

Loss Prevention Circular KISHPNI-LP-DEC-2022

(What can make towing dangerous)

Besides the transport of another ship which is generally devoid of its own motive power, tugs/ towboats are also used during port operations assisting in safe berthing and unberthing operations. The work of tugboat pilots and crews is important but also challenging enough. Which are, therefore, the necessary preventive actions to be followed, in case of towing? Avoiding the planning of the towing can make towing operations dangerous; there are three main things to consider prior towing though:

- The prediction of the weather conditions
- The towing resistance and
- The type of tugboat



Real Life Incident:

A crude oil tanker was programmed to sail from Immingham port. Two pilots boarded, and three tugs were in attendance at the time. There was an exchange of information and an unberthing plan was agreed. The first two tugs were secured and the third tug was standing by to push on until clear of the jetty. All lines were secured and clear of the water. The fore and aft tugs lifted the vessel clear of the jetty and the pilot moved into the wheelhouse to monitor the radar for clearance of other jetties and buoys. When the vessel was 0.06 mile clear of the jetty the forward tug was ordered to pull full. Once the vessel was clear of the jetty the main engine was put half astern to move the pivot point aft, making it easier for the tugs to turn the vessel. Once turned, the engine was put ahead and speed increased. A speed of 3 knots had been reached when the pilot ordered the forward tug to be slipped.

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The pilot then ordered slow ahead on the engine. The tug called on VHF and said that the vessel was proceeding too fast and that he was positioned right under the starboard bow – speed was now 5 knots. The pilot reduced the speed and the tug was slipped and clear. There had been no report to the pilot of any incident with the tug. Later, the tug called the pilot and reported an injured crewman and damage to the tug's hull. The forward's tugs skipper had positioned his vessel under the bow of the tanker and wanted the pilot to confirm that the gear was about to be slipped. However, with the speed increasing on a flood tide, the tug was finding it difficult to maintain directional stability. The forward tug began to swing to starboard. Using full rudder and full power the skipper could not stop the swing to starboard and he collided with the bulbous bow of the vessel causing a split in the port side shell plating above waterline.

An inspection revealed no water ingress. The tug was lying alongside the starboard bow of the tanker still waiting for the gear to be slipped, which it was shortly afterwards. The tug cleared from alongside the vessel and returned to Immingham and inspected the damage.

Actions to be taken in case of towing

- ✓ Master should always confirm that everything is secured.
- ✓ Weather conditions should be checked.
- ✓ Preparatory operations should be made to the same standards regardless of the weather or the location.

Added General points to be considered: Plan the tow:

In addition to towing procedures developed by the Authorized Representative, and industry best practices, it is important for the Master to plan each tow. The plan should consider:

The size and type of the tow, and its limitations;

- The length of the towline, and the position of the tug;
- The location of the towing point;
- The tug's capability (considering its horsepower and bollard pull);
- The towing equipment that is best suited for the job (including the lines and wires);
- The stability of the tug and tow, when used together;
- The amount of consumables to be onboard (including fuel, water and essential spare parts)
- The connection and disconnection arrangements;
- The presence of a gob wire;
- The number of trained crew members in order to operate safely;
- The route planning, including safe transit times (day/night) and location (narrows, bridges, high traffic areas, etc.);
- The limits of the area (reduced depth, tidal limits and expected currents);
- Take into consideration local knowledge
- The weather forecasts, navigation information and warnings;
- The recommended speeds from local regulations or guidance; and
- The vessel's emergency plans.

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The Emergency Release System should be tested regularly to:

- Confirm that all locations of the abort system are included in the verification.
- Inspect the winch to make sure the brake and the clutch releases when activated.
- Confirm that the system fully resets after testing.

During the tow:

To avoid girding:

- 1) Know the length of the towline, and the position of the tug.
- 2) Know the location of the towing point.
- 3) Understand that the risk of girding increases if you change speed or course.
- 4) Never tow when the winch clutch is engaged, unless you are adjusting the length of the tow.
- 5) Check that tow wire is also paid out to "freshen the nip" when towing for extended
- 6) periods.
- 7) Know the characteristics of the towed unit (size, displacement, momentum, pivot point).
- 8) Watch the tow for signs it is overtaking you.
- 9) Check in regularly with the crew on the deck, and any other tugs involved in the operation.
- 10) Know the environmental conditions.
- 11) Make sure the tug is watertight by properly closing all openings.

The angle of heel limitation on the bridge should warn the master that the vessel may capsize. Corrective actions should be taken by the Master before an accident happens.

Procedures for emergency release of the tow should be in place prior to each towing operation. These procedures should be shared with the crew and clearly posted near the towing equipment. The emergency release instructions for the towline must be easy to see, find and understand. The Master should check his/her emergency procedures on what to do in case of bad weather, particularly in respect to arrangements for heaving to or taking shelter.



Girding occurs when a vessel is pulled broadside by a towline force and is unable to manoeuvre out of this position.

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