan (ISIP) or an underwater survey in lieu of drydock (UWILD) instead of alternative drydock examinations.
 3. The OCMI is responsible for administering and enforcing the drydock requirements applicable to the facility within his or her jurisdiction. In carrying out these responsibilities, the OCMI may delegate this authority to a classification society which is authorized to conduct inspections for a floating facility on behalf the Coast Guard per 46 CFR Part 8. The Coast Guard must be present for a minimum of 10% of these examinations.
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CHAPTER 4: Procedures Applicable to Floating OCS Facilities**E. Exemptions Under 33 CFR Subchapter N**

1. Personnel – Quarters Habitable**a. Purpose**

As a Floating OCS Facility transits to be placed “on location”, but before it can produce or bring buy back gas on board, there may be a need for employees to live and work on the unit for a period of time. In accordance with 33 CFR 140.5, the OCMI is authorized to exempt a unit under construction from any requirement of Subchapter N that would be impracticable or unreasonable to apply during construction or erection. The OCMI shall issue a “Quarters Habitable” letter to the Floating OCS Facility prior to the issuance of a Certificate of Inspection (COI), in the interim. This letter allows a limited number of personnel onboard and stipulates lifesaving and manning requirements applicable only until the unit receives the permanent COI.

A Temporary Certificate of Inspection, Form CG-854, should NOT be issued (see Marine Safety Manual Volume II, COMDTINST 16000.7 (series), Section A: Marine Inspection Administration, Chapter 3.I.) because the unit has not satisfactorily completed a full inspection for certification. Additionally, a temporary COI carries all the force and effect of a full term COI which permits all operations, for which this unit is not ready for.

b. Example of Quarters Habitable Letter

**QUARTERS HABITABLE APPROVAL, INSERT NAME OF UNIT HERE,
INSERT BLOCK LOCATION HERE**

Mr. / Mrs. Smith,

A Quarters Habitable inspection was completed on (Insert Date Here), at the request of (Insert Company Here). The inspection concluded that all of the requirements for Quarters Habitable based on current practices and guidance have been satisfactorily completed. Quarters Habitability for (Insert Unit Name Here), (Insert CG Number Here), is hereby “Granted”. This approval is subject to the following comments:

QUARTERS HABITABLE MANNING/LIFESAVING REQUIREMENTS:

This unit is a (insert type here: Floating Production System, Floating Production Storage Offloading unit, etc.) of the (SPAR, SEMISUBMERSIBLE, TLP design), and is considered a Floating Offshore Installation with a (active/passive ballast system), inspected and constructed to the requirements of 46 CFR Parts 107 and 108, as directed by 33 CFR 143.120.

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The maximum persons onboard shall not exceed the limitations approved in the (insert Unit Name Here) Emergency Evacuation Plan, (Insert sections applicable in plan here: ex. Supplement D, Quarters Habitable to Flotel demobilization).

Maximum persons allowed onboard for more than 12 hours in any twenty four (24) hours period and to be berthed onboard is not to exceed (ex. sixty eight (68)). This is based upon the total number of berths consisting of (ex. forty four (44)) available in the permanent quarters and (ex. twenty four (24)) available in the portable quarters.

The following manning shall be maintained onboard:

One (1) – OIM (Offshore Installation Manager)

One (1) – BS (Barge Supervisor)

Two (2) – BCO (Ballast Control Operator) (if applicable)

Two (2) – AB (Able Seaman)

One (1) – OS (Ordinary Seaman)

XXX (X) – LB (Lifeboatman) As per 46 CFR 109.323

A trained “firefighting specialist” holding a course completion certificate from an approved firefighting and first aid course meeting the requirements of 46 CFR 10.205(g) and 46 CFR 10.205(h) respectively, may be substituted for the required Able or Ordinary Seaman

The required number of persons in charge of survival craft may be filled by deck officers (Offshore Installation Managers, Barge Supervisors and Ballast Control Operators), Able Seaman or Certificated Persons.

There must be enough lifejackets for each person on board. In addition, a sufficient number of lifejackets must be carried for persons at each workstation or industrial work site.

This exemption permits this OCS facility to continue construction, but not engage in any activity associated with the exploration for, or development or production of the minerals of the Outer Continental Shelf.

Should you have any questions or concerns, please contact (insert POC here).

Upon receipt of the Certificate of Inspection (COI), this letter will no longer remain valid and all requirements will be based on the COI.

c. Standards

The maximum number of persons allowed on board for more than 12 hours in any 24 hour period, should not exceed the completed berthing onboard and available lifesaving (should the floatel (if utilized as part of the lifesaving) move away due to weather).

Manning requirements are derived from D8 Policy Letter 03-00.

d. Distribution

The original copy of the Quarters Habitable letter should be issued directly to the operator of the unit; one copy should be electronically scanned and

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added to “documents” in MISLE. Additional copies may be obtained by the master, operator, owner, or agent of the unit upon written request to the OCMI.

2. Control of Hydrocarbon Flow – “Buy Back Gas”**a. Purpose**

During the construction phase of a Floating OCS Facility, but prior to full production capability, a company may request to the local OCMI, to be issued an approval letter to be allowed to flow buy-back gas onboard. Buy-Back Gas is hydrocarbon gas used as fuel that has been produced by separate facilities and is available through the facility’s export gas riser to the gas pipeline. Hydrocarbon gas can be used to run different types of machinery onboard the unit, and can be more economical and easier to obtain than having diesel fuel transported out to the unit via barge or OSV. In accordance with 33 CFR 140.5, the OCMI is authorized to exempt a unit under construction from any requirement of Subchapter N that would be impracticable or unreasonable to apply during construction or erection.

This second letter, issued after the Quarters Habitable letter, acknowledges that the unit now has the capacity to handle gas introduction to specified areas and additional systems such as firefighting (in addition to that required for Quarters Habitable) and gas detection will now need to be inspected for the safety of the unit and crew.

b. Example of Buy Back Gas Letter

Dear Mr. / Mrs. (insert name here):

Your original request, dated (insert date here), to bring Buy-Back Gas onboard has been reviewed. The arrangements have also been subsequently discussed between your regulatory personnel and members of my staff. These discussions and a walk-down of the systems occurred with inspections onboard (insert name of unit here) during the weeks of (insert dates here). An in depth discussion was also conducted during a meeting on (insert date here) at our Outer Continental Shelf Inspection Office in (insert location here). Your request to bring Buy-Back Gas onboard to (insert purpose here: ex. to serve as Fuel Gas for the Gas Turbine Generators) while maintaining increased manning levels for ongoing construction and commissioning work is hereby “Approved”. Additional stipulations are further discussed in the following paragraphs.

Persons on Board (POB) can continue at the increased levels after Buy-Back Gas is introduced to the facility. Maximum POB at any time is restricted to a total of (insert number here) persons.

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The installed gas detection system shall be fully operable, tested and accepted by both the (insert who approved the system here) and my OCS Inspections staff prior to the introduction of Buy-Back Gas.

Buy-Back Gas is restricted to (insert where and which locations here: ex. those portions of the Compression, Generation and Production Modules) as previously presented. Introduction into additional portions of the systems for testing will require notification to this office and possible reduced POB.

The (insert floatel or unit here) shall be stationed (insert location here) as an additional precaution to reduce the number of "day workers" present in areas charged with Fuel Gas. This office shall be notified of work that may require the (insert vessel or unit name here) to relocate to the (insert alternate landing location here). (This paragraph may be omitted if no floatel is utilized)

This exemption permits this OCS facility to continue construction, but not engage in any activity associated with the exploration for, or development or production of the minerals of the Outer Continental Shelf.

Should you have any questions or concerns, please contact (insert POC here).

c. Standards

All requests are to be evaluated based on gas detection being operational, fire-fighting capabilities and escape routes being available away from the buyback gas piping and machinery utilizing the buy-back gas.

d. Distribution

The original copy of the Buy-Back Gas letter should be issued directly to the operator of the unit; one copy should be electronically scanned and added to "documents" in MISLE. Additional copies may be obtained by the master, operator, owner, or agent of the unit upon written request to the OCMI.

F. ADDITIONAL REQUIREMENTS FOR STOWAGE OF OIL IN BULK

A floating production facility that is also used for storage of oil in bulk will be considered a tank vessel and should comply with the regulations below.

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1. 46 CFR Subchapter D, Tank Vessels.

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2. 33 CFR Part 157, Rules for the Protection of the Marine Environment Relating to Tank Vessels Carrying Oil in Bulk.

G. CONVERSIONS

When an existing ship, tankship, or tank barge is converted to a FPSO unit, the Marine Safety Center must determine on a case by case basis if the conversion is considered major and if OPA 90 requirements are applicable (e.g., tank access requirements).

H. GUARDRAILS

-
1. 33 CFR Subchapter 143.110 requires a 42 inch top rail height for guardrails protecting the perimeter and all openings on the decks of OCS facilities except MODUs. This type of rail is typical of a vessel rail with a greater top rail height to prevent a person from falling over. This requirement further directs designers and operators of floating facilities to design criteria found in 46 CFR 108. 46 CFR 108.217 requires a 39.37 inch (or 1 meter) top rail height for guardrails protecting the perimeter and all openings on the deck. This type of rail is more typical of a “vessel” rail with multiple courses to inhibit a person from washing through in a greenwater event.
 2. Given the height of the decks on a floating facility (other than ship shape) and the motion dampening abilities of floating facilities to date, the possibility of a greenwater event occurring while personnel are onboard is remote and the rail height found in 33 CFR 143.110 (42”), provides a higher level of safety for the most likely event that could occur, falling over versus washing through.
 3. Floating facilities are permitted to install either of the guardrail designs described above, provided that all rails throughout the entire facility on all deck perimeters and openings are identical. Exception is made for the landing areas associate with stacked modular portable quarters. Here they must meet 46 CFR 108.217 (39”), because they are so frequently interchanged and deployed onboard conventional MODUs.
 4. Removable guardrails may be installed where operating conditions warrant their use. Due to the absence of adverse movements in floating facilities (other than ship shape) hull designs, designers and operators need not comply with the internal storm rail requirements of 46 CFR 108.221 (b) and (c). Operators are still required to comply with the external storm rail requirements of 46 CFR 108.221 (a).
 5. This direction on guardrail heights does NOT apply to floating facilities with conventional ship-shaped hulls.

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I. HELICOPTER FACILITIES

The Coast Guard considers the helicopter lighting scheme of the 2009 MODU Code, Chapter 13 "perimeter lights" to be at least as effective as the requirements of 46 CFR 108.241. CG-ENG has documented the acceptance of the international "green light" scheme on floating OCS facilities (see CG-ENG Policy Letter 01-13). An OCMI may use this CG-ENG policy letter as evidence of compliance for the purpose of issuing a COC to a foreign flag floating OCS facility; an individual waiver should not be required.

J. HOSE REELS WITH NON-COLLAPSIBLE HARD-RUBBER FIRE HOSES

Commandant (CG-ENG-4) has approved certain hose reels for use on floating facilities (other than ship shape and MODUs). These hose reels are required to be outfitted with non-collapsible hard-rubber hoses that meet Standard 92 of the Underwriters Laboratories, Inc. or Military Specification H24580. These hoses may be used on floating facilities as a substitute to the required collapsible fire hose, subject to the following conditions:

1. They may be installed only on open decks; or inside columns, pontoons, and machinery spaces as long as there is adequate room to unreel the hose to its full length.
2. Hydrants with collapsible "UL-19" hoses should be installed inside the accommodation spaces for immediate access by the crew. However, if there are no fire hydrants installed inside the accommodation spaces, all of the following conditions must be met:
 - (a) The accommodation module cannot be longer than 70 feet in length and 40 feet in width. These dimensions may be further limited based on the "coverage" requirements of paragraph 3 (below) if there are obstructions (hallways and secondary rooms) inside the accommodation module.
 - (b) Coast Guard marine inspectors, during annual inspection, shall randomly select permanently-assigned floating facility personnel not normally part of a fire fighting team, and verify that they are familiar with the location of all firefighting equipment; specifically, the location of the external hose stations that are to be used for internal spaces.
3. All fire hydrants (with collapsible or non-collapsible hoses) must meet the following "coverage" requirements per 46 CFR 108.423.
 - (a) Fire hydrants with collapsible or non-collapsible hoses must be able to spray each

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- accessible space with at least two effective spray patterns of water from separate hydrants.
- (b) In all internal and external spaces, other than the main machinery space, at least one spray pattern of water must be from a single length (50 feet) hose. If the hose is over 50 feet in length, then only the first 50 feet of one hose at the hydrant may be used for determining coverage. The length of the second hose is unrestricted, as long as minimum nozzle pressure of 50 psi can be provided with both hoses flowing.
 - (c) In the machinery space both spray patterns of water must be from a single length (50 feet) hose. If the hose is over 50 feet in length, then only the first 50 feet of one hose at the hydrant may be used for determining coverage.
 - (d) NVIC 6-72 allows for an effective spray pattern of about 20-25 feet in still air.
- 4. Hose reels with non-collapsible hard rubber hoses that do not meet Standard 92 of the Underwriters Laboratories, Inc. or Military Specification H24580 currently installed onboard existing floating facilities (other than ship shape), must obtain specific approval from Commandant (CG-ENG-4).
 - 5. Replacement of only the non-approved fire hoses is acceptable. Replacement of the whole firefighting system with appurtenances is not required. However, the nozzles must be Coast Guard approved and compatible with the system. The type of nozzle to be installed can normally be found on the Coast Guard type-approval certificate for the hose.

K. IN SERVICE INSPECTION PLANS (ISIP)

1. Introduction

- a. There are, and continue to be, unique and unconventional floating facilities being constructed to work in the OCS that are not fully addressed by the MODU drydocking regulations referenced by 33 CFR 143.120. Facilities, such as semi-submersibles, TLP's, mini-TLP's and various SPAR and FPSO designs, are characterized by their large size, ability to exceed the capacities of most drydocks, and a tendency to remain permanently located on a fixed mooring for the life of the facility. Drydocking cycles are complex, if not impossible, and the ISIP program was introduced with these types of facilities in mind.
- b. Companies operating one of these facilities must ensure that a customized and approved ISIP Plan is developed. The ISIP must address the hull (internal and external) inspection intervals, taking into account the unique structures of these units. 33 CFR 143.120, Floating OCS Facilities, refers to 46 CFR 107.261 and .265 for

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drydock inspection requirements. 33 CFR 143.120 also provides for equivalences when appropriate and is the basis for authorizing floating facilities to participate in the ISIP to meet drydocking requirements.

- c. The following guidelines provide consistency for the drydocking requirements of floating facilities while maintaining the authority of the OCMI's to modify inspection intervals as necessary to address the uniqueness of each facility.

2. Approval

- a. Companies requesting to use this program should develop their ISIP Plans, for submittal to the OCMI of the zone that a facility will initially be operating, per 33 CFR 143.120, requiring floating OCS facilities to submit plans per 46 CFR 107 subpart C: The requirements of the ISIP Plan draw heavily from NVIC 1-89 Underwater Survey Guidance, as modified by the comments in Section 4 (the Inspection Process) of this subpart.
- b. Companies requesting to use the ISIP should submit their plans a minimum of 90 days prior to entry of the facility into service, to the Officer in Charge, Marine Inspections (OCMI) of the zone that the facility will initially be operating.
- c. OCMI's may seek additional guidance from the appropriate district office or Commandant (CG-CVC-2), as necessary.

3. The Plan

- a. The ISIP Plan is a two-part document that addresses prescriptive and operational considerations, as well as provides plans that identify the crucial/high stress inspection points.
 - (1) The Operational Procedures and Requirements section of the ISIP Plan will be reviewed by the cognizant OCMI.
 - (2) The Structural Critical Inspection Points (SCIP) section of the ISIP Plan must include an explanation as to why a section/area is designated as a SCIP and must be reviewed by the facilities classification society.
 - (a) In the event the structure is not under classification, the Coast Guard Marine Safety Center (MSC) will conduct the review of the SCIP section of the ISIP and MSC must include an explanation as to why the area is being designated as such.

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- (b) Submissions for review by the MSC should be submitted a minimum of 90 days prior to entry of the facility into service, which is the date the Certificate of Inspection, is issued and usually the date of “first oil”.
- (c) Upon completion of their review, the Classification Society (or Recognized Organization (RO)) or MSC shall provide a statement saying: “This plan has been reviewed and appropriately identifies all crucial and high stress areas to be inspected.”
- b. The ISIP plan should be approved prior to the initiation of operations by the floating facility. Plans that were approved prior to 11 February 2003, (the original date of the Commandant (CG-MOC-2) Policy Letter 03-01, which initiated the implementation date), may continue to be used unless a situation occurs (such as excessive wastage, cracking, etc.) that results in the OCMi determining that the plan should be reviewed and modifications required. Subsequent changes and modification to plans with approval dates prior to Feb 11, 2003, are required to meet the provision of this section.

4. The Inspection Process

The following areas are specific to the ISIP program and represent a deviation from the UWILD program

- a. Prior to entry into the ISIP Program:
 - (1) Since TLPs and SPARs are typically too large to examine in drydock, a full assessment of the hull structure shall be made prior to initial placement of it, or its section, into the water.
 - (2) As listed in NVIC 1-89, a full video survey of the condition of the hull or its parts shall be made for future reference purposes.
 - (3) Notifications of the major events surrounding the construction and launching of the facilities hull shall be made to the OCMi of the zone in which the facility will initially be operating; providing ample opportunity for Marine Inspectors to examine and document the initial condition of the hull.
- b. Inspection Cycles.
 - (1) If the facility class is of a novel to unconventional design, a 40% annual inspection cycle (equivalent to twice in 5 years) must be used for the first five years of the OCS facilities service life.

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- (2) After five years, if there have been no major issues; the OCMI may consider allowing a Modified Inspection schedule, “once in five year” (20% annually) cycle.
- (3) A facility class is considered novel or unconventional if:
- (a) There is no known facility of similar design on the U.S. OCS; and
 - (b) There is no design standard (i.e., Coast Guard regulations, classification society rules accepted by the Coast Guard, or industry standards accepted by the Coast Guard) on the facility.
- (4) The decision to allow a facility to be placed in an alternative inspection program should be based on the results of previous exams of similar facilities, the quality of the operating company’s previous inspections for other facilities and any unique operating conditions of the facility. The company should have a satisfactory history of operating floating OCS facilities for at least 5 years. They should be proactive in their preventative maintenance program and are encouraged to meet some type of quality certification program. Additionally, if the facility experiences a significant fractures or hull degradation during the initial cycle, the OCMI may require a more stringent inspection schedule or return to the equipment schedule in 4.b (1) above.
- (5) Under the 40% annual inspection cycle it is acceptable for a company to inspect 100% of the hull every 2-1/2 years vs. 40% every year.
- (6) For Facilities on the Modified Inspection Program (20% annual inspection cycle which is equivalent to once- in-5 years), companies may elect to inspect 50% of the hull every 2-1/2 years vs. 20% every year.
- (7) ISIP Inspection Intervals:

	Interval or...	Alternative Option	Inspection Cycle
Internals (Internal; Structural Exam)	40% Annually	100% @ 2-1/2 yrs	Twice-in-5 yrs
Externals: (Underwater Survey)	40% Annually	100% @ 2-1/2 yrs	Twice-in-5 yrs

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As an option for floating OCS facilities built and inspected in quadrants, the following options may apply:

	Interval or...	Alternative Option	Inspection Cycle
Internals (Internal; Structural Exam)	2 quadrants every 15 months (40% annually)	4 quadrants @ 2-1/2 yrs	Twice-in-5 yrs
Externals: (Underwater Surveys)	40% annually	100% @ 2-1/2 yrs	Twice-in-5 yrs

- (8) For qualifying floating OCS facilities, the OCMI may approve an ISIP with this “modified inspection program”.

	Interval or...	Alternative Option	Inspection Cycle
Internals (Internal; Structural Exam)	20% annually	50% @ 2-1/2 yrs	Once-in-5 yrs
Externals: (Underwater Surveys)	20% annually	50% @ 2-1/2 yrs	Once-in-5 yrs

As an option for floating OCS facilities built and inspected in quadrants, the following options may apply:

	Interval or...	Alternative Option	Inspection Cycle
Internals (Internal; Structural Exam)	1 quadrant every 15 months (20% annually)	2 quadrants @ 2-1/2 yrs	Once-in-5 yrs
Externals: (Underwater Surveys)	20% annually	50% @ 2-1/2 yrs	Once-in-5 yrs

c. Inspection Procedures.

- (1) In any of the cases above, the examination must be conducted within 2-3 years of the last exam and no more than 5 years may elapse from the previous.
- (2) For those facilities placed on the Modified Inspection Program, the internal structural examination shall be conducted on a different portion of the internal areas of the facilities external hull.
- (3) The remaining portions of the internal structure and outer hull must then be completed over the next 2.5 years resulting in a complete internal and external exam by the end of a 5 year period.

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- (4) The underwater examination of the external hull shall include all applicable sea valves, sea chests, cathodic protection, and special examinations of critical structures which have been designated in the approved ISIP plan.
 - (5) During each hull examination under both the “twice in five year” and the “once in 5 year” cycles, the internal hull exams shall be conducted at different areas from the external hull exam. For example, if an internal exam is conducted in one quadrant, the external exam should be conducted in a different quadrant. However, if fractures, flaws, or corrosion is noted on one side (on the interior or exterior) of the hull plating, the other side of the plating should be examined.
-

5. Facilities 15 Years of Age and Older

- a. After 15 years of age, the hull inspection intervals will return to the full requirement of both internal and external examinations required twice in 5 years, unless the companies requests and is granted an extension from the cognizant OCMI.
 - b. In considering an extension of the modified inspection program, the OCMI shall consider:
 - (1) the change in condition of the hull from the initial underwater surveys to the most recent survey (gauging report as detailed in Section 3 of NVIC 1-89 may be accepted to assess condition);
 - (2) the repair frequency of critical areas; and
 - (3) coating and condition of internal tanks and voids.
 - c. Based on this and any additional information, the OCMI may extend the ISIP for this floating facility 5 or 10 additional years.
 - d. The owner must request a new extension at the conclusion of each OCMI approved extension to continue the intervals listed in 4.b (1) or (2) **of Section 4 (The Inspection Process) of this Subpart.**
-

6. Survey Procedures

- a. The majority of facilities will not be capable of increasing freeboard for visual inspection of the hull, through reduction of ballast. Where a facility cannot practically

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- “light ballast” such as a TLP or SPAR, it may remain at operating drafts for the survey.
- b. Though these floating facilities are designed to survive extreme weather situations, such as hurricanes, they do not have the ability to relocate or change their heading as a vessel would to confront adverse weather conditions. For information on Post Hurricane Inspection procedures see Chapter 1 Part I, of this Section G.
 - c. Inspection of the internal and external parts of the hull shall be conducted as per the ISIP Plan to the satisfaction of the attending marine inspector in order for the company to receive credit for the examination. Third party inspectors are not to be used as a replacement for the CG Inspector; however they may be utilized to augment the marine inspector and perform specialized inspection tasks such as nondestructive testing (NDT).
 - d. The scheduling of the hull examination and other required inspections (i.e., Inspections for Certification and Annual Inspections) must be coordinated so that marine inspector attendance is required no more than once per year, unless specifically approved by the OCMI.
-

7. In Service Inspection program (ISIP) Plan – Organization

- a. Below is an outline of the ISIP plan and how it should be organized when it is submitted for approval/review.
- b. This ISIP organization shall be followed in development if new ISIP’s. Companies may add additional sections or make minor deviations from the outline structure below, as long as the minimum contents have been included and basic outline adhered to. Companies may also include large tables and procedural lists as appendixes that are referenced from within the main document.
- c. ISIP’s that have been approved prior to Feb 11, 2003, may retain their original formatting. However, format revision must follow the new guidance below.

Table of Contents**I. Introduction****A. General Description****B. Regulatory compliance, standards and interface with regulators****C. Nomenclature**

SECTION G: OUTER CONTINENTAL SHELF ACTIVITIES**CHAPTER 4: Procedures Applicable to Floating OCS Facilities****D. References****II. Operational Procedures and Requirements****A. Inspection Procedures**

1. Description of underwater body inspections and internal structural inspection. NVIC 1-89 (as modified by this Section G) should be consulted in development of this section.
2. Detailed scope of individual inspection types that may potentially be employed such as hull gauging, ROV operations, tank entry, NDT, and visual inspections.
3. Special inspection techniques, interval and procedures for those crucial/high stress locations.
4. Discussion of general dive operations, safety standards and interaction with diving contractors.
5. Procedural checklists for each operation.
6. The inspection technique for inspecting the shell plating from the inside.
7. The inspection technique for inspecting the underwater portion of the hull.

B. Inspection Schedule and Frequency

1. Outline of general inspection schedule and frequency as required. This should discuss high level scheduling and complement the detailed inspection cycle as for completion listed in **Part C (below)**.
2. The extent of each annual inspection and the areas to be inspected for the lifetime of the facility at the intended site.

C. Facility Component Identification

1. General description of facility including listing of measurements and particulars.

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2. Hull description. Description of hull and special features including general discussion of scantlings and areas of high stress concerns (inspection cycles and general inspection procedures).
3. Structural Critical Inspection Points. General discussion of types of areas that are considered critical and types of inspections. Reference details in Section III of this document (page 4-15) for all specifics.
4. Sea chest and sea valves. (Listing, details, inspection cycles, general inspection procedure.) The method to blank/plug and remove each sea valve during each 5-year period. The method to ensure operability of each sea valve and to externally examine all sea chests/valves for deterioration and marine growth during each 2-1/2 year period.
5. Cathodic protection systems and anodes. This section should include listing, details, inspection cycles & general inspection procedure for cathodic protection systems and anodes.
6. Accessible compartments and voids. These sections should include listing, details, inspection cycles, general inspection procedures for accessible compartments and voids.
7. In accessible compartments and voids. This section should include listing, precise location, details, inspection cycles, general inspection procedures and provisions taken to ensure continued integrity of the in accessible compartments and voids.)

D. Reporting and Documentation

1. General record keeping procedures for reports and surveys (company policy).
2. Notification and report delivery procedures involving the classification society and the Coast Guard.
3. Specific record keeping procedures and report contents for each component category in Section C.
4. Record keeping for dives conducted during inspections of the underwater hull.
5. The manner in which deficiencies and the procedures for their repair will be handled.

SECTION G: OUTER CONTINENTAL SHELF ACTIVITIES

CHAPTER 4: Procedures Applicable to Floating OCS Facilities**E. Damage Assessment & Repair Procedures**

1. Discussion of categories of damage and company procedures to mitigate.
2. Casualty notification procedures with regard to 33 CFR 149.30 and 46 CFR 109 following damage to facility relating to underwater body and hull structure.
3. Specific procedures and methods to investigate damage or potential damage to hull or internal structures.
4. Procedures to submit proposed methods for repair of both underwater defects and damage to the RO and the Coast Guard.

III. Structural Critical Inspection Points

- A. Details of structurally critical locations on the hull of the facility (listing, details, inspection cycles & general inspection procedure).
- B. Drawings detailing the crucial/high stress inspection points as determined by a recognized RO or by the MSC.

L. Manning of Non-self Propelled Floating Outer Continental Shelf (OCS) Facilities

1. Purpose

This section does not apply to ship-shape floating production systems (FPSs) or floating production, storage, and off loading systems (FPSOs). Floating OCS Facilities as defined in 33 CFR 140.10 includes but are not limited to tension leg platforms (TLPs), SPARS, and non-self propelled FPSs. Regulation in 33 CFR, Subchapter N specifically exclude mobile offshore drilling units (MODUs) from the definition of floating OCS facilities. 33 CFR 143.120(c) authorizes the cognizant Officer in charge of Marine Inspection (OCMI) to issue a Certificate of Inspection (COI) after determining that the floating OCS facility meets all applicable requirements. For each COI issued, the OCMI designates an appropriate manning level to ensure the floating OCS facility can be operated safely during both routine and emergency conditions.

2. Manning

CHAPTER 4: Procedures Applicable to Floating OCS Facilities

- a. The following baseline manning scales are established for floating OCS facilities:

Floating OCS Facilities:

One (1) - CG Licensed Offshore Installation Manager (OIM)

One (1) - CG Licensed Barge Supervisor (BS)

Two (2) - CG Licensed Ballast Control Operators (BCOs)

Two (2) - Able Seaman

One (1) - Ordinary Seaman

Persons in charge of Survival Craft determined per 46 CFR 109.323.

- b. One of the two BCOs may be eliminated provided the OCMI is satisfied that the safety of the unit will not be compromised by maintaining a periodically unattended ballast control room. The owner/operator of the facility would need to prove that the damage stability criterion is so robust that the facility wouldn't need to ballast in a worst case environmental condition for that location. Existing units (units with manning scales already accepted by the local OCMI as of the issuance of this version of the MSM) would be grandfathered in and their current manning scales would remain.
- c. A trained "firefighting specialist" holding course completion certificates from approved firefighting and first aid courses meeting the requirements of 46 CFR 10.205(g) and 46 CFR 10.205(h)(1) respectively may be substituted for the required Able or Ordinary Seaman. The "firefighting specialist" need not hold either a Coast Guard license or MMD. A licensed officer serving in a position required on the floating OCS facility's COI may not be "double counted" as a firefighting specialist. Licensed officers in excess of those required on the unit's COI may be counted as a "firefighting specialist."
- d. The required number of person's in charge of survival craft shall be listed on the COI as "Certified Lifeboatman," but may be filled by deck officers (offshore installation mangers, barge supervisors, and ballast control operators), able seaman, or certified persons. It is not mandatory for deck officers to possess an MMD with a Lifeboatman endorsement to serve in this capacity.
- e. The sample manning scales above represent baselines for the OCMI to use in evaluating required manning for each floating OCS facility. The actual manning required by the OCMI could be more or less depending on the specifics of the particular floating OCS facility.
- f. When establishing manning requirements for floating OCS facilities, OCMI's shall consider the units stability characteristics, mooring arrangement and the frequency of required ballasting operations (or tendon/mooring system tensioning), including the degree of ballast system automation. Other factors to consider in establishing appropriate manning include whether produced oil is

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stored aboard the facility, including the mooring and unmooring requirements of any associated lightering operations.

- g. For non-self propelled floating OCS facilities, the deck officers, who include offshore installation managers, barge supervisors, and ballast control operators, may serve as persons in charge of survival craft even if they do not possess a Merchant Mariner's Document (MMD) with a lifeboatman endorsement. All OCMI's shall include the following endorsement on the COI for these facilities to clarify this matter:**

"THE REQUIRED NUMBER OF PERSONS IN CHARGE OF SURVIVAL CRAFT LISTED ON THIS DOCUMENT AS 'CERTIFIED LIFEBOATMAN' MAY BE FILLED BY DECK OFFICERS (OFFSHORE INSTALLATION MANAGERS, BARGE SUPERVISORS, AND BALLAST CONTROL OPERATORS), ABLE SEAMAN, OR CERTIFICATED PERSONS."

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CHAPTER 5: Procedures Applicable to Fixed OCS Facilities or Platforms**A. Applicability of Regulations**

A fixed Outer Continental Shelf (OCS) facility means a bottom-founded OCS facility permanently attached to the seabed or subsoil of the (OCS), including platforms, guyed towers, articulated gravity platforms, and other structures as noted in 33 CFR 140.10.

The regulations found in 33 CFR Subchapter N are applicable to all fixed OCS facilities operating outside of state waters. All fixed facilities must be marked in accordance with the regulations found in 33 CFR 67.

The Outer Continental Shelf Lands Act (OCSLA), as amended, directs the Coast Guard and Bureau of Safety and Environmental Enforcement (BSEE) to conduct initial and annual inspections of OCS facilities. The annual inspection may be in the form of scheduled or unannounced inspections.

This inspection requirement is further modified by 33 CFR 140, subpart B, which requires the Coast Guard to conduct initial inspections and allows the owner/operator of the facility to conduct annual self-inspections. The Coast Guard (NCOE) will conduct recurring training with and for BSEE to be able to conduct these inspections on the CGs behalf.

B. DEVELOPING PARTNERHIPS WITH BSEE

OCMIs are encouraged to develop partnerships with regional BSEE personnel to achieve the following:

- a. Develop lines of communication for information exchange.
- b. Accompany BSEE inspectors on a space available basis.
- c. Develop a targeting strategy for OCS facilities.

C. LIFESAVING EQUIPMENT ON UNMANNED FIXED PLATFORMS

33 CFR 144.10-1 does not specifically require that lifesaving equipment be available on an unmanned platform at all times; it is only required when personnel are on the platform.

SECTION G: OUTER CONTINENTAL SHELF ACTIVITIES**CHAPTER 5: Procedures Applicable to Fixed OCS Facilities or Platforms****D. FIXED PLATFORM INSPECTION PROGRAM**

The Outer Continental Shelf Lands Act (OCSLA) authorizes the Coast Guard to utilize another federal agency for the enforcement of Coast Guard regulations on the OCS. On February 7, 2002, the Coast Guard amended 33 CFR part 140 to grant BSEE the authority to act on behalf of the Coast Guard to perform inspections on fixed OCS facilities in order to ensure compliance with Title 33 C.F.R. Chapter I, Subchapter N, Outer Continental Shelf Activities.

The Coast Guard continues to be responsible for initial fixed facility inspections. However, once the initial inspection has been completed, the annual oversight inspections are conducted by BSEE inspectors on the behalf of the Coast Guard. The Coast Guard retains regulatory authority over its self-inspection program, with BSEE responsible for ensuring compliance with self inspections.

1. Jurisdiction

In accordance with the jurisdiction afforded us by OCSLA the Coast Guard has jurisdiction over fixed OCS facilities in waters beyond the seaward limits of state waters. Fixed OCS facilities located in state waters are not subject to Coast Guard inspection and are not included in this program.

2. Inspections

- a. 33 CFR Subchapter N requires owners and operators of fixed OCS facilities to conduct an annual self-inspection. These facilities are also subject to scheduled and unscheduled spot-check inspections.
- b. BSEE administers the fixed platform annual oversight inspection program on behalf of the Coast Guard to ensure compliance with 33 CFR Subchapter N.
- c. BSEE ensures compliance with the self-inspection program and conducts spot-check inspections on fixed OCS facilities. The Coast Guard will continue to conduct initial inspections on newly constructed fixed OCS facilities.
- d. While BSEE is acting on behalf of the Coast Guard, there is nothing to prevent a Coast Guard inspector from conducting a spot check inspection on a fixed facility at any time or concurrently with other OCS inspection activities. MIs are encouraged to conduct such spot checks when conducting other activities in the vicinity of a fixed platform. The Coast Guard shall forward the results of all spot check inspections regardless of the findings the appropriate BSEE office.
- e. If the Coast Guard issues a Vessel/Facility Inspection Requirements, Form CG-

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835, during a spot check inspection, the inspector shall ensure the owner/operator corrects the deficiency within a reasonable time frame (generally no more than 30 days).

- f. The initial inspection process:
 - (1) District receives and reviews the Application for Class I Aids to Navigation on Artificial Islands and Fixed Structures, Form CG-4143, submitted by facility owner/operator.
 - (2) Districts shall ensure timely approval and forwarding of the applications to the cognizant OCMI.
 - (4) The OCMI conducts initial OCS fixed facility inspections per 33 CFR Subchapter N within 45 days or upon notification from owner/operator that the facility is ready.
 - (5) The OCMI documents the results of the initial inspection in MISLE.
 - (6) The OCMI ensures that all outstanding deficiencies are corrected in a timely manner. OCMI forwards documentation including the Application for Class I Aids to Navigation on Artificial Islands and Fixed Structures, Form CG-4143, and Inspection results to BSEE.
 - (7) Inspection responsibilities are turned over to BSEE.
- g. BSEE Inspectors use a Potential Incidents of Noncompliance (PINC) checklist together with the facility's completed Fixed OCS Facility Inspection Report, Form CG-5432 to ensure compliance with Coast Guard Regulations.
- h. BSEE inspectors issue an Incident of Noncompliance (INC) to the owner/operator for any deficiencies that can't be corrected during the course of the inspection. INCs may include a warning, component shut-in, or a facility shut-in, depending on the severity of the deficiency and the safety hazard that it creates.
- i. BSEE tracks and verifies that all outstanding deficiencies are corrected within a reasonable timeframe (generally no more than 30 days). Noted deficiencies that are corrected during the course of the inspection are documented by BSEE.
- j. Appeals of regulatory actions and resultant penalties shall be processed exclusively by the issuing agency (Coast Guard or BSEE) in accordance with the issuing agency's appeal process.

CHAPTER 5: Procedures Applicable to Fixed OCS Facilities or Platforms**3. Investigations**

As specified in Title 33 CFR Subchapter N, and within the 2009 MOA between BSEE and the Coast Guard, the Coast Guard retains investigation responsibilities for all incidents related to OCS activities.

- a. Where the Coast Guard and BSEE have overlapping responsibilities, the agencies should work together to minimize or eliminate the duplication of effort.
- b. The Coast Guard will normally be the lead investigative agency for incidents listed in 33 CFR 140.201.
- c. All incidents subject to investigation under 33 CFR 140.201 shall be conducted in accordance with 46 CFR 4 and documented in MISLE

4. Fixed OCS Facility Inspection Report, Form CG-5432

- a. Facility owners and operators do not need to submit Fixed OCS Facility Inspection Report, Form CG-5432, to the Coast Guard or BSEE. Instead the operator shall conduct the required self-inspection annually and retain a copy of the Fixed OCS Facility Inspection Report, Form CG-5432, on board the facility.
- b. **By regulation**, the two (2) most recent Self – Inspection Reports **(or two years worth of inspection reports) shall** be retained on board.
- c. BSEE inspectors verify that the Fixed OCS Facility Inspection Report, Form CG-5432, has been completed during their annual inspection of each facility.
- d. In instances where the Fixed OCS Facility Inspection Report, Form CG-5432, cannot be retained on board (unmanned facilities with no living quarters); a copy may be retained at an alternate location convenient to the operator. Upon request, the facility operator must provide copies of any Fixed OCS Facility Inspection Report, Form CG-5432's, to the Coast Guard or BSEE.
- (e) **The Fixed OCS Facility Inspection Report, Form CG-5432, shall be completed within, and not to exceed, 12 months from the last inspection date. (Ex. If an inspection was last completed on 02JUN2014, the next inspection must be completed on or before the end of the month of JUNE2015.)**

5. Emergency Evacuation Plans (EEPs)

The Coast Guard will review and approve EEPs in accordance with 33 CFR 146.140.

CHAPTER 5: Procedures Applicable to Fixed OCS Facilities or Platforms

during their inspection of fixed facilities, BSEE inspectors ensure compliance with EEP requirements.

6. Lifesaving/ Firefighting Equipment

- a. Variances. BSEE consults with the local OCMI to determine suitable options, temporary measures or restrictions during the repair or replacement of required firefighting equipment and lifesaving appliances. BSEE initiates this process with the local OCMI. In cases where the owner/operator contacts the Coast Guard directly, BSEE shall be notified immediately.
 - b. Approval process. The Coast Guard shall continue to approve equipment for use on fixed offshore facilities and publish the list of approved equipment in the Federal Register and COMDTINST M16714.3 (Series) in accordance with 33 CFR 140.15(b). The Coast Guard shall also notify BSEE of any newly approved equipment and provide training as needed.
-

7. Catwalks – Manned Platforms

33 CFR 143.101 (c) requires all manned OCS facilities be provided with at least two primary means of escape extending to the water. 33 CFR 143.101 (a) defines primary means of escape as fixed stairways or ladders of metal construction. For OCS facilities that are connected to adjacent facilities by bridges, or catwalks which allow free access from one facility to another, the catwalk may serve as one of the primary means of escape provided:

- a. The catwalk leads to another location that provides a primary means of escape extending to the water, and
 - b. There is a sufficient amount of primary lifesaving gear per 33 CFR 144.01-1 or 144.01-15 at this alternate location to accommodate 100% of the personnel onboard the manned facility if they cross the catwalk and egress to the water via this alternate escape route.
-

8. Single Well Caissons – Unmanned Platforms

33 CFR 143.101(d) requires unmanned OCS facilities be provided with one primary means of escape and, when personnel are onboard and one secondary means of escape for every 10 persons onboard. In the case of small single-well caisson type facilities, the primary means of escape is usually a fixed ladder from the topside structure (work deck) to the waterline. Since the work deck on these platforms is typically very small, a worker

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cannot become trapped far from the primary escape route. Furthermore, the risk to workers attending these facilities is quite low because there is usually very little processing equipment onboard, plus the limited frequency and duration in which personnel visit these facilities further lessens the risk. Taking all this into consideration, a single-well caisson type facility must have one primary means of escape but will not be required to have a secondary means of escape, even when workers are on the platform, provided:

- a. The work deck is no more than 20 ft x 20ft (or 400 square feet) in size, and
- b. The work deck is no more than 20 ft above mean low water.

9. Swing Ropes and Knotted Man Ropes

A primary means of escape shall be installed to meet the requirements in 33 CFR 143.101. A secondary means of escape shall be constructed and installed to the satisfaction of the cognizant OCMI. Item (8) of Fixed Platform Inspection Program, CCGD8INST 16711.1 (series) is the recommended standard for construction and maintaining man ropes and swing ropes. Particular attention should be given to man ropes and swing ropes due to weathering of the ropes and the dangers that are encountered when using these devices.

Man ropes should be replaced immediately if there is any evidence of wear, dry rot, mildew or ultraviolet deterioration. Swing ropes are subject to all the same considerations as man ropes.

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CHAPTER 6: Procedures Applicable to Other Vessels Engaged in OCS Activities**A. OFFSHORE SUPPLY VESSELS (OSVs)**

1. Definition/Applicability

For U. S. vessels, as long as the vessel in question fits the definition of an OSV, it is considered an OSV and may be inspected as such.

- a. **An OSV is defined in 46 U.S.C. 2101(19) as “a motor vessel that regularly carries goods, supplies, individuals in addition to the crew, or equipment in support of exploration, exploitation, or production of offshore mineral or energy resources” (See Note 1 below)**
- b. The application of this definition is not affected by the physical location of the vessel. The word "offshore," as it modifies "supply vessel" has no geographical significance.
- c. "Offshore" is not defined by statute or regulation. Past administrative policy has been to define "offshore" as that water seaward of the coastline (as measured from the mean high water mark).
- d. Additionally, 46 CFR Subchapter L allows for the granting of "grandfather" status to previously certified OSVs, provided they maintained a COI prior to the effective date of the regulations and they continue to receive inspections following the same guidance enforced prior to the effective date of the regulations. The "grandfather" status is forfeited should the vessel change its service from OSV to another service or undergo a major modifications.

OSV's less than 6,000 GT ITC (500 GRT if GT ITC not assigned) that were grandfathered had to complete construction and had to receive a COI prior to 16 March 1998. OSVs of at least 6,000 GT ITC (500 GRT if GT ITC not assigned) that were grandfathered had to complete construction and receive a COI prior to 18 August 2016.

NOTE 1: Section 617 of the Coast Guard Authorization Act of 2010 (PL 111-281) amended 46 U.S.C. 2101(19) by removing the tonnage limitation in the definition of 'offshore supply vessel.' As a result, OSVs as defined under 46 U.S.C. 2101(19) are covered under this waiver, while operating from a foreign port, regardless of tonnage limitation (46 CFR 15.720(b)(1)). The 1,600 GRT (GT ITC if GRT is not assigned) limitation specified in 46 U.S.C. 8103(b)(3)(A) pertains to other similarly engaged vessels, which are not covered under 46 CFR 15.720(b). For other vessels in service similarly engaged, see Section H.5.b. of this Chapter.

CHAPTER 6: Procedures Applicable to Other Vessels Engaged in OCS Activities**2. Change of Service**

If an inspected OSV surrenders its COI or otherwise changes service, certain privileges granted to that class of vessel no longer apply. Tonnage, manning, and subdivision are several areas affected.

- a. Tankage previously exempted as ballast water spaces for offshore drilling, mining, and related purposes may be included in the new tonnage of the vessel unless otherwise exempted. A review of any ballast exemption in excess of 30 percent of the vessel's gross tonnage, calculated without any allowance for water ballast, is required for the new service of the vessel.

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Policy continues on G6-3.

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- b. In the manning area, the 600 mile voyage, two watch system for OSVs is no longer applicable, per 46 U.S.C 8301 (b).
- c. With respect to subdivision, the installation of Class 1 watertight doors is restricted outside the offshore oil trade.

3. Delivery of Excess Fuel to Drilling Platforms

Under 46 U.S.C. 3702(b), certain OSVs are permitted to transfer fuel from their own fuel tanks to offshore drilling or production facilities without being inspected and certificated as tank vessels.

- a. 46 U.S.C. Chapter 37 does not apply to a documented vessel under these circumstances, provided the vessel in question is not more than 500 GT, is not a tanker and is in the service of oil exploration. 46 CFR Subchapter L grants further exceptions to the carriage of flammable and combustible liquids.
- b. The allowable amount of flammable or combustible liquids, as listed in 46 CFR 30.25-1, may be carried aboard an OSV as long as it does not exceed 20 percent of the vessel's deadweight. This rule does not apply to Grade D and E drilling fluids and excess fuel oils when they are carried in integral tanks.
- c. The person on board an OSV engaged in this type of operation who is in charge of the transfer operation must be a certified tankerman.

4. Rescue Boats

46 CFR 133 requires the use of more stringent requirements than SOLAS approved craft on new U.S. flagged OSVs. When any lifesaving appliance or arrangement on an OSV subject to this part is replaced, or when the OSV undergoes repairs, alterations, or modifications of a major character involving replacement of, or any addition to, the existing lifesaving appliances or arrangements, each new lifesaving appliance and arrangement must meet the requirements of 46 part 133, unless the OCMI determines that the OSV cannot accommodate the new appliance or arrangement. This same part also allows for the substitution of a workboat in place of a required SOLAS approved rescue boat. In all cases, the Coast Guard must ensure that the overall goal of safety of life at sea is accomplished while considering any change to existing rescue boat arrangements. An OCMI's decision to replace an existing rescue boat need not be based solely upon a determination the craft is no longer serviceable. If the adequacy of an existing, but serviceable, rescue boat is in question, the OCMI should require demonstration of its suitability by a performance test to determine if replacement is necessary.

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If a vessels rescue boat is determined to be inadequate for its intended purpose, a requirement to correct the discrepancy shall be issued by using the Vessel/Facility Inspection Requirments, Form CG-835. Most existing OSVs will have three options available to correct this deficiency.

- a. Rescue Boats. Rescue Boat Approved under 46 CFR Approval Series 160.156. These are SOLAS approved rescue boats and a launching recovery system that meets 46 CFR 133.160.
- b. Suitable Workboat. As an alternative to the rescue boat requirement, a suitable workboat should meet the following:
 - (1) Capable of being launched within five minutes.
 - (2) Sufficient seaworthiness (i.e., adequate positive buoyancy, stability, freeboard or deck coverage) to allow for maneuvering in a disturbed seaway with at least a three person complement.
 - (3) Adequate room for at least a two person crew with room for a third person lying down.
 - (4) Capable of marshalling and towing inflatable liferafts (or lifeboats if the vessel is so equipped) loaded with their full complement of equipment and persons.
 - (5) Can affect the recovery of a helpless person and return that individual to the parent vessel within fifteen minutes.
 - (6) If freeboard constraints do not allow for proper launching and loading from the main deck, the workboat shall be equipped with a launching/recovery system that meets the following:
 - (a) Located such that the stowed vessel can be quickly launched and will swing clear of all rigging, stacks, structures and overboard discharges.
 - (b) The davit and winch structural members shall have a design safety factor of 4.5 times the Maximum Working Load (MWL). MWL includes the total of the weight of the boat, personnel, and boat equipment.
 - (c) The falls, suspension chains, links and blocks shall have a design safety factor of 6 times the MWL.

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- (d) The davit shall be fitted with an electric/hydraulic or hand powered winch and shall be capable of raising and lowering the workboat at MWL.
 - (e) If electric/hydraulic powered, the davit winch shall be fitted with automatic cut-off devices in accordance with SOLAS Chapter III Section VI.
 - (f) Each winch shall be designed to allow for lowering under the forces of gravity or independent stored power.
 - (g) Each winch shall be fitted with a brake to control the rate of lowering to approximately 0.5 meters per second.
- (7) There are no firm rules on which boats may adequately serve as a workboat substitute for a rescue boat. However, experience has shown that the buoyancy and stability of rigid hull inflatables, or inflatable boats with reserve buoyancy, deep “V” hull and double “V” hull boats are suitable candidates for this service. Additionally, boats with outboard engines in the 15-30 horse power range have been determined to be adequate for this service.
- c. Rescue Platform. 46 CFR 133.135 states that the vessel qualifying as a rescue platform must be arranged such that the rescue can be observed from the navigation bridge. However, if this requirement cannot be met, vessels with an efficient and reliable method for providing two way communications between a person at the side of the vessel and the person at the helm may be considered equivalent to 46 CFR 133.135, if shown to be at least as effective.
- (1) To qualify as a rescue platform, a vessel shall demonstrate that it has the equipment and trained crew to effect the recovery of a helpless person within fifteen minutes. Although there is no set of proscriptive requirements that are necessary to meet the above essential components of a vessel qualifying as a rescue platform:
- (a) The vessel should have an effective two-way communications system between the person at the rescue station and the person on the helm.
 - (b) Each member of the crew should be trained in his or her duties during a man overboard situation. (There is no way to foresee who will go overboard, there must be sufficient cross training to provide for all contingencies.)
 - (c) The vessel should have a system to recover a helpless person from the water while minimizing injury to that individual. To provide for all contingencies, equipment used to affect the recovery should be provided at each side of the

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vessel or must be easily and quickly transferrable to a recovery station at either side of the vessel. In addition to the recovery equipment, training and planning regarding the procedures to position a helpless person in the recovery apparatus must be planned and practiced.

- (2) 46 CFR 133.135 allows certain OSVs to act as its own rescue platform when it is not “regularly” restricted in its ability to maneuver. Vessels that are “regularly” restricted in their ability to maneuver due to towing or anchor handling operations, may at the discretion of the OCMI, rely upon the rescue boat on the attended vessel to satisfy its rescue needs. To qualify for this provision, the vessel must prove to the OCMI that the rescue boat on the attended vessel meets all the requirements for a rescue boat and that it is sufficiently manned at all hours of the day to affect a timely rescue.

B. LIFTBOATS

Existing liftboats will be inspected initially and subsequently under the guidance provided in NVIC 8-91. 46 CFR Subchapter L is applicable to new vessels contracted for or delivered after 15 March 1996.

As with OSVs, all liftboats that were inspected and certified under the guidance found in NVIC 8-91 prior to the effective date of 46 CFR Subchapter L are granted grandfather status and must continue to receive inspections following the same guidance. The grandfather status is forfeit if the vessel changes its employment from OSV to another service or undergoes major modifications.

All vessels that were grandfathered had to complete construction and had to receive a COI prior to 16 March 1998.

Most liftboats now fall under the same regulatory standards as conventional hulled OSVs; however there are several areas of inspection that are unique to this type of vessel to include: automation, steel wastage, tail shaft inspection intervals, drydock inspections, lifesaving systems, firefighting equipment, systems/equipment for general operation, crane inspection and manning.

1. Drydock/Structural Examination

The manner in which this examination will be performed should be very similar to that employed on independent leg jack-up MODUs.

- a. It is very likely that the initial exams will be conducted without benefit of approved plans, thus making determination of original scantlings difficult. In general, liftboat

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scantlings are relatively light due to weight considerations. Therefore, requiring a comprehensive ultrasonic testing UT exam of the hull is appropriate. Close attention should be paid to plate inserts. Any doublers or spigot patches should be properly cropped and renewed.

- b. Specific welding procedures employed in the construction of these vessels may not be known. Where repairs are required, only current acceptable welding procedures should be employed.

2. Drydocking Alternatives

There are many acceptable methods for conducting a liftboat hull exam. The following methods may generally be considered acceptable:

- a. Conventional Drydocking – Includes lifting the vessel and its appendages out of the water to allow a comprehensive inspection and evaluation of the vessel's underwater hull, submerged portions of legs, towers and pads.
- b. Drydocking Alternatives – The regulations provided for various alternatives which may provide an equivalent level of safety as a conventional vessel drydocking. These regulations are found in 46 CFR Subchapter L, 46 CFR 125.170; and alternatives found in 46 CFR Subchapter I-A, 46 CFR 107.267 for self-elevating units. OCMI's may entertain dry-docking alternatives proposed by industry representatives. At no time shall the alternative method place the crew, shipyard workers, third party surveyors, contractors, or Coast Guard inspectors in danger.
- c. Underwater Inspection in Lieu of Drydocking (UWILD) – This alternative may be utilized in accordance with 46 CFR 126.140. In such cases, the guidance in NVIC 1-89 "Underwater Survey Guidance" should also be followed.

3. Conducting a Liftboat Drydock Inspection

Liftboats spend the majority of their service life jacked up out of the water; so special attention must be paid to the following items:

- a. Pads – These connections at the bottom of the legs are the main load-bearing area of the vessel. The entire pad (top, bottom and all sides) should be visually inspected for damage/insets, by dry-docking or some other alternative method acceptable to the OCMI. The "leg-to-can" connection welds and the "can to-pad" connection welds should be non-destructively tested (NDT) at every hull exam or anytime the vessel has had an incident involving undue stress in these areas.

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- b. Leg Tower Sponsons – The area above the leg pad on the hull should be examined for deformation and fractures. Often debris remains on the pad and may cause hull damage when the leg is retracted. This area is critical to the support of the leg and tower. If vertical deformation of the hull or insets are deep or numerous, the area should be cropped and renewed and suitable access provided to the leg sponson in order to ensure the internal framing is not tripped or fractured.
- c. Legs and Leg Rack – The leg rack is another critical area of the vessel. This is where the hydraulic motor drive gear meets the mechanical leg rack. Great amounts of torque are applied to this area on a regular basis. The racks should be inspected for chipped, damaged or missing teeth, and excessive rack-to-gear wear. The leg rack lower terminus should also be NDT tested for fractures at each dry-docking. The legs should also be inspected for significant creases, dents and deflections that may increase the rack to gear clearance and potentially allow the gear to free wheel, and cause the vessel to descend uncontrollably.

4. Leg Removal and Inspection Intervals

Liftboat companies should have in place a fleet-wide plan adequately addressing the preventive maintenance and corrective measures for each vessel's legs, pads and jacking systems. At a minimum, the following items should be addressed in the plan.

- a. Leg Inspection Cycles and Maintenance – while legs are installed, the legs should be visually inspected annually. The legs should be examined for significant creases, dents and deflections. Note that exceptionally long legs fitted with a single rack system may have slight deflection over the length of the leg during extreme temperatures. The leg rack and pinion should be checked for missing or damaged teeth and fractures. When visual examination warrants, additional/more detailed inspections should be conducted. In addition to the annual visual inspection, at every five (5) year dry-dock cycle, the legs and jacking components should be inspected as described below. If the Coast Guard marine inspector determines that the legs cannot be inspected adequately while installed, they should then be removed to facilitate examinations.
 - (1) The below list is the minimum recommended inspections and maintenance of liftboat jacking system components to be conducted by Coast Guard marine inspectors at 5 and 10-year intervals for those vessels operated on exposed waters routes (Coastwise, Oceans). The following is a best industry practice developed in consensus with representatives of the Offshore Marine Service Association (OMSA) Liftboats Subcommittee. Vessels operated exclusively on protected waters (L, B &S) are not subject to routine removal of the legs for inspection and should repeat the 5 year inspection items, unless the marine inspector determines

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that it is necessary to pull legs based upon other inspection results or observed damage. The recommended cycle for pulling of legs should normally commence when the vessel is 10 years old from the delivery date with the first recommended leg removal normally occurring 20 years from the vessel's delivery date. However, the marine inspector may determine that it is necessary to remove a liftboat's leg(s) at any time based upon other inspection results or observed damage, if he or she determines it is necessary to assure a vessel's safety or seaworthiness.

- (2) Five (5) & ten (10) year liftboat leg inspections should be documented on the vessel's COI to show "last completed" for each leg.
- (3) Five (5) Year Drydock Inspection Items
 - (a) Rack – Visually inspect rack length equal to twice tower height, but not less than 20 feet above tower and one random location (rack must be free of all coatings). If unable to make the required length available for inspection, then the owner or operator should provide an alternative inspection plan.
 - (b) Rack Butts – Clean and inspect (NDT required) rack end butts on all legs.
 - (c) Pinion – Inspect pinion and adjust (as needed) pinion to rack clearance, and record results.
 - (d) Gearbox Oil – Draw oil sample/analyze from every gearbox, and record results.
 - (e) Gearbox Disassembly – Disassemble and inspect lower-most gearbox per leg; additional inspection based on results.
 - (f) Bearings – Bearing and cap inspection on gearbox pulled for disassembly; additional inspection based on results.
 - (g) Brakes – Inspect brake assembly of pulled gearbox per leg; additional inspection based on results.
 - (h) Tower Guides – Inspect tower and rack guide's clearances, and compare with manufacturers recommendations.

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(i) Leg to Pad Connection – Clean and NDT all leg to pad connection welds; evaluate connection integrity.

(j) Hydraulic Hoses – Replace all external hydraulic jacking system hoses that are exposed to weather.

(4) Ten (10) Year Drydock Inspection Items

(a) Rack- Conduct visual inspection and NDT of entire rack length, rack must be free of all coatings, record completion. Conduct NDT of rack to leg welds, entire length of rack and record results.

(b) Rack Butts - Clean and inspect (NDT required) rack end butts on all legs.

(c) Pinion – Check and adjust (as needed) pinion to rack clearance, and record results.

(d) Gearbox Oil – Draw oil sample and analyze from every gearbox, and record results.

(e) Gearbox Disassembly – Disassemble and inspect lower and uppermost gearbox on each leg inspection based on results.

(f) Bearings – inspect bearings and caps on gearboxes pulled for disassembly; additional inspection based on results.

(g) Brakes – Pull and inspect two brake assemblies on gearboxes pulled for disassembly; additional inspection based on results.

(h) Tower Guides - Inspect tower and rack guide's clearances, and compare with manufacturers recommendations.

(i) Tower Roundness – Inspect tower roundness at several locations to ensure within manufacturer tolerances.

(j) Tower Thickness – Evaluate tower wall thickness by conducting grid on tower using NDT (UT), and record results.

(k) Leg to Pad Connection - Clean and NDT all leg to pad connection welds; evaluate connection integrity.

(l) Pad Plate Thickness – Evaluate pad shell plate thickness by performing UT grid; inspect all plug welds.

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- (m) Hydraulic Hoses – Replace all external hydraulic jacking system hoses in locations exposed to weather.
 - (n) Legs External – Clean entire leg of coatings, NDT all legs butt weld joints, and record completion. Conduct UT of leg plate thickness in minimum of four (4) places, and record results.
 - (o) Legs Internal – Remove pan from leg, visually inspect all leg internals, ladder points, butt welds, etc.; if visual inspection reveals areas of concern, appropriate means of non destructive testing should be utilized to further inspect these areas.
- b. Leg Removal Cycles – The leg removal cycles should start ten (10) years from the vessel's delivery date with the first leg removal/examinations occurring, under normal circumstances, at a scheduled drydocking approximately twenty (20) years from delivery.
- (1) After twenty (20) years from delivery, the legs should be removed not less than once every ten (10) years for examination.
 - (2) If the legs are removed before the recommended interval; for any reason, such as repair, each removed leg may be given removal credit and another ten-year cycle started, provided the "10 year" inspections described in paragraph 1.a.4 above, are completed.
 - (3) Credit for removal should be annotated on the vessel's Certificate of Inspection (COI).
 - (4) Those vessels operating exclusively on protected routes (Lakes, Bays, and Sounds) are generally accepted for leg removal, unless circumstances dictate their removal for repair.
 - (5) When the legs are removed for their 10 year inspection cycle, the entire rack, rack lower terminus, all leg butt welds, and leg to can connection should be cleaned or degreased prior to inspection. The owner should then perform inspections as outlined in paragraph 1.a.4, above, and provide reports and any third party results to the attending marine inspector.
 - (6) If a vessel has a delivery date greater than twenty (20) years prior to the effective date of March 4, 2008, (date of original CG-543 Policy Letter 07-02, now integrated in to the MSM.), and the owner cannot provide documentation confirming the legs have been pulled and inspected as outlined above, then the legs should be pulled and inspected before the end of current drydock cycle, or at

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a maximum within five (5) years.

5. Legs, Jackhouses, and Support Structures

These features are extremely critical to the safe operation of liftboats and should receive careful attention during drydock and structural exams.

- a. Legs should be sighted to detect any deflection.
- b. All significant creases and dents should be marked for insert.
- c. Rack and pinion assemblies should be examined for tears, fractures, and broken teeth. Most boats employ a single rack system. Consequently, the side opposite the rack is subject to extreme wear due to rubbing on the jacking guide. Wear-down of as much as 50 percent of the original scantlings is known to have existed. This area should be subject to UT examination for the full length of the leg.
- d. When original scantlings are determined from approved plans, each leg should be verified as meeting the stated thickness. Wastage limits are addressed in part B-6 of this Chapter.
- e. If evidence indicates that liftboat legs may have been fabricated undersized, despite what was indicated on the builders' drawings, the owner or operator should provide calculations that the as-built legs. Consult MSC for assistance if needed. Also, legs on existing vessels may have been lengthened after original build and could be considered suspect. It is recommended, in this case, that consideration be given to employing x-ray examination of butt welds to verify that full penetration was achieved.
- f. The leg to pad connections and condition of the pads themselves are also critical due to the relatively light scantlings for the amount of loading they are subject to. Careful inspection of the footings is critical to ensure that they remain watertight. NDT may be necessary to evaluate these connections.
- g. On some vessels, the jacking guide to hull attachments may be subject to tearing problems. Where this is in evidence, retrofit, and possible redesign of the weld should be discussed with the owner. Additionally, condition and attachment of headers and supporting structure should be verified. Information about lamellar tearing is available in the Ship Structure Committee Report SSC-290. Copies of this report may be obtained from the Secretary, Ship Structure Committee, or Commandant (CG-ENG).
- h. Leg-To-Tower Clearance - Each designer and builder specifies a particular leg-to-

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tower clearance range for proper operation of the vessel's leg and jacking system; too tight and the system may bind, too loose and the system may wobble or cause improper rack-pinion operation. This clearance may deviate from one vessel class to another, however; it is important that the clearance be checked in accordance with the manufacturer's guidelines and compared to the recommended range. When the clearance falls out of the recommended range, the owner/operator should present a proposal to bring this clearance back to the builder's or designer's specifications.

6. Hydraulic Jacking Systems

Hydraulic system jacking failures have been the cause of a number of liftboat casualties. Inspection guidance (NVIC 8-91) provides that systems must be modified as necessary to ensure they are fail-safe.

- a. There are two types of systems installed on liftboats, open loop or closed loop. Open loop systems are arranged with all the legs supplied in series. Closed loop systems serve each leg individually. Both systems employ a common reservoir. Flow from the reservoir through the pumps to the manifolds is directed by three-way valve controlled from the bridge. The planetary brakes are spring loaded and, theoretically, activate when they sense loss of fluid pressure. However, in some previous cases, upon component failure, the brakes did not sense loss of fluid and the vessels fell rapidly.
 - b. This problem may be remedied in several ways, the most common being the installation of compensating and check valves into the systems. It is the responsibility of the owner to propose an acceptable design.
 - c. Material condition of the manifolds, hoses, planetaries, couplings, and pinions should be carefully checked as well as any system modifications.
 - d. When the systems are tested, physical breaks should be made upstream and downstream of the compensating valves.
 - e. Additionally, leg controls in the wheel house should be of the "dead man" type only. A number of accidents have occurred because the operators activated a fixed position switch and walked away from the consoles.
- (1) The following jacking system components should be maintained in accordance with the manufacturer's recommendations:

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- (a) fluid levels;
 - (b) hydraulic piping and hoses;
 - (c) pump drive shaft assembly;
 - (d) jacking system controls;
 - (e) jacking system pressure;
 - (f) gearbox assembly; and
 - (g) bearings.
- (2) Vessel owners should demonstrate the installed hydraulic jacking system complies with the requirement of 46 CFR Subchapter F (46 CFR 58.30).
- (3) Owners of vessels certificated under subchapter L or I may provide approved plans.
- (4) Owners of vessels certificated under the guidance of NVIC 8-91 should demonstrate substantial compliance with 46 CFR 58.30 and that the system is “fail-safe”. Often during initial certification, these vessels were held to varying standards and may not “substantially” comply with Subchapter F.
- (5) Jacking system hydraulic review should be submitted to ensure fail –safe systems, including counter-balance valves and motor brakes.
- (6) Installed hydraulic fittings/hoses/piping should be demonstrated to be adequate for the rated system pressure and comply with the applicable regulations and guidance. Inspectors should check systems for agreement with the drawings and parts list. This review should include a basic line drawing and component list to the satisfaction of the attending marine inspector. Once completed, a copy of the review and associated drawings should be inserted into the vessel’s approved operating manual.

7. Engineering Related Systems

- a. Bilge Alarm Sensors. Should be located in all engineering and machinery spaces. An audible and visual alarm for each space should be provided in the pilothouse and be properly marked. No device should be installed to disable these alarms.

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- b. Engine Overspeeds. Engine overspeed devices on all pre-46 CFR Subchapter L prime movers are “grandfathered”. If installed, however; they should operate properly.
- c. Ventilation Shutdown. All power ventilation equipment, heat pumps and other such devices used in hotel services should have appropriate shutdowns. Natural vents connected to the engine room and deckhouse should have weather-tight closures that are appropriately marked, “Close in Case of Fire”.
- d. Level Alarm. All liftboats not inspected in accordance with 46 CFR Subchapter L should be fitted with a level alarm in accordance with NVIC 8-91 consisting of a distinct alarm that sounds at the main operating station to indicate an out-of –level condition or uneven leg sinkage in the vessel’s elevated condition.
- e. Low Hydraulic Oil Level Alarm. All liftboats should be fitted with an audible and visual alarm at the main operating station that indicates a loss in hydraulic oil level in the main jacking system.
- f. Shaft Speed. An indicator providing the propeller shaft speed should be available to the operator in the pilothouse. Shaft speed indication may be obtained via:
 - (1) an engine tachometer with corresponding “shaft sheets” that convert engine RPM to shaft RPM or
 - (2) a separate shaft tachometer.

8. Steel Wastage Allowance

Lift boats are weight-sensitive vessels and experience maximum hull stresses when elevated since they are only supported at each end of the vessel, compared to a conventional vessel which has its hull supported by buoyancy distributed along its length. Historically, liftboats have been built with the objective of keeping both leg weight and overhull weight to a minimum. The desire to reduce weight in the past led to many older liftboats to be built with reduced scantlings when compared to conventional hulls of the time.

- a. For newer liftboats, built in accordance with approved 46 CFR Subchapter L plans, the wastage allowance can follow current standards; however
- b. for older (non-Subchapter L) liftboats, evaluation should be based on more conservative allowances unless structural analyses demonstrate that greater wastages can be safely tolerated.
- c. Most older vessels were built using the American Bureau of Shipping’s (ABS)

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MODU Rules and the referenced ABS Steel Barge rules.

- d. In the case where they were not built to these standards, it was often trial and error until the vessel was found to be sturdy enough to satisfactorily meet the service demands. These vessels were not built with Coast Guard oversight or approved plans and the approved section modulus/leg strength calculations and associated structural analysis may not be available.
- e. The thickness utilized for evaluation of hull wastage should be the actual plate thickness on board the vessel compared to the approved thickness. In some cases, thicker plate was used during construction when compared to the thickness required by ABS' Rules or otherwise approved. As a result, more wastage may be seen on a particular "over scantling" vessel, while still within tolerance of the approved plans. Use the following guidelines for liftboat categories when determining appropriate wastage allowances:
 - (1) Vessels built to 46 CFR Subchapter L or I standards with approved plans – Allow 25% wastage in accordance with NVIC 7-68.
 - (2) Vessels built without approved plans – Allow 20% wastage for ¼" or thicker steel hull or deck plating in accordance with ABS 1973 MODU and Steel Barge rules. Allow 10% wastage for 3/16" or thinner steel hull or deck plating in accordance with ABS 1973 MODU and Steel Barge rules.
 - (3) Vessels built without approved plans but having a Professional Engineering (P.E.) – provided section modulus and strength calculations – Allow maximum wastage as per calculations, but in no case allow more than 25%. Guidance for the acceptance of P.E. certifications can be found in NVIC 10-92 Ch. 2.

9. Tailshaft Inspection Intervals and Examinations

- a. Liftboats less than 100 GT (domestic) are not normally required to pull tail shafts for examination unless deemed necessary by the marine inspector or unless necessary to determine the condition of the shaft bearings.
 - b. Liftboats of 100 GT or more will be required to undergo tail shaft examinations in accordance with the appropriate regulations. Proper tail shaft /propeller fit-up are necessary to eliminate or minimize damage due to excessive vibration.
 - c. An owner/operator may prove proper fit-up by many methods, including bluing, micrometer readings and others. The owner is responsible for proper fit-up of the vessel's tail shaft.
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- a. Rescue Boat – Unlike conventional vessels, liftboats operate in both elevated and afloat modes of operation. Therefore, liftboats must be able to recover a helpless person from the water in both the elevated and afloat modes. Since a liftboat cannot serve as its own “rescue platform” while elevated, each liftboat must have at least one rescue boat. If no launching device is provided, on vessels with two cranes, the rescue boat must be capable of being launched with either crane. Approval of crane launching of the rescue boat on vessels with only one crane is at the discretion of the OCMI. A crane that is used to launch a rescue boat should be certified for personnel transfer. All pre-Subchapter L rescue boats should be equipped with safety equipment to the satisfaction of the cognizant OCMI. However, at a minimum, these pre-Subchapter L rescue boats should have the following safety equipment and quantities (#): paddles (2), heaving lines (2), sponges (2), boat hooks (1), and bailer (1). All Subchapter L rescue boats must be outfitted with the equipment described in 46 CFR 133.175.
 - (1) A motor-propelled workboat or launch may be used in place of the required rescue boat if the embarkation and recovery arrangements of 46 CFR 133.160 (a), (c), (d), (e) and (f) are met, **if shown to be at least as effective.**
 - (2) While liftboats may be allowed to use the installed cranes to launch rescue boats in lieu of an installed davit, stability concerns and the vessel’s operating manual normally prohibit the use of the cranes while the vessel is afloat.
 - (3) While in the afloat mode, cranes should only be used to launch and recover the rescue boat if the vessel’s operating manual permits use of the crane(s) in the afloat mode.
 - (4) Also, while in the afloat mode, and in accordance with 46 CFR 133.135, the OCMI may determine if the vessel is arranged to allow a helpless person to be recovered from the water, provided the recovery can be viewed from the navigation bridge and the vessel does not regularly engage in operations which restrict its maneuverability. **However, if this requirement cannot be met, vessels with an efficient and reliable method for providing two way communications between a person at the side of the vessel and the person at the helm may be considered equivalent to 46 CFR 133.135, if shown to be at least as effective.**
 - (5) Depending on the vessel’s hull design, this may be accomplished in several ways. Older vessels have leg pads that retract up to the hull and are exposed when underway. These leg pads can be used as a platform to rescue a helpless person if a suitable means is installed to access the pad and to transfer the helpless person

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from the pad to the main deck.

- (6) On many newer vessels, the pad is submerged while underway, and a separate platform should be provided. These platforms may vary based upon hull design, and it is the OCMI's discretion to judge the platform to be fit to recover a helpless person from the water.
- (7) A rescue harness should also be provided, regardless of rescue platform type.
- b. Lifesaving Systems - Previously approved lifesaving appliances or arrangements are acceptable. The regulations in 46 CFR 133.10 should be consulted when changes are made to lifesaving equipment or arrangements.
- c. Embarkation Devices – It is a long standing industry practice to install knotted “manropes” on liftboats for emergency disembarkation as a partial means to meet the intent of an embarkation ladder (Jacob’s ladder). These knotted manropes are generally considered acceptable as an alternative to traditional embarkation ladders as required by 46 CFR 133.110, on liftboats only. If a knotted manrope is installed, it should be long enough to reach the water at the liftboat’s highest elevated position, and be examined at least annually by the vessel’s crew. Excessively soiled, worn or frayed ropes or ropes with cracked or corroded attachments should be replaced or repaired immediately.

11. Firefighting and Alarm Equipment

- a. Firemain and Raw Water Suctions - Firemain, bilge, and ballast systems should be capable of operation at all times, including in elevated mode. When it is practical to do so, the fire main should be tested in the elevated mode.
- b. Fire Pumps - All liftboats must have an installed fire pump, its output is regulated under the appropriate subchapter and capable of operation at all times, including the elevated mode. The typical fire pump installation is a submersible type, mounted on the main deck, and connected to the fire main system through a flexible hose. These hoses should be routinely inspected for condition and serviceability. The launch appliance for lowering the pump into the water should be inspected for proper operation and condition.
- c. Smoke Alarms - Each separate living space and galley should have a smoke alarm. Smoke alarms may be battery powered, independent type units, and all should have a test button to indicate proper operation.

12. General Operations

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- a. Operating Manual – All liftboats should have an operating manual onboard which is approved by the OCMI. This manual should include, at a minimum, those items required by 46 CFR 134.170.
- b. Dead Man Switch – The liftboat jacking system should incorporate a “dead man” feature at the system controls, which requires a physical force from the operator (through hand and or foot pedal) be applied to the controls in order for the system to function. Once the applied force is removed, the vessel’s jacking stops. Often, this is done through use of spring-loaded foot pedal or hand toggle switches.
- c. Anemometer – If the liftboat’s approved operating manual specifies required actions based upon wind speed, the vessel should have a reliable means to determine wind speed such as a properly operating anemometer (portable or fixed) onboard.
- d. Anchors – Anchors should be installed on all liftboats in accordance with the applicable subchapter. “Grandfathered” liftboats may use existing vessel anchors. Standards set forth in ABS rules, utilizing first principle calculations, may be used to determine the appropriate anchor size. Liftboats are restricted in their routes through their approved operating manual to water depths that do not exceed the vessel’s ability to jack up. However, if a liftboat loses steering or propulsion in river current the liftboat may travel a significant distance before the legs can be jacked down to stop the vessel, which may cause serious damage to nearby vessels; or the vessel may incur damage to the legs by suddenly stopping the vessel utilizing legs as emergency anchors. The anchors are considered emergency anchoring systems and should be ready for use at any time.

13. Cranes

- a. Pedestal mounted cranes installed on OSVs, MODUs, and floating OCS facilities having a lifting capacity exceeding 5 net tons (10,000 lbs), used for purposes other than special purpose (e.g., lifting fuel hoses, handling ship supplies), should be designed in accordance with the latest edition of API Specification 2C, Offshore Pedestal-Mounted Cranes, incorporated by reference in the regulations at the time of the vessel's construction or other design standard considered equivalent by the Office of Design and Engineering (CG-ENG) (Ref: 46 CFR 108.101 and 108.601).
- b. Cranes meeting the requirements in paragraph (a) should be operated and maintained in accordance with the latest edition of API Recommended Practice 2D, Operation and Maintenance of Offshore Cranes, incorporated by reference in the current regulations. Cranes, other than those addressed in paragraph (a), should be operated, and maintained in accordance with the manufacturer's recommendations (Ref: 46

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CFR 109.105 and 109.521).

14. Route Restrictions

Route restrictions placed on the COI of a liftboat should be taken directly from the vessels stability letter. See NVIC 8-91 for guidance on the route restrictions for liftboats operating both inside and outside the Boundary Line. After reviewing pertinent stability calculations, the Marine Safety Center (MSC) will issue a stability letter which specifies route restrictions in 3 categories:

- a. Unrestricted Operations – When all provisions of 46 CFR 174 Subpart C are met, within the full range of leg positions encountered while jacking. The stability letter will define the area of operation approved.
 - b. Restricted Operations Beyond the Boundary Line – restricted to service within twelve (12) hours of a harbor of safe refuge or location where the vessel may elevate to survive 100 knots of wind.
 - c. Restricted Operations Inside the Boundary Line – restricted operations inside the Boundary Line, within eight (8) hours of a harbor of safe refuge or location where the vessel may elevate to survive 100 knots of wind.
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15. Manning

For guidance on the minimum safe manning for liftboats see Marine Safety Manual, Volume III, Marine Industry Personnel, COMDINST M16000.8B (series), Chapter 21 (Part B, *Vessel Manning*, Chapter 2, *Sample Vessel Manning Scales*, Section L, *Offshore Supply Vessels (OSVs)*).

16. Domestic Voyage Personnel Carriage Allowance

A liftboat may carry no more than 36 offshore workers when certificated under 46 CFR Subchapter L. In order to facilitate the industry need to carry persons in addition to the crew, who are engaged in the business of the vessel, a liftboat may be inspected under the authority of 46 CFR Subchapter I, with the unique characteristics of self-elevating units being addressed by Subchapter L. In such instances, authorization may be provided on a case –by case basis, for certification to carry more than 36 industrial personnel as defined in 46 CFR Subchapter I. This approach is similar to that used in the past to bring liftboats into certification, as described in NVIC 8-91.

CHAPTER 6: Procedures Applicable to Other Vessels Engaged in OCS Activities**17. International Voyages**

To engage in international voyages, a liftboat must meet the applicable SOLAS requirements and have all appropriate SOLAS documentation. The SOLAS standard for cargo ships is acceptable for this purpose. Not more than 12 passengers (as defined by SOLAS) are authorized on international voyages.

18. Security

All vessels shall adhere to their approved Vessel Security Plans; see 33 CFR Subchapter H, Parts 101, 103, and 104, as appropriate. Liftboats engaged in international voyages must meet the International Ship & Port Facility Security Code (ISPS), as applicable, Chapter XI-2 of SOLAS.

C. DRILLING TENDERS

1. Inspection procedures

Drilling tenders are vessels which are typically engaged in providing material, power, machinery, manpower, and accommodations offshore. Such vessels are normally anchored for several months at a time at an offshore platform. Some of these vessels are propelled by mechanical means and some are not. As a U.S. Flagged vessel, they are inspected and certificated under 46 CFR Subchapter I.

SECTION G: OUTER CONTINENTAL SHELF ACTIVITIES**CHAPTER 6: Procedures Applicable to Other Vessels Engaged in OCS Activities****2. Drydocking**

These vessels are drydocked according to the regulations in 46 CFR Subchapter I. Special considerations may be given to stern tube and tailshaft bearing extension requests due to recognition of their limited amount of time underway. These requests should be made, in writing, by the owner, and should be forwarded to Commandant (CG-CVC), via the District office, together with the recommendation of the OCMI.

D. CREWBOATS

1. Exemption from Tank Vessel Requirements

Oil and mineral industry support crew boats certified under 46 CFR Subchapter T are included in the statutory (46 U.S.C 3702 b)) exemption from the tank vessel requirements allowing transfer of excess vessel fuel to drilling and production facilities if they are not more than 500 GT; not a tanker; and in the service of oil exploration.

2. Fuel Transfers

Fuel transfers from crewboats certified under 46 CFR Subchapter T should be conducted with only the vessel's crew on board (no offshore workers, industrial personnel, passengers, etc.)

3. COI

The following language may be placed on crew boat Certificates of Inspection (COI):

“When engaged in the service of oil/gas exploitation, vessel is allowed to transfer excess fuel from its own fuel tanks to oil/gas drilling and production facilities. No passengers, offshore workers, industrial personnel, persons in addition to the crew or individuals other than the crew shall remain on board during transfers of excess fuel to oil/gas drilling and production facilities.”

E. OFFSHORE RENEWABLE ENERGY INSTALLATIONS (OREI)

NVIC 02-07 provides guidance on information and factors the Coast Guard shall consider when reviewing an application for a permit to build and operate an Offshore Renewable Energy Installation (OREI) in the navigable waters of the United States. The Circular identifies

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information to consider when evaluating the potential impacts of an OREI which will assist in providing valuable input to the Bureau of Safety and Environmental Enforcement (BSEE) and Bureau of Ocean Management (BOEM) or another lead permitting agency for environmental review and decision making purposes.

1. Per 33 CFR 140.10; an OCS activity means any offshore activity associated with exploration for, or development or production of, the minerals of the Outer Continental Shelf.
2. Notwithstanding the above definition, certain offshore renewable energy installations are now covered by leasing arrangements approved by BSEE. The Coast Guard does not view OREIs as an OCS activity based on the definition of “minerals”. Presently this definition has not been expanded to include “alternative energy source” such as wind.
3. As such, the manning requirements found in 33 CFR 141 do not apply to OREIs.

F. ACCOMMODATION SERVICE VESSELS

Accommodation service vessels (ASV or “Flotels”) are subject to U.S. Coast Guard regulatory jurisdiction. Concurrent with the legal determination of the Outer Continental Shelf Land Act (OCSLA), “The Coast Guard has authority to regulate accommodation vessels if they are engaged in activities to support a unit attached to the OCS seabed for the purpose of exploration, development or production.”

Units that are considered to be performing accommodation services are subject to OCSLA and therefore 33 CFR Subchapter N, because such units are engaged in activities to support exploration, development or production.

U.S. flag vessels or units engaged in ASV activities are subject to CG inspection regime and other regulatory authority, as the Flag State.

For foreign flag vessels or units, under Subchapter “N” 33 CFR 140.101(a), units engaged in OCS activities are subject to inspection by the CG. Additionally, 33 CFR 140.101(e) allows for the inspection of foreign flag units to validate the international certificates they possess. At this time, unless the vessel is certificated additionally as a MODU or floating facility, lack of current published regulations do not allow for the vessel to get a Certificate of Compliance (COC).

Currently, U.S. units are subject to all the Flag State requirements when they are issued a Certificate of Inspection (COI), and foreign flag units solely performing accommodation operations are limited to validation of the existing international certificates onboard that

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are accepted by the U.S. including SOLAS, Loadline, MARPOL, and IMO Code to include MODU and SPS if issued.

If an accommodation service vessel embarked passengers in a U.S. port or visited a U.S. port with U.S. citizens as passengers, then 46 U.S.C. 3505 would apply and the vessel would need to hold a Passenger Safety and Security Certificate (PSSC) and obtain a COC. That would include plan review and inspection. If such a vessel remained offshore and other boats or aircraft ferried passengers out to the ASV on location, 46 U.S.C. 3505 would not apply.

G OTHER FOREIGN FLAG VESSELS WORKING ON THE U.S. OCS

Foreign vessels become subject to a Coast Guard Port State Control Examination once they enter U.S. territorial waters. This is to ensure that foreign vessels operating in U.S. waters provide an acceptable level of safety.

Such vessels may be eligible for examination reciprocity in accordance with the provisions of 46 U.S.C. 3303. If, after reviewing certificates, it is determined that a vessel is not eligible for reciprocity, then an examination of the vessel should be conducted to determine compliance with the applicable regulations.

The U.S. Customs service, now Customs Border Patrol (CBP), has ruled that the carriage of merchandise or passengers between a point in the United States and a facility on the U.S. OCS is considered Coastwise Trade, and in accordance with the Jones Act, only vessels licensed, or vessels otherwise qualified, may engage in such activity. In practice, this means that foreign vessels on the OCS may perform service functions but not supply functions (carriage of merchandise and /or passengers as defined above).
