

#### Ribble Cruising Club Dock

#### **Winch Operations Method Statement**

Compiled by: K Lawton 7<sup>th</sup> January 2020

#### Use

This method statement is applicable to the use of Winch 1 (the 'old' or North winch) and Winch 2 (the 'new' or South winch), in the launching and recovery of members vessels on wheeled trailers. Winch operations are under direction of the Winch Operator who has absolute authority on all matters in the execution of this process.

#### Restrictions

Except by prior permission only vessels belonging to members of Ribble Cruising Club may be launched and recovered.

The total mass of the vessel and trailer including all onboard equipment and fluids must not exceed 10000kg This equates to a vessel design empty displacement of 8000kg. Only Authorised Winch Operators are permitted to operate the winch equipment, excepting members who are attending a formal training session and are being directly supervised by an authorised operator.

### **Personnel Required**

Winch Operator (WO)
Winch Operator Assistant (WOA)
Boat Handling Assistant (2) (BHA)
Tug Driver (Optional) (TD)

#### **Training & Competence**

The Winch Operator **must** be on the Authorised Winch Operators List, having attended the winch safety awareness course and who is familiar with this method statement and risks and have signified so.

The winch Operators assistant **must** be familiar with winch operations and risks and act under the direction of the Winch Operator.

The Tug driver **must** be on the Authorised Tug Drivers List having attended the Tug safety awareness course.

# **PPE Requirements**

Stout Gloves and Boots are recommended whilst handling the winch cable, pulley blocks and chain gear

# **Sequence of Actions**

Actio	n	Cautions	
Prepa	aration		
1.	Plan the winch overall operation, briefing assistants as necessary		
1.	Unlock power distribution cabinet and switch on appropriate winch circuit breakers		
2.	Remove pulley block, bridle chains and shackles from storage cupboard	Key located in power cabinet	
3.	Winch 1: Remove Cable Drum protective Cover		
4.	Winch 1: Apply lubricating oil to all winch shaft bush galleries Winch 2: Apply Grease to drum shaft grease point	Oil can in Control cabinet. Spare o	
5.	Place warning signs ahead of winch cable area on access road		
6.	Winch 1: Unlock winch control cabinets and switch on master power switch Winch 2: Remove cover panel and switch on master switch. If E-Stop Reset button is illuminated Press to clear. Check red E- Stop buttons on control panel and remote are not set (turn Clockwise.		
7.	Connect cable turning pulley block with heavy duty shackle to ground anchor	Note orientation of block	
8.	Place traffic barriers when cable is moving		
9.	WO to unwind cable with WOA pulling the out the slack. Stop cable as end thimble reaches turning block. Release the safety pin and bolt on the turning pulley sheave cage and pass though the cable. Replace the pulley sheave cage bolt and safety pin and resume unwinding. Ensure WOA is clear of turning block before continuing	Winch 1: There is drum overrun w Use mechanical brake as necessa No vehicles to cross the cable whil	
10	. Perform visual check on cable, turning block, chains and shackles for signs of abrasion or damage.	Consult the Hardstanding Officer if	
11.	. Place cable rollers and dampers.		
Launching			

Action	n	Cautions
1.	Manoeuvre trailer and vessel to slip area and align with slipway using tug if necessary and chock in position	Ensure trailer does not cross the s This is 4m from the top edge of slip If manoeuvring the vessel to the sl outstretched cable, the turning boo disconnected from the ground and running over the cable.
2.	Perform visual check on trailer for structural integrity and suitability.	Ensure vessel has bow and stern r Ensure trailer has stern rope to ste
3.	Check Spring ropes for suitability and tension.	
4.	Attach chain bridle to trailer and cable.	
5.	Take up slack in winch cable and remove wheel chocks	Winch 1: There is drum overrun wh Use mechanical brake as necessa
6.	Place traffic barriers whilst cable is moving	No vehicles to cross the cable whil
7.	BHA to manoeuvre trailer past the safety line and onto the slipway whilst WO pays out cable. It is imperative that cable sack is kept to minimum at all times	Winch 1: There is drum overrun who Use mechanical brake as necessan No persons to be behind the trailer Persons to stand clear of vessel are
8.	Place timber or roller under cable on top edge of slip to reduce cable abrasion	
9.	Lower trailer and vessel down slip with BHA controlling direction with bow and stern ropes	Careful monitoring of cable slack is may jam against stones or slip edg Winch 1: There is drum overrun who Use mechanical brake as necessal For some boat/trailer combination have to pull the vessel down the slip.
10	Continue lowering the trailer until sufficient water depth obtained	Do not allow the rearward trailer whedge of the concrete on the slip. If insufficient water is available to fix remain on station applying the medialternative means of securing the Munder no circumstances is the wind cable under tension.
11	. Untie and manoeuvre vessel away from cradle	Ensure all ropes on trailer are secutrailer recovery
12.	Recover trailer. Wind cable onto drum whilst the WOA directs the cable to achieve uniform windings.	BHA to use trailer stern rope to ste No vehicles to cross the cable whil
13	.Continue until trailer has passed the Safety line, stop and chock in position	

Action		Cautions
14	.Remove the anti abrasion timber or roller	
15.	. Remove the chain bridle and shackles from trailer.	
16.	. Remove chocks and move trailer clear of winch area	If manoeuvring the trailer for storage outstretched cable, the turning body disconnected from the ground and running over the cable.
Haul (	Out	
1.	Manoeuvre trailer to slip area and align with slipway using tug if necessary and chock in position	Ensure trailer does not cross the s This is 4m from the top edge of slip If manoeuvring the trailer to the slip outstretched cable, the turning boo disconnected from the ground and running over the cable.
2.	Perform visual check on trailer for structural integrity and suitability	Ensure trailer has rear rope to stee
3.	Attach chain bridle to trailer and cable	
4.	Take up slack in winch cable and remove wheel chocks	Winch 1: There is drum overrun who Use mechanical brake as necessa
5.	Place traffic barriers whilst cable is moving	No vehicles to cross the cable while
6.	BHA to manoeuvre trailer past the safety line and onto the slipway whilst WO pays out cable. It is imperative that cable sack is kept to minimum at all times	Winch 1: There is drum overrun who Use mechanical brake as necessan No persons to be behind the trailer Persons to stand clear of trailer and trailer and the stand clear of trailer and the standard clear of trailer and the st
7.	Place timber of roller under cable on top edge of slip to reduce cable abrasion	
8.	Lower trailer and down slip with BHA controlling direction with trailer stern line	Careful monitoring of cable slack is may jam against stones or slip edg Winch 1: There is drum overrun who Use mechanical brake as necessar It may be necessary for BHA to have slip to overcome wheel friction.
9.	Continue lowering the trailer until sufficient water depth obtained	Do not allow the rearward trailer wedge of the concrete on the slip.  The WO is to remain on station apunless an alternative means of secondary place. Under no circumstances is
10	. Manoeuvre vessel onto trailer and secure.	Ensure vessel is correctly aligned taut. Ensure vessel has bow and stern

Action	Cautions
11. Wind in cable onto drum whilst the WOA directs the cable to achieve uniform windings. Stop when vessel hull is clear of water. Check for correct positioning of vessel on trailer and tension of spring ropes. Relaunch and reposition if necessary.	Ensure vessel is sufficiently forwar on rear wheels. BHA to use vessel bow and stern I
12. Continue to wind cable onto drum whilst the WOA directs the cable to achieve uniform windings.	BHA to use vessel bow and stern I No persons to be behind the trailer Persons to stand clear of vessel ar
13. Stop when trailer has passed the Safety line 4m past top of slip and chock in position	
14. Remove the anti abrasion timber or roller	
15. Remove the chain bridle and shackles from trailer.	
16. Remove chocks and move vessel clear of winch area	If manoeuvring the vessel for storal outstretched cable, the turning bood disconnected from the ground and running over the cable.
Cable Recovery	
Remove the chain bridle and shackles from cable. Return to storage cupboard	
<ol> <li>Rewind cable onto drum whilst the WOA directs the cable to achieve uniform windings. Stop cable before end thimble passes through turning block. Release the safety pin and bolt on the turning pulley sheave cage and release the cable. Ensure WOA is clear of turning block before continuing.</li> </ol>	No vehicles to cross the cable while
3. Inspect cable on drum and clean and lubricate as necessary	
4. Winch 1: Replace Drum Protective Cover	
5. Remove any traffic control barriers	
6. Remove and store warning signs	
7. Switch off master power switch lock control cabinets	
Switch off winch circuit breakers and lock power distribution cupboard	
9. Complete the winch operators log making note of any issues	

# **Risks and Controls**

Activity – Moving and Positioning of Boats		
Hazard	Control Measure	
Injury to persons by collision/entrapment.	Driving of tug/tractor restricted to tra	
Trailer runs untethered down slip	Trailer not to be positioned beyond unless attached to winch cable. Use of wheel chocks	
Collapse of Trailer	Trailer inspection. Winch Operator t trailer.	

Activity – Winch Operation			
Hazard	Control Measure		
Injury to persons by boats/cradles	Launching in control of trained/autho Keep careful lookout. Winch operator to have final decision cradle. Persons to stand clear of winch rope Persons not to stand behind vessel of		
Winch Cable Breaking	Load monitoring Winch operator to have final decision cradle. Use of oversized winch wire to preven Regular check of winches, wire and I Routine maintenance of cable Avoid Snatch loads on cable Use of cable dampers		
Winch wire – cuts and abrasions	Wear Appropriate PPE – Stout Glove		
Trip hazard – winch wire	Erect warning signs.		
Vehicles Impacting winch wire	Erect warning signs Place Traffic Barriers when cable mo		
Unauthorised use	Removal of Power when not in us		