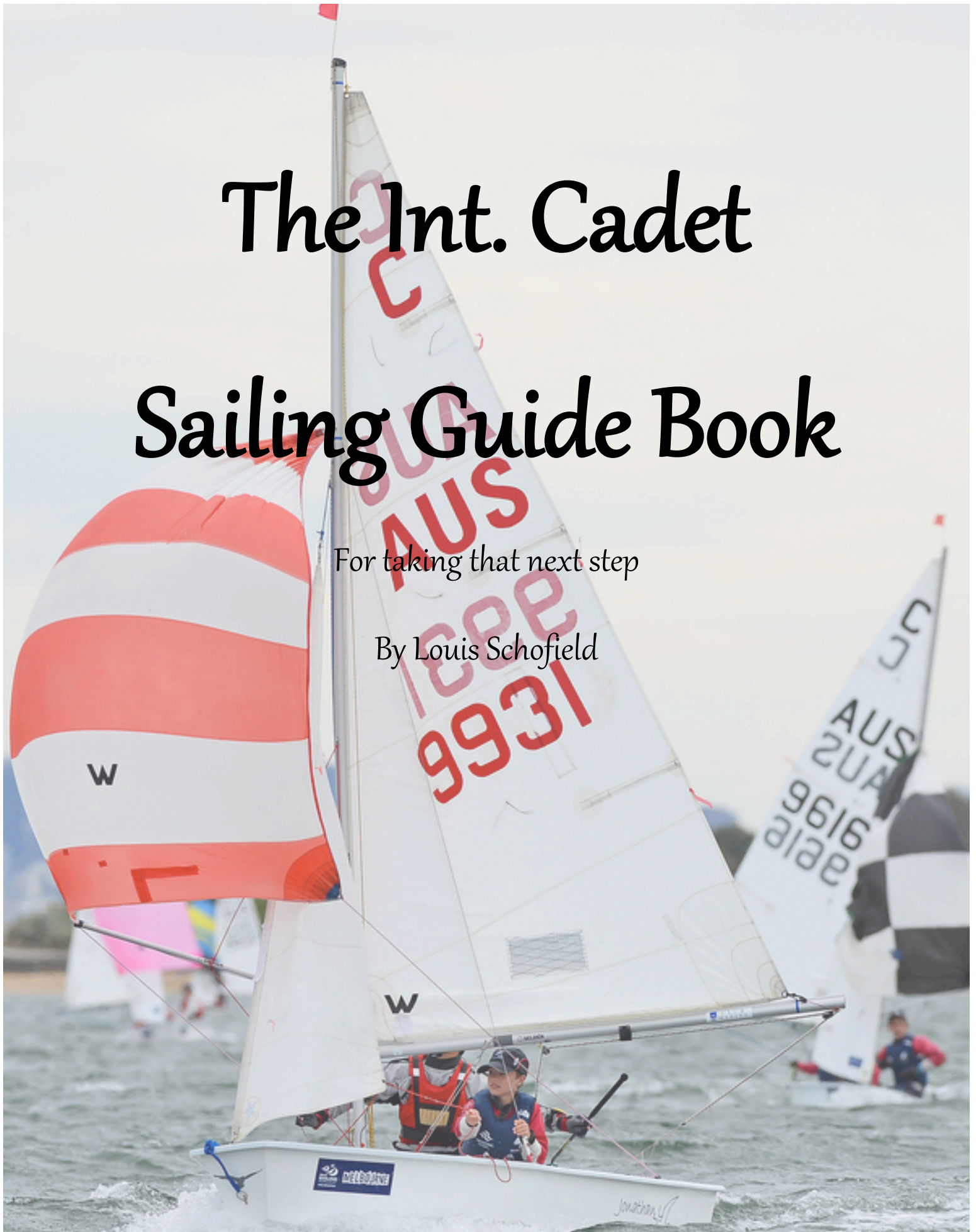


The Int. Cadet Sailing Guide Book

For taking that next step

By Louis Schofield



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Cadet Setup

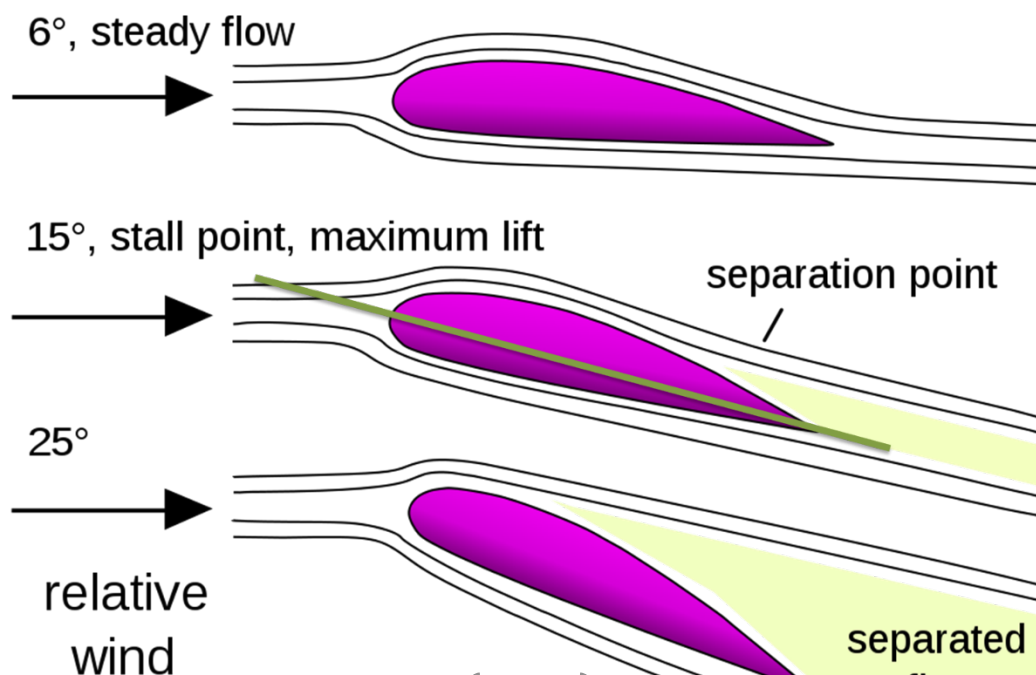


How to set up a Cadet

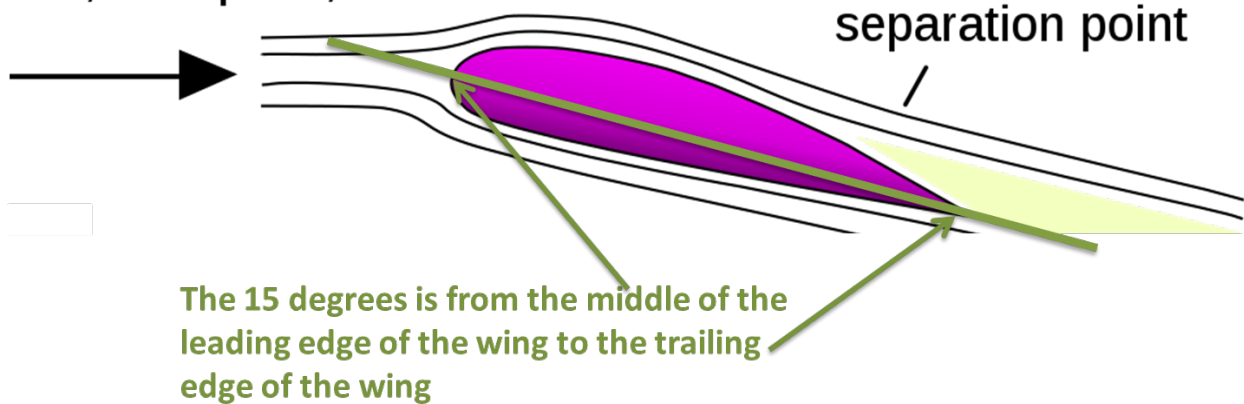
The Cadet has a very adaptable rig and can be sailed fast with a range of setups, for example the rake the Ukraine's use is something like 5150mm compared to the rake that the English boats run about 5000mm, both countries proved to be very fast at sailing cadets. Most Australians are somewhere in the middle at about 5020mm which also works well. But to make the boat go fast it's more important to worry about sail shape and body positioning, if you can get those two things right it can improve your boat speed massively.

Sail Aerodynamics

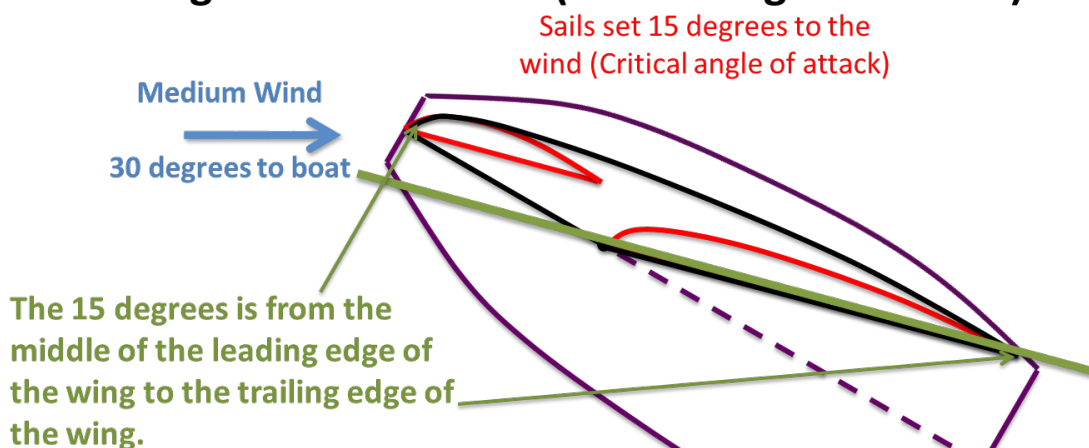
During my time in cadets I have spent a lot of time looking into the way the sails work and how to make them work at their best. I guess what really got me so interested in sail settings was witnessing the 2012 Worlds that were held in Tasmania. That World Championships were dominated by the Ukrainians who made everyone else look bad. And what I found really unusual was the way they set up their sails; upwind they would sail pretty much without windward jib sheet and they had their Mainsail halfway out to the back corner of the boat. Up until then I thought the mainsail was like an accelerator upwind and the more you can pull it in while keeping the boat flat the faster you would go and it just didn't make sense to me how these Ukrainians could even sail upwind with this setup let alone being the fastest boat in the fleet. Here is what I discovered.



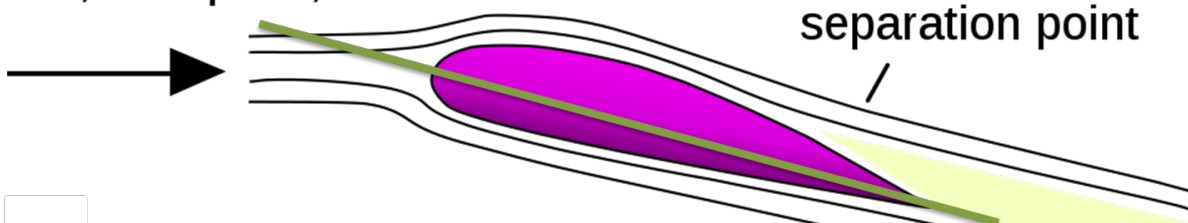
15°, stall point, maximum lift



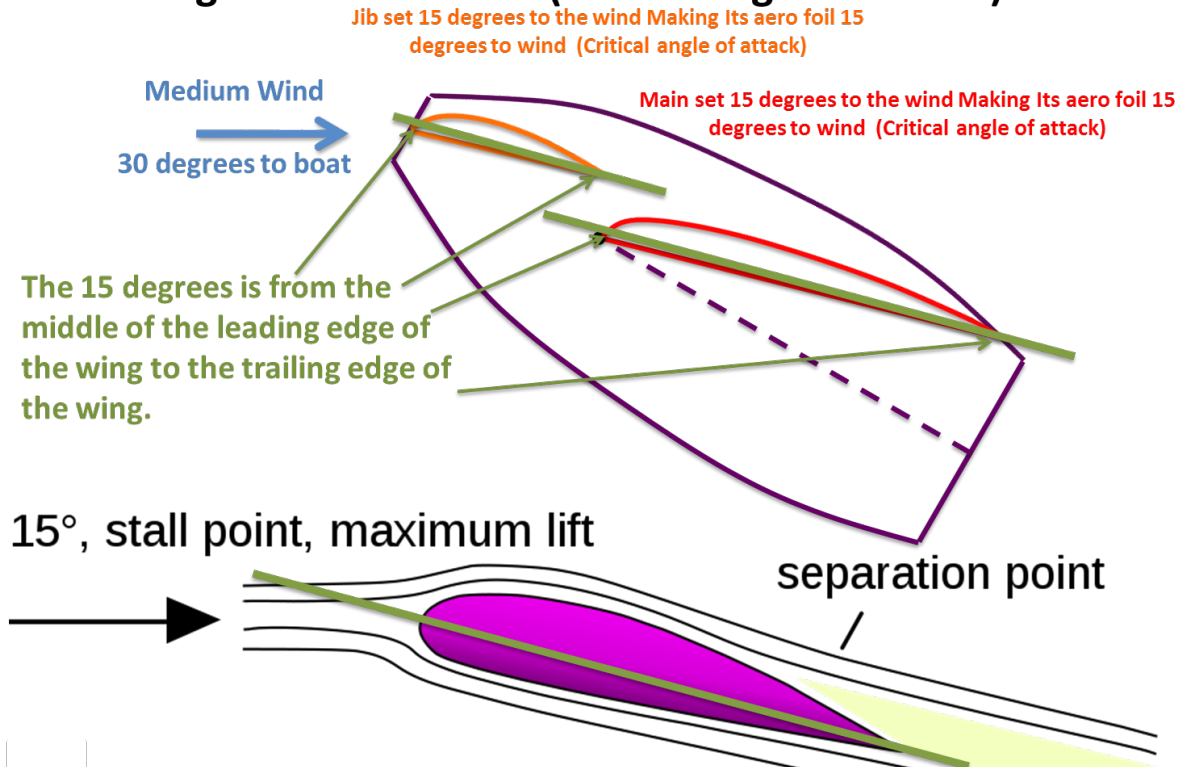
When you form 1 wing out of the 2 sails the wing isn't 15 degrees to the wind (critical angle of attack)



15°, stall point, maximum lift



When you form 2 wing out of the 2 sails the wings are 15 degrees to the wind (critical angle of attack)



About the Ukrainians

In Kiev where the Ukrainians sail, they sail on a lake which almost never has waves or chop so basically they sail in perfect conditions so in theory this sail setting with the main and jib 15 degrees out would be the most effective sail setting they could have.

In Australia we rarely sail on lakes and often sail in choppy and wavy conditions which means the mast pitches forward and aft a lot more disturbing the flow of the wind a lot more and to deal with this we trim our jib and mainsails into the centerline and

open up the leach a little to create a more forgiving sail shape which works well.

So basically the Ukrainians set up for flat water and we set up for chop, in light of this I created a cadet setup guide to cover all bases.

	Light winds- Flat	Medium winds- Flat	Heavy winds- Flat	Light winds- Choppy/W avy	Medium winds- Choppy/W avy	Heavy winds- Choppy/W avy
Outhaul	Flat	Medium	Flat	Medium Flat	Deep	Flat
Cunningham	Wrinkles	Some Wrinkles	No Wrinkles	Wrinkles	Wrinkles	Some Wrinkles
Vang	On the edge of stalling	On the edge of stalling	On the edge of stalling	Slightly Open	Slightly Open	Slightly Open
Boom Angle	Between inside and outside of side deck	Between inside and outside of side deck	Between inside and outside of side deck	Between inside of side deck and centerline	Between inside of side deck and centerline	Between inside of side deck and centerline
Body weight	Weight forward boat dead flat	Weight forward boat dead flat	Weight forward boat dead flat	Weight aft boat <u>slightly</u> heeled	Weight aft boat <u>slightly</u> heeled	Weight aft boat <u>slightly</u> heeled
Jib tell tails	1  	2  	2  	1  	1  	2  
Rake	5040mm	5030mm	5020mm	5030mm	5020mm	5010mm
Rig Tension	8	12	16	6	10	14



Bull Sails

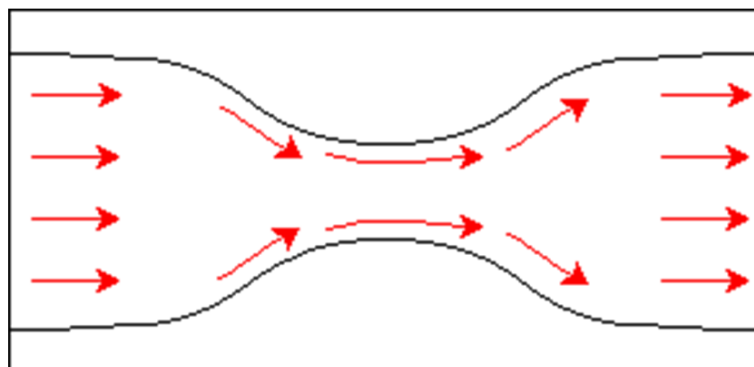
Cadet Sail Trim

How sails work

Daniel Bernoulli- renaissance

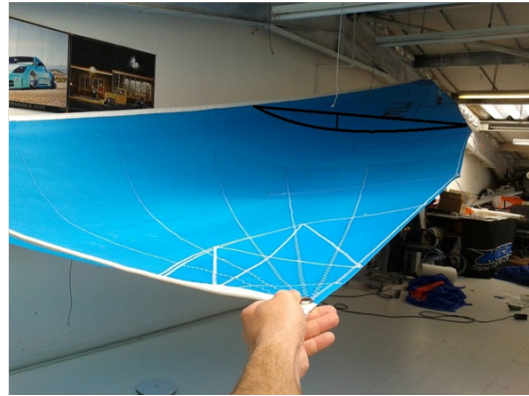
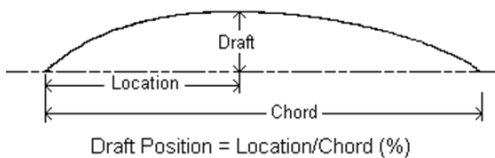
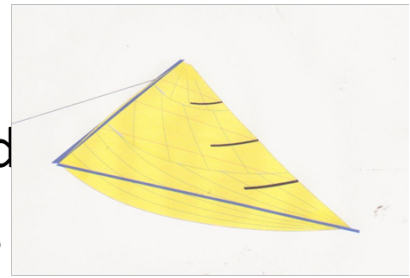
Professor Venturi

Principles of laminar flow



Sail Camber

- Maximum power -medium conditions
- Shed power- heavier conditions
- Search for more power- light conditions



Trim both sails as one entity

Trim to the front of the jib and the back of the mainsail.

Primary focus should be on telltales of jib and leech ribbons of main

- Slot is all important
- Venturi effect
- Greater acceleration



Mainsail Trim

Focus on top leech ribbon



Light airs – looking for power

Leech ribbon stalling about 20-30 % of the time

Top batten- back edge parallel to boom

Medium airs – up to power

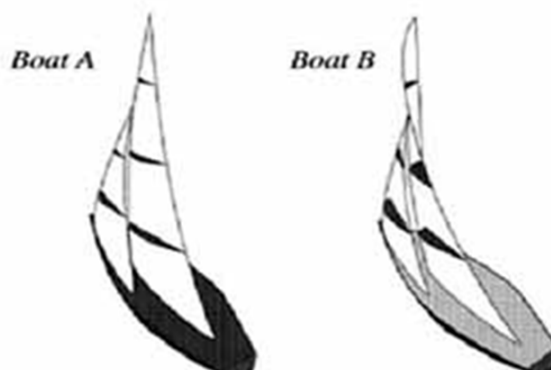
Leech ribbon flowing all the time, batten slightly open

Heavy air- Shedding power-

Flatten sail- outhaul flattens sail in bottom $\frac{1}{3}$, Mainsheet flattens top

Twist sail off- to shed power, when over powered, boat should feel good

*Fig. 16 - Twist is the difference in trim of the sail high and low. Sails are designed with some twist to match differences in wind high and low. We fine tune twist to match sailing conditions and performance goals.
Boat A has closed leeches, with little twist.
Boat B has open leeches, or lots of twist.*



Other sail controls

Vang controls twist

Cunningham eye controls the draft of the sail, keep the camber at about 45 %



Spinnakers

Symmetric

Out in front of boat- fly away from mainsail

Clew tack should be level or tack slightly lower,

Pole position, curl of leech should be at 2/3 height,
Higher curl -means pole is too far forward
Curl down low -pole is too far back.



Jib trim

Use sheet to reduce the twist

Use cross-haul to change angle of attack to the wind



Keep boat flat

Note the twist difference in jib and mainsail

Downwind

Pole height fly spinnaker pole high to separate gap between mainsail and spinnaker.
Helmsman and trimmer work together more, steering angle is critical.

Gybing

Keep spinnaker flying

Don't pull on sheet. Disrupt the flying.

Twist

Still important



Crew weight

Upwind- together

Downwind- forward in the light

Heavy air – aft to make bow lift



Heavy air downwind

Keep boat under spinnaker, keep steering back under it if it rolls one way



across

Sail comfortable angle, wind slightly

boat.
Sail Flat

Bull Sails

Geelong

Tony Bull

tony@bullsails.com.au



On The Water



The different jobs on the boat and who should be doing them

After a few Months with a new crew I decided to put this together so we both knew exactly what had to be done and who was doing it.

BEFORE THE START-

Crew + Skipper

Practice-

- Straight line speed
- Tacking
- Spinnaker hoists
- Gybing
- Spinnaker drop

Then-

- Sync TacTic.
- Find favoured end of line

Create race plan taking into

account-

- Favoured end of line
- Current
- Where on the course there is more wind
- Where on the course are lulls

START-

Crew

- Jib

Tell skipper about-

- Time

Skipper

- Jib orders (Left, Right, Luff, Tacking)
- Getting a good spot on line
- Protecting spot on line

UPWIND LIGHT AND MEDIUM-

Crew

- Keeping Jib leach perfect

Tell skipper about-

- Upcoming boats

Skipper

- Steering to the tell tails
- Steering to the chop
- Adjusting the mainsail
- Adjusting vang
- Looking for side with more wind
- Looking at TacTic for wind shifts
- Calling gusts
- Keeping the boat flat

UPWIND HEAVY WINDS

Crew-

- Setting jib
- Keeping the boat flat

Tell skipper about-

- Upcoming boats
- Gusts
- Side with more wind
- What the TacTic says

Skipper-

- Keeping the boat flat
- Steering to tell tails
- Steering to waves or chop
- Adjusting mainsail
- Adjusting vang

TOP MARK TO DOWNWIND-

Crew

1. Spinnaker pole
2. Jib out, brace on
3. Sitting in position where you can see spinnaker
4. Trimming spinnaker

Skipper

1. Vang off
 2. Spinnaker up
 3. Centreboard up
 4. Pumps Main
 - Balance boat
- Looking around for-

- Bottom mark
- Wind
- Other boats

TOP MARK TO REACHING-

Crew

1. Spinnaker pole
2. Jib out brace on
3. Trimming main
4. Centreboard up (half way)
 - Balance boat

Skipper

1. Vang off
 2. Spinnaker up
 3. Trimming spinnaker
 - Balance boat
- Looking around for-

- Wing mark
- Other boats

WING MARK-

Crew

1. Jib across
2. Shy hook out
3. Boom across
4. Pole up
5. Shy hook in
6. Cleat it

Skipper-

1. Steer around mark
2. Trim spinnaker
3. Hold main in

BEFORE BOTTOM MARK-

Crew

1. Hand sheet to skipper
2. Centreboard down
3. Spinnaker pole down
4. Spinnaker down (When told)
5. Jib (Right Then left)

Skipper

1. Takes Sheet
2. Pulls on outhaul
3. Pulls on vang
4. Rounds mark
 - Look out for other boats

On the Water

I made this when I was 12 to stick on my boat so that I didn't have to remember it all in my head. I remember getting a lot of funny looks when people saw what looked like whole novel stuck to the front of my boat. It helped me a lot and if you're just starting and having trouble remembering everything go ahead and stick this to you boat you may get a few funny looks but it will help you out on the water.

Remember

- Let the vang of before the top mark pull it on before the bottom mark
- Have an acceleration setting for starting and tacking different to your upwind setting.
- Straight after you round the bottom mark or tack look at the sails for correct setting
- Trim sails every time the wind changes if you see a gust coming pull on the vang and jib.
- Stay out of the slot and if possible sit side on.
- Reaching get the main in as fast as you can.
- You need to be able to answer **at any time** (upwind and downwind):

1. Are you being lifted or knocked?

2. Where is the next pressure coming from? Every minute you should be looking **upwind** for next pressure could come from anywhere. (That means behind you when you are going downwind)

3. Have I got the correct setup? Look at your sails every minute. Think of your sails, as

Routine:

1. Checks and warm up:

- 6 tacks
- Spinnaker hoist
- 3 gybes
- Spinnaker drop

2. Speed Test:

- 2 line-ups with partner
- Tack

- Line up again

3. Start Practice:

- 2 x 2 minute practice starts

4. Strategy

- Start on opposite ends of the line on opposite tacks cross over to see which ends favored.

- Beat on opposite tacks, after 2 minutes tack back and cross over.

- Study the horizon splitting it into 3 sections left, middle, and right. Look for **dark patches, cruising sailboats, ripples, and boats heeling more.**

Make a guess at which side is better and head for it.

Medium Winds:

Keep weight forward:

- Completely flat
- Gentle movements
- Roll tack

Downwind:

Choppy Water-

- Centerboard up
- Windward heel
- Roll gybe

Flat Water-

- Centerboard up
- Weight back boat dead flat
- Gybe and hoist spinnaker with tiller between your legs

Light Winds:

Keep weight forward:

- With slight leeward heel
- Gentle movements

Light Wind Roll tacking:

- Crew faces aft and copies every movement of the skipper
- Jib stays on until full turning the boat around.

- When you sit down again main and rudder must be on center.

Downwind:

- Centerboard up
- Windward heel
- Roll gybe

Heavy Winds:

Sails over powered:

- Pull on outhaul
- Keep boat COMPLETELY flat

Downwind:

- Gybe and hoist spinnaker with tiller between your legs
- Weight back boat dead flat

More notes on fast Cadet sailing

Have a race strategy taking into account:

1. **Pressure-**
 - Which side of course has more wind?
2. **Angle of wind-**
 - What direction is the wind coming from?
3. **Oscillations-**
 - Is the wind oscillating?
 - Is the wind persistently going to one side?
4. **Tide (if there is tide)-**
 - Where is the tide coming from?
 - How strong is the tide?
 - The deeper the water the stronger the tide
5. **Current (if there is current)-**
 - Where is the current coming from?
 - How strong is the current?
 - Would it be favorable to go towards the current upwind?
 - Would it be favorable to go towards the current downwind?
6. **Bias end of line-**
 - Which end of the line is bias?
7. **Overall position-**
 - Should I race conservative or risky?

Have the same routine to do every time you go out:

10min to start- Sail upwind on starboard and determine the range of the wind shifts and weather they are persistent or oscillating or both.

7min to start- Do a split tack.

5min to start- Find the bias end of the start line.

4min to start- Look upwind to check if the wind has changed or not.

3min to start- Finding a spot on the line.

1min to start- Protect spot.

VMG:

Sail with 3 grooves or gears-

- Pinching (high groove).
- Close hauled (medium groove).
- Footing (low groove).

Pinching-

- VMG in Flat water in 10knots or more.
- Le-bowing.

Close hauled-

- VMG in most conditions.

Footing-

- VMG in choppy or wavy water.
- VMG in really light winds.
- Going over boats rolling them.

Top tips from James Wierzbowski

Oscillating / Shifty / Gusty - Inches Day

You're not in front until you cross their bow.

What goes left must go right.

If you can't see it, it's not there.

Persistent / Steady - Gain Feature

Sail towards the next shift.

Tack and gybe in bands of pressure.

Speed then height (VMG)

Starts

Start according to upwind strategy but don't underestimate the importance of line bias

Tide & timing

Transits - Get & use it pre-start

Positioning

-Risk in the First third

-Gain in your second third

-Consolidate in the third third

Wind Type = Oscillating OR Persistent shift for the next leg.

Gradient

Thermal

Sea breeze

Cloud

Geographic

Starting



Right from the start

01 Jan 2010

Australian Sailing -- October 2009

How to analyse the starting line and position yourself for success further up the race track, by Tony Bull.

The start of a boat race is where you can set up your whole race. Get into clear air, going the right way, and the rest of the day should fall into place fairly easy.

Preparation for a good start begins well before the five minute gun. You need to develop a plan and in order to implement that plan you need to accumulate as much pre-start data as possible.

Begin by reading the starting instructions. Look at the mark descriptions, the starting sequence, the recall procedures and the appropriate division flags. Out on the water, look at what you think will eventuate on the first leg as this will have the biggest bearing on your starting strategy.

Is one side of the course favoured by breeze, land mass or tide? Is the wind building or dying? Is the wind direction fairly regular or oscillating? These are all factors you need to consider when putting your start process together. Discuss

them with your crew -- you might get some good input and everyone will know what you're doing and why.

My definition of a successful start is not where or how you cross the line but if you are exactly where you choose to be when you make your first tack. This means you are right on your plan and sailing the race the way you intended to, being proactive and not reactive.

Assessing the starting line.

Whereabouts do you intend to cross or start on the line? If you feel that one side or the other is favoured because of what is going to happen further up the race track, then it's in your best interests to start towards that end of the line.

To do this we need to ascertain if the line is square to the wind. If the line is skewed then one end will be favoured above the other as the end further to windward will be closer to the top mark. It is quite simple to work this out -- poke your boat head to wind and take a reading of the wind direction, then sail along the start line and get a compass course on that. If the angle to either end is less than ninety degrees then that end is favoured over the other. There are some excellent comp cards available at chandleries that make this a lot easier. Larger boats have the navigation data to "pin" the end of the line by GPS and

have constant updates on the computer as to the favoured end.

When doing a mark pin, try to sail as slowly as possible, to get the most accurate reading. I see some boats screaming around flat out whilst pinning the line and this is woefully inaccurate. Remember to keep updating the wind direction during pre--start manoeuvres as it will probably be moving at regular intervals and thus minimising or making more pronounced the favoured end of the starting line or even changing it completely. **Port side favoured -- pin end start.** If we have decided the port side of the course is favoured by either angle bias or factors likely to affect the fleet further up the course, then it would be most advantageous to start down toward the pin or buoy end of the line. In this case it will be in our best interests to continue on starboard tack after starting (most boats will nearly always start on starboard tack with its right of way advantage unless the line is very biased) and head quickly to our preferred left side.

Our priorities must be clear air and the room to sail unimpeded on starboard tack. To this end while jockeying for position in the last few minutes it is important to try to keep a clear gap in the area immediately under our bow. If we let another similar or faster boat into this hole then he is going to cause us issues by lee bowing us once the gun has

gone and forcing us to tack away. Sometimes we may have an excruciatingly lengthy wait for the rest of the fleet to open up and allow us enough room to do the tack. Once we have to make this reactive tack our game plan has gone astray.

So work very hard to get this clear space under your bow and protect it. So many times I have seen a boat work very hard to get into a really good spot and then throw it away in the last twenty seconds by sailing down the line towards the boats underneath them and ending up too close.

When doing a preferred pin end start, I am a fan of approaching the line on port tack and looking for the most advantageous spot to tack into -- a gap with a nice space to leeward and away from the negative influence of bigger boats if possible. Whilst sailing in on port tack you have a view of the whole fleet and where they are all setting up. If it looks like a lot of congestion is developing at the bottom end then sail past these boats and tack in clear air up on their hip. Let them fight each other while you concentrate on clear air and a good start.

There is a fair chance that as they disrupt each other you will sail over the top of them and away to your preferred side. If on the other hand the pin is relatively clear then tack in front of the fleet and stake your claim early. It is a

great feeling to be on the pin mark at the gun, going to the favoured side of the course with the whole fleet on your hip and you safe in the lee bow position.

Right side favoured -- boat end start.

If the boat end is favoured then we will need to orientate our starting position to that end of the line and this presents a whole new set of challenges. As we now prefer the right side of the course we need to be able to tack out relatively early (assuming we will start on starboard tack) and get over toward that side. To do this it is very important to deduce where exactly the starboard tack layline to the starting boat or distance mark is. It is worth doing a few runs at the committee boat pre--start to try to gauge this. If you happen to be near land it is a good idea to sight up on the shore to a point where you can see that you are approaching the start on the lay line.

The reason we need to pay a great deal of attention to this layline is that if we try to come down from above it we have no rights and are barging in at the start. This approach is fraught with danger and probably causes more collisions than any other situation in sailing, so be very wary and remember the boats below you have every right to push you out.

However as we are looking to tack away as soon as possible after the start we need to be as close to this layline as we can. The further down the line we end up positioned the longer we will have to wait before we can tack away as we will likely have several starboard tack boats on our hip preventing this.

It can also be OK to come in just behind the main group and quickly tack away to the favoured side. It goes against the grain to hang back but gets you going the way you want earlier than being hemmed in by other boats. If it is not imperative to tack away immediately then a nice conservative start just below the main group can work well. Sail in clear air for a while and wait for the gaps to open up before tacking over.

Oscillating winds -- start in the middle.

If we find we have a square line with no discernible bias then it is often best to start in the middle of the line. A mid line start can be advantageous when you need to keep your options open. If the breeze is oscillating randomly then a nice clear lane in the middle means you can exploit the wind shifts as they become apparent. Generally speaking the fleet as a whole are less aggressive and less tightly bunched midline and it can be a good safe place to start, particularly in heavy winds. Many top steerers like to start mid line regularly so as not to be too hemmed into one side of the


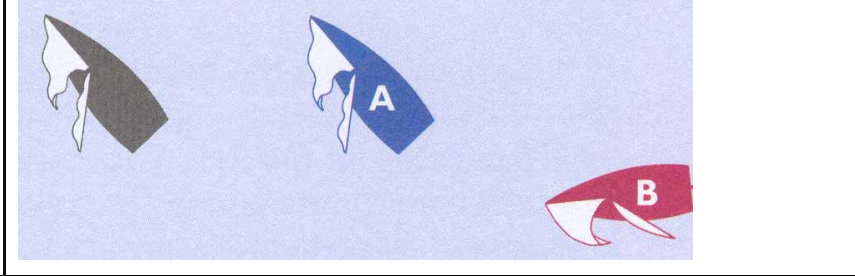
course and have a better chance of getting a clearer lane to sail in.

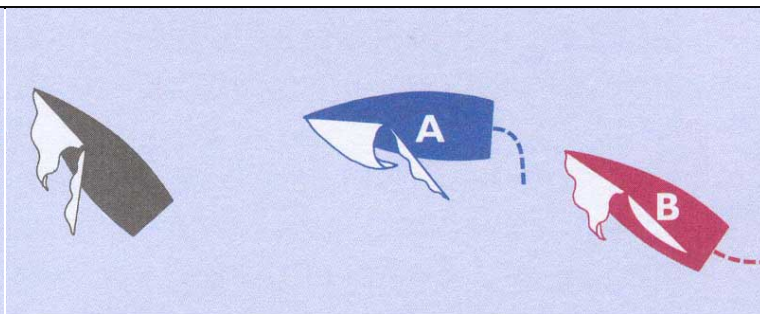
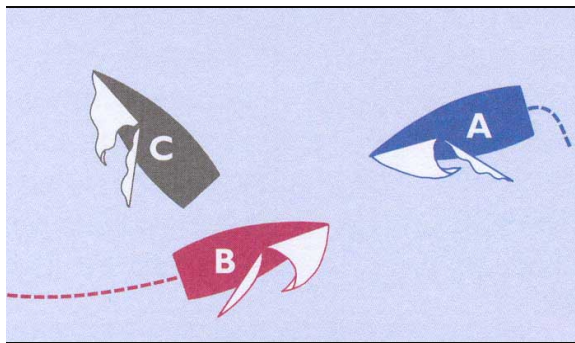
Coming into a start can be pretty volatile with lots of flapping sails, yelling crews and boats in very close proximity. It is no place for the fainthearted or ignorant. On larger boats it can be very hard to maintain a line of communication between helm and tactician so it is best to let the helmsman take over the primary positioning of the boat for the last minute or so. It is imperative that the helmsman has a good understanding of the rules and the ability to handle the boat in tight situations in order to grab opportunities when they present themselves and avoid situations that develop quickly.

Another point in starting a yacht race is the fleet size and type;; we can naturally be a lot more adventurous on a smaller sized fleet where there are fewer competitors to hinder us. In larger fleets we need to take a more conservative approach with so many more boats around. If we find ourselves in a mixed fleet aboard one of the slower boats it would be silly to position ourselves at a starting point where once the race is underway we will be rolled over and gassed by all the larger faster boats, so once again a conservative approach is best.

The way you start a yacht race is usually critical to your chances of success. So take the time to get it right and your success rate will be greatly enhanced.

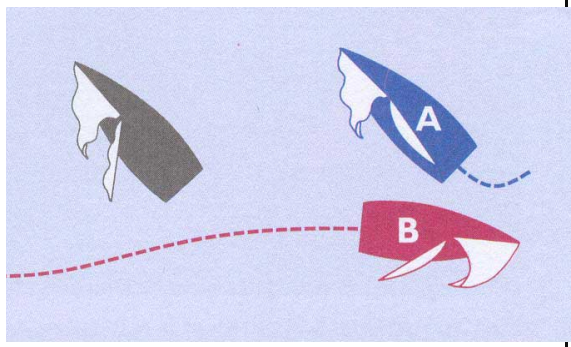
Protecting your spot on the line

<p>From a port tackler</p> 	<p>From a starboard tackler</p> 
<p>1. When you (A) are lined up for the start and you're protecting a hole to leeward, beware of port tackers (B) coming from your leeward side. These latecomers are looking for a space where they can tack, and you definitely don't want them filling up the hole to leeward. Keep a good lookout and use the moves below to discourage them.</p>	<p>1. Another threat to your leeward hole are starboard tackers (B) who can't find a spot on the line and start reaching along behind the front-row lineup, looking for a hole. It's harder to see these boats coming, so keep an eye over your shoulder. Use the moves below to guard your space and avoid getting luffed head to wind.</p>

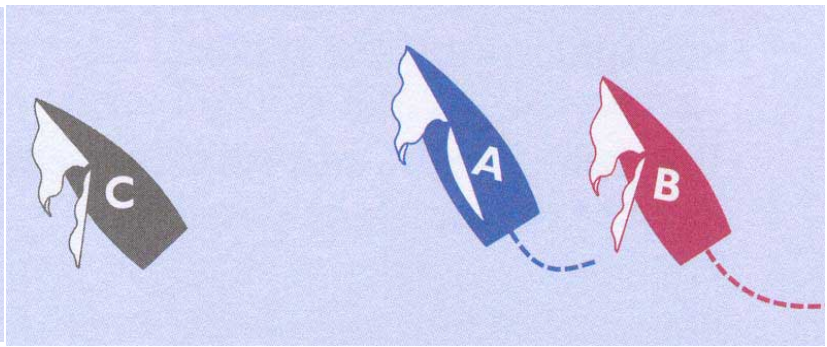


When you see a port tacker eyeing your hole, rotate your boat so you are aimed right at them. This will make it much harder for the port boat to tack into the hole on your leeward side. Try to rotate your boat without moving forward. If you go forward too much you will use up the hole you've been protecting and end up just to windward of the leeward boat (C). Since you're probably not moving through the water very fast, you can't turn with the rudder or by moving your weight. Instead, rotate by over-trimming your jib (or genoa) and letting your main out.

2. When a starboard tacker comes from behind and threatens to sail into your hole (and probably luff you in the process), discourage this by turning your boat to a reaching course, as if you are going to sail into your hole. Turn your boat with your sails and try not to move forward any farther than necessary (so you don't use up your hole). Push your boom out to take up more of your space. Try to make the other boat think there will be a better hole to windward of you than to leeward.



Your goal is to discourage the other boat from tacking into your hole and encourage them to keep sailing past your stern in search of a better space. As soon as the port tacker commits to passing astern of you, use your sails (trim main, ease jib) to rotate your boat back up to a close-hauled course (or above) so you maintain as much of your hole as possible.



3. As soon as the starboard tacker turns and commits to going on your windward side, rotate quickly (using your sails) and luff them toward the wind. This accomplishes two things:

- 1) It gives you control over the windward boat, which will be helpful when you come off the line; and
- 2) It moves you as far as possible from the boat on your leeward side (C).

Instead of turning up to windward of you, it's possible the starboard tacker may continue past on your leeward side. As soon as she commits to going behind the boat to leeward of you (C), head up and maintain your hole.

Regatta Prep



The BIG Regatta Prep Checklist

Gavin Dagley, 2012

You are off to the big regatta. Here are a few things to think about for the trip.

PREPARATION

1. Confirm your transport, tickets, entry and accommodation early. Being close to the venue is an advantage.
2. Have the boat measured before you go. Measurement surprises are always a misery.
3. What will break? Make sure you have the boat fully maintained and checked WEEKS before the regatta. So often, late changes end up giving you a problem at the site.
4. Any new gear (particularly sails and masts) need to be thoroughly tested LONG before you get there (but be careful not to overuse jibs or spinnakers as they wear out).
5. Set up and practice your routines – the “morning” routine, the “pre-race” routine, the “debrief” routine etc.

AT THE VENUE

6. Get there a day or two early. At the least, check out the venue, the shops, the doctor’s surgery, the sailmaker, the ships chandlery – and go sailing if you can.
7. Get the Sailing Instructions as early as possible. Read them carefully. Most Clubs have their own idiosyncrasies.
8. Get the measurement done early and be patient. Most measurers are volunteers under stress. Don’t give them grief. Deep breaths!

FIRST RACES

9. Work with the routines you have established. They are the best “sanity insurance” when stress levels are high.
10. Set yourself some simple targets about what you will do well (rather than where you will come).

Remember you do this for fun. Don’t buy in to the games of stress-monkeys.

Priority 1 – have a good time; Priority 2 – learn heaps!

Routine

Getting into a routine of doing the same things at the same times every day can be a very good thing when you want to sail your best at a regatta. When you're in a routine of going to bed at the same time and getting up at the same time your body clock gets into sync making it a lot easier to rest and overall making you feel at the top of your game when your sailing I made this routine for the worlds I competed in at England.

Worlds Routine:

1. Hang up my sailing gear as soon as I get home
2. Bedtime at 9:30pm
3. Wake up at 7:30am (use alarm)
4. Shower
5. Get sailing gear off the line, pack bag and put wetsuit on.
6. 4 Weet-Bix for breakfast
7. Check forecast
8. Pack the days food (healthyish)
9. Walk to yacht club 8:30am
10. Rig up
11. On Water 10:00am
12. Race starts at 10:55am

Training and racing log

One of the greatest tools that my coach ever gave me was a training and racing log. Training and racing logs are really good thing to use as you remember a lot easier when you write it down and you can also look back at previous weeks and see how far you have come and what you still need to practice.

TRAINING LOG

<div>DETAILS</div> <div>Date:</div> <div>Venue:</div>	<div>CONDITIONS</div> <div>Light / Medium / WINDY</div> <div>Flat / Chop / BIG SEAS</div>	<div>WHAT WE DID</div>
<div>WHAT WE DID WELL</div>	<div>WHAT WE NEED TO PRACTICE MORE</div>	

Racing Log ss

designed by Gavin Dagley 2004

1. DETAILS:

Club:

Date:

Conditions: ☐ **L**ight ☐ **M**oderate ☐ **W**indy



I sailed: ☐ **R**eally well ☐ **Q**uite well ☐ **S**o-so



2. SPEED:

Things I did that made me go **fast** were
Sail setting -

Where I sat or hiked -

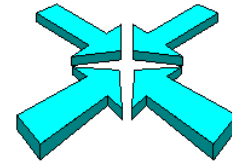
How I steered -



3. WIND:

The wind **strength** seemed to:

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> get stronger | <input type="checkbox"/> stay the same |
| <input type="checkbox"/> die away | <input type="checkbox"/> go up and down |



The wind **angle** seemed to:

- | | |
|---|--|
| <input type="checkbox"/> change back & forth | <input type="checkbox"/> keep changing to one side |
| <input type="checkbox"/> not change very much | |

An **important** thing about the wind today:



4. TACTICS: I liked these things about:
my **start** :



my **mark roundings** :



keeping in **clear wind** :



5. NEXT TIME I'm going to try

Mental



In your head

Sailing is just as much a mental game as it is a physical one especially when you get to national or world championship level, where sometimes the stress of trying to achieve a goal can be overwhelming. Trying to keep your thoughts positive is the most important thing and if you can do that then you know mentally you're in the right frame of mind.

Something Pete and I always used to do after a bad race, was try to take all the emotions away from the situation, and just run through where we went wrong and what we can do better next race and just try to stay positive.

Whatever you do don't think about the results. Just don't even look at them, make a point of telling your friends and your parents not to tell you for the whole regatta. If you think positively and concentrate on the job at hand the results will come to you. At regattas I never look at the results because no matter what you see you will get more stressed!

PERFORMING UNDER PRESSURE

From Australian Sports Commission *Sports Coach* magazine, Vol 25(1), 2005

→ What is stress/pressure?

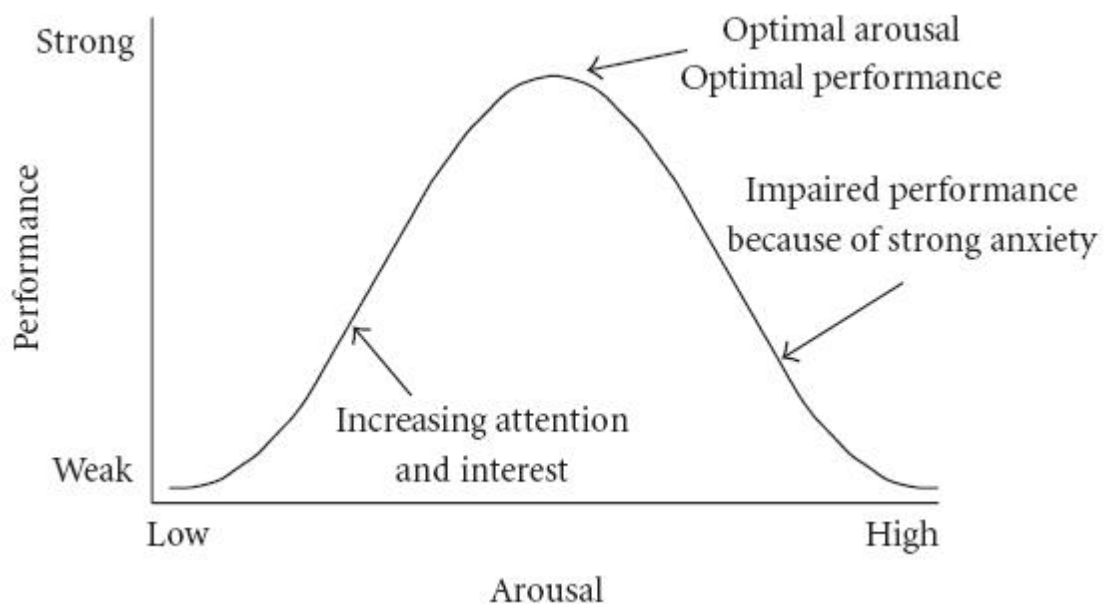
- Pressure usually refers to the feelings that you might have about performing.

→ Symptoms of stress:

- Irritability or moodiness
- Interrupted sleep
- Worrying or feeling of anxiety
- Back and neck pain
- Frequent headaches, minor to migraine
- Upset stomach
- Increased blood pressure
- Changes in appetite
- Rashes or skin breakouts
- Chest pains
- Making existing physical problems worse
- More susceptible to cold/flu and slower recovery

→ Is pressure a good thing?

- Pressure can enhance motivation, concentration and enjoyment
- The feeling of stress can help keep you on your toes and help you rise to the occasion



→ Where does pressure come from?

- Internal sources
 - Yourself and your expectations
- External sources
 - The expectations of your parents, coaches, team mates, crew/skipper and what you think they want from you

→ How to deal with pressure

- **Pressure is an illusion** – pressure isn't something that happens to us, but is something that your mind creates
- **Pressure in the competitive context isn't real** – it doesn't exist. Pressure is simply how we perceive/think about the situation we are in. It is important to learn this, because once you understand that pressure is something that **you create**, then you also understand that pressure is therefore something **you can control**. By controlling responses to pressure situations, you can learn to take them in your stride.

→ Controlling responses to pressure:

- **Pressure only exists if you are concerned about the outcome.** Sailing in a training session and sailing in the national or world championships are exactly the same thing! It's still the same boat, the same strategies, the same rules – nothing has changed in terms of how you sail. So approach pressure situations as though they are practices. Train your mind to stay in the present and let the outcome take care of itself.
- **Learn to practise at the same level you compete at.** Your best possible race can only ever be as good as your best possible training performance. People think that all those little successful moments you learn when training will somehow combine together on race day to bring about higher levels of performance. This just isn't true, so learn to train at the level you mean to sail at.
- You must **practise pressure situations** in training, so they become normal and easy to handle.
- Ensure you have **good preparation** leading up to competition.
- Pressure situations require **enhanced communication**, especially between skippers and crew – practise this in training.
- **Never, ever give in** – maintain commitment and desire in the face of adversity. "Remember the race is from here onwards, you can't change what has happened and to worry about it is pointless"
- **Learn to focus on the right thing at the right time**, regardless of what is going on around you. Don't get distracted (e.g., by a bad start), you can't change that
- Often athletes (and coaches) rush things when they are under pressure. This detracts from performance, communication, vision, and enjoyment. **Slow down.** Even though you may feel under time constraints, it's better to slow down and get it right than to rush it and make an error.

- Some people will benefit from engaging in some **relaxation exercises** prior and during competing, to help them to feel calm and focused – can help you get back in that moment.
- **Practise mindfulness** (no negative thoughts... I mean, think positively!).
- **Share how you feel with others** – talking about how you feel can help you to deal with it. However be mindful of who you choose to talk to, you don't want to put ideas of pressure into your teammates' heads!
- **Strive for excellence, not perfection.** It is okay to make mistakes under pressure, just as it is alright to make mistakes in training – so long as you recover well and learn from them.
- Focus on technique or strategy. Pay attention to the things you have practised – they are familiar so they won't feel pressured.
- **Have good error recovery strategies** – people tend to make more errors when they perceive they are under pressure, so you need to have a good strategy to deal with them without them affecting your confidence. We'll give some examples.
- Remember, **it's not about your feelings but your actions.** Take the focus off how you feel, by putting your focus onto what you will do. Your actions affect your emotions so go through the right actions (pretend if you must) and you will feel better.
- **Identify the actions/skills that suffer most when you are in a pressure situation**, like finding yourself in a bad spot at the start. Put extra time into practising those skills so that you feel confident in them in any circumstance. The appropriate thought process and relevant actions must be practised to the level of a conditioned response (it must be automatic).
- Increased fitness helps you deal with pressure. Also make sure you train sometimes when you're fatigued.
- **Maintain your belief in yourself**, no matter what the situation. You have already proven that you are excellent sailors and you can perform well in high pressure situations
- Allow a few minutes to **practice visualization**, especially before each race. During this time you mentally rehearse, showing yourself doing everything right. Breathe easy, close your eyes and use mental imagery to visualize yourself performing well. This positive self-talk can change your attitude. While athletes need to be flexible enough to react during the event, you should enter the event with a general strategy of how you want to race.
- **Accept, rather than fight, the nervous energy you feel.** Don't misinterpret it by thinking that it is fear. That adrenaline rush you feel is normal and it is part of your body's natural preparation for the competition. Notice it, but don't focus on it. Once the race starts, that feeling will subside, as it always does.

- During the event:
 - **Focus on the task at hand rather than the outcome.** Stay present in the moment and avoid thinking too far into the event or thinking about the finish.
 - If you find yourself thinking negative thoughts or negative self-talk, stop and focus only on your breathing. Focusing on your breathing rhythm will automatically pull you back into the present.
 - **Force a smile or a laugh.** If you are struggling with negative thoughts and can't break out of the cycle, simply force yourself to smile, even if only for a few seconds. This simple action will change your attitude in a split second. Perhaps that is all the time you need to relax back into your performance.
 - **Race like you don't care about the outcome.** If you find yourself caught up in negative thoughts and find that you suddenly expect the worst it will be impossible to perform at your peak. If you begin to race like you don't care about the outcome, you may relax and enjoy the event for what it is - another day in your life. Not the most important thing in your life. Don't let the weight of expectations.
- After the race – not immediately after , you'll be too tired to think clearly straight afterwards
 - **Review the race and recall the things you did well.** Focus on actions, thoughts and behaviours that helped you perform.
 - **Acknowledge, but quickly dismiss things that hindered your performance.** This is the same principle as avoiding an obstacle while driving - look where you want to go, not where you don't. When you focus on the pothole, you invariably hit it. Focusing on the negative aspects of the event will not help you improve in the future. Rather, you want to focus on the times when you 'got it right.' This is a form of mental rehearsal where you practice skills that will be used in the next event.
 - **Design a training program that mimics race-like conditions.** Practice is most effective if you can mimic the conditions you will be faced with in competition. The skippers will be faced with the tactical challenges of dealing with 70+ boats – this will enhance the crew's role in the actual sailing of the boat, setting spinnakers etc. When practicing on your own, be aware of this – don't help out because you can – you won't have time to do this in the race.

NEGATIVE SELF TALK

From Australian Sports Commission *Sports Coach* magazine, 'Stop Playing Those Mind Games',
Vol 29(1), 2006

- **How athletes think or what they say to themselves can have a critical impact on their performance.** Unfortunately athletes are often taught to tune in to their bodies or their physical skills, but are not taught to tune in to their minds or their mental skills.
- There are four main types of **self-talk** that are generally employed by athletes. These are:
 - Negative ('I'll never be any good at this')
 - Positive ('that was fantastic')
 - Neutral ('I wonder what is for lunch?').
- It is generally accepted that **negative self-talk is associated with worse performance**, whereas **positive self-talk is associated with better performance**. Positive self-talk may benefit an athlete by impacting on their self-confidence, anxiety control, concentration and mood.
- **Athletes tend to employ a predominance of negative self-talk.** There are many reasons why this may be the case, including:
 - Tuning in to errors so they can fix them, but then dwelling on them
 - Receiving a great deal of negative feedback or criticism, or filtering out positives and only perceiving negatives
 - Being low in self-confidence
 - Being perfectionist and setting unrealistic standards
 - Engaging in all-or-nothing thinking ('I can't do that') or over-generalisation ('I never start well').
- Point of talking about these is so that you can become **more aware** of when you are engaging in these thinking styles, catch that thought and identify that it is unhelpful thought – it won't make you feel or perform better – and think about how you can **re-evaluate the situation**

STRATEGIES FOR GOOD SLEEP

From Australian Sports Commission *Sports Coach* magazine, Vol 29(1), 2006

- Sleep is something that we take for granted, and often the first thing we sacrifice when we get busy
- Poor sleep is often the first sign of stress or anxiety

- Sleep is essential for quality recovery – especially important for athletes to normalise their sleeping patterns to maximise the recovery process.
- Poor quality and quantity of sleep will:
 - Compromise tissue regeneration
 - Diminish immune and hormonal functioning
 - Decrease effective cognitive processing
 - Increase fatigue
 - Pre-disposition to injury
 - Reduce cardiovascular performance
- Research shows that one to two bad nights sleep before a competition will not harm performance in any way, provided you are not worried about it.
- Prolonged poor sleep can negatively affect performance, recovery and health
- How much sleep is enough?
 - Recommendation for athletes is 10 hours per night sleep
 - Everyone is different however, and you may like to keep a journal to see what is the optimal number for you
- Strategies to help you stop worrying and thinking in bed and get to sleep quickly:
 - Before bed
 - Most of the thinking or worrying that we do does need to be done, but it does not need to be done in bed
 - Put aside 10-15 minutes during the evening to sit and let your mind wander through all the thoughts you didn't have time for during the day. After this time, write down anything that is still on your mind
 - If you suffer from muscular twitches when you are trying to sleep brought on by a build-up of lactic acid in your muscles, then it is a good idea to stretch, self-massage or walk before bed (but keep your heart rate low)
 - Before going to sleep, tell yourself that you are going to have a good night's sleep and that you are going to wake up just before the alarm goes off, feeling alert, refreshed and rested. Start to create the expectation that you will fall asleep quickly and naturally
 - In Bed
 - Once you are comfortable, tell yourself that it is time to sleep now, and don't let yourself continue to think about anything except your breathing
 - As previously discussed, when we are sleeping our breathing is relatively slow, shallow, chest breathing with a small pause between inhaling and exhaling. Try to simulate this sort of breathing and you should feel comfortable.

- Focus on relaxing your body, one muscle group at a time, starting from your toes and working your way up
- A lot of people start to stress about not sleeping, and that ends up delaying sleep. Tell yourself that it doesn't matter if you are not asleep, peaceful rest is nearly as good as sleep. Try some of the strategies that we have already been through.
- Poor performance may result if you have a prolonged lack of sleep, but one poor night's sleep is not going to detract from a performance.
- It is normal to wake up once or twice during the night. If you do wake up, see it as normal and don't stress about it. Be happy that you don't have to get up just yet, focus on breathing and relaxing to help you get back to sleep.
- If you can't stop thinking or worrying, use thought switching. Replace worrying thoughts with pleasant and relaxing ones. Or only think about your breathing, or choose one thought to clear your head.
- Keep a pen and paper beside your bed. If you have a new thought you can write it down and think about it tomorrow, let it go for the night.
- Remember that a lot of the things that we worry about actually never eventuate. Try to avoid worrying about things that are not certain to happen.
- Use good time management skills – keep lists of things to do and good schedules. That way, you have one less thing to worry about.
- Sleep Hygiene
 - Make sure the environment is right – not too hot, cold, noisy, comfortable bed, etc.
 - Make sure you have regular and appropriate sleep patterns – routine is very important. Try to go to bed and get up at similar times each day so that your body clock is synchronised with your sleep patterns and daily routine.
 - Make up for lost sleep as soon as possible.
 - Try to identify and reduce sources of stress
 - If you wake up in the night, try not to turn on bright lights
 - Only use your bed for sleep – don't watch TV, read, or do work in bed
 - Avoid caffeine (tea, coffee, chocolate, soft drinks), and large meals prior to sleep. Small snacks before bed are ok, particularly if you are hungry. A glass of warm milk before bed can help you feel sleepy – the chemical tryptophan is activated which can help sleep induction. Do not have hot chocolate as this contains caffeine and theobromine which are stimulants and will be counter-productive.

- Sleep onset usually occurs when our body temperature starts to drop – avoid raising your body temperature prior to sleep. Avoid exercise, hot showers just before bed and be careful not to overheat the room or use excessive bed clothes and blankets. You can also try and cool the body in hot weather by having a cool or tepid shower or using an air conditioner.
- If you can't get to sleep after 20 minutes, get up and do something boring and unstimulating until you feel sleepy
- Minimise (<30 mins) or discontinue day time naps
- Waking up
 - Expect to wake up feeling refreshed and alert
 - The first thing you should do after waking is have a long, slow stretch in bed and smile
 - Have a good morning routine so you can start the day off with no stress
 - Prepare for your day the night before, so you don't have to rush in the morning
 - Get up early; enjoy the peace and quiet; do something productive or enjoyable

Reaching!!! 😊



The secret to fast reaching

Reaching has always been my favourite point of sailing as it is the fastest. The Faster I am going the More fun I have and this was the reason I practiced it so much because it was fun!

So the real secret of my fast reaching is planning a concept that was brought to me by my coach Gavin Dagley. Planning is where the boat reaches a speed where it starts to skim across the water, just like in a motorboat when you're going really fast, the bow lifts up and water just skims along the bottom, that's planning and the thing about boats that plane such as skiffs is they are designed with a flat bottom. Keep in mind on a Cadet planning only works in heavy winds.

Now the key to planning on a cadet is to get your weight back and lean the boat over about 25 degrees, I know what you're thinking 'my coach tells me that flat is fast' and this is true upwind and on skiffs (flat bottom) on reaches but the thing about the Cadet is, it doesn't have a flat bottom, that's why we lean the boat, so that the leeward chine is flat with the water. To keep the boat at this angle you need to control the heel by steering; up for more heel and down for less just like a skiff and get the crew to go crazy on the main; in for more heel and out for less and the skipper trims the spinnaker perfectly (the benefit of the skipper trimming the kite on a reach is that he can feel the power in the kite and be more responsive with his steering) then you just take

off, it's the best feeling when you're the only boat planning and you're going twice as fast as everybody else just overtaking boat after boat.