

Surveyor's Notebook – Part I

PERSONNEL TRANSFER USING SHIP'S CRANE

A number of recent incidents have occurred during the transfer of personnel from a ship engaged in offshore loading or discharging operations. The consequences of these incidents have led to fatalities and severe injuries, which have resulted in substantial compensation claims.

Reported incidents include:

- back injuries when personnel were landed heavily on deck
- fatality when crane wire parted
- fatality when a person fell into the sea without wearing a life vest
- knee injuries – slipping on wet deck when disembarking the basket
- bruising injury caused by the basket swinging relative to the ship being transferred to and hitting the crash barrier
- injury caused as the basket hits an accommodation railing on the tug
- leg injury as the basket is accidentally swung against the boom of the crane of the ship being transferred to
- personnel tipped from the basket as the basket is trapped beneath an obstruction on the ship being transferred to

In recent years, more and more cargo transfer operations are being carried out offshore, many times outside a territorial state's waters. Due to the nature of the operations, these are often being carried out in deep water, with exposure to the weather and sea swell.

If the ship-to-ship transfer is within port limits, the port itself may have certain personnel transfer procedures that should be complied with. If the ship-to-ship transfer is taking place outside port limits but within a territorial jurisdiction then that state's laws may apply.

These offshore operations require personnel to be transferred from one ship to another, or from a ship to a launch or tendering anchor handler or tug. These personnel can be crew, mooring masters, surveyors, agents or customs officials. They are usually experienced, but not always.

Ships, usually tankers, that engage in such transfer operations may do so infrequently and therefore the ships' personnel are not necessarily as experienced, trained and

equipped as those on offshore oil or construction platforms.

Transferring crew or personnel at sea is a dangerous activity. The Oil and Gas Producers (OGP) Safety Committee's recommended practice document lists three essential principles for lifting personnel:

- avoid doing so 'unless the risk has been demonstrated as being as low as reasonably practicable'
- carry out the lift according to a specific personnel lifting plan
- properly secure lifted personnel with lanyards

In locations that are within a harbour authority's jurisdiction, the preferred method of ship-to-ship transfer is often by a harbour authority launch. This option is not usually available when operating a long way offshore in open waters.

— POLICY

The safety Management System (SMS) must address the issue if ships are engaged in ship-to-ship transfers. It is not sufficient to allow such a high-risk operation to take place without a comprehensive policy, approved by the highest levels within the company. All ships must have proper procedures for critical operations. Transferring personnel falls into the category of critical operations. The consequences of not getting it right could be fatal.

The policy and procedures should consider the possible dangers, which include, but are not limited, to the following:

- poor communication between ships, on deck or with the person being transferred, and language problems
- insufficient or inexperienced crew
- pendulum effect, where the basket starts to swing and injuries can occur
- back and neck injuries occurring when the basket is landed heavily on deck – particularly in poor weather
- poor crane performance
- crane failure, wires, blocks, hooks, hydraulics, brakes
- poor, inexperienced or untrained crane operator
- weather, sea state including swell, wave height and period, rain squalls, wind, poor visibility, air and sea water temperature or ice
- inability of ship to remain in position
- sudden movement of other ship
- night-time transfers: lighting, not being able to see the sea/weather
- crane driver not being able to see the lift when over the side

- not using the appropriate transfer equipment/basket
- not wearing the appropriate clothing and/or life-saving appliances
- commercial pressures

— OFFSHORE STORAGE TANKERS

These ships are usually large seagoing tankers that are converted, equipped with large 'Yokohama'-type fenders and permanently moored by anchor/s or to a buoy. Tankers come alongside or use a floating hose to transfer cargo. Often these units are moored in benign waters.

These units, because they are permanently moored, should ensure that they have the policies, proper equipment and trained personnel for transferring personnel, if appropriate.

These will cover the same or similar issues that affect normal tankers engaged in ship-to-ship operations.

— SHIPS NOT DESIGNATED AS OFFSHORE STORAGE TANKERS – CONVENTIONAL SHIPS

These ships would not normally call at offshore locations to load or discharge. The officers and crew may or may not be experienced in this type of operation. This is therefore a non-routine but potentially high-risk operation.

Ships should ensure that they have proper procedures, equipment and trained crew for transferring personnel.

These will include:

- company approved procedures for transferring personnel
- a crane designated for transferring personnel – this should be Class inspected if used on a regular basis
- survey and maintenance plans to ensure operational reliance
- trained crane operators
- designated and trained personnel as banksmen

To be continued.....

(Article extracted from The Standard Club's publication – Standard Safety)