

Rotary Club of Abingdon Vesper

Barge Trips 2019

Health and Safety Risk Assessment

We have taken groups of disabled and disadvantaged adults and young people for a day on the Kennet and Avon Canal for many years. Our skippers are all trained and we have never had a serious incident so why do we need a formal Risk Assessment?

We live in an era of increasing professionalism when it comes to care of the vulnerable and escalating litigation after personal injury. Rotary International has an admirable record of safely providing social, recreational and leisure activities for a wide range of members of the public. Rotary International Britain & Ireland has decided that clubs must be seen to be taking seriously the protection of the vulnerable people they work with and has adopted a Children and Vulnerable Adult Protection Policy which each club has signed up to. In accordance with that policy we are required to evaluate the risks associated with activities involving members of the public. The Health & Safety Risk assessment would form part of any insurance claim we might be likely to make in the event of an incident involving personal injury.

We are justifiably proud of our safety record with the barge trips. Hundreds of people have had an enjoyable day on the canal. Accidents do happen, however, and it is easy to assume that they won't happen to us. It is only by being trained and prepared that we can minimise the risk of an accident and the severity of an incident should it occur.

Our skippers have all successfully completed the Bruce Trust (latterly Kennet & Avon Canal Trust Bruce Branch) training course and many successfully undertook the Community Boat Management Assessment and they ensure that our crews have suitable and sufficient information, instruction and training on carrying vulnerable passengers on the boats safely. The crews are experienced and usually only one novice crew member may assist on any one trip.

The Health & Safety Risk Assessment is based heavily on the Kennet & Avon Canal Trust Bruce Branch (the Trust) Day Trip Skipper's Risk Assessment and has been reviewed by our trained skippers based on more than 20 years' experience.

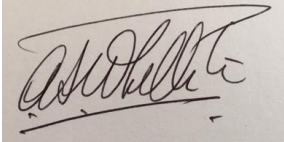
The requirements of this Risk Assessment are binding on all members of the Club helping with the 2019 Barge Trips.

The following Barge Trip Procedures contain essential control measures which minimise the risk to the health and safety of the crews and passengers.

- Crew Notes
- Crew Safety briefing
- Lock briefing

- Emergency procedures
- Joining instructions
- Passenger safety briefing

Rotary Club of: Abingdon Vesper
Club President – Alan Whitlock

A handwritten signature in black ink, appearing to read 'Alan Whitlock', written over a horizontal line.

Date: 17th November 2018

Risk Assessment for: Barge Trips 2019
Compiled by: John May, Organiser in consultation with Skippers

A handwritten signature in blue ink, appearing to read 'John May', written over a horizontal line.

Signed:

Date: 15th November 2018

**Rotary Club of Abingdon Vesper - 2019 Barge Trip
Risk Assessment**

Hazards	LIKELIHOOD	SEVERITY	HAZARD STRENGTH	Risk Management strategy	Strategy Effectiveness	Severity of Managed Risk
General Hazards						
Boat sinking	L	H	L	The boats are hired from The Kennet and Avon Canal Trust Bruce Branch (The Trust) who comply with all statutory requirements for boat operations, regularly maintain the vessels and carry out frequent inspections.	S	L
Boat breakdown, stranding passengers and requiring emergency procedures	L	M	L	The boats are well maintained by the Trust. The Rotary Club Skippers all have passed the Trust Training course & many successfully undertook the Community Boat Management Assessment. There is a rigorous hand over procedure between the Trust and the Skippers. There is also a handover procedure between each Skipper to ensure the boats are in a fit condition to carry the passengers booked to travel on the boat.	S	L
Injuries arising from slips, trips and falls caused by sudden changes in vessel course or speed, bumps and jolts	M	M	M	Every boat crew has a trained skipper, an experienced 'Crewmaster' and two other experienced crew members. The Skipper is responsible for satisfying himself that the crew have suitable and sufficient information, instruction and training to operate the vessel safely taking into account the passengers being carried. The Skipper is responsible for ensuring that the crew are sufficiently fit to operate the vessel safely and ensure the safety of the passengers. See the procedure on 'Crew Safety Briefing'. Passengers are briefed on Health and Safety issues prior to boarding. See the procedure on 'Passenger Safety Briefing'.	S	L

Operational Hazards

Access on and off boat The term 'board' here means both getting on and getting off the boat.

Falls due to towpath slippery, obstructed or involving steps	L	M	L	Position boat to minimise risks, move/mark obstructions. The skipper and crew are aware that care of passengers on the towpath is their responsibility. Do not disembark passengers who may need help without a carer accompanying them. Do not disembark passengers except at end of trip if towpath hazardous.	S	L
Trip, slip or fall between boat and quay	L	H	M	<p>Normal boarding: Board passengers at stern. Position boat to minimise gap and moor tight to quay. Use boarding ramps to accommodate level differences, wider gaps or people who have difficulty boarding. Always have crew attending people boarding.</p> <p>Use of bow: Crew and some passengers may board at bow when helping or in an emergency. Avoid need to jump by positioning boat. Restrict, so far as possible, to active passengers and ensure that those concerned:</p> <ul style="list-style-type: none"> · Have suitable footwear. · Wait until boat on quay and steady – preferably held by bow rope to bollard · Passengers wait until crew member is able to attend boarding and there is someone to assist on shore. · Hold the grab rail whilst stepping on or off. <p>Crew Only: Crew may need to use lock ladders, jump ashore, or move along gunwales. When possible, position boat to avoid these situations, otherwise position as well as possible. Other than in an emergency never walk on gunwales.</p> <p>Use non-slip footwear and wear lifejacket if using ladders.</p> <ul style="list-style-type: none"> · If there is an emergency use handrail & move along gunwale with feet entirely in perimeter of boat to avoid crushing against quay etc. · Jump only in emergency and in a safe manner [feet together, knees bent, arms close to sides] 	S	L

Lift: fall into pit, trap chair or person, chair rolls off or tips someone out.	L	H	M	Top doors to be shut except when lift attended in use or platform set at top. Lift to be operated by an experienced crew member on deck doing nothing else – other crew needed to attend boarding; carer or other crew to see chair off at bottom. Chair faces forward and is checked for not fouling [eg electric plugs, the hatch cover when lift moves]. Brakes on. Passenger and helpers alerted before moving lift.	S	L
Open hatches and tripping hazards on after deck.	L	H	M	If deck hatches are open only those actively involved are to be on the deck and the exit barrier rails are to be lowered. Those involved are to be familiar with and follow the safe working practice prescribed for boat maintenance. Tripping hazards are to be removed, except that mooring ropes are to be kept inboard, tidily and close to the stern gunwale.	S	L
Boat operation						
Navigation hazards	L	M	L	Risks of boat navigation are minimised by the use of trained skippers and crew working in accordance with the relevant Bruce Trust manuals.	S	L
Drowning	L	H	M	Skipper and crew: Any non-swimmer, and in bad conditions everyone, is must wear a lifejacket. Passengers: Life jackets are offered at the start of the trip and if accepted the skipper ensures that people can put them on properly. The skipper decides who may be on deck and will not allow small children on deck without lifejackets. If requested by the group, usually for children, the life jackets can be taken to the groups transport so they can be put on before walking along the towpath to the boat. The skipper must appoint a specific crew member, usually the helm, to act as lookout for people falling overboard when there are people are outside on the boat. When the boat is moored, someone specific needs to be appointed.	S	L
Falling/being swept from roof	L	H	M	No-one is allowed on the roof of the boat. In exceptional circumstances the captain may allow one experienced crew member on the roof, subject to someone else acting as lookout for their safety.	S	L

Within the cabin						
Gas explosion/fire	L	H	M	On opening boat and turning on gas bottle: check by smell and operation of gas monitor. If doubtful, at start or later in trip, turn off gas, vent boat, evacuate people, inform the Trust. Do not light matches etc or operate electrical switches. If appropriate cancel or delay trip. Make visual check of any 240V electrical equipment. See that fire extinguishers are in place. Ensure crew and carers able to light gases on stove. Smoking in the cabin is illegal. Do not permit candles or similar items to be used. The electric hoist must not be used for ten minutes after the gas alarm is activated or after someone reported smelling gas.	S	L
Infections/burns/scalds/cutting injuries in galley	L	M	L	Galley operation is the responsibility of a nominated crew member. Access to the galley is limited and controlled whilst work is in progress there.	S	L
Scalds from hot taps	L	M	L	Explain need to safeguard passengers from hot water scalds in safety talk. See Procedure on 'Passenger Safety Briefing'.	S	L
Food poisoning	L	M	L	Make sure surfaces, boards, china etc are clean before group arrives. Make available to group only non-risk items e.g., tea, coffee, sugar, sealed or freshly opened milk. The safety of food prepared by the group is not a Rotary responsibility.	S	L
Infection	L	M	L	Provide hand towels and hand wash liquid in toilets and kitchen. Check toilet areas clean before, during and at end of the day. Change towels/tea towels regularly. Passengers and crew to be told of need to wash hands before eating etc.	S	L
Head bumping	M	M	M	Warn passengers in safety talk. See Procedure on 'Passenger Safety Briefing'. Put pipe lagging and safety tape in position on front doors	S	L
Fall or hurt from boat movement	L	M	L	Warn passengers to sit down or hang on to something when movement is likely, eg during manoeuvring. In bad conditions remind people again just before carrying out the manoeuvre. See Procedure on 'Passenger Safety Briefing'.	S	L
HAZARDS WHEN OPERATING LOCKS						
Boat and lock	L	M	L	Boat to be under command of the skipper whilst the boat is in motion. If excessive boat movement likely, warn those on board to stay seated or to brace themselves against falling.	S	L
[Descending] Boat hits D/S gate face on entry	M	L	L	Maintenance of boat gear controls. Enter lock at minimum speed.	S	L

[Ascending] Boat sucked into collision with face of gates before entering lock.	L	L	L	Never enter lock mouth when lock emptying. Preferably stay well back but if holding in mouth remain in forward gear with bow against gates.	S	L
Excessive boat movement in lock	L	L	L	It's better not to use ropes unless they are necessary to control the boat. If they are used: Rope bow and/or stern round lockside bollards. Ropes to be hand held throughout to prevent boat hanging up or sheering away. Watch throughout and stow at end to prevent ropes fouling propellers.	S	L
[Upcoming] Gate paddles flood boat on opening.	L	H	M	Helm controls paddle movements, order and extent of opening and boat position. Shore team checks effects. Agreed emergency signals and drill to shut all paddles instantly. When travelling up stream into an empty lock that has to be re-filled it is essential that the lock party understands whether the water fills from under the boat or through paddles in the gate. If through gate paddles extreme care is required to open those paddles slowly to ensure no incoming water splashes over the bow of the boat.	S	L
Bow/stern caught on lock face, in window of gates, under internal walkway or [descending only] stern sits on cill	L	H	M	Helm controls paddle movements and boat position. In doubtful locks rope to bollards. Shore team keeps check boat not trapped. Agreed emergency signals and drill to shut all paddles instantly.	S	L
Boat swept off course	L	M	L	Observe and plan for wind, inflows and obstructions on entry. During locking, observe and plan for hazards on exit.	S	L
Shore team error	M	M	M	Give opening safety talk at lock if untrained helpers involved. Carefully monitor involvement of those not physically fit. Inexperienced people to work as a pair with experienced crew member.	S	L
Getting on and off boat	L	M	L	Boat to put onto lay-by berths except in quiet weather with experienced crew. Beware of slipping or being crushed when moving along gunwales, in emergency manoeuvre boat so crew don't have to jump off. Position boat to make ladder access easy. Use gunwales only in emergency.	S	L
Slips trips and falls	M	M	M	Wear suitable footwear. Observe situation at start, don't run. Beware of slippery towpaths etc in muddy or frosty weather. Keep back from lock edge and to safe sides of balance beams. Do not allow passengers to cross the lock on top of the lock gates. They should only be allowed to cross the canal along the boarded walkway where there is a handrail.	S	L
Body injury from heaving, hauling, pushing, winding etc	L	M	L	Ensure people not working beyond their strength. Provide training.	S	L

Windlass flying off or fouls eg balance beam or fingers catch under handle roller.	L	M	L	Train in selection of windlass [length and socket sizes] and use of correct socket. Warn of dangers.	S	L
Catching fingers, hair, clothing etc. in paddle machinery	L	H	M	Ensure suitable dress. Demonstrate safe operation and warn of danger.	S	L
Injuries arising from mistakes caused by poor communication	L	M	L	Skipper to explain roles to crew and passengers and to set up simple hand signal system. Avoid shouting – get people together before a manoeuvre and explain it quietly at the outset. See procedures on ‘Crew Safety Briefing’ and ‘Passenger Safety Briefing’.	S	L
Canoeists and other boats	M	M	M	Don’t share locks on the canal. Rope up as needed. Shore team to make sure D/S paddles only opened when nothing dangerous in or near D/S lock mouth.	S	L
Bathing in/playing at lock	L	H	M	Do not enter lock until cleared	S	L
Passers by / other boaters	L	M	L	Keep clear of ropes, bollards etc, allow them to help only under supervision.	S	L
Falling in lock	L	L	L	Prevent by supervision and the practice of this assessment. If someone does, put engine in neutral, close all paddles, provide protection against crushing [eg lifebelts] and follow overboard drill.	S	L
CODES	L	Low	S	Strong		
	M	Medium	W	Weak		
	H	High				

Notes on Risk Assessment

1. Organisation of the Event

Key personnel are:

- **Organiser - John May**
- **Health & Safety Adviser - Sue Whitehead**

Any variation to the plans for the event (e.g. groups to be invited, persons staying aboard overnight, etc.) must be approved in advance by both of the above.

On each day of the trips, the trained Skipper on the barge is responsible for its safe operation - this is not just common sense but a matter of law. The law for boats on the canal is exactly the same as that for ships at sea and the Master of the vessel is legally responsible for the operation of that vessel and his/her instructions must be followed at all times. It is a Bruce Trust requirement that the Skipper does not leave the vessel while cruising e.g. at locks.

The key safety documents are the Boat Operator's Manual and Group Skipper Manual provided by the Kennet & Avon Canal Trust Bruce Branch and Group Leaders must re-familiarise themselves with these before the start of the trips.

2. Roles and Responsibilities

The crew will consist of a Trained Skipper, a crewmaster plus two others. The crew will usually not have more than one novice member.

A novice is one who has no previous Canal or Narrowboat experience and has not previously crewed for at least two days.

The Skipper will assign roles and responsibilities to each crew member. It is important that crew members understand their roles and carry them out.

It is particularly important to have two crew members at the stern of the boat while cruising.

3. Emergencies

Raising the Alarm

All persons on board need to be made aware of potentially dangerous situations. The Skipper will carry a whistle for this purpose. Persons on the barge must be told at the start of the day that on hearing the whistle they must listen for instructions from the Skipper and carry them out immediately.

Man Overboard Procedure

Skippers have been trained to take specific actions depending on the circumstances. These procedures must be communicated to the crew before starting to cruise. In particular, somebody other than the Skipper must be made aware of the need to put the throttle into neutral immediately in the event of a person falling overboard. This is particularly relevant if the Skipper is assisting a novice to steer and could be at risk of going over the stern rail.

The Skipper will take charge of any attempt to rescue a man overboard. This action should be undertaken from the bank and not from the boat unless absolutely essential.

Calling Emergency Services

The Skipper is responsible for knowing the location of the barge at all times and should be able to provide an OS Grid Reference of a rendezvous point to the Emergency Services if required. It is strongly recommended that one of the crew be given the task of recording each lock number and the time of leaving the lock. Skippers should familiarise themselves with the location of the on-board Nicholson's Guide and OS Maps.

Mobile Phones

Skippers should ensure that they have an operating mobile phone at all times. (See Bruce Trust documentation for phone charging arrangements.) Where possible, Skippers should ensure that phones from two different network operators are available on board due to variability of signal along the canal.

First Aid

A basic First Aid kit and First Aid manual are available on board. Skippers should familiarise themselves with their location. For anything more than simple cuts or bruises, expert attention should be sought by calling for an ambulance or transporting the injured person to a doctor or casualty department - locations of doctors/hospitals and phone numbers are available in the Bruce Trust documentation.

4. General

Safety Briefing

Before commencing cruising each day, the Skipper must give a Safety Briefing to the passengers and crew. A specimen is provided.

Life-jackets

A mix of sizes of life-jacket is carried on board. Passengers should be offered life-jackets on embarking. Whether the wearing of life-jackets is compulsory on a given day is a matter for the Group Leader and the carers.

If requested by the group, usually for children, the life jackets can be taken to the groups transport so they can be put on before walking along the towpath to the boat.

Out-of-bounds areas

Nobody is allowed on the roof of the boat unless instructed to be there by the Skipper in the event of an emergency. Passengers and carers are not allowed to walk along the sides of the boat at any time and crew members should do this only when necessary and should keep a firm hold of the handrail at all times. Do not walk along the side of the boat while in a lock.

Slipping/Tripping hazard

There should be no running on the boat or the banks except in an emergency.

Embarking/Disembarking

Nobody should embark or disembark until the Skipper confirms that it is safe to do so. Passengers are always keen to help with locks etc. but the crew must ensure that nobody leaves or joins the boat until the Skipper is satisfied that it is safe to do so.

Ropes

These are a tripping hazard and should be kept neatly coiled and ready for use. Particular care must be taken with ropes when we have passengers with impaired vision aboard.

When a rope is in use it must be under the supervision of a crew member. Care should be taken to avoid trapping fingers between ropes and bollards.

Each Skipper has his/her own preferred way of mooring for locks. The crew should listen for instructions and carry them out quickly.

Locks

Operating the locks is part of the fun of a day on the canal but, unless done with care, it can give rise to a number of hazards.

When travelling up stream into an empty lock that has to be re-filled it is essential that the lock party understands whether the water fills from under the boat or through paddles in the gate. **If through gate paddles extreme care is required to open those paddles slowly to ensure no incoming water splashes over the bow of the boat.**

The Skipper will nominate a member of the crew to take charge of the lock party. It is that person's responsibility to maintain contact with the Skipper and to ensure that all instructions are carried out promptly. The lock party must listen carefully for instructions from the person in charge and follow them without question. In some circumstances (e.g. boat snagging on a gate or obstacle in the lock or man overboard) it may be necessary to close all paddles quickly. Before starting to cruise, the Skipper will agree hand signals to indicate to the lock party the need to lower the paddles quickly. Many of the paddle mechanisms are designed so that the ratchet can be lifted and the paddle dropped quickly in this eventuality. Some of the newer mechanisms, however, will need to be wound down with speed.

When in a lock, all passengers must be made aware that they must not trail arms or legs over the edge of the boat.

Windlasses should be used only under the supervision of a crew member. Windlasses should be carried safely and not swung or thrown.

Ratchets on the paddle mechanisms can trap fingers. The ratchet should be lifted, where possible, by a crew member.

Where possible, more than one person should be used to open and close each gate. Pushing with the back is the safest way to avoid muscle strain. This should be done slowly and carefully while the crew member supervising the operation must ensure that nobody goes too close to the edge of the lock.

The Skipper is responsible for the safe passage of the boat through each lock and will ensure that the boat is maintained in a safe position. Some of the locks are fitted with gate paddles and these can create very strong flows of water if opened quickly and when travelling upstream this can present a significant hazard. Such paddles should be opened slowly and only at the rate indicated by the Group Leader.

Help from Passengers

The whole point of these trips is to enable our guests to try something that wouldn't otherwise be available to them. We encourage them to help with steering, locks etc but it is our responsibility to ensure their complete safety. When carrying out an activity with a guest e.g. operating a lock paddle or crossing a lock it is important to evaluate the risk. Crew members must take into account that our guests have a variety of disabilities ranging from impaired mobility to total loss of sight. DO NOT undertake an activity with a guest unless both the Skipper and the Carer are satisfied that it is safe. The Skipper is legally responsible and has the final word in this matter.

5. Personal Care

The personal care of the guests is the responsibility of their accompanying carers. Crew members must not give help with toileting, medication, feeding or other personal care as they do not have DBS clearance through Rotary. Crew members must also ensure that they avoid one-to-one situations with guests and that all conversations are appropriate.

5. Travelling

It is the responsibility of guest organisations to get our passengers to and from the boat. The crew may assist with embarking/disembarking but should do this under instruction from carers.

6. Animals

Animals other than registered Assistance Dogs are not encouraged. They can be a tripping hazard. Crew members intending to bring a dog should first check whether the Skipper for the day has any objection. If a dog does accompany a crew member it is the responsibility of the crew member to keep the dog under control at all times.

7. Fires and Flames and Gas

Fires are a major cause of loss of life in boating accidents. Smoking aboard the boat is not permitted and this must be communicated to passengers and enforced by the crew. In the event of a fire, listen carefully for instructions from the Skipper.

The gas cooker should be used only by the crew or by an accompanying carer after training. In the event of the gas alarm sounding, the boat should be evacuated immediately and the instructions in the Boat Operating Manual should be followed.

The electric hoist must not be used for ten minutes after the gas alarm is activated or after someone reported smelling gas.

8. Catering

Carers will bring food for the passengers. The crew will cater for themselves. Because of the presence of Weil's disease in the canal, it is important that hands are washed thoroughly before preparing or consuming food. Waste food should be disposed of in the bin provided and not in the canal.

It is important that the fridge is checked at the end of each day's cruising to prevent contamination by food that is no longer usable. If you bring food with you then please take the remains away with you.