



BRITISH TUG OWNERS' ASSOCIATION  
ANNUAL SAFETY SEMINAR 2022

**QUIKSLING**<sup>®</sup>   
THE LLOYDS APPROVED MOB RESCUE SYSTEM

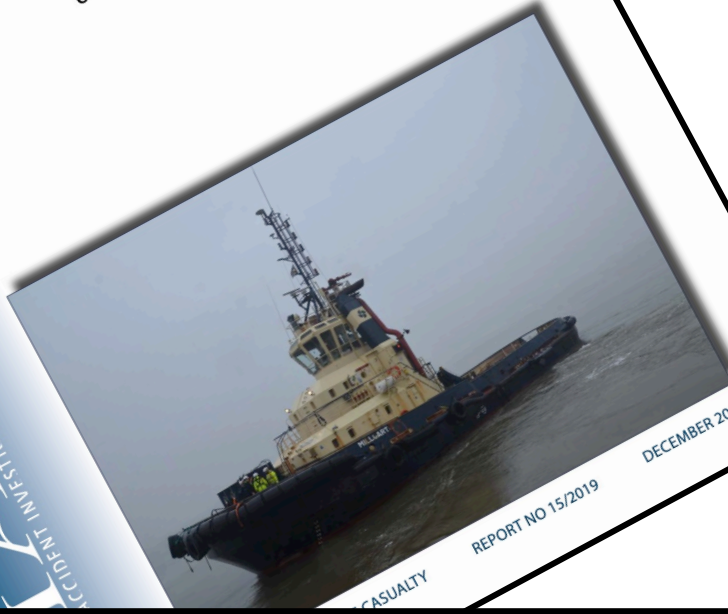
ACCIDENT REPORT

Report on the investigation of the fatal accident  
while boarding the tug

**Millgarth**

at the north oil stage  
Tranmere Oil Terminal, Birkenhead, England  
on 27 January 2019

ACCIDENT INVESTIGATION BRANCH  
**MTA**



REPORT NO 15/2019

DECEMBER 2019

CASUALTY

1. WHY WE'RE HERE

**QUIKSLING**<sup>®</sup>   
THE LLOYDS APPROVED MOB RESCUE SYSTEM

### 1.6.2 Life-saving appliances

The mandatory life-saving appliances (LSA) requirements for Class IX tugs under 500gt are set out in the *Merchant Shipping (Life-Saving Appliances For Ships Other Than Ships Of Classes III To VI(A)) Regulations 1999*. In accordance with the regulations, *Millgarth* was equipped with a rescue boat (with dedicated winch), two 10-person inflatable liferafts (one on each side of the boat), four lifebuoys (two with smoke signals and light, and two with 18m buoyant line), 14 emergency use lifejackets and ten immersion suits.

In addition to the mandated LSA, *Millgarth* was equipped with two MOB recovery devices: a Jason's Cradle with dedicated winch and davit, and a rescue-sling. This equipment was fitted to satisfy conditions set by the MCA in 2003 when it permitted a reduction in the tug's minimum manning levels from four to three. The conditions included:

- Crew wearing lifejackets with PLBs.
- Carriage of MOB equipment that is readily available, regularly checked for condition and maintained in accordance with manufacturer's instructions.
- Risk assessments to be carried out on board and periodically reviewed.
- New crew members to be familiarised with the MOB recovery equipment prior to sailing.

### 1.6.3 Rescue-sling

The rescue-sling carried on board *Millgarth* was manufactured by the Norwegian company Sula Bedriftsteneste AS (SB). It was designed to help rescue a casualty from the water and could be used as a stand-alone piece of safety equipment or as part of the full SB rescue system, which included a rescue davit and winch. The SB rescue-sling was one of two similar types of MOB recovery devices carried on board all Svitzer tugs in Liverpool.

The SB rescue-sling was attached to a 12mm plaited polyester line and was clipped to a 1.2m long open-ended aluminium frame to form an open loop (**Figure 7a**). The frame was attached to a 1.7m telescopic pole that could be extended to 4m (**Figure 7b**). The procedure for recovering a person from the water was:

1. Place the frame holding the sling around the person, either from the feet up or head down.

At about 1749, the chief engineer stepped over the damaged over-rider and, crouching down, lowered himself onto the top of the fender. As he did so, he fell backwards, through the gap between the oil stage and the fender, into the river. His lifejacket inflated and he started to drift clear of the oil stage and tug with the ebbing tide.

On seeing the chief engineer fall into the water, *Millgarth's* master immediately moved the tug away from the oil stage and alerted Mersey vessel traffic service (VTS) of the accident using very high frequency radio. The chief engineer was floating on his back about 5m off *Millgarth's* port bow with his head out of the water and arms and legs outstretched. The assistant engineer tried to throw him a rope, but the wind blew it back on board. The mate then threw a lifebuoy with a lifeline attached and, after several attempts, managed to get it close to the casualty, who put an arm through it. The two crewmen then used the attached line to pull the chief engineer to the foot of the tug's port side rescue ladder and gate, which were located approximately midships, aft of the main access gate (**Figure 5**). He had been in the river for approximately 5 minutes and was able to hold on to the recessed ladder, but was unable to climb up.

The master came down from the wheelhouse and asked the crew to get the manoverboard (MOB) rescue-sling, which was stored on the bulkhead on the starboard side of the main deck (**Figure 6**). The crew positioned the rescue-sling under the chief engineer's arms and tried to lift him using its aluminium telescopic extension pole. They managed to pull him out of the water to his waist level but were unable to lift him further. The master left the two crewmen in charge and went back into the wheelhouse to control the vessel. He maintained communication with Mersey VTS, who informed him that the rescue boat *Marine Fire Rescue 1 (MFR1)*, based at the port's Pier Head Landing Stage in Liverpool, was on its way.



VERY SERIOUS MARINE CASUALTY REPORT NO 15/2019 DECEMBER 2019

# 1. WHY WE'RE HERE

**QUIKSLING**<sup>®</sup>   
THE LLOYDS APPROVED MOB RESCUE SYSTEM

#### 1.7.4 Manoverboard drills

In accordance with Svitzer's requirements, emergency drills, including MOB, fire, abandon ship and medical emergencies were carried out monthly on board *Millgarth*. The drills were recorded in the SMS and occasionally in the tug's official logbook. Examination of the records showed that MOB drills had been conducted on board *Millgarth* on a monthly basis. All but one of the MOB drills recorded in the past 12 months had been conducted by the bottom watch crew. The top watch crew might have carried out MOB drills that had not been recorded because Svitzer UK only required one drill per tug to be recorded each month. The last recorded MOB drill for *Millgarth's* top watch crew was carried out on 18 February 2018. On that occasion, the crew recovered a mannequin, which was thrown into the water in Bramley.

A month after the accident, MAIB inspectors observed an MOB drill conducted by *Millgarth's* bottom watch crew at Bramley. The crew took about 18 minutes to recover the mannequin back on board using the SB rescue-sling and Jason's Cradle. Key observations made were:

- The crew struggled to manoeuvre the mannequin into the cradle with the SB rescue-sling. The sling was not tightened, and the frame was not removed, so the mannequin kept falling back into the water.

<sup>5</sup> Digital Selective Calling (DSC) is a standard for transmitting pre-defined digital messages. It is a part of the Global Maritime Distress safety system.

<sup>6</sup> Global Positioning System (GPS) is a satellite-based radio navigation system.

<sup>7</sup> Mate Saver was the brand name of the other type of rescue-sling used on board Svitzer UK tugs.

17

- The sling eventually released itself from the frame and tightened around the torso of the mannequin. The crew then physically lifted the mannequin back on board.
- A further drill was conducted when the crew managed to guide the mannequin into the Jason's Cradle and retrieve it in much shorter time.

The MCA required an MOB drill to be completed in the presence of one of its surveyors every 2 years. The drills usually coincided with the tug's 2-yearly inspection regime. The last MOB drill witnessed on board *Millgarth* by an MCA surveyor was the one conducted by the top watch crew on 18 February 2018.

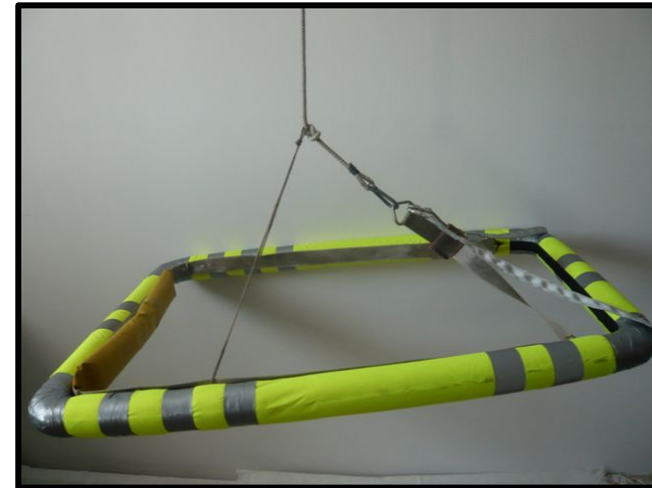
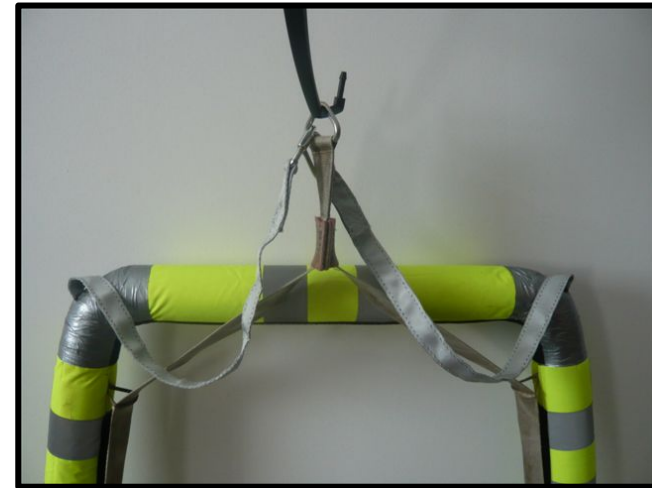
VERY SERIOUS MARINE CASUALTY REPORT NO 15/2019 DECEMBER 2019

# 1. WHY WE'RE HERE

**QUIKSLING**<sup>®</sup>   
THE LLOYDS APPROVED MOB RESCUE SYSTEM

1. Perfect sea conditions
2. Lovely morning dawn
3. Fully compliant vessel
4. Experienced familiar crew
5. Three souls almost lost

2. WHEN IT ALL STARTED



**FROM THE ISLES OF B&Q...**

# 3. WHAT'S IN THE BOX

**QUIKSLING**<sup>®</sup>   
THE LLOYDS APPROVED MOB RESCUE SYSTEM

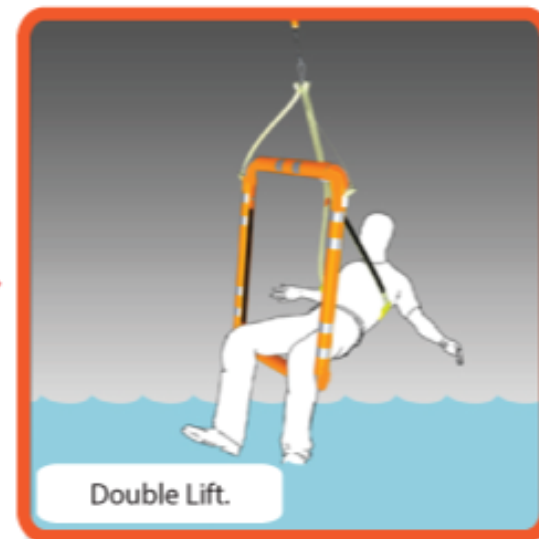
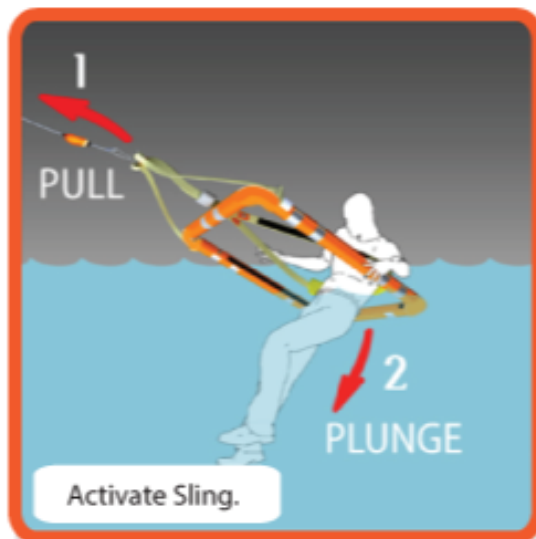


**.....TO FULL LLOYDS TYPE APPROVAL**

# 3. WHAT'S IN THE BOX







<http://www.quiksling.com/how-it-works>

4. HOW IT ALL WORKS

**QUIKSLING**<sup>®</sup>   
THE LLOYDS APPROVED MOB RESCUE SYSTEM

## How it Works

- Weight of only 3kg allows for easy throw, and soft surfaces alleviate injury risk
- Delivers a wide open loop for easy entry in rough seas- even an inflated lifejacket does not impede
- Hand grasp diameter buoyancy frame is easily flipped overhead for entry
- The casualty is captured by two slings: a detachable chest sling and the leg sling formed by the float frame
- By a natural reaction, the casualty's arms rise up and drape out over the frame
- The rescuer can now snatch the tension-activated chest sling from its tangle eliminating mountings, and capture the casualty
- The casualty is now captured and supported by two slings, one around the shoulders and chest, and the other under the knees
- Double sling recovery ensures a safe "low deckchair" posture for the hoist aboard to minimise the risk of Circum Rescue Collapse.
- Capture position assists and encourages a horizontal walk aboard while being hoisted.
- An additional handle on the frame assists the haul on to deck

## 4. HOW IT ALL WORKS



5. WATCH IT WORKING

**QUIKSLING**<sup>®</sup>   
THE LLOYDS APPROVED MOB RESCUE SYSTEM



6. WHERE DO I GET MINE

**QUIKSLING<sup>®</sup>**   
THE LLOYDS APPROVED MOB RESCUE SYSTEM

FIND OUT MORE

[www.quiksling.com](http://www.quiksling.com)

quik with no c!

ORDER ON LINE

[www.quiksling.uk](http://www.quiksling.uk)

GET IN TOUCH

[george@quiksling.com](mailto:george@quiksling.com)    [phil@quiksling.com](mailto:phil@quiksling.com)

GIVE US A CALL

07940 895 336

07831 319 100

6. WHERE DO I GET MINE

**QUIKSLING**<sup>®</sup>   
THE LLOYDS APPROVED MOB RESCUE SYSTEM