

Level 2 Powerboat Handling

Aim: To teach boat handling and seamanship in powerboats. The course may be conducted in a variety of boat types, both planing and displacement, and the certificate issued will be endorsed to show the type of boat in which the training took place. The ratio of students to instructors should not exceed 3:1.

Duration: Two days

Minimum Age: Twelve years old

Endorsement: Is aged 12-15 and therefore the holder should only use powered craft under the supervision of a responsible adult.

Assistance required to complete the course.

Section A: Practical

Launching and Recovery

Knowledge of:

- Use of a trailer or launching trolley
- Consideration of launching and sea conditions, including hazards and obstructions
- Number of persons required to launch/recover
- Construction, width and condition of slipway
- Steep/slippery slipways, beach launching, lee shores
- Care of trailer bearings, hitch, lashings, ties, lights and winch
- Trailer parking

Can:

- Prepare the boat, lines, fenders, safety equipment, fuel tanks, lines and secure gear on board
- Prepare to go afloat
- Tie relevant knots

Preparation of Boat and Crew

Understands:

- Personal buoyancy and appropriate clothing
- The use of the following equipment: lines, fenders, anchor and warp, bailer, fire extinguisher, pump, paddles or oars, compass, flares, torch, whistle, charts, first aid kit, sharp knife

Boat Handling

Knowledge of:

- Loading: effect on handling and performance, effect on balance and trim, CE plate and manufacturer's recommendation
- Handling characteristics of displacement boats, rudder-steered craft and shaft-driven vessels

Understands:

- Crew members: minimum number in faster craft, keeping a look-out
- The importance of boat control in waves and adequate seating to minimise the possibility of injury
- Awareness of other water users, including effect of wash
- Steering, controls, effect of current or tidal stream
- Handling a boat at planing speed, trim tabs and power trim
- Planing boats: propeller angle and immersion, shallow drive, planing and displacement speed handling, tiller/console steering

Can:

- Carry out pre-start checks, engine starting and stopping
- Demonstrate the use of an appropriate length kill cord at all times

- Carry out low speed manoeuvres including: turning in a confined area, effect of wind on bow and holding off. Demonstrate an awareness of the danger of flooding when going astern
- Handle a boat at planing speed

Securing to a Buoy

Understands:

- Preparation of mooring warp
- Use of a boat hook
- Direction of approach
- Taking way off
- Crew communication
- Making fast
- Procedure when overshooting

Can:

- Approach and secure a buoy

Anchoring

Knowledge of:

- Types of anchor
- Stowage and attachment to boat
- Preparation of anchor, chain and warp
- Weighing anchor

Understands:

- Correct approach in various conditions
- Taking way off
- Crew communication
- Check holding
- Depth of water, holding ground, scope required

Can:

- Approach and anchor correctly
- Weigh anchor correctly

Leaving and coming alongside

Understands:

- Preparation and use of lines and fenders, attachment to boat, stowage under way
- Speed and angle of approach
- Wind effect
- Method of approach in tidal stream or current

Can:

- Make fast alongside
- Use springs
- Leave – ahead or astern

Man Overboard

Knowledge of:

- Recovery of man overboard

Understands:

- Cold shock and immersion hypothermia
- How and when to raise alarm

Can:

- Take immediate action
- Observe the man overboard
- Carry out the correct return with awareness of propeller
- Approach and recover the 'man' in the water. (Small weighted buoy to be used)

- Demonstrate both drift down and into wind approach method
- Switch engine off

Section B: Theory

Knowledge of:

- Types of craft: advantages and disadvantages of different hull forms with respect to sea-keeping ability
- Seating arrangements
- Stepped hulls
- Engines and drives: advantages and disadvantages of outboard, inboard and outdrive units, single and twin-shaft drives, choice and use of fuels
- Siting of fuel tanks, fuel lines, batteries, wiring, fire extinguishers
- Routine engine maintenance checks, basic fault diagnosis
- Close down procedure
- Advice to inland drivers about coastal waters
- Use and limitations of GPS/chart plotters
- Application of local byelaws, especially around commercial shipping
- Sources of weather information

Understands:

- Awareness of other water users
- Communication with other craft
- Disabled craft
- Emergency action, preventing sinking
- Adrift – alternative means of propulsion
- Actions to be taken by a disabled craft and being towed
- Fire precautions and fire fighting
- Distress signals, means of issuing distress, DSC and the Mayday call
- Advice for vessels in restricted visibility

Can:

- Apply IRPCS, principally rules 5, 6, 7, 8, 9, 12-18

Section C: Coastal

Knowledge of:

- Byelaws and local regulations
- Insurance
- Boat registration schemes

Understands:

- Pilotage and passage planning
- Charts, chart symbols, buoyage systems
- Tides and tidal streams

Can:

- Use steering and hand bearing compasses
- Apply Section A on coastal waters

Section D: Direct Assessment for Experienced Powerboat Drivers

The candidate should have the equivalent of at least one full season's powerboating-handling experience.

The candidate must complete the practical exercise described overleaf, and satisfactorily answer questions on Section B.

Candidates seeking assessment on coastal waters will demonstrate a knowledge and practical application of Section C.

Practical Assessment of all Candidates for Level 2

The practical exercise detailed in the diagram overleaf shows the manoeuvres required to be demonstrated during the practical assessment. Candidates are expected to show that they understand the principles of each manoeuvre. Failure to complete a manoeuvre successfully at the first attempt will not necessarily result in overall failure, but a timely awareness of the need to abort an exercise and try again is important.

Powerboat Handling Level 2 direct Assessment

Test diagram on p18