

Sailing an Access Dinghy Quickly

Introduction: As we all know sailing an Access dinghy on Oulton Broad is a lot of fun. However it is very pleasing to note that having mastered the basics of sailing safely, many Waveney Sailability sailors are looking for the next challenge. Over the last eighteen months we have organised an informal race series towards the end of our Tuesday session. Last season's series was keenly contested and you may have noticed that somehow the same people finish at the front whatever the wind conditions or the course that has been set. Sailing quickly is not a mystery and as Arnold Palmer once said 'it is funny that the more I practise, the luckier I get'. With this in mind I thought it would help if I write a few tips on sailing quickly and techniques to practice.

Sail setting: A sail works best when wind flows along it from front to back; the wind passing the leeward side (*the down wind side*) has to flow round the curvature of the sail, travelling further than the wind on the windward side (*the side the wind is coming from*). This causes a difference in air pressure and it is this difference which 'sucks' the boat through the water (without curvature in the sail it has no power to push you along). The Access dinghy sails have very little 'built in shaping' in the panels so the sail shape is adjusted by changing the outhaul tension (*sail control on bottom corner*). The amount of sail curvature (*usually called 'fullness'*) must be set for the wind conditions on the day. In medium conditions (Force 2 to Force 3) we want the 'foot' (*bottom*) of the sail to be between 6 & 8 inches away from the boom when sailing to windward (*into wind*). In strong winds the outhaul is pulled on harder to flatten the sail which makes the boats much easier to control. In light airs it is necessary to reduce the outhaul tension to allow the sail to take up a smooth curve.

The same rules apply to the jib; the difference is that the sail curvature is set every time you tack! If you pull the jib sheets (*rope controlling sail*) in too tight, the jib mast bends and this flattens the sail and it will have no curvature and no power. The jib fairlead (*guide for sheet*) / jam cleats (*device for holding rope*) are mounted on a track so they can be adjusted backwards and forwards, they should be set in the fully back position. This reduces the angle of the jib sheet which puts less tension on the sail leach (*back edge*) and more on the foot (*bottom*), allowing the sail to twist, which allows more wind to pass through the ‘slot’ (*the gap between the jib and the back of the mainsail*). This increases the speed of the wind passing the back of the mainsail, which gives more drive.

Reaching: (*wind coming over the side of the boat*). This is the fastest point of sailing and the usual mistake is having the sails in too tight. Steer the shortest course in the direction you want to go and then adjust the sails, so the wind is flowing along the sails for maximum drive. Making constant adjustments to the sails to allow for small changes in the wind direction is the key to maximum speed. I watch the main sail about half way up the mast, watching for it ‘lifting’ (*beginning to flap*) just behind the mast. If it is not flapping I let the sail out until it does and then pull it in until it stops, ‘playing’ (*pulling the sail in and out*) the sheet six to nine inches. I then check that I am sailing in the right direction, steer to adjust my course and immediately look at the sail again, if it is not flapping I let it out, repeating this process constantly. This ensures that I sail the shortest distance to the next mark, making only minor alterations to my course and the wind is always flowing along the sail for maximum drive and speed.

Beating: (*sailing into wind*). The wind on Oulton Broad (and anywhere else) changes direction by a few degrees constantly, if we are going to sail quickly to windward (*into wind*) we need to use these 'wind shifts' to our advantage. To do this we must first be sailing 'accurately' on the wind, I pull the sails in close hauled (*close to the centre line*), but not too tight so they have a nice curved shape for maximum drive. In an Access dinghy it never pays to have the boom on the boat's centre line, let the sheet out so the end of the boom is above the 'quarter' (*the back corner*). Having set the sails correctly for the wind conditions, 'all' we have to do now is sail as close to the wind as possible, whilst maintaining the boat speed (it is very easy to sail too close to wind and stop the boat). This is one of the most difficult skills of sailing and is the reason experienced sailors who have put in many hours of practice sail quickest to windward. To find the quickest angle (direction) to the wind, I sail the boat in a series of little 'wiggles' whilst watching the sails constantly (look at the front of the jib about a third of the way up) to see when the sail starts to lift (*flap*). When it flaps I turn away from the wind until it stops, straighten up for a few yards (knowing the wind is flowing along the sail for maximum drive) before turning into wind again watching to see when the sail flaps. When sailing to windward I watch the sails about 90% of the time (wasting your time spotting ducks and pretty birds of other varieties is not quick!), only occasionally checking my course and looking for other boats to avoid. By steering in this way the boat is always travelling at maximum speed, whilst also sailing 'close' to the wind for the shortest course to the next mark. If you try this you will find that the boat's heading (*the direction you are steering*) changes at the same time as the wind direction changes, one second you will be heading for the houseboats and the next Broadlands. You are now in a position to decide if you are on the best 'tack' for the shortest course to the next mark. If you are on a 'lift' (*favourable wind shift*) steer into wind and take advantage of it, if it is a 'header' (*sails suddenly start flapping and the boat slows down*) it is time to change

direction by tacking, taking advantage of a 'lift' on the other tack. If you spend time practising these skills your sailing will improve enormously. Ask me to have a sail with you if you need more help.

Running: (*wind coming from behind the boat*). When a boat is running it is pushed along by the wind coming from behind, this is the only point of sailing where the wind is not flowing along the sail. For more speed we need the maximum sail area in front of the wind, to do this we set the sails at right angles to the wind. It is essential to let the boom out as far as it will go, very often the main sheet (*rope controlling the sail*) has too much friction in the pulleys (we are looking at changing them for ball bearing pulleys) for the sail to go out with wind pressure alone, so release the main sheet from the cleat (*grip for rope*), pull the spare rope out and push the boom out by hand. If the jib is flapping about, 'hiding' behind the mainsail in no wind, release the jib sheet and hold the windward jib sheet in front of the fairlead (*eye to guide rope*) / jam cleat (*grip for rope*) to set the jib on the opposite side to the mainsail, again it needs to be set at right angles to the wind direction, this is called 'goosewinging'. This is the fastest way down wind and it will sometimes pay to sail a course which is not directly in the direction you want to go to keep the jib goosewinged. Having done this aim for the next mark and set the sails for a reach, which is the fastest point of sailing.

Steering: All boats are slowed when they are steered; this is because to change the boat's heading (*direction*), the rudder (*steering blade*) is turned at an angle to the direction of travel, deflecting the water to one side. This has a 'braking' effect on the water, so speed is 'lost' by excessive steering. However there is a lot to be gained by steering the boat on the best course, which means we have to balance the gains of going in the right direction against the slowing effect of steering, which means it is important to alter course slowly, without overcorrecting. Unless you are tacking, the steering 'joystick' should only be moved about an inch either side of straight ahead. Making small corrections early is much faster than using the full tiller movement and sailing an erratic course.

Sailing in the strongest wind. When good sailors are not watching the sails and making small adjustments for more speed, they will be scanning the water looking for disturbances on the surface, which show the direction of the next gust and where the wind is blowing strongest. Gusts of wind show up as darker patches on the water surface. At coffee time try standing on the pontoon facing into wind (feel the wind full on your face) and watch the water for tell tale signs about the wind direction and strength. If you do this whilst other boats are sailing you will notice that the boats sailing in the 'dark patches' are sailing faster. Clearly in a race it will pay to sail where the wind is strongest, unfortunately it is not so easy to spot the right place to be when actually sailing, but it is very easy to win all the races whilst standing on the bank! If you spend a few minutes looking at the water before the race you are likely to know where to go when the race starts. When you have raced on Oulton Broad a lot you get to know where the lifts (*favourable changes in wind direction*) and headers (*unfavourable changes of wind direction*) will be in certain wind conditions, however these 'tips' would be too difficult to remember, which is why I recommend looking from the bank on the day, ask me at coffee break.

Trim: Access dinghies are short stubby little boats with wide transoms (*stern or back of boat*). When heavy crew members lay back in the 'deck chairs' thinking they look cool, the crew weight is concentrated at the back of the boat and the transom is 'dragged' through the water by the sails. If you watch an Access dinghy from the bank, you will notice the water flowing along the sides of the boat and turning in round the transom, with lots of turbulence (*whirlpools*) on the surface, this is slow. If you are able to, sit upright in the boat to lift the stern as clear of the water as you can.

Balance: All dinghies are designed to sail their best whilst upright. If they are sailed heeled (*leaning over*) there is more hull in the water on the downwind side and the sails have to push more water out of the way to go forward, which slows you down. Also when heeled the boat wants to turn into wind, to stop this you have to steer in the opposite direction and the rudder (*steering blade*) acts as a brake. If you are sailing by yourself and are able to, you will sail quicker if you move across the boat to sit on the windward side (*the side the wind is coming from*) and balance the force of the wind.

Crew weight: Most dinghies have an optimum crew weight; indeed at Olympic level you are refused RYA sponsorship, if you are not the right size for the boat you want to sail. Compared to most racing boats, Access dinghies are very small and because of this they definitely sail quicker with small people aboard. So the message is either diet, choose a small crew or sail single handed if you want to go quickly!

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