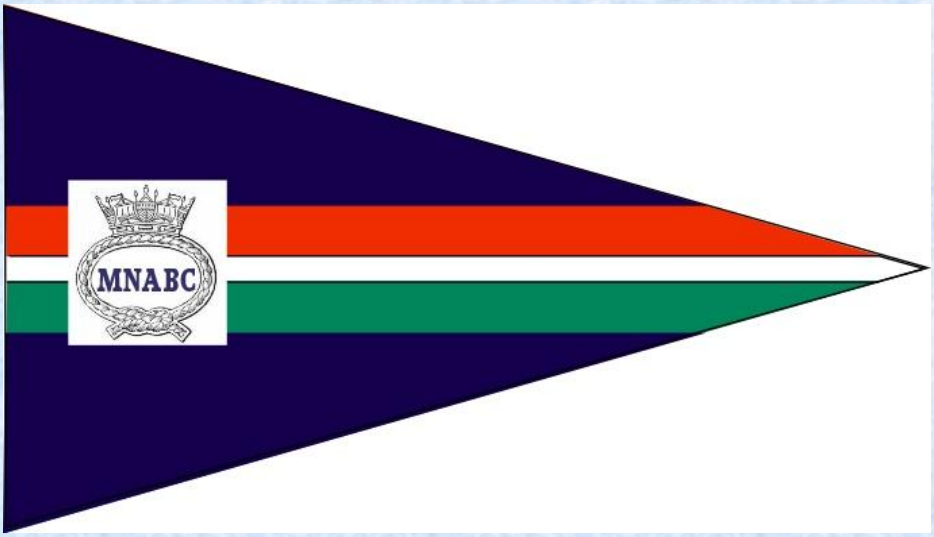

Boating Basics

By

Clive Edwards, MNI and Captain Chris Woods

An introduction to renting and handling motorboats on inland waterways with particular reference to those of the UK

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“Boating Basics”

Introduction

This publication has been produced by the Merchant Navy Association Boat Club with the aim of providing basic information for anyone venturing onto the water for the first time. The idea is to help make the experience more enjoyable and safer, both for you the reader and for other users of the waterways.

As we anticipate that most of those likely to benefit will be planning to hire a boat on inland waterways, rather than taking to the sea, we have concentrated on how to handle a boat on rivers, canals, lakes, the Broads etc. but many of the practices we describe would apply equally when taking to the sea

The Merchant Navy Association Boat Club is a group of present or former professional seafarers who are members of the Merchant Navy Association and interested in boating, contributing to maritime safety and sharing information. The Club is affiliated to the Royal Yachting Association (RYA) and the Norfolk & Suffolk Boating Association (NSBA) and has links with The Coastguard Association, the Sea Safety Group, the National Coastwatch, the Maritime Volunteer Service, the Nautical Institute and several other maritime organisations.

The objectives of the Club are to facilitate and promote the safe participation and enjoyment of boating activities on oceans, seas, lakes and inland waterways. We also seek to facilitate the training of prospective younger members and promote opportunities for careers in the leisure sector.

The authors are both former professional mariners with many years experience of operating a variety of craft, including fast rescue boats, as can be seen from these brief biographies:

Clive Edwards

Para Handy

A yachtmaster instructor and a member of HM Coastguard for many years, including several years as patrol boat skipper, Clive was chief rescue officer for the Yacht Clubs of Weymouth, a rescue officer and rescue boat operator for the RYA British Olympic Sailing Team, and more recently he was the NCI Lyme Bay National Coastwatch station manager. He is a member of the Honourable Company of Master Mariners, the RYA, the

Coastguard Association, and the Nautical Institute and is currently Commodore of the Merchant Navy Association Boat Club.

Captain Chris Woods

Borato

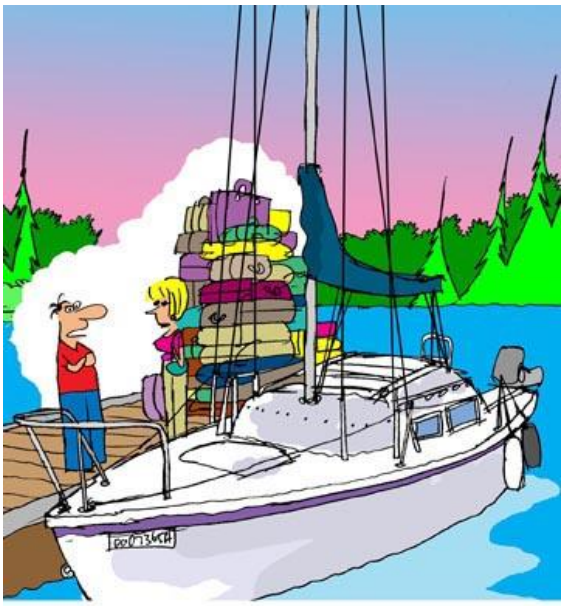
Chris is a tanker man through and through with a full Masters Foreign Going Certificate. In 1980, after 18 years deep sea with BP, he was invited to transfer to their offshore fleet supporting BP Exploration, mainly in the North Sea but also the Med. and Canada. His first three years were with their mid-N.S. sector disaster ship, the converted tanker Forties Kiwi, during which Chris had professional training with Fast Rescue craft and their remarkable ability to be handled in extreme conditions for rescuing rig/platform personnel from the water, plus co-ordination with commercial SaR helicopters and Nimrod search aircraft. He then transferred to their more challenging but rewarding offshore support vessels where he remained as Master until retirement in 1999. Since then Chris has sailed and cruised the Norfolk Broads, is a member of the Norfolk & Suffolk Boating Association and a Governor of the RNL. His role as the Merchant Navy Association Boat Club's Vice-Commodore includes liaison with the NSBA

Chapter 1
Before you leave home

The following is a guide as to what you should take with you:

Bags: Hard suitcases are certainly not ideal on a boat, so you should try to pack your things in soft bags

Clothing: Clothing should be practical, comfortable and easy to clean, even though you may want to take some "smart-casual" clothes for evenings out etc. Don't forget that it can rain or turn chilly so packing a warm sweater and lightweight wet-weather gear is advisable. Shoes – Non-slip "deck-shoes" (identifiable by their razor-cut soles) are ideal, but trainers will probably do – high heels and slippery-soled smart shoes are definitely unsuitable! Gloves, especially the high-grip type available from builders merchants, are useful for handling anchor warps and mooring ropes. Caps are also very useful as a protection against the glare of the sun and UV sunglasses are almost essential for the driver (helmsman - hopefully!)



"Yes, I do think you overpacked. After all, we're sailing around the bay for a few hours."

Toiletries: Boats do not generally have sockets for 240 volt hair dryers! Water reflects and intensifies sunlight, so don't forget the sun-glasses (UV lenses are a must to avoid eye damage in strong sunlight over the water), the sun-tan lotion and the after-sun! Our boats have razor sockets in the bathrooms.

Maps & Guides: A Thames Waterways Guide will be provided on board your craft. This will prove invaluable for identifying such things as:

- The location, opening hours and distances between locks
- Where you can find moorings and other crucial information
- The nature and location of tourist attractions, restaurants etc.

Other publications worth considering are:

- A large scale Ordnance Survey map for exploring ashore.
- The Boaters Handbook (Link attached to your confirmation documentation).

If you're a keen angler you'll know what to take in terms of tackle, but don't forget you'll need a rod licence from the Environment Agency.

Children & Pets: At sea and on most rivers we recommend that everybody wears a life jacket whilst on deck even though on most canals and smaller inland waterways they are not a legal requirement. We also strongly recommend the continual use of lifejackets or "buoyancy aids" for all young children and/or non-swimmers – do make sure to use ones that are "age appropriate" and fitted with a whistle. Please ask for life jackets before departure, we can provide free of charge if you do not have your own.

You can even for dogs these days too, but you would need to bring your own. However, you might also think about using a harness for your dog which can be useful if you need to use a boat-hook to haul it out of the water – you don't want to strangle him or her by trying to lift by the collar! It is preferable not to let your pet go swimming in the first place, especially in rivers where Green Algae and weed are serious hazards and only too easy to get entangled in. They are responsible for more loss of human and canine life than any other cause on inland waterways.

Rule 1: Wear a life jacket. Rule 2: Don't get all tangled up in the anchor rope.

Books and some games will help to stop kids becoming bored if the novelty of being afloat begins to wear off. TV reception is generally poor so you may consider bringiong some DVD's. If you're taking dog(s) with you don't forget the pet food, their beds, leads and food/water bowls.

Barbecues: Handy when you are ashore but **NOT** allowed to be used on board.

Bin-Bags: These are useful for depositing rubbish into the bins provided at most locks and official mooring places.

Documentation: In the UK no qualifications are required when hiring a boat on our inland waterways . Cruiser operations on the inland waterways of Europe are governed by a set of quite complicated regulations, rather like the Highway Code. Cotswold Boat Hire will normally provide you with a summary of these regulations illustrating the more important points you will need to comply with during your handover.

Chapter 2
Before you leave the base

Most hire-cruiser operators will take you carefully through the operation of your hire cruiser and all its equipment before you leave port. It is important to make sure you have understood everything and are familiar with the operation of things like the engine, fuel, drinking water, gas, shower, toilets, heating, lighting, the cooker and the 'fridge before you set off. Make sure that everyone on-board is conversant with the advice and instruction given - not just the skipper! In addition the following points are worth bearing in mind

Try to stow all your personal belongings away tidily – there is nothing worse than trying to operate a boat with things, including children's toys, strewn all over the place and it can be positively dangerous even to try!

Fenders: Never try to fend off using your arms or legs so, whenever you intend to moor up to anything like a quay or a wall. Your boat is equipped with suitable fenders.

Mooring Ropes: You will be using these a lot, so a few words of advice before you leave the base are worthwhile. Firstly make sure you have mooring ropes securely attached to the boat at both the bow (the front end of the boat) and stern (the back end). Make sure that they are neatly coiled up (practice first to see which way the rope coils naturally) and that they can't fall off and trail in the water where they can foul the propeller. It can literally take hours to free a rope that is wrapped round your propeller, it can cause damage to the engine, you will get very wet indeed untangling it and, if the stern has to be lifted by a crane to clear the rope from round your prop, that's going to be very expensive as well as hugely embarrassing, and you would definitely lose your security deposit!

The simplest way of mooring, in gentle winds and with little tide or current, is to simply have one rope leading forward and another one leading aft.

If there is a reasonably strong current or a strong wind, then you will need more ropes and the most useful are ones called “springs”. These are fixed to prevent your boat surging backwards and forwards which it would tend to do if you only have a bow line (i.e. a line at the front) and a stern line (i.e. behind). To add springs you should take a line from towards the stern of the boat and run this forward to a mooring post ashore some little way ahead of your boat, and another line from near your boat’s bow to a mooring post ashore a little way astern your boat. You should also make sure that your stern mooring line is secured to a post or ring not too far behind your boat so that the wash from passing traffic can’t drag your boat too far away from the side.

Remember to pass you mooring ropes UNDER any guard-rails around the boat to avoid damaging them and make sure you avoid having the ropes snagging any obstructions such as stanchions (these are the up-right posts that support the guard-rails). In other words make sure your mooring ropes have an unimpeded run.

The most common use for a rope on board will be making fast to a post and the surest way of doing this is to take a couple of turns round the mooring post and then feed the rope back on board and secure it to a cleat -this doubles the strength of the mooring and makes for easier letting-go

It is quite possible you may at some stage need to throw a rope to someone ashore or to someone on another boat. Most people who are not used to using ropes make a mess of this and end up with the rope in the water! The correct way to throw a rope is firstly to attach one end to something secure and then to coil the rope neatly. If it is a long rope divide the coil into two with one half in your throwing hand and the other half in the other hand. Swing your throwing arm smoothly and let go of the first coil then allow the remainder of the rope coiled in your other hand to follow. It’s worth practicing this and you’ll be surprised just how far you can actually throw a line!

Knots: Although not essential, it is useful to know how to tie the most common knots used in boating and the correct way to attach a rope to a cleat (a piece of equipment found on deck at either end of the boat specifically designed for attaching ropes).

Let us start with the **Clove Hitch**, as illustrated below. This is a simple knot, quick and easy to tie, and very useful when mooring to a post for a short time, but it’s not a particularly secure knot and should only be used while someone is in attendance to make sure that it doesn’t start to slip

Perhaps the most useful knot of all is the **Round Turn & Two Half-Hitches** which can be safely used in lots of situations where your boat is to be left unattended as it is not prone to slipping**.**

There may be occasions when you need to join two ropes together to make one longer rope. When doing this you should use a knot called a **Sheet Bend**, as illustrated below:

Finally it's quite important to know the correct way to attach your ropes to the cleats on-board your boat! The following picture illustrates the correct way to do this:

Chapter 3
Under Way

Handling the boat: Start the engine, keep it in neutral and allow some time for it to warm up before you move off. During that period you and your crew should use the time to take a good look up and downstream for other traffic. Even if the river is twisty you may still be able to see the tops of boats "round the bend" or through the trees or vegetation. Once you and your crew know that it is safe to move (and you know where to find the switch for the horn!), untie the bow (front) and stern (back) mooring ropes from the bank leaving them tied to the boat, coiled and ready for use. Don't forget to stow the mooring stakes and mallet. On rivers the general rule is to untie the downstream rope first.

Before you leave your mooring, you need to ensure that you know which way the water is moving in.
You should check by looking at the water flowing past posts, piles, buoys or whatever

Because the boat steers from the stern, you can't drive away from the bank as in a car. Making sure your ropes can't trail in the water and get caught in the propeller, use the flow of the water to help you to manoeuvre away from the bank – worth thinking about this before you let go! Check again that the area is clear of boat traffic then push the boat away from the bank so that you can make a clean getaway, with your propeller in deep water.

In shallow water, push the back of the boat out and reverse away until there is room to straighten up. When the boat is straight, go into forward gear and accelerate gently to cruising speed. Bear in mind that for most boats stern power is less effective than forward thrust due to the shape of the boat, so full astern is only about as effective as half-ahead.

Turning round: A general guide to handling a boat is that successful turning in a small space depends on correct use of the vessel's momentum. To turn around in a restricted area give the boat a kick of (say) halahead with the helm hard over in the direction you wish to turn. As soon as the bow is seen to be swinging in the direction you want, go full astern (to stop any ahead movement - some mariners will put their helm amidships while stopping this ahead motion - I don't bother and leave the helm hard over until the manoeuvre is complete).
Once the bow stops swinging, go 1/2 ahead again to resume the swing, then full astern for the duration of that swing; and so on until the manoeuvre is complete. With practice, a boat can thus be turned almost in her own length. It is all to do with momentum and this should be considered one of the most important and earliest bits of boat handling to be learnt.

Speed: Be well aware of local speed limits and respect them otherwise your wash will damage the river banks and the environment you came to enjoy. Environment Agency Patrols have speed guns and can, as a last resort, prosecute you for repeated excessive speeding. If in doubt look astern and see if you are creating a big wash which could damage natural river banks. You should be going no faster than a rapid walking pace.
Excessive speeding can also be dangerous for other boat users - causing a boat to rock may make someone fall in and possibly drown. Always have regard to other boat users and their safety and, if not used to handling boats, particularly large vessels. Remember they don't slow down like a car and that just going astern is not always as effective as expected.

Wind & Weather: Note that some parts of a boat's structure may act as a sail when the wind is coming from the side and can make handling difficult. Take this into consideration when choosing a mooring. Better to find an alternative than have a wind blowing onto the berth which could make mooring and letting-go difficult, hazardous and sometimes impossible.

Rules of the Road: The two most important things to remember are to KEEP to the RIGHT HAND SIDE (the starboard side) of the channel, and watch your speed – the maximum limit is 10 knots, approximately 4 mph. As the operator of a pleasure craft you are required keep clear of, or give way to, all commercial craft - you are on holiday, they are at work!

Navigating: The Thames navigation route along which you should steer is occasionally marked by BUOYS.

If you are travelling **upstream** the can-shaped RED marker buoys should be passed on your left-hand (PORT) side and the conical shaped GREEN buoys on your right-hand (STARBOARD) side

When travelling **downstream** the reverse applies i.e. the RED buoys should be on the right-hand side and the GREEN buoys on your left-hand side

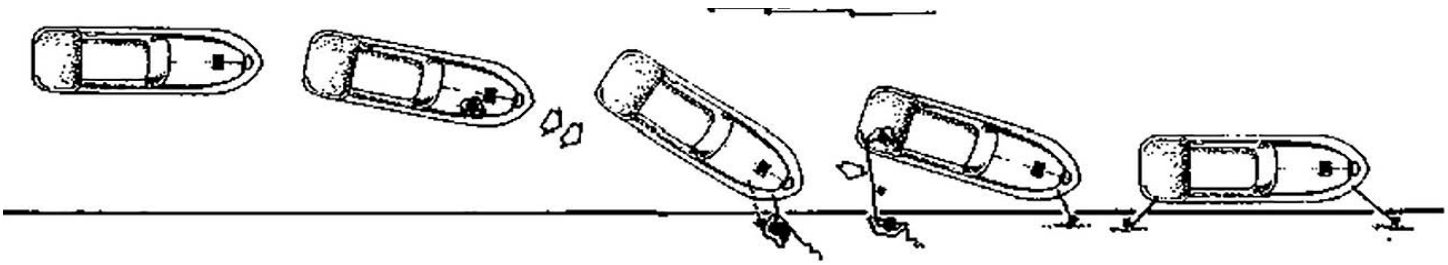
Etiquette: Be polite, for example by slowing down when passing moored boats, especially if the crew is eating a meal and try also not to upset anglers by creating a large wash or cutting their fishing lines.

Mooring: You can normally moor wherever you like along the towpath unless a "no mooring" sign forbids it. However, you should take care not to obstruct the towpath by running your mooring ropes across it.

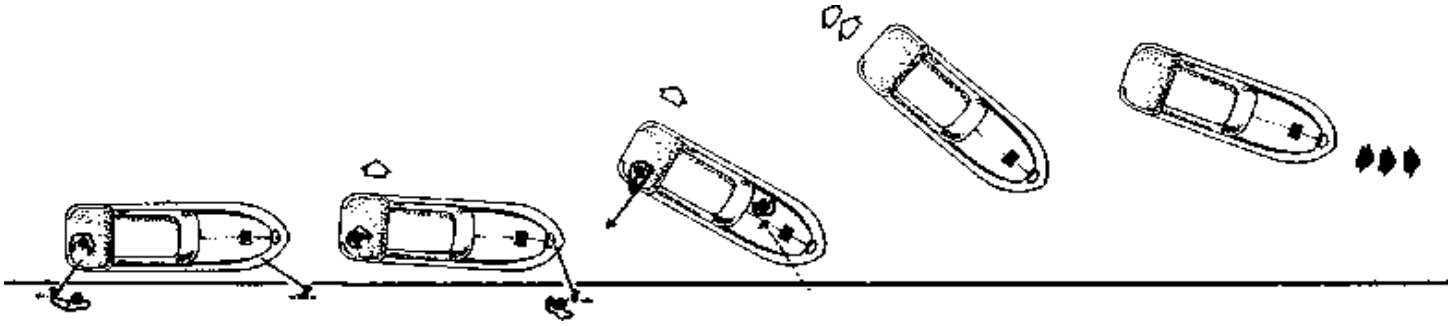
You should always approach the bank at very slow speed, as reverse gear is your only brake. If there is a wind blowing, or a strong current running, you should approach facing into the wind or against the current, as these will help to slow you down. What happens if the wind and current are in opposite directions you ask? Well the answer is that you have to guess which is likely to have the greatest effect on your boat, which isn't always easy to tell – sometimes just a question of trial and error.

Motor towards the bank at a shallow angle and at low speed until you reach your intended mooring spot then turn your wheel sharply towards the bank and go gently into reverse gear. This will have the effect of both stopping the boat and dragging the stern in towards the bank. Once you are safely alongside, put the gear into neutral but don't switch off your engine until your mooring lines are secured in case the wash from another boat, or a gust of wind, means you need to manoeuvre a bit more.

In any event you should normally tie the bow first, with a crewman detailed to jump ashore with the bow-rope which he or she should secure before you throw them the stern rope. The ropes should be taken and secured several metres forward of the boat at the bow end and several metres behind the boat at the stern. The easiest way to moor on many canals is to take your mooring ropes around a tree or post on the bank then lead them back on board and secure them to one of your own mooring cleats. This makes casting-off when you leave much easier as it can probably all be done from on-board.



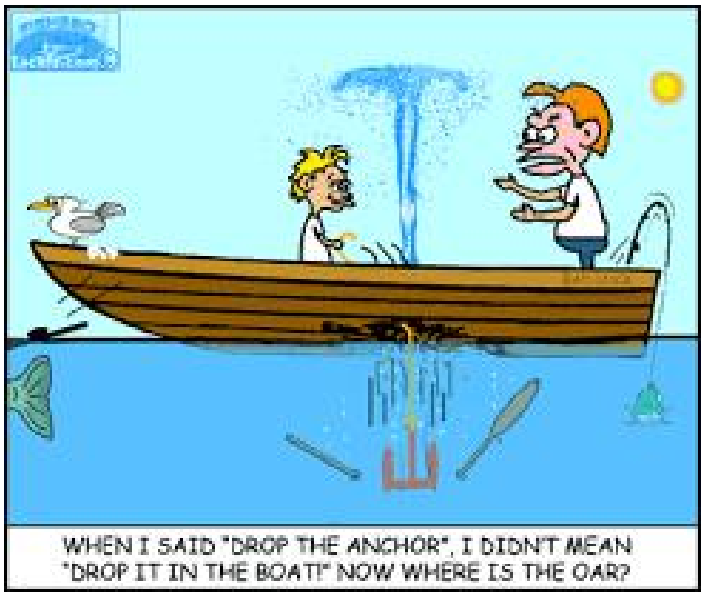
Unmooring: Normally the best way to leave a mooring is to untie the stern rope first then push the stern of the boat out from the bank whilst one of your crew stays on the bank holding the bow line, keeping the bow of the boat close enough to the bank for him or her to step aboard, with the rope at the appropriate moment at the same time pushing the bows out into the stream. If you untie the bow line first you will almost certainly have a problem with the propeller hitting tree roots so, unless there are really unusual circumstances preventing you from doing so, you should normally release the stern first and the bow afterwards.



On non-tidal rivers, unless the wind is blowing really hard, a bow-rope and a stern-rope is normally sufficient to secure a boat safely. Remember not to pull the ropes too tight as this makes letting-go more difficult. For instance, any knots or windings onto the mooring cleats will be difficult to undo.

As previously mentioned, on tidal rivers, or if there's a strong wind blowing, it may be necessary to use more than two mooring ropes to secure your boat safely. The best way to do this is to have two extra ropes, known as "springs" with one of these secured to the bow of the boat and running aft (i.e. backwards) to a mooring point ashore somewhere astern of the boat and another rope from the stern of the boat leading forward to a mooring point ahead of the boat.

The best advice on mooring is to approach everything slowly and methodically. Use the wind and current to help you rather than try to fight them! Keep calm, don't panic and you'll soon get the hang of it. Some hire boats are equipped with an anchor but this is essentially for emergency use and NOT for mooring!The anchor is attached to a length of chain then to a rope which should be firmly secured to the boat (it's worth checking this is all correct before you leave the base). In the unlikely event of encountering an emergency situation as a result of engine failure, or through trying to manoeuvre too near a dam or weir, you should throw the anchor out over the bow and allow all the chain and some of the rope to run out before securing the remaining line to a cleat in the bows. This should hold you securely while you sort out the problem or call for assistance.

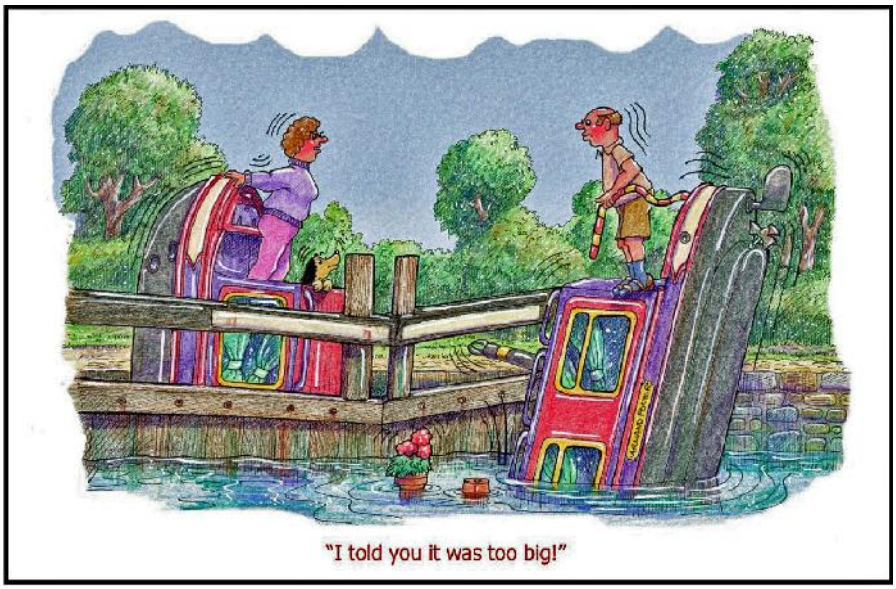


Locks: Locking should be a pleasant and interesting experience, but many newcomers are understandably somewhat daunted by what appears to be a complicated process. In fact it is all quite simple provided you follow a few basic rules.

Bear in mind that locks work to a timetable, that the lock-keeper has a job to do and is normally very experienced. Always follow his advice or instructions and respect the fact that he's required to give priority to commercial craft, so please be patient. Quite often, especially at busy times, the lock keeper will want to group several boats together before operating the lock. Passage through locks is covered by your boat licence, but if a lock-keeper has been particularly helpful, a tip will be appreciated and if he or his wife has produce for sale alongside the lock they'll appreciate your patronage!

In some cases lock-keepers will telephone ahead to the next lock to alert them to expect your arrival so if you plan to moor up for some time between this lock and the next one please tell the lock keeper.

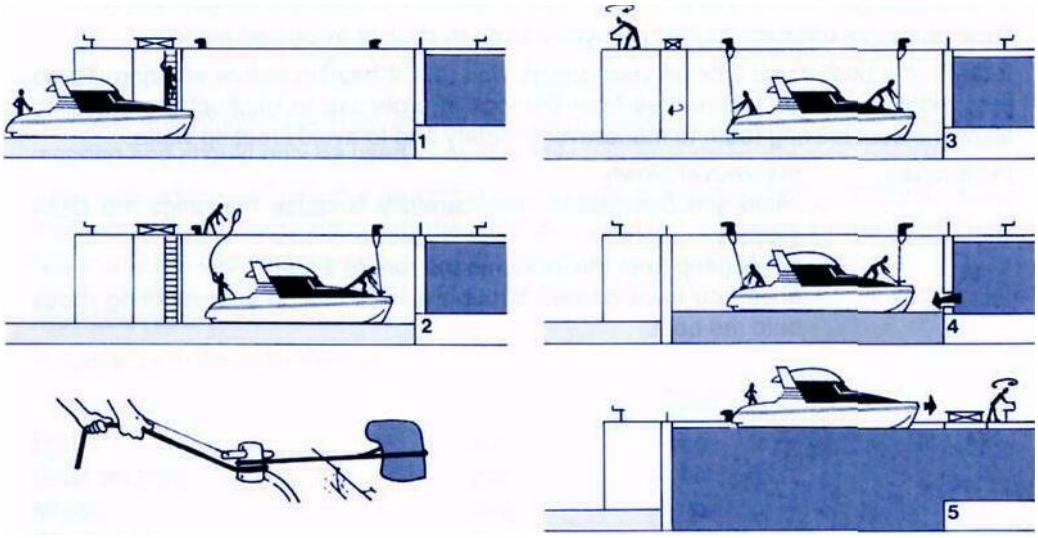
When approaching a lock you should reduce speed when you're about 150 metres from it. If the lock gates are open when you arrive you can normally go straight in and tie up. If there is a boat in the lock and/or if the gates are closed you should moor up and wait about 100 metres short of the entrance, making sure that you don't impede the passage of other vessels.
Always remember to manoeuvre slowly, be careful climbing ladders which are often slippery, never to jump off the lock onto your cabin roof and to coil your ropes away tidily once you've cleared the lock.



Locking Up-Stream: (i.e. an ascending lock). Approach the lower level (downstream) gate very slowly and drop-off one or two of your crew either onto the bank or via the ladder normally situated just inside the lock. It may be possible for these crew members to take your mooring lines ashore with them but, if not, once fully inside the lock you need to throw your mooring lines up to them. To do this make a coil of the rope and throw it in a similar manner to bowling a cricket ball. The crew ashore should loop the ropes around the mooring bollards provided, without tying them, and throw the end of the ropes back to the crew member(s) on board.

Once your boat is secured alongside, the lock keeper will close the downstream gates behind you. Some locks are operated manually, in which case the lock keeper may appreciate some help from your crew members ashore. Once the downstream gates are closed, the lock-keeper will open the up-stream sluices to fill the lock. Make sure you keep your boat snugly alongside the lock wall while the lock fills, which means that the crew on board must constantly tighten the ropes to reduce the slack in the mooring lines as the boat rises..

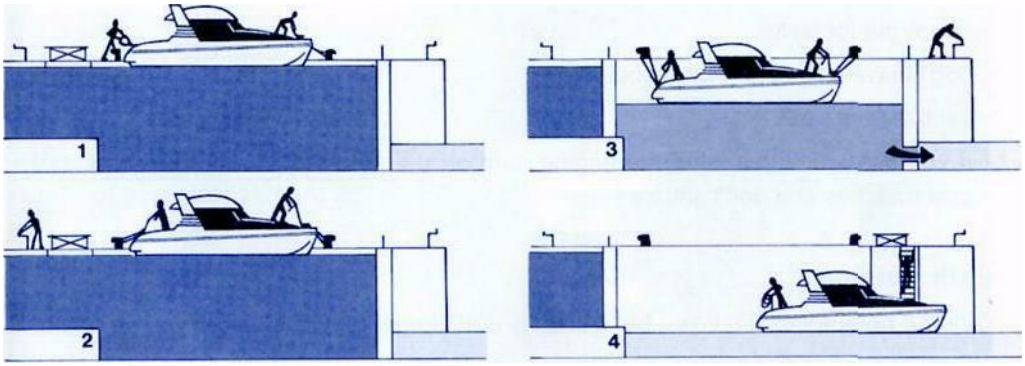
When the water level in the lock is equal to that in the canal ahead the gates are opened, you can untie your mooring ropes, coil them neatly, pick up your crew and move slowly ahead. It's really all quite simple!



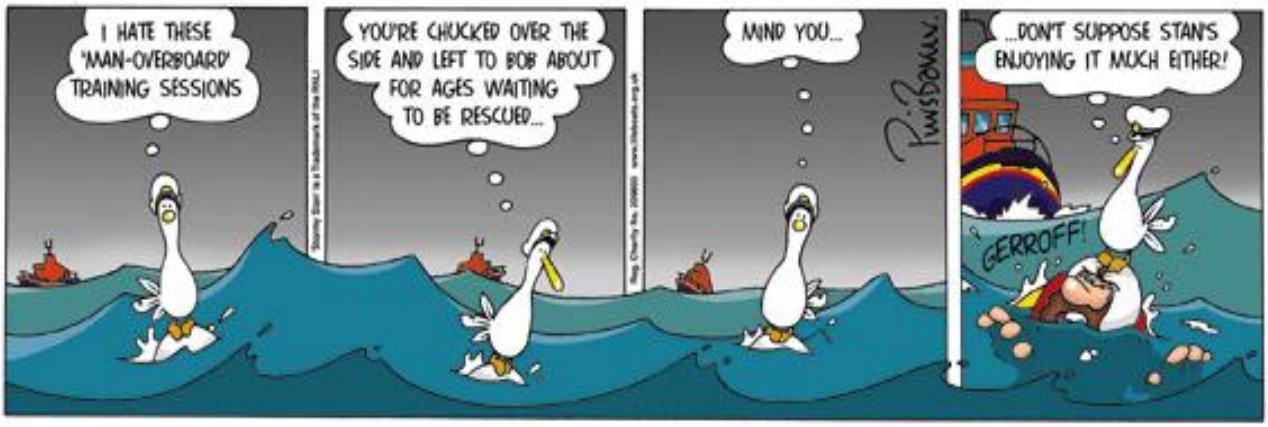
Locking Down-Stream: (i.e. a descending lock) Providing the up-stream lock gate (called the crown gate) is open you should enter the lock slowly and carefully and drop one or two crew members off onto the bank taking ropes with them. These ropes should be looped around the bollards provided on the lock-side, without tying them, before throwing them back on board **leaving plenty of slack.** (at least 3-4 metres)

The lock keeper will now close the crown gate and open the sluices ahead of you to allow the water in the lock to fall while you and you crew adjust the slack in the mooring ropes.

Once the level of water in the lock and that in the canal ahead are equal the gates ahead of you will be opened, and you can coil your mooring ropes, pick up your crew-members and proceed on your way.



Emergencies: Hopefully there won't be any! - boating ought to be fun, but you'll enjoy it more if you try to do things the correct way and to look "seamanlike" by keeping calm and running a "tidy ship" Always try to keep ropes coiled and not leave things lying about, particularly on deck, where members of the crew can trip over them. Observe sensible precautions, particularly where gas is concerned. Don't smoke whilst changing gas bottles. Be careful when going forward along the decks. Watch out for low bridges especially if you're on the cabin roof for some reason. If someone is unfortunate enough to fall in don't panic You should always know where to find your emergency contact details. Your first call after a 999 call in the circumstances warrant it should be to your hire company and in genuine emergencies using the out of hours number. An emergency involving injury to anyone would warrant a 999 call in the UK..



Man Overboard!

There are tried and tested procedures for re-covering someone who has fallen overboard at sea and some of those procedures could apply equally well on the river or on a canal, so it is worth running very briefly through them.

Firstly don't lose sight of the person in the water, which can easily happen at sea when there are even moderately large waves, but it could also happen on a river in misty conditions. The standard advice is to tell a crew member to keep watching the person in the water while the skipper manoeuvres the boat.

Secondly, and just as importantly, remember that anyone in the water is very vulnerable to being severely cut by your propeller, so whatever you do keep the stern of the boat well clear of them.

On the Upper Thames Skipper and crew should be aware that if they are in an overboard situation and conscious and able then they should in the first instance attempt to reach the bank. It is much easier to reach safety on the bank than to re-board a boat from the water.

It a water recover is necessary it is usually best to approach the person in the water SLOWLY in an up-wind direction so that the boat can more easily be stopped, and the engine put into neutral (to stop the propeller from turning) when you are alongside them. If you have enough crew aboard then you should consider anchoring and switching your engine off once you are close enough to the casualty to use paddles or a bow thruster to get alongside the person in the water. Remember too that it is not easy for anyone in the water, who will be wet and probably cold, to clamber up the side of a boat, so a rope over the side with a loop in it, into which they can place a foot, will certainly help. REMEMBER A BANKSIDE RECOVERY IS EASIER ON THE UPPER THAMES.

Edited edition from Boating Basics - by
Clive Edwards, MNI, & Captain Chris Woods
@Merchant Navy Association Boat Club - Thank you.

COTSWOLD BOAT HIRE - EMERGENCY CONTACT NUMBERS:
For Serious Emergencies in the first Instance Call 999 as normal.

Office No: 01793 727083
General and out of Hours Mobile No: 0794 7993784
Secondary back up operations Mobile No 0794 6655730

Environment Agency Switchboard: 03708 506 506