

Introduction

I first wrote this guide in 2006 and made some minor alterations in 2015 to accommodate the latest rules and rigging techniques, plus some more recently identified tips that I thought were worth sharing.

As a crew for around 20 30 years now (where does the time go!), and having sailed at the sharp end of the fleet for much of that time, I thought it might be useful to share my experience and thoughts on dinghy crewing with other members of the club/association.

I've aimed this guide at novice to intermediate sailors who want to sail faster and become more competitive within their fleet. In order to stop this becoming an overly epic tome, I've assumed you know your way around a boat enough to know the general sailing terms, which sheet does what and the basics of how to hoist and fly a spinnaker, dropping it may be another story!

As I've stated, most of my experience comes from crewing in GP14s and this guide is really centred on this experience but I expect that, apart from characteristics specific to a GP, most of these techniques can be applied to any dinghy.

I should probably also highlight that I am an out and out crew and those that know me will confirm that the fleet is a far safer place without me on the tiller! I say this as you will probably get a sense throughout this guide that I have never been a helm (save for squeezing myself into an Oppy with my young boys every now and then) so you will see that I am by no means a hot-shot Olympic crew who govern tactics, race strategy and all that good stuff. I cast an envious glance at these guys, however, when I learned to sail and all my experience since was through crewing alone with the helm working out the tactics using my inputs. That said, you should hopefully see that I'm pretty handy at pulling ropes!

Preparation – The Six Ps to Going Faster Before You Even Get on the Water

They say that Proper Preparation Prevents Pretty Poor Performance (or something very similar) and it's true.

At some point or other I've been involved in the full range of clanger dropping moments such as sailing the wrong course, having the sheets rigged incorrectly, missing the start, and even missing the finish.

The most frustrating thing is the stupidity of it – there's simply no excuse for most of these clangers and if it happens on a Wednesday night when there's only one race, the cat doesn't half get a kicking when I get home!

The answer is to remember the six Ps and be properly prepared for the race in hand. I make no apology if the following checklist is obvious – the fact is that we have all dropped a clanger so it needs spelling out, indeed, Championships have been lost owing to some of the following:

- Arrive in plenty of time to complete all the jobs that need doing. You should be aiming to be on the water with enough time before your start to have at least one practice beat and come back down the course with the kite up, gybed and dropped in the right side for the first hoist. (So you'll need to figure out the wind direction from the first to the second mark,

which you can't do if you're still hopping around the changing rooms trying to get your other leg into your wet suit!)

- Rig the boat correctly. The most common thing to get wrong is the kite halyard and sheets on the wrong side of the jib's. Make sure the kite goes outside everything. Also make sure that the jib halyard shackle is taped up or covered in some way to prevent the kite halyard sticking on it. Another good tip is to make sure the kite halyard is tight when you're pulling the rig tension on – this prevents the kite halyard looping in the mast and jamming on the first hoist.
- Are the bungs in?
- Prepare yourself correctly. Have you got your watch on? Make sure you've got the right clothes on, not so much a problem for club sailing but spending a day at sea brings its own challenges – remember that you can always take off what you've got on but you can't put something on if you haven't got it. Take some liquid and a snack – I take a mars bar to eat just before the start of each race. If it's sunny, take a hat and some sun cream too. Sunstroke doesn't half spoil your enjoyment of the post-race beers!
- Don't forget to sign on or tally or do whatever needs to be done to follow the sailing instructions and record the fact that you are intending to race. Spending a day at sea for a couple of discards is no fun! If necessary, agree with your helm which of you is responsible for doing this task; don't have an "I thought you were doing that" clanger moment.
- Don't forget the course. This is not only which marks and which way round information; you need to know where you're starting (is it a committee boat start for example), you need to know if the course changes after a number of laps, and you need to know the total number of laps. The reason for the latter is that typically the inner and outer marks (or finish line) are not part of the course until the finish so you need to make sure you go through the finish line after the prescribed number of laps. Also, your tactics may change if you know you're coming into the finish. There's a lot of debate over who takes the course and my thinking on this is that both the helm and crew should be familiar with it. From the helm's point of view, they're obviously steering you from A to B but as a crew, how can you be prepared for a hoist, drop, gybe or whatever if you don't know where the next mark is?
- Familiarise yourself with the weather forecast (which may affect your clothing choice if you're going out for a while) and, if you're sailing in tidal waters, know when the tide turns and the currents affecting the racing area.
- As I mentioned earlier, get onto to the water early. This allows you to gain a real advantage over those who leave it until the last minute. Firstly, check out the start line. It is amazingly common for the transits not to be in line with the inner and outer marks. Strictly speaking, the OOD should look down the transits for the start which means that if the inner and outer are set in front of the transit line you could be over and if they're set behind, you can usually take an advantage over the rest of the fleet who start in line with the marks.
- You should also be able to size up which end of the line is best to start from by determining which end of the line, if any, is further upwind. A practice first beat can help confirm this. Admittedly, I leave a lot of this to the helm, who at the end of the day is steering the Good Ship and has ultimate control of tactics.
- If you're sailing on the sea, you should also check out the tide on a mark too.
- Having completed a practice beat, work out the direction the wind will be in from the first to the second mark so you know which side to drop the kite in for your preferred hoist (see the 'Downwind' section on this too.) Always sail back down the course with the kite flying and do at least one gybe – this ensures you've got all the sheets and halyards rigged correctly and allows you time to resolve any issues (if you have to cock your head

sideways to read the numbers or sail maker's logo on the kite, there's a good chance something is not quite right!!). Having this bit of practice also gets you into sailing mode and warmed up before the race starts rather than it taking the first lap of the actual race to get you going.

- Whilst you're doing this practice – don't forget that you need to get a gun, so don't go too far away if the start is coming up. Sound takes a while to travel and you can literally be out by several seconds if you're a good distance from the gun or horn and there's a fair breeze, particularly if you're upwind. I like to get a gun at least two before the actual start if I can – this allows me to check my watch is in synch with the OOD's when the preparatory gun is sounded. I would add that I think it is best for the crew to deal with the time – I think the helm has enough to do at the start and shouldn't add looking at their watch to their list of tasks.
- If you're sailing where there's weed pop the centreboard up one last time to clear it.
- If you're sailing somewhere unfamiliar, you need to orientate yourself with the first mark. Inland, it should be straightforward enough to pick out a couple of landmarks, but out at sea, you might have to take a compass bearing because the first mark is actually out of sight. Go past the committee boat for the bearing, which should be shown on a board. Don't take it for granted that the windward mark is directly upwind, you can become disoriented if you start late in a gate start for example.
- For club sailing, it is quite common for a fleet to start before you. Watch their start and see who performs best up the first beat – valuable information for when you're on your way up there.

The Start

At the preparatory gun, you should by now have completed all the pre-race tasks and your watch should be going. Between you, you should have a starting and first beat plan and you now need to concentrate on getting the boat in the right position for the start.

Make one last check to ensure the boat is correctly trimmed ie. correct amount of rig tension, outhaul on, kicker set and centreboard down. It's quite easy to forget these when you're pottering about before the start and they haven't been reset since you sailed down the course. Finding out after the gun goes is too late!

The key thing at the start is for the boat to be going flat out when it crosses the line, ideally as the gun goes. Granted, this is not an easy feat so it's better to play safe and not be over the line at the gun but you should be very close. One thing is for certain, the wrong approach is 1. 'bang', 2. pull the sails in and 3. wait for the boat to get up to speed. You can pretty much guarantee the fleet will have gone by this point!

The first beat is absolutely critical in any race and particularly in GPs when places don't change too much downwind (compared to say the RS400s), hence it is the start that is the foundation to a good race.

You have got to be thinking first row if you're serious about a good start and the best bet is to get into position early, ideally into a nice gap which allows you to move down as well as go up. As a crew you can't obviously steer the boat but you can use your eyes and look down to leeward (where the helm usually can't see) and keep him informed of what's going on. You should also be keeping the helm advised of the time remaining and he should be keeping you

advised of how much speed he wants on the boat which will govern how much the jib should be pulled in.

You can kill the boat speed altogether by pushing the boom out, you can even drift sideways if you pull the centreboard up – but don't forget that the boat needs forward speed to steer and, most importantly, you need to be going at full speed for the start.

In the last minute, call the time out every ten seconds (or whatever the helm feels best with) and in the last ten, call out every second.

Be aware of the wind conditions and how long it will take to get the boat going at full speed. As a guide, the last ten seconds should be concentrating on building up to full speed (assuming your helm has given you enough room – beat him regularly until this becomes standard practice!) Keep an eye on your tell-tales to make sure the jib is pulling correctly and is not over-sheeted. The helm will almost always be slightly bearing off the wind to avoid being over the line so over-sheeting is easy to do. Again, depending on wind conditions, be aware of the weight needed to keep the boat flat (your practice beat should have given you an idea but the wind changes all the time.) As you start to wind up, transfer your weight to windward as the boat requires it. In the last five seconds, you should be fully hiked out (if necessary) and giving it large!

Just a quick word on gate starts; don't be fooled into thinking that timing doesn't matter because it does. Make sure you understand the starting sequence and the timings. Keep an eye on the pathfinder and don't lose touch with it. As it starts its beat on port, I keep pointing to it so my helm can look around to manoeuvre the boat and, whenever he needs to, he can glance at my pointing arm to quickly find the gate and gauge the timing of our start. If you're starting late (further up the right side of the beat) remember that a) the path finder might have tacked off so you will now be looking for the gate boat which probably won't stand out as much, and b) there is usually a time limit for the gate to be open so once you have counted down to the opening of the gate you should also count up to the closing time. There is no greater sinking feeling than realising you've got to reach down to the end of line as the rest of the fleet charges off in the opposite direction to the first mark – this is from experience!

Upwind

When I was first learning to sail, like most people, I was always confused with the endless list of things that needed doing. I was constantly being bombarded with "weight in", "more weight", "watch your jib" and so on. I learned after a while that the best thing to do was keep a list of priorities in my head and, at any given moment, I could run through the list and carry out the appropriate job. Because sailing is a rapid response sport, the list needed to be short so here it is: Weight, Trim, Niceties. The order is critical.

Priority 1 - Weight

As a crew, you are not encumbered with a tiller and so you are the one best suited to move in and out of the boat as the wind dictates. It is only when you have reached the extent of your range of movement ie. from being fully hiked out to sitting on the leeward deck, should the helm have to move. Like it or not, the best upwind boat speed comes from the helm being comfortable, that way he has a consistent view of the sails and scenery beyond in order to spot shifts, the tiller remains as still as it needs to be and he can gauge how you're doing compared to other boats. Just to make it more of a chore for the crew, in those wind

conditions where there is no right position – one minute you're needed out, the next in etc, you have to move in such a way as to avoid blocking the helm's view too! Being tall, this is a tricky one for me so I tend to sit on the bench ducking down for the 'in' moments and then lie with my back on the side deck and slide further in or out for the 'in between' and 'out' moments.

Upwind, more than any other leg, it is paramount that the boat is kept flat. This applies to almost all dinghies but the GP's design with its square edged chines means that the boat really digs in if it is at all heeled and the helm needs to use a lot more rudder to keep the boat on the wind. The only exception to this is in really light airs when the boat should be sailed with a slight heel to keep a shape in the sails, which more than compensates for the dig-in effect.

You both need to communicate on the issue of weight, I sometimes find that if I'm concentrating on the jib in those semi-hiking conditions, I can be a bit slow to realise that the helm has dumped some mainsail to keep the boat flat (after all, if he is doing his job with the mainsheet correctly, the boat should never heel) and so I ask my helm to give me a (polite) reminder to get my weight further to windward if this situation occurs. By the same token, if you're flogging yourself out in a full hike and your helm's still perched comfortably on the side, you're more than entitled to request a bit of assistance too! Also, don't be afraid to point out that the boat is sailing at an angle if your helm is concentrating on something else or has just become unaware of a gradual increase in wind – particularly common with cleated centre-main users.

Whilst repeated pumping or rocking is not allowed, you can take advantage of those increases in wind which heel the boat over; actively flattening the boat is a key element of good boat speed in light-medium airs.

Finally, keep in mind that you may have to adapt you hiking out style when you're on the sea. I tend to find that I hit a lot of waves if I hike out as I would on flat water which, apart from being a rather soggy experience, also acts as a very effective brake. Consequently, I have to angle myself back slightly which loses a bit of hiking power but doesn't slow the boat more than the brake effect. Granted, if I had bionic legs I would be able to straight-leg it and keep myself above the waves but I don't, as I suspect a lot of you don't either, hence the compromise.

Priority 2 - Trim

Jib/Genoa

After weight, trim is the second most important element on our list of priorities for good boat speed. Remember we're talking about the upwind leg in this section and you may be thinking (like I used to) that all you need to do is pull the jib in and lean out as required. The number of crews I see with the jib jammed in and sitting on the thwart facing aft watching other boats go by kind of backs this up!

In fairness, wind speeds that require you to be sitting on the side all the time require the jib to be pulled in tight and the helm will govern the heel of the boat with his mainsheet. If it's honking, you might need to be on the ball to ease or even spill your jib if required.

In any other wind conditions, I think the crew is responsible for the biggest accelerator pedal the boat has: the jib and the slot it makes with the mainsail. I won't profess to know much

about aerodynamics and sail characteristics but over the years I have learned that the slot (the overlap between the jib and the mainsail) and the air flowing through the slot has a massive effect on boat speed in winds where you're just having to sit in and less.

In saying all of this, I'm assuming that your boat is set up correctly for the wind speed in terms of rig tension and jib cleat track position – refer to your supplier's information for this.

The general gist of it is as follows. In medium airs when you're both sitting on the side and the jib is in tight, the rig should be set up so that there's a slot between the jib and the mainsail of a couple of inches or so. This allows the air to flow across the jib and is accelerated through the slot, helping to drive the boat forward.

The problem that occurs is when the wind eases and you move into the boat slightly (on to the bench), there is then not enough wind pressure on the jib to keep the slot open, hence it closes and chokes the air-flow through the slot and kills the boat speed.

The trick therefore, is when you start to move onto the bench as the wind eases, you need to ease the jib fractionally to keep the slot open. As the wind eases even more, the jib sheet tension should also be eased further. Anyone observing a boat in which I'm crewing in this sort of weather will see me regularly leaning into the boat and looking up at the slot. I use the spreaders as a reference point to gauge how much I need to ease the jib sheet to keep that couple of inch slot gap.

Try this when you're practising before the start – it is absolutely amazing how tiny alterations in the jib sheet tension make big differences to the slot gap. It is only when you see this that you realise how much of an effect this must have on boat speed.

Remember that as the wind picks up you'll need to transfer your weight and harden the jib back in ideally at the same time.

One final note on upwind jib trim in light-medium airs to get that bit of extra boat speed: if you get a big lift and see the back tell-tales flutter, crack off the jib to suit and then ease it back in as your helm points up – this lets him point up gradually rather than jamming the rudder hard over and effectively putting the hand brake on. This technique can gain you the odd boat length when it starts to get really light.

Kicker

The other element of upwind sail trim is in playing the kicker. In a lot of boats, the helm will play the kicker but for some helms, they find they've got their hands full playing the mainsheet and steering the boat, particularly on shifty inland waters so it is more convenient for the crew to adjust the kicker as the wind strength changes.

Below is an extract from Richard Estaugh's Sail Tuning Guide on how to set the kicker:

“A tell tale has been positioned on each batten pocket and these are vital to the correct use of the kicker, particularly in light winds. The top tell tale is by far the most important and most of the time the bottom two can be ignored.

Every effort should be made to keep the top tell tale flying all the time. I find the best thing to do is pull the kicker on until the top tell tale disappears behind the mainsail and then ease the

kicker until it reappears, for most conditions you will have the correct settings. When using this method to set the kicker on a reach and a run you will probably find that you use a lot less kicker than you used to, this is fine in light winds, but can make the boat unstable in strong winds.

Once the wind strength is above a Force 3 the tell tales will fly constantly no matter how much kicker you put on. The best guide I find is that if you feel the boat is under powered then you probably have too much kicker on. If you are not pointing and are struggling to hold the boat upright then you need to apply more kicker. Once the wind strength is approaching a Force 5 then it is just a case of using as much kicker as you can.”

The only thing I would add to this is that as a crew, you are not quite as in touch with the mainsail as the helm so only they will really know if the boat is being under or over powered, hence it's best to let them check the kicker every now and again.

Also, remember the priorities in order, weight first, trim second. So if the wind eases slightly, move into the boat first, adjust the jib sheet tension, then the kicker; and when the wind picks back up, get your weight out first, pull the jib in and then add a bit more kicker.

Tacking

The process of tacking is pretty much the same irrespective of the wind conditions, what changes is the speed at which each phase of the tack is completed and how much roll you let the boat develop.

For all tacks, make sure your helm gives you a clear instruction that he's planning to tack. First, locate the windward jib sheet, then uncleat the jib (keeping it as tight as possible though) and tell your helm you're ready. In a blow this is really important.

In winds where you're both sitting out, as the boat goes through the wind, you should allow the jib to back very little in strong winds and just a fraction in medium winds. What you're trying to achieve when backing the jib in these wind conditions is to get the boat whipped around to the new tack as soon as possible. There should only be a small amount of roll on the boat then you should both be up on the other side, weight out and pulling the sails in as quickly as possible.

In lighter airs, you should be aiming to pull off a good roll tack. This time, as the boat goes through the wind, keep the jib backed so it helps the boat turn through the wind and lean out from the side deck so the boat rolls on top of you. It is important not to start the roll until the jib has backed. When the boat has rolled so the gunnels are touching the water (avoiding over-rolling or you'll ship water), let go of the jib and then climb up to the new windward side. Hike out to flatten the boat, whilst at the same time pulling in the jib. To put none too finer point on it, you're doing a big pump at this stage and the air is driven through the sails to return the boat back to the speed at which it entered the tack. Ideally, the boat should finish flat just as the jib (and main) come fully in.

Avoid over-rolling the boat to windward as you come out of the tack as I tend to think you lose a bit when you try to flatten it back to leeward and invariably the sails just flap about. In order to stop over-rolling you may have to dive back into the boat just as it comes flat. In really light airs, when you're sitting on the opposite (leeward) side to the helm up the beat, you may find it best to join him to roll the boat over but stay there and let the helm's weight alone pull the boat

flat on the new tack. You really need to be in tune with the wind at the time to judge this. A simple guide is to think that your position before you start the tack should be the same once the tack is fully completed; it may just take a bit more weight to get the boat flat to finish the tack though.

Roll tacks require a lot of practice, particularly if your helm is new to them too, but it's well worth the effort, so get out there early or practise between races until you've got them perfected.

Priority 3 - Niceties

I use the word 'niceties' only to emphasise the point that weight and trim are the first and foremost priorities for a crew. I don't think many helms/boat owners would thank me for saying that watching out for starboard boats whilst you're on port is a nicety but you get the point I'm making!

As you're going upwind, along with all the weight and trim adjustments, which do come second nature after a while, I would suggest you need to be thinking of the jobs below:

- Racetrack information. Keep an eye on how the other boats are doing and if you spot something useful, mention it to your helm. For example, you may see boats up ahead getting a big lift or backer, you may also see other boats in more wind (look to see how much they're sitting out – if you're sitting in and the boats ahead are both fully hiked out then there's more wind up there and vice versa). I don't believe in telling a helm how to sail the race (largely because I'm not a helm myself) but I do know that information like this is incredibly useful in helping create the big picture of the beat.
- Keep an eye out for other boats on a collision course with you. If the fleet is spread, boats can literally be appearing from any direction – beating back up through running boats being a classic example. Don't think that if you're on starboard then everything will be fine; other boats may simply not see you, especially if they're dropping their kite at the time.
- If you're on the sea and the helm has no landmarks to judge wind shifts, you should have a compass. Work out beforehand what information your helm wants from the compass and give it to him as required.
- Keep yourself aware of the next mark. Even in small lakes, helms can get so involved that they miss the lay-line to a mark altogether. At sea, it may be a while until you can even see the next mark so once you spot it, keep it in mind so you can find it easily when your helm asks, and when he does you should clearly point to it so that the process is done very quickly – remember that while this is going on, neither of you are looking at your boat or seeing other boats.
- As you come to the windward mark, think about what needs doing before you get there, in particular, the twinning lines might well have to be uncleated on one side and pretensioned on the other (getting the slack out but not pulling it on completely so the kite gets pulled out). The kite might need unclipping if you use restraining clips too.

The Windward Mark

The windward mark in a big fleet can be a daunting experience if you're not used to it; there seem to be so many boats and a lot of shouting! Coming in on port makes it even more 'exciting'. The thing here is to keep cool. Look for boats coming in on starboard and give your helm clear instructions as to what's going on. With so many white boats in the fleet these days, it's sometimes not enough to say, "there's a white boat coming" and similarly saying

“Fred’s coming” is not a lot of use either. A typical banter would go something like, “Right, we’ve got two whites, a blue then there’s a gap after another white ending in 377 (give the last three digits rather than the whole sail number or something which is unique and easily seen, it saves time). Note that I’m pointing out a gap here – just rattling off a list of potential carnage is not good – find a gap and make the helm aware of it, if he goes for it then fine, if not, find another one and sharpish.

Usually somewhere around the windward mark there’ll be an almighty shout and maybe even a banging, crunching sound. Ignore it – don’t get distracted with things that don’t affect your immediate situation, or you too may find a boat parked a little closer than your helm and his insurers would like!

As you come up to the mark, and especially if you’re struggling to make it, concentrate on keeping your weight out and forget about any niceties – you do not want to be doing a turn when the rest of the fleet is powering away with their kites up.

If you’ve been roll tacking up the beat and you’re tacking on the mark itself, go for a flat tack rather than a roll tack – for one, it minimises the risk of clonking the mark with the boom, but more importantly, the helm will be bearing away on the mark so there’ll be no real pressure in the sails to roll back on. A roll tack here would also mean you’re falling all over the place when you should really be going for the kite.

Finally, remember the rule that prevents you coming in on port and tacking into the mark within three boat lengths. Be prepared to ease off behind a boat to ensure you’re three boat lengths away from the mark, then tighten up and straight into a tack.

Downwind

So, we’ve got to the windward mark and we’re in one piece. Let’s go through the downwind legs now, starting with the reach.

Reaching

- In a breeze, as you start to bear away round the windward mark, keep your weight out and make sure the jib goes out or the helm will struggle to bear off; over-ease it if you have to. Letting the boat heel towards you will also let the chine bear the boat away rather than a lot of rudder. Don’t dive in for the pole until you’re both happy the boat has borne away and is settled.
- For club sailing with a smaller fleet, there is usually a sprint to get the kite up as quick as possible but sometimes, if you’re in a big fleet, it often pays to sail a little higher to give yourself clear wind and a better wave angle to then come down over the top of some boats. Your helm should call out when he’s happy for you to go for the pole.
- I find the wind conditions dictate the order in which you set the boat up at this stage. If it’s light, get the kite going as quickly as possible then worry about the centreboard and the outhaul. If it’s windy, let the outhaul off first then get the board up (half way for a broad reach, only a quarter if it’s close), put the windward twinner on then go for the pole. Make sure the helm does not pull the kite up until you have got the twinner on – communicate with each other. And whilst you’re at it, make sure the helm has eased the kicker too.
- I mentioned in the ‘Preparation’ section that you should have the kite in the right bag and the pole on the right side of the boom for the first hoist. Usually, people go for a leeward

hoist, which means you invariably need to yank the jib in as the kite goes up – grab it by the foot if you have to.

- If you prefer a windward hoist or find yourself having to do one, I've found the method of throwing the kite up and trying to time this with the helm pulling the halyard is too risky or cumbersome – particularly in a blow. A better method, which I've refined since poles started to be stored on the boom is as follows: flick the halyard towards the front of the boat so there's no risk of it getting on the wrong side of the pole. Clip the pole on the windward kite sheet (guy) and keep the guy in your windward hand and the pole in your leeward hand. *Only* at this point tell the helm to pull the kite up. As he does so, push the pole out generally sideways whilst keeping some tension in the guy. The aim is to get the kite to fill and pop around the forestay, rather than fill inside the genoa. This obviously requires good communication between you – if the kite goes up before you're ready, it's a right pain, especially in a blow, to get the kite around the forestay. I have to say that for very broad reaches or runs, this is now our preferred hoisting method, so we think of that before the start and store the kite (and pole) accordingly.
- I once heard a very good helm saying they avoided having to do windward hoists by pulling the kite around the front of the forestay while they're coming up the beat. Personally, I'm very sceptical about this – not only are you creating a huge distraction but you are not sitting out properly while you're pulling it round. There's also a very good chance the kite gets twisted when you put it into the bag so it comes out in a wineglass on the hoist. My opinion is to get yourselves comfortable with either hoist by practising before and in between races.
- You will at some point get a wineglass hoist (where the kite goes up twisted in the middle and won't open). If it doesn't open after one good tug on the sheet and guy together, it's not going to untwist so get the pole off, grab a clew in either hand and pull downwards then out until the twist is released.
- As you attach the pole onto the mast, the helm should ideally be grabbing the first handful of the kite sheet so as you sit down the kite is flying.
- An easy mistake to make in a blow is for both of you to immediately sit right back in the boat before it has actually got on the plane. Similarly, when the boat comes off the plane, don't forget to get forward or the boat will just wallow.
- I said that the helm needs to be kept comfortable upwind but downwind, I would say the focus should be to keep the crew in full view of the kite, that means the crew should always be sitting to windward with the helm going down to leeward as necessary (although in some conditions the best solution is for you both be sitting to windward with the crew sitting on the bench). I would also say that the helm should play the jib as necessary unless it is honking and he can't reach the jib sheet. My key point here is that if the kite is not flying properly or has collapsed then the boat is not going as quick as it can so it needs the crew's utmost concentration. So crews – if you are afforded this 'comfort', don't blow it by looking round at the scenery and letting the kite collapse!
- In light airs, it is important not to let the boat lean to windward in order to keep the shape in the sails, sit on the bench if you have to. Make the most of any puffs of wind by flattening the boat and trimming the kite.
- In very light airs, you may need to drop the pole slightly to make the kite easier to fill.
- In a blow, like the beat, it is important that the boat is kept flat so maximum hiking is the order of the day. Avoid thinking you're hiking out when in actual fact you've got your feet in the forward toe-straps and you've been knocked backwards so you're almost lying on the side-deck. Get back into your aft toe straps and exert as much leverage as you can.
- Try to keep in tune with any gusts – you'll feel them hit the back of your neck before they hit the sails. Ease the kite as the gust hits and the helm bears away then tighten back up as the helm hardens.

- On the sea, the helm should be steering with the waves for maximum speed, which means you'll be playing the kite even more.
- On a windy closer reach, I've often found that I can't actually see the kite with the spray that's coming up the side of the boat. You need to feel the boat a bit more in situations like this. Try to feel if the boat is being blown over, if so the chances are you need to let the kite out more so the helm can bear away.
- In conditions where there's a swell but not quite enough wind to be going flat out, the rules allow you to help the boat surf down the waves by pumping (once) on the kite. As a wave catches you up and picks up the stern, get the boat to surf down the wave by pumping the kite. This can really make boat lengths for you if you keep this up for an entire leg.

Gybing

I find the process of gybing changes with the wind strength so you need to communicate with your helm in advance who is covering which tasks. I appreciate that some of what follows may not be your, or more likely not to your helm's liking – discuss what is best for you as a team. This is what usually happens in boats I crew for.

Light to Medium Winds

The key in these winds is to keep the kite flying as much as possible and if it has to collapse, make it for the briefest time.

Going from reach to reach, as you come up to the gybe, get the helm to pretension the leeward twinner (pull it on so that the kite sheet is just being deflected downward but not enough to choke off the kite.) Release your windward twinner and, as the helm bears off, bring the kite round so that it flies as long as possible. Grab the boom and pull it over as you climb up to the new windward side whilst pulling on the remainder of the twinner. While you're sorting out the pole, the helm should be sorting the jib and if he has time, pulling in the kite sheet so he can give it you as you sit back down.

Going from run to run, it's possible for the helm to fly the kite all the way through the gybe, in which case it's down to you to sort out the twinners, get the boom over and sort out the pole and the jib.

Heavier Winds

Heavy weather gybing is notoriously easy to make a hash of. I remember going to my first World Championships in Howth and after a particularly wild day's sailing, someone commenting in the bar that he couldn't understand why they always seem to put the gybe mark in the middle of all those capsized boats!

For those of you that ski or snowboard, you'll know that the only way to do it properly is for you to be positive and really attack the slope, the more you shy away from it, the more difficult it gets. The same applies to heavy weather gybing.

The key is to get the boat going as fast as possible into the gybe, doing this means the wind exerts less force on the sails as you go through the gybe and the whole process becomes a lot easier. Also, if you're on the sea, wait until you've just come down a wave so not only are really motoring but you're also sheltered slightly by the wave you've just come down. Get this right and the boom comes over easier than in lighter airs!

Whilst wanting to keep the kite flying as long as possible during heavy weather gybes, it becomes less of a priority than keeping the boat balanced. Also, you know that it won't take a second to get the kite filled should it collapse, unlike in light airs.

Going from reach to reach then, you'll need to pretension the leeward twinner as the helm probably won't be able to reach it. As you come up to the mark, get the leeward twinner on all the way (you'll need to let a bit more kite sheet out to compensate for this), undo your windward twinner and really get the boat going as fast as you can. Bring the kite round as the helm bears off and pull the boom over. The most important thing now is to get your weight over quickly to the new windward side. Depending on the quality of the gybe, you might have to forget the kite momentarily and hike out until the boat has settled. Once you're stable, go for the pole while the helm sets the jib. When you're doing the pole, make sure you are not straddling the centreboard – keep both your feet on the windward side of the boat because if the boat tips to leeward, you will automatically put more weight on your leeward foot and increase the heel and possibility of capsizing.

Getting the pole on after a gybe in heavy weather can be quite difficult if you're not strongest, particularly if you're also a bit nervous since you tend to stop breathing properly. Help combat this as you're coming into the gybe by taking a few deep breaths and giving yourself a 'positivity boost'. As you push the pole out, remember to breathe out like a weight-lifter – it helps!

Running

Assuming you've got the kite hoisted and set, here are a few pointers for running quickly.

Light to Medium Winds

- Keep the pole round as far as it will go – you're trying to make the kite as bigger wall as possible for the wind to hit and push you forward.
- Try to keep the clews level at all times.
- Keep glancing up to the burgee to check the wind direction.
- Tell your helm when the kite has eased or hardened. When you're running, the helm has no immediate reference to the wind direction so if it has changed he may well want to change course slightly by heading up (if the wind has borne away or you are by the lee) and bearing off (if the wind has just hardened.)

Heavy Winds

Running in heavy weather can be extremely exciting! A couple of pointers to keep you out of mischief:

- Take the balloon shape out of the kite by keeping it flat along the bottom. This dramatically reduces the boat's rolling tendencies.
- Keep in mind that in controlling the kite on a windy run, the crew has significant control over the heel of the boat. So for example, if you find you're heeling excessively to windward, pull the kite round a little more to leeward. Be subtle with this though and make sure your helm knows you're doing it so he's not trying to compensate with his weight and/or the rudder as well. We've all seen those spectacular death rolls which are incredibly entertaining – when you're not involved!

- Use more board (three quarters) – this also reduces rolling.
- Work out where you need to position yourselves in the boat. Despite the fact that you should probably be on opposite sides of the boat, most helms can not resist the urge to get easier access to the centreboard and shift themselves over to windward! Consequently, it can get very crowded in the back quarter especially if you have to sit in as well. Make sure you're not stopping the movement of the tiller.

Dropping the Kite and Rounding the Leeward Mark

There is a fine balance on the best time to drop the kite. Obviously you need to keep it up for as long as possible, but not so that you spend half of the next beat getting the kite stowed properly or climbing over the deck to get the spinnaker sheet back from over the front.

- Communicate with each other on the best time to drop. If you have to gybe before the next beat, establish if you're going to drop first then gybe or the other way around; allow extra time accordingly.
- Like the windward mark, coming into the leeward mark can get a bit vocal. Concentrate on what you have to do (there's a lot) and don't be distracted by what's happening elsewhere.
- If it's honking, you're first job may be to ease the jib in order to reduce the heeling.
- Leave the centreboard till last – this reduces any heeling forces whilst you're sorting the kite out.
- Get the outhaul on before you start to harden up.
- When the kite's stowed, flick the halyard round the shroud to stop it interfering with the jib as you tack.
- As you come round the mark, get the kicker on as much as is necessary for the beat. Make sure there's a heel on the boat – sit down to leeward if you have to – this allows the chine to harden the boat up rather than too much rudder.
- Watch how you pull you jib in. It should come in smoothly as the boat comes onto the wind. Make sure you don't sheet in too early.
- Be ready for an early tack – you might be stuck in someone's exhaust or it may be the best route to the next mark. All the more reason for making sure the drop is completed before you get to the mark.

Good dropping and mark rounding takes some practice. The goal is to be whizzing out of the leeward mark with everything stowed properly, the sails set and you beating as you would half way up the beat.

Fetching

It's almost inevitable in club racing that there will be a fetch somewhere in the course. Whilst there's very little overtaking on a fetch (which means most people switch off and moan about the OOD's course setting abilities), you can easily make ground by working the boat better than people around you. Really play your jib and work to keep the boat flat.

Finishing

Many a place is won and lost on the last leg to the finish so it pays to be on the ball.

- Establish where the finish is exactly, it could be an OOD box finish, shortened on a mark or, in big events the finish line can be beyond the windward mark or even on a leeward finish beyond the leeward mark.

- Look for the ends of the line and try to figure out which end is nearer. A good technique is to wait until you're crossing a lay line to one of the ends and at that point judge the nearest end – tell your helm this information.
- A lot of people see the finish as 'Thank God for that' and start to switch off. Take advantage of this by squeezing out that last bit of energy and driving the boat as hard as you can. At the end of the event or season it's surprising how few points separate places so picking up one or two a race can really help your overall position. (If you want to see a demonstration of this, have a glance through any Nationals or Worlds results. In the 2003 Worlds for example, 3rd to 6th were separated by just 6 points; 34th, 35th and 36th finished on the same points; and 117th to 120th were separated by just 3 points!)
- If you're neck and neck with a boat, be prepared to tack just before the line, this pushes your bow ahead of the other boat's.
- When you cross the line, you normally have to go round an end ie. don't recross the line and lose your points – check the rules on finishing beforehand.
- As you head for home, keep vigilant for other boats, particularly if they're still racing – it's unfair to mess up their race.
- Now's a good time to discuss any areas that could have been improved in the race whilst they're still fresh in your minds.

And Finally...

Just to wrap up, I wanted to share some thoughts on how the helm and crew sail as a team to get the most out of the boat.

- First and foremost, it is a team of two equals sailing a dinghy. Unless you're a masochist, a helm that continually berates a crew is a liability as far as I'm concerned. The crew loses the desire to think and contribute positively to the race. As we've seen in this guide, a crew has a huge amount to do and if they're demotivated, things aren't going to get done.
- Crews - if you find yourself in this situation, explain your views and if things don't improve find another helm. If you're doing everything I've mentioned in this guide it won't take you very long to find one!
- Helms – reread the two points above.
- I've mentioned communication a lot within these notes – it is essential you both talk to each other, particularly in conditions where things need doing differently to when you last did them, especially gybing.
- Keep positive. All right, sometimes you may be down the pan but there's no use keep moaning about it. Similarly, losing one or two places on a beat is not the end of the world, so keep your chin up and make sure you win the places back at the earliest moment.
- Finally, enjoy you're sailing. Unless I'm much mistaken, you aren't getting paid for it and you're using your free time to partake in this sport – if you're not having fun then there's something very wrong!

If you have any comments or queries about this guide or even better techniques, please feel free post them on the forum or you can contact me directly at dale@dkconsulting.co.uk

Good sailing.

Dale Knowles, January 2006 (*and updated in September 2015*)