



# Peterborough Sailability

## PERFORMANCE TRAINING MODULE

### PTM 04: Challenger ~ Asst. Instructor Training



## Challenger ~ Assistant Instructor Training and Assessment

### Requirement

There is a requirement to train existing Helpers who are suitably qualified to teach the Challenger Trimaran to new and existing Helpers.

### Aim

The aim of this procedure is to provide training to existing Helpers to enable them be Assistant Instructors so that they too can train new and existing Helpers in the rigging, preparation, launching, operation, recovering, de-rigging and storage of the of the Challenger Trimaran boats.

### Objectives

The objective of this procedure is to train a Helper is as follows:

- a) To be able to instruct Helpers to rig and prepare a Challenger multi hull boat satisfactorily prior to launching, recover and de-rig prior to storage.
- b) To be able to instruct Helpers to maneuver the trailer to the slipway, launch the boat fully-crewed and to apply the same techniques to the recovery procedures.
- c) To able to instruct Helpers to sail the boat in accordance with recognized sailing techniques and to sail the Challenger in a safe and acceptable manner.

### Method

Everyone involved in the launching and the recovery of the Challenger Trimana boats must be familiarized with the methodology of these tasks by means of written and/or verbal instruction, observation, participation and assessment from seasoned members of the group. Common sense will prevail and by these methods the shore crew members will be able to carry out the objectives safely and without endangering themselves, other crew members and without causing damage to the boats and equipment.

### Qualification

#### Basic Skills ~ Level 2 (specific to Peterborough Sailability only)

**When delivering this course, source material should be taken from the RYA Start Sailing Beginners Handbook**

Page numbers shown in the text refer to page numbers from RYA Start Sailing Beginners Handbook (2013)

Other variations may apply as shown;

- Challenger Specific Variations;      See Flip Charts
- Peterborough Sailability;      See Shore Crew Training Manual

## NATIONAL SAILING SCHEME - LEVEL TWO SYLLABUS

### SECTION A - PRACTICAL

**Rigging** – See Shore Crew Training Manual

- Understands how to rig according to weather conditions
- Able to reef ashore

**Ropework**

- Knows how to tie a bowline, clove hitch, reef knot Page 28

**Sailing Techniques and Manoeuvres**

Has basic practical understanding of the following:

- The Five Essentials Page 19  
Centreboard, Trim, Balance, Sail Setting, and Course Made Good
- Can sail around a short course using all points of sailing and crewing skills Page 16
- Leaving and returning to a beach, jetty or mooring Pages 30 - 31
- Coming alongside a moored boat

Knows basic rules of the road; power/sail, port/starboard, Wind-ward boat, overtaking boat

Pages 34 - 35

- Aware of lee shore dangers Pages 30 - 31
- Sailing in close company with others
- Man overboard recovery Page 40 & Flip Chart 3

**Launching and Recovery**

- Has knowledge of boat storage ashore, launching and recovery (Shore Crew Manual)
- Able to paddle a sailing dinghy and/or row a boat around a short course
- Come alongside and make fast
- Can launch and recover a boat

**Capsize Recovery**

Not being taught for Challengers. It is very unlikely that a Challenger will capsize under the sailing conditions that are permitted at Peterborough Sailability. In the event of a misfortune and capsize, the crew would not be able to right the boat without specialist help. The boat should not fully invert because Gunwade Lake is not deep enough.

**Racing**

Pages 46 - 47

Understands the course and starting procedure (May be covered as onshore teaching)

## **SECTION B – SAILING BACKGROUND**

### **Sailing Theory and background**

Has knowledge of:

- Points of sailing and 'No Go Zone' Pages 16 - 17
- How a sail works and sailing boat moves – basic theory Page 14
- Sea sailing; Local knowledge / advice Pages 44 - 45
  - Tide tables, tidal sequence of springs and neaps, ebb and flow
  - The effect of wind direction and tidal flow on sailing conditions
  - Speed over the ground with / against tidal flow
  - Estuaries and harbour mouths – conditions and hazards
  - Informing someone ashore / Dangers of sailing alone
- Inland Sailing; Basic advice including local bylaws, permits, overhead power lines, locks and weirs
  - Advice for independent sailing – self reliance
  - The dangers of hypothermia and the importance of first aid training particularly cardio pulmonary resuscitation

### **Meteorology**

- Knows sources of relevant weather, inshore forecasts - Page 42
- When to reef
- Understands Beaufort Wind Scale

**Clothing and equipment** - Knows importance of;

- Personal safety Page 4 - 5
- Clothing and buoyancy Page 4 - 5
- Boat buoyancy and basic equipment. Page 6 - 7

**Emergency equipment and precautions** Page 48

- Knows importance of first aid kit and flares including stowage
- Visual methods of attracting attention
- Action to help those in distress

## **SECTION C – COASTAL**

Not applicable to Peterborough Sailability

## **SECTION D – EXPERIENCED SAILOR’S DIRECT ASSESSMENT**

Direct assessment is done in a shorter session and is for people who have the experience already but not the certificate.

### **Instructor ~ Practical Session**

- Demonstrate batten tension before hoisting the sail
- Hoist the sail with someone sitting in the boat, demonstrate the sequence for using downhaul, outhaul, kicker, explain why and how they affect the sail controls.
- With the boat positioned so that the sail fills on the tack, demonstrate sail set and trim for upwind light, medium and heavy weather. Explain settings and how the boat should feel.
- With the boat positioned so that the sail fills at right angles, demonstrate sail set for off-wind light, medium and heavy weather. Explain settings and how the boat should feel.

### **Instructor tips;**

- Keep it simple. Don't offer several different solutions and don't self-contradict
- Try to start a discussion whilst demonstrating each topic
- Get people to move around the boat and view the sail shape from different angles
- Get people to say what they do in each situation and whether it works
- Prepare a summary to use at the end and ask for questions

### **Aide Memoire to the RYA Teaching Method for Double Hander's**

Where appropriate shore drills and theory sessions can be used before practice on the water. Whenever delivering a session keep it short and sweet. (Use of models / teaching aids) Don't overload your students with too much information at one time

### **This can be covered in one or two sessions**

- Clothing - Buoyancy Aids – Gear - Page 4
- Rigging / Launching - Page 6 – 9 and Shore Crew Manual

### **All in one session on water ~ instructor in hull**

- Familiarisation – Demonstrating, tacking, gybing, sails
- Basic Controls - Across wind, control, speed, slow
- Land Drill – shore or water (most can see this on water)
- Swap over and practice skills alongside or in water – trainee in Hull

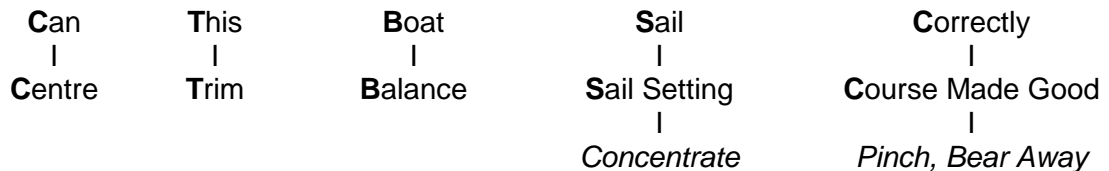
**Sailing across wind, tacking either end** - Basic Principals, Page 20  
- Flip chart 1

### **Going To Windward - Explain why we tack**

- Reason - to get upwind
- Points of sailing windward – beam reach, close reach, close haul (page 16)
- Best way to get up wind
- Sail close to wind / or too close
- No go zone
- Sail just off wind (at roughly 50 degrees) for better performance

## The Five Essentials and use them to tack

Page 19



Practice the 'Five Essentials'

## Going Downwind

- Demonstrate gybing, broad reach, training run and run
- Land drill for gybe
- Practice gybing all way downwind
- Triangular Course: do a lap then get them to try
- Further Practice – as above – could do a follow my leader exercise

Page 24

Flip Chart 2

## Separate Exercises

- Tying up to a buoy
- Coming Alongside
- Man overboard
- Launching
- Recovery

Page 32

Page 33

Flip Chart 3

Flip Chart 4

Flip Chart 5

(Remember ~ planning, approach, manoeuvre and escape)

**During all of above, practice should be gained in the following.**

Stopping and Heave to

Page 18

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## FLIP CHART ONE

### How to Tack a Challenger Boat

- Have a look around
- Say 'Ready About'
- Say 'Lee Ho' and gently push tiller towards the boom (Leeward side of boat)
- Ensure sail is pulled in as you proceed through the turn
- As the sail fills on the new tack, centre the tiller
- Helm trims the sail and continues on the new course

## FLIP CHART TWO

### **How to Gybe a Challenger Boat**

- Steer onto a training run
- Have a good look around, especially under the sail
- Say 'Standby to Gybe'
- Wait for a reply, if you have crew, and sheet the sail in to at least half way
- Say 'Gybe Ho' and move tiller away from the boom and continue to sheet in
- As soon as the boom crosses the centreline, centralise the tiller and as the boom continues over the boat ease out the sheet
- Helm trims the sail and continues on the new course

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## FLIP CHART THREE

### **Man Overboard - Challenger boat**

Page 71 of Instructors Handbook

However we should gybe instead of tack

Page 81 of Instructors Handbook *(last paragraph)*

- Regain control and steer onto a close reach. (Radio for assistance if available)
- Maintain visual contact (and keep shouting reassurance to MOB)
- Sail away on close reach for 10/15 boat lengths to give room to gybe without ending up too far down wind - but do not lose sight of the MOB
- Gybe and bear away sharply (tacking could fail)
- Position the boat (downwind of the MOB) so that final approach is on a close reach
- Spill & fill the mainsheet to control boat speed which should be slow on the final approach
- Stop to Leeward and immediately beside MOB
- Retrieve the MOB from between the windward sponson and the main hull to enable them to hold on to the main cross beam

A flick to windward on the tiller helps prevent the boat tacking on top of the MOB, who will act as a drogue or sea anchor to keep the dinghy in the basic hove to position.

## FLIP CHART FOUR

**Launching** refer to Shore Crew Training Manual

### **Prior to Launch**

- Consider Weather conditions / is Reefing necessary
- Check radio, paddle, rudder/tiller, bungs, rigging, mainsheet, and boom out of way
- Check appropriate buoyancy aids, wet weather gear fitted on crew/sailor
- The carers are responsible for assisting the sailor into the helm seat. Be vigilant as to the safety of those concerned
- The Buddy should ensure that at least two additional crew wearing buoyancy aids are available, to assist with the launch. (Three in all) Take control of all manoeuvres

### **Launching**

- Request shore crew help and permission from shore-master
- Check for obstacles, on tarmac, slipway and in water
- Supervise and control manoeuvre down slipway and into water, ensuring shore crew, not between boat and water
- Once trolley in water, sit on Buddy Seat / Double Buddy Seat before too deep
- Once off trolley, boat to be turned into the wind, allowing for the direction of the sail /main sheet
- Drop centre board and rudder slightly to provide steering
- Have a look around. Request to be pointed in appropriate direction and start sheeting in, just enough to keep moving
- Once in deep enough water, drop rudder and centreboard and trim sail

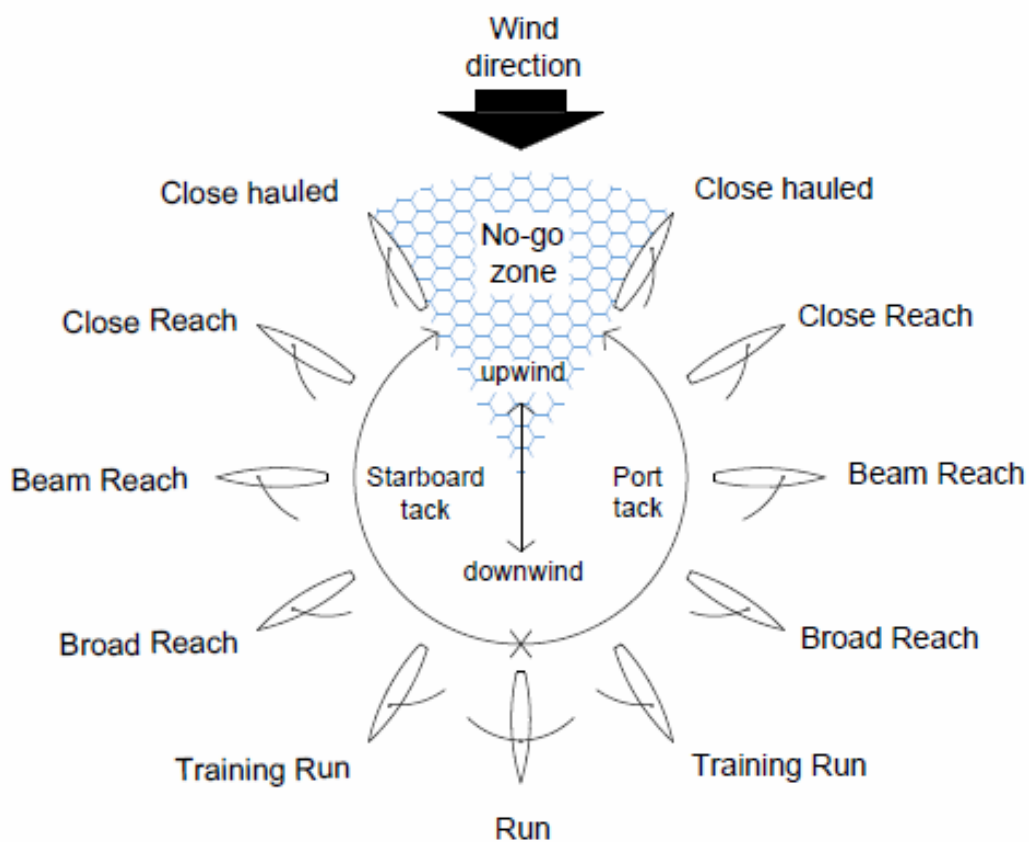
## FLIP CHART FIVE

### Recovery

- Await permission from shore-master. Ensure shore crew available
- If possible, start the approach, leeward of the slipway, on a beam reach, spilling wind to control speed. (Plan an escape route). If not possible to approach on a beam reach, make sure you approach in the most controlled way that the conditions allow
- Partially raise centre board and rudder. Leave enough to provide steering
- Turn into the wind to stop, ensuring main-sheet uncleated. It may only be possible to 'Heave-to'
- Fully raise centre board and rudder. Dismount buddy seats as soon as shallow enough, once floated onto trolley
- Ensure painter secured to trolley before recovery. The Buddy should take responsibility for recovery (as for launching.) Ensure boom safely out of way of client/sailor

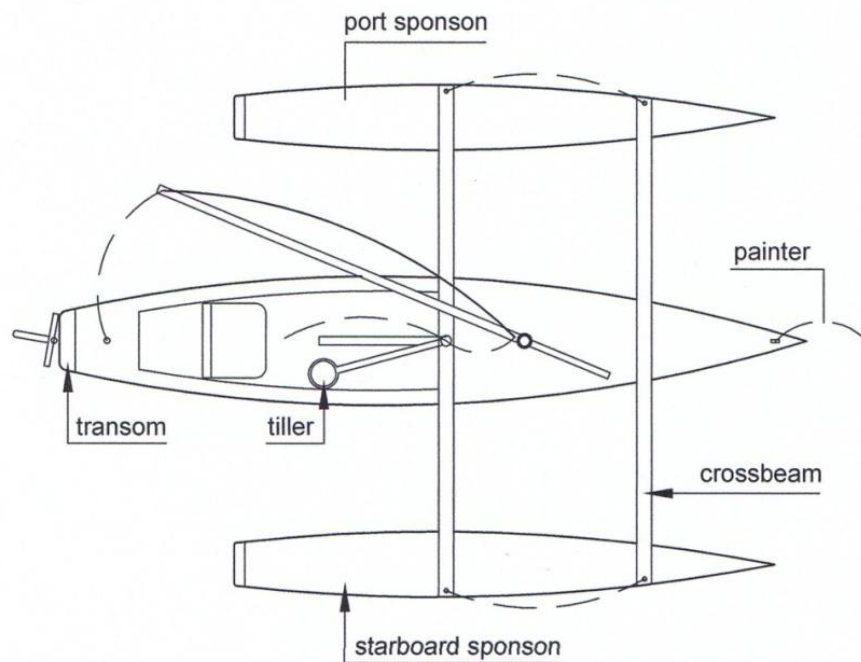
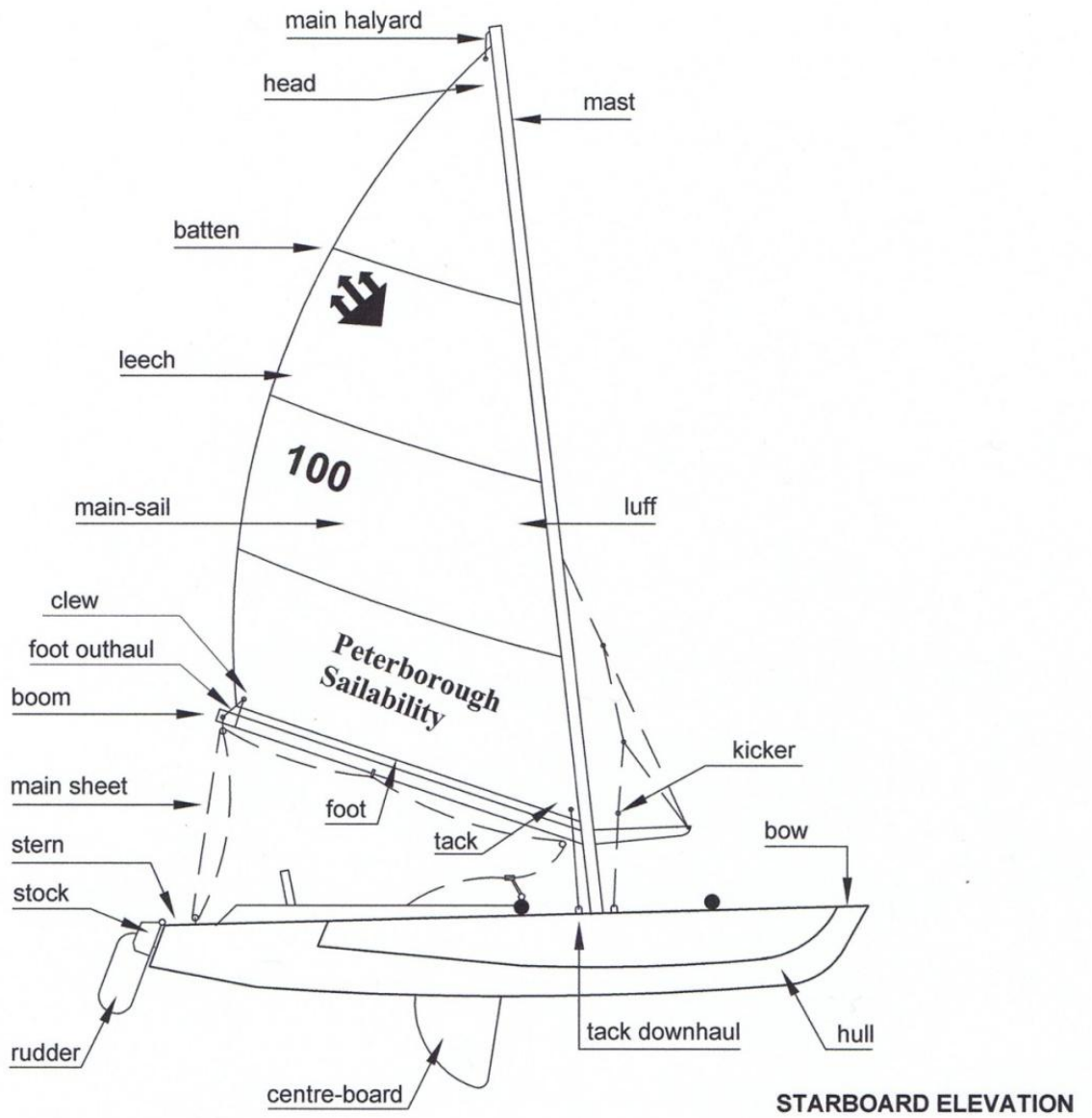
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**POINTS OF SAILING**      see page 17



The points of sailing describe a boat's course in terms of the angle of the boat to the wind





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**PLAN OF CHALLENGER TRIMARAN**

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Original Authors; Margaret Bothamley, Jed Walker in conjunction with Lakeside Leisure Sl Simon Mace