

Rotary Club of Abingdon Vesper

Barge Trips 2009

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 Group Leaders are all trained and we have never had a serious incident so why do we suddenly 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 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.

This year the Risk Assessment has been completely redrafted. It is based heavily on the Bruce Trust Day Trip Skipper's Risk Assessment and is now in a standard format for such documents.

The requirements of this Risk Assessment are binding on all members of the Club helping with the 2009 Barge Trips.

Rotary Club of: Abingdon Vesper

Risk Assessment for: Barge Trips 2009
Compiled by: Paul Thompson

Date: 07/05/2009

Signed President



Event organiser



Risk Assessment

General Risks:

Risk for operations	Arrangements to minimise risk
<i>Access on and off boat</i>	<i>The term 'board' here means both getting on and getting off the boat.</i>
Towpath slippery, obstructed or involving steps	Position boat to minimise risks, move/mark obstructions. See that the skipper and crew are aware that care of passengers on the towpath is the hirer's responsibility. Do not disembark passengers who may need help without a carer accompanying them.
Trip or fall between boat and quay	<p>Normal boarding</p> <p>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</p> <p>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 people 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 – before stepping off. • 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</p> <p>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. Walk through the boat not on gunwales if possible. In locks, stop the boat before people walk along them. Use active crew with non-slip footwear. Crew to:</p> <ul style="list-style-type: none"> • Hold the grab rail whilst moving along gunwales and the grab rail or ladder when stepping on or off. • 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]
Lift: fall into pit, trap chair or person, chair rolls off or tips someone out.	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.
Open hatches and tripping hazards on after deck.	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.
<i>Boat operation</i>	
Navigation hazards and risks are considered in design of manuals and training	Risks of boat navigation are minimised by the use of trained captains and crew working in accordance with the relevant Bruce Trust manuals.

Risk for operations	Arrangements to minimise risk
Drowning	<p>Captain and crew: Any non-swimmer, and in bad conditions everyone, is advised to wear a lifejacket.</p> <p>Passengers: Life jackets are offered at the start of the trip and if accepted the captain 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.</p> <p>When people are outside on the boat, someone – usually the helm - acts as lookout against people falling overboard. When the boat is moored, someone specific needs to be appointed.</p>
Falling/being swept from roof	No-one is allowed on the roof of the boat. In exceptional circumstances the captain may allow one active and experienced crew member on the roof, subject to someone else acting as lookout for their safety.
<i>Within the cabin</i>	
Gas explosion/fire	<p>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 Trust. Do not light matches etc or operate electrical switches. If appropriate cancel or delay trip.</p> <p>Make visual check of any 240V electrical equipment.</p> <p>See that fire extinguishers are in place.</p> <p>Ensure crew and carers able to light gases on stove.</p> <p>Smoking in the cabin is illegal.</p> <p>Do not permit candles or similar items to be used.</p>
Infections/burns/scalds/cutting injuries in galley	Galley operation is the responsibility of a nominated crew member. Encourage limited access to galley whilst work is in progress there.
Food poisoning	<p>Make sure surfaces, boards, china etc are clean before group arrives.</p> <p>Make available to group only non-risk items e.g., tea, coffee, sugar, sealed or freshly opened milk.</p> <p>The safety of food prepared by the group is not a Rotary responsibility.</p>
Infection	<p>Provide hand towels and hand wash liquid in toilets and kitchen. Check toilet areas clean before and at end of the day. Change towels/tea towels daily.</p> <p>Passengers and crew to be told of need to wash hands before eating etc.</p>
Scalds from hot taps	Explain need to safeguard in safety talk [see skipper's instructions].
Head bumping	Warn passengers in safety talk [see skipper's instructions]
Fall or hurt from boat movement	Warn passengers in safety talk 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.

Risks when operating locks:

Risk for operations	Arrangements to minimise risk
<i>Boat and lock</i>	Boat to be under command of a competent person. If excessive boat movement likely, warn those on board to stay seated or to brace themselves against falling.
[Descending] Boat hits D/S gate face on entry	Maintenance of boat gear controls. Enter lock at minimum speed.
[Ascending] Boat sucked into collision with face of gates before entering lock.	Never enter lock mouth when lock emptying. Preferably stay well back but if holding in mouth remain in fwd gear with bow against gates.
Excessive boat movement in lock	<p>It's better not to use ropes unless they are necessary to control the boat. If they are used:</p> <p>Rope bow and 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.</p>

Risk for operations	Arrangements to minimise risk
[Upcoming] Gate paddles flood boat on opening	Helm controls paddle movements, order and extent of opening and boat position. Open ground paddles first where they exist and then open gate paddles when covered with water. Shore team checks effects. Agreed emergency signals and drill to shut all paddles instantly.
Bow/stern caught on lock face, in window of gates, under internal walkway or [descending only] stern sits on cill	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.
Boat swept off course	Observe and plan for wind, inflows and obstructions on entry. During locking, observe and plan for hazards on exit.
<i>Shore team</i>	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 competent crew.
Getting on and off boat	Boat to put onto lay-by berths except in quiet weather with competent and experienced crew. Beware of slipping or being crushed when moving along gunwales. In locks only move along gunwales when boat stopped. Manoeuvre boat so crew don't have to jump off. Position boat to make ladder access easy. Passengers to use gunwales only in emergency.
Slips trips and falls	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. Avoid gate crossings, particularly with a deep drop on one side and for those less able. When made hold on whilst crossing.
Body injury from heaving, hauling, pushing, winding etc	Ensure people not working beyond their strength. Provide training.
Windlass flying off or fouls eg balance beam or fingers catch under handle roller.	Train in selection of windlass [length and socket sizes] and use of correct socket. Warn of dangers.
Catching fingers, hair, clothing etc. in paddle machinery	Ensure suitable dress. Demonstrate safe operation and warn of danger.
<i>Other people and all concerned</i>	
Mistakes from poor communication	Captain to explain roles [see above] 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.
Canoeists and other boats	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.
Bathing in/playing at lock	Do not enter lock until cleared
Passers by	Keep clear of ropes, bollards etc, allow them to help only under supervision.
Falling in lock	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.

Notes on Risk Assessment

1. Organisation of the Event

Key personnel are:

- Organiser - John May
- Children and Vulnerable Persons Protection Officer - Paul Thompson

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 Group Leader (or "captain") 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 Group Leader does not leave the vessel while cruising e.g. at locks.

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

2. Emergencies

Raising the Alarm

All persons on board need to be made aware of potentially dangerous situations. The Group Leader 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 Group Leader and carry them out immediately.

Man Overboard Procedure

Group Leaders 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 Group Leader 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 Group Leader is assisting a novice to steer and could be at risk of going over the stern rail.

The Group Leader 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 Group Leader 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. Group Leaders should familiarise themselves with the location of the on-board Nicholson's Guide and OS Maps.

Mobile Phones

Group Leaders should ensure that they have an operating mobile phone at all times. (See Bruce Trust documentation for phone charging arrangements.) Where possible, Group Leaders 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. Group Leaders 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.

3. General

Safety Briefing

Before commencing cruising each day, the Group Leader 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.

Out-of-bounds areas

Nobody is allowed on the roof of the boat unless instructed to be there by the Group Leader 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 Group Leader 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 Group Leader 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 Group Leader has his/her own preferred way of mooring for locks. The crew should listen for instructions 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.

The Group Leader 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 Group Leader 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 Group Leader 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 Group Leader 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 Group Leader and the Carer are satisfied that it is safe. The Group Leader is legally responsible and has the final word in this matter.

4. 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 CRB 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 guide dogs are not encouraged. They can be a tripping hazard. Crew members intending to bring a dog should first check whether the Group Leader 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

Fires are a major cause of loss of life in boating accidents. Smoking inside 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 Group Leader.

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.

8. Catering

Carers will bring food for the passengers and 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.