#### Introduction

This document sets out the method for lifting of club members' keel boats into and out of the water. A crane is hired on each occasion, planned for 2 days Lift-in, 3 days Lift-out. Lighter boats may be lifted with the club crane on (a) different day(s), (b) though the same general principles will still apply.

No persons under the age of 18 are to be involved in any aspect of the Lift In / Out.

## **Risk assessments**

The current risk assessments where produced in December 2018 and are located on the club web site. All persons involved in this operation should read and understand these assessments, with any questions being directed to the Team Leader.

## **Key roles and responsibilities (including Training & Competency)**

#### Team Leader (Appointed Person): Graham Allinson

The Team Leader will be appointed based on their overall understanding and experience of Boat Lift In's and Out's. They should preferably be a keel boat owner. The experience of departing Team Leaders should be transferred to the new Team Leader through instruction and shadowing wherever possible.

# Responsibilities include:

In overall charge of each Lift in and Out.

Liaises with Moorings Officer to facilitate de-winterisation before lift-in and winterisation after lift-out.

Plans lift dates based on tides, typical weather, daylight, with reserve dates.

Ensures Boat Stickers are available for all boats.

Produce and issue planned Running Order of Boats, by Name of boat, taking into account draught, and tide height.

Determines actual Running Order on Lift day.

Books the crane and provides relevant boat information to crane company.

Management of availability of slings: arranging inspection and test of all Slings before each Lift In / Out, discarding failed slings, ensuring washing and storage of slings after use.

Arranges sufficient planning meetings to ensure all practical arrangement are in place for the Lift In and Out, including a Briefing at the commencement of each Lift day.

Banksman for Boat Park and Jetty: Team of 4 trained persons.

Lift Team Members can only operate as Banksmen after receiving suitable training/instruction from experienced Banksmen. Lifting will only be done when 2 suitable banksmen are present and "in place".

## Responsibilities:

Directing crane driver for boat park activity (first banksman) and jetty activity (second banksman).

Adjusting chain links before lift commences.

## Prep Lead: Min 3 No. trained persons.

Prep Leads are trained by the Team Leader.

## Responsibilities:

Locate owner/crew in sufficient time to prepare boat for lifting

Ensure slings are available close to the boat in due time

Responsibility for the boat while being prepared for lifting until removing slings after being lowered.

informs Banksmen when boat is ready for lifting, after consulting with boat owner.

Releases boat to owner after lowering is completed.

## **Boat Register Author: Rob Murley**

Responsible for maintaining the Boat Register in appropriate form and format; one entry for each boat, to includes:

- 1. Photograph of boat in lift, showing position of slings and keel/rudder detail.
- 2. Boat weight (where known) and keel depth
- 3. Whether forward crane chains need shortening and if so, by how many links.
- 4. Prepare and make available Dymo mast sticker, with information in 1, 2 & 3 above. Hand over to boat owner, to be stuck on port side of mast, approx. 300 mm above deck level.
- 5. Ensure 4 hard copies, and electronic file are available and up-to date for each lift in / out, at least 2 being of laminated pages.

## **Boat owners**

Boat owners responsibilities are detailed in the document 'Boat Owners Responsibilities'.

# **Planning / Preparation**

#### **Equipment:**

Crane. Prior to hiring the crane, it will be ascertained that the crane owner is fully aware of the lifting site and ground conditions, together with details of the maximum size and weight of boats to be lifted. The crane specification will be recommended by the crane owner. History indicates that a 100 tonne crane is currently appropriate for the lift.

The Team Leader will review statutory test certificates for the crane and lifting tackle.

The slings are inspected by a third party competent person prior to each lift.

#### PPE.

- Hard hats for everyone in the vicinity of the lift. Both active Banksmen will have distinctive high visibility hard hats, which will be passed over during any change of banksman.
- High viz vests for Lift team members.
- Sturdy, appropriate footwear.
- Life jackets for all persons who are waterside of the jetty gate.
- Suitable protective gloves

## **Method of Work**

# **Rigging procedure**

The crane will arrive on site and manoeuvre itself into the allocated lifting area.

The crane will extend the outriggers to the required extension and make final adjustments to its position.

Railway sleepers will be positioned, the rams lowered and the crane levelled.

The main boom will be raised to the operating position and extended to the required length.

The lifting chains supplied by the crane hire company will be attached to the crane hook to make the crane ready for work. A set of four chains are used, one for each end of the two slings used to lift the boats.

# **Positioning of slings**

The Prep Lead is responsible for preparing the boat for lifting. With the owner, 1 crew and 1 additional helper, the slings are placed under the boat at the point where the lifting point stickers are fixed. The ends of the slings are laid inside the cockpit / on the deck.

The banksman directs the crane to the boat. The banksmen consults the Boat Register for the number of chain links to be adjusted; if necessary, he directs the crane driver to lower the chains to his location and adjusts the chain lengths.

The banksmen then directs the crane driver to lift the chains and to lower them above the boat. Each slinger takes one chain, and hooks the end of the sling to the chain hook. The slack is then taken up under the direction of the banksmen.

Where the Boat Register / Sticker indicate, the forward and aft slings are tied together.

The slingers disembark from the boat. 2 competent persons take hold of the guide lines to control the boat while it is being lifted.

#### Lifting procedure

NO LIFTING TALES PLACE UNLESS THE TEAM LEADER OR NOMINATED SUBSTITUTE IS PRESENT.

The Prep Lead obtains agreement from the owner that the boat can be lifted.

The Prep Lead then instructs the Banksmen to lift the boat.

The Banksmen, supported by the Prep Lead ensures all personnel are clear of the Lift area and Lift arc, before directing the crane driver to commence the Lift.

As the boat moves over to the point of lowering the receiving Banksmen takes over, and directs the boat down to the cradle in the Park (Lift out) or onto the water (Lift in).

LIFT IN.

When afloat the boat is secured with the guide lines.

The Owner/crew move back onto the boat. When ready, the Prep Lead asks the Banksmen to lower the chains.

The outer slings are unhooked and lowered into the water. The slings are then pulled under the boat, unhooked from the other chain, taken to the jetty, rolled up and placed in a wheelbarrow ready for the next boat.

Maintaining clean slings, free of grit, is essential part of sling handling.

The Prep Lead hands control of the boat back to the owner.

**LIFT OUT** 

To be completed prior to Lift-out 2021.