



## MKRC Boat Handling Safety

### Introduction

Milton Keynes Rowing Club is affiliated to the ARA and as such is responsible for the safety of its members both on and off the water. This document sets out to establish the responsibilities of the club and members in respect of boat handling and the procedures for handling them safely.

### The Clubs Duties

The Club will try to minimise all unnecessary manual carrying of boats both to and from the jetty and also when loading and unloading boats for transportation to Regattas, etc.

The Club will so far as is reasonably practicable, avoid the need for a member or crew to undertake any manual boat transportation that may involve a risk of injury.

In the rare occurrence where this is not reasonably practicable the club will:

- Make a suitable and sufficient assessment of all the transportation to be undertaken, having regard for the points contained in the safety checklist in appendix A.
- Take appropriate steps to reduce the risk of injury to members and crews that may arise out of any manual boat transportation. Any unavoidable risk will be kept to the lowest practicable level.
- Take appropriate steps to provide any members and/or crew undertaking manual boat transportation with general instructions and where it is reasonably practicable to do so precise information on how to proceed.

Where the club has made an assessment regarding boat transportation this must be reviewed where:

- There is reason to suspect that it is no longer valid.
- There has been a significant change in the handling requirements of the boat in question (EG where it is stored, etc).

When changes to an assessment are required the club will conduct a review and make all changes within its power to implement. The club will additionally:

- Provide safe procedures for boat transportation.
- Ensure the safety of the membership and the absence of risks in the handling, storage and transportation of boats and other related equipment.
- Provide all instruction and training necessary to ensure the health and safety of the membership.

### Members Duties

It shall be the duty of every member while conducting activities associated with the club to take reasonable care of themselves and of other people who may be affected by their actions.

In addition it will be the duty of each member to make full and proper use of any boat handling procedures and methods made available by the club.

Every member will make full use any equipment supplied by the club for the transportation of boats, etc in accordance with any instruction or training supplied.

Members must inform the safety officer (and/or anyone else responsible for safety at the club) of any shortcomings in the clubs arrangements for safety.

## **Common Injuries**

Strains and sprains to muscles and joints, torn ligaments and tendons, disc trouble and hernias are often caused by sudden and awkward movements. This can be in the form of twisting or jerking while lifting or handling heavy loads. These injuries can also be attributed to lifting or handling loads that are beyond the physical capabilities of an individual or crew. The muscles of the abdominal wall are particularly vulnerable and excessive strain can lead to ruptures.

Cuts, abrasions, splinters, sharp or jagged edges, projections, etc can be minimised by suitable attention when maintaining boats. However members should be aware of these dangers when handling boats and other club equipment.

Back injuries are the most frequently sustained while lifting and handling boats manually. They may be the cumulative effect of repeated minor injuries or the result of an abrupt strain. Stoop lifting should be avoided since it greatly increases the chances of sustaining back injuries. Laboratory tests show that the stresses imposed on a rounded back during stoop lifting are six times that experienced if the trunk is kept erect while bending at the knees.

Crushing of extremities such as fingers, hands, toes, feet, etc is a danger when handling heavy loads such as if a four or eight were to be dropped. Careful adherence to handling methods will avoid such injuries.

The risk of injury is reduced by knowledge of correct lifting techniques and not by attempting to lift excessively heavy loads without assistance.

## **Assessments - New Boats, etc**

Making assessments is the responsibility of the club and its safety representatives. These assessments will be published from time to time in respect of general boat handling and more specific instructions where applicable.

Most assessments will be references or adaptations of accepted and published procedures available from the ARA or other bodies. Each type of boat will have a basic handling procedure appropriate to the size of crew expected to use it. In addition specific boats may have their own handling procedure due to distance from the waters edge, location on a rack, type of construction etc. All assessments will be made available to the membership as various appendices to this document and will be in addition to the general handling advice supplied below.

The clubs safety officer will be responsible for training the membership in safe boat handling using the appropriate procedure identified and documented by the club. The club will modify any procedure if and when an incident or potential incident is reported.

When performing boat handling assessments the club will consider ways of reducing any risk found. Assessments must be treated seriously and full attention to detail applied. As already mentioned the club will provide general instruction for types of boat and point out the general risks concerned and how they may be minimised.

## **Lifting Capacities**

Since the club caters for a wide range of physically able members it is difficult to assess in general terms the lifting capacity for an average member. It will generally be assumed that the individual(s) intending to use a boat on the water will have the physical ability(ies) to transport that boat to the water using an approved procedure supplied by the club. It will also be assumed that should those individuals not feel safe to transport the boat for any reason (IE slippery conditions, fatigue, etc) then additional help will be sought. The following may be informative when the club makes assessments.

The weight that can be lifted by any individual will vary according to personal physique, age, condition, practice, and techniques employed. The general rule is that a load should not be lifted if it causes a feeling of strain. Assistance should be available when required and a member should not be required to carry/lift loads beyond their capability.

Youthful exuberance and bravado can tempt younger members to attempt to lift loads that are too heavy. While they may succeed in the short term, long term damage may result.

Lifting capacity declines with age and an older man may not be capable of lifting the same load as a younger man. This can be offset to some degree by employing a better technique.

## **Basic lifting and Manoeuvring practice**

Before lifting and handling any boat the following points should be established:

- What has to be moved ?
- How heavy is it giving all consideration to any water that may have accumulated in the hull either before or after an outing ?
- Can it safely be handled by the crew or individual ?
- Where is the centre of gravity and how will this change when any accumulated water flows to the lowest point in the boat during the lift and transportation.
- Does the boat really have to be moved ?
- How far does the boat have to be moved ?
- Over what terrain does the boat have to be lifted ?
- How long will the lifting manoeuvre take ?

## **GENERAL CONSIDERATIONS**

### **Weather**

In windy weather be aware that gusts can result in the scull being potentially blown out of control. If the wind is too strong (greater than 15 Knots) do not do not attempt an outing at all. If there is a moderate wind of less than 15 Knots proceed with caution.

### **Ground State**

Given that many of the boats are stored and transported over undulated terrain, attention to the state of the ground must be given. Generally be aware when boating that the compound, ramp and jetty maybe subjected to bird excreta, algae, and ice. Members should make themselves aware of these hazards. Etc. . . .

### **Water conditions**

When there is any evidence of ice either reported or visible then no outings should be attempted.

When the water is choppy (EG waves breaking on shore, waves with white topping, etc) no outings should be attempted.

Under certain and generally windy conditions unattended boats may be blown or drift from the jetty and/or landing stage. This may have a bearing on which side of the staging a boat is launched and the method used to single handedly complete the rigging of a single scull.

Members should be aware of the effect currents have on Caldecot Lake particularly under the bridge where standing waves, etc can be established due to wind and under currents. In such conditions it is best to avoid having to stop beneath the bridge.

## **Launch Preliminaries**

Before committing to your outing check that the boat riggers and gates are secure, that the hull is sound and that the bow ball is present and secured. Also check that the heel restraints are attached to the shoes and footplate(s). If any of the above are at fault then do not proceed and report your observation to the safety officer or other committee member.

Before attempting to transport and launch any boat, members should be aware of any obstructions that may be encountered during the operation.

Ensure that all blades, the sliding seat, your water bottle and any other ancillaries have been taken to the launch point. Coxes should collect life jackets, amplifiers, etc in advance of boat transportation.

Remove all retaining straps from the boat to be used and store these together with any covering in a safe place near to the boats location.

## **Handling Single sculls**

Complete novice members will start by using 2 people to carry a scull to the water edge. This may reduce to one member after written approval from the safety officer.

### ***Two member handling***

One member only will give commands up to and including the launch point of the boat. That member should be agreed before proceeding.

Before lifting the boat imagine two points between the stern and bow, one a third from the stern the other a third from the bow. The two members should position themselves at these two points and prepare to lift the boat.

On a command, both members should lean over the boat, lift, and step back clear of any obstruction in unison. Proceed to sufficiently open ground so that the boat can be rotated such that the riggers are vertical and clear of the ground. Raise the boat to shoulder height (again in unison) and rest the gunnel on the shoulder. Use one arm to steady the boat by holding the upper gunnel and support the hull of the boat with the other arm.

Proceed to the launch point and be aware of your restricted vision.

With the boat parallel to the waters edge, on command and in unison lower the boat from shoulder to waist height. Wade out to knee depth and place the boat gently onto the water with one hand each under the hull.

### ***One member handling***

Before lifting the boat the member should stand adjacent to the stern side of the riggers and prepare to lift the boat.

Lean over and lift the boat ensuring that you maintain control of its weight and step back clear of any obstruction. Proceed to sufficiently open ground so that the boat can be rotated such that the riggers are vertical and clear of the ground. Raise the boat to shoulder height and rest the gunnel on the shoulder. Use one arm to steady the boat by holding the upper gunnel and support the hull of the boat with the other arm. An alternative and arguable safer method is to place the boat on your head and steady it by holding both riggers.

Proceed to the launch point and be aware of your restricted vision.

With the boat parallel to the waters edge lower the boat from shoulder to waist height. Wade out to knee depth and place the boat gently onto the water.

## **Handling Double Sculls and Pairs**

One member only will give commands up to and including the launch point of the boat. That member should be agreed before proceeding but would normally be the cox of a coxed boat.

Locate the boat trolley stored in the compound near the larger boats, it may need to be collected from the waters edge. Position the trolley such that the boat can be placed on it with minimal effort and risk to other nearby boats, equipment, etc. Before lifting the boat imagine two points between the stern and bow, one third from each end of the boat, two members should position themselves at these two points and prepare to lift the boat.

On a command, both members should lean over the boat, lift, and step back clear of any obstruction in unison. On command, rotate the boat so that the decking is upward, ensure that you are clear of all riggers during this operation. On command, lift the boat onto the trolley ensuring that the weight is evenly distributed.

Proceed to a location near the launch point where the trolley can be parked safely and without risk the public, do not attempt to take the trolley onto the landing stage. Park as close as is practical and resume your original lifting positions one third from each end of the boat and with regard to the side of the landing stage from which you intend to launch.

Lift the boat to chest height, move clear of the trolley, and lower the boat to waist height. Proceed to the launch point and with the boat parallel to the waters edge, on command and in unison, both crew members should place one foot near the edge of the landing stage. Reach out and with one hand under the hull place the boat gently onto the water.

## **Handling fours**

One member only will give commands up to and including the launch point of the boat. That member should be agreed before proceeding but would normally be the cox.

Locate the boat trolley stored in the compound near the larger boats, it may need to be collected from the waters edge. Position the trolley such that the boat can be placed on it with minimal effort and risk to other nearby boats, equipment, etc. Before lifting the boat the crew should position themselves either side of the two riggers facing out of the rack and prepare to lift the boat.

On a command, all four crew members should lean over the boat, lift, and step back clear of any obstruction in unison. On command, rotate the boat so that the decking is upward, ensure that you are clear of all riggers during this operation. On command, lift the boat onto the trolley ensuring that the weight is evenly distributed.

Proceed to a location near the launch point where the trolley can be parked safely and without risk the public, do not attempt to take the trolley onto the landing stage. Park as close as is practical and resume your original lifting positions on one side of the boat and with regard to the side of the landing stage from which you intend to launch.

Lift the boat to chest height, move clear of the trolley, and lower the boat to waist height. Proceed to the launch point and with the boat parallel to the waters edge, on command and in unison, all crew members should place one foot near the edge of the landing stage. Reach out and with one hand under the hull place the boat gently onto the water.

## **Handling eights**

One member only will give commands up to and including the launch point of the boat. That member should be agreed before proceeding but would normally be the cox.

Locate the boat trolley stored in the compound near the larger boats, it may need to be collected from the waters edge. Position the trolley such that the boat can be placed on it with minimal effort and risk to other nearby boats, equipment, etc. Before lifting the boat the crew should position themselves either side of the four riggers facing out of the rack and prepare to lift the boat.

On a command, all eight crew members should lean over the boat, lift, and step back clear of any obstruction in unison. On command, rotate the boat so that the decking is upward, ensure that you are clear of all riggers during this operation. On command, lift the boat onto the trolley ensuring that the weight is evenly distributed.

Proceed to a location near the launch point where the trolley can be parked safely and without risk the public, do not attempt to take the trolley onto the landing stage. Park as close as is practical and resume your original lifting positions on one side of the boat and with regard to the side of the landing stage from which you intend to launch.

Lift the boat to chest height, move clear of the trolley, and lower the boat to waist height. Proceed to the launch point and with the boat parallel to the waters edge, on command and in unison, all crew members should place one foot near the edge of the landing stage. Reach out and with one hand under the hull place the boat gently onto the water.

## **Post Launch Procedures**

### **During the outing:**

Refer to the MKRC club outing procedures for safety and other guidance during your outing.

### **After the outing**

After your outing transport the boat back to its storage location using the reverse of the transport procedure above. Ensure that the boat is securely tied down and that any covers are replaced. It is important to use straps correctly when securing boats this will ensure that they stay secure during wind and temperature variations.

If the boat or any equipment was damaged during the outing or you were involved in an actual or potential safety incident, this should be reported immediately to the safety officer or other committee member. Then follow the MKRC accident procedure, please see relevant document.

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