

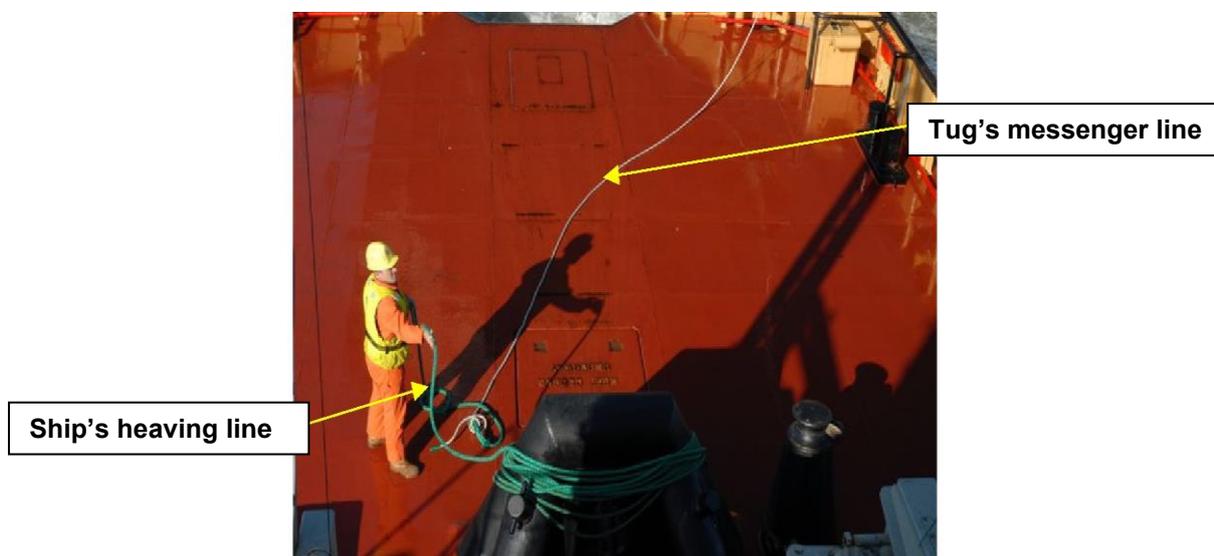
Tug safety – assisted ship guide to connecting up

Stand-by for manoeuvring

The assisted ship's crew should be on stand-by at their mooring stations early enough to ensure there is sufficient time to secure the tugs before the vessel enters the approach channel.

Steel tow wires – messenger lines and heaving lines

The heaving line used by the assisted ship should be made of a small diameter rope, ideally 8 - 10mm. Anything heavier makes it difficult and slower for ship's crew to bring the messenger and tow wire on board, requiring the tug to remain in close proximity to the ship and prolonging the most dangerous moment. The tug will take the heaving line and attached it to a 24mm rope messenger line of 30m in length, which will in turn be connected to a 42 - 48mm steel tow wire (or other towing line).



Dangerously weighted heaving lines

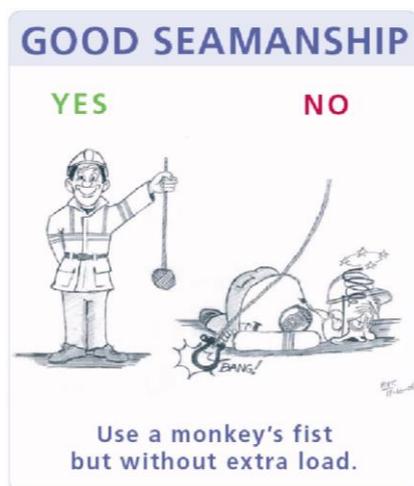
The use of inappropriately weighted heaving lines by ship's crew when passing mooring ropes or retrieving a messenger is dangerous and could lead to serious injury.

In the past it was not uncommon for seafarers to weight the monkey's fist at the end of a heaving line with pieces of scrap metal or to attach a heavy item such as a shackle, so that the line would travel a greater distance when thrown. This practice is no longer acceptable and heaving lines must not be weighted by items such as shackles, bolts or nuts, or twist locks. Any such other such object striking the head of a tug deck hand 20m below, has the potential to cause a serious or fatal injury; it could certainly lead to a fine or criminal prosecution of the ship's master. If an inappropriately weighted heaving line is



Unacceptable practice

used, the tug crew may cut off the monkey's fist or additional weighted parts before the heaving line is returned to the vessel.



The UK Maritime and Coastguard Agency's (MCA) publication "Code of Safe Working Practices for Merchant Seamen", Section 25.3.2, states that "heaving lines should be constructed with a "monkey's fist" at one end. To prevent personal injury, the 'fist' should be made only with rope and should not contain added weighting materials".

Safe alternatives to the traditional monkey's fist at the end of the line are:

- A soft floating ring, such as used at the end of lifebuoy lines
- A sand bag or rubber float



Safe alternatives to the monkey's fist

Safe speed for securing a tug

Following extensive investigation, tug operators have established that the safe maximum for securing a tug, particularly around the bow is 6 KNOTS THROUGH THE WATER. A tug master may refuse to approach and secure to a vessel above this limit.

Deck lights on the foc'sle and poop deck

The floodlights on the foc'sle can often blind the tug master, who is forced to look right into them while approaching the vessel. This will destroy the master's night vision and is particularly dangerous when approaching the bow.

When approaching aft, the effect of the superstructure lighting somewhat reduces

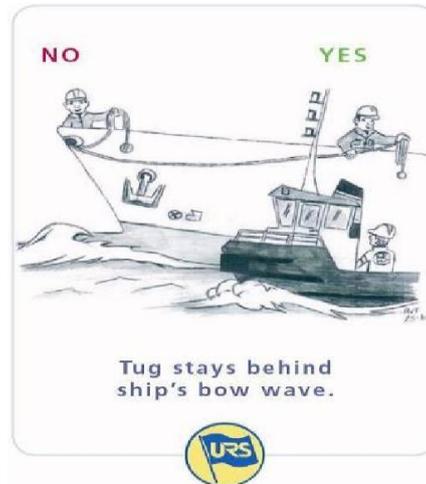
the brightness of the floodlights that illuminate the mooring deck.

Passing over the heaving line

The heaving line should be thrown over to the tug from the shoulder of the vessel if possible and not from the position of the Panama/Suez fairlead.

The position in front of the vessel's (bulbous) bow is the most dangerous for the tug. Simply lowering a heaving line from the bow is, therefore, not acceptable. The tug will generally stay on the lee side under the bow.

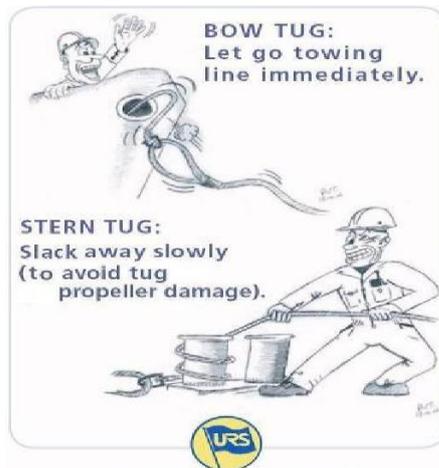
On instruction from the bridge, the operation should be conducted quickly and efficiently to allow the tug to withdraw to a safe position.



Securing the tug

Releasing the tow wire

There has been an increasing problem of uncontrolled release of towing lines by the ship's crew once towing is complete. This risks injury to those on the deck of the tug below and the possibility that the gear will foul the tug's propellers.



Releasing the tug

It is important that the tug's messenger should not be disconnected from the tow wire and the vessel's speed should be at dead slow.

At the bow, the wire should be released in one motion.

At the stern, the wire should be slackened gently using messenger, so that the wire can be recovered onto the tug's winch. This will help ensure that it does not go into the water.

Good communication, with the pilot advising the tug first and the master of the vessel then ordering his crew to release in a controlled manner.

Thank you for your co-operation

British Tugowners Association
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