PLANNING GYBES – THE SECRETS UNLOCKED

How would you describe not planing out of a carve gybe despite weeks, months, years of trying?

Here’s a selection of the less portable analogies dreamed up by friends on a course. They express both humour and frustration ... but more of the latter. “It’s like trying to master the Rubik’s cube – as soon as you get one bit right, another falls out of place.” “It’s like walking 100 miles across a scorching desert only to collapse 3 feet from a pub selling iced cold lager.”

“It’s like taking a girl out on a series of dates to the most expensive restaurants only to be rewarded with a pick on the cheek – very little interest from investment.” If you can get round a good number of your gybes, usually with practice, the Holy Grail of the planing exit will organically evolve. And then, when you’ve done one, you won’t row of light bulbs illuminating and the mystery be solved. Apparently not. Doing a planing gybe is like riding a bike for the first time (one achieved forever remembered), and more like the golf swing. Through perseverance (monkeys and repetitions), you may indeed connect spontaneously with power and accuracy only for the next shot to dribble 6 inches in an explosion of mud, turf and profanities. But for it to be repeatable, many basics have to be solid – the grip, the stance, the back edge runs out.

Fear lies at the heart of most mistakes. Flat, shallow water you can beachstart away from after a fall and a stable, solid but not overpowering wind, will free the mind and help you attack with greater speed, drop your body in the void and commit in directions and to an extent you haven’t before.

Seek out that glorious 18-25 knot wind window (force 5-6). Much less than that and the planing gybe becomes very technical. You have little reserve power and are being pulled along by a thread, which is all too easy to break. You overtake the wind as you bear away, at which point the sail depowers. With little backhand pressure the big rig swings round pandemoniously. The longer the board remains unpowered, the more time it has to slow down. A planing exit is possible, but there’s no room for timing and trim errors.

And much more than 25 knots, you start to have control issues. The wind is strong enough to destabilise the board and, in all but a few special places, kick up a vicious drop. You’ll have to depower the rig with a committed over-sheet, which is advanced stuff. And that feeling of full-on power can encourage that momentum/size of defence reactions listed above.

The right sail choice is the one that allows you to sail 120º downwind powered up. Many people play safe with sail up to the extent where they can only plane across or just off the wind and slow down as soon as they bear away. For a planing gybe you have to get that feeling of being shot out of a gun as you foot off.

And the best condition? A cross onshore 20-knot breeze and a clean, well-spaced lazy swell. Bear away some 60º to 90º and come up clew first for the same reason. You feel a reassuring counterbalance. The longer the board remains unpowered, the more time it has to slow down. A planing exit is possible, but there’s no room for timing and trim errors.

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Stage 1 – The Set-up

In terms of planning out, this is the most important frame of all - the preparation phase. Say you started with 25 knots of speed when you were hooked in and now you're ready to turn. You'll want to be sitting on the rail and ready to pounce. This is where most lose speed and stability. Disturbing the rig is as they unfurl. Shooting out as they move the back foot out of the strap. Forgetting to move the back hand back. Doing all this after bearing away will be a net loss of power and top speed. Changing your body position right at the beginning is essential. You are likely to accelerate a few degrees off the wind just enough for the sail to power up and push you forward. So important now is to project forwards by softening the hand and meaning the head and hips almost level with the masthead. And where is your back foot? Don't put it too near the inside edge or the toes will drag in the water and slow you down.

Top planning point. Take a couple of moments to let the board settle and not look for the smallest window of opportunity to muscle hard-foiling into a rotation. But when they can do it, they look for the sweetest lip, because, with height, they realise they have time to complete the rotation and controlling the rotation is a lot less painful than half completing. It's one that's changed their relationship with the way - it's a sound decision. For the less-sharp-conditioned giber, their trigger to gibe is when they feel the pressure drop in the sail - i.e., when they're blown into a lull. It's an anti-capsule measure. But the planning gibe or when they enter the other and feel the extra drive in the sail. Drive equals speed and speed leads (can lead) to a planing change.

Stage 2 – Initiation and Triggers

So what initiates the carve? Clue: it's not the back foot. It's the hand. Say you want the board to stay level nose to tail. You want the front section of rail to grip. You do that by shifting the front shoulder onto the boom, extending the front arm and dropping the rig forward and to the inside. The trigger is the same – it's the absence of tension. But when they feel the pressure drop in the sail – i.e., the less-than-confident giber, their trigger to gibe is when they feel the pressure drop in the sail – i.e., when they're blown into a lull. It's an anti-capsule measure. But the planning gibe or when they enter the other and feel the extra drive in the sail. Move equals speed and speed leads (can lead) to a planing change. Change your relationship with the power - it's your rate – and gibe on the front of the face, not the back of it. The most useful training you can do is speed runs, bearing easy into the gusts, sailing broad, enjoying the feeling of the front of the sail loading up, extending the front arm to sheet in and examining the assisted to shake power by holding it. I'm trying to say here without resorting to vulgar parlance, it's that you've got to grow some 'vines.'

Stage 3 – Commit and Drive

Every speed marine has a moment when they just have to man up and drop their body into the back hand and twist the rig, the sail wants to pull you over the centreline to the inside. Every instinct is to resist that. That's the moment of planing. You have to go with that pull. Yes there is a sensation of being stretched – with your back to the kite's key bit - as your hips overtake your feet and make their way to the centre of the circle, that's when you can drive off the back foot to steepen the carve. But with your body forward – and in - you're not stamping on the tail, you're directing the outboard pressure, it's weight forward, pressure back and suddenly the backfoot starts to open up. Downwind is where so many stand up and level out. Not This where you must be most committed, increase the sail pressure, tighten the carve, go yet deeper in the slot, and increase your position to the inside. Say how much sail is really engaged. If you're amazing your performance from a photo, examine 2 things at the stage. What's the angle of the mast? If it's upright or, worse still, leaning back, you're Newport that is a half Tilted forward is the right answer. And look at the vernier. There should be an even spray coming off the whole rail, not just a rooster tail.

Top planning point. As you accelerate downwind and the pressure drops, throw the front hand over to maintain the power and carve up the rail. Be there, have more space for you to step forward into.

Stage 4 – Preparing to Change

Dead downwind, the carve is less than 2 seconds but already you're into the transition as the windward starts to open up. Downwind is where so many stand up and level out. Not This where you must be most committed, increase the sail pressure, tighten the carve, go yet deeper in the slot, and increase your position to the inside. Say how much sail is really engaged. If you're amazing your performance from a photo, examine 2 things at the stage. What's the angle of the mast? If it's upright or, worse still, leaning back, you're Newport that is a half Tilted forward is the right answer. And look at the vernier. There should be an even spray coming off the whole rail, not just a rooster tail.

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Stage 5 – Getting Turned

If we just watch the board it should show no signs of anything going on. To move the feet without making an elephantine weight transfer. We have close ups of that coming up, but the trick is to hold your position to the inside so your weight acts dynamically. If you open the rig and let it turn your shoulders, your feet will want to follow and drop into the right positions. If the front foot doesn't want to twist out of its strap, then you're guilty of assuming it and hitting the hips drift back over the centre-time.

Top planning point. The hips should already be in the right position to sail away on the next tack. All you have to do is route your feet beneath them.

Stage 6 – The Full-speed Foot Change

With the gibe just 3 seconds old, the feet have switched with the board only just changing windward. This is a moment of change. To twist out of its strap, virtually none. Load on the backhand, crack it around on the tail to avoid a rail press. Have hands wide open, extending the front arm to sheet in and resisting the pull. If it's upright or, worse still, leaning back, you're Newport that is a half Tilted forward is the right answer. And look at the vernier. There should be an even spray coming off the whole rail, not just a rooster tail.

Top planning point. Switch early!

REALISTIC EXPECTATIONS

Someone says to me "I need help. I don't plane out of all my giba." Will not do I - mostly through choice (well that's my excuse). The right situation doesn't always present itself. Not is a planning gibe always appropriate. To plane out, you generally need to widen the entry of the arc for maximum speed. But if the road ahead is a madhouse of steepy bumps, you'll be asking for the moon for a change. That's better to set up with the arc to width off track and get away with it. Enter at 35 knots and you've got a series of major mistakes not to come out at least semi planeing. Enter with 15 and you've got to be bloody brilliant to keep it going at the end.

POWER – AN ATTITUDE CHANGE

When people are learning to forward heal, they had not looking for the smallest window of opportunity to muscle hard-foiling into a rotation. But when they can do it, they look for the sweetest lip, because, with height, they realise they have time to complete the rotation and controlling the rotation is a lot less painful than half completing. It's one that's changed their relationship with the way - it's a sound decision. For the less-sharp-conditioned giber, their trigger to gibe is when they feel the pressure drop in the sail - i.e., when they're blown into a lull. It's an anti-capsule measure. But the planning gibe or when they enter the other and feel the extra drive in the sail. Move equals speed and speed leads (can lead) to a planing exit. The sensation of a planning gibe is that of being pulled through the turn all the way up to the foot change. Change your relationship with the power - it's your rate – and gibe on the front of the face, not the back of it. The most useful training you can do is speed runs, bearing easy into the gusts, sailing broad, enjoying the feeling of the front of the sail loading up, extending the front arm to sheet in and examining the assisted to shake power by holding it. I'm trying to say here without resorting to vulgar parlance, it's that you've got to grow some 'vines.'

HAVING A WORD WITH YOURSELF (AND GET VERY BASIC)

In the photo sequence I point out various details. You can try to say here without resorting to vulgar parlance, in that you've got to grow some 'vines.'
STAGE 7 – CARVING OFF THE HEELS
It's confusing in that to change the feet you need to unweight them - but once changed the key is to drop the hips and load up the heels so keep the board carving. To linger sideways at this stage is to lose all your speed, if you stand too tall, the board will level out. The back hand has just released and an important at this stage is to maintain your outboard position, keep looking out of the turn and let the rig come to you.
Top planing point: Don’t go looking for the rig or you’ll drop towards it and stop carving.

STAGE 8 – SHEETING IN BROAD
Assuming the wind isn’t nuclear, to plane out you have to sheet in off the wind - and the more off the wind, the more power you get - and the greater the chance of a catapult … but then, in the planing gybe, you’re constantly flitting with that balance tipping point. But the fact is, it’s out of your hands. You can only sheet in broad to the wind, if you’ve maintained speed and the apparent wind has swung forward. The faster you carve, the broader you can exit. Duck gybes have a greater planing success rate because you get the power back on earlier - that’s what we’re trying to emulate.
Top planing point: Only sheet in when the boom comes within easy reach. The faster you’re going the broader to the wind that will be.

STAGE 9 – EXIT PLANING
That last frame caught the moment just prior to sheeting in where the front hand is still forward on the boom following the rig change. If you sheet in then, the rig will be too far back and will sink the tail. A subtle but vital detail is to slide the front hand back on the boom just before you sheet in so the rig drops forward and powers the nose down and away. At the same time as you sheet in, actively level the board off with the toes to minimise drag and stop yourself over-rotating.
Top planing point: Hands back, rig forward, board flat, mission accomplished!

ABOUT THAT GYBE.
It’s a step gybe in nicely powered up conditions. There are no ‘showy-off,’ lay-down, one-handed, ‘look-at-me’ bits. Laying the rig down and over-sheeting is only necessary if you’re stacked. If not, the game is to reduce the rig movements and just hold it at its most efficient angle to the wind all the way round, to maximise power rather than kill it. The more movements you make with the rig, the greater the chance of upsetting the trim.
**TRANSITION ISSUES**

Flipping rig and changing feet is where the planing gybe is under greatest threat from wayward feet and hands. Turning yourself through 180º atop a fast moving object, while keeping it on its edge, as the sail swings round, pressures changing all over the place. It sounds like a tall order. So let’s turn the camera round, get closer and identify the issues.

This is a key set-up position for the foot change. Sail opening, shoulders following the boom and most important, pressure moving from front to back foot. With the hips to the inside, the front foot is weightless and ready to make its move.

It makes out of the strap and the heel moves right over to the inside edge to take over the job of carving from the toe of the old back foot. On a bigger wave, board with superhero straps, it’s a bit more. The foot may end up in the ‘demi-plié’ ballet position, which looks great, but moves are absurd (unnaturally). Note: the front one has kept its hold on the boom before the release.

Trim for speed.

It’s all about maintaining speed. So let’s turn it the other way round. What do you do if you suddenly need to slow down? Shut out, stamp on the tail and head up. Surprisingly that’s what many do when they start to gybe, even when they intended to plane out. So do the opposite. Gybing fast is very similar to sailing fast in a straight line. It’s all about keeping a constant source of power flowing into the board and holding a constant trim angle, nose to tail. In the gybe, of course, you keep the board on its edge, but the other elements are the same. It’s sudden trim changes that cause imbalance and drag, so think about giving the board the smoothest contact with the water.

Control of the Nose

Those three words contain the rub of the challenge. 94.3% of control problems occur because people lose contact with the nose. It’s an MFP (manifest pressure) issue. When you shear out suddenly or let your hips drop behind your feet, you lose MFP, the nose flattens, the tail drops, you dig the bucket and stop. Gybe that stop before the finish, or over-rotate, invariably involves an upturned nose. Think of the manifest at the front foot of your body. You’ve always got to have pressure on it, which you maintain by dropping forward and pulling down through the boom.

The slow down zone

Clock the wind direction. Look at the area from broad reach to one tack to broad reach on the other. Imagine it infested with sharks and mines. It’s a place where you don’t want to be. You need to be massively powered up to plane in this area (think Formula hat) so the longer you stay in it, the more you slow down. If you think about getting through it as quickly as possible, you instinctively carve and get on with it – and getting on with it is the greatest gybe-planing tip of all.

Focus on the ending

Talking about getting on with it, this thing is only going to last 4 seconds if it’s to be a plane. You haven’t got much time to prattle about. So as soon as you initiate, you’re projecting both mentally and physically towards the ending. You’re looking for the exit and you’re immediately moving forward and across the boom to where you need to be to remove the rig, shear in and power away on the new tack. It’s when you have to make adjustments to gather the rig that it all stops.

Time now to let the images do most of the talking. What should become clear is the knock-on effect of the good and bad. “Why don’t you plane out?” “Because I mess up the rig change.” Possibly, but it’s a symptom not a cause. The rig and foot changes are scrappy and awkward because you’ve lost speed, lost commitment; the boom, choked the rig, are hanging over your feet, looking down at them too far back on the board etc., etc. This situation is an accumulation of errors so, it’s to the beginning of the gybe we look for the root causes. ‘Start well, end well’ is the mantra.

By happy coincidence Harty’s new DVD ‘10 steps to gybing’ which he made with Dave White, is now available by contacting him on peter@peterh.com or ‘like’ his Peter Hart Masterclass Facebook page.