

## USE OF HOIST

**MOVING THE HOIST:** For insurance purposes the hoist may only be used when it is controlled by the club tractor driven by one of the authorized drivers

### **USE TOW BAR WHENEVER POSSIBLE.**

The hoist has no brakes. It relies upon the tractor for controlled movement. Never bring the hoist off of the slipway gradient onto the level without first connecting up to the tow bar. Neglect of this basic precaution will result, sooner or later, in the hoist running forward out of control into the tractor. The hoist weighs 2 tons: the combined weight of a boat and hoist may readily exceed 5 tons. Safe control means TOWBAR.

### **STEERING THE HOIST: USE FRONT END ONLY.**

The back wheel steering capability should only be used on rare occasions for close-to manoeuvres such as getting into a tight position for picking up a boat or extricating the hoist from a difficult position having packed a boat in tightly. Obviously any large disparity in the tracking of the pairs of wheels on either side will impose a nutcracker or splits force upon the lower frame of the machine which could cause permanent distortion. This is particularly the case when the weight of a boat is being carried and for this reason it is best to use the front steering only. Group leaders should be very strict on this as it has become evident that there is a great temptation for the back-end lookouts to want to steer their pair of wheels individually; the analogy of a car with a steering wheel and a driver for each of its four wheels all working independently, should make this danger obvious to even the least experienced among us. **THE GROUP LEADER MUST DIRECT STEERING IF THE BACK WHEELS NEED TO BE USED.**

Ramps must always be used when going up or down a curb and the back wheels locked in position to ensure that they do not skew out of track thereby imposing a massive wrench to the lower frame.

The steersman should anticipate the path of the tractor and ensure that he steers in cooperation ensuring that the towbar does not jackknife or come hard up against the limit of its travel when the tow-bar could be bent. He can generally avoid an impending jack-knife by swinging hard over onto the opposite lock.

### **MANNING THE HOIST: THREE IS A SUITABLE CREW.**

Three persons make up a minimum crew for the hoist. One to steer and one on each back corner to look-out (and steer the back wheels if needed). When placing slings when on hard-standing a man is required on the platform on either side, the third man may position and pass up the sling ends and direct the lifting or lowering.

### PLACING THE SLINGS.

Most boats will enter the hoist bow first. It will be seen that the back sling points are usually fixed at the ends of the top tube. Accordingly hoist or boat must be moved to bring this sling under the boat approx. 1/3 of a boat-length from the stern (Usually about on the after end of the cabin). The fwd. sling is positioned approx. 1/3 from the bow by sliding the chain blocks along the top tube. In boats with a triangular profile such as a Folkboat or Twister type, there is a tendency for the fwd. sling to slide forward up the slope of the forebody. This is countered by having a pair of good quality ropes tied to the sling as low down as possible then secured to the back sling, cockpit sheet, winches or after deck cleats; this applies to all boats. The chain hoist hooks should be lowered to a little below deck level and all the slack taken up on the sling by engaging the lower becket, (it is better to ensure that more lift is available rather than less. Be sure the boat is lifted high enough to allow for the hoist going down a curb or over a hump.

### DO NOT DRAW SALT WATER UP INTO THE CHAIN BLOCKS.

When hauling a boat out avoid trailing the chains in the water. Salt water drawn up into the blocks by the pull-chains will quickly make them useless.

### ONTO THE SLIPWAY; ALIGNMENT & POSITION

There should be withies marking the lower end and one side of the lower slip revetting blocks. Before lowering the hoist into the water chock the two front wheels and connect the check-rope then transfer connection from tractor to tow wire, length according to draft of boat. Shackle wire to end of tow bar and tractor hitch. Ensure that you are on slip gradient before doing this so that hoist will run down under its own weight. Pause at water's edge to allow hoist crew to board.

### BEFORE MOVING BOAT TO HOIST:

Withdraw any external log paddle wheels or senders if possible. Pass a light Messenger line under the boat in the position of the back sling and secure the ends tightly to your guardrail wires. **THE POSITIONING OF THIS SLING IS YOUR RESPONSIBILITY.** If your mast must be unstepped remove sails and Boom. Unreeve any deck lead halyards and remove any parcelling on rigging screws ensure their threads are free and any split-pins are straightened out and will withdraw easily. Make sure all mast foot electrics are disconnected and bolts in mast heel fittings are free. Remember, time wasted under the mast derrick can mean the last man (who has probably been helping to get your boat out) will possibly not get his done. He will remember you and how you consider other people.

## MOVING TO THE HOIST: DON'T TRY TO MOTOR IN

We have a strong cross current throughout most hoist operations. It is hardly possible to make a successful entry by motoring. The boat should be fetched up gently head to tide with the bow onto the up-tide post, the hoist crew will then warp you into position. ( It is often better to first secure one end of the boat to the yellow buoy then warp the other end to the hoist) There are cleats on the hoist structure to which a bow and stern breast rope may be fastened on the up-tide side. Please have a couple of short lengths of rope available for this, rather than festooning the boat in a great tangle of surplus line which only creates difficulties and wastes time. Once the slings have lifted the boat no restraints on the movement of it in the hoist are required during transport to hard standing.

## PROBLEMS PECULIAR TO CLUB SLIPWAY.

In reality ours is almost a half-tide slipway for, once a rising tide has covered the brow of the incline, it prevents further use to anything drawing more than 2 feet or so by the creation of a level, water covered plateau. Obviously with no declivity the hoist cannot operate unless there was a very long downhaul and haul-up cable or be self propelled. The formation of this water plateau is the reason why recovery of deep draft boats, (contrary to many people's understanding) should not be attempted on big tides. The danger lies in the tractor finding itself being submerged by rising water with insufficient length of cable to allow it to back off onto higher ground and no means of disconnecting as everything is under water.

A smaller tide also creates a slower beam-going current thus making the moving into the hoist easier, especially with larger boats having a big under-water lateral area.

## THE GREAT DANGER; WORKING ON A FALLING TIDE.

This is the area where lack of experience and judgement can lead to a calamity. The danger is that of trying to recover a heavy deep draft boat on a falling tide when it grounds before the slings can be got in position to lift it. Should a heavy boat ground for only a minute or two on a falling tide you will find there is almost nothing you can do to move it back into deeper water. The only course of action left to you is to rapidly slide the fwd. chain blocks into position and tension them to hold the boat upright by hooking onto a substantial deck fitting such as a chain plate or jib fairlead (if through-bolted) A strong rope lashing around the mast to the top tube of the hoist on either side could also save the day but it must all be done very quickly before the boat takes a list to one side. Whilst she is upright it takes very little to keep her so, but she gets progressively heavy as she leans. A rope on all fours will stop her skewing after which all you can do is to get off the

hoist and keep clear. You can then make arrangements about who is going to turn out in the middle of the night to sort out the situation on the next tide (if you have acted quickly enough to stop her falling over.) You may also rearrange the rest of the day which had been planned and discuss the situation with members of the large crowd which, sensing a disaster, will have materialised out of thin air. You will also hear all about it—with great embellishments — throughout the village.

So, how do we avoid this scenario? It's quite simple really. NEVER ATTEMPT TO HAUL-OUT A HEAVY DEEP DRAFT BOAT ON A FALLING TIDE. Such a craft should only be hauled about half an hour before high water on a tide which isn't going to cover the plateau. If the owner hasn't got his act together and arrives at the hoist at high water tell him "Tough! No-go!" Don't fall into the trap, for trap it is and a very tempting one at that, especially if you have just got one deep boat out and are now being pressed to go for another.

#### DON'T KEEP THE HOIST WAITING.

If you keep the hoist waiting while you go swanning off to your mooring to collect your boat you may readily waste tide-time and spoil someone else's chance of getting out that day. You will not be loved! Bring your boat to the pontoon before hauling out begins.

#### BILGE KEEL BOATS.

A bilge keel boat may take advantage of a falling tide by grounding itself on the slip and drying out. So long as it is kept straight and pointing towards the sliphead it is an easy and quick matter for the hoist to pick it up. A long boat hook or an oar onto the bottom is all that is needed to keep the boat straight and in position while she settles.

#### PREPARE YOUR TRAILER OR CRADLE.

It is a act of selfishness not to have checked over your trailer or cradle to ensure that tyres are inflated, ball-hitches and brakes are free and supports are adjustable and working if required. You should also know the boat's position on a trailer or cradle. Not to have done this is wasting other people's time and imposing on their good will. Time spent sorting out your trailer will often mean that someone else doesn't get hauled out that day. They may, with justification, decide they won't waste time on you next year

#### DO NOT TRAVEL ON HOIST.

It is a needless risk to travel on the hoist as it moves up and down the slip. It is not far to fall but far enough to matter. Board and dismount as it stops at the water's edge to change over to wire or bar. It is a good idea to wear water boots

#### SAFETY GEAR.

It is a matter for the individual but it makes good sense to wear a hard-hat when working with any lifting gear i.e. the steel rings on the end of the slings could cause a nasty lump if dropped. A lifejacket worn when working over the water is a sound idea as is that of having a dinghy and oars readily available.

#### CRANE-SPEAK.

Learn and use the universal crane hand-signal system. It is impossible to be heard over the noise of the tractor engine; shouting is a waste of breath and time .A hand signal can be understood at a hundred yards' distance.

#### GROUP LEADER OR HARDMASTER;

There is a natural reluctance to appoint someone as being in charge of the day's activities but any professional work group has a manager or foreman, for the sake of co-ordinating the activity .A ship with a crew of captains soon comes to grief. Appoint the hardmaster for the day and refer all matters to him. There is no room for individuals deciding they will do things their way regardless of the rest of the group. Perhaps a fluorescent waistcoat should be worn by the hardmaster of the day. It would at least make the target for a handful of mud stand out clearly.

#### RUSHING:

Many accidents are caused by making rushed decisions in the heat of the moment. Though boat hauling may seem to be a relaxed slow affair to the casual onlooker, in reality you are generally being pressured by a rising or falling tide and very many problems arise from this root-source in trying to squeeze-in that extra boat on this tide. Disappointment is better than disaster. This is a final decision that should rest with the Hard-master.

#### SAFE WORKING LIMITS;

There will always exist a temptation, (even pressure) to use the hoist and tractor beyond their safe working limits. Avoid this at all costs even at the chance of making yourself unpopular. The hoist has been tested and certificated to safe-lift a maximum of 5 Tons. **DO NOT EXCEED.** Ten years of experience with our model of tractor have shown that a 3 Ton. disp. boat combined with the weight of a hoist is as much as may be handled with any degree of certainty and safety. **DO NOT EXCEED.** Handling boats heavier than 3 Tons requires. **A BIGGER TRACTOR DO NOT BE TEMPTED !!!**