RISK ASSESSMENT

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What are the hazards?	Who might be harmed and how?	H/M/L	What is already in place?	What needs to be done?	Action by who?	Action by when?	Date completed
Drowning	 All users of the boat At particular risk in deeper water (on rivers) and in locks Acting contrary to briefing 	Н	 Lifejackets are kept on the boat and must be worn Lifebelts (x2) are kept on the boat (one at the bow and the other at the stern) and are attached to the boat by rope 'Man overboard' procedure forms part of the narrowboat training programme Lifejackets are maintained to schedule and repaired as necessary 	Operation of the lifejackets is explained during the master's safety briefing Master must ensure all passengers and crew are wearing a lifejacket before setting off			
Electric shock	 All users of the boat When using switches and when turning battery isolator switches on and off When the inverter is in use 	L	 Only the master or an adult under his/her supervision is to open the engine compartment to operate the battery isolator switches Boat operates a 12volt system to minimize risk of shock Inverter is kept locked and is only used by JV committee members for maintenance purposes Accident book and incident report form to be completed 	Master to ensure they (or an adult under their supervision) operates the battery isolator switches			
Falling in the water	 All users of the boat When stepping onto and off the boat Whilst outside the boat's cabin, so on the bow or stern deck When on the bank by losing footing When operating locks and getting too close to the lock edge Standing on the 'wrong' side of lock gate arms and getting knocked into the water 	Н	 Advice set out in the WDS 'rules of the boat', booking conditions and is set out in the boat's instruction and guidance folder Advised to wear sensible footwear with suitable grip Advised to take care in wet or icy conditions No jumping on or off the boat 	 Advice and instructions to be part of the master's safety briefing at the start of every trip including instructions on use of life jackets If in locks, shut everything down, shut down lock gate paddles, throw life belts either side of boat to prevent crushing Be aware of location of boat in 			





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	By running on the bank or within lock areas and slipping into the water Non swimmers particularly at risk If the boat hits an object or runs aground Falling through open sliding windows (SV)		 The boat's gunwales and roof are 'out of bounds' so passengers can only pass along the boat through the cabin Passengers instructed to keep their legs and arms within the boat's confines Only 3 persons allowed on the stern deck whilst underway Crew and passengers instructed not to run and to take care when in the vicinity of locks All young people are supervised by an adult in lock areas All users must wear life jackets Accident book and incident report form to be completed 	relation to roads / bridges in case assistance is required and ensure party has a charged mobile phone available Users must be supervised near open windows Special care needs to be taken when groups are operating both boats together as there's the potential for more young people to be in the vicinity of the water			
Fire	All users of the boat By using matches and gas lighters to ignite the cooker When carrying out engine checks or carrying out routine maintenance on the boat Leak in fuel supply system	M	 Fire extinguishers kept inside the boat (x5) Further fire extinguisher within the engine compartment Emergency fuel cut off switch (instructions in folder) Gas bottle has a gas safety fuse fitted, which cuts off the supply in the event of a leakage Fire blanket provided and kept on view near the gas cooker Both gas bottle containers (one in use and one spare) are unlocked during trips Boat is completely 'no smoking' on any area Long wooden plank is kept on the boat to help evacuation of passengers 	 Masters to be aware of the location of fire extinguishers and blanket and brief all crew Master to ensure the securing bar is removed from the bow doors and they are unlocked as soon as they board the boat. Padlocks should be locked on or removed Passengers to be aware of the smell of gas / smoke / flames and take appropriate action – inform the master straight away Only attempt to fight a fire if safe to do so Throw both gas bottles overboard if safe to do so Evacuate the boat and conduct a 			



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			Gas bubble tester Accident book and incident report form to be completed	roll call Ensure that care is taken when the cooker is in use, use back rings, point kettle away and keeping passenger movement through the galley area to an absolute minimum Keep all towels and loose clothing away from the cooker Be aware of location of boat in relation to roads / bridges in case assistance is required and ensure party has a charged mobile phone available			
Fouled propeller	Master When the propeller becomes fouled with rubbish, rope and other foreign object Loss of control Damage to engine Injury when removing debris	L	Training covers stopping engine in event of foul and how to clear debris Boat is equipped with an anchor in case of propeller being fouled on river sections and where the bank cannot be reached safely	Master should get boat to bank if possible Master to ensure ignition keys are removed from the control panel, and out of reach of other boat users, before opening weed hatch in engine compartment Master to ensure debris is removed, where possible, and not to throw it back into the water if it is likely to foul the boat, or other boats, again			
Gas leak	 All users of the boat When turning the gas bottle supply on and off When exchanging a new gas bottle for an empty one When operating the cooker When operating the water heater (JV) 	L	 Must follow the manufacturer instructions, which are kept in the boat information folder Must follow the gas supply switching process (use of gas fuse and bubble-tester) 	 Only the master, or an adult under their supervision, to turn the gas supply on or off Ensure all appliances are turned off after use or at the end of each trip Ensure adequate ventilation 			



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Lifting and Manual Handling	 Master and crew Manoeuvring gates at Sea Cadets' Operating lock gates Emptying and refilling toilet (JV) Carrying provisions Setting up bunks and tables (JV) Carrying fuel Lifting safety equipment onto roof of boat 	М	Safe operation of locks forms part of the Narrowboat training programme Instruction and guidance on toilet emptying and refilling is included in the boat information folder	 Master and crew to be aware that the entrance gates to Sea Cadets HQ are very heavy as are the moving parts to lock and unlock them All persons having to lift and carry heavy items to be familiar with safe lifting technique and ensure they do not carry more than they are safely able to 			
Locks	 All users of the boat When the boat is entering and leaving a lock Risk of losing control of the boat when ascending and the lock is being filled with water, causing turbulence inside the lock and fast flowing water upstream When the boat is descending and the lock is being emptied, causing fast flowing water in the lock and turbulence downstream Danger of the boat's stern end becoming trapped on the lock cill, which can cause the boat to take on water and sink Risk of damage to the stern end of the boat and its steering gear and propeller if the stern of the boat hits the lock rear gates or the cill Lock operating equipment and gates are very heavy and have moving parts so there is a risk of hands, fingers and clothing becoming entangled Risk of losing control of winding handles (windlasses) when operating lock equipment as they can 'fly off' at speed 	Н	 Operation of locks and handling the boat when approaching, inside and leaving a lock form part of the Narrowboat training programme Rules of the boat state that young people must be supervised at all times, particularly around lock areas Ropes are provided at the bow and stern of the boat for use when ascending locks Life jackets to be worn at all times Rules of the boat and our booking conditions refer to the fact that under no circumstances whatsoever should the boats be used to ram, push or nudge lock gates, swing-bridges or any other items of waterways infrastructure 	Master to ensure that they survey the lock area, or arrange for it to be surveyed by an adult under their supervision, so they are conversant with its operation, hazards and mooring point once through the lock Master to supervise the sequence of and degree of opening of lock gate paddles and ground paddles to ensure the safety of the boat and crew Ropes to be used to keep boat secure and stable when lock is being filled Bow doors to be shut when ascending locks to ensure no water enters the boat's cabin Master to ensure that the stern of the boat is kept clear of the lock cill area when descending a lock Master to ensure the boat's stern is kept clear of the lock gates at all times Master to ensure that whoever is			



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	 and hit people nearby Risk of people operating the lock gates and mechanisms falling in if they lose their footing Risk of the boat taking on water and sinking Risk of falling into the water, either inside or outside the gate due to slippery surfaces and moving equipment 			tasked with winding paddles always keep two hands on the windlass, never let it go when winding up and down and always remove it when they have finished winding the gear, after ensuring the ratchet lock is in place • Master to advise during safety briefing; no running when in vicinity of locks and to keep away from lock edge • In the event of the boat becoming unsecured and unsafe during lock operation the Master must instruct those operating the gates and paddles to shut all paddles down in order to minimize and stop the flow of water • Under no circumstances whatsoever should the boats be used to ram, push or nudge at lock gates, swing-bridges or other waterways infrastructure in an attempt to open or close them			
Overhanging trees, branches and undergrowth	 All users Risk of being hit by overhanging trees, branches and undergrowth, causing injury to people on the boat Risk of damage to the boat Risk of being knocked off balance and falling into the water 	L	Masters are trained to keep away from the banks of the waterway where possible thus avoiding these hazards	 Master to ensure the boat is kept away from overhanging hazards Where contact with overhanging hazards is unavoidable the Master must give a warning to other boat users so they can take action to avoid being hit 			
Rope injury / burns	 All users of the boat When mooring the boat or releasing it from her moorings When using ropes to secure the boat 	M	Accident book and incident report form to be completed	Master to include risk of rope burns during safety briefing Wear gloves to minimize risk of burns			



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	when ascending locks			Care to be taken when handling rope Persons to check that rope is not wrapped around themselves or other passengers before attempting to throw or secure a rope			
Stalled engine / mechanical breakdown	All users of the boat As a result of an engine stall or mechanical / electrical breakdown	L	If boat is under power then any momentum can be used to reach the bank Poles are provided which can be used to help get the boat to the bank Plank is provided to help get someone ashore to secure the boat to the bank Mooring pins and hammer are provided Boat is equipped with an anchor in case of breakdown or loss of control on river sections Reporting procedure is set in the booking conditions and call-out details are prominently displayed on the boats	Forms part of the narrowboat training programme Ensure fire switch has not been pulled Master to give clear instructions on what they intend to do in these circumstances Fuel level check is part of the handover and checks process Master to ensure that the boat has sufficient fuel for their intended trip before setting off			
Trapped finger / limb injury	 All users of the boat When on the move and passing other craft When coming into moor the boat When passing through narrow waterways When in locks When opening and closing doors When using the tables or bunks (JV) When carrying out engine checks before and after each trip Using sliding windows (SV) 	Н	 All users must keep hands and feet inside the boat's 'footprint' at all times Boat to be slowed down when approaching other craft or narrow waterways and when coming into moor up All young people must be supervised at all times and accompanied by an adult at locks Instructions for safe use of bunks / tables are provided in the instruction 	 Risk forms part of the master's safety briefing Master and crew to be aware of first aid box location Be aware of location of boat in relation to roads / bridges in case assistance is required and ensure party has a charged mobile phone available Windows to be locked into position (SV) 			



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			 folder Only the master or an adult under their supervision may open the engine compartment and carry out the engine checks Appropriate speed forms part of the narrowboat training programme Rules of the boat state that young people must be supervised Masters are instructed to remove the ignition keys from the control panel, and keep them out of reach of other boat users, when in the engine compartment First aid kit kept on board Accident book and incident report form to be completed 				
Water turbulence and unsafe water conditions	 All users of the boat When filling or emptying locks When passing other craft on narrow waterways On rivers in flood conditions 	M	 Must follow all the rules concerning locks – young people must be supervised, no running, keeping away from the lock edge or standing 'wrong' side of lock gate arms Boat to be held secure on ropes when ascending locks Master to be in control of lock opening and closing procedure and to give clear instructions to all crew and passengers Bow doors must be closed when ascending locks to prevent water ingress to boat Boat is equipped with an anchor in case of breakdown or loss of control on river sections 	 Forms part of the master's safety briefing Master to regularly review and act on weather and water conditions before and during their trip and to plan return journey with weather / water conditions in mind Master to take notice and act on water level indicator boards when intending to move from a canal section to a river section Boat not to be taken onto river sections in flood conditions 			





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Weather	 All users Heavy rainfall can quickly cause flood conditions on river sections Wet or icy conditions can increase the risk of slips and falls on the boat's decks and on the bank and in the vicinity of locks Heavy wind can make the boat harder to control Hot weather and exposure to high levels of sunlight can cause dehydration and/or sunburn 	M		 Group leader to provide clear instructions on suitable clothing for Narrowboating Master to regularly review weather and water conditions before and during their trip and to plan return journey with weather and water in mind Master to be aware of and act on current weather conditions and any threat of flood conditions Group leader to advise crew and passengers to bring sunscreen and water 			
Weils disease	All users of the boat When coming into contact with water	L	Hands to be washed after coming into contact with canal / river water And at all times before preparing food and drink or eating or drinking No swimming	 Forms part of Master's safety briefing Avoid contact with canal and river water where possible Provide antibacterial soap and towels 			
Wheelchair Hoist (SV)	All users of the boat Incorrect usage	Н	The hoist is marked out of action and must not be used under any circumstances	Users to ensure instruction forms part of safety briefing			
Whiplash type injuries	 All users of the boat When the boat hits an obstruction in the water, another craft, the bank, lock gates or any other object at speed If the boat runs aground 	L	 Need to approach any potential hazard, such as the bank and other craft when mooring, or locks and other craft on the water with care and at an appropriate speed, slowing down well ahead of the hazard To cruise at a reasonable speed given the circumstances at the time To treat all other boaters and water 	 Forms part of the narrowboat training programme If a collision is unavoidable the master, or person controlling the boat under their supervision at the time, must warn all crew and passengers and ask them to brace themselves 			





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			users with respect and consideration				
Loss of control of the boat(s) when at mooring	 Any person either on the boat(s) and other boat users and anyone in the vicinity of the water Mooring ropes coming loose from mooring rings and bollards and the boat moving off Mooring pins working loose and leaving the boat unsecured and at risk of drifting from the bank Rope becoming damaged and breaking 	М	 Need to secure the boat using either recognized bollards or mooring rings designed and provided for that purpose When these are not available then by securing the boat(s) by rope to mooring pins securely driven into the bank Our training programme covers the safe securing of the boat(s) in all situations Ropes and their condition are checked at regular intervals and fautly/damaged lengths repalced 	Forms part of the training programme The boats should only be moored on recognised bollards and rings provided at mooring points Users should ask for a practical demonstration if appropriate and required			