TO: ALL VESSELOWNERS, OPERATORS, MASTERS AND OFFICERS OF MERCHANT VESSELS, AND AUTHORIZED CLASSIFICATION SOCIETIES

SUBJECT: Manning requirements for Mobile Offshore Units (MOUs)

References: 
(a) Maritime Regulation 10.292
(b) IMO Resolution A.891 (21) as amended by IMO Resolution A.955 (23)
(c) International Regulations for Preventing Collisions at Sea, 1972, COLREGS
(e) IMO Resolution A.1047 (27)
(f) MEPC Resolution 186 (59)
(g) Publication RLM-118 – Requirements for Merchant Marine Personnel Certification.
(h) Global Marine Distress and Safety System (GMDSS) requirements.
(i) SOLAS Chapter V, Regulation 14

Augments: Marine Notice MAN-001, dated 06/12

PURPOSE:

This Notice promulgates the Liberian requirements for the manning of Mobile Offshore Units (MOUs), to include Floating Petroleum Storage Vessels and non self propelled MOUs while on fixed locations and when manned and under tow following the guidance of references (b), (e), and (f).

Reference (g), provides the standards and information on Training, Qualifications, Examinations, Certification and Documentation for all Merchant Marine Personnel required for compliance with STCW 1978, as amended and other related conventions. Refer to reference (g) for personnel certification requirements.

APPLICABILITY:

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

1.0 DEFINITIONS:

1.1 Administration means the Government of the State whose flag the MOU is entitled to fly.
1.2 **Ballast control operator** a person assigned responsibility for the normal day-to-day control of trim, draught and stability of a MOU.

1.3 **Barge supervisor** a person who may provide support to the OIM in certain essential marine matters. The Barge Supervisor on some MOUs may be referred to as the stability section leader or barge master.

1.4 **Coastal State Administration** means the Government of the coastal State concerned in cases where a MOU is engaged in exploration for, or exploitation of, the sea-bed and subsoil thereof, adjacent to the coast over which the coastal State exercises sovereign rights for the purposes of exploration and exploitation of their natural resources.

1.5 **Drillship** is a self-propelled vessel-shape mono hull surface mobile offshore drilling unit.

1.6 **Dynamically Positioned Vessel** is a vessel which is designated to automatically maintain its position and heading by using its own propellers and thrusters.

1.7 **Emergency preparedness training** means training which prepares individuals to respond adequately and safely to anticipated emergency situations.

1.8 **Maintenance supervisor** a person assigned responsibility for the inspection, operation and testing, as required, of all machinery and equipment as specified by the owner of the MOU. The Maintenance Supervisor on some MOUs may also be referred to as the chief engineer, technical section leader or rig mechanic.

1.9 **Maritime crew** comprises the OIM, Barge Supervisor (BS), Ballast Control Operator (BCO) and Maintenance Supervisor (MS) as well as other deck and engineering officers, radio operators and ratings as defined in regulation I/1 of the STCW Convention, as amended.

1.10 **Maritime safety training** means training with respect to safety of life at sea, including personal and group survival.

1.11 **Mobile offshore accommodation unit** is a unit the primary purpose of which is to accommodate personnel working offshore.

1.12 **Mobile offshore drilling unit** is an industrial function involving offshore operations other than those traditionally provided by the vessels covered by Chapter I of the 1974 SOLAS Convention. A unit capable of engaging in drilling operations for the exploration for, or, exploitation of resources beneath the seabed such as liquid or gaseous hydrocarbons, sulphur, or salt; are considered MOU’S under this definition.

1.13 **Mode of operation** means the condition or manner in which a unit may operate or function while on location or in transit. The modes of operation of a unit include the following:

- **Operating conditions**: conditions wherein a unit is on location for the purpose of conducting operations, including drilling and production activities, and wherein combined environmental and operational loadings are within the appropriate design limits established for such operations. The unit may be dynamically positioned, moored, or supported on the sea-bed, at the operating location as applicable.
- **Survival conditions**: conditions wherein a unit may be subjected to environmental loadings in excess of those established by the unit's operations manual for performing routine operations. It is assumed that routine operations will have been discontinued when the unit is placed in survival conditions as defined in the operations manual. The unit may be dynamically positioned, moored, or supported on the sea-bed, whether moored or dynamic positioned over the operating location as applicable.

- **Transit conditions**: conditions wherein a unit is moving from one geographical location to another.

- **Combined operations**: operations in association with, or in close proximity to, another mobile offshore unit or offshore installation, where conditions on the other unit or installation may have an immediate impact on the safety of the unit. For example, a dynamically positioned drill rig working next to a construction unit.

1.14 **Offshore installation manager (OIM)** means 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 MOU, and to whom all personnel on board are responsible.

1.15 **Other mobile offshore unit** is a unit which may be involved in any single activity or combination of activities such as:
- construction
- maintenance (including the maintenance of wells)
- lifting operations
- pipe-laying and related operations
- emergency / contingency preparedness, including fire-fighting
- offshore production systems
- diving

1.16 **Not mobile offshore unit** Vessels not included in the definition of MOUs:
- Crew boats
- Utility vessels
- supply vessels
- standby vessels
- anchor-handling vessels
- seismic vessels
- vessel-shape mono hull diving support vessels

1.17 **Special personnel** means all persons carried on board a mobile offshore unit in connection with the special purpose of the unit or with special work being carried out on the unit, and who are neither seafarers nor directly or indirectly paying passengers.

1.18 **Station Bill (may also be called Muster list)** is the list prescribed by an international convention or recommendation which applies to the unit. If no convention or recommendation applies, it means a similar list which indicates essential information on actions to be taken in the event of an emergency, in particular the station to which each person should go and the duties which that person should perform including the designation of individual responsibilities for the safety of others. Also the use of bunk cards at each bunk reminds of the alarm signals and lifeboat/liferaft assignment.
2.0 REQUIREMENTS:

2.1 Standards Regarding Watchkeeping for self propelled MOU’s when underway:

2.1.1 STCW 1978, as amended, the COLREGS, and SOLAS, 1974, as amended, have a direct impact on watchkeeping practices on all vessels and the manning requirements for self propelled MOU’s when underway (see B-V/d of reference (d)).

2.1.2 The Master of every vessel is bound to ensure that watchkeeping arrangements are adequate for maintaining safe navigational watches. If the Master is also the OIM for on location activities he shall also hold an OIM endorsement which indicates he has the necessary training and experience.

2.1.3 Under the general direction of the Master as applicable, the officers of the watch are responsible for navigating the vessel safely during their periods of duty, and they will be particularly concerned with avoiding collision and stranding.

2.1.4 The Maintenance Supervisor or Chief Engineer of every vessel is bound, in consultation with the OIM or Master, as applicable to ensure that watchkeeping arrangements adequately maintain safe engineering watches.

2.1.5 The officer in charge of the navigation watch is the Master's representative and is primarily responsible for the safe navigation of the vessel and for complying with the International Regulations for Preventing Collisions at Sea, 1972.

2.2 Fitness for Duty

2.2.1 All persons who are assigned duty as officer in charge of a watch, or as a rating forming part of a watch shall be provided a minimum of 10 hours of rest in any 24-hour period.

2.2.2 The hours of rest may be divided into no more than two periods, one of which shall be at least 6 hours in length.

2.2.3 During overriding operational conditions the minimum period of ten (10) hours may be reduced to not less than six (6) consecutive hours; provided that, any such reduction shall not extend beyond two (2) days, and not less than seventy (70) hours of rest shall be provided in each seven (7) day period.

2.3 Protection of Marine Environment

The master, officers and ratings shall be aware of the serious effects of operational or accidental pollution of the marine environment and shall take all possible precautions to prevent such pollution, particularly within the framework of relevant international and port regulations.

2.4 Vessel Security

The Master, OIM, officers and ratings shall be aware of their Security Duties as defined in
the Vessel’s Security Plan when applicable, and the vessel owner and operator are to ensure
the vessel is adequately manned to meet its security needs.

2.5 **Look-Outs** A proper look-out shall be maintained at all times in compliance with Rule 5 of
the COLREGS and shall serve the purpose of:

- maintaining a continuous state of vigilance by sight and hearing as well as by
  all other available means, with regard to any significant change in the
  operating environment
- fully appraising the situation and the risk of collision, stranding and other
dangers to navigation
- detecting ships or aircraft in distress: shipwrecked persons, wrecks, debris
and other hazards to safe navigation

2.6 **Principles of Safe Manning:** The following outlines the Administration’s requirements for
the principles of safe manning addressed by references and the training requirements for
MOUs as found in reference (b).

2.6.1 **Sufficient Number of Qualified Persons:** There should always be sufficient
number of qualified persons on board to deal with peak workload conditions and the
vessel’s complement shall include the grades/capacities and number of persons
required for safe operation of the vessel and the protection of the marine
environment with due regard to the number of hours of duties and rest periods
assigned. The following factors shall also be taken into account in determining the
minimum safe manning levels:

- size and type of vessel
- number, size and type of main propulsion units and auxiliaries
- construction and equipment of the vessel
- method of maintenance used
- operations
- operating areas (s), waters and operations in which the vessel is involved
- degree of shore side support
- extent to which training activities are conducted on board
- applicable work hour limits and rest requirements
- duty assignments during emergencies, and
- the provisions of the approved Security Plan when applicable.

2.6.2 There should be on board a nucleus of marine personnel to deal with routine
maintenance of marine-related equipment and marine-related emergencies.

2.6.3 Marine personnel should not normally be employed on non-marine duties.

2.6.4 The OIM and all crew on board a MOU shall have successfully completed the
training requirements appropriate to their position as identified in references (b), (e)
and (g) regarding but not limited to:

- Survival Craft
- Fire prevention
- Fire fighting
The Republic of Liberia

- First Aid
- Personal Safety
- Social responsibilities

2.6.5 Certificated (Licensed) personnel shall have received the specialized training identified in references (b), (e) and (g) as it related to their position on board the MOU.

2.6.6 Emergency drills and training sessions should be performed on all MODUs to ensure that all personnel are familiar with the emergency procedures. The OIM, Maintenance Supervisor, Barge Engineer, Ballast Control Operator, Survival Craft Crewmen and other marine-trained personnel are expected to provide guidance and leadership during training and in emergency situations.

2.6.7 The MSMC will only identify the marine crew. For example, the tool pusher, roustabouts and others in the crew need for the industrial operation of Mobile Offshore Drilling Units will not be identified in the MSMc but must be assigned to the MODU by the company.

2.7 Watches

2.7.1 Operators of MODUs should note that the provisions of reference (g) –describe how personnel with training and experience in MODU operations may qualify for the officer and rating grades required for service in Liberian MODUs and fill positions required by a specific MODU manning certificate.

2.7.2 On self propelled vessels, there should always be a sufficient number of qualified persons in a watch to maintain safe navigational, engineering and radio watches in accordance with regulation VIII/2 of the STCW Convention as amended, and also maintain general surveillance of the vessel.

2.7.3 A two-watch system should be adopted for both navigational and engine room watches for self propelled MOUs underway and (exceptions may be granted for vessels certified for unattended machinery operations).

2.7.4 Where the bridge watch is normally limited in numbers, there should be a routine for providing additional assistance without delay. This means that standby personnel should be identified and immediately contactable.

2.8 GMDSS

2.8.1 For vessels fitted with GMDSS, but without a radio maintainer on board, at least two (2) deck officers are required to hold the GMDSS-General Operator Certificate. One (1) of the operators shall be designated as having primary responsibility for radio communications during distress incidents. In this case, the duplication of on board equipment and shore-based maintenance must be employed by the vessel owner/operator.

2.8.2 For vessels fitted with a GMDSS but without two deck officers on board holding GMDSS-General Operator Certificates, a dedicated radio maintainer must be on
board who holds either a GMDSS-1st Class or GMDSS-2nd Class Radio Electronic Operator and Maintainer Certificate and is designated as having primary responsibility for radio communications during distress incidents.

2.8.3 For vessels without GMDSS, there shall be at least two persons certified to operate the radio equipment on board.

2.9 MODU Catering Staff: MODU Catering staff personnel are not normally included in the Minimum Safe Manning complement except when the vessel is required to comply with MLC 2006.

2.10 Unattended Machinery Operations: Vessels certified for unattended machinery operations, a sufficient number of qualified personnel must be carried to provide a continuous watch and manual control of machinery should there be an emergency there will be sufficient engineers on board to enable the vessel to move to a new destination.

2.11 Manning Principles for different vessel types:

2.11.1 Drill Ships, Self-Propelled and Mobile Offshore Drilling Units and Self Propelled and Oil Storage vessels will have to meet the navigation and engineering watch standing requirements found in reference (d). A Self-propelled drill ship on location will need an OIM or a Master with an OIM endorsement.

2.11.2 Non-Self-Propelled Vessels: Mobile offshore Units, such as the Self Elevating Mobile offshore Drilling Units (MODU), and non-self-propelled Oil Storage vessels which are not self propelled, do not navigate and rely on other vessels for propulsion are not required to meet the watchkeeping requirements found in reference (d).

2.11.3 In order to comply with reference (d), and to avoid possible port State interventions for liquid cargo transfer operations Owners and Masters should ensure that:

- All officers on oil, chemical and gas storage units who are in charge of cargo operations or who have immediate responsibility for cargo handling operations are qualified as Tankerman, Person in Charge, and
- That all ratings performing cargo handling duties and responsibilities, shall be qualified as Tankerman, Person Assisting.

2.11.4 Vessel to FPSO or FSO Transfer Operations At Sea: The vessel owner and master are to ensure the vessel is adequately manned to meet the general rules for safety and environmental protection for oil tankers transferring cargo at sea as described in reference (g).

2.12 Minimum Safe Manning Certificates

The following notes outline the procedures followed by the Administration in issuing Minimum Safe Manning Certificates (MSMs).
2.12.1 Procedures

2.12.1.1 The scales given below are standards for general guidance only. Minimum safe manning will be assessed on a unit by unit basis upon application to the Administration.

2.12.1.2 Subject to the governing principle that the Offshore Installation Manager (OIM) is at all times responsible for the safe operation of the MOU, the OIM, shall in his discretion, vary the number of personnel on watch either by reduction under favorable conditions or by augmenting watches in event of poor visibility or high traffic density or for other operational considerations as may be needed for the safety of the MOU.

2.12.1.3 In assessing the required qualifications and number of persons filling the positions identified on the minimum safe manning certificate, the Office of the Deputy Commissioner will consider the following duties and responsibilities for the individuals filling those positions on self-propelled MOUs as found in 3.3 and 3.4 of reference (e), as applicable:

- Navigation, comprising tasks, duties and responsibilities required, *inter alia*:
  - plan and conduct safe navigation;
  - maintain a safe navigational watch in accordance with the STCW Code;
  - maneuver and handle the ship in all conditions; and
  - moor and unmoor the unit safely.

- Industrial Operations, comprising tasks, duties and responsibilities required to:
  - plan, monitor and ensure the safe operation of the unit during its intended operations.

- Operation of the unit and care for persons on board as follows:
  - maintain the safety and security of all persons on board, and keep life-saving, fire-fighting and other safety systems in operational condition;
  - operate and maintain all watertight closing arrangements;
  - perform operations, as appropriate, to muster and disembark all persons on board;
  - perform operations as appropriate, to ensure protection of the marine environment; exercises
  - provide for medical care on board; and
  - undertake administrative tasks for safe operations of the unit at all times.

- Marine Engineering, comprising the tasks, duties and responsibilities required to:
  - operate and monitor the unit main propulsion and auxiliary machinery and evaluate performance of such machinery;
  - maintain a safe engineering watch in accordance with the requirements of the STCW Code;
  - manage and Perform Fuels and ballast operations; and
• maintain safety of the unit engine equipment, systems and services.
✓ Electrical, electronic and control engineering, comprising the tasks, duties and responsibilities required to:
  • operate the unit electrical and electronic equipment; and
  • maintain the safety of the unit electrical and electronic systems.
✓ Radio communications, comprising the tasks, duties and responsibilities required to:
  • transmit and receive information using the unit radio equipment;
  • maintaining a safe radio watch in accordance with requirements of the ITU Radio Regulations and the 1974 SOLAS Convention, as amended; and
  • provide radio services in emergencies.
✓ Management of the safety and security functions of the unit at sea when not underway.
✓ Maintenance of applicable occupational health and hygiene standards on board.
✓ The provision of proper food and drinking water for all persons on board. The number of qualified and other personnel required to meet peak workload situations and conditions, with regard to the number of duties and rest periods assigned to the crew.
✓ The capacity of the OIM and/or master and the unit’s compliment to coordinate the activities necessary for the safe operation of the unit and the protection of the marine environment.

2.12.1.4 In assessing minimum requirements, the Office of the Deputy Commissioner will consider the following duties and responsibilities:

• If an interdepartmental flexibility system of manning is proposed, the Office of The Deputy Commissioner shall require evidence that personnel are competent to perform their additional duties and are not employed in capacities for which they are untrained or unqualified.
• Entry-level ratings (junior ordinary seaman/wiper) and cadets will not be acceptable as part of the basic minimum safe manning complement.

2.12.1.5 In assigning the required qualifications and number of persons filling the positions identified on the minimum safe manning certificate, the Owner/Operator should consider the requirements of the Coastal State. For example in the USA the U.S. Coast Guard has determined that all Dynamically Position MODU’s must have an STCW Master on board at all times.
### MODU’s (Self-Propelled (SP))

<table>
<thead>
<tr>
<th>Application</th>
<th>On Location</th>
<th>Field Moves/Underway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Propelled Mobile Offshore Drill Ship</td>
<td>1 Master STCW II/2 (if Master is an OIM an additional OIM is not required)</td>
<td>1 Master STCW II/2</td>
</tr>
<tr>
<td></td>
<td>1 Off shore Installation Manager 1 Chief Mate STCW II/2</td>
<td>1 Chief Mate STCW II/2</td>
</tr>
<tr>
<td></td>
<td>3 Able Seamen (or Able Seafarer Deck)</td>
<td>2 Navigational Watch Officer (STCW II/1 ) (*Not required for moves less than 12 hours)</td>
</tr>
<tr>
<td></td>
<td>2 Ordinary Seamen (Ordinary Seafarer Deck)</td>
<td>3 Able Seamen (STCW II/4) or Able Seafarer Deck (STCW II/5)</td>
</tr>
<tr>
<td></td>
<td>1 Chief Engineer</td>
<td>2 Ordinary Seamen</td>
</tr>
<tr>
<td></td>
<td>1 Second Engineer</td>
<td>1 Chief Engineer (STCW III/2)</td>
</tr>
<tr>
<td></td>
<td>2 Engineering Watch Officers</td>
<td>1 Second Engineer (STCW III/2)</td>
</tr>
<tr>
<td></td>
<td>2 Oiler or Motormen</td>
<td>2 Engineering Watch Officers (STCW III/1)</td>
</tr>
<tr>
<td></td>
<td>1 Engine Rating</td>
<td>2 Oiler or Motormen (STCW III/4) or 1 Engineering rating (STCW III/4)</td>
</tr>
<tr>
<td>Or 3 Able Seafarer Engine</td>
<td>The notes will require two persons for each watch to be trained as DP operators (STCW 2009 Section B-V/f* Guidance on the training and experience for personnel operating DP systems) if fitted with DP.</td>
<td>Or 3 Able Seafarer Engine (STCW III/5)</td>
</tr>
<tr>
<td></td>
<td>If classed for Periodically Unattended Machinery Space the number of engineers may be reduced.</td>
<td>The notes will require two persons for each watch to be trained as DP operators (STCW 2009 Section B-V/f* Guidance on the training and experience for personnel operating DP systems) if fitted with DP.</td>
</tr>
</tbody>
</table>

**Self Propelled Mobile Offshore Drilling Unit – Semi submersible (Column Stabilized) Dynamically Positioned**

<table>
<thead>
<tr>
<th>1 Offshore Installation Manager (in the USA a Master will also be required if the OIM is also a master then only the OIM is required)</th>
<th>1 Master STCW II/2 (if Master is an OIM an additional OIM is not required)</th>
<th>1 Master STCW II/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Chief Mate STCW II/2 or Barge Supervisor</td>
<td>1 Chief Mate STCW II/2 or 1 Barge Supervisor</td>
<td>1 Chief Mate STCW II/2</td>
</tr>
<tr>
<td>2 Ballast Control Operators</td>
<td>1 Navigational Watch Officer (NWO) STCW II/1</td>
<td>1 Navigational Watch Officer (NWO) STCW II/1</td>
</tr>
<tr>
<td>2 Able Seamen MODU or (Able Seafarer deck)</td>
<td>1 Off shore Installation Manager</td>
<td>1 Off shore Installation Manager</td>
</tr>
<tr>
<td>1 Ordinary Seamen MODU or (Ordinary Seafarer Deck)</td>
<td>2 Ballast Control Operators (If BCOs are qualified as NWOs no additional NWO is required)</td>
<td>2 Ballast Control Operators (If BCOs are qualified as NWOs no additional NWO is required)</td>
</tr>
<tr>
<td>1 Chief Engineer or Maintenance Supervisor</td>
<td>3 Able Seamen MODU or Able Seafarer Deck (STCW II/5)</td>
<td>3 Able Seamen MODU or Able Seafarer Deck (STCW II/5)</td>
</tr>
<tr>
<td>1 Chief Electrician or Chief Mechanic</td>
<td>2 Ordinary Seamen MODU or Ordinary Seafarer</td>
<td>2 Ordinary Seamen MODU or Ordinary Seafarer</td>
</tr>
<tr>
<td>2 Mechanics (Oiler or Motormen) Or 2 Able Seafarer Engine (STCW III/5)</td>
<td>1 Chief Engineer or Maintenance Supervisor</td>
<td>1 Chief Engineer or Maintenance Supervisor</td>
</tr>
<tr>
<td>The Notes will require two persons for each watch to be trained as DP operators (STCW 2009 Section B-V/f* Guidance on the training and experience for personnel operating DP systems).</td>
<td>1 Chief Electrician or Chief Mechanic</td>
<td>1 Chief Electrician or Chief Mechanic</td>
</tr>
<tr>
<td></td>
<td>2 Mechanics (Oiler or Motormen)</td>
<td>2 Mechanics (Oiler or Motormen)</td>
</tr>
<tr>
<td></td>
<td>Or 2 Able Seafarer Engine (STCW III/5)</td>
<td>Or 2 Able Seafarer Engine (STCW III/5)</td>
</tr>
<tr>
<td></td>
<td>The Notes will require two persons for each watch to be trained as DP operators (STCW 2009 Section B-V/f* Guidance on the training and experience for personnel operating DP systems).</td>
<td>The Notes will require two persons for each watch to be trained as DP operators (STCW 2009 Section B-V/f* Guidance on the training and experience for personnel operating DP systems).</td>
</tr>
<tr>
<td>MODU or MOU – Non Self Propelled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Application</strong></td>
<td><strong>On Location</strong></td>
<td><strong>Field Moves/Underway</strong></td>
</tr>
<tr>
<td>Non-self-propelled Column Stabilized</td>
<td>1 Off shore Installation Manager</td>
<td>1 Off shore Installation Manager</td>
</tr>
<tr>
<td></td>
<td>1 Barge Supervisor</td>
<td>1 Barge Supervisor</td>
</tr>
<tr>
<td></td>
<td>2 Ballast Control Operators</td>
<td>2 Ballast Control Operators</td>
</tr>
<tr>
<td></td>
<td>3 Ordinary Seamen or (Ordinary Seamen MODU)</td>
<td>3 Ordinary Seamen or (Ordinary Seamen MODU)</td>
</tr>
<tr>
<td>Non-self-propelled Self Elevating</td>
<td>1 Off shore Installation Manager</td>
<td>1 Off shore Installation Manager/ or Master</td>
</tr>
<tr>
<td></td>
<td>1 Barge Supervisor</td>
<td>1 Barge Supervisor</td>
</tr>
<tr>
<td></td>
<td>2 Ballast Control Operators</td>
<td>2 Ballast Control Operators</td>
</tr>
<tr>
<td></td>
<td>3 Ordinary Seamen or (Ordinary Seamen MODU)</td>
<td>3 Ordinary Seamen or (Ordinary Seamen MODU)</td>
</tr>
</tbody>
</table>

The Notes will require two persons for each watch to be trained as DP operators (STCW 2009 Section B-V/f* Guidance on the training and experience for personnel operating DP systems).

For in field moves under its own power or for larger moves under tow:
1 Master (STCW II/2) (if Master is an OIM an additional OIM is not required)
2 Navigational Watch Officer (STCW II/1) (*one NWO Not required for moves less than 12 hours)
1 Barge Supervisor
2 Ballast Control Operators (BCO)
2 Able Seamen (STCW II/4) or (Able Seafarer deck MODU)1 Ordinary Seaman (STCW II/4) or Ordinary Seafarer
1 Maintenance Supervisor (or Chief Engineer) (STCW III/2)
2 Mechanics (Oilers/ Motormen) (STCW III/4) Or 2 Able Seafarer Engine (STCW III/5)

The Notes will require two persons for each watch to be trained as DP operators (STCW 2009 Section B-V/f* Guidance on the training and experience for personnel operating DP systems).
<table>
<thead>
<tr>
<th>FPSOs, FSOs and MOUs – Self propelled</th>
<th></th>
<th>FPSOs, FSOs and MOUs Non Self Propelled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-propelled Oil Storage Vessel – Not equipped for Unattended Machinery Space</td>
<td>1 Master or Offshore Installation Manager (STCW II/2)</td>
<td>1 Offshore Installation Manager Officer(s) (Tankerman In Charge - operational level) as needed depending on the frequency of transfers. Ratings (Tankermen Assist - Support level) as needed depending on the frequency of transfers. Engineer’s as need to provide hotel services and maintain the pumps and power to the navigation lights.</td>
</tr>
<tr>
<td></td>
<td>1 Navigational Watch Officer (Tankerman In Charge - operational level) (STCW II/1)</td>
<td>1 Officer (Tankerman In Charge - operational level)</td>
</tr>
<tr>
<td></td>
<td>2 Ordinary Seamen (Tankermen Assist - Support level) (STCW II/4)</td>
<td>3 Ratings (Tankermen Assist - Support level)</td>
</tr>
<tr>
<td></td>
<td>1 Chief Engineer (STCW III/2)</td>
<td>If manned: Master or OIM</td>
</tr>
<tr>
<td></td>
<td>1 Engineering Watch Officer (STCW III/1)</td>
<td>1 Officer (Tankerman In Charge - operational level)</td>
</tr>
<tr>
<td></td>
<td>3 Engineering Ratings (STCW III/4 or III/5) one of which must be an Oiler or Able Seafarer Engine.</td>
<td>3 Ratings (Tankermen Assist - Support level)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Engineer’s as needed to provide hotel services, and maintain the pumps and power to the navigation lights.</td>
</tr>
<tr>
<td>Self-propelled Oil Storage Vessel – Equipped for Unattended Machinery Space</td>
<td>Master or Offshore Installation Manager</td>
<td>If manned: 1 Offshore Installation Manager and 2-Deck ratings (Ordinary Seamen)</td>
</tr>
<tr>
<td></td>
<td>1 Navigational Watch officer (Tankerman In Charge - operational level).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 Ordinary Seamen (Tankermen Assist - Support level)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Chief Engineer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 Engineering Ratings (STCW III/4 or III/5) one of which must be an Oiler or Able Seafarer Engine.</td>
<td></td>
</tr>
<tr>
<td>Non-self-propelled Oil Storage Vessel</td>
<td>Offshore Installation Manager Officer(s) (Tankerman In Charge - operational level) as needed depending on the frequency of transfers. Ratings (Tankermen Assist - Support level) as needed depending on the frequency of transfers. Engineer’s as need to provide hotel services and maintain the pumps and power to the navigation lights.</td>
<td></td>
</tr>
<tr>
<td>Non-self propelled oil barge</td>
<td>1 Offshore Installation Manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes will require Tankermen for oil transfer.</td>
<td>If manned:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Offshore Installation Manager and 2-Deck ratings (Ordinary Seamen)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notes will require Tankermen for oil transfer</td>
</tr>
<tr>
<td>GMDSS Operators</td>
<td>Where GMDSS is fitted, there shall be at least 1 GMDSS 1&lt;sup&gt;st&lt;/sup&gt;/2&lt;sup&gt;nd&lt;/sup&gt; Class Operator or 2 Deck Officers holding GMDSS Operator Certificates.</td>
<td>IV/2</td>
</tr>
<tr>
<td>All Vessels</td>
<td>Where GMDSS is not required and is not fitted there shall be at least 2 persons certified to operate the radio equipment on board.</td>
<td>IV/2</td>
</tr>
</tbody>
</table>
2.13  Reductions from Minimum Numbers

2.13.1 Reductions from these minimum numbers may be considered by the Office of the Deputy Commissioner on application by the vessel operator, but applicants are advised that further reductions will only be allowed when it can be demonstrated that safety and security of the vessel, crew and the environment will not be affected. In all instances of reduced manning, it remains the Master’s/OIMs, Chief Engineer's/Maintenance Supervisor’s and owner's responsibility to provide sufficient personnel to cover additional watchkeeping requirements, cargo handling and control, and maintenance of the vessel or to make adequate alternative arrangements.

2.13.2 Requests for reduction must describe the how the vessel can meet the requirements with the reductions in crew such as very limited voyages with frequent crew changes, shore side support by visiting maintenance teams, and or new automated systems that reduce the work load. In the request for a reduction these operational or equipment advantages must address how the reduced crew can meet all of the tasks and issues presented in 2.12.1.3.

2.14  Survival Craft Crewmen

2.14.1 Two (2) Survival craft/rescue boat crewmen are required for each lifeboat on vessels in accordance with the SOLAS Convention. One person shall be designated the person -in-charge and another designated the second-in-command. Both the person-in-charge and the second-in-command shall be identified by clearly marked life jackets. In addition to the certified survival craft/rescue boat crewmen assigned to each motor lifeboat, there shall be a certified engineer or rating capable of starting the lifeboat engine and trouble shooting minor engine problems.

2.14.2 On all MOUs, survival craft/rescue boat crewmen are required at a ratio of two (2) to each lifeboat. In cases where liferafts are carried in lieu of lifeboats, one (1) survival craft/rescue boat crewman shall be carried for each 25 units of liferaft capacity, or part thereof.

2.15  MOU Catering Staff

MOU Catering staff personnel are not normally included in the Minimum Safe Manning complement except where they are qualified and also utilized as survival craft/rescue boat crewmen.
3.0 Control Procedures

3.1 Port State Authorities

3.1.1 Regulation I/4 of SCTW 1978, as amended, enables port State authorities to verify conditions on any vessel, particularly to the qualifications and ability of personnel on board. Port State authorities may pay particular attention to the following:

.1 that all seafarers on board who are required to be certificated hold an appropriate Liberian certificate or provide documentary proof that an application for an endorsement has been submitted to the; and/or
.2 the numbers and certificates of the seafarers serving on board are in conformity with the applicable safe manning requirements of the Administration.

3.1.2 In accordance with section A-I/4 of reference (b), port State authorities may assess the ability of the seafarers of the vessel to maintain watchkeeping standards as required by STCW 1978, as amended if there are clear grounds for believing that such standards are not being maintained because of any of the following having occurred:

.1 the vessel has been involved in a collision, grounding or stranding;
.2 there has been a discharge of substances from the vessel when underway, at anchor or at berth which is illegal under any international convention;
.3 the vessel has been maneuvered in an erratic or unsafe manner whereby routing measures adopted by the IMO or safe navigation practices and procedures have not been followed; or
.4 the vessel is otherwise being operated in such a manner as to pose a danger to persons, property or the environment.

* * * * *