



National Windsurfing Scheme

Intermediate to Advanced Coaching Notes

Incorporating:



CONTENTS

PAGES

RYA National Windsurfing Scheme & Intermediate Coaching Methods (Pages 2-40).

Introduction to Advanced Fastfwd Coaching Delivery

Lesson Plan

Advanced Getting Going/Harness/Footstraps & Blasting Control

Blasting Control Additions

Spin Out

Head Upwind

Upwind off the Plane

Strong Wind Uphaul

Intermediate to Advanced Clinics

Waterstart (incorporating intermediate beach start)

Carve Gybe (incorporating Non-Planing Carve Gybe)

Additional Advanced Clinics

Gybe Variations

Bump & Jump

Introduction to Advanced Fastfwd

The effectiveness of the *Fastfwd* coaching method is that *the* essential skills and objectives in windsurfing are highlighted and introduced very early on in the sport. In Advanced Coaching we continue this ethos by constantly referring to, using and improving on these basic, yet defining, windsurfing skills.

On the water this translates to focusing on, and accentuating, each element of the formula and developing the additional transition skills, all of which aids faster progression towards aiding our students to become an 'Advanced Windsurfer'.

Someone able to plane in the harness and footstraps on a larger volume board in marginal winds will need to continue to develop each element in the formula, to enable them to encounter stronger winds, more challenging conditions and lower volume boards. Essentially we are using identical skills and objectives learnt in the intermediate section to help us become more efficient and accentuated in their application.

The advanced clinics are a seamless continuation from the intermediate clinics. Beachstarts progress to become waterstarts and the non-planing carve gybe transfers to the carve gybe, the whole time encouraging the use of the pre learned skills and coaching concepts, ensuring seamless, swifter and easier progression.

Essentially the whole sport can be coached and perfected using a few elements, skills and rules sitting behind the seven defining aspects of windsurfing listed below. Just using these as diagnostic references enables fault analysis for the majority of situations. If fully embraced, these skills become the route to quick progression and a coaching platform for even the most varied or extreme aspects of windsurfing.

The Formula

Vision
Trim
Balance
Power
Stance

Transition Skills

Shifting & Switching
Rig Rotator

Lets move on!

In spite of the higher level of both the course and the student's objectives, it remains vital to use the effectiveness and simplicity of the formula and its accompanying skills.

As advanced coaches, this enables us to isolate and perfect *the* defining skills that truly make the difference on the water. As we know progression to higher levels is so often down to developing and re-focusing the skills and techniques that students already have. How often have you heard: "I didn't realise such a small point could make such a difference". "I thought I was low in my harness", and the classic, 'It felt like my knees *were* bent!' Almost annoyingly, progress is so often down to going back to basics then perfecting or accentuating pre learnt skills.

Equally, you'll probably find that more advanced windsurfers have a better understanding of our sport. Often progress has been hampered because bad habits have been picked up, good habits not fully applied when learning - basic aspects of the sport. It is quite common for people to imagine that there must be something magically different or 'more complicated' that needs to be learnt to become a 'better windsurfer'. In reality the best windsurfers in the world are really good at a key number of basics. It's all about emphasizing the basics, all of which are enveloped in the Fastfwd Formula and the transitional skills,

- A flatter board for early planing,
- More weight in the harness or curl on the toes in stronger winds
- Fully shifting the hips and bending the knees in the gybe

Greater board speeds give students less time to think, and possibly a more challenging coaching environment. Below are three major considerations for advanced instructors and coaches to think about:

- Simplify your delivery - where possible summarize your coaching suggestions and break moves or objectives down into the key parts. When on the water help by focusing on one skill or objective at a time.
- Always try to sail on your students' equipment as this gives an opportunity to ensure that key areas, such as harness line set up, are correct. Fatigue and board handling problems are vastly exaggerated in stronger winds when gear isn't set up properly.
- Finally, and probably the most important message for Advanced coaching is '*accentuation*' of, and even greater '*commitment*' to, the key elements and skills within the formula and transitions.

LESSON PLANS

The following coaching notes will aid the progression of our intermediate students into advanced windsurfers.

INTRODUCTION

The following information will provide guidance to help with the first few advanced courses or sessions that you run. In addition to these notes you should use your own experience, ideas and knowledge to develop your courses and sessions to suit your teaching environment and weather conditions.

The National Windsurfing Scheme and Advanced Course

Advanced - Assessment Criteria

Main Advanced Course Criteria

The student should be able to correctly set up their board and rig to suit their size and prevailing conditions. In various conditions and water states, students must be able to launch and recover their equipment, demonstrate an understanding of applying the Fastfwd formula to tack efficiently, show effective stance on all points of sail, advanced getting going and blasting control techniques, show an ability to sail safely and in control, with awareness of other water users, any hazards in their environment and knowledge of necessary actions to prevent the need for rescue. All criteria should be assessed on equipment suitable to the conditions. Assessment is likely to be over a long period, with differing skills being worked upon until competence is demonstrated, at either tidal or non tidal location

Water Starting Clinic

In addition to the above, the students should have a practical understanding of controlling the board and rig together in deeper water, completing the waterstart in a variety of both light and strong winds.

Carve Gybe Clinic

The assessment for the Planing Carve Gybe may need to be carried out over a period of time at either a tidal or non tidal location, addressing the individual aspects that make up the manoeuvre: preparation, approach, initiation, body position, rig rotating, timing and foot change, maintaining speed and power, and the possible variations to suit conditions. The conditions and equipment used should enable the students to plane comfortably.

Bump and Jump Clinic

The student should be able to correctly set up their board and rig to suit their size and prevailing conditions, enabling them to sail at either a tidal or non tidal location.

The assessment may be carried out over an extended period of time at varying locations and conditions. On completion the student should be comfortable sailing in a variety of conditions including small waves or chop and have a basic jumping technique.

Carving Skills Clinic

The assessment may be carried out over an extended period of time on suitable equipment at varying locations and conditions either tidal or non tidal. On completion the students should be comfortable sailing in a variety of conditions, applying the formula with ability to rig and tune appropriate equipment to the conditions, showing confident variations in carving manoeuvres.

In all course and clinics the student should also be able to correctly set up their board and rig to suit their size and prevailing conditions, showing an ability to sail safely and in control, with awareness of hazards in their environment, knowledge of necessary actions to avoid the need for rescue, at either a tidal or non tidal location.

ADVANCE COACHING EXAMPLE

In keeping with the ethos of **Fastfwd: Advanced Getting Going, Harnessing, Footstraps** and **Blasting Control** are a direct continuation of the formula and its associated skills. Here are a few examples:

GETTING GOING:

SHORT BOARD EARLY PLANING EXAMPLE

These are the same skills as used on a larger volume board to encourage planing, but accentuated to help transfer to smaller, lower volume boards.

Vision	Look forward and head 5-10 degrees downwind.
Trim	Keep feet forward, inboard and push through forward facing toes of the front foot. This may mean both feet are in front of the front straps!
Balance	<i>Fully</i> extend the front arm to assist trim and allow the body to lean back and oppose the rig <i>as much as possible</i>
Power	Sheet in, back and down on the boom.
Stance	Combining the points above correctly will create the elements of a ' super 7 drop & push ' body position; <i>heavily</i> flexing the rear leg and keeping the shoulders back. As the board accelerates, <i>quickly</i> ' lift and lock ' towards a straight 7 to assist acceleration.

By continuing to focus on and accentuate the essential skills, this reinforces the value of the coaching method and adds greater importance to what the students are continually learning.

It's important to demonstrate how accentuating and fully committing to, or speeding up the fundamental actions and objectives, enhances our sailing.

Here is another example using **stance**:

STANCE EXAMPLES

MARGINAL WIND **STRAIGHT 7**

The sailor who really exaggerates the '**lift and lock**' aspect of the **straight 7** - by *extra* tightening of the torso, *fully* extending the body, pushing through the toes and forcing the mast away - is going to make the most efficient use of their **stance** while improving both **balance** and **trim**, ultimately increasing their chances of sailing through gusts and lulls, compared to a student who is less exaggerated with their stance.

STRONG WIND **SUPER 7**

At the other end of the scale, the student who really '**drops and digs**', sinking in the harness, *continually* flexing the rear leg, *really* pulling up on the toes and *down* on the boom is going to improve their **power** and control over someone less committed or accentuated.

Blasting Control – Additional Notes

The following themed skills are covered in the intermediate **Blasting Control** section. However they are worth highlighting and incorporating into your coaching when working with students in more challenging conditions or on lower volume boards.

The following skills are chosen for their particular usefulness when starting to encounter stronger winds, greater speeds and more response from the equipment in use. They support and reinforce the objectives of certain elements in the Formula, but most importantly, these themes and objectives help the student create control and greater confidence in more advanced situations;

- Head upwind for control
- Sailing upwind off the plane
- Uphauling on short boards or in strong winds

You will see how **vision** and sailing line play a huge role in getting sorted in advanced situations!

In addition to the Intermediate Coaching Notes due to higher speeds, chop and smaller fins.

Spin Out

occurs due to:

Poor equipment:	Not enough downhaul or a rig set too full. Too small a fin for the sail size or power (See fin guide page 16 – Intermediate Coaching Notes) Harness lines incorrectly set – perhaps not far enough back
Poor trim	Too straight or an over weighted back leg at speed. Not flexing the back leg in anticipation of chop.
Poor balance & power ,	Too upright Incorrect sail setting - sheeted out, or A body position too close to the rig.
Poor stance :	<i>Lack of</i> commitment down and out in the harness and not enough accentuation of stance: Super 7 'drop and dig' in stronger winds.

Head Upwind (Intermediate to Advanced)

Aim:

It is vital to instil in students the importance of heading upwind to gain control. This should, ideally, be established from an early stage in their windsurfing career, but it is vital to make this 'routine' in stronger or marginal planing conditions on lower volume boards.

Key Formula Elements: Vision

Objectives:

By the end of the session/course the students should have a greater knowledge or ideally, experience of taking the board upwind enabling them to get the board and rig settled in a number of different situations.

Group Dynamics:

Use any of the following situations to demonstrate the value and importance of heading upwind to establish control, save energy and improve safety in stronger winds. Provide your students with practical demonstrations and link back to the value of **vision** and the importance of our sailing line.

- Setting up and coming up onto the board during a beach or waterstart.
- Encourage heading upwind whenever off the plane.
- Uphauling in planing winds or on lower volume boards.
- Prior to getting going, harnessing & footstraps
- Any situation when trying to reduce speed and/or gain control.
- In over-powered or challenging situations when setting up for tacks, gybes, chop hops, body drags and/or jumping waves.

Coaching Notes:

Two key areas to help coach these skills:

- Sailing upwind off the plane
- Strong wind or low volume uphaul

Upwind Off The Plane (Intermediate to Advanced)

Aim:

Sailing upwind without a daggerboard.

Key formula elements: **Vision, trim & counter balance**

Objectives:

By the end of the session the students should be able to:

- Sail upwind, off the plane in non-planing or planing conditions on a board without a daggerboard.

Group Dynamics:

Setting up examples as a practical demo, followed by a group session with very short runs is an excellent way to show the importance of both **vision** and **trim**.

Information to be covered:

VISION	Looking upwind helps head upwind and spot changes in wind strength and direction.
TRIM	Use of <i>specific trim</i> with the forward facing front foot, heavily depressing the windward rail to provide grip.
BALANCE	Rig back, body forward to initially head upwind. Due to the tilted board, the rig comes further forward to help the board maintain speed. A well extended front arm helps oppose the rig and maintain a counter balance .
POWER	Gentle power control is vital to avoid over-sheeting and sideways drift.
STANCE	Super 7 'drop and dig' to head upwind. Come up into a straighter 7 when pointing higher and going slower into wind.

Coaching Notes:

Demonstrate how heading and tracking slowly upwind out of the harness gets them upwind before bearing away. Show how heading upwind off the plane is far more productive and less tiring than sailing across the wind 'half in and out of the harness' whilst trying to get going. With practice it is possible to sail upwind off the plane using a harness.

It is vital to show how little effort is required even in very strong winds or on very low volume boards.

Common problems include

- **Trim** - Not depressing the windward rail enough to ensure it grips and tracks upwind.
- **Trim** - Hanging off the rig too much and pushing excessively on the back foot.
- **Power** – Over-sheeting the rig in and back too much, causing the board to go sideways or backwards.

Strong Wind or Low Volume Board Uphauling (Intermediate to Advanced)

Aim:

To dramatically increase ease and reduce the fatigue of uphauling in planing winds or on lower volume boards, once again reinforcing the key skill of heading upwind in difficult situations.

Key Formula Elements: **Vision, trim & counter balance**

Objectives:

By the end of the session the students should be able to:

Uphaul by facing the board towards the wind rather than *across* the wind.

Allow the rig to come from the back of the board towards the front making it easier to apply **power**, get going and remain balanced in challenging situations.

Group Dynamics:

This exercise can be run as a light wind session linked with safety, or as a demo when taking non-waterstarting students out in planing winds. This session is particularly useful for;

Uphauling in planing winds or on choppy waters.

Uphauling on lower volume boards if the wind has suddenly dropped.

Information to be covered:

Developing existing uphauling technique with the emphasis on heading and staying upwind, during and after uphauling.

VISION	Looking upwind to keep and turn the board upwind when uphauling.
TRIM	Pushing through the feet to point the board 5-20 degrees above a beam reach
BALANCE	Rig back, body forward to initially head upwind and smoothly release the rig from the water. As the rig clears, the rig is kept back to remain into wind. When settled the rig is drawn forward and the body sinks back.
POWER	Forward movement of the rig makes sheeting in and down on the boom more stable than having the rig across the board and having to pull it to windward or reach for the boom.
STANCE	Staying low and using the legs to uphaul, dropping into a forward facing super 7 'drop and push' to apply power and sheeting in.

Coaching Notes:

It is important to use existing uphauling skills yet ensure that during and after the final rig release the rig is back, the body is reasonably far forward and the board is pointing as close into the wind as possible.

This technique reduces wobble and students will find it easier to balance and sheet in on a lower volume board, rough water and/or stronger winds.

INTERMEDIATE & ADVANCED CLINICS

Once again, the formula and core transitional skills form the basis of the advanced clinics. Ensure that core coaching content is seamless between the levels, helping link the intermediate and advanced clinics together. The beachstart will progress to the waterstart and the non-planing carve gybes become planing carve gybes, with more diverse areas of the sport being diagnosed and aided using the fastfwd skills and providing you with a brilliant set of coaching tools to use throughout the sport. Thus reinforcing the concept of continually getting better at the basics, adding additional detail to help students venture into different areas of the sport and progress through the levels.

ADVANCED CLINICS

Waterstart (incorporating beachstart)

Carve Gybe (incorporating non-planing carve gybe)

Carving Variations

Bump & Jump

WATERSTART

Beachstarts and waterstarts rely on a sequence of very specific and quite mechanical skills that sit slightly outside our regular windsurfing actions. It is important to introduce the benefits of waterstarting as early as possible and to encourage students to start learning regardless of their current level. If you have the environment and conditions to coach waterstarting, it is perfectly feasible to see students mastering waterstarts even before being able to plane in the harness and footstraps properly, enabling the technique to be introduced alongside the essential skills for windsurfing.

Try to find progressively deeper water so that students can practice each of the skills without the feet touching the ground.

Aim:

Waterstart in deep water.

Objectives: By the end of this session, the students should be able to :

- Fly the rig without standing on the ground.
- Correctly position the board and rig
- Create lift from the rig to help bring themselves in towards and up onto the board.
- Understand the correct body position to maximize the rig's lift.

Group Dynamics:

This session can be run as part of an advanced course or as a specific session or clinic, either in a one to one or group session. To aid simplicity waterstarting exercises could be linked with sailing upwind off the plane for a short distance before dropping down into the water. Keeping students upwind and closer to the shore counteracts the tendency to drift downwind when learning to waterstart.

Information to be covered:

The beachstarting skills are transferred and progressed to aid learning the waterstart. Due to the board and rig orientation that occurs in deeper water, we need to include skills to minimize the time and effort required to get everything correctly placed prior to making this essentially a higher wind move.

Break the move down into these four specific skills

- Board & rig orientation - rules of board and rig orientation in deeper water.
- Rig elevation - 'sliding & guiding' the rig to clear it from the water.
- Generating lift - 'rig twisting' and orientation using **balance** and **power**
- Specific vision - 'nose over toes' to minimise body weight on the rig.

Exercises or follow-up work:

Each of the waterstart skills can be taught as separate exercises to build up muscle memory and reduce fatigue, together forming the basis of efficient waterstarting.

Remember: If teaching beachstarting start your delivery from the rig elevation section - from a standing rather than deepwater position.

BOARD & RIG ORIENTATION

The board and rig will be found in many different combinations after a dismount. A practical demonstration is the only way to run through the common situations. Here are some general tips to save time and energy to help students get their equipment in place.

- Try to keep your back to the wind with the equipment downwind of you.
- To position the equipment, swim the board and not the rig to save energy
- Point the nose of the board into wind before sorting the rig out.

There are two basic methods of setting up the board and rig prior to the rig elevation.

Depending on how the board and rig are lying encourage students to choose which is best to save time, energy and get going in the desired direction.

Option 1 – Boom across the tail.

Initially point the nose virtually into wind, pull the mast so it lies just downwind of the tail, turn the board and rig across the wind, so that the rig can be pulled over the tail and elevated.

Option 2 – Rig at 90 degrees to the board.

Swim the nose directly into wind and position the mast so that it is at 90 degrees to the board and facing into wind.

RIG ELEVATION by ‘Sliding and Guiding’ the rig

- Always elevate the rig with the mast at 90° to the wind.
- When ready, hold the mast approximately 1m above the boom clamp and get a good distance from the mast by extending the front arm.
- To release the rig clear of the water, you may first need to wiggle or shake the mast to break the surface tension.
- In one strong movement, kick positively with the feet to keep the head above the water, simultaneously ‘**sliding and guiding**’ the mast across, over the head and as far to windward as possible and only then, up.
- Never lift the mast straight up as this can cause the body to go down or the clew to catch.
- The mast should move from a stretched out arm position downwind of you to a stretched out position upwind of you.
- Once the rig is guided to windward and has cleared the water, the back hand grabs the boom.

If the rig is being pulled across the back of the board (as in option 1), the front hand still holds the mast, but the back hand can hold the tail. If the board forms an X shape with the arms, during the elevation the arms un-cross as the mast moves towards the wind and the tail of the board goes away.

Coaching notes:

Practice in shallow water by taking the feet off the ground to help simulate a deep waterstart. Make sure students don't try to push the mast up, always **sliding and guiding** it to windward.

GENERATING LIFT by 'Rig Twisting'

To create lift the front hand pushes up and forward, as the back hand sheets the boom in above the head, creating a 'twisting action' with the whole rig. This helps to generate a surge of power prior to coming inboard - a specific skill that needs to be accentuated when floating in the water, especially in lighter winds. This feels like turning a giant set of handlebars above your head. Always try to extend the arms rather than pulling on them, continuing this action until you are up and sailing away. The '**rig twisting**' action is an exaggerated version of bearing away if you are too far into the wind. Later in the sport this action can be used to complete a 360, initiate a loop or at any time you want to create a surge of power in the rig.

Coaching notes: Practice the 'Rig Twisting' in the shallows or lying down on the beach to see how much lift it can generate.

SPECIFIC VISION AND TRIM 'Nose over toes'

Bending the back leg, rolling the head inboard below the boom and towards the mast base, are paramount actions for waterstarts and happen during the '**rig twisting**' action. Bending the back leg pulls the tail in towards the body and helps **trim**. Rolling the '**nose over the toes**' reduces the body weight on the rig and increases the chance of coming smoothly up onto the board.

Note that the front foot comes up onto the board late in the sequence. If it comes up too soon, the action tends to lift the hips and throw the head back, increasing the weight on the rig and the chances of falling back and into the water. Ideally the front foot hangs straight down or even slightly behind and kicks as the head and upper body roll inboard.

Coaching notes:

Waterstarting can easily be shown on dry land with two people sitting on the ground trying to stand up. If their legs are kept out straight, it is so much harder to pull them up than if the rear knee bends and the head rolls forward. It is good to stress that this has little to do with windsurfing ability, just basic physics.

A WATERSTART SEQUENCE INCORPORATING KEY SKILLS

VISION	<p>In controllable conditions, position the upper body upwind of the tail with the board across the wind.</p> <p>In stronger winds heading the board slightly upwind (5-10 degrees above a beam reach).</p> <p>The board can be steered by varying balance and power to apply pressure through the mast base.</p> <p>Pushing through the front arm and pulling on the back forces the rig forward and turns the board away from the wind.</p> <p>Pushing through the rear arm and pulling on the front arm, sheets out and angles the rig back, helping turn the board into the wind.</p>
TRIM	<p>With the rig quite high, place the rear heel just to windward of the centre line between the straps, angled slightly forward to encourage the body to move forward on the board and <i>not</i> across. It is vital to bend the back leg throughout otherwise the board heads either into the wind or it will prove difficult to get the body inboard and towards the mast base.</p>
BALANCE & POWER	<p>The 'rig twisting' action initiates the rig elevation and creates lift, so accentuate it through the move.</p>
STANCE	<p>As soon as the rig is twisted up and forwards accentuate the 'nose over toes' action rolling the head forwards and in towards the mast base - Accentuate the 'rig twist' with extended arms throughout.</p>
STANCE	<p>Once up on the board the stance initially resembles an extremely rolled super 7, with the arms high above the body, the back leg really bent and the head</p>

well below the boom. This maintains security in stronger winds and prevents falling back into the water in lighter winds.

COACHING NOTES

When 'floating' under the rig, it is vital to minimize the down force on the rig, especially in marginal winds. Encourage students to practice floating and steering in the shallows; work on keeping the feet off the ground and gently holding the boom, whilst kicking with the legs to reduce the demands on the rig, Try getting students to momentarily take their hands off the boom to prove they don't need a death grip!

⌋ FASTNOTES

Common problems:

- Not aligning the board properly at the start or before the **rig twist**.
- Lifting the mast straight up and catching the clew.
- Pulling too heavily down on the boom, when flying the rig.
- Over-extending or weighting the back leg when bringing the back foot up onto the board
- Coming up with the head above the boom.
- Not continuing to keep the rig twist and elevation going until right up on the board. This is often due to pulling the body too close to the boom killing control and power.
- Allowing the feet to drag behind leading to the board sailing off.
- Bringing the front foot up too soon, which in turn keeps the head back and demands far more lift from the rig.
- Standing upright too soon.
- Body and rig too far forward = going over the front.
- Body and rig too far back = keeps heading into wind.
- Rig keeps coming down on top of the head = not extending the front arm high enough. Or the board has turned too far downwind.

The planing carve gybe continues to develop the skills embedded in the non-planing carve gybe. However there are three factors that make the planing carve gybe a little more dynamic:

- The **super 7** set up before and after unhooking starts from a speedier, more outboard and committed position.
- Increased pressure and commitment is applied to the inside carving rail before, during and even after **shifting and switching** of the feet mid gybe.
- Finally, the rig is *not* leant out of the turn so much and it is released slightly earlier due to the extra turning speed of the board.

When teaching a non-planing carve gybe as a training exercise in lighter winds, the major differences are:

start from a less outboard position;

less pressure on the inside rail;

the rig is leant out of the turn more and released a little later.

Apart from those slight changes all the gybing skills have a smooth progression.

GYBE VARIATIONS

There are many different interpretations of how to gybe, so we have covered those in the advanced carving clinic. The carve gybe outlined here is a 'step gybe' that can be taught from an early stage and used as a light wind training exercise. This style of gybing has proved to be one of the most effective and easiest methods to learn. Most importantly it creates a very versatile gybe that works in all winds, boards and levels.

Planing carve gybes are one of the most exciting, rewarding and yet commonly over-complicated aspects of windsurfing. By using *fastfwd* we progress by developing some very particular skills that link together to form a gybe.

Aim:

To develop planing carve gybe skills for dry corners!

Objectives:

By the end of this session, students should be able to:

- Set up, unhook and control the entry into the gybe.
- Apply ample pressure to the inside rail to create the carving action.
- **'Shift and switch'** the feet whilst **counter-balancing** and controlling the rig.
- Time the rig release to carry out the **'rig rotator'**
- Be able to turn the board round by gybing and breaking down the skill.

Group Dynamics:

This session could be run as part of an advanced course or specific session or clinic, a one to one or group session. Start with a short dry land delivery of a particular section, followed with either light or strong wind demonstration and exercises and reinforced with instructor feedback.

Resources Required:

- A full understanding and good delivery of the key/core skills
- A finless board as a simulator (ideally with a powered up rig) or non-planing carve gybe on water exercises.

Information to be Covered:

Essentially carve gybing comes down to developing and stressing the importance of:

- **Vision**
- **Continually counter balancing** the movement of the rig.
- **Super 7 'drop and push' stance** for higher speed set ups and exits.

Then like the Non Planing Carve Gybes, adding in two vital and very specific skills;

- **'Shifting & switching'** to position the body, moving the hips and switching the feet mid-gybe.
- **Rig rotator** to control the rig release, movement and ease of sheeting in again.

Due to the speed and co-ordination required, it is impossible to remember a long series of actions. Simplify your delivery, always teach the gybe in three skills-based sections incorporating **vision** and **counter balance** through out.

Super 7 set up for unhooking and gybe entry.

Shifting & switching for the hip and foot movement whilst carving.

Rig rotator to control the rig change and **super 7** once again for gybe exit.

Crucially, this means teaching just three imperative skills for an entire gybe, adding in extra detail for individual requirements or fault diagnosis.

FORMULA RELEVANCE AND SPECIFIC DETAIL FOR PLANING CARVE GYBE

<i>VISION</i>	Look into, through and out of the turn, rather than at the feet or hands when they are moved.
SPECIFIC TRIM.	Position the carving foot just in front of rear strap, with the toes on the rail.
<i>COUNTER-BALANCE</i>	Oppose the position and movement of the rig. As the rig moves one way, the body moves the other and visa versa. This forms the framework for gybe entry, shifting and switching , the ' rig rotator ' and the exit.
POWER	Sheet the rig in on entry; during the shifting & switching , sheet the boom in enough to split the board in half and pull <i>down</i> to assist balance and trim .
STANCE	Super 7 drop and push is used for both the entry and unhooking sequence and the exit of the gybe.

Additional skills to concentrate heavily on:

FOOTWORK

Use **shifting and switching** skills to move the hips and change the feet mid-gybe. Keep the body low via bent back leg and pull down on the boom for extra stability.

'SHIFTING AND SWITCHING' IN GYBING

Shift the hip over the back foot with the toes right over the inside rail.

Switch the front foot 'heel to toe' just *in front* of the back foot.

Shift the weight down onto the new back foot, by bending the new back leg.

The new front foot steps up the board as the hips drop back into a **super 7 'drop & push'** stance. Students may need to shuffle the new rear foot back even more to help maintain pressure on the inside rail at the end of the turn.

THE RIG ROTATOR

Rigs like to move in a scooping, almost cone shape action rather than being 'flipped' bolt upright like a swinging door. By keeping the mast moving, thus take the 'whack' out, releasing the rig, in turn helping to sheet in on the new side. (This applies to helicopter tacks and more advanced freestyle moves too.)

'Rig rotator' in gybing

Just before releasing the rig and before the board comes out of the turn, make sure the feet have been switched and the front hand slides down towards the mast, and that the back hand is far down the boom towards the clew. As the back hand is released, the mast must be 'rotated' towards the back of the board.

Whilst looking forward the new front hand grabs the boom when the mast is behind the body. As the rig is drawn forward and sheeted in, the body sinks back down into a **super 7 drop and push** exit.

It is vital to keep the mast moving continuously in a scooping action, always opposing its movement with the body to create a constant **counter-balance**.

THE CARVE PLANING GYBE

Never try to teach a whole gybe! Break it down into the sections as suggested in the highlighted areas below.

Gybe Entry

Super 7 'drop and push' / Unhook & Set Up

Objective: Unhook, sail and prepare to carve *without* unsettling the board and rig.

VISION Look downwind and into the turn

UNHOOKING Prior to unhooking, slide the back hand well down the boom and sink heavily into a low hiped, **Super 7** stance. If possible bear away in the harness.

To unhook, momentarily pull in and down with bent arms on the boom, rather than excessively lifting the hips to release the line. Immediately the line does release, drop the hips down further and hang off the boom. Encourage students to look at other sailors rigs from the leeward side - it should be difficult to see if someone has unhooked, as the rig movement should be minimal and remain sheeted in.

COUNTER BALANCE

To bear away out of the harness, use downwind steering skills. Keep the rig forward and sheeted in as the body sinks down and back in a **super 7 'drop and push'** stance. When settled, remove the back foot from the strap and place it initially on the *windward* side just in front of the back strap. Keep the front foot in the strap.

CARVE SET UP

Holding a committed **super 7** position, continue to sail helping to settle the board and ideally blast further downwind. During this time slide the back foot across to the leeward side of the board with toes on the leeward rail, just in front of back strap.

As the foot moves across, keep the hips as outboard as possible and wait to settle the board. Only then should the body be brought across by pulling on the back arm and extending the front arm to lever and let the hips in, across and over the inside rail. As this is happening, lower the hips over the carving back foot to start '**shifting and switching**'. This should be practiced on land to make the whole process a smooth natural action.

FASTNOTE

On really wide boards students almost have to commute to the other side! Therefore the process of coming across is slightly more gradual. However, the value of remaining, low, outboard and limiting the rig and board's movement whilst unhooking and coming across to carve is incredible.

*Set Up Summary: **Super 7**, backhand down, unhook, wait, back foot, wait, start to carve by shifting and switching. The bearing away and setting up sequence should take approximately 4-5 seconds and take approximately a third of the way into the turn.*

Mid Gybe

Footwork by 'shifting and switching'

VISION: It is important to keep looking through and out of the turn!

COUNTER-BALANCE:

Maintain a good distance from the rig, leaning the mast gradually out of the turn as the hips shift into the turn. Pull in and down on the boom with the back hand to keep the clew close to the rear shoulder.

FOOTWORK

Shift & switch the feet as the board reaches or just passes the downwind stage of the gybe. After the feet are switched, remain momentarily clew first and lower the hips into a **super 7**.

- At high speeds start the feet switch early - just approaching dead downwind.
- At low speeds, or if dropping off the plane, the feet stay carving until just after dead downwind stage.
- Immediately after switching the feet, shift the body weight low, down and over the new back foot as you sink into a **super 7 'drop and push'** to rotate the rig and prepare for the exit.

↳ FASTNOTE

Whilst changing the feet try to keep the clew sheeted in close to the rear shoulder and head, placing the rig approximately 90 degrees to the board. It looks like the rig is splitting the board in half.

Remember: It is essential to pull *down* on the boom to stabilize the rig, improve **trim** and maintain **power**.

Gybe Exit Rig rotator and super 7 'drop and push' exit

VISION

This is the most important time to turn the head to look and lead out of the turn. It is important not to look at the rig!

RIG ROTATOR

At high planing speeds start the **rig rotator** (see page 18) immediately after switching the feet to release the rig early. In marginal winds or if the board comes off the plane, it is possible to sail clew first for a short while after changing the feet.

STANCE

Emphasize the **super 7 'drop and push'** stance to exit smoothly and control the **rig rotator**, keeping the hips low over the new back foot.

↳ FASTNOTES

To avoid over-complicating things, go through each gybe working on one skill at a time. Essentially, **vision, super 7, shifting & switching** and the **rig rotator** should be highlighted, demonstrated and practiced separately. Link everything to **counter-balance** as this creates stability and improves **trim**. The Fastnote for MID-GYBE is particularly important as it is often the small detail that makes quite a big difference to rig-handling and continued turning mid-gybe.

VERY STRONG WIND, EXCESSIVE SPEED, CHOP OR LACK OF CONTROL

In conditions which prevent keeping the rig sheeted in when bearing away, it is paramount to change the sailing line during the gybe set up. As mentioned in the Blasting Control section (page 8), heading upwind kills excess speed and most importantly, when setting up for a high wind gybe, it helps keep the rig sheeted in, aiding control.

VISION Head upwind during the unhooking and back foot placement. The stronger the wind, the further upwind the board should be taken to aid it to settle and sheet the rig in. The carving will therefore start when the board is actually above a beam reach, rather than on a broad reach in more controllable conditions. The carving needs to be assertive as the board has further to turn. It may initially seem strange going upwind and then heading downwind, but the benefits of getting the rig sheeted in using this upwind line, far out-weigh being out of control and bearing away in a sheeted out position heavily overpowered.

BALANCE As the board heads upwind and reduces speed, the body needs to oppose the rig differently to maintain a **counter-balance**. This often means the rig comes back further and the body hangs slightly further forward than the conventional line into the turn. Once the carving starts, the body drops back into the **'shifting & switching'** carving action and the rig is put forward to **counter-balance**.

POWER In very strong winds, dramatically emphasising the pulling down action on the boom and keeping the clew sheeted in close to the body is a gybe saver.

Common step gybe problems

POOR SET UP

- Not sliding the backhand down the boom on set up.
- Standing up and/or sheeting out prior, during and after unhooking.
- Coming straight across to carve immediately after unhooking - always wait a second or three.
- Coming straight across to carve when the board isn't settled.

POOR SHIFTING & SWITCHING

- Not having the toes right on the inside rail.
- Not flexing the knees sufficiently.
- Breaking at the waist instead of bending the knees therefore 'leaning into the turn' with just the head or upper body.
- Not shifting the hip over the back foot and into the turn.
- 'Gear gazing' - looking down at the feet and being unaware of position in gybe.
- Changing the feet too early and standing up.
- Releasing the rig before changing the feet.
- Not pulling down on the boom when splitting the board in half with the rig.

POOR ROTATOR & SUPER 7 EXIT

- Standing up and pulling the rig too close to the body.
- Insufficient weight on the inside rail before, during and after switching the feet.
- Insufficient bend on the back leg at the end of the gybe.
- Gear gazing rather than looking out of the turn

GYBE TRAINING

To increase rig control and muscle memory for specific actions, always try to run skills sessions in marginal winds, on the land or on the water. Never under-estimate the value of these sessions! Blasting for 500m and then trying a gybe, takes years to learn. Practicing specific skills and piecing them together dramatically shortens the learning process.

VISION Training

Your first sessions should be just using vision. Ask your students to do their normal gybe and just get them to try looking into and out of the turn with more purpose. This alone can dramatically change students gybes. A good example of this is doing **rig rotator** sessions on land where the students must not look at the rig.

SUPER 7 Set Up Training

When most people unhook it is to stop and slow down at the end of a run. This usually means standing up creating a 'bad habit' that is often taken into gybing.

A good exercise to avoid this is to blast along in the straps and unhook without unsettling the board, sheeting out or standing up. Then once unhooked sail for 20-50m out of the harness in a low **super 7** stance; hook back in, rest and repeat.

The aim is for the rig to hardly move and to maintain as much speed and control as possible.

SHIFTING AND SWITCHING Training

Run through the shifting and switching actions on the shore making certain to emphasise keeping the head up and looking in the direction of travel. It is also vital to accentuate the shift of the hips and the bend of the knees before, during and after switching.

RIG ROTATOR Training

This is best done in marginal winds as part of non-planing carve gybe practice. For more detail use a board and rig on the shore to demonstrate and get students to try the '**rig rotator**'.

A brilliant training tool and great light wind alternative are clew first beachstarts. By starting clew first, it develops rig control and sets up for a rig rotator once up onto the board. These can be repeated again and again to simulate the end of a gybe.

CLEW FIRST Training

Being able to control a rig clew first is a fantastic way to develop rig handling skills, become more familiar with the ending of a gybe and also recover from dismounts/waterstarts mid gybe. The following exercise can be used for clew first beach starts or as a training exercise in marginal winds. Below are the main tips for this unorthodox sailing position that's a real gybe maker!

VISION	On a broad reach - look forward keeping the head below the boom.
TRIM	A wide stance with the front foot facing and driving the board forward.
BALANCE	The mast hand should be extended and away from the body and to leeward.
POWER	Pull in and down hard with the backhand to split board in half with the rig. This often ends up with the clew hand close to the head.
STANCE	Keep a very low super 7 stance to help pull down on the boom before releasing it.

Common Problems

- Back hand not far enough down the boom.
- Not pulling down on the boom enough with backhand.
- Sailing too close to the wind - keep it broad!
- Allowing clew to go too far forward – cut that board in half.

Gybe Variations

Over the years gybing has evolved, leaving a lot of confusion about gybing styles and concepts. The main gybe outlined in the intermediate and advanced coaching methods is a proven and incredibly versatile method of gybing. Below are the different styles of gybes and how they differ from our recommended gybe:

By varying one major element from the *fastfwd* formula - **counter balance** - it will enable you to change the style of gybe.

STEP GYBE This is our preferred gybe, where the feet are switched before the rig is rotated.

COUNTER-BALANCE The rig is forward and the body is back on entry and carving. The body leans into the turn and the mast is leant out of the turn mid gybe. As the boom is released and the rig is rotated towards the back of the board, the front foot steps forward to oppose the rig's movement. As the rig is drawn forward and sheeted in, the body sinks low and back into a **super 7** to maintain that all important **counter balance**.

STRAP-TO-STRAP Also known as a 'classic' or 'wave board' gybe. The rig is changed before the feet. Often used on small wave boards or in more extreme conditions, as the feet are moved at the very last minute. It is less effective in marginal winds or with larger rigs as the board tends to sink on the tail due to the more rearward position of the sailor.

COUNTER - BALANCE The rig is kept forward and quite upright on entry, during carving and on the exit, due to the body staying at the tail of the board throughout - rig forward, body back!

When coaching strap-to-strap gybes, use the same sequence for set up and early part of carving, making the following changes:

RIG ROTATOR As the board approaches the dead downwind stage of the gybe, slide the front hand closer to the mast and release the boom with the back hand. The mast is kept forward and quite upright, with only a small 'scoop' of the mast to rotate the rig round before sheeting in on the new side.

SHIFTING & SWITCHING

During the rig's rotation, the feet remain in the carving position (i.e. front foot in the strap, rear foot on the rail). The hips and body shift into the turn and lean back to oppose the forward rig. Once the rig is sheeted in on the new side, the feet switch - ideally slipping straight into the straps.

SLAM GYBE

Also known as 'pivot', 'chicken' or 'survival' gybe! A more extreme example of the stronger wind step gybe. The board is taken even further into wind, virtually to the point of stopping. The body then hunches up, sits back to sink the tail and pivots the board round by accentuating the stronger wind step gybe carving skills.

VISION

Look and head into wind, so the gybe is performed from close reach to broad reach, which often requires a clew first exit after changing the feet. In non-planing conditions you can slam gybe from beam reach to beam due to the reduced force in the rig.

COUNTER-BALANCE

Due to the decrease in board speed, the rig is leant even more out of the turn, in order help pivot the board on the heavily sunken tail.

The pulling down action in **power** often needs to be overly accentuated, to control excess pull from the rig and prepare for a clew first broad reach exit.

SLALOM/ LAYDOWN

This originates from the step gybe camp, where the feet are changed before the rig. The objective is to over sheet the rig, and get more weight onto the inside rail. To enable this to happen there is a fundamental change in how we **counter-balance**.

COUNTER-BALANCE

In the set up, like a step gybe, the rig is forward and the body back. As the board bears away, the rig is heavily sheeted, not just in, but back and down into the turn. The rig 'lays down', towards the back of the board. To oppose this movement, the upper body has to lean forward, which is why racers always advise, "leaning right into the turn". With the rig placed closer to the water and towards the tail, the board turns tightly enabling more weight over onto the rail. The consequences require a huge movement of the rig during the rig rotator and a much speedier movement of the feet as the board will turn very quickly.

Bump & Jump

Aim: Chop Hop & Jumping – basically 'Air time!'

Objectives

By the end of this session, students should be able to:

- Set up and unhook - reversing the formula for take off.
- Apply ample pressure to the tail from an elevated sailing position.
- Control the flight of board by re-establishing the formula.
- Land safely, ideally maintaining speed.

Information to be covered

- Importance of spotting troughs of wavelets and changing sailing line.
- Temporarily reversing each element in the formula to induce take off (apart from **vision**)
- Performing an exaggerated **super 7** mid flight, then re-establishing the formula for landing.

Group Dynamics:

This session could be run as part of an advanced course, as a specific session or clinic or as a one to one or group session.

Coaching Notes

- It is important to stress that jumping is NOT about trying to 'jump' the board whilst in a sailing position. It is vital to momentarily change the sailing position and work on the timing of pushing down in the trough, rather than looking for a wave to jump off.
- If possible, hold a board with hands in the straps on the shore. Demonstrate how extra lift is generated when the board is turned towards the wind 5-15 degrees and the tail is depressed, rather than being held flat across the wind and trying to pull the board up.

FORMULA FOR FLIGHT

You will notice that apart from **vision**, we momentarily reverse all elements in the formula

VISION	Spot and aim for a trough, piece of chop or a small wave approximately 5-15 degrees above normal beam reach sailing line.
TRIM	On approaching the trough, unhook by <i>standing up</i> and coming right in over the board. To initiate take-off, push <i>down</i> through the back leg as the board reaches the trough. Simultaneously, lift and extend the front foot and leg up and into the wind. The action is best achieved in a relaxed upper body position, keeping over the board as much as possible as the back leg extends to push down in the trough.
BALANCE	Use an underarm grip on the front arm and pull the boom closer to you to reduce the forces through the mast base.
POWER	Coming inboard helps the key objective of sheeting out, reducing the forces through the mast base to <i>ruin</i> that trim !
STANCE	<p>Once in the air try to re-establish the formula; immediately tuck up into an exaggerated super 7 'drop and push' stance, by extending the front leg and heavily flexing the back leg.</p> <p>Once in the air, it feels like the body drops down towards the tail as the nose of the board is pushed and pointed high and into the wind. The objective is to keep the tail tucked in close to the backside. This helps avoid over-weighting the tail on landing and will turn the board back on line after the slightly upwind take off position.</p> <p>Whilst sinking down and back into a super 7, extend the front arm to re-establish balance and sheet in with the back hand to re-apply power. On landing, <i>uncoil</i> from this very tucked position.</p>

Common Problems

- Not heading upwind or timing the push in the trough well enough.
- Trying to 'jump' the board from a low, outboard position – get inboard and more upright.
- Pulling down on the boom too much.
- Landing heavily on the back foot and causing the board to stall - this is often due to back leg being too straight, being too sheeted out, or in a frozen, startled stance mid air.
- Spin out is usually due to a straight or stiff back leg mid flight or on touch down.
- Not getting much height is usually due to lack of timing when pushing down, or really tucking the tail close to the backside mid flight.

BUMPS NOT JUMPS

To avoid unwanted jumps, accentuate a **super 7 'drop and dig'** stance, pulling up on the toes (particularly front foot) and flexing the back leg as soon as the nose lifts. If there is still 'unwanted height/ air', head upwind more and flex *both* legs heavily just before hitting large chop, small or even large wave. When the dangers is over, re-establish your stance with an extended front leg and slightly bent back leg.