

Dangerously weighted heaving lines

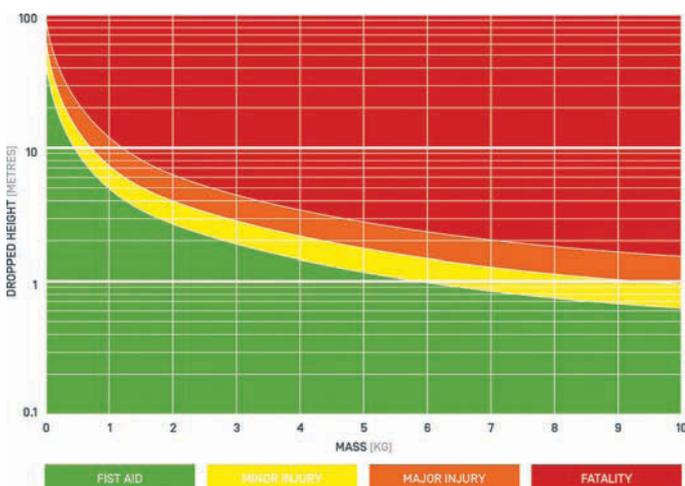
A frequent – and frequently unacknowledged – problem that needs to be tackled

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The practice of using unconventional, dangerous heaving lines is an endemic and perennial problem in the maritime industry. Ships' crews use a multitude of items to weight heaving lines. These range from bolts, nuts, threaded bar, even shackles (see MARS 201643), to sector-specific objects, such as container twistlocks and vehicle wheel chocks. This practice is not acceptable and introduces the potential for serious injury if a crew member aboard a tug or mooring boat, a linesman or a shore worker is struck by such an object during mooring operations, or if the weighted end hits a member of the vessel's mooring party when the heaving line is thrown back.

A recent MARS report (MARS 201835) highlighted a near miss involving a 'dropped object'. The graph below, which appeared in that report, clearly indicates the ratio between an object's weight and the distance it falls in relation to potential outcome of hitting an individual. Large modern container ships have bow heights of more than 10 metres. Coupled with the weight of an average dangerously weighted heaving line (approximately 1kg), it is clear that an injury (or worse) could be experienced.

Some of the items removed by tug crews in recent years have clearly been manufactured for the purpose, which means that chandlers are supplying these items to ships' crews. Whether homemade or purchased, it is clear that users have adapted to their environment and suppliers have evolved to supply their customers. Some flag states have even specified protective cages for tugs under their construction rules to protect the tug crews from dangerously weighted heaving lines. This seems to be missing the point.



Why do ships' crews do this?

There may be many reasons why crews weight heaving lines. Clearly, they are not inventing this array of dangerous weighting devices on purpose to harm tug crews and linesmen. It is more likely that crews have struggled to reach their targets over time during mooring operations and when taking towlines due to high winds – or perhaps more fundamentally, because some vessels are now so big that the height and distances involved make the use of a standard monkey's fist simply prohibitive. Weighting monkey's fists fitted to the end of heaving lines with pieces of scrap metal or sand, or attaching a heavy item such as a shackle will clearly assist the line to travel a greater distance when thrown. From one perspective, it's simply a means to an end.

In the towage industry, another worrying trend has emerged: the use of thicker, heavier messenger lines as heaving lines. These lines can be between 24–28mm in diameter. When coiled and falling from a height, they present as much of a hazard as a dangerously weighted heaving line. Because such lines are not easy to throw great distances, they tend to be used when the tug is positioned more or less beneath the ship, allowing the crew to throw the line on to the tug's deck.

Stakeholder activity

A brief online search reveals a plethora of articles, notices and updates on this topic, all with similar messages. The loss-prevention departments of all the major protection and indemnity (P&I) clubs have focused at one time or another on this topic. There is no shortage of guidance and alerts out there, yet the message appears not to be getting through to the right people.

The Code of Safe Working Practices for Merchant Seamen (COSWP), a best practice publication that can be found on the bookshelves of most well-managed vessels, has been updated to reflect the issues surrounding weighted heaving lines. It provides clear guidance on the matter. COSWP 26.3.5 states:

“To prevent personal injury to those receiving heaving lines, the “monkey's fist” should be made with rope only and must not contain added weighting material. Safe alternatives include a small high-visibility soft pouch, filled with fast-draining pea shingle or similar, with a weight of not more than 0.5kg. Under no circumstances is a line to be weighted by items such as shackles, bolts or nuts, or twist locks.”

Administrations such as the UK Maritime & Coastguard Agency have long had alerts in place, reiterating COSWP Chapter 26. The MCA has issued a warning that ‘Vessels using dangerously weighted heaving lines in the UK may be subject to prosecution.’ In support of this alert, the UK Administration is to be informed immediately after any incident involving dangerously weighted heaving lines. An alert could initiate a priority one (P1) inspection under the Paris MoU on Port State Control.

Harbour authorities, too, have acted to highlight this unacceptable practice. Like the UK MCA, they have issued notices warning of the potential penalties for the use of dangerously weighted heaving lines.

Many harbour authorities have instructed mooring teams to cut off weighted heaving lines and ‘any added appendages’ used during mooring operations. Items removed are retained as evidence in the event of any legal action against the vessel.

And still the problem persists.

Education

Given the persistence of this issue, education must form a key part of resolving the problem. But where do we start? Nautical colleges around the world could play a crucial part in informing their students, both officers and seafarers. In the first instance, there is need to increase awareness of the risk posed by what many crew members believe to be an innocent act. Perhaps harbour authorities and tug operators could liaise more effectively with nautical colleges to provide a ‘real-life’ lecture on this matter. Perhaps they should focus on best practice, with a reminder of the potential consequences, both for the injured party and the perpetrator?

Onboard management

After the tug master-pilot information exchange, the tug master often asks the pilot for confirmation from the Master of the assisted ship that weighted heaving lines will not be used. And moments later there is a loud bang on the deck of the tug as another dangerous line is thrown down. Anecdotally, when Masters are questioned by harbour officials after the event, they claim ignorance of the presence or use of any illicit form of heaving line.

Admittedly, the reduction in vessel manning does not help. There is as much to do as ever, but with fewer crew. But this in no way alleviates the need for line managers on board to ensure they understand the regulations and/or industry best practice. When was the last time that the Master discussed this with the Chief Officer? The latter, in turn, trains the junior deck officers and the bosun, who finally manage their respective deck teams during mooring deck operations. It is my contention that few, if any, of these fundamental management conversations take place. And yet, deck officers are the first and the last line of defence against the use of dangerously weighted heaving lines.

Management at all levels must take ownership in a bid to tackle this issue, and ship owners, managers and operators must also play their part.

Practical dilemmas

At the risk of delivering a mixed message, there are specific situations when, with adequate planning, and an appropriate level of communication, the use of a weighted line might be justified. Slowly lowering a weighted line in a controlled manner has been common practice in some areas. This is preferable to recent reports of an entirely unweighted heaving line (without even a monkey’s fist) flailing uselessly in the breeze as the tug positioned itself right under the bow of a ship – in the very position where the tug would like to spend the least amount of time!



Above: Approved weight.
Below: Illegal weights - and the consequences



What next?

The maritime industry must face up to this problem. This article is a call both to those affected by dangerously weighted heaving lines to continue reporting incidents by the appropriate means, including MARS, and to the officers and crews out there who can influence and ultimately eradicate this practice.

Next time you are preparing a heaving line or are in charge of a mooring party, think about the dangers it may pose to those on the receiving end – and use a monkey’s fist or appropriate alternative.

If a weighted heaving line is used, don’t be surprised if the line returns to the vessel without the weight! Most ports prohibit the use of additional heavy material, and vessels may be inspected or fined for breaching local regulations if a weighted end is used.

Before throwing a heaving line, the vessel’s mooring party should alert the linesmen, mooring boat and/or tug crew and anyone else in the vicinity that a line is about to be thrown. The operation should only proceed if the area where the heaving line will land is clear of personnel.

Communication and planning is everything.

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No. 2

DANGEROUSLY WEIGHTED SHIPS HEAVING LINES

There have been several instances where dangerously weighted heaving lines, including the use of monkey’s fists with additional weights inserted into them, have been used resulting in serious injury. Further guidance is contained in Ch 26 section 26.3.5 in the 2015 edition of the Code of Safe Working Practices for Merchant Seafarers.

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