

POWER BOAT KNOWLEDGE





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Introduction

Thank you for taking an interest in power boats and for downloading this eBook.

The following pages are crammed with lots of information that will make you more knowledgeable about the sea and what is happening around you.

The more you can absorb over the time the better a captain you will be. However, when you take the course you will be introduced to all the information. Don't worry though.....**There is no test!**

The emphasis on the course is very much about having fun and being safe. This book will be a helpful introduction to that before you come along to our school.

Once you are on the course you will also receive a hard copy book that is published by the Royal Yachting Association (RYA). This RYA book will guide you alongside the practical instruction you will be getting.

Finally, the following pages contain lots of colourful guides to help you reference and remember things. Feel free to print them out and laminate them. They will be useful notes for you as you take your journey towards being a captain.



Parts Of A Boat

It's important to understand the nautical terms when discussing a boat. Initiated boaters refer to this as 'Knowing Your Way About'. Before we look at the different parts of our training boat we need to make sure that we know our left from right.

The left hand side of any boat is called the 'Port Side'.

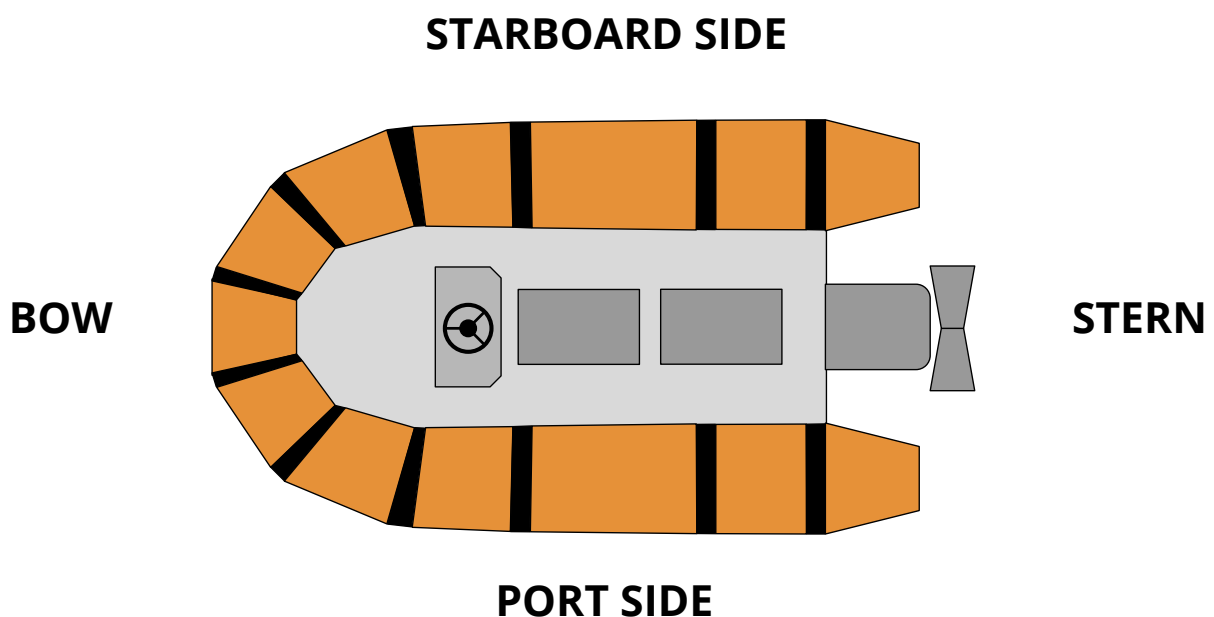
The right hand side is called the 'Starboard Side'.

The front of the boat is called the 'Bow'.

The rear of the boat is called the 'Stern'.

Therefore you may well hear on your power boat course instructions such as; turn to starboard or go astern. Now you will be sure to understand what is being asked of you.

You may even be directed towards something or have another vessel pointed out to you. This could be described with reference from the bow. For example, there is another fast moving boat at 10 o'clock from the bow.



Meet The Training RIB



This is our training RIB. She is a very sturdy boat and great as a training vessel. She is manufactured by a company called Highfield.

RIB is an acronym and stands for Rigid Inflatable Boat. This means that she has a rigid hull. The hull is the main body of the boat and ours is made of aluminium.

The inflatable part refers to the sides of the boat. These are called tubes and they are manufactured in several sections or compartments. This means that if one part bursts, you don't lose all the sides. Contrary to common belief, the inflated sides have nothing to do with keeping the boat afloat. The hull floats all on its own. The tubes are there for comfort and to keep the boat drier.

Our Highfield RIB is brand new and she is 6 metres long. She has enough seating for 6 people comfortably and plenty of storage for a weekend away.

She is also fitted with a Honda 135hp engine which means she is capable of up to 35 mph.

The console is the place where we have all of the electronic components that we need when we are on the water. All sorts of things can be mounted here for safety and navigation. Our boat is fitted with:

Steering wheel

GPS for navigation loaded with electronic charts

VHF radio for emergencies and general communications

Bluetooth stereo

Steering compass

Throttle handle

Guages for fuel and engine management



Safety Brief

Whenever you come to a boat for the first time the skipper in charge will give you a thorough safety brief. This is the same as you will receive when you join your power boat course.

It's a very important thing to cover as it explains basic operation of the boat, the location of safety equipment and what to do in emergencies.

The following page has an example of a power boat safety brief that you can keep and use as a guide for yourself. After all, once you complete your two day course you will be the skipper and be responsible for the safety brief.



Dominic, one of our instructors giving a safety brief



SAFETY EQUIPMENT

- ☐ **Life Jackets** - when and how to wear them
- ☐ **Flares** - where are they? how do they work?
- ☐ **First Aid** - where is the kit? who's trained?
- ☐ **Fire Extinguishers** - where are they
- ☐ **Kill Cord** - how to wear it and what does it do?
- ☐ **Horse Shoes** - where are they?
- ☐ **Throw Line** - where is it?
- ☐ **Life Raft** - where is it? how does it deploy?

EMERGENCIES

- ☐ **Man Over Board** - how to recover them
- ☐ **VHF and MAYDAY** - DSC button and voice call
- ☐ **Start / Stop the Engine** - spare kill cord
- ☐ **Flooding** - bilge pumps and deck drains
- ☐ **Anchoring** - stop the boat and get help
- ☐ **Fire** - fighting and abandon ship

CREW WELFARE

- ☐ **Weather** - how will it affect the day?
- ☐ **Clothing** - warm clothes or water and sun screen?
- ☐ **Boarding** - hand holds and non slip areas
- ☐ **Seating Position** - posture and hand holds
- ☐ **Plan for the day** - an outline of the days activities

You will learn about everything in the safety brief on your two day course. You will also receive a free book written by the Royal Yachting Association which covers everything in detail.

One thing you can do though that will give you a great head start on the course is to familiarise yourself with a VHF radio MAYDAY call. A MAYDAY call is a type of message that is sent when there is a serious emergency at sea and help is needed.

The VHF radio is far better than a mobile phone for emergencies when you are at sea for the following reasons:

- Everyone on the water including emergency services is listening to the VHF radio.
- A VHF radio is a broadcast system so when you call for help everyone can hear you. Unlike a mobile phone which means you can only talk to one person at a time.
- There are no mobile phone masts at sea and reception can be poor.
- VHF radios are weather and water proof for the marine environment which can be very harsh on electronics.
- The VHF radio is wired in to the boats power system and so it won't run out of battery.

Use of the VHF radio for emergencies is covered in detail on the course. To help you get ahead so you can spend more time on the water there is a MAYDAY call template on the following page.





MAYDAY

GRAVE & IMMINENT DANGER TO PERSON
VESSEL VEHICLE OR AIRCRAFT

Operate the **DSC distress alert button** if available:

Press the button once.

Select the type of distress from the menu options.

Enter position manually unless VHF radio is connected to the GPS.

Press and hold the DSC distress alert button until audible alarm sounds.

Set radio to **Channel 16** - High Power

Slowly and carefully say the following message:

This is _____ (name of vessel three times)
Call Sign _____
MMSI number _____
Mayday
Vessel name _____
Call Sign _____
MMSI number _____
My position is _____ (what is your latitude and longitude?)
I am _____ (what is your distress?)
I require immediate assistance
I have _____ (how many people on board)
_____ (any other information)
Over

Buoys & Their Meanings

The term 'buoy' refers to metal objects that float on the surface of the sea and that are anchored to the sea bed.

These objects serve as the nautical equivalent of road signs. They tell us where to go and whether or not there are any dangers to avoid.

The buoys themselves are designed by a body called the International Association of Lighthouse Authorities or IALA for short.

One of the great things about the power boat course is that it equips you with an internationally recognised licence so that you can hire and drive power boats all over the world while you are on holiday.

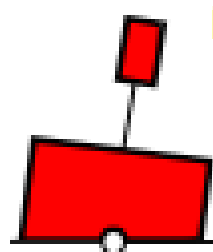
The board of governors at IALA ensure that there is consistency in buoys and navigational marks around the world so that they are familiar to everyone on the sea.

There are only twelve of them to be learned. There is a complete guide for you to keep on the following page. The guide shows you the colours and shapes of the different buoys and also what lights they display at night time.

This is what they all mean:

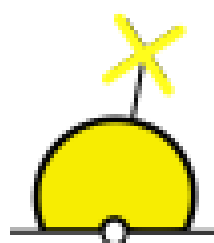
Port Lateral Mark - this red buoy denotes the left hand side of a channel. It is sometimes possible to go outside of a marked channel but you must be aware that it won't be maintained and may not be deep enough for the boat.

Special Mark - this yellow buoy tells us that there is an object of interest or a restriction in the area. When you are boating on holiday for example, the beach may have a line of yellow buoys running along it. These denote an area for swimming where boats aren't allowed. The marks can also pinpoint historic wrecks, anchoring zones or even racing circuits for yachts.



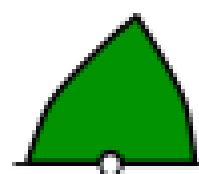
Port Lateral Mark

Marks the port side of a channel. Red light any rhythm.



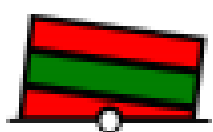
Special Mark

Marks something of interest. Yellow light any rhythm.



Starboard Lateral Mark

Marks the starboard side of a channel. Green light any rhythm.



Preferred Channel to Starboard

Indicates main fairway to starboard. Flashes red 2 + 1.



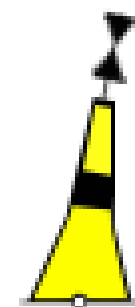
North Cardinal

Marks safe water to the north. Continuous flashing white light. Either Q or VQ.



Preferred Channel to Port

Indicates main fairway to port. Flashes green 2 + 1.



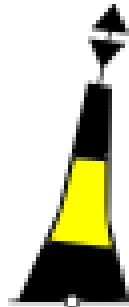
West Cardinal

Marks safe water to the West. 9 white flashes. Either VQ in 10 seconds or Q in 15 seconds.



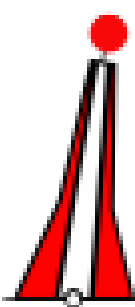
Isolated Danger Mark

Marks a single obstruction. 2 white flashes in 10 seconds.



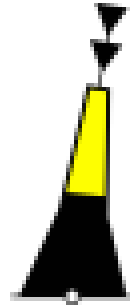
East Cardinal

Marks safe water to the East. 3 white flashes. Either VQ in 5 seconds or Q in 10 seconds.



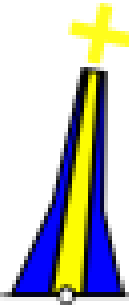
Fairway Buoy

Marks the start of a buoyed channel. Either 1 long flash in 10 seconds, Iso, Occ or morse Alpha.



South Cardinal

Marks safe water to the South. 6 white flashes plus 1 long flash. Either VQ in 10 seconds or Q in 15 seconds.



Emergency Wreck Mark

Temporarily marks a new wreck. Alternating blue and yellow light. Each on for one second with 0.5 seconds of darkness in between.

Light Characteristics



Flashing. Fl.



Quick Flash. Q. 50-79/min



Very Quick Flash. VQ. 80-159/min



Group Flashing. Gp.Fl.(3)



Occulting. Occ. More light than dark



Group Occulting. Gp.Occ(2)



Isophase. Equal periods of light and dark

Starboard Lateral Mark - this green buoy is the opposite to a port lateral mark. It denotes the right hand side of a channel.

Preferred Channel to Port / Starboard - these two buoys mark a point in a channel where the channel forks. Think of them as similar to marking a junction in a road. The preferred channel that's indicated is the main thoroughfare. You can take the other fork but you will be going into something. Such as a marina or a boat yard.

The Cardinal Marks - these black and yellow buoys are among the most important to recognise. They indicate the fact that there is a danger near by and show you the safe way to go. The danger may be something like rocks or a mud bank on which you could run aground. The marks are named after the cardinal points on a compass and direct you toward safe water. For example, you would stay to the north of a north cardinal as there is danger to the south of it. Likewise stay west of a west cardinal as there is danger to the east of it.



Isolated Danger Mark - this buoy with its black and red stripes looks a bit like *Dennis the Menace*. It marks a specific danger like a single rock or a dangerous wreck. Unlike cardinal marks which mark a large area of danger, an isolated danger mark pinpoints a single obstruction.

Fairway Buoy - this red and white striped buoy is the first buoy you will see at the start of a channel. As you are coming in to shore from the open sea it is there to let you know that you are entering a channel and that you should keep an eye out for buoys and hazards.

Emergency Wreck Mark - finally, this blue and yellow striped buoy is a temporary mark that is placed on top of a new wreck. It lets us know it is there so that we don't hit it.

Collision Avoidance

Part of the fun of driving a power boat is the speed at which you will skim over the sea. Sometimes this can be very quick. On hiring a RIB in Ibiza for example, we travelled at speeds of around 50 mph. At these kinds of speeds on the open sea, with no road markings, we need to know which way to turn in order to avoid a collision with another boat.

All the things to do are clearly defined in something called the IRPCS. These are the International Rules for the Prevention of Collisions at Sea. There are 41 rules in total but when we are learning to drive a power boat we need to understand 4 things.

These 4 things are:

1. We are the most manoeuvrable type of vessel on the water so it our responsibility to give way to other yachts and ships so long as it is safe to do so.
2. We need to keep out of the way of a vessel if we are overtaking it.
3. We need to turn to starboard (to the right) if we are in a head on situation with another power boat.
4. We need to give way to any power boats crossing in front of us if they are coming from the right.

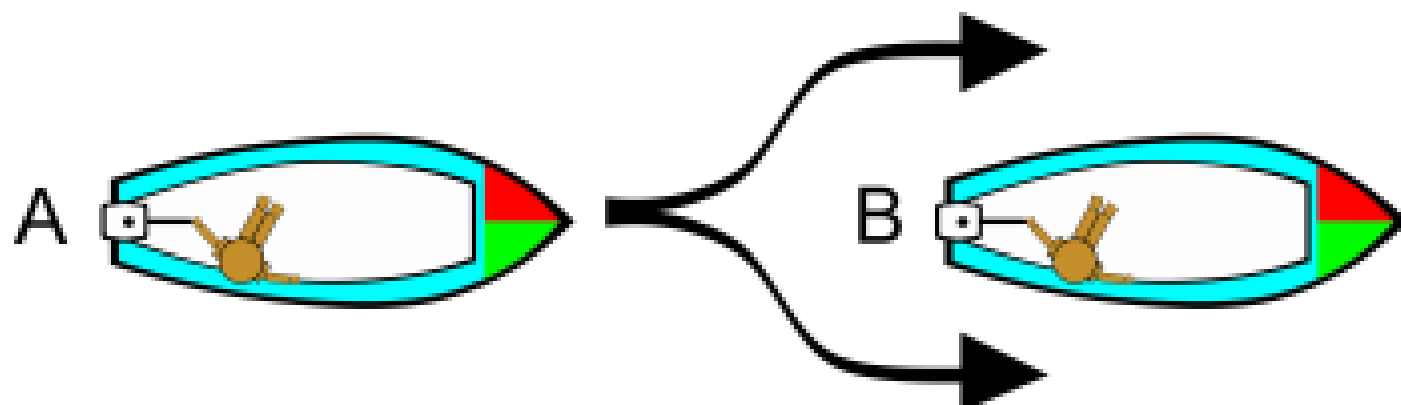
The following three pages illustrate the rules as well as giving you the exact wording.

Remember, we don't need to learn these off by heart. We just need to understand what to do when a situation arises.



RULE 13 - OVERTAKING

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A KEEPS CLEAR OF B

(a) Notwithstanding anything contained in the Rules of Part B, Sections I and II, any vessel overtaking any other shall keep out of the way of the vessel being overtaken.

(b) A vessel shall be deemed to be overtaking when coming up with another vessel from a direction more than 22.5 degrees abaft her beam, that is, in such a position with reference to the vessel she is overtaking, that at night she would be able to see only the stern light of that vessel but neither of her sidelights.

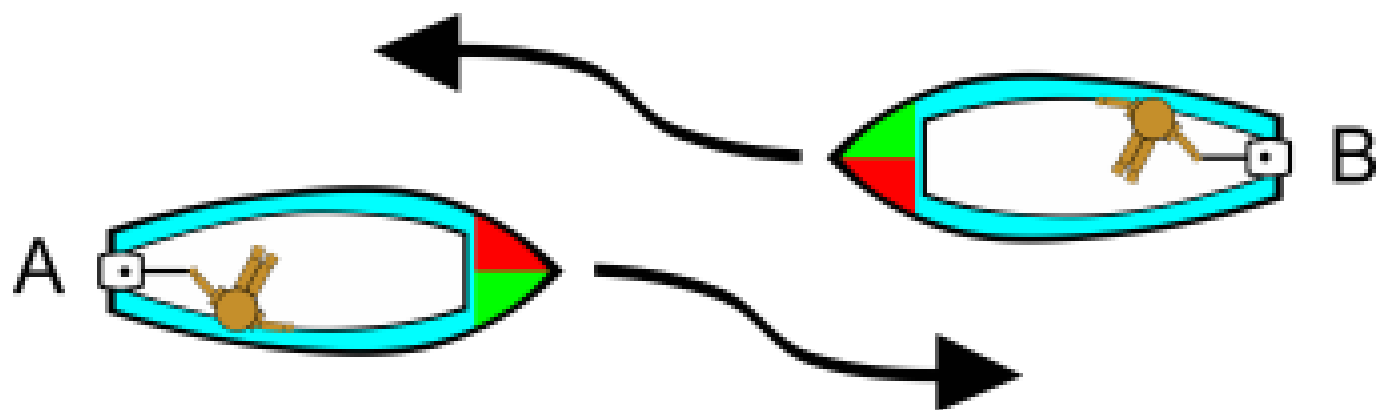
(c) When a vessel is in any doubt as to whether she is overtaking another, she shall assume that this is the case and act accordingly.

(d) Any subsequent alteration of the bearing between the two vessels shall not make the overtaking vessel a crossing vessel within the meaning of these Rules or relieve her of the duty of keeping clear of the overtaken vessel until she is finally past and clear.



RULE 14 - HEAD ON SITUATION

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A and B both make one short blast and alter course to starboard

(a) When two power-driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision each shall alter her course to starboard so that each shall pass on the port side of the other.

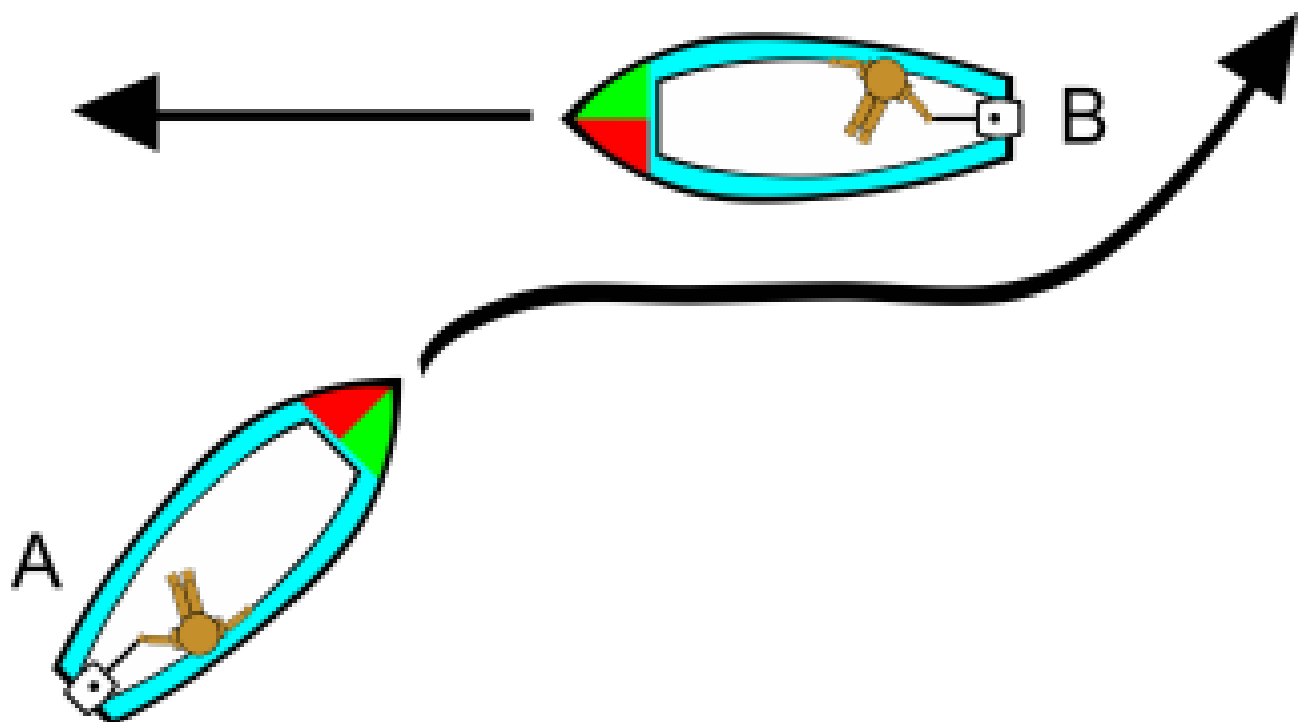
(b) Such a situation shall be deemed to exist when a vessel sees the other ahead or nearly ahead and by night she would see the mast head lights of the other in a line or nearly in a line and or both sidelights and by day she observes the corresponding aspect of the other vessel.

(c) When a vessel is in any doubt as to whether such a situation exists she shall assume that it does exist and act accordingly.



RULE 15 - CROSSING SITUATION

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A makes one short blast and either alters course to starboard or takes her way off

When two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel.

Sound Signals

If you have read the last three pages on the rules you will have noticed that sound signals are mentioned. This is stated as 'one short blast'.

If a vessel makes one short blast on its horn then it is letting you know that it is about to turn to starboard (to the right). This informs you and everyone else of the vessel's intentions so that any problems of collisions can be easily avoided.

There are several sound signals that boats can make and they are all described and explained within the IRPCS. When you come for your training in Poole you will hear the island ferry services making these sounds when they are coming and going from the harbour wall.

The next page gives you a guide as to what the sound signals are and the ones we can be aware of when we start learning about boats.



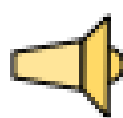


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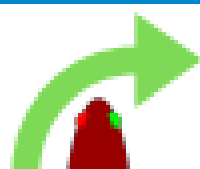
MANOEUVRING & WARNING SOUND SIGNALS



SHORT BLAST - 1 SECOND



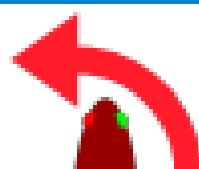
PROLONGED BLAST - 4 TO 6 SECONDS



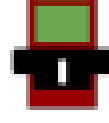
"I am altering my
course to
starboard"



ONE SHORT
BLAST



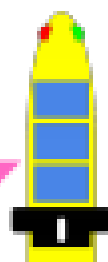
"I am altering my
course to port"



TWO SHORT
BLASTS



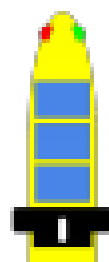
"I am operating
astern
propulsion"



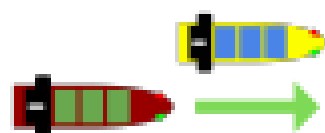
THREE SHORT BLASTS



"I fail to
understand your
intentions"

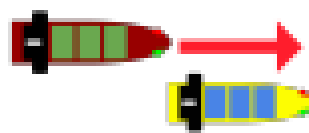
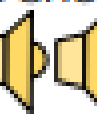


FIVE SHORT BLASTS



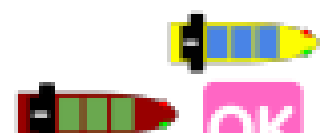
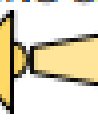
"I intend to
overtake you on
your starboard
side"

LONG LONG SHORT



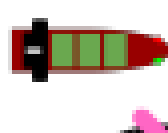
"I intend to
overtake you on
your port side"

LONG LONG SHORT SHORT



"I agree with your
intention to
overtake me"

LONG SHORT LONG SHORT



When nearing a
bend where
vessels may be
obscured



ONE LONG BLAST

Practical Course Elements

Now that you understand most of the theory of the course and can understand the sights and sounds as you travel on your adventures, let's look at some of the practical elements of learning to drive a power boat.

We won't explain them all here as the best way to understand them is to come along and do them.

You will learn how to:

- 1 Check life jackets and safety equipment.
- 2 Carry out engine and pre-start checks.
- 3 Handle the boat at slow speeds.
- 4 Hold the boat still taking into account the effect of wind and tide.
- 5 Turn the boat around in a tight space.
- 6 Park the boat along side a pontoon.
- 7 Tie some useful knots.
- 8 Use a compass.
- 9 Pick up a mooring buoy so you can stop for lunch or go swimming.
- 10 What to do in emergencies such as if someone falls overboard or if you need a tow.
- 11 Make a plan taking into account the tide and weather.
- 12 Anchor the boat safely.
- 13 Handle the boat at speed.



It really is a great two days with the emphasis on fun and safety.

About Our School

Our company has been around since 2015 and we have always been based in Poole. We originally started out giving RIB rides to tourists along the Jurassic Coast and providing freelance teaching services for other schools. We still do these things now and many schools along the south coast employ us to help train their students.

In 2019 we started teaching at our own Royal Yachting Association school on Poole Town Quay. It took a while for us to set up because we wanted to wait until we could afford a brand new boat for training. That meant we could stand out from the crowd somewhat.

Poole is a great venue for training as it is the second largest natural harbour in the world, it has busy boat movements and it has quick and easy access to the sea and the beautiful scenery along the coast.

There are several friendly instructors that work at the school and we are proud of what we do and the results we get for our customers. We have been fortunate to help train all sorts of people from lifeboat crews and the police to military people and holiday makers.

We spend a lot of time trying to make boating accessible to everybody and we provide lots of free information on our blog and Youtube channel.



How To Book Your Course

Booking your course is very simple with us as we have a live booking calendar on the website.

You can find out everything you need to know by visiting:

www.getlostpowerboattraining.com

The two day power boating course starts at £225 and we provide everything you need for the course. We will lend you safety equipment and waterproof clothing to keep you safe and comfortable.

Everything you need is there so that you can get your internationally recognised licence. It's exactly the same place that we started from ourselves!





GET LOST POWERBOAT TRAINING

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Get Lost Power Boat Training Ltd is a Royal Yachting Association accredited training centre based in Poole, Dorset.

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