

Travel-Lift Operating Procedure

The Board of Directors for the Holyrood Marina Park Corporation is responsible for the operation and development of the Holyrood Marina complex including the Marine Travel-Lift. To protect the long term future of the Marina, its members and its assets, standard operation procedures and policies are required, including for the use of the Marine Travel-Lift.

To that end, we would like to introduce the following procedure for HMPC lifting operations.

1.1 Purpose

This procedure covers the lifting in and out of vessels at the Holyrood Marina using its 50 Ton Marine Travel-lift. The Holyrood Marina Park Corporation manages the lifting in and out of all vessels, whether owned by HMPC Members or Non-Members. The lifting in and out of vessels, whether owned by Club Members or Non-Members, carries a degree of risk to the people involved and to their vessels. The purpose of this procedure is to reduce the risks to all involved to as low as is reasonably practicable by identifying the key activities and people. It is important that all those involved in the lifting operation are aware of this procedure and that they follow it. The procedure simply formalizes much of what HMPC has always done while adding some additional steps to the operations. This procedure also identifies and defines the key roles.

1.2 Scope

This procedure applies to all lifting operations at the Holyrood Marina using HM PC's 50 Ton Marine Travel-Lift . This procedure applies to all who are involved in lift-in and lift-out operations including the Marina Supervisor and HMPC volunteers .



1.3 Roles and Responsibilities

HMPC is responsible for the general upkeep and maintenance of the travel-lift and associated equipment as per manufacturers instructions ?????? and providing training for the marina supervisor as well as volunteer operators / lift coordinators.

The Marina Supervisor reports to the HMPC board of directors and is responsible for the day to day operations at the Marina including, along with member volunteers, operation of the Travel-Lift. The Marina Supervisor is also responsible to ensure that any fees are paid and agreements are signed before lifting can proceed.

The Lift-Coordinator (spotter), who must also be a trained operator, directs the operator and directs slinging and lifting operations.

For those occasions where multiple vessels are to be lifted in a single day, volunteers will also be assigned the roles of Marshaling-Coordinator and Safety-Coordinator.

The role of the Marshaling-Coordinator is to ensure that vessels are ready to be lifted in the proper prearranged order and in the case of lift-out, cradles or stands are in position and ready.

The role of the Safety-Coordinator is to keep an eye on the overall operation to ensure that operations are being performed safely and that only key people are in the lifting area.

It is important that all and only those listed above wear high visibility safety vests and hard hats during lifting operations so that they are easily identifiable.

Boat owners are responsible for ensuring that all fees are up to date and the HMPC Membership Agreement c/w vessel's weight and length, has been signed and submitted. That there vessels are properly prepared for lift-in or lift-out, including markings for sling locations, having bow and stern lines attached to secure the boat in position while in the pound and, if applicable, their cradles or stands are suitable for the purpose, ready and in good condition. Cradles should be clearly marked with the vessel,s name, bow and stern locations as well bow and stern overhang lengths. The vessel's owner or a designate should always be present during any lifting operations for their vessel.



1.4 Pre-Lift Check List

Before commencing any lift perform the following checks:

- . engine oil level prior to starting and oil pressure after starting.
- . fuel level prior to starting.
- . lifting shackles have safety split pins in place.
- . lifting straps are not frayed and/or torn.
- . strap pins are engaged with all strap fingers.
- . strap pins have their safety cages in place and are facing away from the boat and secured with the safety pin.
- . port and starboard cable blocks are at the same elevation.
- . steering wheels are synchronized.
- . strap separation is correct for the vessel and the hydraulic separation cylinders are synchronized.
- . tires are properly inflated.
- . wire cable is not frayed and/or kinked.
- . wire cable is spooling properly.
- . boat being lifted has bow and stern lines attached and ready.



1.5 Travel-Lift Operations General

Restrict personnel in area to only those required for lifting operations.

Restrict vehicular traffic from general area.

A minimum of two persons are required for any travel-lift operation, the operator and lift-coordinator or spotter. The spotter serves as a second set of eyes and directs the operator in all lifting and traversing operations. The spotter must remain in clear view of the operator at all times and use hand signals to communicate with the operator.

The operator uses the controls of the travel-lift to position the lift, raise and lower the slings and traverse the lift between the boat storage area and the lifting pound. The operator takes direction from only one person, the spotter, for all but emergency stop situations. The operator should never leave the controls while the engine is running or rev the engine at maximum.

A vessel should never be lifted with persons on board.

No vessel over 50 tons is to be lifted.

No lifting operations are to be performed in winds exceeding 60 kph.

Special care and assigned personnel are required to guide the lift's cable blocks in and out of the pound while raising and lowering empty slings. There is a risk that the blocks make contact while lowering and the load is temporarily removed. The wire rope may loose its position on the spool causing a dangerous overlap, possibly damaging the cable. When raising empty slings in the pound there is a possibility that the cable blocks can snag objects overloading the cable.

While traversing, slings should never be allowed to drag. They should be either connected together above the ground or laid on the travel-lift's frame.



1.6 Lift-In (Launch)

With direction from the spotter, the operator moves the travel-lift with the engine at no more than quarter throttle, into position centred over the boat to be lifted with slings separated if necessary. Placing pre-measured marker sticks perpendicular from the vessels centre line, fwd and aft, helps with centring travel-lift over boat's centre line.

Slings are positioned underneath the boat, aligned vertically with lifting points for that boat, and joined using strap pins with their safety cages in place and are facing away from the boat and secured with the safety pin.

Forward and aft slings are raised slowly (mid throttle level) to a snug fit, just taking a small portion of the load.

Safety lines are attached running forward from the aft sling and aft from the fwd sling and attached at deck level to the boat on both port and stbd sides. This will prevent slings from slipping fwd or aft on sloped surfaces.

All four lifting points are raised until clear from supports and just high enough to clear any obstacles along the path to the lifting pound. While in transit lower to near ground level whenever possible. Adjust tilt and trim as necessary using individual lift points.

With direction from the spotter, the operator moves the travel-lift with the engine at no more than quarter throttle, into position centred over the launch pound. Once in position the boat is lowered into the water until the load just comes off the slings. Note that additional hands are needed at this point to help guide lifting blocks over pound wheel guard. Before lowering the slings to the point where the boat can clear them and move out of the pound, the boat owner or representative is to go aboard to check for leaks, throw bow and stern lines ashore and untie the safety lines from the boat.

Once the launched boat is clear, the slings are raised to just above ground level. Again additional hands are needed at this point to help guide lifting blocks along inside walls of the pound and over the wheel guard.

If no more vessels are to be launched, the Travel-Lift should be parked with the aft wheels just of the concrete pad to allow for proper water drainage. The slings should be tied to each other using the safety lines to prevent them from swinging in the wind and causing the lifting blocks to hit the Travel-Lift's frame.



1.7 Lift Out

Note: No sailing vessels are to be stored on MPC property with its mast erect or stored on deck.

Before lifting any vessel, check that supports are ready and path to area is clear.

With direction from the spotter, the operator moves the travel-lift with the engine at no more than quarter throttle, into position over the lifting pound with slings joined using strap pins with their safety cages in place and are facing away from the boat and secured with the safety pin.

Slings are lowered into the water to a depth where the vessel being lifted can be manoeuvred into position over the slings and secured squarely in pound so that the boat is square with the lift.

Slings are raised underneath the boat and aligned vertically with lifting points for that boat.

Forward and aft slings are raised slowly (mid throttle level) to a snug fit, just taking a small portion of the load.

Safety lines are attached running forward from the aft sling and aft from the fwd sling and attached at deck level to the boat on both port and stbd sides. This will prevent slings from slipping fwd or aft on sloped surfaces.

After all persons have left the vessel, all four lifting points are raised until clear over the pounds wheel guard and just high enough to clear any obstacles along the path to the lifting pound. While in transit lower to near ground level whenever possible. Adjust tilt and trim as necessary using individual lift points.

With direction from the spotter, the operator moves the travel-lift with the engine at no more than quarter throttle, into position centred over the vessel's supports. Once in position the boat is lowered into the vessels cradle or sitting lightly on keel blocks while other supports are installed.

Once the vessel has been secured, the slings are lowered and separated if necessary for the return trip to the lift pound. The slings are reconnected before arriving at the pound.

If no more vessels are to be launched, the Travel-Lift should be parked with the aft wheels just of the concrete pad to allow for proper water drainage. The slings should be tied to each other



using the safety lines to prevent them from swinging in the wind and causing the lifting blocks to hit the Travel-Lift's frame.

1.8 Special Lifts

In the event that a vessel is to be lifted temporarily, it is not be be left unsupported in the slings.

For a sail vessels to be lifted temporarily with masts in, in order to clear the pounds whee guard, it should be backed stern first into the pound with its back stay released or secured further forward.

Version	Date	Author	Scope / Remarks
No.			
Version 0	11 09 2016	Spencer Butt	Draft procedure – Initial Issue
Version 1	15 09 2016	Spencer Butt	Draft procedure