

# Sail Trim & Rig Set Up



***Yachting New Zealand***

# Daniel Fong



TP52 Super Series - Provezza



J Class - Ranger

# Trimming the mainsail



# Mainsail controls

## Main halyard:

- Tension until scalloping just disappears
- Luff folds mean it is too tight
- Top tip – mark the halyard



## Outhaul:

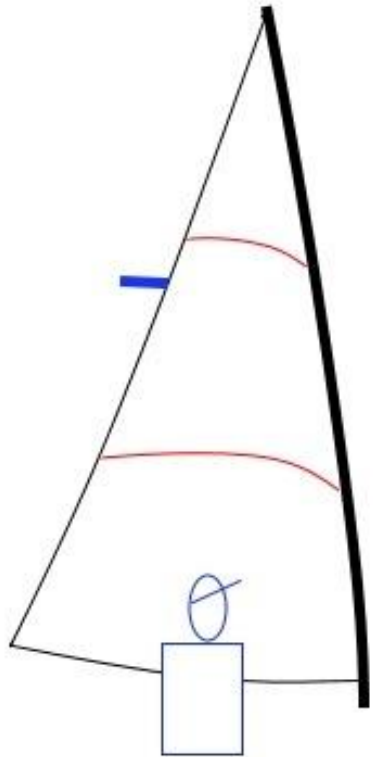
- Pulls the clew of the mainsail along the boom
- In light winds outhaul looser so mainsail is fuller
- In stronger winds pull on to depower sail



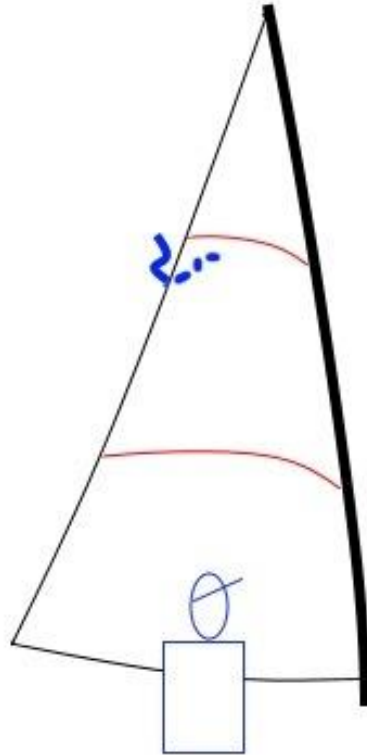
## Cunningham:

- Pulls luff of the mainsail down
- When pulled on, flattens the mainsail for stronger winds

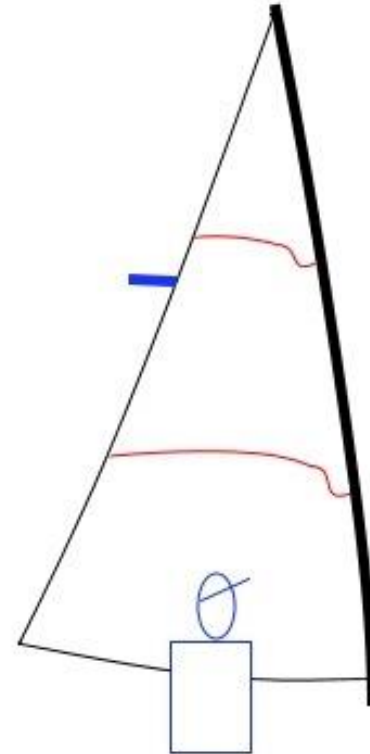
# Mainsail leech ribbons



Leech ribbon streaming  
Ideal trim



Leech ribbon stalling  
Ease mainsheet



Sail luffing  
Trim mainsheet on

# Boom Vang

Pulling the vang on, pulls the boom down:

- Straightens the leech
- Decreases twist
- Bends the mast to flatten the sail

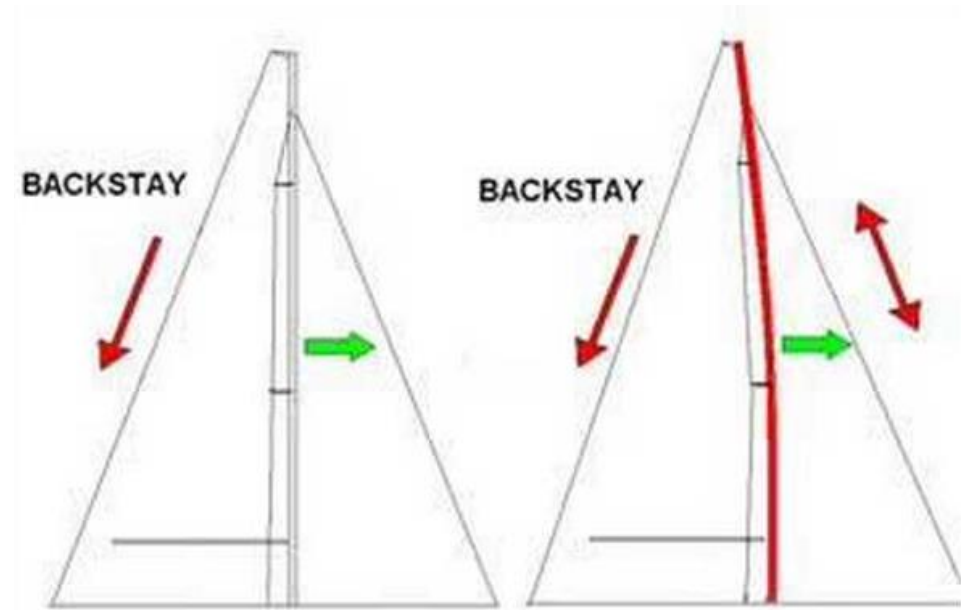
In stronger winds you want more tension on the vang.



# Backstay

Pulling on the backstay bends the top of the mast aft.

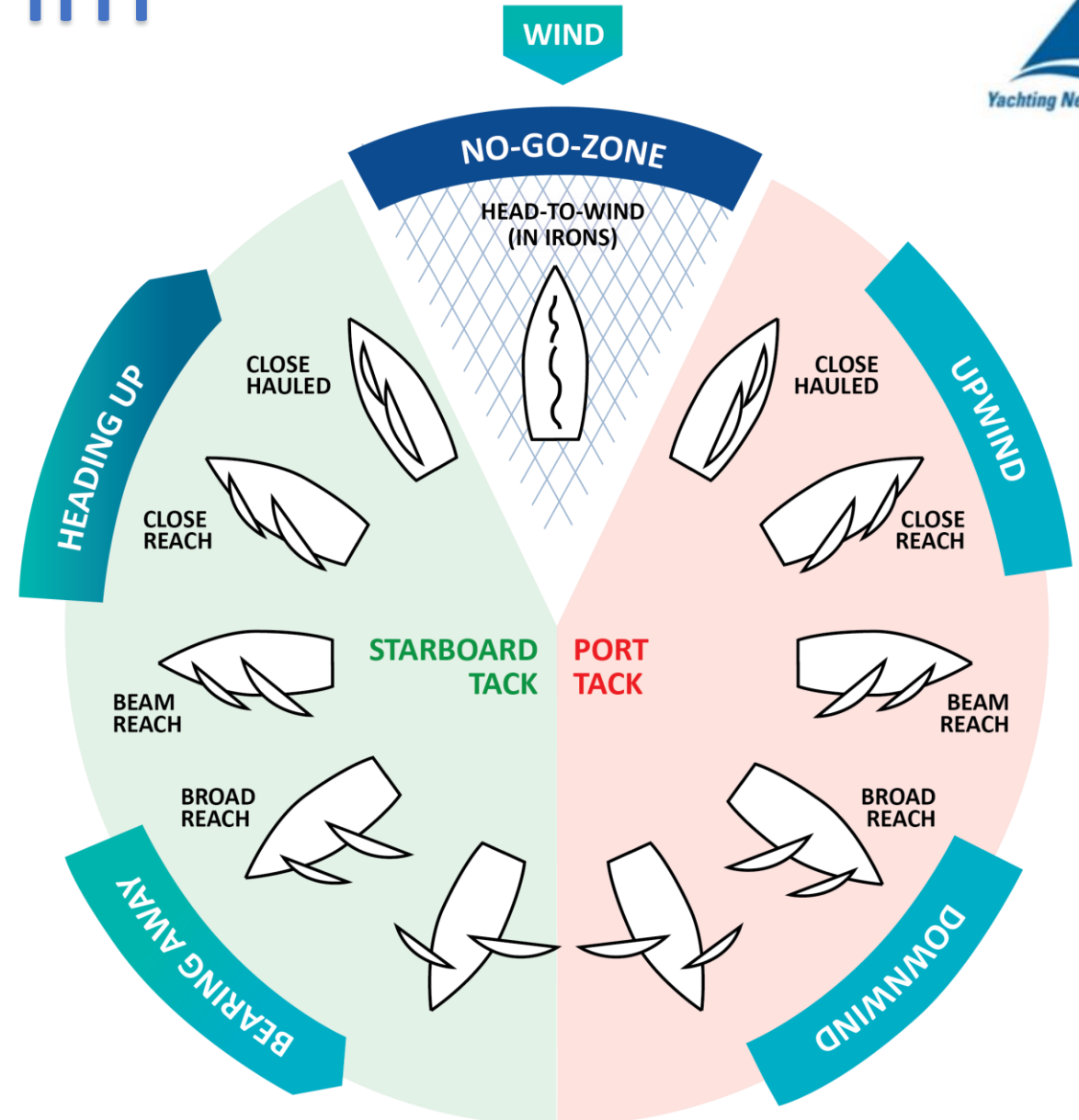
- Tightens the forestay
- Flattens & twists the sails
- Depowers the sails
- Pull on as wind increases
- May need more mainsheet



# Reaching mainsail trim

As you bear away from being close hauled:

- Ease traveller down half way between centre line and bottom of track
- Ease mainsheet until leech ribbons stream
- Check boom vang tension
- Ease backstay to medium tension



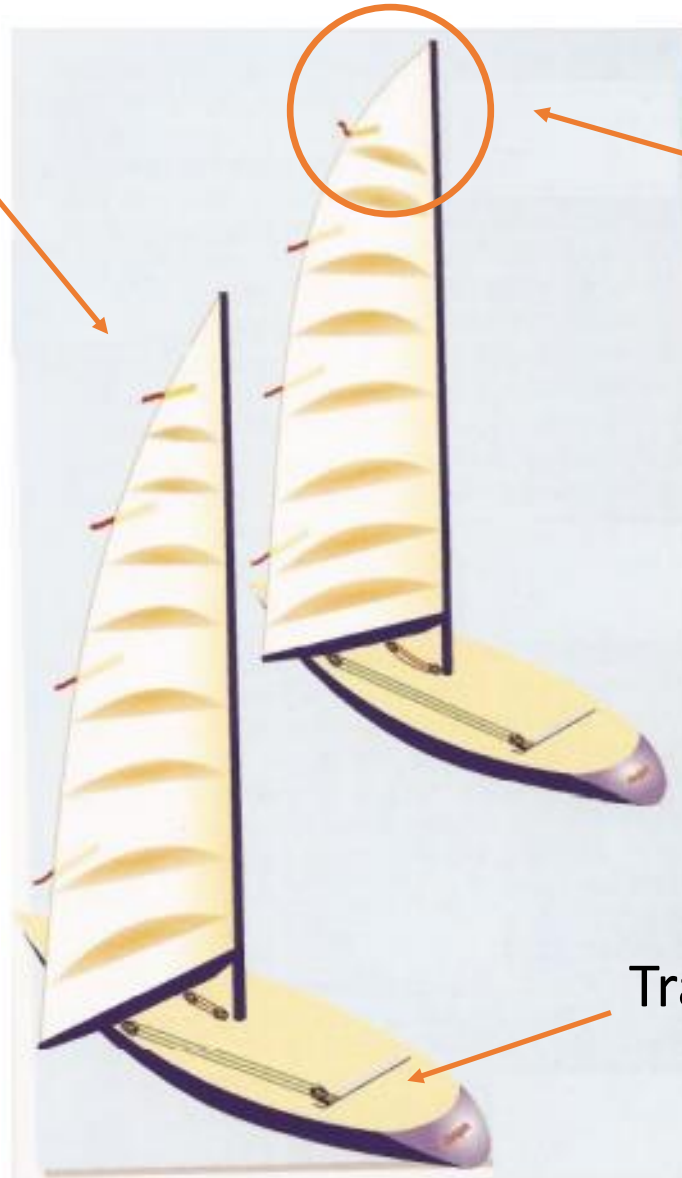


# Downwind mainsail trim

Ideal trim - all ribbons streaming

Ease mainsheet until the boom is approx. 80-90 degrees to the mast

Check boom vang tension



Top ribbon stalling - mainsheet too eased

Traveller down to bottom of track

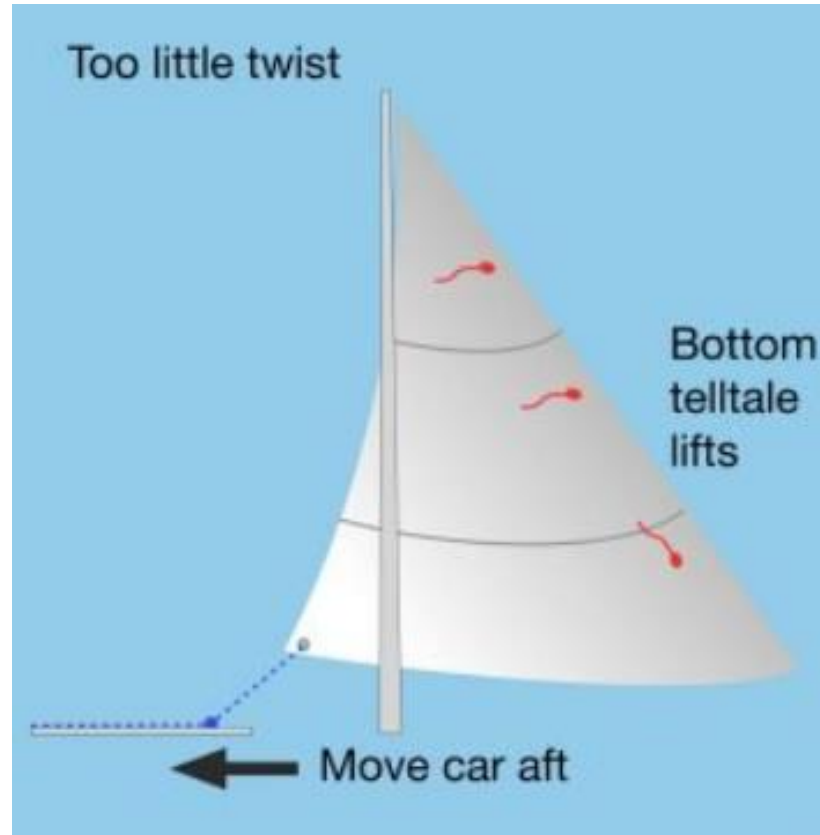
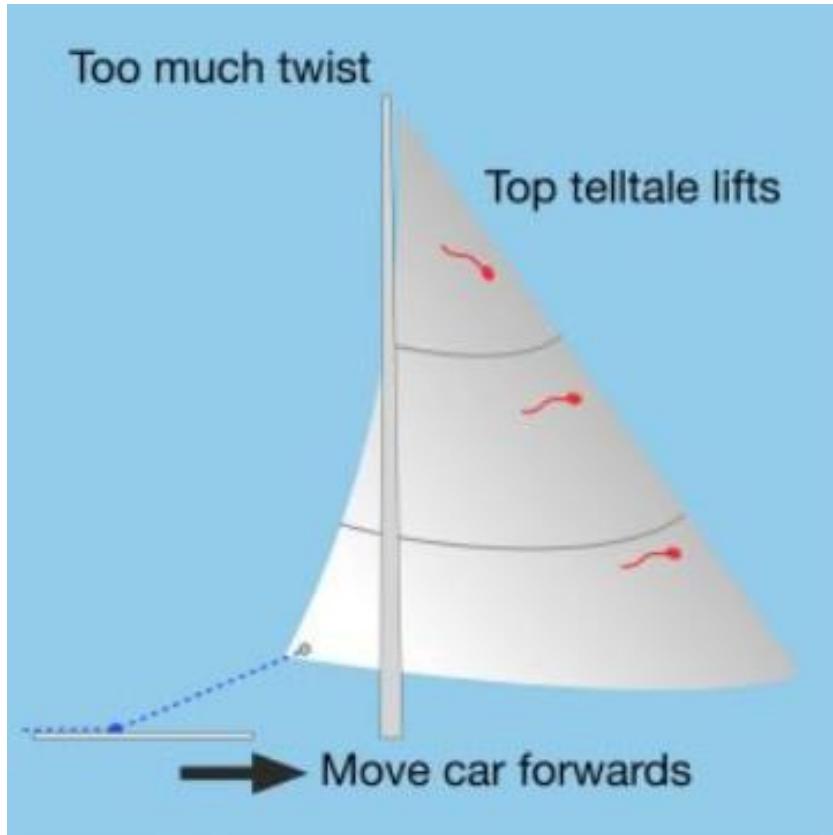
# Trimming the headsail



# Headsail trim

Ideal headsail trim is when all tell-tales stream evenly

How to work out car (block) position:

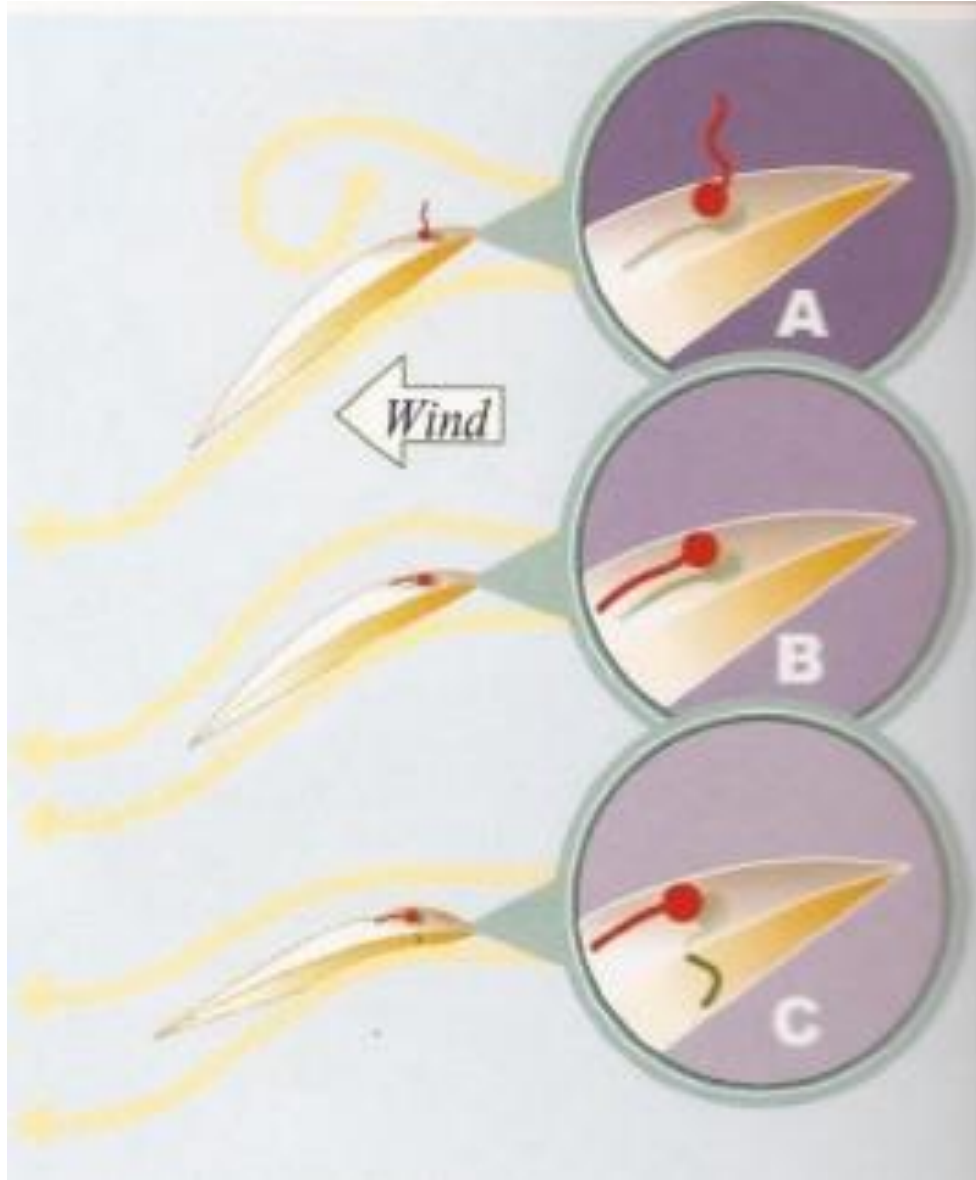


Halyard tension:

- Light–moderate wind, slight scalloping
- Heavy winds – no scallops

Top tip - mark the ideal halyard position

# Headsail trim



If leeward tell-tale stalls

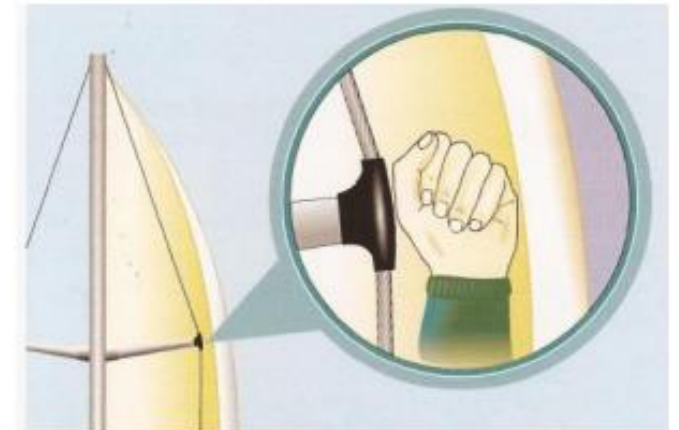
- Ease the sheet or
- Helm should luff up

Ideal trim - all tell-tales streaming aft

If windward tell-tale stalls

- Sheet in or
- Helm should bear away

A good general rule for on the wind headsail trim is to have a fist width between leech and spreader



# Trimming the headsail

## Headsail Luff Telltales



- If leeward tell-tale stalls
- Ease the sheet or
  - Helm should luff up



- Ideal trim - all tell-tales streaming aft



- If windward tell-tale stalls
- Sheet in or
  - Helm should bear away

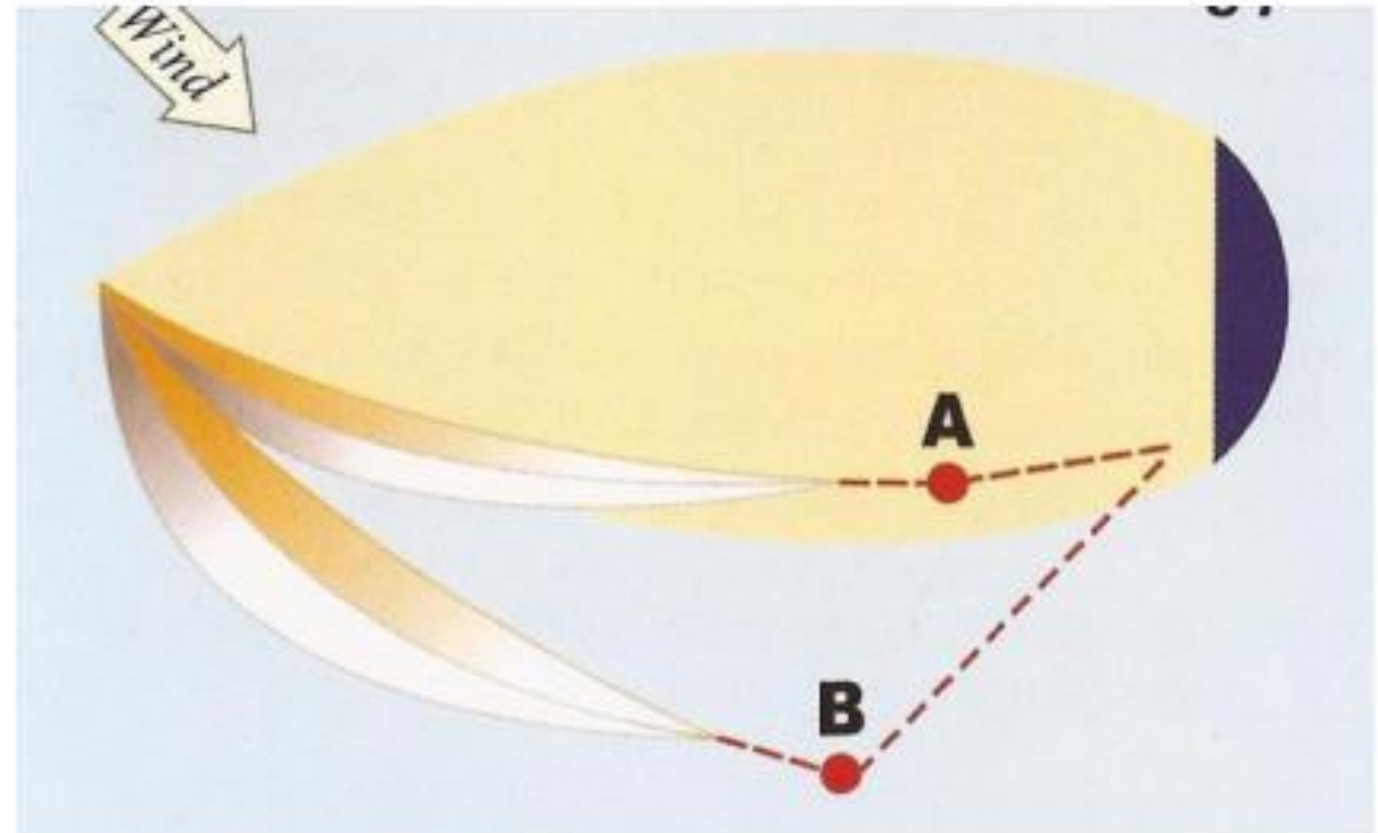
# Headsail reaching trim

When reaching, move the car forward and ease the sheet until the tell-tales stream

The best sheeting angle for reaching is outboard and forward (B) from the upwind car position (A)

Achieve outboard sheeting by using:

- Another sheet
- Windward sheet
- Spinnaker sheet

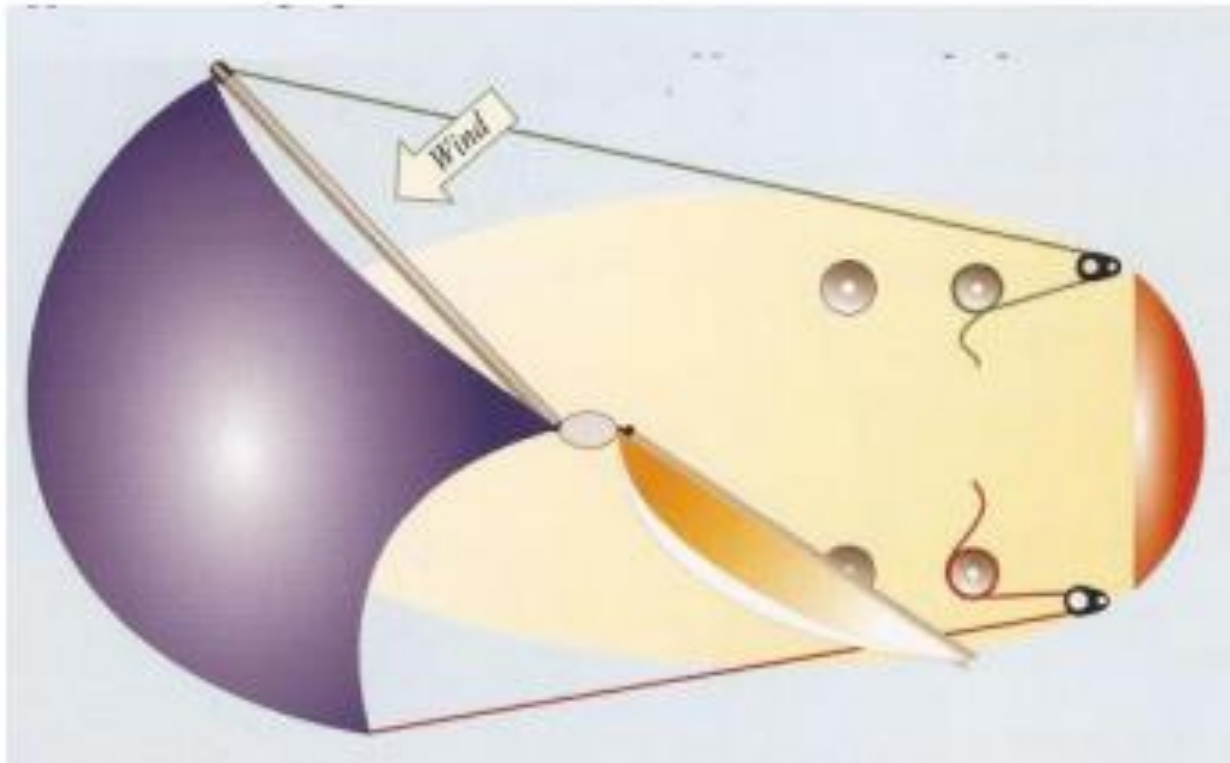


# Trimming the spinnaker



# Spinnaker trim

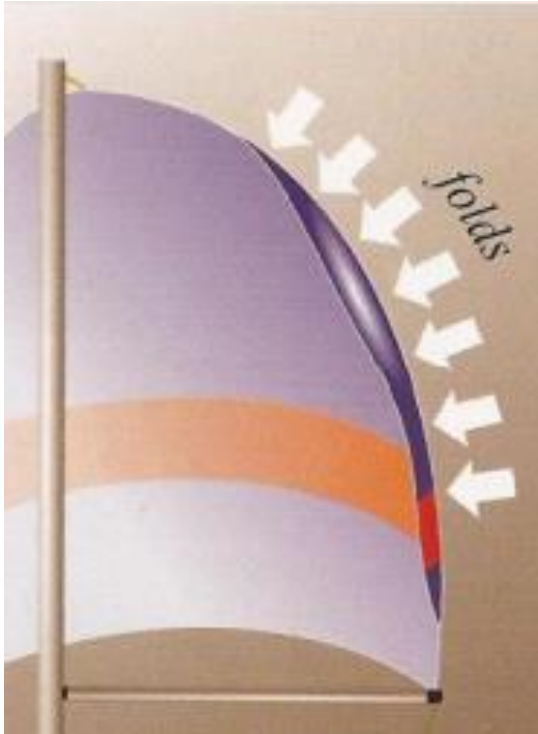
Generally pole should be at 90 degrees to wind direction





# Spinnaker pole height

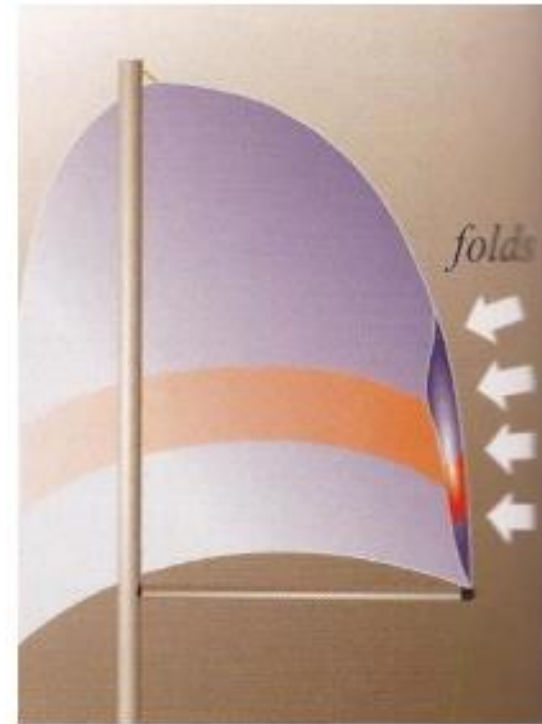
General rule is keep the clews even. In lighter wind pole can be slightly lower



Edge folds evenly -  
ideal spinnaker trim



When top edge  
folds - pole too low



When bottom  
edge folds - pole  
too high