

Powerboat Level 2 Crib Notes

Section A Practical

1. 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 the slipway
- Steep / slippery slipways, beach launching, lee shores
- Care of trailer bearings, hitch, lashings, ties, lights and winch.

Can

- Prepare the boat, lines, fenders, safety equipment, fuel tanks, lines and secure gear on board

2. Boat Handling Underway

Knowledge of

- Loading: effect on handling and performance, effect on balance and trim, CE plate and manufacturers recommendation
- Displacement boats: handling ahead and astern, carrying way

Understands

- Crew members: minimum number in high speed craft, keeping a look-out
- Awareness of other water users, including effect of wash
- Steering, controls, effect of current or tidal stream
- High speed manoeuvring: planning, trim tabs and power trim
- Planing boats: propeller angle and immersion, shallow drive, high / low 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
- Carry out high speed manoeuvres including S-turns and U-turns

3. Securing to a buoy

Understands

- Preparation of mooring warp
- Use of a boat hook
- Method of approach
- Crew communication
- Making fast
- Procedure when overshooting

Can

- Approach and secure to a buoy

4. Anchoring

Understands

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

Knowledge of

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

Can

- Approach and anchor correctly
- Weigh anchor correctly

5. Leaving and Coming alongside

Understands

- Preparation and use of painter, lines and fenders, attachment to the 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

6. Man Overboard

Knowledge of

- Recovery of man overboard

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

Summary of the Terms

KNOWLEDGE OF the subject – The subject is to be briefly explained. Familiarisation is to be given during the course and information on where to find out more.

UNDERSTANDS the subject – The Subject will be covered in greater depth and the student will be asked to demonstrate a basic understanding and go away from the course able to further develop their own skill in this area. Confirmation of their understanding of the subject may be achieved in a number of ways, such as a short quiz near the end of the course.

CAN demonstrate a level of proficiency in the subject – The subject will be covered in great depth, including background theory, practical demonstrations by the instructor and repeated practice by the student until they can demonstrate good skills in this subject.

Section B – Shore Based Teaching

Knowledge of

- Types of craft – advantages / disadvantages of different hull forms with respect to sea keeping ability
- Engines & drives – advantages / disadvantages of outboard, inboard & outdrive units, power tilt and trim tabs, single & twin screws, choice 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
- Application of local byelaws, especially around commercial shipping

Understands

- Awareness of other water users
- Communication with other craft – hand and sound signals
- Disabled craft
- Emergency action, preventing sinking
- Adrift – alternative means of propulsion
- Towing & being towed
- Fire precautions and fire fighting
- Distress signals and the Mayday call

Can

- Apply IRPCS, principally rules 5, 7, 8, 9, 12 – 19

Section C – Coastal

Knowledge of

- Pilotage and passage planning
- CG66 Small Craft Safety Scheme

Understands

- 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

Candidate must complete the practical exercise described in the Powerboat Logbook (G20) Page 17. and satisfactorily answer questions on Section B.

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

Optional Session. Disabled Craft – To support the theory session.

Boat adrift -	Drifting towards safety or danger? Use of anchor if depth permits Alternative propulsion - effectiveness Controlling drift/paddling towards moorings Assessing cause/rectifying engine failure Self help before seeking help How to seek help
Boat damage -	Alter heel/trim to bring damage above waterline Plug leaks temporarily and head ashore Bailing underway
Grounding -	Prevention; awareness of surroundings Reversing off; engine partially tilted Changing trim; lightening boat Use of paddles; get out and push Check for damage to hull and engine If stranded; lay out anchor and wait for tide
Towing -	Speed/angle of approach Passing and securing towline; use of bridle Signals/communication Speed of tow Manoeuvring in confined areas Casting off tow
Being Towed -	Offer own line; agree terms Secure towline; agree signals Tilt engine and trim boat bow up