

**THE REPUBLIC OF
LIBERIA**

OFFICE OF THE DEPUTY COMMISSIONER OF MARITIME AFFAIRS
LIBERIA MARITIME AUTHORITY

**MOBILE OFFSHORE UNIT
STANDARDS**

MOBILE OFFSHORE UNIT STANDARDS FOR THE REPUBLIC OF LIBERIA

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INTRODUCTION

This publication contains the Standards of the Republic of Liberia for the construction, arrangement, equipment, and operation of Mobile Offshore Units including Mobile Offshore Drilling Units. This publication is organized into Chapters which provide the specific national requirements for MOUs and the Administration's guidelines and interpretations of the MODU Codes, where applicable.

The Chapters are organized as follows:

Chapter I – The Liberian requirements applicable to all MOUs/MODU without regards to their date of construction.

Chapter II – The Liberian requirements for a MODU constructed before 31 December 1981 that does not comply with the 1979, 1989, or 2009 MODU Code. All such units are considered an existing unit. Such units must comply with National Requirements specified in Chapter II and Chapter I as applicable. The unit will be issued a Liberian National Mobile Offshore Drilling Unit Safety Certificate.

Chapter III – The Liberian requirements for a MODU constructed on or after 31 December 1981 and prior to 1 May 1991. Such units must comply with the requirements of the 1979 Code for the Construction and Equipment of Mobile Offshore Drilling Units (1979 Code) and the applicable requirements of Chapter I. The unit will be issued an International Mobile Offshore Drilling Unit Safety Certificate (1979).

Chapter IV – The Liberian requirements for a MODU constructed on or after 1 May 1991. Such units must meet the requirements of the 1989 Code for the Construction and Equipment of Mobile Offshore Drilling Units (1989 MODU Code) and the applicable requirements of Chapter I. The unit will be issued an International Mobile Offshore Drilling Unit Safety Certificate (1989).

Chapter V – The Liberian requirements for a MODU constructed on or after 1 January 2012 must meet the requirements of the 2009 Code for the Construction and Equipment of Mobile Offshore Drilling Units (2009 MODU Code) and the applicable requirements of Chapter I. Such units will be issued an International Mobile Offshore Drilling Unit Safety Certificate (2009).

Chapter VI – The Liberian requirements for MOUs in addition to the applicable requirements of Chapter I. Such units will be issued a Liberian National Mobile Offshore Unit Safety Certificate.

The requirements in Chapter II may also apply to a MODU which was constructed on or after 31 December 1981 and does not fully comply with the provisions of either the 1979 or 1989 MODU Codes, as applicable. This option may also be applied to a unit that was initially constructed and/or registered under a flag that did not adopt the 1979 and/or the 1989 MODU Code and issued the unit a MODU certificate based on that flag's national MODU requirements.

The requirements and guidelines contained in this standard do not preclude the issuance of a 1979, 1989, or 2009 International Mobile Offshore Drilling Unit Safety Certificate, as appropriate, to a unit constructed prior to any of the effective dates noted above; provided, the MODU in question is in full compliance with the provisions of the applicable MODU Code.

THE LIBERIAN REQUIREMENTS APPLICABLE TO ALL MOUS WITHOUT REGARDS TO THE DATE OF CONSTRUCTION

SECTION I

1.0 APPLICABILITY

This Chapter is applicable to all MOUs as defined in this Chapter under Liberian Flag.

SECTION II

2.0 DEFINITIONS

- 2.1 1979 MODU Code - Annex to IMO Resolution A.414 (XI) as amended by MSC/Circ.561 dated 3 July 1991.
- 2.2 1989 MODU Code - Annex to IMO Resolution A.649 (16) as amended and published in the MODU Code Consolidated Edition 2001 (IMO Publication IMO-811E).
- 2.3 2009 MODU Code - Annex to IMO Resolution A.1023 (26).
- 2.4 Column-Stabilized Unit - a unit with the main deck connected to the underwater hull or footings by columns or caissons.
- 2.5 Drillship - a self-propelled vessel-shaped hull surface mobile offshore drilling unit.
- 2.6 Dynamic Positioning (DP) - the capability of a unit to automatically maintain its position and heading (fixed location or predetermined track) by using its own propulsion units.
- 2.7 Equivalence - an alternative arrangement which provides the same general level of safety or generally fulfills the intent of a convention/standards requirement without meeting all criteria for full compliance. Such arrangements can be accomplished either independently or in combination with; alternative equipment, additional procedures/precautions, operational restrictions, etc.
- 2.8 Exemption - a permanent or conditional release from compliance with a convention standard requirement due to the existence of specific circumstances as sanctioned by the provisions of that convention.
- 2.9 Existing Unit - any MODU built prior to 31 December 1981 which, on the basis of conformity with these MODU Standards, is issued a National MODU Safety Certificate.
- 2.10 International Voyage - A voyage outside of waters under the jurisdiction of one country and into waters under the jurisdiction of another country.

- 2.11 Mobile Offshore Drilling Unit (MODU) - a unit capable of engaging in drilling operations for the exploration or exploitation of resources beneath the seabed such as liquid or gaseous hydrocarbons, sulphur or salt.
- 2.12 Mobile Offshore Unit - a manned vessel which can be readily relocated and which can perform an industrial function involving offshore operations or activities such as:
- Construction
 - Maintenance (including the maintenance of wells)
 - Lifting operations
 - Pipe-laying and related operations
 - Emergency/contingency preparedness, including firefighting
 - Production systems
 - Accommodations
 - Storage systems
- 2.13 National MODU Safety Certificate - a certificate issued by the Administration or RO on behalf of the Administration, to an MODU that meets the requirements for MODUs contained in Liberian Publication RLM-293.
- 2.14 National MOU Safety Certificate - a certificate issued by the Administration or RO on behalf of the Administration, to an MOU that meets the requirements of for MOUs contained in Liberian Publication RLM-293.
- 2.15 Non-Self-Propelled Unit - a MODU or MOU not fitted with mechanical means of propulsion to navigate independently.
- 2.16 Offshore Installation Manager - a certificated competent person appointed in writing by the owner, or operator, as the person in charge, who has complete and ultimate command of a MODU, and to whom all personnel on board are responsible.
- 2.17 On Location - a unit is positioned at a particular geographic location, whether afloat or supported on the seabed, for the purpose of conducting operations, including drilling and production activities or support for those activities. If afloat, the unit may be moored or dynamically positioned.
- 2.18 Recognized Organization (RO) - a Classification Society that has been authorized by written agreement with the Administration to act on its behalf to conduct examinations, perform surveys, determine tonnage and issue relevant international certificates. The Liberian Administration only recognizes classification societies that are members of the International Association of Class Societies (IACS).
- 2.19 Self-Elevating Unit - a unit with moveable legs capable of raising its hull above the surface of the sea and lowering it back into the sea.
- 2.20 Self-Propelled Mobile Unit - A MODU or MOU fitted with a mechanical means of propulsion to navigate independently.
- 2.21 Short Field Move - the on location repositioning of a unit, up to 20 Miles in distance or 8 hours in duration, under the cognizance of an STCW Convention licensed Master or Mate.

- 2.22 Surface Unit - a unit with a ship, or barge, type displacement hull of single or multiple hull configurations intended for operation in the floating condition.
- 2.23 Underway - for the sole purpose of application of these Standards, a condition wherein a unit is moving, by force of its own propulsion or assisted by other vessel(s), from one geographical location to another.

SECTION III

3.0 APPLICATION OF OTHER REGULATIONS, STANDARDS AND CONVENTIONS

- 3.1 MARPOL 73/78 - All units are required to comply with the applicable provisions of MARPOL 73/78, as amended. All units shall be issued an IOPP, IAPP, and ISPP Certificate, as applicable, in accordance with the provisions of MARPOL 73/78, as amended.
- 3.2 LOAD LINE - All units are required to meet the 1966 International Convention on Load Lines and must have a valid Load Line Certificate on board. Existing MODUs built prior to the implementation of the 1966 International Convention on Load Lines will be reviewed on a case by case basis by the Administration for compliance with the Load Line requirements.
- 3.3 ITC – All units are required to comply with the requirements of the International Convention on Tonnage Measurements of ships (ITC69) and must have an International Tonnage Certificate (69) on board.
- 3.4 COLREG - All units are required to comply with the applicable requirements of the International Regulations for Preventing Collisions at Sea, 1972, as amended.
- 3.5 MLC 2006 - The Liberian Administration has decided not to apply the provisions of MLC, 2006 to MODUs and MOUs whose primary service is drilling operations for the exploration, exploitation, and production of resources beneath the sea-bed, servicing or construction of offshore facilities, storage and processing of crude oil and other gas and petroleum products and are not normally engaged in navigation or international voyages. However, if MODU or MOU owners/operators wish to apply MLC on a voluntary basis, they should contact the Administration.
- 3.6 ISM CODE and ISPS CODE
- 3.6.1 In accordance with the provisions of SOLAS Chapter IX Self-Propelled MODUs and MOUs of 500 gross tons and larger are subject to the ISM Code in accordance with Regulation 2.1.3 in Chapter IX of SOLAS.
- 3.6.2 In accordance with the provisions of SOLAS Chapter XI-2, Self-Propelled MODUs and MOUs of 500 gross tons and larger are subject to the ISPS Code in accordance with Regulation 1.1.1.3 in Chapter XI-2 of SOLAS.
- 3.6.3 Non-self-propelled MODUs and MOUs are not required to be certified as in compliance with the requirements of the ISM Code or the ISPS Code.

The Administration strongly encourages operators of non-self-propelled units to be certified as in compliance with the ISM and ISPS Code on a voluntary basis. Non-self-propelled units that voluntarily comply with the Code and meet the Administration's requirement regarding ISM and ISPS Code compliance found in Liberian Marine Notices ISM-001 and ISPS-001 will be issued a Safety Management Certificate and Ship Security Certificate, as applicable, by the Administration. Operators of non-self-propelled MODUs should be aware that coastal states may require compliance with the ISM and/or ISPS Code or similar coastal states requirements for vessels participation in offshore activities in waters under their jurisdiction. When the coastal state requires the MODU to be certificated to show compliance with either the ISM or ISPS Codes, the operators should contact the Liberian Administration for assistance.

- 3.7 Additional statutory requirements for MOUs other than MODUs can be found in Chapter VI of this publication

SECTION IV

4.0 CLASSIFICATION

- 4.1 All units are required to maintain class as a mobile offshore drilling unit with one of the classification societies (RO) recognized by the Administration. The Liberian Administration only recognizes class societies that are members of the International Association of Class Societies (IACS). Any deviations from the structural, subdivision, and stability of the applicable MODU Code shall be reported to the Administration by the RO for review and acceptance.

SECTION V

5.0 EXEMPTIONS, EQUIVALENCIES AND ALTERNATIVE ARRANGEMENTS

The Administration will consider requests for exemption, equivalencies, or alternative arrangements on a case by case basis provided that they do not create a hazard to the unit, environment, and/or personnel aboard.

5.1 Requests for Exemptions, Equivalencies or Alternative Arrangements

- 5.1.1 In all cases, requests for exemptions, equivalencies, and alternative arrangements must be communicated to the Administration for consideration and formal approval.
- 5.1.2 Exemption Certificate is linked to, and shall be retained with, its associated statutory certificate. Full term Exemption Certificates are issued by the Administration in accordance with the applicable convention. The RO who issued the statutory certificate may issue the unit interim Exemption Certificates under specific authorization from the Administration.
- 5.1.3 Authorization for issuance of an Exemption Certificate is considered by the Administration on a case-by-case basis. Such authorization shall be based on the

level of equivalency to the intent of the requirement being exempted, the unit's design or other factors that may make compliance with a regulation impractical or unreasonable, and a recommendation from the RO.

SECTION VI

6.0 CERTIFICATION

- 6.1 All units complying with this Standard, upon successful completion of the applicable surveys, shall be issued a MODU Code Certificate or MOU Safety Certificate as applicable. All exemptions granted to the unit shall be noted on the Certificate or an attached sheet.
- 6.2 The MODU Code Certificate will be valid for five (5) years, running concurrently with the five (5) year classification survey period.
- 6.3 The MOU Safety Certificate will be valid for five (5) years, running concurrently with the five (5) year classification survey period.
- 6.4 All units shall be issued an IOPP, IAPP, and ISPP Certificate in accordance with the applicable provisions of MARPOL 73/78, as amended.
- 6.5 In accordance with the applicable provisions of the ICLL 66, all units shall be issued an International Load Line Certificate.
- 6.6 All units shall be issued a Safety Radio Certificate in accordance with the provisions of SOLAS Chapter IV. In addition, all units must obtain a Radio Station License issued by the Administration. The requirements for obtaining a Ship Radio Station License can be found in Liberian Marine Notices RAD-001 and RAD-002.
- 6.7 Self-propelled units that are required to comply with the ISM and ISPS Code shall be issued Safety Management Certificates and Ship Security Certificates, as applicable, in accordance with the provisions of SOLAS Chapter IX and Chapter XI-2.
- 6.8 Self-propelled units which embark upon an international voyage under its own power may be issued SOLAS Certificates such as Safety Construction and Safety Equipment if the unit meets the requirements for issuance of the certificate.

SECTION VII

7.0 SURVEYS

- 7.1 Each unit shall be initially and periodically surveyed for compliance with the applicable provisions of the Administration's MODU and MOU Standards.
- 7.2 The classification society will survey the unit and review plans and calculations on behalf of the Administration to determine compliance with the requirements of the applicable MODU Code and this Standard.

- 7.3 The survey schedule for each unit shall be as specified in the applicable MODU Code or for units to which Chapter II and Chapter VI applies as specified in the Chapter.
- 7.4 The classification society may issue, to the unit, the relevant statutory certificates and, if so instructed by the Administration, applicable documents of compliance on behalf of the Administration upon satisfactory completion of the necessary reviews, surveys, and audits.
- 7.5 Dry-dock Survey - A minimum of two dry-dock surveys during any five-year period, shall be carried out. The intervals between any two such surveys should not exceed 36 months. Where such an extension of the unit's MODU or MOU Safety Certificate is granted, this five-year period may be extended to coincide with the extended period of the validity of the certificate.
- 7.6 Underwater Body Examination in lieu of Dry-docking - The Administration may allow underwater inspections in lieu of a survey in dry-dock provided such an inspection is equivalent to a dry-dock survey. An underwater inspection plan shall be submitted to the vessel's classification society for review and approved in accordance with the requirements of the unit's Classification Society. Application for authorization for an underwater inspection in lieu of dry-docking (UWILD) shall be made via the unit's classification society to the Administration well in advance of the survey. The application forwarded to the Administration by the classification society should include a recommendation regarding the UWILD along with details of the inspection and any conditions and prerequisites.

SECTION VIII

8.0 ANNUAL SAFETY INSPECTIONS

- 8.1 Any unit being offered for registration may be subject to a pre-registration inspection, as required, for a waiver of the age limitation to registration or as deemed necessary by the Administration to adequately assess the condition and acceptability of the unit prior to proceeding with the registration process. When required or deemed necessary, it shall be done with the cooperation of the owner. The direct costs of the inspection shall be the responsibility of the registering owner.
- 8.2 All units shall be required to undergo an initial flag state safety inspection.
- 8.3 All units are subject to a Liberian Annual Safety Inspection (ASI) to be performed within the window of one month before and one month after the anniversary date of the initial inspection. The inspections are to be carried out by an authorized Liberian Nautical Inspector, unless, under exceptional circumstances, other arrangements are authorized by the Administration (*see* Liberian Marine Notices INS-001 and INS-002).
- 8.4 The Administration, when deemed appropriate, may require units subject to corrective action to undergo periodic inspection at assigned intervals of less than one (1) year.
- 8.5 The Administration, in addition to the above inspections, may require a unit to undergo a special or unscheduled safety inspection at any time, sometimes without advance notice.

SECTION IX

9.0 ACCOMMODATIONS

- 9.1 Accommodations on board each unit including the sanitary conditions in the galley, quarters, and work areas shall meet those specified in the International Labour Organization (ILO) Conventions 92 and 133. This requirement is applicable to existing accommodations, new or modified installations, and new construction.
- 9.2 Units that comply with the Conventions will be issued an ILO 92/133 Statement of Compliance (SoC) valid for five years. Renewal of the SoC will be contingent upon the unit passing an inspection of the accommodations by an Administration authorized nautical inspector or a class society surveyor.
- 9.3 The Administration will consider allowances for multiple-berth sleeping rooms on a case by case basis.
- 9.4 The Administration will consider allowances for a combined unit office and officers and senior officer offices on a case by case basis.

SECTION X

10.0 MANNING

- 10.1 All units shall be manned in accordance with the provisions of Liberian Marine Notice MAN-004 and/or MAN-001 when applicable. This Notice promulgates the Liberian requirements for the manning of Mobile Offshore Units (MOUs), including MODUs, both self-propelled and non-self-propelled, while on fixed locations (connected to the bottom) and when underway by their own means of propulsion or under tow.
- 10.2 In accordance with Marine Notice MAN-004 all units shall have a designated Master and/or Offshore Installation Manager (OIM) as applicable.
- 10.3 All units shall be issued a Minimum Safe Manning Certificate (MSMC) by the Administration in accordance with Marine Notice MAN-004 and/or MAN-001 when applicable. The MSMC shall describe the minimum maritime crew requirements for the MOU in all modes of operation.

SECTION XI

11.0 EMERGENCY PROCEDURES

- 11.1 All Liberian flagged MODUs, no matter the date of construction, shall comply with the requirements for emergency procedures described in Sections 14.9 through 14.14 of the 2009 MODU Code instead of those procedures described in Section 10.6 of the 1979 MODU Code or Section. All drills and exercises shall be recorded in the official logbook aboard the unit as per 14.14.2 of the 2009 MODU Code.
- 11.2 All Liberian flagged MOUs, other than MODUs, shall develop and have on board emergency procedures pertinent to the unit's operations. All drills and exercises shall be

recorded in the unit's official logbook. Additional guidance can be found in Chapter VI of this publication.

REQUIREMENTS FOR MOBILE OFFSHORE DRILLING UNITS THAT DO NOT MEET THE 1979, 1989, OR 2009 MODU CODE

SECTION I

1.0 APPLICATION

- 1.1 This Chapter contains the Requirements of the Republic of Liberia for the arrangement, equipment, operation, and certification of Mobile Offshore Drilling Units (MODUs) constructed prior to the implementation of the 1979 MODU by Liberia on 31 December 1981.
- 1.2 A MODU constructed before 31 December 1981 (hereafter referred to as an existing unit) which does not meet the requirements of the 1979 MODU Code must comply with the requirements specified in this Chapter and in Chapter I to the National MODU Standards.
- 1.3 The Administration may consider the application of the requirements and guidelines found in this Chapter to a MODU which was constructed on or after 31 December 1981 and does not fully comply with the provisions of either the 1979 or 1989 MODU Codes as applicable. This option may also be applied when a unit was initially constructed and/or registered under a flag that did not adopt the 1979 and/or the 1989 MODU Code and issued the unit's MODU certificates based on that flag's national MODU requirements.
- 1.4 It is not intended that the National MODU Requirements contained in this Chapter and in Chapter I result in the removal from service of existing units whose construction preceded the development and/or adoption of the 1979 MODU Code. Many existing mobile offshore drilling units have operated successfully and safely for extended periods of time and the Administration will consider each unit's operating history in evaluating its suitability to be certified for operation as a Liberian flagged MODUs.
- 1.5 The requirements of this Chapter do not preclude the issuance of a 1979, 1989, or 2009 Mobile Offshore Drilling Unit Safety Certificate to a unit constructed prior 31 December 1981 provided, the unit in question is in full compliance with the provisions of the applicable MODU Code.
- 1.6 The requirements of this Chapter may also be applied to a MODU which was initially constructed on or after 31 December 1981 and/or registered under a flag that did not adopted the 1979 and/or the 1989 MODU Code if so determined by the Liberian Administration.

SECTION II

2.0 CERTIFICATION, SURVEY, AND INSPECTION

2.1 Structural and Stability Requirements

- 2.1.1 All units are required to maintain class as a mobile offshore drilling unit with one of the classification societies (RO) recognized by the Administration. The classification for an existing unit shall provide structural, subdivision, and stability standards at least equivalent to those found in Chapter 2 and 3 of the 1979 MODU Code. Any deviations from the structural, subdivision, and stability of the 1979 MODU code shall be reported to the Administration by the RO for review and acceptance.
- 2.1.2 For existing units constructed without one compartment subdivision the Administration will consider acceptance of such units without modifications to provide a one compartment standard of subdivision. The existing level of subdivision may be accepted provided all watertight and weather tight boundaries, including closing devices, are maintained in serviceable condition and any operational limitations are satisfied at all times.
- 2.1.3 For unrestricted service, an existing unit should meet the 70 knot offshore and 100 knot severe storm wind heel criteria specified in the 1979 MODU Code. Special consideration may be given to units designed to a lesser wind velocity; provided, the previous service was in an equal or more severe environment and/or if appropriate operational limitations are applied. Units operating in sheltered locations should meet the 50 knot wind velocity criteria of the 1979 MODU Code.

2.2 Certification

- 2.2.1 All existing MODUs complying with this Chapter, upon successful completion of the applicable surveys shall be issued a Liberian National MODU Safety Certificate. All exemptions granted to the unit shall be noted on the National MODU Safety Certificate or an attached sheet.
- 2.2.2 The National MODU Safety Certificate will be valid for five (5) years, running concurrently with the five (5) year classification survey period.
- 2.2.3 All existing MODUs shall be issued international statutory certificates (i.e. MARPOL, ITC, Load Line, etc.) as specified in Section V of Chapter I to the National MODU Standards.
- 2.2.4 The classification society may issue to the unit the relevant statutory certificates and applicable documents of compliance on behalf of the Administration upon satisfactory completion of the necessary reviews and surveys.
- 2.2.5 It should be noted that self-propelled units that are required to comply with the ISM and ISPS Code shall be issued Safety Management Certificates and Ship Security Certificates, as applicable, in accordance with the provisions of SOLAS Chapter IX and Chapter XI-2.
- 2.2.6 Self-propelled units which embark upon an international voyage under its own power may be issued SOLAS Certificates such as Safety Construction and Safety Equipment if the unit meets the requirements for issuance of the certificate.

2.3 Surveys

- 2.3.1 Each existing unit shall be initially and periodically surveyed for compliance with the applicable provisions of the Administrations National MODU Standards.
- 2.3.2 The classification society will survey the existing unit and review plans and calculations on behalf of the Administration to determine the degree of compliance with the requirements of this Chapter. The initial survey of the unit and any technical reviews performed by the classification society are to ensure that there are no structural defects or excessive deterioration of the hull, that equipment is available and suitable for its intended purpose, and that there are no fire/explosion hazards or other unsafe conditions on board the unit.
- 2.3.3 The survey schedule for each existing unit, irrespective of build date, shall, without exception, be as specified in 1.6 of the 1989 MODU Code.
- 2.3.4 Dry-dock Survey - A minimum of two dry-dock surveys during any five-year period, shall be carried out. The intervals between any two such surveys should not exceed 36 months. Where such an extension of the unit's National MODU Safety Certificate is granted this five-year period may be extended to coincide with the extended period of the validity of the certificate.
- 2.3.5 Underwater Body Examination in lieu of Dry-docking - The Administration may allow underwater inspections in lieu of a survey in dry-dock provided such an inspection is equivalent to a dry-dock survey. An underwater inspection plan shall be submitted and approved in accordance with the requirements of the unit's Classification Society. Application for authorization for an underwater inspection in lieu of dry-docking shall be made via the unit's classification society to the Administration well in advance of the survey, and include a recommendation from the unit's Classification Society which details any conditions and prerequisites.

2.4 Annual Safety Inspections

- 2.4.1 All existing MODUs shall undergo annual safety inspections in accordance with the provisions found in Section VIII of Chapter I.

SECTION III

3.0 EQUIPMENT AND ELECTRICAL

3.1 Machinery and Equipment Installations

- 3.1.1 The machinery and electrical requirements contained in Chapters 4 to 8 of the 1979 MODU Code provide an acceptable degree of protection for personnel from fire, electric shock or other physical injuries. The requirements apply to both marine and industrial equipment.
- 3.1.2 Codes and standards of practice which have been proven to be effective by actual application by the offshore drilling industry which are not in conflict with the 1979 MODU Code, and which are acceptable to the Administration, may be applied in addition to these requirements.
- 3.1.3 All machinery, electrical equipment, boilers and other pressure vessels, associated piping systems, fittings and wiring should be of a design and construction adequate for the service for which they are intended and should be so installed and protected as to reduce to a minimum any danger to persons on board. Due regard shall be paid to moving parts, hot surfaces and other hazards. The design should consider the materials used in construction, the marine and industrial purposes for which the equipment is intended, the working conditions and the environmental conditions to which it will be subjected.
- 3.1.4 All machinery installed on an existing unit shall comply with the certification requirements of the unit's classification society. The class society requirements must provide a level of safety at least equivalent to the requirements found in Chapter 4 of the 1979 MODU Code. Any deviations from the structural, subdivision, and stability of the 1979 MODU code shall be reported to the Administration by the RO for review and acceptance.
- 3.1.5 Essential propulsion and auxiliary equipment, including oil fired boilers and heating units, must be periodically examined and tested as required by the classification society for maintenance of class standing and for validity of the Liberian National Mobile Offshore Drilling Unit Safety Certificate. Industrial equipment is to be examined and tested in accordance with recognized offshore drilling unit standards or, alternatively, as required by the Classification Society.

3.2 Hazardous Areas

- 3.2.1 Machinery and industrial equipment installed in hazardous locations must be suitable for safe operation under anticipated environmental conditions. Any installed electronic control or monitoring devices should be explosion proof or intrinsically safe, as applicable.

- 3.3 Hazardous areas for both machinery and electrical installation shall be divided into zones as follows:
 - 3.3.1 Zone 0: in which an explosive gas/air mixture is continuously present or present for long periods.
 - 3.3.2 Zone 1: in which an explosive gas/air mixture is likely to occur in normal operation.
 - 3.3.3 Zone 2: in which an explosive gas fair mixture is not likely to occur, and if it occurs it will only exist for a short time.
- 3.4 For the purpose of machinery and electrical installations, hazardous areas are classified as in accordance with requirements of Chapter 6 of the 1979 MODU Code.
- 3.5 Electrical Installations
 - 3.5.1 All electrical services necessary for maintaining the unit in normal operational and habitable conditions will be assured without recourse to the emergency source of power;
 - 3.5.2 Electrical services essential for safety will be assured in case of failure of the main source of electrical power; and
 - 3.5.3 The safety of personnel and unit from electrical hazards will be assured. The unit should comply with the requirements and guidelines found in Section 5.5 of the 1979 MODU Code.
- 3.6 Electrical equipment is to be constructed to minimize electrical shock, fire, and explosion hazards. Electrical equipment installed in Zone 1 and Zone 2 locations should be of suitable construction in accordance with Section 6.6.3 of the 1979 MODU Code. Existing equipment in Zone 1 or Zone 2 locations that does not meet MODU Code requirements may be accepted on a case by case basis if it can be shown that it does not produce personnel, fire, explosion, or other safety hazards.
- 3.7 Each unit should be equipped with an emergency source of power and emergency switchboard in accordance with the provisions of Section 5.3 and 5.4 of the 1979 MODU Code.
- 3.8 The ability of the ventilation systems in battery rooms, paint and flammable liquid lockers, gas cylinder storage spaces, and other similar compartments to prevent concentrations of flammable or toxic vapors should be verified. Only essential electrical equipment of appropriate construction should be installed in these spaces.

SECTION IV

4.0 DIVING SYSTEMS

- 4.1 Diving systems, if provided, should be installed, protected and maintained so as to minimize, so far as practicable, any danger to personnel or the unit, due regard being paid to fire, explosion or other hazards.
- 4.2 Diving Systems are to comply with the current revision of the IMO Code of Safety for Diving Systems.

SECTION V

5.0 LIFTING DEVICES

- 5.1 Lifting devices shall meet the standards of the unit's classification society regarding installation, testing, survey and certification of the devices the lifting devices shall be examined and tested, as applicable, during the initial and renewal surveys. The classification societies' standards should provide a level of safety at least equivalent to that found in Chapter 12 of the 1979 MODU Code. The Administration will consider on a case by case basis the acceptance of industry standards for lifting devices in lieu of class society standards if such standards provide a level of safety at least equivalent to that found in Chapter 12 of the 1979 MODU Code.
- 5.2 The Administration will accept certification intervals of five (5) years accompanied by annual testing of the cranes onboard a unit.
- 5.3 A classification society surveyor must examine and witness the load testing of any lifting devices that has been repaired or altered.
- 5.4 A boom radius versus hook load chart, or similar operating aid, must be available for use by the lifting device operator.
- 5.5 A crane manual as requested by Section 12.1.9 of the 1979 MODU code shall be provided on each existing unit.

SECTION VI

6.0 DYNAMIC POSITIONING

- 6.1 Where position keeping is achieved by means of a DP system, this system shall be tested and certified by the Classification Society for the unit and the appropriate class notation assigned.

SECTION VII

7.0 FIRE SAFETY

7.1 Fire Safety Equipment and Arrangements

- 7.2 Existing units should comply with the structural fire protection requirements in Section 9.1 and 9.2 of the 1979 MODU Code. However, for existing that do to their construction or arrangements cannot fully comply with the requirements of the 1979 MODU Code the Administration will, on a case by case, basis, consider deviations from the requirements of the Code if such provide a level of safety generally equivalent to that of the Code.
- 7.3 Interior stairways penetrating a single deck must be enclosed on at least one of the two levels served. Stacked stairways penetrating multiple decks may be accepted; provided, their enclosures maintain the integrity of each deck penetrated.
- 7.4 Accommodation or service spaces constructed of wood or other combustible material must be fitted with a fire detection and alarm system having sensors in each compartment. The system may be activated by heat, smoke, flame, other products of combustion, or a combination of these factors. Newly installed systems should meet the applicable SOLAS requirements. Existing systems should be suitable for marine applications and meet the requirements of a recognized national fire standard or underwriting agency acceptable to the Administration.
- 7.5 The bulkheads and decks separating paint lockers and other high hazard storage spaces from accommodations and/or control stations should be at least “A-0” steel fire boundaries or lined with steel if they are of wood or other combustible material construction.
- 7.6 Public spaces, staterooms and other sleeping quarters, and normally manned compartments are to be fitted with at least two means of escape which must remain unobstructed at all times.
- 7.7 Each unit must be fitted with at least two independently driven fire pumps. Although not required, they should preferably be located in separate compartments. Any suitable capacity pump with sea suction may be designated as a fire pump as long as it cannot be connected to a system conveying oil or other flammable liquid.
- 7.8 The arrangement and capacity of the fire main system should permit any accessible location aboard the unit to be serviced by two streams of water emanating from separate fire hoses which are not connected to the same hydrant. At least one of the two hoses specified above must be a single length fire hose. A fire hose, nozzle, and associated equipment are to be installed at each hydrant.
- 7.9 Portable fire extinguishing equipment, fixed firefighting systems and their components, fireman’s outfits, and other firefighting equipment should, to the extent reasonable and practicable, meet or exceed the requirements of the 1979 MODU Code. Alternative equipment and arrangements may be considered if they provide an equivalent level of protection. All firefighting equipment and appliances are to remain in serviceable condition and ready for immediate use at all times.

- 7.10 “NO SMOKING” and/or “NO OPEN FLAME” signs and other applicable warnings are to be displayed in working and living spaces, as appropriate.
- 7.11 Existing firefighting equipment on helicopter decks may be retained as long as it is in serviceable condition and is considered effective. A helideck fixed firefighting system is only required when helicopter refueling capability is provided.
- 7.12 Emergency Escape Breathing Device (EEBD) shall be provided in the machinery spaces as follows:
- 7.12.1 One (1) EEBD shall be provided for each watch stander in the engine control room, if located within the machinery space.
 - 7.12.2 A minimum of two (2) EEBDs shall be located on each level of the machinery space.
 - 7.12.3 If a machinery space contains an enclosed primary escape trunk having a door at each level, only one (1) EEBD need be located on each level.
 - 7.12.4 The location and number of EEBDs on board should be included on the units Fire Control Plan.

SECTION VIII

8.0 LIFESAVING APPLIANCES

- 8.1 Davit launched primary lifesaving capacity for 100% of the persons on board shall be provided on each side of the unit with a rigid totally enclosed, motor propelled, fire protected lifeboats.
- 8.2 For units that cannot comply with the above paragraph 8.1 the Administration will consider the acceptance of a combination of davit launched survival craft, having an aggregate capacity to accommodate at least 100% of persons permitted on board. At least one of these should be a rigid, totally enclosed, motor propelled, and fire protected lifeboat.
- 8.3 The Administration will give consideration to other survival craft arrangements, such as the installation of three widely separate davit launched lifeboats to provide capacity for 100% of the persons on board or a combination of davit launched lifeboats and float free life rafts, on a case by case basis taking in to account the size and design of the unit, the nature and arrangement of installed lifesaving equipment, and the unit’s area of operation.
- 8.4 In addition to the davit launched survival craft, each unit shall be fitted with inflatable life rafts of an aggregate capacity to accommodate at least all persons permitted on board. Each life raft must be equipped with a float free securing device which will automatically release the life raft when submerged.
- 8.5 Survival craft and survival craft equipment is to be in accordance with the applicable requirements of the LSA Code.

- 8.6 Survival craft should be so marked that they can be properly and readily identified; including identification of the craft by an aircraft.
- 8.7 Immersion suits should be provided in accordance with the requirements of the coastal state in which the unit is operating. In the absence of coastal state requirements regarding immersion suits, they are to be carried in accordance with Section 10.11 of the 1989 MODU Code. For purposes of this requirement, the Administration considers warm climates to be the region between 32 degrees North and 32 degrees South latitudes (see Marine Notice SAF-001).
- 8.8 A rescue boat must be provided in accordance with Section 10.2 of the 1979 MODU Code. The rescue boat must also comply with the applicable requirements of the LSA CODE. A lifeboat may be accepted as a rescue boat, provided that it and its launching and recovery arrangements also comply with the requirements for a rescue boat found in the LSA Code. The Administration may give special consideration to the location of and launching arrangements for the rescue boat on a case by case basis taking in to account the size and design of the unit and the area of operation.
- 8.9 An approved portable radio apparatus for survival craft complying with the requirements of Regulation 13 of Chapter III of the 1974 SOLAS Convention should be carried on each unit. This portable radio should be kept in a suitable location ready to be moved to one of the survival craft in the event of an emergency.
- 8.10 All lifeboats should carry a radar transponder. In addition, at least two radar transponders should be available on the MODU, so stowed that they can be rapidly placed in any life raft. All radar transponders should conform to performance standards not inferior to those adopted by IMO in Resolution A.802 (19).
- 8.11 Lifejackets shall be provided for 100 percent of the total number of persons permitted on board. A sufficient number of additional lifejackets shall be stowed in suitable locations for persons who may be on duty in a location where lifejackets are not available (see Marine Notice SAF-001). Lifejackets should be SOLAS approved or approved to an equivalent standard acceptable to the Administration.
- 8.12 At least eight lifebuoys are to be provided on each unit and stowed in accessible locations near debarkation points. Two of these lifebuoys are to have self-igniting lights. Another two are to be fitted with lifelines of a length at least equal to 1.5 times the distance from the working deck to the waterline. Lifebuoys should be SOLAS approved or approved to an equivalent standard acceptable to the Administration.
- 8.13 First aid kits should be readily available to the satisfaction of the Administration. Each unit should be provided with a stretcher capable of being used for lifting an injured person into a helicopter.
- 8.14 Not less than 12 rocket parachute flares complying with the LSA Code should be carried and bestowed on or near the navigating bridge. If the unit does not have a navigating bridge, the flares should be stowed in a location acceptable to the Administration.
- 8.15 A line-throwing appliance complying with the requirements of the LSA Code should be provided.

- 8.16 Means should be provided for embarkation into primary survival craft and other craft as appropriate. In providing the means of embarkation consideration should be given to the shape and configuration of the unit, the method of launching and embarkation into the survival craft. Minimum physical exertion should be required for embarkation.
- 8.17 Lifesaving appliances should be serviced and maintained in accordance with Liberian Marine Notice SAF-001 (Lifesaving Equipment) and SAF-005 (Lifeboat and Survival Craft, Servicing and Maintenance).
- 8.18 Illustrations and instructions should be provided on or in the vicinity of survival craft and their launching controls and should:
- 8.18.1 illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions or warnings;
 - 8.18.2 be easily seen under emergency lighting conditions; and
 - 8.18.3 use symbols in accordance with the recommendations of IMO.

SECTION IX

9.0 COMMUNICATION AND NAVIGATION EQUIPMENT

- 9.1 The radio installations on each unit shall comply with the applicable requirements of the 1979 MODU Code Chapter 11 and SOLAS, as amended, Chapter IV, Radio Communications.
- 9.2 Additional radio equipment shall be installed in a room or position, which could be the bridge or an emergency control room, situated as far as practicable from the radio equipment fitted in compliance with section 11.4 so that no single accident in any part of the MODU could deprive the MODU of all facilities for radio-communications.
- 9.3 Each unit must have a Radio Station License issued by the Administration.
- 9.4 Self-Propelled units while underway and units under tow must meet the GMDSS requirements of SOLAS. When being towed, the GMDSS installation aboard the towing vessel, or other accompanying craft, may be used to satisfy this requirement.
- 9.5 As an alternative to the SOLAS and 1979 MODU Code GMDSS requirements, units operating in coastal waters may comply with the GMDSS requirements of the coastal State. Units that operate exclusively in areas where GMDSS is not available do not have to be fitted with a GMDSS installation unless it is required by the coastal State.
- 9.6 While on location, the radio equipment installation must meet or exceed the requirements of the coastal State in which the unit is operating. However, in no cases shall the radio equipment installation meet requirement less than what is required by this Section. In the absence of coastal State regulations, radio equipment installations shall comply with the requirements of this Chapter.

- 9.7 Each unit serviced by helicopters should be provided with the radio communication equipment required for flight safely as determined by the coastal State.

SECTION X

10.0 SAFETY OF NAVIGATION

- 10.1 The applicable provisions of SOLAS Chapter V shall apply to all self-propelled MODUs.
- 10.2 The General Exemption referred to in SOLAS Chapter V, Regulation 3.1 shall apply to Non-Self-Propelled MODUs.
- 10.3 The requirements of the Convention on the International Regulations for Preventing Collision at Sea shall apply to all units except when stationary and engaged in drilling operations.
- 10.4 Each unit when stationary and engaged in drilling operations should comply with the requirements for, the safety of navigation of the coastal State in whose territorial sea or on whose continental shelf the unit is operating.
- 10.5 Bridge Navigation Watch Alarm Systems (BNWAS)
- 10.5.1 Each self-propelled unit shall be fitted with a BNWAS in accordance with SOLAS Chapter V.
- 10.5.2 For self-propelled units, other than drill ships, that when underway always have multiple persons on watch and/or located in different compartments on the unit the Administration will consider requests for exemptions from fitting a BNWAS,
- 10.5.3 In the case of such exemption when the unit is making an unassisted transit, the navigation watch shall, at all times, consist of not less than two (2) persons, one (1) of whom shall be a qualified navigation officer (mate).
- 10.5.4 For self-propelled units, other than drill ships, that typically make transit voyages under tow or tow-assisted, the Administration will consider requests for exemption from fitting a BNWAS.

SECTION XI

11.0 OPERATIONS

11.1 Each unit shall comply with the following Operating Requirements

- 11.1.1 Operating Manual - An Operating Manual complying with Section 14.1 of the 2009 MODU Code should be onboard the unit. The Operating Manual must be approved by the classification society on behalf of the Administration.
 - 11.1.2 Drills and Emergency Procedures - The requirements for drills, emergency procedures and instructions, onboard training and instructions, and recordkeeping described in Sections 14.9 through 14.14 of the 2009 MODU Code must be met. All drills and exercises must be recorded in the official logbook aboard the unit.
 - 11.1.3 Lifeboat Drills - The Administration recognizes the difficulty and hazards inherent with the launching of lifeboats from offshore units during drills. Nonetheless, regular drills are essential for crew emergency preparedness and therefore shall still be conducted, as required, to the degree that they may safely be carried out. In the event that weather or sea conditions are not compatible with the safe lowering into the water, exercising, and retrieval of the lifeboats, as determined by the OIM assigned to the unit, a log entry shall be made to that effect, the flag Administration notified by email to safety@liscr.com, and that operation performed at the next safe opportunity.
 - 11.1.4 Dangerous Goods - Each unit shall comply with the requirements of the 2009 MODU Code with regards to the carriage and stowage of dangerous goods.
 - 11.1.5 Marine Safety Data Sheets – Units carrying oil fuel shall comply with the requirements of Section 14.3 of the 2009 MODU Code.
 - 11.1.6 Transfer of Material, Equipment, or Personnel – All units shall comply with the requirements of Section 14.6 of the 2009 MODU Code with regarding the transfer of material, equipment, and personnel.
- 11.2 Each unit shall maintain a record of all changes (alterations log) to machinery, structure, outfitting, and equipment that will affect the light ship data. These are to be taken into account in daily operations.
- 11.3 Each unit shall comply with the following requirements with regards to helicopter operations:
- 11.3.1 The operating manual for normal operations should include a description and a checklist of safety precautions, procedures and equipment requirements for helicopter operations.
 - 11.3.2 If refueling capability is to be provided, the procedures and precautions to be followed during refueling operations should be in accordance with recognized safe practices and contained in the operations manual.

11.3.3 Fire-fighting personnel, consisting of at least two persons trained for rescue and fire-fighting duties, and fire-fighting equipment should be immediately available when the helicopter is about to land, landing, refueling, or during take-off.

11.3.4 Fire-fighting personnel should be present during refueling operations. However, the fire-fighting personnel should not be involved with refueling activities.

SECTION XII

12.0 SAFETY PRECAUTIONS

12.1 Internal means of communication should be available for transfer of information between all spaces where action may be necessary in case of an emergency.

12.2 Guards and rails should be provided to prevent persons from falling overboard the unprotected perimeter of all floor and deck areas and openings.

12.3 The Administration recognizes the difficulty and hazards inherent with the launching of lifeboats from offshore units during drills. Nonetheless, regular drills are essential for crew emergency preparedness and therefore shall still be conducted, as required, to the degree that they may safely be carried out. In the event that weather or sea conditions are not compatible with the safe lowering into the water, exercising, and retrieval of the lifeboats, as determined by the OIM assigned to the unit, a log entry shall be made to that effect, the flag Administration notified by email to safety@liscr.com, and that operation performed at the next safe opportunity

SECTION XIII

13.0 HELICOPTER FACILITIES

13.1 For construction, location, and marking of a helideck existing units may comply with either the helicopter deck requirements of the 1979 MODU Code or the Fifth Edition of CAP 437 issued August 2005.

13.2 Existing MODU that installed new helidecks shall comply with either the helideck requirements of the 1989 MODU Code if installed prior to 1 January 2012, or if installed on or after 1 January 2012 those of the 2009 MODU Code. Such new installations may also comply with CAP 437 (Seventh Edition) in lieu of the MODU Code. It should be noted that CAP-437 is a guideline for construction and marking of helicopter decks issued by the United Kingdom Civil Aviation Administration and accepted by many coastal states for MODUs operating on their outer continental shelf.

13.3 MODUs are not allowed to mix and match the requirements (i.e. part of the MODU Code and part of CAP 437). If a MODU opts to use CAP-437 it should be noted on the MODU Code Certificate and the unit shall be required to keep a copy of the applicable edition of CAP-437 on board.

REQUIREMENTS FOR COMPLIANCE WITH THE 1979 MODU CODE

SECTION I

1.0 Application

- 1.1 This Chapter contains the Republic of Liberia requirements for the construction, arrangement, equipment, operation, and certification of Mobile Offshore Drilling Units (MODUs) constructed on or after 31 December 1981 and prior to 1 May 1991.
- 1.2 This Chapter does not preclude the issuance of a 1979 Mobile Offshore Drilling Unit Safety Certificate to a unit constructed prior 31 December 1981 provided the unit in question is in full compliance with the provisions of this Annex and the 1979 MODU Code.

SECTION II

2.0 CERTIFICATION, SURVEY, AND INSPECTION:

- 2.1 Certification - MODUs that comply with the requirements of this Annex and the requirements of the 1979 MODU Code will be issued an international 1979 Mobile Offshore Drilling Unit Safety Certificate upon verification of compliance with the aforementioned requirements.
- 2.2 Survey - In addition to the requirement found in Part of Annex I, the following Administration guidelines for compliance with the identified provisions of 1979 MODU Code are provided:
 - 2.2.1 Section 1.6.1.2 - The interval for periodical surveys is five years.
 - 2.2.2 Section 1.6.1.3 - In lieu of the specified intermediate survey, the Administration has adopted the combined annual and intermediate survey scheme and the underwater survey schedule specified in Sections 1.6.1, 1.6.2, 1.6.3, 1.6.4, and 1.6.5 of the 1989 MODU Code. The Administration will accept an underwater inspection in lieu of drydocking when conditions provide an equivalent examination.
 - 2.2.3 Section 1.6.2 - The Administration requires that all MODUs be classed with a classification society which is recognized by the Administration. The Liberian Administration only recognizes the classification societies that are members of the International Association of Class Societies. These Recognized Organizations are authorized to perform the required statutory inspections and to issue the relevant statutory certificates (MODU, Load Line, MARPOL, SOLAS. etc.) on behalf of the Administration.

- 2.3 Annual Safety Inspection - As required in Part of Annex I to the Liberian MODU Standards MODUs complying with the 1979 MODU Code must undergo an annual Liberian Safety Inspection (ASI).

Section III

3.0 CONSTRUCTION, STRENGTH, MATERIALS, SUBDIVISION, STABILITY, AND LOAD LINE:

- 3.1 MODUS complying with the 1979 MODU code shall meet the requirements of Chapters 2 and 3 of the Code regarding construction, strength, materials, subdivision, stability, and load line. In general, the materials, construction, strength, stability, and subdivision of a MODU must meet the standards of the unit's classification society applicable to the specific MODU type (surface, self-elevating, or column stabilized). These requirements should be equivalent to, or exceed, those specified in the International Association of Classification Societies (IACS) Requirements Concerning Mobile Offshore Drilling Units (Requirements D3 through D7).
- 3.2 Extent of Damage Column Stabilized Units – (Section 3.5.3.2 of the 1979 MODU Code)
- 3.3 Depending upon the unit's arrangement and operations, the Administration may consider a reduction in the vertical extent of damage if an acceptable level of safety can be demonstrated.

SECTION IV

4.0 MACHINERY AND ELECTRICAL INSTALLATIONS

- 4.1 MODUS complying with the 1979 MODU Code shall comply with the requirements of Chapters 4 to 8 of the Code regarding machinery and electrical installations. Additional guidelines for compliance with specific identified sections of 1979 MODU Code are provided in the following paragraphs
- 4.2 Acceptable Standards – Section 4.1.2 of the 1979 MODU Code

Equipment which is constructed, surveyed, and tested in accordance with the requirements of a classification society recognized by the Administration is considered acceptable. Recognized offshore drilling industry standards or codes, which result in at least an equivalent level of safety may be accepted by the Administration. (

- 4.3 Design and Construction – Section 4.1.3 of the 1979 MODU Code

Machinery which is essential to the operation of the vessel, other than industrial drilling related equipment, must meet the applicable classification society design and construction standards. These requirements should be equivalent to, or exceed, those specified in the IACS Requirements Concerning Mobile Offshore Drilling Units (Requirement D9).

4.4 Electrical Installations – Internal Means of Communication – (Section 5.6 of the 1979 MODU Code)

Fixed internal communication systems will be required in all spaces that are normally manned during an emergency.

4.5 Equipment in Hazardous Areas – Section 6.6.4 of the 1979 MODU Code

Non-armored cables may be permitted in Zone 1 applications provided the level of safety is equivalent to that for an armored cable installation.

4.6 Equipment On Self-Propelled Units – Engineer’s Alarm – Section 7.8 of the 1979 MODU Code

A suitable internal communication system between the engine control room or maneuvering platform and the engineers’ accommodation may be substituted for the alarm.

4.7 Periodically Unattended Machinery – Alarm System – (Section 8.6.1 of the 1979 MODU Code)

Only functions related to the safety of personnel and/or the operation of propulsion or other vital machinery systems are required to be alarmed.

4.8 Periodically Unattended Machinery – Safety Systems – Section 8.8 of the 1979 MODU Code

Devices and arrangements which minimize the risk of serious damage, breakdown, or explosion in the event of a serious malfunction of the machinery or boilers should be employed. The possible dangers and complications that may result from a rapid and uncontrolled automatic shutdown of equipment should be avoided.

SECTION V

5.1 FIRE SAFETY

5.2 MODUS complying with the 1979 MODU Code shall comply with the requirements of Chapters 9 of the Code regarding fire safety. In general, firefighting equipment and construction materials (fire boundaries, portable fire extinguishers, detection and alarm systems, firemen’s outfits, etc.) should meet or exceed the applicable requirements contained in Chapter II-2 of SOLAS. Additional guidelines for compliance with specific identified sections of 1979 MODU Code are provided in the following paragraphs.

5.1 Covers for Windows and Side Scuttles – Section 9.2.13 of the 1979 MODU Code

The Administration considers this requirement applicable to windows and sidescuttles in boundaries which face the drill floor and are required to be of “A-60” construction. Other means of construction to maintain the required “A-60” integrity may be accepted as an alternative to steel covers or water-curtain protection.

5.2 Protection of Drill Floor Escape Route – Section 9.3.5 of the 1979 MODU Code

To the extent reasonable and practicable, due consideration will be given to the arrangement and location of the superstructure and/or deckhouse to protect personnel, escape routes, and survival craft from the radiant heat of a drill floor fire.

5.3 Fire-Extinguishing Systems in Machinery Spaces and in Spaces Containing Fired Processes – Sections 9.5.1 and 9.5.2 of the 1979 MODU Code

Semi-portable firefighting systems and/or additional portable extinguishers may be accepted by the Administration, on a case-by-case basis, as an alternative to a fixed firefighting system in continuously manned spaces.

5.4 Halon Systems – Section 9.5.1.1.3 of the 1979 MODU Code

On units built before 1 October 1994 existing fixed Halon firefighting systems may be retained as long as they remain in serviceable condition. Liberia is signatory to the 1985 Vienna Convention and the 1987 Montreal Protocol which provide for the recycling of Halon and the establishment of Halon Banks. This should allow for replenishment of a system which was discharged to extinguish a fire and for recycling of Halon in the event that a system is decommissioned. Attention is directed to Liberia Marine Notice POL-007, Use of Halogenated Hydrocarbons (Halon) and Other Ozone Depleting Substances.

5.5 Fire Detection and Alarm System – Section 9.7.1 of the 1979 MODU Code

The fire detection and alarm system installed in the accommodation and service spaces must meet SOLAS requirements. As such, it may be operated by heat, smoke, flame, other products of combustion, or any combination of these factors.

5.6 Firemen's Outfits – Section 9.9.3 of the 1979 MODU Code

Firemen's outfits should be stowed on the open deck in suitable enclosures that are readily accessible (not locked) and clearly labeled.

5.7 Helideck Foam Fire Extinguishing System – Section 9.11.2.2 of the 1979 MODU Code

A helideck foam fire extinguishing system will only be required on units equipped with helicopter fueling facilities.

SECTION VI

6.0 LIFESAVING APPLIANCES

- 6.1 MODUS complying with the 1979 MODU Code shall comply with the requirements of Chapters 10 of the Code regarding lifesaving appliances. The lifesaving appliances and equipment (survival craft, rescue boats, personal lifesaving appliances, lifebuoys, distress signals, etc.) should meet or exceed the applicable requirements contained in Chapter III of SOLAS and the International Life-Saving Appliance (LSA) Code. Additional requirements and guidelines regarding the provision of lifesaving equipment on MODUS complying with the 1979 MODU Code are provided in the following paragraphs.

6.1 Immersion Suits

For units, other than those operating in warm climates, immersion suits shall be provided for every person on board the ship. Immersion suits and thermal protective aids are to be assigned by the Master. Additional immersion suits shall be provided for each person on watch or at any normal work location that is remote from where immersion suits are normally stowed. For the purposes of this paragraph, a normal work location is a location where a crewmember regularly carries out normal work functions. For purposes of this requirement, the Administration considers warm climates to be the region between 32 degrees North and 32 degrees South latitudes (See Marine Notice SAF-001).

6.2 Emergency Drills – Section 10.6.3 of the 1979 MODU Code

The requirements for emergency drills described in Section 14.12 of the 2009 MODU Code instead of those procedures described in Section 10.6.3 of the 1979 MODU Code shall be met. All drills and exercises shall be recorded in the official logbook aboard the unit as per 14.14.2 of the 2009 MODU Code.

6.3 Emergency Warnings – Section 10.6.4.2 of the 1979 MODU Code

This section applies only to units fitted with a public address system.

SECTION VII

7.0 RADIO INSTALLATIONS

- 7.1 MODUS complying with the 1979 MODU Code shall comply with the requirements of Chapters 11 of the Code regarding radio communications and the applicable requirements of SOLAS Chapter IV, as amended. Additional requirements and guidelines regarding the provision of lifesaving equipment on MODUS complying with the 1979 MODU Code are provided in the following paragraphs.

7.2 Radio Station License

Each unit must have a Radio Station License issued by the Administration.

7.3 Requirements for Stationary Units at a Site or Engaged in Drilling Operation - Section 11.5 of the 1979 MODU Code

Units that operate exclusively in areas where GMDSS is not available do not have to be fitted with a GMDSS installation unless it is required by the coastal State.

Section VIII

8.0 LIFTING DEVICES

8.1 Crane Certification Intervals – Section 12.1.5 of the 1979 MODU Code

The Administration will accept certification intervals of five years accompanied by annual testing of the cranes.

8.2 Crane Safety Device – Section 12.1.7 of the 1979 MODU Code

The safety device will not be required if the crane operating manual contains restrictions which preclude lifting objects of unknown weight. If the safety device is installed, the operating manual must contain adequate procedures for periodic testing of the device by the crane operator.

8.3 Crane Manual - Section 12.1.9.1 of the 1979 MODU Code

Only operational and maintenance data needs to be contained in the crane operating manual aboard a unit.

SECTION IX

9.0 HELICOPTER FACILITIES

9.1 MODUS complying with the 1979 MODU Code shall comply with the requirements of Chapters 13 of the Code regarding helidecks except as noted in the following in the following paragraphs

9.2 The helideck should comply with either the helicopter deck requirements of Chapter 13 of the 1979 MODU Code or the Fifth Edition of CAP 437 issued August 2005 except as noted in the following paragraph 2.

9.3 MODUs that installed new helidecks on or after 1 January 2012 shall comply with either the helideck requirements of the 2009 MODU Code or in lieu of the MODU Code, the requirements of CAP 437 (Seventh Edition). It should be noted that CAP-437 is guideline for construction and marking of helicopter decks issued by the United Kingdom Civil Aviation Administration and accepted by many coastal states for MODUs operating on their outer continental shelf

9.4 MODUs are not allowed to mix and match the requirements (i.e. part of the MODU Code and part of CAP 437). If a MODU opts to use CAP-437 it should be noted on the MODU Code Certificate and the unit shall be required to keep a copy of the applicable edition of CAP-437 on board.

SECTION X

10.0 OPERATIONS

10.1 In lieu of compliance with the requirements of Chapter 14 of the 1979 MODU Code, the unit shall comply with the operating requirements found in Chapter 14 of the 2009 MODU Code

10.2 Operating Manual – Section 14.1 of the 1979 MODU Code

In lieu of compliance with the requirements of Section 14.1 of the 1979 MODU Code, the unit should have on board an Operating Manual complying with Section 14.1 of the 2009 MODU Code. The Operating Manual must be approved by the classification society on behalf of the Administration.

10.3 Dangerous Goods – Section 14.2 of the 1979 MODU Code

In lieu of compliance with the requirements of Section 14.2 of the 1979 MODU Code the unit shall comply with the requirements of the 2009 MODU Code with regards to the carriage and stowage of dangerous goods.

10.4 Transfer of Material, Equipment, or Personnel – Section 14.5 of the 1979 MODU Code

In lieu of compliance with the requirements of Section 14.5 of the 1979 MODU Code the unit shall comply with the requirements of Section 14.6 of the 2009 MODU Code with regarding the transfer of material, equipment, and personnel.

10.5 Diving Systems – Section 14.6 of the 1979 MODU Code

If a Diving system is fitted, the System shall comply with the IMO Code of Safety for Diving Systems.

10.6 Drills and Emergency Procedures

The requirements for drills, emergency procedures and instructions, onboard training and instructions, and recordkeeping described in Sections 14.9 through 14.14 of the 2009 MODU Code must be met. All drills and exercises must be recorded in the official logbook aboard the unit

10.7 Lifeboat Drills

The Administration recognizes the difficulty and hazards inherent with the launching of lifeboats from offshore units during drills. Nonetheless, regular drills are essential for crew emergency preparedness and therefore shall still be conducted, as required, to the degree that they may safely be carried out. In the event that weather or sea conditions are not compatible with the safe lowering into the water, exercising, and retrieval of the lifeboats, as determined by the OIM assigned to the unit, a log entry shall be made to that effect, the flag Administration notified by email to safety@liscr.com, and that operation performed at the next safe opportunity.

10.8 Marine Safety Data Sheets

Units carrying oil fuel shall comply with the requirements of Section 14.3 of the 2009 MODU Code.

10.9 Alteration Log

Each unit shall maintain a record of all changes (alterations log) to machinery, structure, outfitting, and equipment that will affect the light ship data. These are to be taken into account in daily operations.

10.10 Helicopter Operations

The operating manual for normal operations should include a description and a checklist of safety precautions, procedures and equipment requirements for helicopter operations.

10.12 Firefighting Personnel Requirement for Helicopter Operations

Fire-fighting personnel, consisting of at least two persons trained for rescue and fire-fighting duties, and fire-fighting equipment should be immediately available when the helicopter is about to land, landing, refueling, or during take-off. Fire-fighting personnel shall be present during refueling operations. However, the fire-fighting personnel should not be involved with refueling activities.

10.11 Helicopter Refueling

If refueling capability is to be provided, the procedures and precautions to be followed during refueling operations should be in accordance with recognized safe practices and contained in the operations manual.

Requirements For Compliance With The 1989 MODU Code

SECTION I

1.0 APPLICATION

- 1.1 This Chapter contains the Republic of Liberia requirements for the construction, arrangement, equipment, operation, and certification of Mobile Offshore Drilling Units (MODUs) constructed on or after 1 May 1991 and prior to 1 January 2012.
- 1.2 This Chapter does not preclude the issuance of a 1989 Mobile Offshore Drilling Unit Safety Certificate to a unit constructed prior 1 May 1991 provided the unit in question is in full compliance with the provisions of this Annex and the 1989 MODU Code.

SECTION II

2.1 CERTIFICATION

- 2.2 MODUs that comply with the requirements of this Annex and the requirements of the 1989 MODU Code will be issued an international 1989 Mobile Offshore Drilling Unit Safety Certificate upon verification of compliance with the aforementioned requirements.

SECTION III

3.0 CONSTRUCTION, STRENGTH, MATERIALS, SUBDIVISION, STABILITY, AND LOAD LINE

- 3.1 In general, the materials, construction, strength, stability, and subdivision of a MODU must meet the classification society standards applicable to the specific type (surface, self-elevating, or column stabilized). These requirements should be equivalent to, or exceed, those specified in the International Association of Classification Societies (IACS) Requirements Concerning Mobile Offshore Drilling Units (Requirements D3 through D7).
- 3.2 Extent of Damage Column Stabilized Units – Section 3.5.3.2 of the 1989 MODU Code

Depending upon vessel arrangement and operations, the Administration may consider a reduction in the vertical extent of damage if an acceptable level of safety can be demonstrated.

SECTION IV

4.0 MACHINERY AND ELECTRICAL INSTALLATIONS

4.1 MODUS complying with the 1989 MODU Code shall comply with the requirements of Chapters 4 to 8 of the Code regarding machinery installations. Additional guidelines for compliance with the specific identified sections of 1989 MODU Code are provided in the following paragraphs

4.2 Acceptable Standards – Section 4.1.2 of the 1989 MODU Code

Equipment which is constructed, surveyed, and tested in accordance with the requirements of a classification society recognized by the Administration is considered acceptable. Recognized offshore drilling industry standards or codes, which result in at least an equivalent level of safety may be accepted by the Administration.

4.3 Design and Construction – Section 4.1.3 of the 1989 MODU Code

Machinery which is essential to the operation of the vessel, other than industrial drilling related equipment, must meet the applicable classification society design and construction standards. These requirements should be equivalent to, or exceed, those specified in the IACS Requirements Concerning Mobile Offshore Drilling Units (Requirement D9).

4.4 Electrical Installations – Internal Means of Communication – Section 5.6 of the 1989 MODU Code

4.5 Fixed internal communication systems will be required in all spaces that are normally manned during an emergency.

4.6 Equipment in Hazardous Areas – Section 6.6.4 of the 1989 MODU Code

Non-armored cables may be permitted in Zone 1 applications provided the level of safety is equivalent to that for an armored cable installation.

4.7 Equipment On Self-Propelled Units – Engineer's Alarm – Section 7.8 of the 1989 MODU Code

A suitable internal communication system between the engine control room or maneuvering platform and the engineers' accommodation may be substituted for the alarm.

4.8 Periodically Unattended Machinery – Alarm System – Section 8.7.1 of the 1989 MODU Code

Only functions related to the safety of personnel and/or the operation of propulsion or other vital machinery systems are required to be alarmed.

4.9 Periodically Unattended Machinery – Safety Systems – Section 8.9 of the 1989 MODU Code

Devices and arrangements which minimize the risk of serious damage, breakdown, or explosion in the event of a serious malfunction of the machinery or boilers should be employed. The possible dangers and complications that may result from a rapid and uncontrolled automatic shutdown of equipment should be avoided.

SECTION V

5.0 FIRE SAFETY

- 5.1 MODUS complying with the 1989 MODU Code shall comply with the requirements of Chapters 9 of the Code regarding fire safety. In general, firefighting equipment and construction materials (fire boundaries, portable fire extinguishers, detection and alarm systems, firemen's outfits, etc.) should meet or exceed the applicable requirements contained in Chapter II-2 of SOLAS. Additional guidelines for compliance with the specific identified sections of 1989 MODU Code are provided in the following paragraphs.

- 5.2 Protection of Drill Floor Escape Route – Section 9.3.5 of the 1989 MODU Code

To the extent reasonable and practicable, due consideration will be given to the arrangement and location of the superstructure and/or deckhouse to protect personnel, escape routes, and survival craft from the radiant heat of a drill floor fire.

- 5.3 Fire-Extinguishing Systems in Machinery Spaces and in Spaces Containing Fired Processes- Sections 9.5.1 and 9.5.2 of the 1989 MODU Code

Semi-portable firefighting systems and/or additional portable extinguishers may be accepted by the Administration, on a case-by-case basis, as an alternative to a fixed firefighting system in continuously manned spaces.

- 5.4 Halon Systems – Section 9.5.1.1.2 of the 1989 MODU Code

On units built before 1 October 1994 existing fixed Halon firefighting systems may be retained as long as they remain in serviceable condition. Liberia is signatory to the 1985 Vienna Convention and the 1987 Montreal Protocol which provide for the recycling of Halon and the establishment of Halon Banks. This should allow for replenishment of a system which was discharged to extinguish a fire and for recycling of Halon in the event that a system is decommissioned. Attention is directed to Liberia Marine Notice POL- 007, Use of Halogenated Hydrocarbons (Halon) and Other Ozone Depleting Substances.

- 5.5 Firemen's Outfits – Section 9.9.3 of the 1989 MODU Code

Firemen's outfits should be stowed on the open deck in suitable enclosures that are readily accessible (not locked) and clearly labeled.

- 5.6 Helideck Foam Fire Extinguishing System – Section 9.11.2.2 of the 1989 MODU Code

A helideck foam fire extinguishing system will only be required on units equipped with helicopter fueling facilities.

SECTION VI

6.0 LIFESAVING APPLIANCES

6.1 MODUS complying with the 1989 MODU Code shall comply with the requirements of Chapters 10 of the Code regarding lifesaving appliances. The lifesaving appliances and equipment (survival craft, rescue boats, personal lifesaving appliances, lifebuoys, distress signals, etc.) should meet or exceed the applicable requirements contained in Chapter III of SOLAS and the International Life-Saving Appliance (LSA) Code. Additional requirements and guidelines regarding the provision of lifesaving equipment on MODUS complying with the 1989 MODU Code are provided in the following paragraphs.

6.2 Immersion Suits - Section 10.11.2 of the 1989 MODU Code

For units other than those operating in warm climates, immersion suits shall be provided for every person on board the ship. Immersion suits and thermal protective aids are to be assigned by the Master. Additional immersion suits shall be provided for each person on watch or at any normal work location that is remote from where immersion suits are normally stowed. For the purposes of this paragraph, a normal work location is a location where a crewmember regularly carries out normal work functions. For purposes of this requirement, the Administration considers warm climates to be the region between 32 degrees North and 32 degrees South latitudes (see Marine Notice SAF-001).

6.3 Emergency Warnings – (Section 10.16.2 of the 1989 MODU Code)

This section applies only to units fitted with a public address system.

SECTION VII

7.0 RADIO INSTALLATIONS

7.1 MODUS complying with the 1989 MODU Code shall comply with the requirements of Chapters 11 of the Code regarding radio communications and the applicable requirements of SOLAS Chapter IV, as amended. Additional requirements and guidelines regarding the provision of lifesaving equipment on MODUS complying with the 1989 MODU Code are provided in the following paragraphs.

7.2 Radio Station License

Each unit must have a Radio Station License issued by the Administration.

7.3 Requirements for Stationary Units at a Site, Or Engaged in Drilling Operation - Section 11.5 of the 1989 MODU Code

Units that operate exclusively in areas where GMDSS is not available do not have to be fitted with a GMDSS installation unless it is required by the coastal State.

Section VIII

8.0 LIFTING DEVICES

8.1 Crane Certification Intervals – Section 12.1.6 of the 1989 MODU Code

The Administration will accept certification intervals of five years accompanied by annual testing of the cranes.

8.2 Crane Safety Device – Section 12.1.8 of the 1989 MODU Code

The safety device will not be required if the crane operating manual contains restrictions which preclude lifting objects of unknown weight. If the safety device is installed, the operating manual must contain adequate procedures for periodic testing of the device by the crane operator.

8.2 Crane Manual – Section 12.1.10.1 of the 1989 MODU Code

Only operational and maintenance data needs to be contained in the crane operating manual aboard a unit.

SECTION IX

9.0 HELICOPTER FACILITIES

9.1 HELIDECKS – Chapter 13 of the 1989 MODU Code

- 9.1.1 The helideck should comply with either the helicopter deck requirements of Chapter 13 of the 1989 MODU Code or the Fifth Edition of CAP 437 issued August 2005 except as noted in the following paragraph 2.
- 9.1.2 MODUs that installed new helidecks on or after 1 January 2012 shall comply with either the helideck requirements of the 2009 MODU Code or in lieu of the MODU Code, the requirements of CAP 437 (Seventh Edition). It should be noted that CAP-437 is a guideline for construction and marking of helicopter decks issued by the United Kingdom Civil Aviation Administration and accepted by many coastal states for MODUs operating on their outer continental shelf.
- 9.1.3 MODUs are not allowed to mix and match the requirements (i.e. part of the MODU Code and part of CAP 437). If a MODU opts to use CAP-437 it should be noted on the MODU Code Certificate and the unit shall be required to keep a copy of the applicable edition of CAP-437 on board.

SECTION X

10.0 OPERATIONS

10.1 Operating Manual – Section 14.1 of the 1989 MODU Code

In lieu of compliance with the requirements of Section 14.1 of the 1989 MODU Code, the unit should have on board an Operating Manual complying with Section 14.1 of the 2009 MODU Code. The Operating Manual must be approved by the classification society on behalf of the Administration.

10.2 Dangerous Goods – Section 14.2 of the 1989 MODU Code

In lieu of compliance with the requirements of Section 14.2 of the 1989 MODU Code the unit shall comply with the requirements of the 2009 MODU Code with regards to the carriage and stowage of dangerous goods.

10.3 Transfer of Material, Equipment, or Personnel – Section 14.5 of the 1989 MODU Code

In lieu of compliance with the requirements of Section 14.5 of the 1989 MODU Code the unit shall comply with the requirements of Section 14.6 of the 2009 MODU Code with regarding the transfer of material, equipment, and personnel.

10.4. Diving Systems – (Section 14.6 of the 1989 MODU Code)

If a Diving system is fitted, the System shall comply with the IMO Code of Safety for Diving Systems.

10.5 Drills and Emergency Procedures – (Sections 14.8 thru 14.13 of the 1989 MODU Code):

In lieu of compliance with the requirements of Section 14.8 thru 14.13 of the 1989 MODU Code the unit shall comply with the requirements for drills, emergency procedures and instructions, onboard training and instructions, and recordkeeping described in Sections 14.9 through 14.14 of the 2009 MODU Code. All drills and exercises must be recorded in the official logbook aboard the unit

10.6 Lifeboat Drills

The Administration recognizes the difficulty and hazards inherent with the launching of lifeboats from offshore units during drills. Nonetheless, regular drills are essential for crew emergency preparedness and therefore shall still be conducted, as required, to the degree that they may safely be carried out. In the event that weather or sea conditions are not compatible with the safe lowering into the water, exercising, and retrieval of the lifeboats, as determined by the OIM assigned to the unit, a log entry shall be made to that effect, the flag Administration shall be notified by email to safety@liscr.com, and that operation performed at the next safe opportunity

10.7 Marine Safety Data Sheets

Units carrying oil fuel shall comply with the requirements of Section 14.3 of the 2009 MODU Code.

10.8 Alteration Log

Each unit shall maintain a record of all changes (alterations log) to machinery, structure, outfitting, and equipment that will affect the light ship data. These are to be taken into account

in daily operations.

10.9 Helicopter Operations

- 10.9.1 The operating manual for normal operations should include a description and a checklist of safety precautions, procedures and equipment requirements for helicopter operations.
- 10.9.2 If refueling capability is to be provided, the procedures and precautions to be followed during refueling operations should be in accordance with recognized safe practices and contained in the operations manual.
- 10.9.3 Fire-fighting personnel, consisting of at least two persons trained for rescue and fire-fighting duties, and fire-fighting equipment should be immediately available when the helicopter is about to land, landing, refueling, or during take-off.
- 10.9.4 Fire-fighting personnel should be present during refueling operations. However, the fire-fighting personnel should not be involved with refueling activities.

Requirements For Compliance With The 2009 MODU Code

SECTION I

1.0 APPLICATION

- 1.1 This Annex contains the Republic of Liberia requirements for the construction, arrangement, equipment, operation, and certification of Mobile Offshore Drilling Units (MODUs) constructed on or after 1 January 2012.
- 1.2 This Annex does not preclude the issuance of a 2009 Mobile Offshore Drilling Unit Safety Certificate to a unit constructed prior 1 January 2012 provided the unit in question is in full compliance with the provisions of this Annex and the 2009 MODU Code.

SECTION II

2.1 CERTIFICATION

- 2.2 MODUs that comply with the requirements of this Annex and the requirements of the 2009 MODU Code will be issued an international 2009 Mobile Offshore Drilling Unit Safety Certificate upon verification of compliance with the aforementioned requirements.

2.3 Surveys – Section 1.6.4 of 2009 MODU Code

The complete survey of the hull to meet the requirements of the Hull Special Survey may be carried out on the continuous survey basis consistent with the Classification Society's requirements for Continuous Survey.

SECTION III

3.0 CONSTRUCTION, STRENGTH, MATERIALS, SUBDIVISION, STABILITY, AND LOAD LINE

- 3.1 In general, the materials, construction, strength, stability, and subdivision of a MODU must meet the classification society standards applicable to the specific type (surface, self-elevating, or column stabilized). These requirements should be equivalent to, or exceed, those specified in the International Association of Classification Societies (IACS) Requirements Concerning Mobile Offshore Drilling Units (Requirements D3 through D7).
- 3.2 Extent of Damage Column Stabilized Units – Section 3.5.10.2 of 2009 MODU Code

Depending upon vessel arrangement and operations, the Administration may consider a reduction in the vertical extent of damage if an acceptable level of safety can be demonstrated.

3.3 Internal Openings – Section 3.6.5.2 of 2009 MODU Code

Doors placed at or below the deepest load line draft in column-stabilized and surface units, which are normally opened or frequently used, shall be remotely controlled from the central ballast control station and operable locally from each side. Indicators (i.e. light signals) showing personnel both locally and at the central ballast control station whether the doors or hatch covers in question are open or closed shall be provided.

SECTION IV

4.0 MACHINERY AND ELECTRICAL INSTALLATIONS

4.1 MODUS complying with the 2009 MODU Code shall comply with the requirements of Chapters 4 to 8 of the Code regarding machinery installations. Additional guidelines for compliance with the specific identified sections of 2009 MODU Code are provided in the following paragraphs

4.2 Acceptable Standards – Section 4.1.2 of 2009 MODU Code

Equipment which is constructed, surveyed, and tested in accordance with the requirements of a classification society recognized by the Administration is considered acceptable. Recognized offshore drilling industry standards or codes, which result in at least an equivalent level of safety may be accepted by the Administration.

4.3 Design and Construction – Section 4.1.3 of 2009 MODU Code

Machinery which is essential to the operation of the vessel, other than industrial drilling related equipment, must meet the applicable classification society design and construction standards. These requirements should be equivalent to, or exceed, those specified in the IACS Requirements Concerning Mobile Offshore Drilling Units (Requirement D9).

4.4 Electrical Installations – Internal Means of Communication – (Section 5.7.5 of 2009 MODU Code)

Fixed internal communication systems will be required in all spaces that are normally manned during an emergency.

4.5 Equipment in Hazardous Areas – (Section 6.5.5.2 of 2009 MODU Code)

The Emergency Disconnect System (EDS) shall be operable after an emergency shutdown

4.6 Cables Permitted in Hazardous Areas – Section 6.6.8.4 of 2009 MODU Code

Non-armored cables may be permitted in Zone 1 applications provided the level of safety is equivalent to that for an armored cable installation.

4.7 Equipment on Self-Propelled Units – Chapter 7 of 2009 MODU Code

The provision of Section 7.1 and 7.4 also applies to units fitted with means for positioning other than attachment to the seabed or other structures.

4.8 Engineer's Alarm – Section 7.8 of 2009 MODU Code

A suitable internal communication system between the engine control room or maneuvering platform and the engineers' accommodation may be substituted for the alarm. This provisions also applies to units fitted with means for positioning other than attachment to the seabed or other structures.

4.9 Periodically Unattended Machinery – Alarm System – Section 8.7.1 of 2009 MODU Code

Only functions related to the safety of personnel and/or the operation of propulsion or other vital machinery systems are required to be alarmed.

4.10 Periodically Unattended Machinery– Safety Systems – Section 8.9 of 2009 MODU Code

Devices and arrangements which minimize the risk of serious damage, breakdown, or explosion in the event of a serious malfunction of the machinery or boilers should be employed. The possible dangers and complications that may result from a rapid and uncontrolled automatic shutdown of equipment should be avoided.

SECTION V

5 FIRE SAFETY

5.1 MODUS complying with the 2009 MODU Code shall comply with the requirements of Chapters 9 of the Code regarding fire safety. In general, firefighting equipment and construction materials (fire boundaries, portable fire extinguishers, detection and alarm systems, firemen's outfits, etc.) should meet or exceed the applicable requirements contained in Chapter II-2 of SOLAS. Additional guidelines for compliance with the specific identified sections of 2009 MODU Code are provided in the following paragraphs.

5.2 Protection of Drill Floor Escape Route – Section 9.4.5 of 2009 MODU Code

To the extent reasonable and practicable, due consideration will be given to the arrangement and location of the superstructure and/or deckhouse to protect personnel, escape routes, and survival craft from the radiant heat of a drill floor fire.

5.3 Firemen's Outfits – Section 9.13.3 of 2009 MODU Code

Firemen's outfits should be stowed on the open deck in suitable enclosures that are readily accessible (not locked) and clearly labeled.

5.3 Helideck Foam Fire Extinguishing System – Section 9.16.4 of 2009 MODU Code

A helideck fixed foam fire extinguishing system will only be required on units equipped with helicopter fueling facilities.

SECTION VI

6.0 LIFESAVING APPLIANCES

6.1 MODUS complying with the 2009 MODU Code shall comply with the requirements of Chapters 10 of the Code regarding lifesaving appliances. The lifesaving appliances and equipment (survival craft, rescue boats, personal lifesaving appliances, lifebuoys, distress signals, etc.) should meet or exceed the applicable requirements contained in Chapter III of SOLAS and the International Life-Saving Appliance (LSA) Code. Additional requirements and guidelines regarding the provision of lifesaving equipment on MODUS complying with the 2009 MODU Code are provided in the following paragraphs.

6.2 Immersion Suits – Section 10.12 of 2009 MODU Code

For units other than those operating in warm climates may apply to the Administration for an exemption from the requirements to carry immersion suits. For purposes of this requirement, the Administration considers warm climates to be the region between 32 degrees North and 32 degrees South latitudes. A minimum of two (2) immersion suits (where required) and two (2) lifejackets shall be provided at locations where remotely located survival craft are stowed (see Marine Notice SAF-001).

SECTION VII

7.0 RADIO INSTALLATIONS

7.1 MODUS complying with the 2009 MODU Code shall comply with the requirements of Chapters 11 of the Code regarding radio communications and the applicable requirements of SOLAS Chapter IV, as amended. Additional requirements and guidelines regarding the provision of lifesaving equipment on MODUS complying with the 2009 MODU Code are provided in the following paragraphs.

7.2 Radio Station License

Each unit must have a Radio Station License issued by the Administration.

7.3 Requirements for Units Stationary at A Site or Engaged in Drilling Operation - Section 11.5 of 2009 MODU Code

Units that operate exclusively in areas where GMDSS is not available do not have to be fitted with a GMDSS installation unless it is required by the coastal State.

Section VIII

8.0 LIFTING DEVICES

8.1 Crane Certification Intervals – Section 12.1.6 of 2009 MODU Code

The Administration will accept certification intervals of five years accompanied by annual testing of the cranes.

8.2 Crane Safety Device – Section 12.1.8 of 2009 MODU Code

The safety device will not be required if the crane operating manual contains restrictions which preclude lifting objects of unknown weight. If the safety device is installed, the operating manual must contain adequate procedures for periodic testing of the device by the crane operator.

8.3 Crane Manual – Section 12.1.10.1 of 2009 MODU Code

Only operational and maintenance data needs to be contained in the crane operating manual aboard a unit.

SECTION IX

9.1 HELICOPTER FACILITIES

9.2 HELIDECKS – Chapter 13 of 2009 MODU Code

The helideck should comply with either the helicopter deck requirements of Chapter 13 of the 2009 MODU Code or the requirements of CAP 437 (Seventh Edition). It should be noted that CAP-437 is a guideline for construction and marking of helicopter decks issued by the United Kingdom Civil Aviation Administration and accepted by many coastal states for MODUs operating on their outer continental shelf.

MODUs are not allowed to mix and match the requirements (i.e. part of the MODU Code and part of CAP 437). If a MODU opts to use CAP-437 it should be noted on the MODU Code Certificate and the unit shall be required to keep a copy of the applicable edition of CAP-437 on board.

SECTION X

10.0 OPERATIONS

10.1 The unit shall comply with the requirements of Chapter 14 of the 2009 MODU Code. The Operating Manual must be approved by the classification society on behalf of the Administration.

10.2 Lifeboat Drills – Section 14.12.1 of 2009 MODU Code

The Administration recognizes the difficulty and hazards inherent with the launching of lifeboats from offshore units during drills. Nonetheless, regular drills are essential for crew emergency preparedness and therefore shall still be conducted, as required, to the degree that they may safely be carried out. In the event that weather or sea conditions are not compatible with the safe lowering into the water, exercising, and retrieval of the lifeboats, as determined by the OIM assigned to the unit, a log entry shall be made to that effect, the flag Administration shall be notified by email to safety@liscr.com, and that operation performed at the next safe opportunity.

RLM 293 Chapter VI Requirements For

Mobile Offshore Units (MOUs)

SECTION I

1.1 APPLICATION

1.2 This Annex contains the Republic of Liberia requirements for the construction, arrangement, equipment, operation, and certification of Mobile Offshore Units (MOUs)

1.3 Mobile offshore unit (MOU) means a manned vessel which can be readily relocated and which can perform an industrial function involving offshore operations or activities such as:

- Construction
- Maintenance (including the maintenance of wells)
- Lifting operations
- Pipe-laying and related operations
- Emergency/contingency preparedness, including firefighting
- Production systems
- Accommodations
- Storage systems

1.3 MOUs may be ship shaped, barge shaped, self-elevating or column stabilized units. If configured like a MODU the unit cannot be outfitted with drilling equipment for the purposes of exploration. Mobile Offshore Units (MOUs) includes, but not limited to, the following vessel types:

- FSO (Floating, Storage and Off-Loading)
- FPSO (Floating, Production, Storage, and Off-Loading)
- FPU (Floating Offshore Production Unit)
- FSU (Floating Storage Units)
- FLRSU (Floating Liquefaction, Regasification and Storage Unit)
- Workover and Well Servicing Vessels
- Non-self-propelled Dredges
- Non self-propelled accommodation vessels
- Non self-propelled construction vessels
- Non self-propelled crane vessels
- Non self-propelled cable and pipe laying vessels
- Other specialized non-cargo non-passenger vessels as designated by the Administration

Section II

2.0 Statutory Requirements

- 2.1 All Liberian flag MOUs, unless exempted by the Administration, are normally required to obtain the certificates listed below:
- a. Load Line Certificate
 - b. International Oil Pollution Prevention Certificate
 - c. Financial Responsibility Certificate, when applicable
 - d. Cargo Ship Safety Radio Certificate
 - e. International Tonnage Certificate
 - f. International Labor Organization Conventions ILO 92 and ILO 133 Crew Accommodation Certificates in lieu of compliance with the requirements of Title 3 of MLC 2006
 - g. Bunker Civil Liability Certificate
 - h. Liberian National Mobile Offshore Unit Certificate
 - i. Ship Radio Station License
 - j. Minimum Safe Manning Certificate
- 2.2 Requirements for obtaining certificates a thru g listed above are those found in the applicable international conventions and those of the unit's class society. Self-propelled MOUs, other than FPSO, FSOs, FSUs, and FLRSU, may be subject to compliance with the Special Purpose Ship Code as determined by the Administration.
- 2.3 The Liberian Administration has decided not to apply the provisions of MLC 2006 to non-self-propelled Mobile Offshore Units; including FPSO, FSOs, FSUs, FPU, and FLRSU. The application of MLC 2006 to self-propelled MOUs will be determined on a case by case basis taking into consideration the unit's design and operation.
- 2.4 For issuance of the Liberian National Mobile Offshore Unit Certificate, MOUs shall comply with the requirements of either Chapter IV or Chapter V to the Liberian Publication RLM 293 as indicated below:
- a. Chapter IV for units built prior to 1 January 2012
 - b. Chapter V for units built on or after 1 January 2012

The guidelines in RLM 293 address lifesaving equipment, firefighting systems and equipment, machinery and electrical installations, and special operating requirements. The provisions of the 1989 MODU Code or 2009 MODU Code, as applicable, relating to these areas are normally used as the standards for Liberian flag MOUs. However, the Administration will consider alternatives to and modifications of these requirements, as necessary, to address the specific design and operation of each MOU.

Also standards, other than the MODU Code, addressing the above mentioned areas may be accepted by the Administration if they provide a level of safety generally equivalent to the MODU Code requirements.

- 2.5 MOUs, in addition to comply with Chapter IV or Chapter V of the RLM-293, as applicable, shall also comply with the guidelines found in Section IV, Section V, Section VI, Section VII, Section VIII, and Section IX of Chapter I of the Liberian Publication RLM-293. These Sections provide requirements and guidelines for classification, survey, and inspection of the unit as well requirements for accommodation areas and manning.

- 2.6 Due to the variety of MOU designs and operating conditions the application of additional requirements, including the SPS Code, to each MOU will be determined by the Administration on a case by case base.
- 2.7 The requirements for obtaining a Ship Radio Station License can be found in Liberian Marine Notices RAD-001 and RAD-002.
- 2.8 The requirements for obtaining a Minimum Safe Manning Certificate (MSMC) can be found in Marine Notice MAN-004.
- 2.9 Self-propelled MOUs, depending on their design and nature of their operations, may also be required to obtain a Safety Construction Certificate, and Safety Equipment Certificates. Self-propelled MOUs may also be required to comply with the ISM Code and ISPS Code.
- 2.10 Non-self-propelled MOUs are not required by the Liberian Administration to comply with the ISM Code or the ISPS Code. However, the Liberian Administration recommends that all MOUs comply with SOLAS Chapter X1-2 and the ISPS Code to facilitate interaction between the MOU and other ships. If the unit is required by a coastal state to obtain a Ship Security Certificate, the Liberian Administration will review the unit's ship security plan and assist the owners in obtaining ISPS Code certificates.
- 2.11 All non-self-propelled MOUs should develop an operations manual and emergency response procedures to address the unit's operational, safety, and pollution risks associated with the unit's operations and systems. The operations manual should take into account the provisions of Chapter 14 of the 2009 MODU Code and other appropriate safety and emergency guidelines applicable to the unit's operation. If the coastal state in whose waters the MOU is located requires full compliance with the ISM Code, the Liberian Administration will review the vessel's safety management system and assist the owners in obtaining ISM Code certificates.