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## Revision History

<table>
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<th>Revision Number</th>
<th>Date</th>
<th>Section</th>
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<tbody>
<tr>
<td>1</td>
<td>Aug – 2018</td>
<td>9.3; Sailing Instructions</td>
<td>Dangerous goods paperwork added to list</td>
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<tr>
<td></td>
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<td>9.7; Stowage and Securing of Cargoes in Containers</td>
<td>Wording added to highlight that the proper packing and securing of cargo within any container is the responsibility of the shipper and not the vessel</td>
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<td></td>
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<td>9.8; Refrigerated Containers Disconnection at Offshore Facilities</td>
<td>Wording on connection changed from “receptacles” to “power supply”</td>
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<td></td>
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<td>9.11; Cherry Picking</td>
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<td>9.12; Other Potentially Hazardous Practices</td>
<td>Wording at point 1 expanded on to indicate that this practice should be actively discouraged</td>
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<td>9.13; Unusual Cargo Items Loaded onto Vessel Decks</td>
<td>Reference added to “Non-Routine Cargo Items Guidance”</td>
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9 Logistics and Cargo Handling Operations

This Section includes guidance on best practice for logistics and cargo handling operations which should be complied with by all the relevant parties involved in the course of a typical voyage to and from the offshore destinations.

9.1 Cargo Planning

9.1.1 Compliance with Legislation

When planning to load any cargo, on or under deck, on an offshore support vessel, it is the joint responsibility of Charterer, Owner, Master and Base Operator to ensure that the proposed vessel is fully fit for purpose and in compliance with all relevant requirements relating to the safe carriage of the goods or products concerned.

Compliance with relevant international legislation, together with the rules or codes of the vessel’s flag state and those of the regional authorities in its present area of operations is included in this requirement.

The Charterer, Owner, Base Operator and Master should ensure that all personnel who may be involved in the loading or discharge of cargo are appropriately qualified and competent in the handling and carriage of the goods or products involved. This requirement also extends to other personnel who may be mobilised to provide any support services which might be necessary, including surveyors and other quality assurance specialists.

Whilst these responsibilities relate particularly to the carriage of dangerous goods and inflammable, noxious or otherwise hazardous liquid products, they also relate to all other cargoes carried on offshore supply vessels.

9.1.2 Notification of any Unusual Cargo Items

Where there is an intention to ship any unusual cargo items on an offshore supply vessel, the Base Operator should advise the Master in a timely manner in order that any risks associated with the shipment can be properly assessed and appropriate preparations made.

Items falling into this category are referred to in Sections 7.3.2 and 9.13 of these Guidelines.

9.1.3 Deck Space Management, Back Load Cargoes

Congestion on the cargo decks of both vessel and offshore facility can result in hazardous situations for personnel or equipment.

Except where rigorous planning of logistics support is in place or where previously agreed and confirmed in sailing instructions, it is considered good practice for a vessel to arrive at an offshore facility with approximately 10% of its useable deck clear and ready to receive initial back-load. This allows sufficient space to be cleared on the facility’s deck before any cargo is taken up from the vessel. Wherever possible, this clear deck space should be contiguous.

Subject to discussion with the Master, this recommendation may be waived at the last facility at which cargo is back-loaded onto the vessel prior to its return to base when all deck space may be utilised,
but only on the understanding that it will not subsequently be diverted to support another offshore location on its inward voyage.

9.2 Cargo Plans

In the course of the initial loading at its shore base, the Master should ensure that a record of the cargo loaded on board is maintained. This should show the locations of the “blocks” of cargo for each facility to be supported during the forthcoming voyage, together with number of lifts in each block and other relevant details.

Locations of any unusual cargo items should be clearly indicated.

The cargo plan may be further supported by photographs of the vessel’s deck.

There is normally a requirement for this plan to be forwarded to the Base Operator on completion of loading, who will subsequently arrange for it to be forwarded to the facilities to be supported in the course of the subsequent voyage.

The plan should be updated as the voyage progresses.

A typical deck plan is illustrated in Appendix 9-A of these Guidelines. Other examples, based on software packages exist, and may be more easily transmitted through the communications channels in use.

A table or drawing showing the contents of the vessel’s under-deck cargo tanks should also be prepared and forwarded to the Base Operator as described above.

9.3 Sailing Instructions

Prior to a vessel being dispatched on any voyage delivering cargoes to one or more offshore facilities the Base Operator or Logistics Service Provider, in conjunction with the Charterer, should furnish it with a comprehensive set of sailing instructions.

These instructions may include, but are not limited to the following:

1. Cargo Manifest which includes details of items loaded on the vessel.
2. Any specific information regarding cargoes on board, including:
   a. MSD Sheets.
   b. Particular hazards associated with any cargoes.
   c. Particular precautions relating to the care of any cargo.
   d. Dangerous Goods paperwork.
3. Routing for voyage.
4. Facilities data cards, if not already held on board.
5. Reporting requirements.
6. Any changes in contact details.
7. Any other special instructions or relevant information.
9.4 Weather Forecasts

Arrangements should be made with a reputable weather forecasting service provider, experienced in the preparation of offshore forecasts, to prepare and promulgate weather forecasts extending, where practicable, up to 5 days for the relevant locations.

Such forecasts will generally be arranged by the Charterer and should be made available to Masters of all vessels operating on its behalf.

The weather forecasting service provider may also be able to prepare more specialised information on request, including longer term forecasts and met-ocean statistical analyses, etc., if this is required for any particular purpose.

It is also the Master’s responsibility to ensure that forecasts from other publicly available sources can be received on board and taken into account in voyage planning.

9.5 Dispatch of Vessels

Where forecasts received indicate prolonged periods of adverse weather at the offshore locations to be supported on a particular voyage such that it is unlikely that any of the intended sites can be worked safely, the Master and Charterer should agree that the dispatch of any vessels involved should be deferred until anticipated conditions improve.

In the event that a vessel is dispatched in such circumstances, the Master may, at his sole discretion, elect to take an indirect route to reduce the risks to the ship, its personnel and cargo, or to proceed to a sheltered location to await an improvement in conditions the offshore locations.

In this context “prolonged period” should be taken as period exceeding approximately 1 day where it is unlikely that any work could safely be undertaken at any of the relevant offshore locations in the forecasted conditions.

9.6 Potential Dropped Objects

Unsecured objects being dislodged or falling from cargo items represent a risk to personnel, equipment and the environment throughout the supply chain. At all stages in the supply chain, items should therefore be thoroughly inspected prior to transfer from one stage to the next. Potential dropped objects identified during these inspections should be removed and reported.

Objects which constitute this risk include, but are not limited to:

1. Loose tools used when servicing equipment included in or forming part of the cargo item.
2. Foreign objects in or on containers, including in fork lift pockets.
3. Ice formed when water entrained in a cargo item freezes.

When loading or discharging any deck cargo, the personnel involved should move to a safe haven well clear of the intended load path until it is safe to approach the item, or it is no longer above the vessel’s deck.

Where practical and safe to do so, items on the deck should be inspected for potential dropped objects after loading and again before discharge at the offshore facility or onshore base.
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Any such objects identified during these inspections should be removed, if safe to do so, and an incident report submitted through the appropriate channels. If the objects cannot be safely removed the cargo item should be quarantined pending a full assessment of the risks which may be involved in discharging it, either at the offshore facility or quayside.

9.7 Stowage and Securing of Cargoes in Containers

Failure to correctly secure cargo items shipped in containers, either open or closed, can pose serious risk to personnel and equipment, including:

- Injuries being sustained by crew members when attempting to secure the loose items.
- A change in the centre of gravity of the lift due to the movement of loose items within the container could result in its being significantly out of level.
- This may result in the loss of contents from the container.
- Handling of the load, particularly when landing, will also be made much more difficult.

The proper packing and securing of cargo within any container is therefore a safety matter of the highest importance.

Any person who has reason to believe that the correct procedures have not been followed or satisfactory arrangements installed should “stop the job” until remedial measures have been implemented.

It is important to note that the proper packing and securing of cargo within any container is the responsibility of the shipper and not the vessel.

9.8 Refrigerated Containers, Disconnection at Offshore Facilities

From time to time, refrigerated containers may be used to deliver provisions to offshore facilities. Such containers may have their own self-contained refrigeration unit, but more usually electrically powered units will require connection to a power supply on vessels which have been specifically installed for this purpose.

Specific check lists may relate to the carriage of such items which should be completed by the relevant personnel.

Where such containers are used, it is important that they are not isolated for significant periods since the temperature may rise to such an extent that the contents thaw and have to be condemned.

It is therefore recommended that when preparing to discharge this type of container at an offshore facility the power supply should be isolated, disconnected and removed only from those items to be delivered to that facility. The power supply may remain connected to refrigerated containers intended for other destinations.

In some circumstances it may be necessary to isolate, disconnect and remove the power supply to those containers to be delivered to an offshore facility prior to entering its safety zone.
9.9 Tubular Cargoes

9.9.1 General Guidance

General guidance relating to best practices when transporting tubular cargoes is included in Appendix 9-B attached to this document.

9.9.2 “Round Tripped” Tubular Cargoes

It is recommended that when tubular cargoes remain on the vessel for successive voyages to an offshore facility, the following practices be adopted to prevent incidents:

1. Lifting arrangements should be checked to ensure that they are correctly installed prior to loading any other similar items “on top”.
   Such checks should include:
   a. Correct leads of all parts of lifting arrangements.
   b. Presence and correct installation of securing arrangements (bulldog grips, Velcro straps, tie-wraps, etc.).
   c. Adequacy and suitability of above securing arrangements.

2. Prior to lifting any bundles from the vessel deck at the offshore facilities, a check should be made of BOTH ends of the lifting slings to ensure that they are correctly set up for the lift.

Where appropriate, a risk assessment of the discharge of such items should be undertaken and the outcomes included for discussion in the subsequent tool box talk.

9.10 Main Block Operations

Cargo items will normally be transferred between a vessel’s deck and an offshore facility using the auxiliary hoist (otherwise known as the whip line) of the latter’s crane.

From time to time, however, where the weight of the item to be transferred exceeds the capacity of the auxiliary hoist, the crane’s main hoist must be used.

Should this be necessary, an intermediate pennant of sufficient safe working load should be installed on the hook of the main block enabling personnel to connect or release the lifting rigging on the cargo item without having to approach or attempt to manoeuvre the block itself.

Where practical, this intermediate pennant should be of sufficient length such that the height of the main block when the lifting rigging is connected or released is always approximately 5 metres above the cargo rails at the side of the main deck, or the highest adjacent item of cargo if this extends above the cargo rail.

Any requirements to undertake operations of this nature should be advised to the vessel involved in sufficient time for the appropriate task-specific risk assessments to have been made. Operations should not commence until the vessel has confirmed that these assessments have been completed and personnel briefed as to any particular precautions to be observed.
9.11 "Cherry Picking"

"Cherry Picking" may be defined as being "selective discharge of cargo from within the stow". The term "cherry picking" includes:

1. Cargo lifting arrangements not being directly accessible from deck level.
2. Breaking stow from an open location with no clear and secure access/escape routes to adjacent safe havens.
3. Any requirement for personnel to use unsecured ladders or to climb on top of other cargo or ship's structure and to enter any container to connect lifting arrangements is prohibited at all times.

Masters who are asked to undertake any of the above should “stop the job”.

To eliminate the risk of "cherry picking", every effort should be made prior to commencement of loading to ascertain which, if any, cargo items are of high priority.

Vessels will be advised accordingly, and cargo should be stowed in such a manner that any high-priority items can be discharged directly on arrival at their destination.

Such cargoes are to be identified before cargo is loaded onto the vessel.

9.12 Other Potentially Hazardous Practices

The following practices may also be potentially hazardous and should be individually risk assessed:

1. Moving other cargo on deck of vessel to gain access to a particular item. As with “Cherry Picking”, this practice should be actively discouraged due to various associated risks.

2. Lifting cargo containers to deck of facility, stripping the same and returning to the vessel, with the vessel being required to remain alongside the installation throughout.

   It should be appreciated that such practices may introduce increased risks due to:
   a. Additional lifting operations, involving increased risk to personnel.
   b. Vessels having to remain close adjacent to the facility for extended periods, involving increased risk of collision.

Masters who are asked to undertake either of the above should challenge any such requests, drawing attention to the additional risks outlined above.

Furthermore, before proceeding with any of the activities referred to above, a thorough risk assessment should be undertaken and the outcomes included for discussion in any subsequent tool box talks.

Where frequent requests to support operations of this nature are received from a particular facility concerns relating to the risks involved should be raised with the OIM and the Charterer.

9.13 Unusual Cargo Items Loaded onto Vessel Decks

From time-to-time requirements may exist for unusual items to be loaded onto the deck of offshore support vessels.
Examples of such items include, but are not limited to, the following:

1. Modules or large fabricated items associated with offshore construction projects.
2. Very long items, including tubulars, flare booms, crane booms or similar, which, because of lifting geometry require the use of 2 stinger pennants on the crane hook.
3. Any items which have not been pre-slung prior to shipment.

Such items may have unusual dimensions, be unduly heavy or have high footprint loads, have unusual means of support and their transportation may have been the subject of a specific engineering assessment. In addition, connection and release of the lifting rigging may pose particular risks for personnel on the vessel.

In this context, any cargo items not carried in conventional shipping units such as containers, baskets, tanks or racks should be considered “unusual”.

The Master of the vessel proposed for the carriage of any such items should be notified of the intention to load them on his vessel sufficiently in advance for the potential risks associated with their loading, carriage and discharge to be fully assessed.

Please refer to Chapter 3 for further information relating to specific responsibilities relating to this matter.

For further information and guidance refer to “Non-Routine Cargo Items Guidance” on the GOMO website. www.g-omo.info

9.14 Tag Lines

In general, it is recommended that the use of tag lines should be avoided.

However, it is recognised that their use may be advantageous in handling some of the cargo items referred to above, and also that they are in general use in certain parts of the world.

Guidelines for their make-up and use is therefore included in Appendix 9-C.