For further information about Access Dinghies or to contact local Clubs using Access Dinghies call

Access Dinghy Sailing Association
2/7 Bungaleen Court, Dandenong
Victoria, Australia 3175

61 3 9768 3101

This Booklet belongs to:

Name _____

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Address

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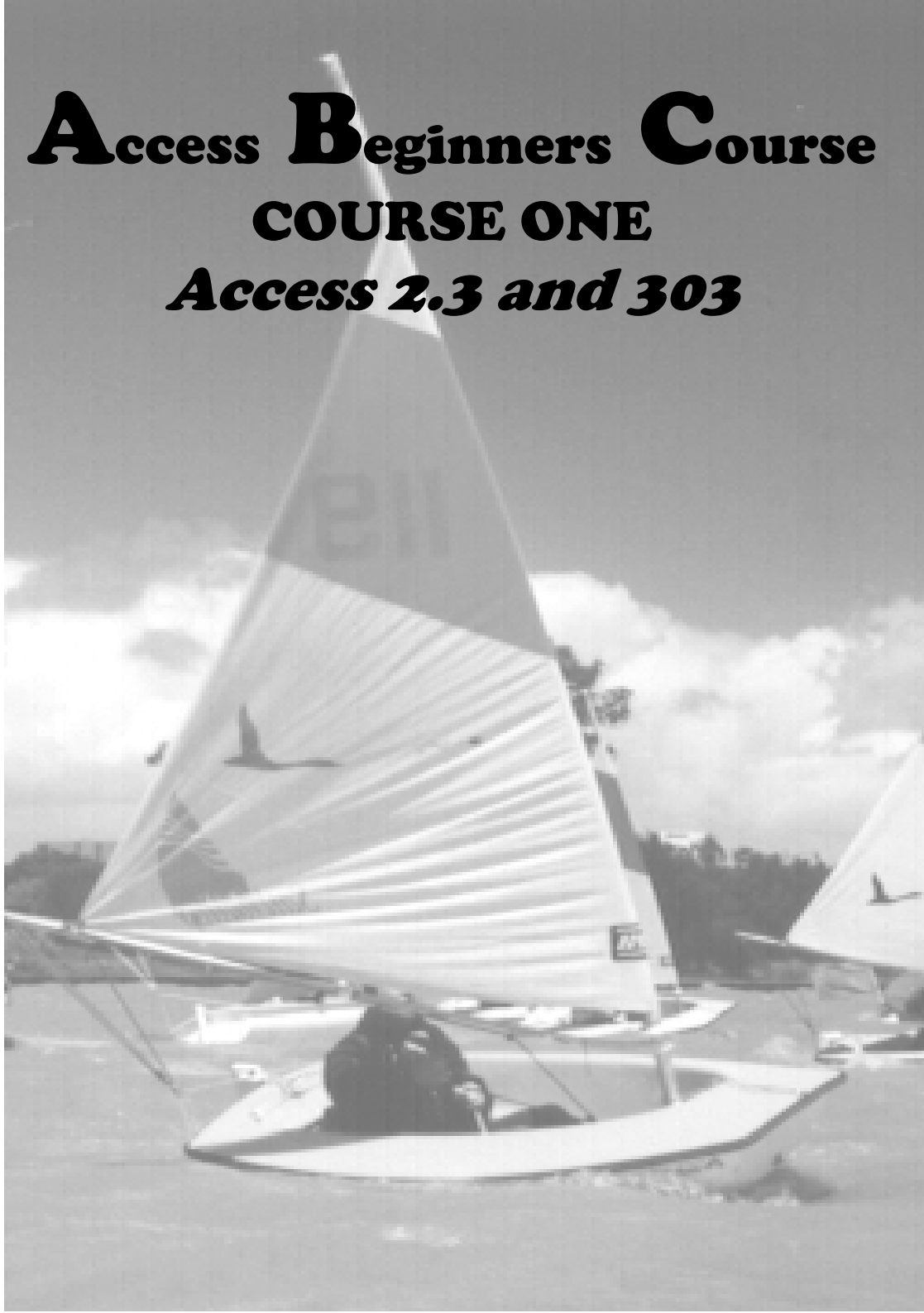
Access Beginners Course

COURSE ONE

Access 2.3 and 303



Introduction

This Course is specifically for use with Access Sailing Dinghies, an ideal craft for anyone to learn the basic principles of sailing in a fun and safe environment. Innovative technical modifications mean that even the very young, the very old and the very disabled are now able to learn to sail.

Access 2.3 & 303

These dinghies are virtually impossible to capsize, but it is imperative that the ballasted centreboard is always fully down when sailing, and locked in position. It is also important for stability and ease of control that the sail is reduced (reefed) to the correct size to suit the wind. Refer to "How to Rig an Access Dinghy" for guidance.

The ABC One

The Course is divided into three sessions and introduces the basic principles of sailing. **ABC TWO** consolidates previous information and introduces the rules of the road and basic racing rules. Each session has a theory component, followed by practical experience. Each session should take approximately 2½ to 3 hours, though depending on the sailors' capabilities may be much longer or shorter. Each student is given a set of these notes and their sailing history endorsed by the Instructor. Send us a copy of this and we will forward your Certificate to you.

Access Dinghy Sailing Association
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Life Jackets

(Personal Flotation Devices)

PFD is a legal requirement to be worn by all dinghy sailors. The term Life Jacket covers personal flotation equipment. There are three types of PFD's approved for recreational boating.

TYPE ONE JACKET: This type offers protection from drowning by maintaining a person in a safe floating position in the water.

TYPE TWO JACKET: This type is known as a buoyancy vest and has a collar.

TYPE THREE JACKET: This type is known as a buoyancy vest but has not collar

Hints for Instructor

Explain why life jackets are so important and must be worn at all times.

Demonstrate the importance of correct size by lifting a too large jacket over the upstretched arms of a child.

Sunburn

1. There is increased risk of SUNBURN when sailing due to the glare of UV rays reflecting off the water.

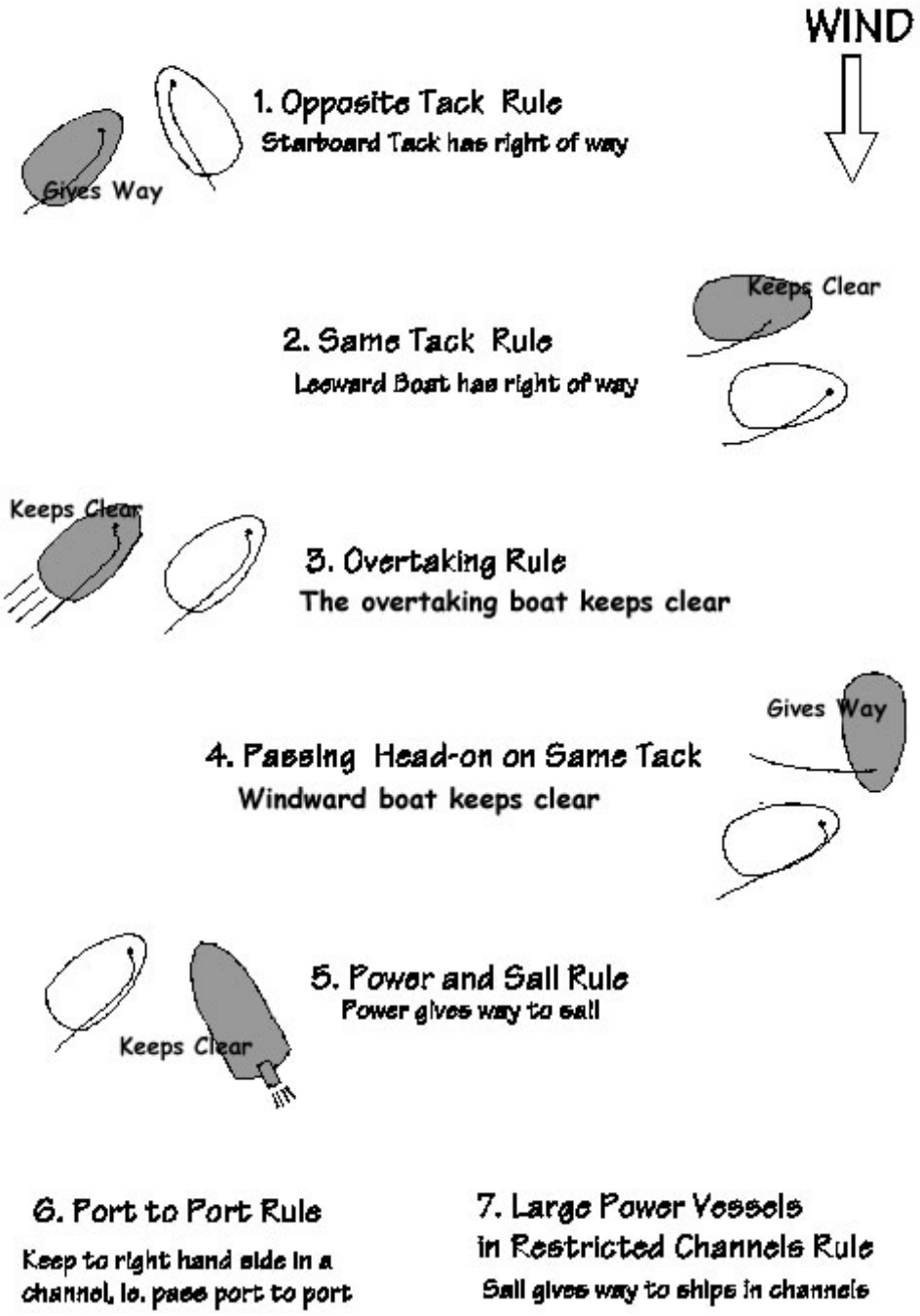
2. For sun protection wear a hat which covers the ears and neck, best is the "foreign legion" type as it doesn't blow off. Also wear a long sleeved shirt, long pants, even socks.

3. To exposed skin areas apply a broad spectrum sunscreen of Factor 15, or preferably use zinc cream which probably gives better protection.

COURSE LOG – Completed by Instructor

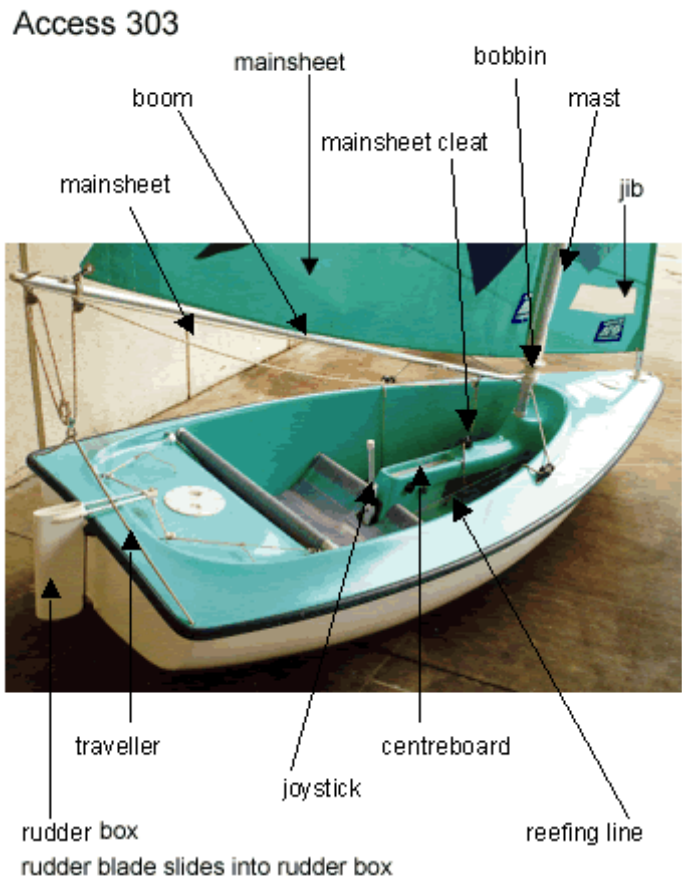
ABC One Module	Date	Instructor's ID	Signature
A			
B			
C			

THE RULES OF THE ROAD



Session A

Boat Familiarisation



Hints for Instructor

1. Show different parts of the boat and explain what their jobs are.

2.Explain the joystick which turns the boat in the same direction as you want to go.

3.Demonstrate the weight of the centre-board and show the stability it generates. (stand on the gunwale when the boat is launched). Explain that because of the deep centreboard do not sail too close to the shore or they will run aground.

4. Show how the sail area can be reduced in size, (this will be done for those who need it).

5. Show the high boom which clears their heads.

Port and *Starboard*

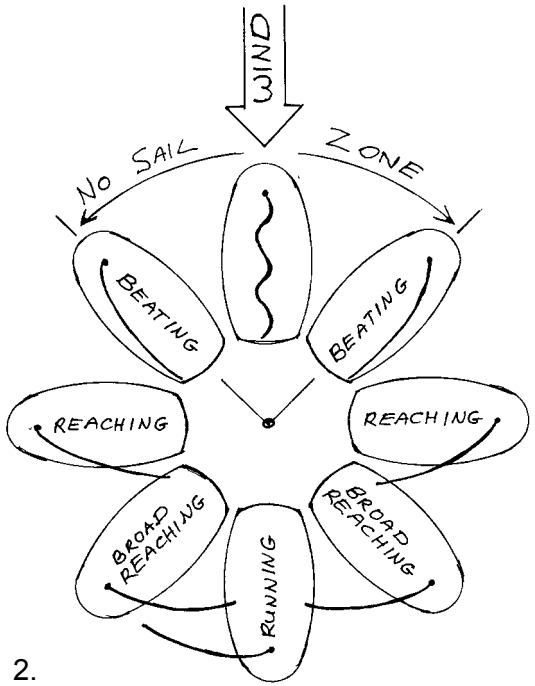
1. When facing forward, the left side of a boat is called Port*, and the right side is called Starboard*. You can remember this by saying: "how much Port is Left in the bottle.

2. To assist in navigating at night, the front of an oncoming boat's Port side has a red light, *the Starboard side's light is Green*. To remember this think: "Port wine is Red".

3. When 2 sailing boats are on a collision course, the one on the Starboard tack has right of way. *A Starboard tack is when the wind is coming over the right hand side of the boat. So Starboard is Right and has Right of way*. See Page 12 – Rule 1.

4. An exception to this is when one of the sailing boats on the collision course is sailing into the wind and the other is running with the wind. Here the boat running with the wind must give right of way as it is said to be more manoeuverable. See Page 12 – Rule 4.

Wind Direction

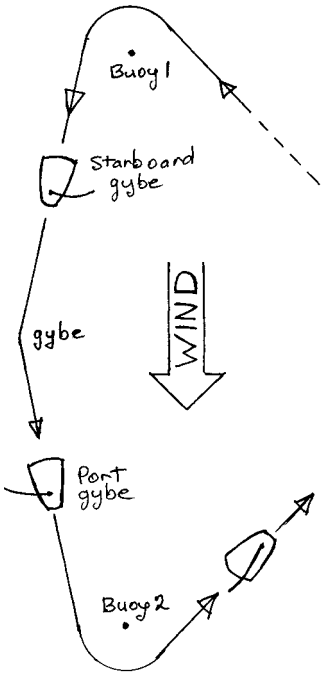


Set up a boat on shore in the same general direction as the sailors will be going whilst out on the water – reaching. Rotate the boat to demonstrate going about and gybeing. Demonstrate the correct way to haul in the sheet prior to gybeing.

4. If the steering is heavy when running in a strong wind it is because the sail, which is square out to one side is trying to twist the boat around and off course. If you can lean the mast over centreing the sail above the boat it will ease the pressure on the rudder.

5. If you are to gybe at the leeward mark haul in the sheet to help control the gybe, round the buoy and you are already set up for the first beat upwind.

Tacking (Gybeing) Downwind



Explain that the boat is more controllable and will sail faster with the wind coming from over the side rather than dead astern. There is also a definite disadvantage if caught sailing by the lee.

Demonstrate using the whiteboard the right time to gybe considering wind shifts, speed through the water and the position of other boats, and the meaning of "sailing by the lee".

Continue on upwind changing tacks within the laylines, rounding the mark as before and practicing gybeing downwind, and testing your speed and efficiency by trying to overtake other boats.

Leeway

When approaching the windward mark remember leeway, that is the boat is not sailing truly in a straight line but slipping sideways slightly. This means that when aiming for the buoy you may begin to point too close into the wind [lees than 45 degrees], and you will loose power and stall. It is best to keep the boat at 45 degrees, moving fast with the sail full and if necessary tack across to the other layline.

Demonstrate using the white board the effect of leeway when approaching a buoy.

Rounding the Mark

Depending on your course you will either go about or gybe around the windward mark. If gybeing don't forget to haul in the sail to help it over onto the other side.

Running Downwind

1. The course sailed back to the downwind, or Leeward mark is called Running, a Square Run if the wind is dead behind you. Ease out on the sheet till the sail is full and catching the maximum wind.

2. Most likely you will need to change course downwind and can gybe from side to side to take advantage of windshifts and to maneuver to overtake other boats, very easy when running as you can block off their clear flow of wind.

3. With the sail out square to catch the wind when running particular care must be taken to haul in the sail before turning the boat to complete a gybe. As the sail fills from the other side immediately ease out on the sheet allowing the sail to set square to the wind on the new course.

Reaching

In Session A we will be sailing between two buoys at approximately 90 degrees to the wind, this is called reaching.

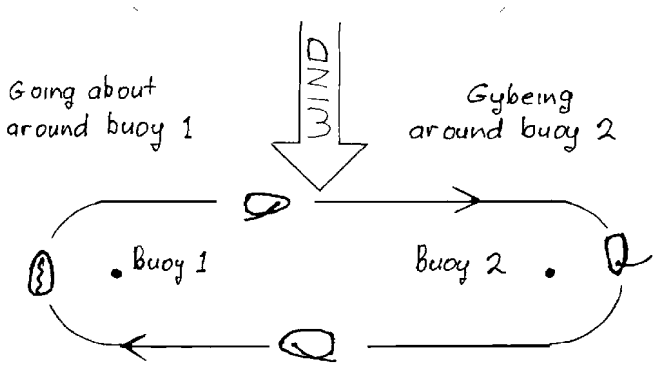
1. When sailing across the wind (reaching), we set the course, then set the sail.

2. Use the joystick to steer the boat in the direction we want to go, then return the joystick to near centre to sail a straight line.

3. Let the rope out until the sail is flapping in the breeze – this is a good way to see the direction of the wind.

4. Pull in the rope until the sail just stops flapping – this is the basic setting for the direction you want to travel.

5. Remember this concept – change the direction of the boat and change the setting of the sail.



Session A is sailed reaching as it puts off the complication of leeway until the sailors are more experienced.

Set up two buoys about 50 m apart to sail a sausage going about at one end and gybeing at the other.

It is imperative to set the correct course for the learner sailor to ensure that this initial experience is achievable and therefore enjoyable.

Overly reef the sails for the initial experience.

Maybe use of the description "clockwise" and "anti-clockwise" to help explain the direction around the buoys.

Going About

1. When you turn around the buoy and the wind is coming from in front of the boat the turn is called “going about”.

2. To “go about” we push the joystick away from the sail and hold it there.

3. The boat turns, and as the wind fills the sail from the other side return the joystick to near centre.

4. Let the sail out until it starts flapping and then pull the rope until the sail just stops flapping.

5. The wind will often change direction and therefore it is important to keep checking that the sail is set correctly.

Ensure that the students understand that if things get out of control, let go of rope and steer into the wind and the rescue boat will come to their aid if they cannot get going again.

Gybeing

1. When the wind comes from the back of the boat and crosses behind the sail, the turn is called a “gybe”.

2. To “gybe”, the correct technique is to pull in the sail just prior to the turn.

3. Then push the joystick toward the sail and hold it there while the boom sweeps across overhead.

4. Then centre the joystick to head the boat on the new course.

5. Ease out the sail until it just begins to flap, then pull it in until it just stops flapping.

The significance of gybeing is better understood and controlled when introduced early like this alongside “going about”.

Reef the sails even further in a strong breeze.

Returning to Shore

Explain what to do when approaching the pontoon or shoreline so the boat does not run aground. You slow the boat by easing out the sail and /or pointing into the wind before you get to shore or to the pontoon.

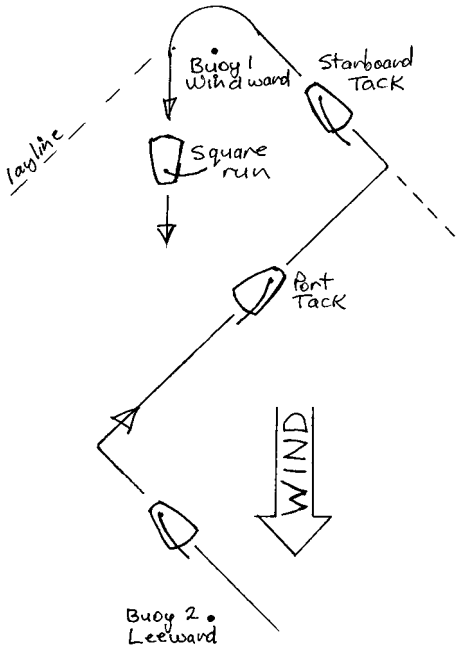
Session C

Tacking to Windward

1. The closest course you can sail to the wind is 45 degrees which we refer to as Beating. [also close hauled, sailing upwind, sailing to windward. To sail to a point directly upwind involves a series of zigzags, which are called tacks. They are either Port tacks or Starboard tacks depending on the side the wind is coming from. (Port tack is left, Starboard is right.) Therefore if the wind is coming over the PORT SIDE, you are sailing on PORT TACK. If the wind is coming over the STARBOARD SIDE, you are sailing on a STARBOARD TACK.

2. For your zigzag course to be most effective you should select the tack which takes you most directly to the up wind [windward] mark.. If the wind changes direction the other tack may be more favourable and presuming you have right of way and wont interfere with another boat, you should go about, or tack.

3. It is also time to change tack when you reach the “layline” which is an imaginary line at 45 degrees to the wind from the windward mark. It is customary to tack within the port and starboard laylines.



In session C set one of the 2 buoys dead to windward of the other to facilitate tacking to windward and a square run return. Draw the course on the white board to demonstrate the wind direction and the corresponding laylines. Explain why one should tack when reaching the layline.

Beating Continued...

7. We say pushing it back on course, as the boat will always be trying to point up into the wind and you hold a course by pushing downwind on the joystick. This is the correct balance for a sailing boat and called "WEATHER HELM" - the boat wants to turn up into the weather. "LEE HELM" is when it wants to turn downwind.

Reefing

1. Reefing is reducing the power generated by the sail.

2. Reefing is often necessary in strong winds and on our boats it is accomplished by pulling a cord which rotates the mast, rolling up the sail like a blind.

3. To reef, the port side (left side) reefing line is pulled with the left hand and is jammed in the clamcleat positioned on the console by your left knee.

4. The first turn of the mast flattens the sail which greatly reduces its power with little reduction in area.

5. Further turns roll away the sail and require an easing of the outhaul which is cleated on the boom.

6. To increase sail area, uncleat the port reefing line and pull the starboard line with your right hand, re-cleat if necessary and adjust the outhaul.

7. Do not rotate the mast by hand as the reefing line may derail.

Session B

Broad Reaching

Reaching is sailing at approximately 90 degrees, or at right angles across the wind. If the wind is coming from slightly in front (less than 90 degrees) it's called close reaching, if it's coming from behind a little it's called broad reaching.

When broad reaching, sail a straight line to the next buoy easing the sheet out so the sail is approximately at right angles to the wind.

Aerodynamics

A sail working to windward and reaching obeys the same laws as an aeroplane wing. The air is parted at the leading edge and that which passes over the curved top of the wing has to travel faster than the air which goes straight along the wing's flat under surface. This creates a low pressure in front and above the wing which the wing lifts to fill. To develop more lift for low speed operation the pilot lowers the ailerons on the wing's after edge which greatly increases the distance the upper air must travel, and therefore its speed, with a resulting lower pressure which "sucks" harder at the wing. A sail works the same way, the wind parting at the mast, the sail being cut and shaped with a similar cord [cross section] to the wing. The sail can be adjusted to alter its draught and therefore the pressures it generates. On Access Dinghies the sail draught and area can be altered by adjusting the outhaul and by rotating the mast or "reefing".

On the white board draw a typical wing section with ailerons and show the comparison to the aerofoil shape of the sail.

Beating

1. It is not possible to sail straight into the wind as the boat will be blown backwards. It is possible though to sail into the wind at an angle of approximately 45 degrees. This is called “beating”.

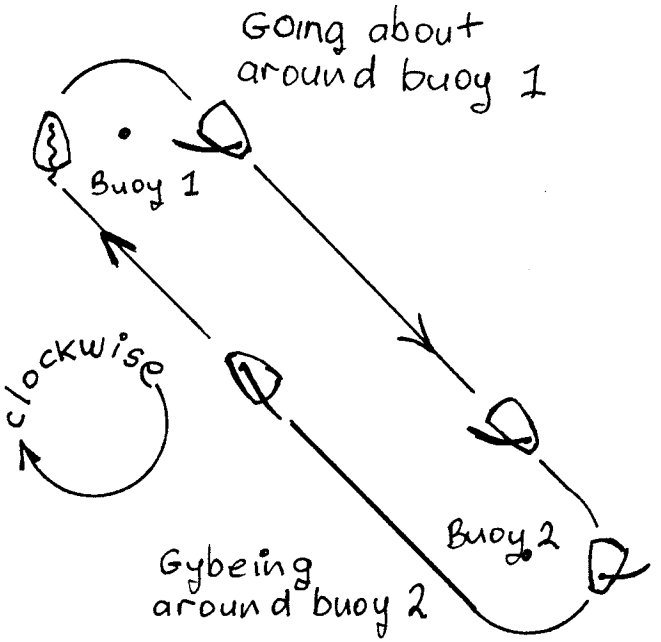
2. To beat into the wind we pull in the sail and point the boat gradually up into the breeze until the sail first begins to flap. Then quickly, before losing speed, steer back slightly until the sail first re-fills. This is the course to hold in relation to the wind. Refer to the paragraph called “Aerodynamics” to see how a sail works just like an aeroplane’s wing.

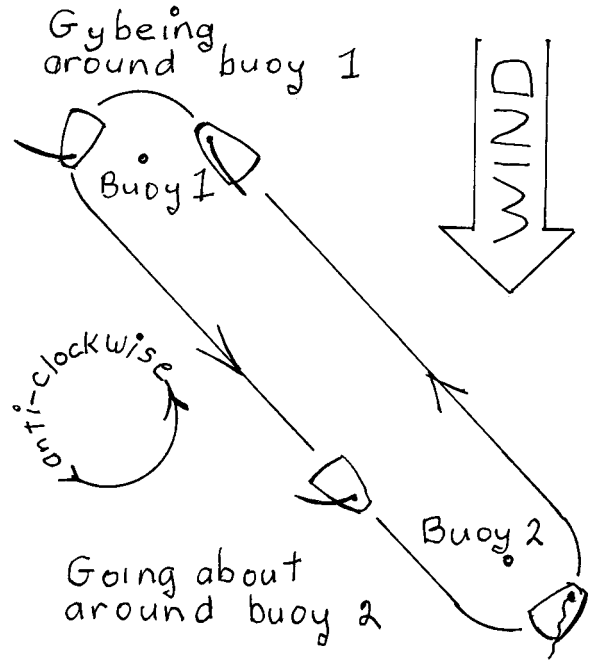
3. The correct beating course is therefore governed by the direction of the wind. As the wind shifts you need to follow it by changing the direction of the boat. This is called “sailing on the edge”, “sailing close to the wind”, or “beating to windward”.

4. Trying to sail to a buoy to windward is like climbing a slippery mountain, you trudge uphill and if you aren’t careful can slide back down and have to do it all again.

5. To climb this mountain with maximum efficiency we have to point as high as possible into the wind, yet still maintain enough power to achieve adequate boat speed through the waves. When you get it right some call this sailing “in the groove”. The compromise is finding the balance between sailing too high into the wind and stalling, and sailing too low, wasting ground already won (sliding back down the mountain).

6. As the wind is always shifting we also need to be constantly checking on its direction and that we are sailing "in the groove". This is done regularly by very carefully pointing up into the breeze till you sense the leading edge is about to luff, then quickly, before you lose power and stall, pushing the boat back on course with the sail full and working properly.





For session B set one of the two buoys to windward to facilitate an easy beat and a broad reach return between them. Draw the circle on the white board to demonstrate the wind direction, the no-go sail zone, the need to sail to windward, and the sail set to the wind, and leeway.

Explain that the boat will slip sideways when sailing to windward resulting in the straight line beat to the buoy being sometimes unattainable. If there are windshifts a tack may therefore be necessary.

In session B, the instructor is constantly reinforcing the concept that when sailing to windward the sail is set, the course adjusted to suit the wind direction.