RYA Tender Operators Course Instructor delivery notes

Aim: To teach tender driving up to the required standard to carry passengers and other crew members to and from the mother ship by day and night.

This course is designed to build on a candidate's basic knowledge of powerboating and candidates should gain confidence in their own competence. They will have plenty of time for practice of techniques in working with a crew member and short-handed. It is important that candidates understand the emphasis of the course is ship to shore transfers, and associated skills rather than coastal cruising.

Candidates should gain an appreciation of their role as tender skipper and their responsibilities in addition to helming skillfully.

Pre-course knowledge: Candidates must hold a RYA Powerboat Level 2. It is strongly recommended that candidates hold a valid first aid certificate and hold a VHF/SRC operator's license or equivalent.
Duration: Two days
Minimum age: Seventeen years old

Section A: Practical

Preparation for Sea

Can:
Prepare the vessel including;

Navigation equipment

This initial session should cover checking navigation equipment set up, such as which GPS datum it is referring to and understanding whether the depth is reading from the water surface or is offset to the keel. As most chartplotters have similar features, there's no need to get too bogged down in the detail of a particular unit, it's a case of the candidates understanding the requirement to become familiar with the equipment on the vessel they will be skippering – examine the basic functions, what data is available through changing the screens as well as how to alter the backlighting.

Bilge pump and alarms

Discuss the advantages/disadvantages of this manual/automatic bilge pumps and those with a battery override.

Essential safety equipment

Where the equipment is stowed, how and under what circumstances it is deployed

Stowage of warps and securing gear

Importance of a tidy tender with regards to safety of the vessel and those aboard

Pre-departure procedures

Understands:
Drive systems

The types of drives commonly in use for tenders include outboards, inboard diesel, jet drive. The pre-start checks for the particular vessel being used for training should be taught, with the students aware that they should learn the corresponding pre-start checks for the tenders they will be operating.

Emergency shutdown procedures for the vessel being used for training
The need to be familiar with procedures for re-fuelling onboard and at sea

Risks and hazards and precautions plus environmental impact, candidates should ensure they are trained on this as part of their familiarisation training on a new yacht.

Communication protocol with mother ship

Each vessel will have a protocol for how often the tender operator contacts the mothership; this may be at regular time intervals or could depend upon the nature of the transfer, the conditions, and whether it is day or night.

Can:
Carry out fuel and mechanical checks on the vessel being used for training including:
Engines, cooling and lubrication systems
Safely start and shutdown engines
Diagnose basic engine start problems

Teach candidates a routine to diagnose basic starting issues, this may be worked methodically from “console to engine”, or may take be broken into the three areas for faults: electrical, fuel, mechanical.

Fuel levels

Include location of fuel tap/shut offs, fuel filter sight glass

Life Saving Apparatus (LSA)

Knowledge of:
Sources of information on different types of LSA

Understands:
The importance of familiarisation with the use of different types of LSA

Know what you are carrying on your tender and how to deploy it

Can:
Demonstrate the use of all LSA carried onboard

On an RYA Training vessel the items which should be discussed are the kill cord, life jackets, flares, and liferaft. Candidates should have an understanding of what each item does and how it works. They should understand where they can find such information for the items on the tender they will be operating.

Lifejackets should be discussed in depth. Wearing a lifejacket in an open powerboat is prudent and professional. Consider what message your attitude to this piece of equipment gives off. Remember that it will be difficult for a skipper to convince

passengers to put a life jacket on, if they themselves are not wearing one. Life jackets nowadays are much more sleek, comfortable and smart looking than previously. Life jackets supplied for use at night should have a light, this will likely be the only way of spotting a man overboard.

Kill cord usage should be discussed and enforced rigorously throughout the course. It is an essential piece of safety equipment.

Boat handling

Understands:

The importance of having crew to assist in berthing operations
The importance of boat control in waves and adequate seating to minimize the possibility of injury
How to select an anchorage with due regard to the safety of the vessel and passengers who may be partaking in water sports
Towing water toys and the need for a spotter
Tidal considerations

Effect on ride comfort, ramifications for watersports, berthing and anchoring

Can:

Demonstrate the correct use of the kill cord at all times when underway
Demonstrate berthing and docking skills in the following situations:
    beam to; bow to and stern to carried out with a crew member and shorthanded
Helm considerately at planing speed
Recover MOB by day and night
Anchor the vessel safely

The boat handling section is aimed at polishing the candidate's current skills and helping them to manoeuvre smoothly with account to their surroundings and the prevailing conditions. When practicing berthing techniques, adequate time should be set aside for candidates to have experience of using springs. They should gain confidence in their ability to helm the vessel smoothly. Practical activity can be punctuated with discussions on the section on passenger safety and comfort, as well as considering how to transfer those with reduce mobility or restrictive clothing.

Rules of the Road

Knowledge of:

Sources of local byelaws

The majority of this course should be taught practically, infusing theory knowledge into the practical training wherever possible. When discussing local bylaws under "Rules of the Road" section, it would be useful to have laminated copies of some sample documents or, to have them on a tablet so that they can be discussed during the course. The aim is to bring the subject to life. Ignoring local bylaws can have serious consequences, for example speeding in France carries a maximum 6 month prison sentence and the possibility of being banned from French territorial waters for 5 years.

Some PDF resources are available from RYA Training, keep your eyes open and pick up anything useful from local harbour master's offices to supplement your resources.

Understands:
The importance of adhering to local byelaws
Can:
Apply the International Regulations for the Prevention of Collisions at Sea (IRPCS)

The emphasis is on a practical working knowledge of the IRPCS, focus on concepts and practical application, be opportunistic when afloat. Lights should be at a basic level – for example identifying that there is a vessel and whether it is moving or at anchor.

Demonstrate a good sense of situational awareness including; the ability to conduct dynamic risk assessment given the prevailing conditions and location

Passenger safety and comfort

Knowledge of:
Sources of information regarding maximum number of people and payload

Take a look at the builder's plate

Understands:
When to instruct passengers to wear appropriate LSA
The importance of boat control in waves and appropriate seating to minimise the possibility of injury or ejection
Requirement to comply with maximum number of people and payload
The hazards associated with non-compliant passengers and those under the influence of alcohol
The hazards associated with less mobile passengers and children
Strategies for ensuring the safety of non-English speaking passengers
The importance of selecting a safe place to meet and greet passengers
The need to pre-plan onward land transportation of passengers

There are scenarios for use to prompt discussion amongst the candidates on the topic of dealing with people, these can be used to add context and variety during the practical boat handling exercises.

Can:
Brief the crew on passage plan and roles and responsibilities
Give an effective passenger safety briefing
Give an effective demonstration of all relevant LSA and location

Candidates need to be able to deliver a smooth, confident and informative passenger briefing. Think about the safety briefing given on a plane. Introduction, who is in charge; passengers to remain seated (and holding on?); how to tell the crew if you are uncomfortable or wish the boat to slow down; how to put on a life jacket (recommendations regarding wearing one for the transfer); what to do in an emergency; expected conditions and duration of transfer.

Embark and disembark passengers safely

Drive appropriate to prevailing weather and sea conditions, with due consideration to keeping all onboard comfortable and dry

Daytime pilotage

Understands:

The benefit of agreeing and lodging the pilotage plan with the Master or Officer of the Watch

This course covers monitoring and executing a plan, tender operators should seek guidance from the OOW regarding their intended ship to shore plan.

The requirement for a safety margin when using chartplotters and other electronic navigation aids

The need to use a secondary means of position fixing when using electronic navigation aids including the use of verifiable waypoints

There are many factors which can affect the accuracy of a GPS derived position, from atmospheric conditions to a GPS jammer nearby, to poor electrical connection to speed of screen update. Candidates learn to identify verifiable waypoints which, given the rate of screen update, they will identify as having reached prior to the chartplotter announcing their arrival at a waypoint.

Consideration for local environmental conditions, hazards and other water users

The importance of maintaining contact with the mother vessel at all times

Safe speed for navigation

Can:

Produce an effective day time pilotage plan

A simple plan which allow for the short ship-shore transfers (Approximately 1-2M), remember tender operators are unlikely to have a chart on board, a sketch pilotage plan would be useful as an aide-memoire for spotting their waypoints.

Use charts and publications

This is for the purpose of geographical context, and re-familiarisation, most of the planning will take place directly on the chartplotter.

Interpret Lateral and Cardinal buoyage System A & B

Use a chartplotter for navigation afloat

Use waypoint navigation

When inputting a basic plan, consider it in three stages:

- On large scale drop in two waypoints A-B (mothership to port entrance)
- Zoom in and follow the line, does it put the boat close to any hazards or restricted areas? If it does, drop in a waypoint and move it well clear of the hazard, repeat this as many times as is necessary to have a safe route
- Zoom in on each waypoint, is it verifiable by sight (for example, is there a landmark or buoyage that can be referred to? Teach the candidates not to rely on the waypoint alarm to alert them that they have arrived, as they will already have passed their waypoint, it should be considered a back up.

Use pilotage to enter a port by day

Night time pilotage

Understands:

The additional hazards associated with moving passengers by water during the hours of darkness

Can:

Take charge of a power driven vessel during the hours of darkness, including but not limited to, short passages between harbour and mother vessel

Produce an effective night-time pilotage plan

Demonstrate ability to keep a proper look-out by all available means

Identify position at all times

The night pilotage exercise is a very basic one. The exercise should imitate the kind of pilotage that tender operators may make when transporting guests between a quayside or waterside restaurant and the mothership. It is not intended to be an Advanced Powerboat-style of exercise. They are not required to find unlit positions or to undertake complex navigating. The aim is to experience boating at night, gain a realization of the hazards and an appreciation that a simple plan should be made and followed. An example might be to identify a nearby bay which can be where the imaginary yacht is at anchor. For the plan to be successful, the candidate would need to be able to follow it singlehandedly. Think about how to make it simple enough that the candidate can identify their waypoints to change course by sight, for example when this or that is abeam, or when the aerial on the cliff lines up with the fixed red on the entrance to the port.

Emergency situations

Knowledge of:

Helicopter rescue procedures

Local safe havens/points of refuge

Understands:

Effective management of an emergency situation by day and at night

Importance of keeping an up-to-date head count of all persons on board

Fire prevention and fighting

Action to take in the event of hull damage / loss of watertight integrity

What to do in a medical emergency

The principles of towing and being towed

The danger of cold shock

Can:

Simulate a distress alert by all available means

The emergency section should cover how to raise the alarm; finding out about the emergency services in the operating area; the importance of an EAP (emergency action plan).

Section B: Theory

Types of Tender

Knowledge of:
Different types of tender
Different types of propulsion systems: outdrive, outboard, jet drive, forward-facing drives, shaft drive
Understands:
The handling characteristics for various types of common hull forms

In addition to discussing what different hull types are suited to, take time to discuss what happens when they are used for other uses, e.g. a particular boat may be great for producing good wake for towed sports, but the trim angle required may impact on field of vision going forward and thus objects in the water may be more difficult to spot.

Launch and Recovery

Knowledge of:
Various methods of launch and recovery from the mother vessel whilst at anchor and stopped in the water
Understands:
Requirement to gain onboard type specific training

This is not a practical session as training is bespoke to each system and forms part of the safety management on board each yacht. This section is to be covered very briefly; the candidates should come away with the strong message that they must undertake specific training on the systems used on the yacht they are working on. On the PowerPoint, there are some pictures of different launch mechanisms for you to refer to in this session.

Legislation and guidance

Knowledge of:
The requirement to maintain a current MCA Officer of the Watch Training Record Book (Yacht)

For those working in the Deck Department of a yacht and wish to progress up through the UK Maritime and Coastguard Agency (MCA) Yacht Deck qualifications; the MCA requires the completion of a (Yacht) “Officer of the Watch Training Record Book” as part of the prerequisites towards the (UK) MCA OOW (Y) 3000gt Certificate of Competence.

The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended; regulates the training and competence of seafarers internationally. The MCA regulates the training and certification of seafarers working in UK registered yachts in line with the requirements of STCW95. As part of this training every candidate for certification as Officer of the Watch (Yachts, less than 3000gt), must complete an approved training programme which is structured to assist an officer candidate achieve the necessary standard of competence.

The OOW(Y) training programme is a combination of shore-based education and training, and onboard service. The (Yacht) OOW Training Record Book is an integral part of this training programme and should be completed during periods of onboard service. The (Yacht) OOW Training Record Book not only allows for the practical assessment of assignments but also provides a comprehensive record of shore based training and onboard service. The MCA favor the (Yacht) OOW Training Record Book be completed over a 3 year period, in line with the 36 months of yacht service requirement for entry to the OOW training programme for those new to yachting, and a minimum of a 12 month period if you have further prior experience.

The book must be fully completed, with the Master or a duly authorised officer verifying that the various “assignments” and “tasks” are completed by signing the appropriate sections

RYA Code of Practice for Safe Water Sports Operations
RYA Guidance on Small High-Speed Craft Passenger Safety

Understands:
The importance of carrying the correct documents

Tenders should be marked T/T [name of the mother ship]. If the tender’s use extends beyond ship to shore transport, some jurisdictions may treat the tender as a pleasure craft in its own right and the registration requirement and other rules outlined here may apply to the tender independently of the mother ship.

If the owner of the vessel is not onboard, in some countries the skipper will need a letter authorising use of the vessel to ensure the loan is not seen as illegal chartering.

There is a core set of paperwork - your ship's papers which, together with your passport, any other personal paperwork and any country specific documentation or publications you may be required to carry on board, should enable you to satisfy a foreign customs official, if required.

Ships Papers: Registration document, ships radio license, insurance, VAT status

Personal Papers: Passport, evidence of competence, proof of authority to operate maritime radio

Vessel Specific Training

Knowledge of:
Additional regulated training available
RYA Intermediate Powerboat
RYA Advanced Powerboat
RYA/MCA Advanced Powerboat certificate of competence
MCA Fast Rescue Craft

Understands:
The importance of vessel and equipment specific training

Candidates should understand that this course is an introduction to tender operations and that there is more for them to learn once they work on board a yacht. They should assimilate the knowledge and experience gained on the course with on board training they should receive prior to using any specialist equipment.