



# **Operational Best Practice**

**Emergency Procedures Plan** 

**Information Commentaries** 

This document issued to...

«Forename» «Surname»

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### Foreword

## Western Trip Boats — Operations Manual

**Operational Best Practice & Safety Procedures** 

Information Commentaries

### **Emergency Procedures Plan**

- 1. This manual is issued to each member of the Western Trip Boat Team and relates to Trip Boat *Perseverance* and the area of operation
- 2. All four CCT Trip Boats have a copy of the manual on board maintained by the Operations Manager
- 3. The loose leaf format allows for additions, adjustments and amendments on individual pages to be updated as required
- 4. A Primary Copy is held at Cotswold Canals Trust Head Office
- 5. Updates initiated by the Western Trip Boat Operations Manager are carried out and distributed by CCT Administration Staff

### Mission Statement — Aims & Objectives

### Aims

- To operate Cotswold Canals Trust Trip Boats safely, effectively and profitably
- To use the Cotswold Canals Trust Trip Boats to inform, educate & entertain passengers
- To increase public awareness of Cotswold Canals Trust aims & objectives
- To increase membership of Cotswold Canals Trust
- To recruit active volunteers to further the aims of Cotswold Canals Trust

### **Objectives**

To achieve the aims outlined above by employing best practice in the following:

- Crew safety
- Passenger Safety
- Boat Preparation & Safety Checks
- Safe & effective rope work coiling & handling, knots & hitches
- Steering, Navigation & Mooring
- Route Information Commentary
- Emergency Procedures

### Personal Safety

This section addresses the personal safety of the Trip Boat crew.

A neat and tidy turnout is important. Not only will tidiness serve to ensure your safety, but passengers will make a judgement upon the professionalism of the operation.

Such a judgement may be an almost unconscious conclusion. It should establish confidence and calm in the minds of the passengers and crew members alike.

We endeavour to impress our guests and to instil confidence.

The next person to step on board might just be the wealthy benefactor the Trust needs as a corporate member!

Seven personal safety points to consider...

- 1. Non slip shoes, with no trailing laces, are the order of the day
- 2. Outer garments must avoid loose belts and lacings or other components that could snag in hand rails or impede movement
- A crew member wearing a lifejacket will add an air of professionalism.
   A life jacket will also provide an aid to flotation should a crew member be in the water for *any* reason
- 4. Always portray an air of 'calm control'
- 5. Move about the boat and berthing site smoothly and calmly
- 6. Keep ropes and equipment stowed tidily
- 7. Read and understand the Risk Assessment documents

### Boat Preparation & Safety Checks

### An Overview

Many ventures in life benefit from proper planning and thorough safety checks. This applies to Trip Boat Operations.

It has been said that 'shared responsibility can result in - no responsibility'.

*Never* trust to chance that a safety check has been done by someone else.

Early research for the Cotswold Canals Trust Trip Boat Operations uncovered a noteworthy commercial trip boat tale.

After the last trip of the day a crew member, quite properly, commenced clearing the propeller of some troublesome plastic. Then, an unconnected event at the boatyard resulted in a lapse of concentration after which all staff went home. Consequently the weed hatch cover was not secured...

The next day's operation, with a different skipper, was curtailed somewhat when the engine space filled with canal water en route to the pick up point! Fortunately, this was a shallow canal. Only pride was hurt and nothing but income lost.

### Passenger Care

We have described the need to create a good impression and the positive effect that such an approach can have upon safety, enjoyment & profit.

We have a duty of care towards our colleagues and passengers. Passengers boarding a trip boat will inevitably come from a wide range of backgrounds and experience.

Some may be experienced boaters or sailors well used to the movement and areas of risk in and on a floating vessel. Others may well be first time visitors to the waterways. They may experience nervousness at the movement of the boat as they board. They may be excited and lack an understanding of the dangers of running, jumping or shouting in the vicinity of, or on a boat.

Everyone, bank-side crew, cabin crew and steerer all have a responsibility to care for their customers and colleagues.

Top Tips for good passenger care...

- 1. Put yourself in their place
- 2. Observe, assess and react accordingly listen and watch
- 3. Address and direct the passengers quietly and confidently
- 4. Be clear and firm when the situation demands
- 5. Once aboard, consider asking the seated group the question... "Who has been on a canal boat before?" The answers may well assist you in the delivery of the safety address and the information commentary!
- 6. Insist that everyone remains seated when returning to the operational wharf and awaiting disembarkation
- 7. Always smile and communicate with your customers, colleagues and crew in a friendly tone

### Passenger Safety Address

Having welcomed your passengers on board it is essential that everyone present is aware of certain rules & safety procedures.

This address must be delivered in a warm and reassuring manner.

Even at the end of a long day the safety address must be fresh and important.

Inappropriate humour regarding 'shipwreck' etc. must be avoided. Remember, there may be a nervous person aboard whose enjoyment might be spoilt by such an 'off the cuff' remark.

The address can be adjusted to suit the passenger group or the trip location.

### **Example of Passenger Safety Address**

Here is a list of issues to be covered. The way you deliver the message and words used should be your own.

### Prior to departure

Consider the provision and fitting of passenger buoyancy aids

- Welcome aboard the ..... My name is.....
- Our Steerer's name is.....The Steerer is in charge of the boat
- The vessel is equipped with a range of communications and safety equipment which we are trained to use
- At all times, in the event of an incident that may affect your safety please follow the crew instructions
- At all times, keep your head, hands, arms and legs within the profile of the boat

### Following departure

- Today's trip will last approximately 30 minutes
- Are any of you 'boaters'?
- If you have any questions or extra information do let me know
- Smoking, or use of electronic nicotine vapour devices, are not permitted on board
- For safety & environmental reasons please use the litter bin on board
- Do not throw anything overboard
- On arrival at the mooring please remain seated until the boat is moored
- You will be informed when the boat is secure and it is safe to disembark

### General Information

Boat Teams report to the Team Leader half an hour before start time for allocation of duties.

The Day Team Leader may allocate and rotate duties as appropriate.

The Steerer and Cabin Crew will wear lifejackets at all times.

Bank-side staff will wear a lifejacket when embarking & disembarking passengers or handling ropes at the waters edge and at any other time when within two metres of the waters edge.

Please wear CCT Green clothing when on duty.

Please wear your own Trip Boat Team Name Badge.

No alcohol is to be consumed by volunteers on any Trip Boat duty.

No smoking by volunteers on any Trip Boat duty.

The Day Team Leader is responsible for all trip boat operations throughout the day as well as the end of day closing & cash reconciliation procedures.

All Boat Team Staff will assist with preparation and end-of-day duties.

### Times & Fares

Public Boat Trips run on Saturdays at Ebley and Sundays at Saul from April to September inclusive. Also on Bank Holiday Mondays.

The trips run on demand from 12 noon to 4.30 pm.

Private Party Charters for both boats are available on all other days. Charter bookings are taken by CCT Administration on 01453 752 568

### Fares

### Adult: £5 Child under 16yrs: £3 Child under 5 yrs: FREE

The coloured Boarding Cards are issued only on receipt of payment The Boarding Cards must be collected as the customers board the vessel Check that ALL issued Boarding Cards have been collected

### Weil's Disease

Cotswold Canals Trust offers the following advice to boat crews and work party personnel regarding Health & Safety issues relating to Weil's Disease.

Unlike tap water, the water in canals, rivers and reservoirs is untreated and micro-organisms are naturally present.

The risk of contracting illness, including the much publicised but rare condition Weil's Disease, is extremely small. However, sensible precautions should be taken as follows:

- All personnel should comply with Health & Safety legislation
- Avoid full immersion in canal water
- Cover all cuts and abrasions with waterproof dressings before contact with canal water
- Wash all exposed skin after contact with canal water and before eating
- Hot water, soap or hand sanitiser is available in the boat toilet compartment
- Do not put wet ropes or other objects in your mouth
- Should illness occur within two weeks of contact, inform your doctor that you have been in contact with untreated water

### Bank-side Staff

### Training

All Team Members carrying out Bank-side duties will be conversant with the Trip Boat Operational Best Practice & Safety Procedures appropriate to their role. The Day Team Leader **MUST** hold an Inland Waterways Association COBM.

#### Responsibilities

- The Team Leader's instructions and directions must be adhered to at all times
- The Boat Steerer is specifically responsible for, and in control of the boat at all times
- The Boat Steerer's instructions and directions must be adhered to at all times
- Remember... 'A boat has ONLY ONE Skipper'

#### **Operational Best Practice & Safety Procedures**

#### The Team Leader & Bank-side Staff will:

Operate public trips **only if** the minimum required crew of **three volunteers** are present and in place:-

- 1 x Team Leader / Bank-side Staff
- 1 x Boat Steerer
- 1 x Cabin Crew

### The Team Leader and Bank-side Staff will assist with the preparation of the boat. The Team Leader & Bank-side Staff will:-

- Wear High Visibility Jackets
- Wear a lifejacket when embarking and disembarking passengers or handling ropes at the waters edge or at any other time when within two metres of the waters edge
- Wear their own Trip Boat Team Name Badge
- Collect fares, issue boarding passes and record passenger data for each trip
- Collect Boarding Passes at embarkation

## When dealing with passengers and during trips, the Team Leader and Bank-side Staff will:-

- Assist the Boat Steerer & Cabin Crew Member with ropes as directed by the Steerer
- Supervise and assist passengers to embark and disembark
- Be aware at all times of the location and direction of the boat
- Be mindful of members of the public and bicycle movements on the towpath or wharf

#### At the end of the day the Team Leader and Bank-side Staff will:-

- Assist, as directed by The Steerer, to moor the boat securely
- Reconcile fare takings and secure monies accordingly

### Cabin Crew

### Training

All Team Members carrying out Cabin Crew duties on trip boat operations shall be conversant with the Trip Boat Operational Best Practice & Safety Procedures appropriate to their role.

Crew Members not qualified as 'Steerer' must, nevertheless, be competent in Passenger Safety Address, Emergency First Aid, Fire Safety, Evacuation & Man Overboard procedures plus basic 'craft specific' boat handling skills to assist in the evacuation and other emergencies.

#### **Responsibilities**:

- The **Cabin Crew member** is responsible to The Boat Steerer
- **The Boat Steerer** will control ALL aspects of movement and navigation of the boat
- **The Boat Steerer's** instructions and directions must be adhered to at all times
- Remember... 'A boat has ONLY ONE Skipper'

## At the start of the day, under the directions of the Team Leader, the Cabin Crew member will:

- Wear a lifejacket
- Wear their Trip Boat Team name badge
- Assist with the preparation of the boat in accordance with the Start of Day Check List

### During trips with passengers on board, the Cabin Crew member will:

- Always be in possession of the dedicated cell-phone in the waterproof carrier provided
- Assist passengers to embark and disembark
- Remain on board at all times while passengers are also on board
- Ensure that numbers do not exceed 12 or 10 passengers as applicable + dedicated crew before departing the moorings
- Deliver the Passenger Safety Address
- Use ropes as directed by the Boat Steerer
- Be alert to the position and direction of the boat
- Be aware of the actions of others

#### At the end of the day the Cabin Crew member will:-

- Assist, as directed by The Steerer, to securely moor the boat
- Assist with the close down of the boat in accordance with the End of Day Check List

### Boat Steerer

### **Certificated Qualification**

All Cotswold Canals Trust Trip Boat Steerers **MUST** hold an Inland Waterways Association Certificate of Boat Management (COBM)

#### Responsibilities

- The Steerer, is specifically responsible for, and will control ALL aspects of the movement and navigation of the Trip Boat
- **The Steerer's** instructions and directions must be adhered to at all times
- Remember... 'A boat has ONLY ONE Skipper'

### At the start of the day the Team Leader will attend to the following issues:

#### **Engine Compartment & Steering Position**

- Stage 1 Remove & retain the engine ignition key prior to carrying out checks
- Ensure battery isolator is in OFF position
- Check header tank on engine for water, top up if needed
- Check oil levels in gearbox and engine (dipsticks). Top up as needed
- Check fuel level (with dipstick).
- **STAGE 2** Turn battery isolator to ON position
- Run Engine compartment bilge pump if required. Stop if no water is being pumped out
- Run Cabin bilge pump for short period. Stop if no water is being pumped out
- Fit tiller & tiller pin
- Record all checks in accordance with the Start of Day Check List

### **Initial Starting Procedure**

- Pull out single lever control at base (to disengage gears) and move it slightly forwards
- Insert ignition key and turn to the left "warm" position and hold for a maximum of 10 seconds
- Turn ignition key to the right to "START" and hold until engine fires (adjust throttle if necessary)
- Allow to run for several minutes to warm up
- With Crew check that Emergency Engine Stop and Crew Call buzzer are working
- The engine may be run continuously, it is unnecessary to turn it off between trips
- Check ropes, remove knots and coil in a tidy fashion working **from** the fixed end
- Check that the Horn is working
- All safety equipment must be in place before the commencement of any trip
- Unclip and stow side mooring fenders

### Boat Steerer continued

#### When steering the Steerer will always:-

- Wear a lifejacket
- Wear their Trip Boat Team name badge
- Stand, and steer only **outside** the tiller arc
- Ensure that all Side Mooring Fenders are removed and stowed when boat is under way
- Be alert and aware of the movement of all other craft

#### When embarking and disembarking passengers The Steerer will always:-

- Ensure the boat is secured to the operational wharf with a minimum of two ropes
- Ensure that numbers do not exceed 12 or 10 passengers + dedicated crew before departing the mooring
- Ensure passengers do not walk along the gunwales i.e. the sides of the boat

#### When departing the mooring the Steerer will always:-

- Ensure the stern rope is coiled and stowed neatly & safely never on the Tiller Pin
- Engage desired gear by moving lever in the appropriate direction
- Increase speed as required by moving the single lever control
- Operate the controls smoothly at all times
- Steer the boat to avoid collision with the landing stage, banks, locks, bridges or other vessels

#### When changing direction the Steerer will always:-

- Check the position and progress of other moving vessels

# When using the weed hatch to clear the propeller of weed or other obstruction the Boat Steerer will always, before attempting to remove any propeller obstruction:-

- Moor the boat and disembark passengers if possible
- Inform and seek the assistance of the Cabin Crew Member or Bank-side team
- Reassure the passengers that this is a normal operational procedure
- Engage 'neutral' stop engine <u>and remove and retain the ignition key in personal</u> <u>possession</u>
- Remove the floor panels, undo the turnbuckle and lift off the weed hatch cover
- Remove the obstruction, if necessary rotating shaft by hand to untangle the obstruction
- Use the 'Prop Knife' with care. It is very sharp
- When all the obstructing material is removed, replace weed hatch cover and tighten turnbuckle ensuring gasket is undamaged and in place
- Next run the engine in reverse gear for fifteen seconds to check for water ingress
- Retain and stow the obstructing material for safe disposal at the end of the cruise

#### At the end of the day the Steerer will always:-

- Moor the boat and ensure ropes are secure
- Close down the boat in accordance with the End of Day Check List

# **Safety Notice**

When carrying out engine checks ALWAYS

- One person only on the boat
- Turn battery isolator switch to OFF
- Remove and retain the engine ignition key in personal possession
- Carry out all fluid levels checks
- Turn stern greaser
- Replace the engine cover

### Then...

Turn the battery isolator on and continue the pre-trip check procedures

### Western Trip Boats Operational Forms Perseverance

Cotswold Ca Perseverance Trip E		Day Team Leader / Steerer Daily Maintenance & Safety Checks Record Checks to be carried out by, or as delegated by, the Day Team Leader Complete ALL entries ✓ the box & sign the sheet					
Day Team Le	ader	Day & Date					
St	art of Da	y Chec	k L	.ist			
General	Sa	Safety		Mechanical			
Cabin Sides, Windows & Canopy clean	Throwing Line in cabin			Indicate Fuel Level with	F 3⁄4		
Bow & Stern Fenders secure	First Aid	Kit in cabin		arrow on 'dipstick' right	1/2 1/4		
Boat Hooks (x 2) & Pole in position	Fire Exting & F	uishers x 3 Fire Blanket		Bilges pumped			
Toilet Compartment clean	Crew Life	ejackets x 4		Oil Levels checked Engine & Gearbox			
Advertising Panels stowed in toilet	Passenger Buo	oyancy Aids available		Coolant checked			
Ropes checked & knot free	Interco	om checked		Stern Gland greased			
Brasses polished	Ladder / Gangp	Life Ring & lank on roof		Drive Belt checked			
Seating & Floor dry/clean Seat Cushions in cabin	Но	orn working		Engine rur			
Mooring Pins & Hammer on roof		lios checked & Hand-held		Engine Cut Out checked			
Side / Mooring Fenders in engine room	Smoke &	CO detectors checked	Engine Hours at St				
Prop clear, & Weed Hatch secure & not leaking	Cell Phone	operational					
E	n <mark>d of</mark> Day	Check	c Li	st			
Window Advertising Panels displaying two messages		Box & Float ntral locker		Engine Room & Slide locked			
Tiller Bar, Pin, & 2 Life Rings in engine room	All Safety stowed in sa	Equipment afety locker		Stern Gland turned tight			
Boat hooks (x2) & Pole in cabin	Passenger Bud stowed in d	oyancy Aids abin locker		Ensure canopy straps are looped up out of the way			
Bridge & Diesel Keys in engine room		Lifejackets crew locker		All electrical switches, Radio & Battery Isolator SWITCHED OFF			
Signage & Sales Equipment in boat cabin	Accident Form	completed if required		Intruder Alarm turned on			
Side / Mooring Fenders hooked on roof	Cell phone 8 VHF Ra	Hand-held dio secure		Engine Hours at Fir	nish		
orward cabin seat cushions moved to rear cabin		Gangplank ked in cabin					
IMPOR Record any shortages & ope notes on the Defects at the back of	rational or admin / Shortages For	istration	Теа	m Leader's Signatu	re		

	Cotswold Canals Trust Perseverance Trip Boat Operations		Perseverance & Shortages	
an aw Please empt Boat	form will remain in the Daily Mainter vareness for all crew members of ma e highlight any operational issues, sl ying etc. There should be no need to Managers will deal with the issue as ety Critical' issues must be notified to Boat Ma Bob Mulkerrin — Tim K	atters identifie hortage of form prepeat the sa soon as possi the Operatio <b>nagers</b>	d and receiving ms, fuel neede ame problem a ble. ns Manager, R	g attentio d, toilet s one of t ob Burgoi
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		Canals 7							
Day			Date			/			
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Statement, Sa question it and That I have pr	d when sa	tisfied will a	gree to abide	by its recom	mendations	eration, I shall & requirement t today's date			
Team Leader & Team Members Names (Please print)	Arrival Time	Signature	Next of Kin Name & No.	Departure Time	Hours Worke per Skill Code Certificated				
<u>,</u>									
2									
3									
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V	olunte	ers Hour	s Worked	& Taking	s Report	t			
Total hours per	worked by skill code	team	Takings	Totals AFT	ER £30 Flo	at removed			
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			Therefore: Takings Grand Total = f :						
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				Canals Ti Boat Oper	Daily Record Passenger Numbers & Takings						
Day Team Leader						Day, Date, Month & Year					
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fo	r Day	'						d Total he day	£	•	

February 2017

	d Canals Trust	Volunteer (	te Charter Crew Attendance & End of Day Repor
Day		Date	1 1

- That I have received the Cotswold Canals Trust Trip Boats Volunteers Induction Briefing
- That I have no reason, on the grounds of health and / or experience, not to undertake the task allocated to me
- That, if I do not understand any of the three documents presented to me, i.e. Method Statement, Safe System of Work & Risk Assessment for the Trip Boat Operation, I shall question it and when satisfied will agree to abide by its recommendations & requirements
- That I have provided my next of kin's name & contact number relevant at today's date

Team Leade & Team Members (Please prin	Names	Arrival Time	Signatur		of Kin & No.	Departure Time	Hours Wo per Skill <b>C</b> ertific	Code	Hours Worked per Skill Code <b>R</b> outine	
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2										
3										
Charter Fee Amount		or Star		Trip Route or Charter TypeNo. of Pax Passengers inc. infants in arms		No. ( Crev		Total No. of all souls on board Inc. Crew & Infants		
£										
Route, To	Information in Case of Emergency Details of: Route, Start Time, Pax Numbers, Non Payers & All Souls on Board To be conveyed to Operations Manager BEFORE departure Tel 07860 329 477									
Volun	teers	6 Hours	Worke	d & Ch	arter	Fee Pay	ment	Rep	ort	
Total hours wo	rked by	team per sl	cill code	Charter Fee Payment Method						
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						Cash paym	ient* =	£		
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Operationa	l or A Note		ation	*Deli	vered	to Boats V	Vest Ma	nagei	r 🗸	
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February 2017

# Cruise Information Commentary for Boat Trips from Ebley Wharf

Westbound Cruise & & Eastbound Cruise

The following list of facts and pictures are guidelines only Please make the trip interesting, entertaining and educational Feel free to tailor the commentary to the group

#### **Ebley Mill**

Known as 'The Cathedral of the Cotswolds'. Largest of the local cloth mills employing over 800 people in the 1860's. Once powered by five water wheels and a steam engine. The mill produced cloth until its closure in 1981. In 1986 the empty mill was purchased by Stroud District Council for conversion into new centralised offices. The building was fully re-opened in 1990.

### **Central Square Ebley**

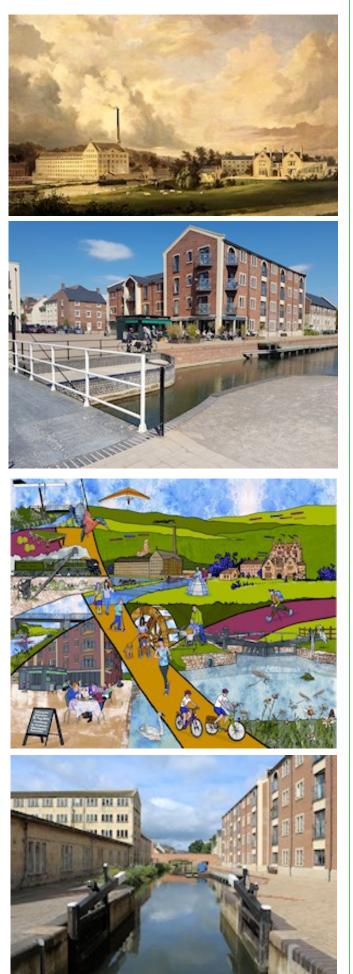
Formerly a run down trading estate, the site was purchased by a Bristol property developer. The canal had been infilled to provide a car park for SDC staff. All apartments and retail space sold prior to completion. The pedestrian swing bridge was installed by the developer and manufactured in Portugal. Kitsch Café is a feature of Central Square.

### **Tracy Spiers Mural**

Local illustrator, and author Tracy Spiers designed the mural which fills an 11ft x 9ft blank window in Kitsch Café. The mural depicts the many elements of Stroud.

### **Ebley Flood Gates**

The Stroudwater Navigation is fed by several streams east of Ebley. This can result in high water levels that must be diverted into the nearby River Frome to prevent flooding of canalside properties west of Ebley. This single pair of gates is closed at times of anticipated high water. This diverts the excess levels over Ebley Weir and into the River Frome behind Ebley Mill.



#### **Oils Mills Bridge**

Formerly an arched bridge leading to Oil Mills. The mill was established in the 1700's to make rape seed oil for the cloth industry; later converted to fulling cloth and then to grinding corn. After 1919 the tenant made folding furniture for hotels and ocean liners. The mill is now owned by 'Snow Business' a world leading company manufacturing artificial snow for the international film industry.



### **Ryeford Double Lock & Lock-Keepers Cottage**

The lock has two chambers and three pairs of gates. Designed by Anthony Keck, a local architect and shareholder in the Stroudwater Navigation. There were problems from the outset with the far side wall. In 1779, five months after the canal opened, the wall was showing signs of collapse. A remedy was found by rebuilding the wall and inserting circular drainage holes and culverts into the hillside.

The failure of the lock structure led to lengthy litigation between the Company of

Proprietors and Mr Keck, himself, one of those proprietors! The lock-keepers cottage was built in 1784. From then until 1930 the cottage accommodated seven separate lock keepers and their families. There is no vehicular access to the lock cottage. Assistance with waterborne transport of goods and materials has been given by Cotswold Canals Trust Volunteers using boats owned by the Trust.



### **Ryeford Swing Bridge**

This footbridge, leading to a group of canalside cottages, was restored in 1982 by the Cotswold Canals Trust under the Manpower Services Commission Scheme. The bridge was found to be jammed shut across the canal. It now swings easily, reputedly on the upturned axle of a Ford Transit Van.

Close to the bridge behind a wooden door in a wall on the towpath side are the sluices to regulate the levels between the canal and River Frome.



### **Ryeford Bridge**

East of Ryeford Bridge is Fords Wharf which once provided facilities for a sawmill owned by the Ford family. The family home was opposite the wharf. West of Ryeford Bridge was the Anchor Inn. The inn held a 'breakfast' licence that permitted sale of ale to the boat crews.

### **Coal Pens**

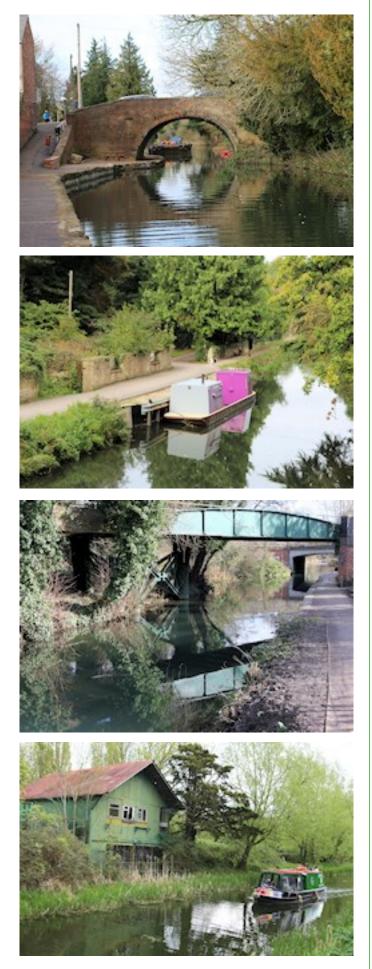
East of Ryeford Bridge are the remains of coal pens built in 1864. These stone built constructions stored coal for Stanley Mill and Ryeford Mills. The coal was unloaded from the boats into the pens using wheelbarrows & planks.

### **Skew Railway Bridge**

James Ferrabee, who founded Phoenix Ironworks at Thrupp in 1828, was the engineer and designer of the bridge. The iron bridge, built on a complicated alignment, set at an oblique angle, carried the Nailsworth branch of the Midland Railway from Stonehouse to Nailsworth. The line opened in 1867 and closed in 1966. It is now a cycle trail. Beyond Skew Bridge Haywards Bridge, carrying Ebley Bypass, was built in 2003.

### Wycliffe Boat House

Wycliffe College was first given permission to row on the Stroudwater Navigation in 1884. The original College Boat House was built on this site in 1887. It was replaced in the early 1900's by the current structure, built of corrugated iron on a timber frame. Wycliffe College now row on the Gloucester & Sharpness Canal.



### **Upper Mills Bridge**

This structure, built by Britannia Construction of Cheltenham in 2010, replaced a low level steel and concrete fixed bridge installed in 1969 when there was no navigation. The new bridge provides access to Upper Mills Trading Estate for heavy goods vehicles. The line of the canal was relocated 10 metres to the north to enable vehicles to cross the canal on a level approach road.

### Stonehouse Wharf

A former coal wharf from which coal was sold in the 1800's.

The wharf now provides moorings for CCT Maintenance vessels and other boats.

### **Nutshell Bridge**

The bridge was built in 1778 and once gave access to Bridgend Mill. The mill became famous for dyeing scarlet cloth using a new process invented by Giles Nash. The process required coal and regular deliveries of cochineal.

Nutshell House was once a warehouse but converted to a domestic dwelling in the 1820's.

### St. Cyrs Church

The Parish Church of St. Cyr in Stonehouse is hidden by trees from most of the town. Saint-Cyr refers to the martyred child-saint Saint Quiricus (Cyriacus), whose following was strong in France. The church has a ring of six bells the youngest dating from 1768. The original Parish Chest is retained within the building but all the registers, dating from 1558, are now in safe keeping at the County Records Office.









#### **Stonehouse Court Hotel**

Stonehouse Court was built early in the reign of Queen Elizabeth 1 by William Fowler who purchased the Manor of Stonehouse from the Earl of Arundel in the first year of the reign of Elizabeth, 1558.

Queen Elizabeth 1 visited the house in 1601. The visit is commemorated by a Royal Crown and the initials E.R. carved over the entrance.



The building was severely damaged by fire in 1908 and then remodelled internally by Edward Lutyens. The Court became a hotel in 1983.

#### **Ocean Swing Bridge**

Swing bridges were common where no steep sided banks assisted the approach to an arched bridge. Swing bridges were originally made of wood. In the 1880's they were replaced by iron bridges. When the canal ceased operating the bridges were fixed. A fixed bridge at Ocean, made of concrete with oak planking, was installed in 1958.

The new hydraulically operated swing bridge was installed in 2012

### The Ocean & The Railway Bridge

The canal widens into an area known as The Ocean. There was once a boat repair yard in the far corner by the railway. The yard included a floating platform to raise boats from the water for repair.

Originally The Ocean may have been no more than a winding hole but was probably extended to act as a wharf for railway building materials when the Gloucester to Bristol railway line was being built.

In the 1960's cracks appeared in the railway bridge abutments . The railway company infilled the bridge-hole installing one large Armco tube for pedestrian access and a smaller one for the water. Network Rail will hopefully reinstate a navigable arch in the future.



#### **Ebley Flood Gates**

The Stroudwater Navigation is fed by several streams east of Ebley. This can result in high water levels that must be diverted into the nearby River Frome to prevent flooding of canalside properties west of Ebley. This single set of gates are closed at times of anticipated high water. This diverts the excess levels over Ebley Weir and into the River Frome behind Ebley Mill.



#### **Ebley Weir**

Excess water, held back by the Ebley Flood Gates, is discharged here into the River Frome. The remains of the original 1700's weir can be seen a few metres east.



#### **Ebley Fish Pass**

Migratory species, fish and eels, are able to move upstream from the River Frome at spawning time. Otters have been sighted nearby.



#### **Hilly Orchard Bridge**

Originally a low level swing bridge built to maintain an ancient right of way through to Rodborough and Selsley. The footbridge was later raised to prevent crossings by unattended livestock. The close proximity of the bridge to local dwellings made it a popular location for playing and swimming.



#### **Dudbridge Crane & Wharf**

Coal and other goods were unloaded from boats at this wharf for many years. This crane was the last one installed.

### Dudbridge Lower Lock & Hydro

The canal gathers water from a number of streams east of Dudbridge. The surplus water flows through an electricity generating turbine housed in the steel roofed structure alongside the lock. A digital display shows the amount of energy generated.

#### Dudbridge Upper Lock Fish Pass & Eel Pass

The water intake for the Hydro Electric turbine at the Lower Lock is between the two locks. The steep by-wash channel edged on one side with green plastic bristles is another fish & eel pass.

### Chestnut Lane Swing Bridge

Formerly Gasworks Bridge. Stroud Gas Light & Coke Works was established alongside this site in the 1830's. The coal was burned to make gas. The canal proved invaluable to transport coal to the works and coal-tar away from it. Gas was used for street and domestic lighting and in the mills. Demand expanded and the canal towpath was used as a route to lay pipes. The last delivery of coal by boat was in 1941.



#### Strachans Close Slipway

Strachans Close was named after a former proprietor of the nearby woollen cloth mill. The close provides an ideal location for the slipway which was built by volunteers.

### Lodgemore Lift Bridge

A swing bridge once provided access to Lodgemore Mill but it became fixed when navigation ceased. This single bascule lift bridge is the replacement. Lodgemore cloth mill still produces small quantities of its historic `Stroud Scarlet' now only for the Guards Regiments mess jackets. The main output currently is cloth for billiard, snooker & pool tables, as well as a bright yellow wool & cotton mix fabric for tennis balls.

#### Wallbridge Basin Terminus of Stroudwater Navigation

This postcard painted in 1900 shows the terminus of the Stroudwater Navigation and the first lock on the Thames & Severn Canal. Of significance is the square stone arch on the towpath. The arch once supported a heavy locked door into Wallbridge Basin where goods including coal & corn were unloaded. The arch and warehouse still exist.

### Stone Arch & Rope Grooves

Close examination of the stone arch shows grooves cut into the stone made by years of contact with wet and grit covered towing ropes. The view through the arch now shows the basin entrance blocked by Stroud Sewage Pumping Station. Apartments overlook the first Lock on the Thames & Severn Canal.









from a Water-Colour Drawing by J. N. BOCTON.



#### Warehouse at Wallbridge

Former Stroudwater Navigation Company Warehouse located between the two canals.

#### Stroudwater Navigation Company Headquarters

This imposing stone building facing the basin of the Stroudwater was built by William Franklin in 1795 for the Stroudwater Navigation Company and was used as their headquarters until it was sold in 1953. Clerks in the offices recorded in giant ledgers the tonnage of goods delivered. They also calculated the toll to be levied on each cargo. In 1810 the canal carried nearly 11,000 tons of coal and by 1822 this had doubled to over 22,000 tons.

### **Stroud Brewery Bridge**

A new bridge carrying the A46. Slad Brook joins the canal through the small arch. Beyond the bridge is the site of Stroud Brewery 1760 — 1970. The basement wall of the brewery with its barred windows can still be seen.

### Wallbridge Upper Lock

The blue brick abutments on each side of the lock once carried an iron bridge giving vehicle access into the Midland Railway goods yard. The high Hill-Paul building behind was an architect designed Victorian clothing factory built in the 1890's. The building is named after the clothing manufacturers. Local activists saved the building from demolition in 2000 and it is now apartments.









#### **Capels Mill Diversion**

Stroud Bypass, Dr Newtons Way took the route of the canal in the 1980's and the canal was infilled. The route for the new section of canal is through another arch of Brunel's 1860 viaduct. In the 1970's this area was used as a landfill site for Stroud's domestic waste. In 2013 at the commencement of work concrete piles were sunk through the waste.

The line of the new channel was then



excavated and the waste material placed behind the piling. A concrete channel separates the River Frome from the new line of canal.

#### **Bowbridge Development**

Canalside housing replaces derelict industrial buildings. The property developers Newland Homes funded the dredging of the canal in this section



### Bowbridge Lock

Bowbridge was the focal point of early restoration in the 1970's. Immediately above the lock on the towpath side is a restored circular overflow weir.

### **Stantons Bridge**

A typical humpbacked canal bridge. The towpath was restored entirely by volunteers.





### Perseverance, Endeavour and Adventure

*Perseverance, Endeavour* and *Adventure* were the names of vessels that once carried cargo on the Stroudwater Navigation and Thames & Severn Canal. All three names now appear on three of CCT's four trip boats.

In his book 'The Thames & Severn Canal', first published in 1969, author and researcher Humphrey Household describes the building of a boat named *Endeavour* at Wallbridge in Stroud.

'The Thames & Severn company's first need for boats was to deliver constructional materials... and in 1784 began building their own boats, engaging William Large, "carpenter and millwright" to do so.

William Large built two 30 ton canal boats, *Endeavour* and *Adventure*, on a temporary site at Wallbridge, and then in 1786, completed two 60 ton Thames barges, *Severn* and *Thames*, at The Bourne, above Brimscombe.'

The Clerk to the Stroudwater Navigation Company who was employed in the Company Headquarters at Wallbridge recorded vessel names, owners, skippers and cargoes in the company ledgers.

The names *Perseverance* and *Endeavour* often feature in the ledgers.

Here are some of the entries recorded in the Tonnage Books of 1881:

Perseverance, owned by James Smart, Coal Merchant of Chalford, (Master J.Webb or C. Butt) carried 52 ton of coal from Lydney/Bullo to Stroud/Chalford

*Endeavour*, owned by James Webb, Coal Merchant of Chalford (Master W. Davies) carried 50 ton of coal from Lydney/Bullo to Stroud/ Chalford

Another *Endeavour* is also recorded:

*Endeavour*, owned by William Butler & Co. Tar Distillers of Sandhurst (Master J. Thomas) carried 24 ton of gas tar from Stroud and Cirencester Gas Works to Gloucester (for processing at Sandhurst on the River Severn north of Gloucester)

## Emergency Procedure Plans for Cotswold Canals Trust Western Trip Boat Operations

### Aims

- To create confidence & professionalism in the Trip Boat Team thereby enabling them to deal effectively with incidents, accidents and emergencies
- To facilitate rapid attendance of Emergency Service personnel & vehicles through the accurate identification of casualty recovery sites along the cruising grounds on the Stroudwater Navigation and Thames & Severn Canal

### **Objectives**

- Equip the Trip Boat Steerer & Cabin Crew with contact telephone numbers and geographic locations of bridges and other casualty recovery sites along the cruising grounds on the Stroudwater Navigation and Thames & Severn Canal
- Equip Emergency Service Control Room staff with contact telephone numbers and geographic locations of bridges and other casualty recovery sites

### Overview of the Plans

### Emergency Procedure Plans for Trip Boat Operations on The Stroudwater Navigation and Thames & Severn Canal

The Inland Waterways Association Certificate of Boat Management (IWA COBM) requires the operator of a Small Passenger Boat Operation to produce a detailed Local Area Evaluation & Emergency Procedures Plan. The plan is produced in association with the Risk Assessment & Method Statement.

This plan uses aerial photographs or large scale detailed maps together with a geographic listing of locations, contact numbers and OS grid references to identify the following:

- The cruising grounds & routes
- Departure / Arrival wharf
- Bridges
- Locks
- Slipways
- Ordnance Survey Grid References
- Post Codes & Telephone Numbers listed as appropriate
- The boat carries an operational mobile phone
- If there is a need to remove a passenger the **boat will make for the** nearest available recovery point as indicated in the listings

This plan has been circulated to the following organisations:

- Gloucestershire Emergency Services HQ
- Canal & River Trust
- Cotswold Canals Trust Head Office
- Stroud Valleys Canal Company

C		nance Survey Map References Bridges, Locks & Wharfs	s — Listed Geographically OS Map Reference
	13	Stantons Bridge No Vehicle Access	· ·
	12	Bowbridge Bridge & Lock	SO 857042
	11	Dr Newtons Way Bridge	SO 852048
	10	Wallbridge Upper Lock	SO 848050
	9	Stroud Brewery Bridge	SO 847051
	8	Wallbridge Lower Lock	SO 846050
East of	7	Lodgemore Lift Bridge	SO 843 050
Ebley Wharf	6	Strachans Close Slipway	SO 840050
	5	Chestnut Lane Swing Bridge	SO 840050
	4		
		Dudbridge Upper Lock	SO 837049
	3	Dudbridge Lower Lock	SO 835048
	2	Dudbridge Wharf & Bridge	SO 835048
1		Hilly Orchard Footbridge	SO 833047
Ebley Mill		Trip Boat Wharf GL5 4SR	SO 829046
	1	Ebley Mill Foot Bridge	SO 829046
	2	Cloth Mills Bridge	SO 828046
	3	Oil Mills Bridge	SO 825046
	4	Ryeford Double Lock No vehicle access	SO 819046
	5	Ryeford Swing Bridge No vehicle access	SO 814046
West of	6	Ryeford Bridge	SO 813046
Ebley Wharf	7	Haywards Bridge	SO 809047
	8	Skew Bridge	SO 809047
	9	Upper Mills Bridge	SO 805048
	10	Stonehouse Bridge	SO 804048
	11	Stonehouse Wharf	SO 803048
	12	Nutshell Bridge	SO 800049
	13	Ocean Swing Bridge	SO 798050
Havi	ng r	In Emergency dial reported the incident always	<b>999 or 112</b> ask for the `Incident Number
Rob	Bu	rgon Operations Manager	07860 329 477
	CC	T Office at Wallbridge	01453 752 568

