

LOCK SAFETY BRIEFING v2026.1

(For instructions on how to operate a lock refer to the CRT Boaters Handbook pages 16 to 29)

Locks are the most dangerous part of the canal system: they are much deeper than the surrounding canals, have fast moving water, lots of trip hazards, and many moving parts. In addition, there is restricted room in the lock chamber itself if someone should fall in. If your boat gets caught up, it could come crashing down into the lock. Should there be a fire on your boat it is harder to escape.

WHAT CAUSES ACCIDENTS IN LOCKS?

- Lack of knowledge or preparation
- Not paying attention
- Rushing the procedures

SAFETY ESSENTIALS

Make sure all crew involved in locking and any passengers who step off to assist wear properly fitted life jackets.

Make sure that each member of the crew sticks to their allotted task – accidents happen when crew lose focus and deviate from allocated tasks.

Watch out for ‘helpful’ bystanders – their mistakes could land you in trouble ´

Boats tend to move about when water flows in and out of a lock – stay alert ´

Use the standard hand signals so that the crew and helm can communicate quickly – especially the signal that means ‘close all the paddles. ´

Watch out for unprotected drops around locks, especially when opening gates ´

If there is a bridge, use it when crossing the lock. If not, take care using the walking board attached to the gates – do not jump across part-opened gates ´

Ask before helping other boaters with their lock operation

Take your time – and keep an eye out for problems

The Skipper must remain on board

CREW

• HELM

When going uphill, be careful not to get the rudder caught between the gates or to get caught on any projections on the lock wall ´

When going downhill, keep the stern of the boat clear of the cill.

Using standard hand signals instruct paddles to be open a little, then more and finally fully open using ground paddles first.

Monitor the locking crew to ensure eye contact is maintained, and use horn to attract attention if needed.

Constantly monitor the boat whilst in the lock to ensure it is level and free – not touching gates or walls.

Cill Keep the back of your boat well forward of the cill below the top gates when going downhill. Cills stick out by up to 5ft (1.5m) and you can only see them as the lock empties. Most locks have markers to show you the approximate position of the cill.

If in doubt use the Pause signal – if you think there is a problem use the close paddle signal. If you want the lock refilling or lowering – use hand signals but check they are properly understood.

- **COMMUNICATIONS**

Helm to appoint one of the crew as Communications Officer if there is no line of sight between helm and locking crew. Communications Officer to relay hand signals and messages between the two.

- **BOWMAN**

Make sure all your passengers – and yourself – keep arms and legs inside the profile of the boat when entering the lock.

Ask passengers to go into the cabin and close the cabin doors if there is a lot of leakage through the gates.

Use hand signals to indicate to the helm the space between the bow and the lock gate when entering and if you become concerned

If necessary use the boat hook to keep the boat from touching the lock side, but beware of injuring passengers.

LOCKING CREW

- **LOCK GATES**

To avoid muscle/back strain, the safest way to open or close a gate is to push with your backside, pushing at the far end of the balance beam, where you have greatest leverage, but check where you are walking. Also watch out for slippery surfaces when you're pushing the gates open.

- **PADDLES**

The upper gate will have paddles, set into the lock gate itself. These are opened to let water into the lock. In addition, there may also be ground paddles, which run through a pipe under the ground, and bring water into the lock chamber at a lower level. If the lock has both, you should open the ground paddles in stages first (when instructed by the helm). After the ground paddles are fully open await the helm's instruction to open the gate paddles in stages. Do not fully open the gate paddles until they are below deck level. The bottom gates will only have gate paddles.

- **WINDLASS**

A flying windlass can cause serious injury! To avoid injury – Keep a firm grip and don't let go. Ensure that you use a tapered eye of the windlass on a tapered spindle, never the square eye – Make sure the windlass is fully slotted onto the spindle All winding gear has a safety catch, like a ratchet. When winding the paddle up, ensure the safety catch is flicked over onto the mechanism, and you'll hear a repeated clicking sound when winding the paddle up. If anything goes wrong, the safety catch will prevent the paddle from falling, and perhaps causing the windlass to spin. It will also hold the paddle fully open.

To lower the paddle, take the weight of the paddle on the windlass, and either flick the catch out of the way, or hold it up. Wind the paddle down firmly, and replace the safety catch at the end.

Never leave a windlass on a gate spindle unless you're holding it. Keep fingers, hair and clothing away from the mechanism.

PASSENGERS

Warn carers when approaching a lock. Ask that the cooker is not used, hot drinks are not served and passengers remain seated as you pass through the lock.

Any passengers on the front deck should be warned that they may get splashed as the lock fills or from a leaky gate. Offer them the chance to move inside the cabin and close the cabin doors if necessary.

EMERGENCIES

- **MAN OVERBOARD**

If someone falls into the lock, let the Helm know immediately. Act quickly to close all the paddles. Helm switches off the engine (RYA Page 60). Life rings and boat hooks to be deployed front and rear to help protect MOB from being crushed. There will be space in the lock to use our boarding ladder over the rear rail to recover the person, but if they can't climb – you may need to fill the lock slowly to recover then to the side of the lock. Or, if the lock is almost empty, slowly lower the water level, open the gate and draw the person to safety using the lifeline or a rope to assist them through the lock gate to be recovered on the canal side at the lower level. NEVER jump into the water yourself to rescue someone who has fallen in

- **HANG UP**

Floating freely? As the water level rises or falls, keep a constant eye on your boat to check that it's floating freely. If it does get caught or jammed, immediately close all the paddles and work out what needs to be done to get it level again. ´

Going down – If the side of your boat is caught against the lock wall or the back is caught on the cill close the bottom gate paddles to stop the water falling further. Slowly open the top gate paddles to refill the lock. Check for damage.

If your ropes get snarled or too tight, to let your boat move down freely, slacken them off if you can. If not, refill the lock. ´

Going up – If the front of your boat is caught under part of the top gate or your rudder is trapped between the bottom gates, close the top paddles to stop the lock filling. Open the bottom gate paddles to allow the water level to fall.

- **CILL HANG UP**

When entering a lock, and intending to go down, ensure your stern is past the cill of the upper lock gate. If you don't, when the water level drops, the stern may be caught on the cill. This will cause the front of the boat to go down, possibly under the water line. If this does happen, close the lower paddles, and open the upper ground paddles to add water and refloat the boat, then move the boat forward and try again.

- **FIRE OR MEDICAL EMERGENCY IN A LOCK**

On board crew to raise the alarm to alert helm and locking crew

Locking crew closes all paddles

On board crew deals with the emergency and starts to move passengers onto front deck.

Helm to assess situation and in most cases instruct locking crew to open top paddles to refill the lock.

When lock full, onboard and locking crew secures boat to towpath side, lowers the ramp and starts the evacuation. All 3 locks have evacuation points adjacent.

SAFETY AT LOCKS - SUMMARY

Moving through a lock is the trickiest part of boating. There's a lot to think about at once and a whole series of tasks to carry out. You need to be extra alert.

Keep eye contact with the helm and await his instructions before opening paddles – the helm is in charge

Use and follow the standard hand signals – particularly the close all paddles sign

Listen for a horn or whistle attracting your attention

Keep an eye on the boat – if it is not level and free, raise the alarm with the helm immediately

