RISK ASSESSMENT FOR ENDEAVOUR OPERATING ON LEEDS LIVERPOOL CANAL BETWEEN GARGRAVE AND SILSDEN

Approved by the Trustees at their meeting on 20th December 2023

Next Review due 20th December 2024 or following a serious incident/near miss or change in operating procedures

Risk/Hazard	AT RISK	CONTROLS/ACTION * See Operating Procedures **See Joining Instructions
Slips, Trips and Falls	Crew	
Bollards, rings, ropes, mooring pins, holes, uneven or		Skipper to Crew briefing to include*:
slippery surfaces especially when wet or icy		- crew trained in safe working practices and the need to exercise good judgement to stay safe
Slipping on a wet deck		- crew not to take any risks
Foot Injuries from sharp stones or glass on the towpath		- crew to be aware of low/no handrails in stern area.
Falls off unprotected canal edges including at Snaygill,		- crew not to step off the boat unless instructed by Skipper/Helm
bridges and locks		- crew not to step off the boat in a dangerous place, where gap is too large or if boat moving too fast for
Climbing in or out of engine compartment		them
		- handrails or grabrails to be used
		Trustees provide Anti-slip deck surface
		Crew to wear non-slip shoes *
		Trustees provides Crew Training via Trainer and skippers
Slips, Trips and Falls	Passengers	
Slippery surfaces especially when wet or icy	and carers	Carers responsible for taking appropriate care to avoid slips/trips/falls **
Slipping on a wet deck		Carers responsible for moving passengers from their transport onto the boat **
Slipping whilst transferring to or from boat		Carers and passengers to wear non-slip shoes **
Passengers moving around on boat		Trustees provide anti-slip deck surface
		Skipper to Passenger briefings to include*:
		- the need to take care due to the risk of slips, trips and falls and in particular stairs, ramp and lift
		- Handrails to be used
		- Passengers are not normally permitted on rear deck due to low/no handrails.
		- Passengers to move around boat with care – beware of warnings from crew if a jolt is imminent
		- Lift only to be operated by trained crew
		- Passengers to remain seated and cooker off whilst going through locks
Slips, Trips and Falls	Passengers,	We cannot control nature – Skipper to Passenger Briefing to include that Passengers, carers and Crew need
Slippery surfaces in car parks, paths and towpath caused by	Carers and	to take appropriate care as they would do in their own locality. */**
fallen leaves, moss, mud, wet grass, ice etc	Crew	
		Whilst we cannot remove all leaves crew will brush most leaves off the Hospital ramp and in icy conditions
		sprinkle rock salt. The same applies to the bridge/plank at Snaygill. *
Collisions with shore, bridges, stationary boats, moving		Crew trained in safe working practices including the need to maintain a Bowman.
boats and in locks		Helm to warn passengers if a jolt is imminent (if possible) *
Falling into lift shaft		Crew trained for lift to be left in up position when not in use (or in down position if outer doors shut) *

Entrapment/Crushing	Crew	
Between boat and other object		Crew trained in safe working practices including the need to maintain a Bowman.
In parts of locks or bridges		Skipper to Crew briefing* to include:
Berthing and Slipping moorings		- the need to exercise good judgement to stay safe
Weed Hatch		- crew not to take any risks
Trapped fingers in mooring rope		- extra care to be taken when operating bridges or locks
Entanglement in ropes		Skippers trained that weed hatch only to be opened with engine off, key removed and all electrics switched
Body parts when lowering/lifting ramps		off. Seal to be checked afterwards every time.*
g,g		- crew trained to take extra care when lifting ramp and engaging turnbuckles *
Entrapment/Crushing	Crew and	
Body parts trapped in lift when in use including head injury	Passengers	Lift only to be operated by a crew member observing the passenger and taking care themselves*
Body parts under lift when lowering		Trustees provide hazard tape/paint on floor around lift base and on lift door frame and lift edges
		Crew training*
Fingers trapped or body entangled in mooring ropes		
Manual Handling	Crew	
Opening/closing bridges and lock gates		Crew briefing and training* to include:
Opening and closing paddles (especially guillotine paddles)		- crew trained in safe working practices and the need to exercise good judgement to stay safe
		- crew not to take any unnecessary risks
		- extra care to be taken when operating bridges or locks
Recovering MOB from water		Where possible MOB to self-rescue using boarding ladder with support *
Manual Handling	Crew and	
Any lifting	Carers	Crew are not to lift any passengers*/**
		Carers to ensure they have the capacity to lift passengers when transferring to/from the boat and following a
		fall **
		Crew to share any other lifting ensuring backs are straight and load not too high *
Drowning	Passengers,	
Falling from boat	carers and	Skipper to Crew briefing* to include:
Slipping from bank	crew	- crew trained in safe working practices and the need to exercise good judgement to stay safe
Rails not continuous on stern		- crew not to take any unnecessary risks
Boat sinks:		Crew Trained in lock use and briefed before entry
- snagging in lock – overhang or cill		Skipper to ensure 12 passengers only, including carers */**
- overcrowding		Crew Training to avoid collisions/rocks etc
- hull holed		Skipper Training on fitting weed hatch and checking for leaks every time refitted*
- weed hatch not fitted/insecure/not sealed		,
		MOB procedure trained including recovery of unconscious casualty
Man Overboard (MOB)		First Aider on crew of every trip
Fire		
Cooker	Passengers,	Cooker and Microwave only to be used by carers and passengers who are competent to use them. No metal
Microwave	carers and	items in microwave. Cookers and microwaves not to allow food to burn, care with inflammable items near
	crew	cooker. Crew trained to watch out for fire risk by cooker. No shallow or deep frying allowed. */**

Dropped or discarded cigarette or match		No Smoking or vaping is allowed inside the boat or on the decks. */**
Gas/Gas bottles		Bowman to turn off gas at bottles as a priority in any emergency *
Engine compartment Electrical		Training in Fire Procedures*
Burns/Scalds		
Cooker, Microwave and Kettle		Cooker, microwave and kettle to be used under carer's direct supervision **
Chemicals		All chemicals to be kept in proprietary packaging away from food preparation areas and listed in a COSHH
		register*
		No other chemicals to be brought on board*
Rope burns		Crew training to minimise the risk of rope related accidents including rope burns
Moving hot food/water		Carers to directly supervise the moving of hot drinks/hot food/hot water **
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Weather	Crew,	
Too hot	carers and	In hot weather carer to ensure that passengers are suitably protected by suncream, long sleeves and sunhats
	passengers	etc and that fluid intake is maintained**
Too cold		In cold weather carer to ensure that passengers wear suitable clothing for transfer from transport to boat
		having regard for the anticipated conditions. Spare blankets are on board to supplement the boat heating
		system**
		First Aider to make regular checks on condition of any persons that have been immersed in water and
		recommended to seek professional medical advice*
Too windy		Skipper to monitor wind speed and make a decision on whether to cancel or curtail a trip based upon the
loo wiiidy		experience of the crew and the forecast/actual weather*
lcy		In Icy weather Skipper to monitor conditions ashore and afloat (especially the hospital ramp) and make a
icy		decision on whether to cancel or curtail a trip based upon the experience of the crew and the forecast/actual
		weather*
First Aid/Illness	Crew,	
Medical conditions – passengers	Carers and	First Aider on crew of every trip *
Medical conditions – crew	Passengers	Medical conditions of passengers held by carers – Skipper to check **
Head injury – low hatch at steps		Medical conditions of crew to be checked at crew briefing*
Head injury – low ceiling below decks		
		Skipper to Passenger briefing * to include:
		- Low hatch at steps and low ceiling below decks

Loss of glasses - contact with overhanging branches		- Low headroom under bridges and overhanging branches – passengers to remain inside rails and below the roofline at all times Trustees to provide hazard tape around hatch.
Head injury - contact with overhanging branches Head injury - going under bridges		Skipper to ensure Bowman in place whenever boat is moving with passengers on foredeck*
Weil's Disease		Crew to wash hands after handling ropes/canal water and always before eating *
Evacuation Passengers may be infirm and have restricted mobility Wheelchair users and others may have to use lift Time taken to transfer passengers to wheelchairs Time taken to evacuate and get 200m from the boat	Passengers, carers and crew	Carers and Passengers must follow the instructions of Skipper and Crew promptly * Number of wheelchair users including poor walkers who need a wheelchair to access the boat are restricted to four and each must have his/her own wheelchair on board ** Evacuation led by Skipper assisted by crew* - to front deck to commence as soon as possible after emergency declared - to shore to commence as soon as possible after mooring up - In case of fire, movement 200m away from boat to commence asap - In cold weather Crew to issue space blankets to passengers as well as ordinary blankets as they leave the boat
Boat Systems/Grounding Engine failure Electrical system failure Electrocution Floating debris Grounding including submerged objects	Passengers, carers and crew	The risk of engine failure/electrical system failure/electrocution are minimised by: - regular servicing, PAT Testing and Boat Safety Certificate testing arranged by trustees - daily checks by Skipper* - crew training to ensure boat systems are used property Bowman trained to minimise risk of collisions, floating debris and submerged objects/shallow water
Personal Security Unlocking/locking boat Persons intending to cause harm to the boat on bridges Aggression from other canal/towpath users	Passengers, carers and crew	Bowman trained to be aware of danger from persons intending to cause harm to the boat on bridges – Skipper to consider action to take * Helm and crew trained to be as polite as possible to other water users to minimise risk of aggression from other canal/towpath users