



RYA POWERBOAT RACE TRAINING REQUIREMENTS

Offshore Powerboat Racing
Version 1

01/03/2011
Royal Yachting Association

OFFSHORE

The RYA has mandated that any competitors new to the sport must undertake a powerboat race training course prior to being allowed to race. This also applies to any competitor that has not held a powerboat racing licence for more than two years. The RYA have delegated the responsibility for race training to its affiliated powerboat racing clubs, each club must nominate a training officer and advise the RYA of who that person is and what competences he/she possesses.

The club training officer will be responsible for signing of a new or lapsed competitors and it is his/her responsibility to ensure that the training syllabus for the class the competitor intends to race in is completed satisfactorily. Prior to the RYA training session being approved by the RYA the Club Training officer must submit the names of instructors being used for either the theoretical training or the on water practical training. These instructors must have raced for a minimum of two years in the class in which they are instructing and they must also have held an RYA Powerboat racing licence within the last two years.

Powerboat racing is divided up into three key disciplines, Offshore Racing, Circuit Racing and Jetsport Racing, each discipline has many different classes and it is not possible for the RYA to mandate a detailed course for each class. It is the responsibility of the RYA affiliated clubs and the appointed club training officer to provide the RYA with details of their training courses and how they are to be implemented. The RYA requires that a number of key safety issues are included in all courses and this document sets out the details of that requirement.

OFFSHORE**OFFSHORE RACING**

All training provided under this discipline must include both theoretical and on water practical training however the training officer must primarily take into account the ability of the trainee to drive or navigate his/her boat safely on the water at all times and to comply with the racing rules as set out in the Offshore Racing Rule Book PB1. Under no circumstances must a trainee be signed off as competent to race if he/she has not satisfactorily completed an on water specific powerboat race training module. Full details of this and the theoretical syllabus can be found below.

1.1. Offshore Theoretical Training

The following key topics must be included in all offshore theoretical training sessions:

- a) How to start racing, licences and medicals
- b) Mandatory equipment required (Class specific)
- c) Scrutineering, equipment required and presentation
- d) Race documentation
- e) Race Officials
- f) The racing rules and the IRPCS Rules, when do they each apply
- g) Safety and Flag Procedures
- h) Start procedures including what to do in the muster area
- i) Overtaking rules and overlaps (clear ahead) rule
- j) Roles of the Rescue Craft
- k) Reading a chart and understanding the race course
- l) Boat Handling
- m) Missed marks and aborting a race
- n) Finishing a race and signing off

**RYA Offshore and Coastal Powerboat Race Training Theory
Course Guidelines for Instructor/ Assessor**

1. How to Start Racing – Theory

Aim: *to inform potential racers of procedures and expectations*

Importance of joining an RYA Affiliated Club

- a. Discuss various Club Options and what they offer
- b. Discuss types of races – *club & national*
- c. Discuss different classes – Junior, Offshore, Coastal and Circuit racing
- d. How to get an RYA licence
- e. How to get a Medical

Consider : Areas of expertise & location
Costs

Gaining Racing Experience

- a. Owning a boat
- b. Participating as a Co-Driver
- c. Participating as a Driver

Consider: Age Limit

National Championship Calendar

- a. Club Events
- b. National Events
- c. International Events

Consider: Sponsors

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2. Equipment Required – Theory

Aim: *to give information on mandatory/recommended personal and boat equipment for club/national racing*

To outline mandatory/recommended equipment for Racing:

- a. Some items are not required for Club Racing
- b. Need to comply with basic safety requirements
- c. Racing Number
- d. Steering system in good condition
- e. Kill Switch
- f. Fire Extinguisher
- g. Orange Flag
- h. Log Book
- i. Refer to class specific rules
- j. Lifejacket specifications
- k. Helmet Specifications
- l. Importance of covering limbs – racing overalls or similar

Optional

Flares, Whistle, First Aid Compress
Class specific rules

Consider: Marathon require pre-fix numbers & measuring
Weather Conditions
Serviceability

3. Scrutineering

Aim: *To identify mandatory race equipment and demonstrate 'good practice' when setting up a race boat*

Discuss and highlight mandatory race equipment

- a. Importance of display for Scrutineering purposes
- b. Lifejackets: Importance of rigorous checks on fastenings and straps
- c. Helmets: Annual RYA marking
- d. Seating: Importance of height positioning (class specific)
- e. Log books and record keeping
- f. Inspections/ Sealing and striping of engines to comply with class rules

4. Race Documentation –Theory

Aim: *To give clear guidance on the importance of race regulations, documentation and their purpose*

Discuss mandatory race documentation required

- a. Importance of returning race entry on time
- b. Importance of reading **before** race
- c. Race Administration
- d. Next of Kin information
- e. Measurement Certificate / Log Books
- f. Signing Off Form

Consider: RYA Insurance/ Calendar Fee
What it entails and how long

5. Race Officials – Theory

Aim: *To inform on Race Official hierarchy and jurisdiction over conduct on and off the water*

Brief outline of roles and responsibilities of Race Officials

- a. Difference between the Organising & Race Committee
- b. Role of Officer of the Day
- c. Role of Safety Officer
- d. Role of Race Secretary
- e. Role of Senior Technical Officer (Chief Scrutineer)
- f. Role of Chief Timekeeper
- g. Role of Chief Marshal
- h. Role of Medical Officer
- i. Role of RYA / UIM Commissioner

Brief Outline of Protest Procedures

- a. Who can protest and when?
- b. Race Jury

Consider: Roles of Safety & Rescue Boats
Role of Course Marshals
Roles of Patrol & Mark Boats

6. PB1 2011 –Theory

Aim: *To ensure competitors are informed of up to date general racing, class specifics rules and IRPCS*

General Racing Rule Amendments

To create a clear understanding of all aspects of the general / class specific RYA / UIM rules

Consider: Update & Additions

Discuss IRPCS

- a. Refer to copy and where to find them
- b. Highlight key elements affecting powerboat racing
- c. Keeping a good look out and making intentions clear
- d. Maintaining a safe speed

Consider: Keep to Starboard of channel passing port to port
Power gives way to sail
IRPCS regulations before, during & after a race
Actions of stand on and give way vessel

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7. Safety & Flag Procedure – Theory and Practical

Aim: *To be confident of official safety procedures, to recognise and act appropriately to all flag signals*

Understanding the Safety Set-up:

- a. How the Safety Network in a race operates
- b. Radio Procedures
- c. Media Spokesperson

Consider: Major Incident Declaration

Importance of not talking to press

Mandatory and Recommended Safety Precautions when racing:

- a. No overtaking under yellow flag & must acknowledge
- b. Stopping in the event of an accident
- c. Role of the Paramedic
- d. Kill Switch and Cord

Consider: Class specific rules

Amendment to rules

Conduct on & off the water

- a. Conduct in the Dry/Wet Pits
- b. Behaviour on the water
- c. Need for improved discipline

Consider: Representing your Sport

Protecting / preserving life paramount

Recorded Observations for assessments/protests

Understand the implications of all race flags

- a. All flags and when deployed
- b. Importance of acknowledging flags
- c. Action to be taken
- d. Instructions after finishing a race

Consider: Positions of flags

8. Start Procedures & Muster Areas – Theory

Aim: *Trainees to have a full understanding of Start Procedures relevant to their Class*

Muster Area

- a. Proceeding to Muster Area
- b. Milling in Muster Area

Start Procedures

- a. Rolling Start
- b. Standing Start
- c. Jetty Start
- d. Beach Start

9. Overtaking Rules & Overlaps – Theory

Aim: *Trainees to have a full understanding of Overtaking Rules & Overlap Rule Specific to their Class*

Responsibility

- a. Crew Communication
- b. Crew Awareness of other boats
- c. Powerboat Racing = Non Contact Sport

Overtaking

- a. Yellow Flag – No Overtaking
- b. Sea Conditions
- c. Proximity of other Vessels
- d. Hazards on Course
- e. Safety
- f. Position on Course
- g. Right of Way
- h. Multi Class Overtaking
- i. Altering Course
- j. Canopied Boats

Overlaps

- a. When does an Overlap Exist
- b. What is meant by Clear Ahead
- c. Fouling Other Boats

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10. Roles of Rescue Craft – Theory

Aim: *To understand the roles and responsibilities of safety and rescue craft*

Discuss official duties and responsibilities:

- a. Designated Official Start Boat
- b. Designated Official Safety & Rescue Boats
- c. Role of Patrol Boats
- d. Role of Marker Boat
- e. Course Marshals & Referees

Consider: Minimum equipment on board

How to attract attention & use of safety equipment

- a. Flag/Hand signal to indicate level of distress
- b. Alternate means of propulsion

Consider: Correct use of flares (class rules)
May be floating into danger zone

Competitor co-operation with Rescue Boat/Medical Personnel

- a. Importance of taking direction from Rescue/Medical Personnel
- b. Towing and being towed
- c. Towing astern and towing alongside
- d. Emergency action to prevent sinking
- e. Correct procedure to right flipped boat
- f. How to get out of an up turned boat

Consider: Life over craft

11. Charts & Race Courses

Aim: *Trainees to have an understanding of a Nautical Chart so that they can plot positions or courses and identify hazards relevant to their class*

Charts

- a. Latitude & Longitude positions
- b. Courses
- c. Bearings
- d. Hazards, Drying heights, rocks etc
- e. Tides
- f. Charted depths

Race Course

- a. Plot a race course on nautical chart
- b. Measure course distances
- c. Fuel requirements
- d. Location of Muster Area

12. Boat Handling – Theory

Aim: *To provide awareness of the importance of good racing techniques and set up*

Race Boat Set Up:

- a. Propellers
- b. Importance of Testing
- c. Weight distribution
- d. Trim /bow tanks

Consider: How different props affect stability and handling

How sea conditions affect boat performance

- a. Discuss different wave patterns within a race
- b. Discuss HOOK

Consider: Beam, Following head etc

Navigation/Co-Pilot

- a. Discuss importance of crew communication
- b. Check tell tale for water through engine
- c. Role of Co-Driver during race

Consider: Importance of constant vigilance when safe
Compass & Chart reading

13. Missed Marks & Race abort

Aim: *To provide awareness of protocol's when missing a race mark or during Race abort Procedure relevant to their class*

Missed Marks

- a. Importance of not returning to a missed mark
- b. Missing marks or marks out of position
- c. Race instructions – Penalties for missing a mark

Race Abort

- a. Flag Signals
- b. Action by competitor following Race Abort
- c. Reasons for Race abort

14. Finishing a Race & Signing Off

Aim: *To ensure competitors are fully aware of Race finishing procedures and post race administration*

Finishing a Race

- a. Procedure for Leaving course at end of race
- b. Flag Signals
- c. Lap Counting methods & Distance
- d. Curtailment signals

Signing Off

- a. Post Race Scrutineering
- b. Indemnity form Sign Off
- c. Time limit for Protest Procedures

OFFSHORE**1.2. Offshore Practical Training**

All practical on water RYA training sessions must be run by affiliated RYA Powerboat racing clubs, full details of the training session provided must be submitted to the RYA Race Approvals Committee and will be subject to the approval of this Committee. These details must include a full description of the training course being used, the RYA Officials in attendance, the safety cover provide and details of the chase boats and the chase boat instructors. A full risk assessment must also be included with this application.

This is a key element of the race training process and instructors and club training officers must be entirely satisfied that the trainee is competent to be signed off for a powerboat racing licence before they make the final recommendation to the RYA.

The training officer or instructor must ensure that the trainees are given a full drivers briefing prior to being allowed to participate in this on water practical training session. The OOD must ensure that the trainees understand that this is NOT a race but an evaluation session during which their on water competences will be assed.

The training course must consist of a minimum of three race turn marks, details of this course must be submitted to the RYA Race Approvals Committee and approved prior to the event in accordance with standard race approvals procedures.

- a. Prior to participating in the practical training session each boat must be scrutineered and declared fit to run by the RYA scrutineer
- b. All trainees are required to wear full safety equipment as in a race and defined in PB1 rules
- c. No personnel other than those being assessed shall be allowed in the boat during the training session.
- d. The training officer must ensure that there are a minimum of three chase/observation boats present and that safety boats and paramedics are deployed in accordance with the events risk assessment.
- e. Each competitor must complete a minimum of three laps of the training course, five or more laps are strongly recommended.
- f. Trainees are required to demonstrate good boat handling at speed, reading of sea conditions and wake awareness of other boats around them. They must at all times demonstrate by their actions a comprehensive knowledge of both the RYA Racing rules and the International Regulations for the prevention of collisions at sea regulations.

OFFSHORE**1.3. The Practical Training Session**

- a. Trainees must demonstrate ability to overtake and be overtaken by other trainees or the instructors in the chase boats in accordance with the rules set out in RYA PB1. They must particularly demonstrate a constant awareness of what is happening around them at all times and must show by their actions on the water that they know how to avoid collisions or unnecessary close quarters situations.
- b. Each trainee will be required to successfully carry out an emergency man overboard recovery. They must prove that they understand the boats start stop procedures particularly relating to the use of the kill cord. They must also prove that they can protect the person in the water from on coming traffic and handle the boat well enough to get safely off the course.
- c. Trainees will be required to take part in a simulated race start, and also to follow the correct procedure of an aborted start using race flag signals only
- d. Trainees will be tested in all aspects of race flag signals which will include yellow and red flag procedures.
- e. The function of the chase boats is to follow the trainee drivers and observe their racing lines, they are also required to observe how the trainees react to other boats around them. The chase boats must also simulate overtaking in race conditions and must observe how the trainees deal with overlaps and close quarters situations.
- f. All chase boats and observer boats must have the following flags on board, green, yellow and red. The chase boats must keep in VHF contact with the event safety officer who will be in charge of the training session. Instructors are particularly asked to observe how the trainee navigator checks the positions of other race boats and if this information is successfully conveyed to the driver in order to avoid a collision or close quarters situation.

**RYA Offshore and Coastal Powerboat Race Training Practical
Course Guidelines for Instructor/ Assessor**

15. Awareness of Boat/ Engine/ Equipment

Aim: *To be able to demonstrate understanding of boat/engine and the purpose of equipment on board*

Engine

- a. Carry out all checks
- b. Trim engine in/out
- c. Identify fuel connection and prime fuel
- d. Engine bolts correctly tightened
- e. Correct use of Kill Switch
- f. Band displayed if Provisional Driver
- g. Demonstrate how to change a propeller and tools required

Consider: No Starting of engine in Dry Pits

Boat

- a. Race Number displayed on trailer
- b. Adequate boat buoyancy

Equipment

- a. Correctly fitted helmet with race numbers displayed
- b. Correctly fitting lifejackets
- c. Personal Kit – EPIRBS, Air Supply etc – class specific

Consider: Colour, Spec & RYA date sticker
Spec and efficiency i.e. worn straps etc.

16. Launching

Aim: *To be able to demonstrate good cooperation with Marshals and awareness of slipway/crane safety*

Understand the importance of 'being ready to race'

- a. Discuss what 'Being ready' means
- b. Importance of co-operation with the marshals
- c. Race numbers on Trailers
- d. Assistance with hooking onto launch vehicles
- e. Safe manoeuvring and securing of boat and trailer

Consider: Greased jockey wheels
Tow hitches
Bearings

Be able to launch and recover by slip safely

- a. Be aware of slipway/crane safety procedures
- b. Condition/Steepness of slip
- c. Width & surface
- d. State of tide/sea conditions
- e. Hazards and other water users

Consider: Engine is raised

Being able to launch and recover by crane (not able to do practically)

- a. Discuss importance of authorised personnel only
- b. Use of Hard Hats
- c. Preparing boat for launch and fastening strops

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17. Local Speed Limits and Low Speed Manoeuvres

Aim: *To be able to demonstrate understanding and importance of local by-laws and speed restrictions and be able to manoeuvre craft at low speeds appropriately*

Be able to control boat safely at low speed

- a. Wear kill cord at all times when engine is running
- b. Demonstrate safe use of gear shift and throttle together
- c. Communication before powering up/down
- d. Turn in a confined area/hold off
- e. Be able to demonstrate a good approach to/from jetty or pontoon

Consider: Steer then gear

Effect of wind on bow/sea conditions

Sharp edges on jetty/pontoon

Depth of water/sea conditions etc

To be able to demonstrate the following fundamentals

- a. Look around before setting off
- b. Keep all round vision
- c. Decrease speed slowly to avoid flooding
- d. Check engine is trimmed appropriately before powering up
- e. Effect of wash on other users/ local speed restrictions

Consider: Awareness of Mega Fauna

Any other environmental issues

OFFSHORE

18. High Speed Manoeuvres

Aim: *To be able to demonstrate good communication and driving skills between Driver and Navigator*

General Race Manoeuvres

- a. Be able to demonstrate anti-clockwise milling manoeuvre
- b. Be able to demonstrate appropriate trim applicable to water conditions
- c. Be able to demonstrate appropriate use of kill switch

Communication between crew

- a. Observe communication before initiating turns/overtaking
- b. Observe warnings to crew when turning
- c. Check all round vision and looking behind at suitable times

Consider: reducing power prior to turn
Looking round prior to turn
Use of appropriate trim

Rounding Marks

- a. Observe approach, angle, speed and trim

Consider: Sea Condition weather & sun direction

Over Taking

- a. Be able to demonstrate approach and correct position
- b. Understanding Class rules
- c. Show awareness of other boats throughout manoeuvre

Consider: Sea & wind conditions

Emergency Situations

- a. Understand alternative means of propulsion
- b. Emergency action to prevent sinking
- c. Towing and being towed
- d. Procedure for righting boats / escape
- e. Actions of the first boat to an incident (class specific)
- f. Canopy release awareness
- g. Evacuation procedures (can be theory if unable to do practical)

Consider: Equipment carried
Availability of other rescue services
Communication

Start and Finish Protocol

- a. Understanding of Muster Area
- b. Class specific rules
- c. Holding of lines on start run

Consider: Multi-discipline races
Convergence of classes

OFFSHORE**19. Debrief, Assessment and RYA Provisional Theory Test**

Aim: *To successfully complete the training program and assessment; as required for a pre requisite for the application of a RYA Powerboat Licence*

Debrief on Practical Activities

Consider: Marginal candidates at this time
Pass or Fail

Assessment and Provisional Theory Test

- a. Course candidates are required to complete an oral (if required practical) assessment by and authorised RYA Powerboat Racing Assessor at the end of the course – This cannot be the instructor
- b. RYA official Theory Test Paper (this may be Class specific)
- c. Assessor to sign-off the training sheet after verifying the candidates competence

FAILURE: The candidate will need a direct assessment on failed subjects only, but will not be allowed to race until full course completion.

PASS: On completion and passing of the Training course, candidates will receive a signed Certificate of Racing Competence.

1.4 Certification

Upon satisfactory completion of the written test and practical assessments the driver and navigator will be signed off as competent to race by the club training officer. They will then be eligible to apply for an RYA provisional licence for the class in which they have been tested.

Each person will be approved to race only the type and class of boat they have been tested in. Should they wish to compete in a different class they must contact the RYA and re take any part of the test deemed necessary by the RYA.

Driver and Navigator: Due to the nature of the testing, each person will be signed off to race as a driver or navigator. Should they wish to compete in a position other than that they were tested in they will have to repeat the test in that position.

Candidates Race Training Requirements: Tick option 1,2 or 3. 4,5&6- Optional													Trainer Notes:		
1.	A minimum of RYA PB2 – (No Racing or Boating experience)														
2.	Boating C.V – (No Racing experience or PB2, thus needing Race Training)														
3.	Racing C.V, Assessment only – (experienced racers that have not competed in the last 2 years)														
4.	VHF/DSC Certification – (where applicable)														
5.	First Aid – (where applicable)														
6.	Sea Survival – (where applicable)														
Training Schedule – Class Specific Tick the correct box where applicable													Trainers Comments:		
	T/Cats	Zapcats	UKFFORC	OCR	Class 3	V24	RIB	MPA	SuperStock	Marathon	Pass	Fail			
Theory Subjects - To Understand															
1	How to Start Racing														
2	Equipment Required														
3	Scrutineering														
Race Officials & Event Support															
4	Race Documentation														
5	Race Officials														
6	PB1 2010														
	Collision at Sea Regulations														
Pre Race Requirements															
7	Safety and Flag Procedures														
8	Start Procedures & Muster Area														
9	Overtaking rules & Overlaps														
10	Roles of Rescue														
11	Charts & Race Courses														
12	Boat Handling														
13	Missed Marks & Race Abort														
14	Finishing a Race & Signing Off														

RYA OFFSHORE POWERBOAT RACE TRAINING SHEET

Training Schedule – Class Specific		Tick the correct box where applicable												Trainers Comments:
		T/Cats	Zapcats	UKFFORC	OCR	Class 3	V24	RIB	MPA	Superstock	Marathon	Pass	Fail	
	Practical Subjects													
15	Awareness of Boat, Engine & Equipment													
16	Launching													
	Safely Manoeuvre boat and trailer & understand the safe securing and workings of the boat on the trailer													
	Safe launch and recovery of boat on trailer at slipway													
	Safe launch and recovery of boat on trailer by crane													
	Water Based													
17	Proper control at Low Speed													
18	Proper control at Low Speed													
	Communication and teamwork between Driver & Navigator													
	Rounding Marks													
	Overtaking – as per class rule													
	Emergency situations & procedures including man overboard – Red Flag Procedure													
	Holding the line on the start run, correct finish procedure and response to flags													
Sign Off:														
	Course Completion	<u>Pass</u>				<u>Fail</u>				<u>Date</u>				
	Instructor's Name:	<u>Sign:</u>								<u>Date</u>				
	Assessor's Name:	<u>Sign:</u>								<u>Date</u>				



RYA OFFSHORE POWERBOAT RACE TRAINING SHEET

