



# RYA MCA Advanced Powerboat course Syllabus

## Minimum requirement for advanced powerboat exam candidates

This is the pinnacle of the RYA powerboat scheme and as such students wishing to gain this MCA RYA qualification should be experienced power boaters. As a minimum guide this would include –

- 2 years and 30 days at sea
- 2 as a skipper
- 800 miles and 12 night hours

If students already hold an RYA Advanced Powerboat Course Completion Certificate then the sea time is reduced to:

- 20 days, 2 days as skipper, 400 miles
- 12 night hours

Minimum age of 17 and your theory knowledge should be to a Coastal Skipper level or above.

## All exam candidates will also require:

- A passport photo
- A copy of your VHF/SRC operator's license
- A copy of your valid first aid certificate
- Students wishing to commercial endorse their certificate will also require -
- A copy of your Sea Survival certificate
- A completed ML5 medical report Adding the commercial endorsement will cost an additional £32, **payable (by cheque) to the RYA.**

## Subjects covered during the RYA MCA exam will include:

- Preparation for sea
- Preparation of vessel
- Safety brief Stowing and securing gear for coastal passages
- Engine operations and routine checks, fuel systems, kill cord, Fuel system, bleeding, changing filters and impellers
- Boat handling
- Hull forms and their handling characteristics, propeller configurations.
- Knowledge of action to be taken in rough weather
- Significance of tidal stream on sea conditions Steering and power control through waves
- Understanding and correct use of power trim and tabs
- Towing, under open sea conditions and in confined areas



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- Strategy up and downwind and in heavy weather

- Awareness of the effects of wind and tide when manoeuvring, including Steering to transits and in buoyed channels
- Turning in a confined space
- All berthing and un-berthing
- Picking up and leaving a mooring buoy
- Anchoring
- Recovery of man overboard
- Awareness of ground speed and ability to hold the boat on station

### **Skipper responsibilities**

- Can skipper the vessel with effective crew communication
- Preparing the vessel for sea and for adverse weather
- Tactics for heavy weather and restricted visibility
- Emergency and distress situations
- Customs procedures Courtesy to other water users
- Pilotage and Passage making

### **Your chart work and theory knowledge should include:**

- Charts, navigational publications and sources of navigational information
- Chart work, including position fixing and shaping course to allow for tide
- Tidal heights and depths
- Buoyage and visual aids to navigation Instruments, including compasses, logs, echo sounders, radio nav aids and chartwork instruments
- Passage planning and navigational tactics
- Importance of pre-planning
- High speed navigation, pre-planning and execution
- Use of electronic navigation (GPS & Radar)
- Pilotage techniques and plans for entry into or departure from harbour
- Use of leading and clearing lines, transits and soundings as aids to pilotage.
- Navigational records
- Limits of navigational accuracy and margins of safety
- Lee shore dangers

Students will be expected to be able enter and exit from a charted port by day or night. You will be expected to be able to explain your plan to your examiner indicating why and what you did.



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## **Meteorology:**

Candidates should be able to use weather and tidal information to predict likely sea conditions and make passage-planning decisions.

- Definition of terms including the Beaufort Scale, and their significance to small craft
- Sources of weather forecasts
- Weather systems and local weather effects
- Interpretation of weather forecasts, barometric trends and visible phenomena
- Ability to make passage planning decisions based on forecast information
- Rules of the Road

## **Application of the International Regulations for Preventing Collisions at Sea (IRPCS).**

- Candidates will be able to identify - power and sailing vessels by night.
- Identification of types of ship by night is not required except a knowledge of the lights of tugs and trawlers.

## **Safety**

Candidates will need to be familiar with all the equipment onboard the boat, as you may be asked to demonstrate its use. You will also be expected to know what safety equipment should be carried on board the vessel, this will be based on information from either the codes of practice for the safety of small commercial vessels or on the recommendations in RYA booklet C8.

## **Candidates must know the responsibilities of a skipper with regards to:**

- Fire prevention and fighting
- Hull damage/watertight integrity
- Medical emergency
- Towing and being towed
- VHF emergency procedures
- Explanation of helicopter rescue procedures
- Use of flares
- Man overboard
- Search patterns
- Lifejackets
- Life rafts



## **RYA MCA Advanced Powerboat course Syllabus**

Awareness of risks to passengers and crew through shock and vibration caused by operating at speed  
Awareness of strategies to mitigate risk of injury caused by shock and vibration.