



SUMMER SESSION!

Simon Bornhoft identifies a counterintuitive eureka moment that enables beginners and intermediates to master helicopter tacks, and links the same theme into the granddaddy of counterintuitive moments, the forward loop.
Photos: **WindWise / Karen Bornhoft**

In 1968 a relatively unknown athlete strode with pace and leapt skywards, but rather than projecting his lithe body forward, Richard Douglas Fosbury twisted and arched uniquely over the Olympic high jump bar. Fosbury literally flew backwards into the record books and a gold medal position! In that defining, counterintuitive moment, the 'Fosbury flop' changed the way people perceived, approached and went for the high jump. There have been a number of breakthroughs in windsurfing where new actions, skills and tricks are discovered. These evolve from gradual progress, but often they are also linked to an individual acting counterintuitively.

When coaching I'm often illustrating that what you might imagine to be true isn't always the way it's learnt or done, so I'd like to share with you a counterintuitive moment linked to helicopter tacks (heli-tacks) and other aspects of the sport. Please don't turn the page if you've never fancied doing a heli-tack – it's such an achievable light wind move that does wonders for rig handling and gybe exit skills! I've taught beginners to heli-tack in light winds, and many more experienced sailors to master them in stronger winds.

TAKING THE MYSTERY AND PAIN OUT OF HELI-TACKS!

WHAT IS A HELI-TACK?

Like a tack, the board is turned 180° through the eye of the wind, but rather than the sailor moving around the front of the mast, the rig is rotated over the nose and the sailor stays behind the mast. As ever, our **WindWise Principles** come into play throughout the move.

VISION: Head up and look forward, not at the kit!

TRIM: Be mobile on the feet and work on your counterbalance to keep that board flat.

COUNTERBALANCE: Always 'oppose' the movement of your mast / rig by moving the body the opposite way. For example:

Entry: Rig right back, body forward.

Mid: Rig low and to windward, body to leeward.

Rotation & Exit: The mast moves to windward and forward to scoop the rig past the nose and to leeward. Simultaneously the body moves to windward and back to oppose the movement and momentum of the mast.

POWER: Pull down on the boom, especially if you pause 'clew first' on the exit.

STANCE: Head up, flexing the knees and ankles to prevent breaking at the waist. Sink low into a 'super-7' drop-and-push stance to exit the move.



ASSUMPTION: 'PUSH THE CLEW ROUND'

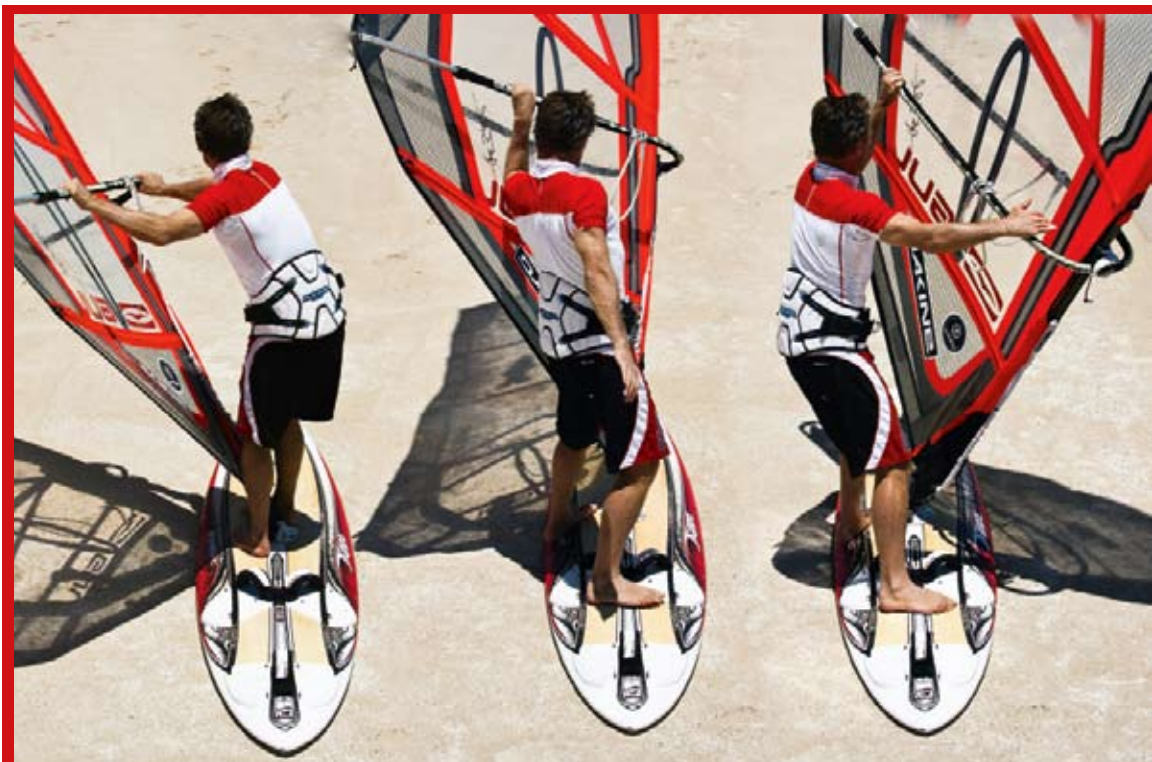
Ask a group of windsurfers what the rig pivots or rotates around when doing a heli-tack, and most will naturally assume that it's the mast, likening the rig to a slightly out of kilter flipping door. Yes, in zephyr-like winds you can push the rig round like a door, but in anything more than a Force 1 keeping the mast too upright and pushing out on the rear hand either back-winds you or you get whipped round like a rag doll. **SO, DON'T TRY TO PUSH OUT ON THE BACK HAND OR PUSH THE CLEW ROUND!**



FRONT-TO-SAIL CONTROL

When front-to-sail the majority of pressure is on the front arm and the mast is lower and more to windward than the clew.

- To turn upwind and reduce power, extend the front arm and lean the mast towards the tail.
- To turn downwind and increase power, slightly flex the front arm and move the mast towards the nose.
- 'Fanning' the clew in and out and keeping the mast low dramatically reduces back-winding.



LAND EXERCISE

I beg you to try this exercise. Hold on tight, but remove your front hand as you go for the 'heli'. You'll instantly discover the true pivot point and how it actually works! It's brilliantly counterintuitive and very instructive.



1.



2.



RIGHT SKILL RIGHT TIME – TOP TIP!

Move your **rear foot** up to the mastbase before going for the heli. This encourages a simple step back with the new back foot and avoids garrotting your shins!

3.



Note how little the clew has actually travelled so far, and that the feet are quickly in place **before** the clew moves too far forward or is released.

4.

COUNTERINTUITIVE MOMENT: 'HOLD THE CLEW TIGHT'

Once you're 'front to sail' and about to initiate the move, the secret is to **minimise the movement of the clew**. Focus much more on moving the mast for the first part of the move and hold the rear placed clew hand tight close to the body. Here's how to learn it!

1-2: START AS IF TACKING!

Like a giant windscreen wiper, rake the rig back and massively increase the pressure on the back foot to ensure the board passes right through the eye of the wind. As it does so, whip the mast forward (to roughly 90° to the board) and low in a 'half-waterstart' position, prioritising your weight through your front arm and 'fanning' in and out with the rear arm. Try to steer onto a beam reach.

3-5: COUNTERINTUITIVE MOMENT

When going for the move, adopt a wide hand spread. Keep the mast hand extended and low and the clew hand high and tucked in close to your head. Remember it's the clew hand that the rig pivots round at this point! So look forward and concentrate on dipping the **mast hand low, to windward and then forward towards the nose**. As the mast moves, simultaneously step back with your new rear foot, forcing your shoulders to windward, pulling in and down hard with the clew hand to control that clew! It's classic 'opposition': mast moves low, forward and downwind / body moves back and upwind to dodge the 'punch' from the rig. Effectively the rig rotates around your clew hand and body as the mast swings round to leeward.

6-8: RIG ROTATOR & EXIT STRATEGY

Look forward, pull down hard on the clew hand, slide the mast hand to the front of the boom and crucially direct the board on a broad reach to help take that 'thwack' out of the release.

In lighter winds remain 'clew first' for a few seconds before rotating the rig.

In stronger winds release the clew hand once you have both feet firmly in place.



5.



6.



7.



8.



FORWARD LOOPS

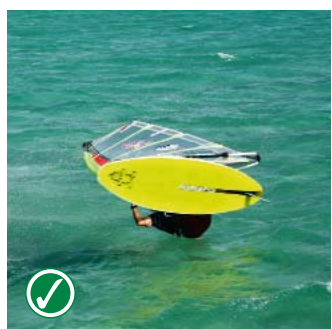
This 'pivot around the clew hand' theme also relates to upwind 360s and even forward loops! So even if you never try one, there's no harm understanding how they're done.

❌ ASSUMPTION

Many people assume that everything pivots around the mast in a loop and that the body needs to go 'forward'. This often ends with painfully incomplete 'loos'!

✅ COUNTERINTUITIVE MOMENT

Counterintuitively, the centre of the turn, and where you want everything to pivot round, is actually the rear placed back hand, head, hips and shoulders.



GET BACK!

For further proof, my Starboard / Tushingham teammate John Hibbard shifts his body **backwards** to initiate a **forward** loop! He then remains at the epicentre, kit pivoting around him, rather than being flung forward and towards the 'outside' of the rotation.

SEQUENCE: John Carter



SIMPLE SUMMARY

Just like Fosbury's 'flop', it was arguably Josh Stone's realisation that it was the kit rotating around him, and not him around it, which evolved full planing forwards. However, unlike the Olympic high jump no-one has managed to come up with a soft landing mat to learn forward loops! As for heli-tacks, give them a go this summer. If you act counterintuitively you'll be surprised how achievable they are!

After a sell-out 2010 Winds of the World Tour, SB has just announced his 2011 schedule. For proven guaranteed progress and a fabulous time on and off the water, check out windwise.net

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If you have any questions regarding your technique, or any subjects you'd like covered in the magazine, you can contact sb@windwise.net

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