

Technical Course for Coaches Level 3 – ILCA Trim



TCC Level 3 – ILCA Trim

How to trim an ILCA Sail

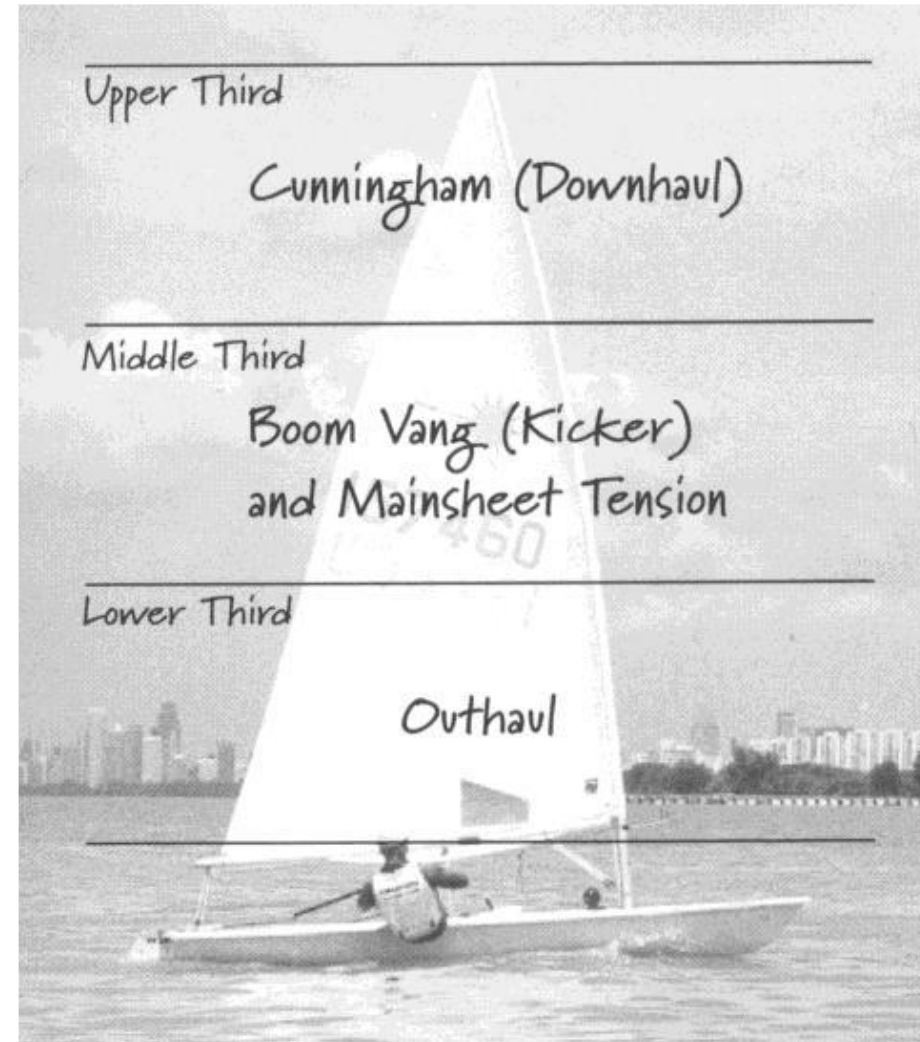
Top 1/3 is controlled by the Cunningham



The middle 1/3 is controlled from boom vang and main sheet

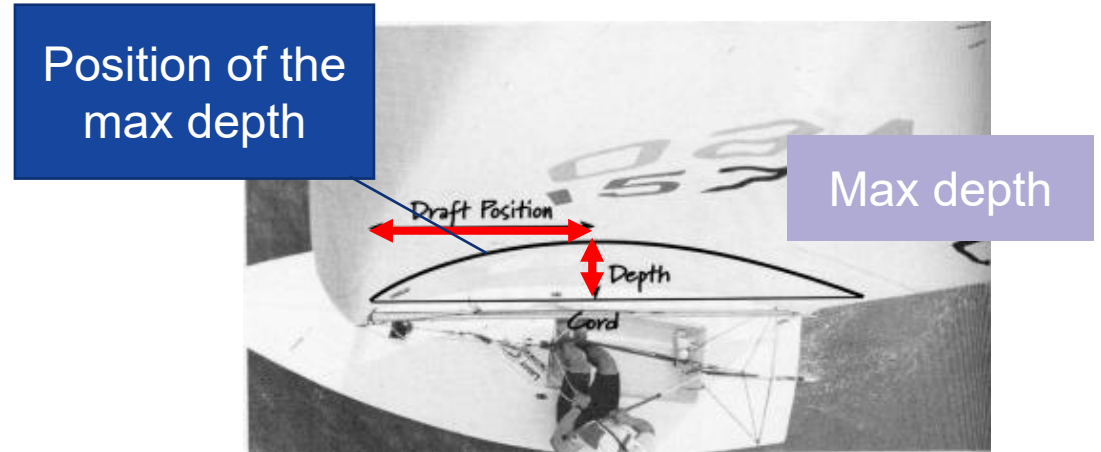


The lower 1/3 is controlled by outhaul



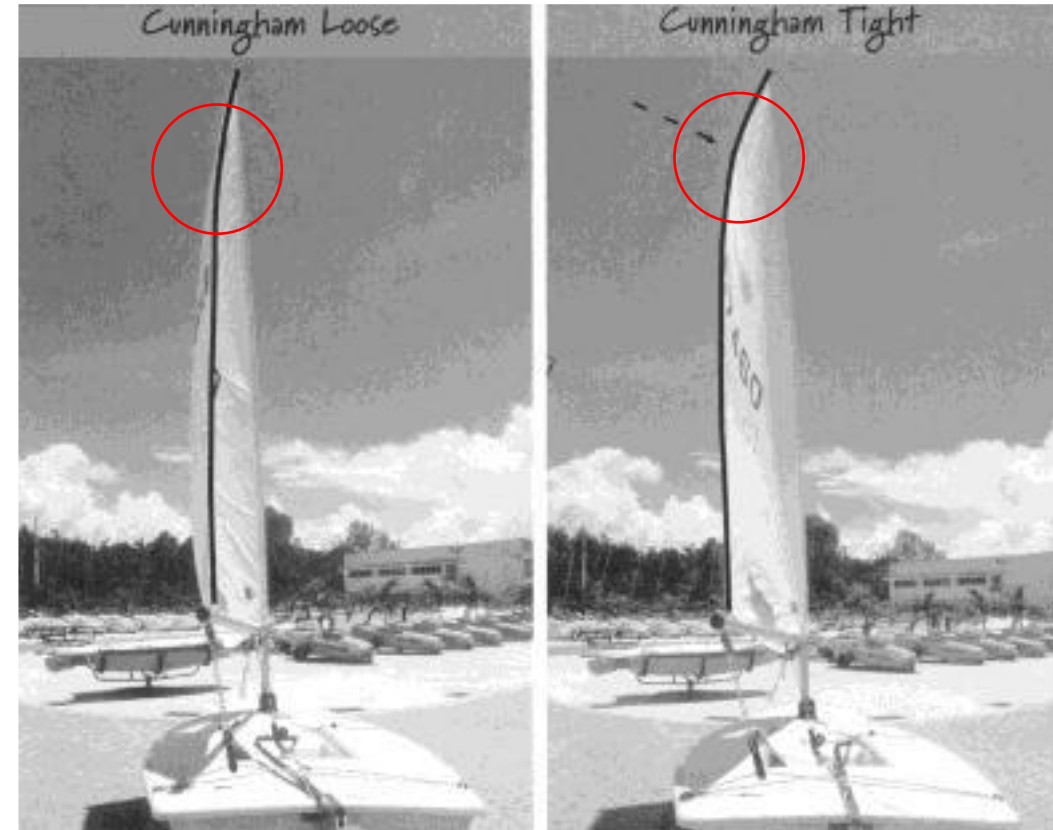
How to trim the ILCA Sail – The Cunningham

- The primary job of the Cunningham is to control the position of the maximum depth
- By pulling the Cunningham the maximum depth moves forward
- With loose Cunningham the maximum depth moves backwards



How to trim the ILCA Sail – The Cunningham

- The secondary job of the Cunningham is to control the top part of the leach
- By pulling the Cunningham the top part of the leach opens
- With loose Cunningham the top part of the leach is close
- By pulling the Cunningham the max depth moves forward and the top part of the leach opens
- By loosening the Cunningham the max depth moves backward and the top part of the leach closes



How to trim the ILCA Sail – The Cunningham

By pulling the Cunningham the max depth moves forward, and the top part of the leach opens.

What Happens?

- The boat accelerates faster, is easier to handle and the tiller is “light”
- The boat is balanced easier and moves through the waves more easily
- The boat loses upwind angle, and it has lower final speed
- The sail loses power necessary in the medium wind



How to trim the ILCA Sail – The Boom Vang

What happens when we pull?

- It starts bending the mast starts from the lower part
- Stretches and opens the whole leach
- It decreases the wind angle of attack in the lower part of the sail

What happens to the boat?

- The boat is balanced easier **in strong wind**, the tiller is “light” and the boat has more speed
- In light wind conditions give the proper shape to the sail and with better upwind angle
- Control the shape of the sail reaching and downwind
- Downwind with strong wind it gets the boat stable
- When we lose it in medium wind the boat gets more power

How to trim the ILCA Sail – The Outhaul

The Outhaul Controls the lower part of the sail by making it deeper or flatter

Why its important?

- It is necessary to loosen it in light wind and big waves as these actions will give the necessary power to climb the waves
- When not set properly upwind the sail doesn't have a good shape therefore the boat won't have good upwind angle and speed

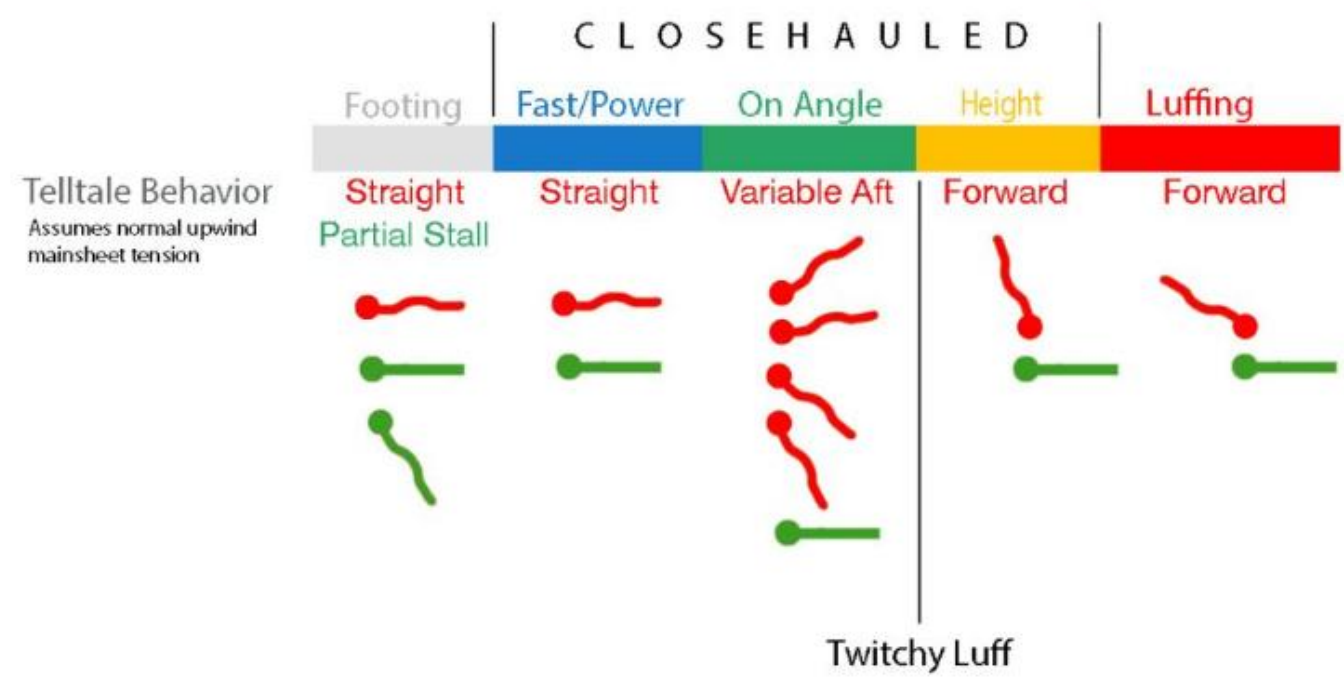
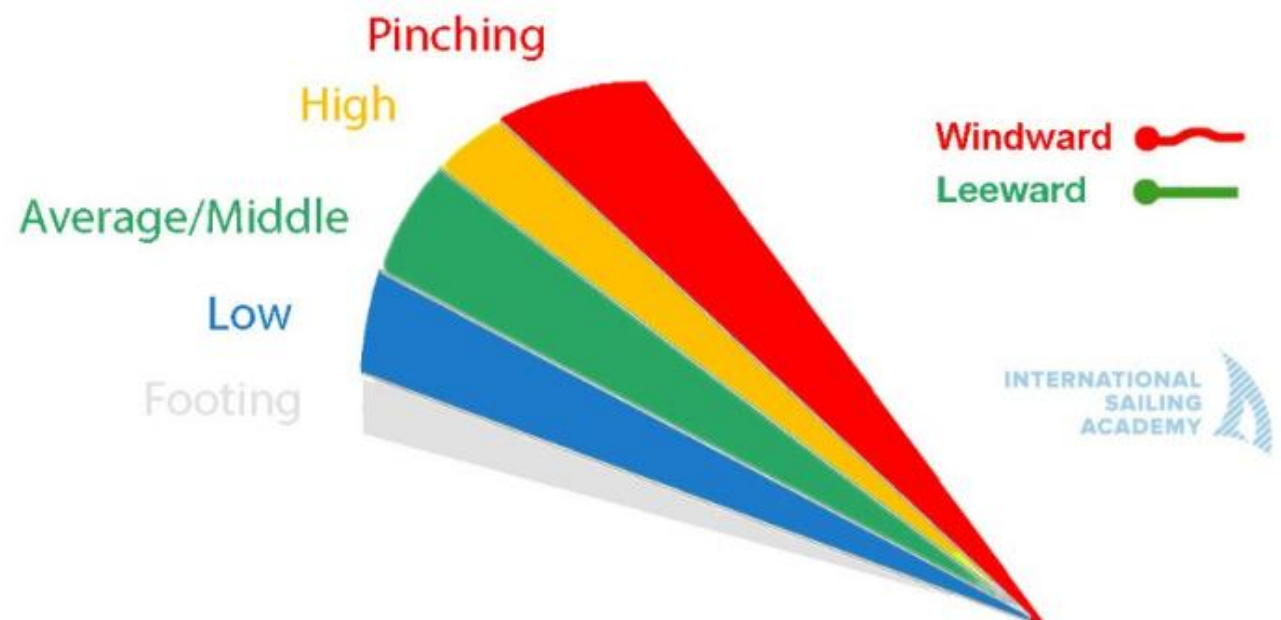
How to trim the ILCA Sail – The Outhaul

Light wind



Strong wind

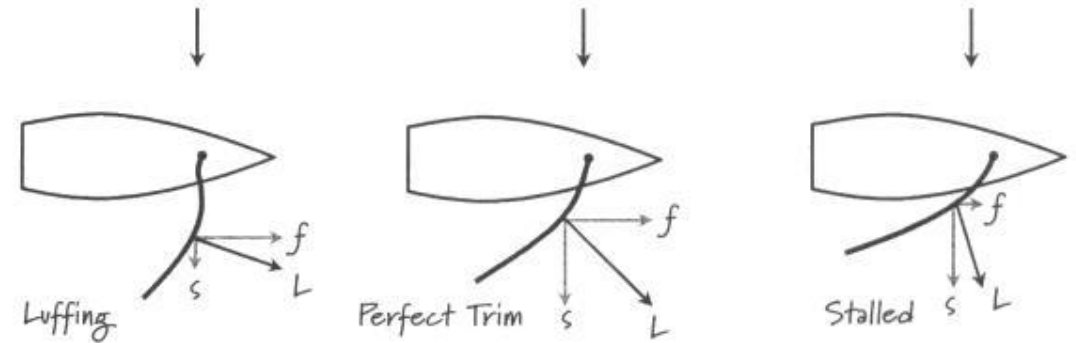




Upwind	Objective	Cunningham	Boom vang and main sheet	Outhaul
Very light	Average depth with open leach	Very low pressure	By keeping the sheet 20 -30 cm, pull the vang plus 2 cm more	10 cm in the center of the sail
Light	Deep sail specially with wave	Very low pressure	Sheet 0 – 20 from block to block, no boomvang	10 -15 cm in the center of the sail
Medium	Deep powerful sail	Just the wrinkles	Block to block, little vang	10 -15 cm in the center of the sail
Strong	Depower starting from the top	The eye touches the gooseneck	Block to block and loose sail in the gusts, maximum vang	5 -10 cm in the center of the sail
Very strong	Very flat sail and loosing main sheet	Maximum tension	Average vang keeps the boat flat by controlling the main sheet	No depth

How to trim the sail and the vang, on a reach and downwind

- Maximum attention in controlling the main sheet continuously to cope with wind directions and strength
- Control the airflow by watching the leeward telltale
- Loose enough boom vang so the top batten is more open than the lower
- Every wind strength variation needs immediate correction of the main sheet
- Big wind strength variations need trimming of the boom vang



Body trim – Light Wind

When sailing upwind from light to strong wind our aim is to keep the boat flat with the body position

- Move the body forward next to the dagger board with the aft foot above the hiking strap on the leeward side so we can apply pressure
- The tiller is stabilized behind the body in order to minimize movement
- We try to minimize the body movement, all corrections are done using the torso
- As the wind builds we move aft



Body Trim – Medium Wind

As the wind builds up we start hiking

As the wind gets stronger we move more backwards

Body trim – Strong Wind

When sailing upwind from light to strong wind our aim is to keep the boat flat with the body position

- Never cleat the sail
- Keep the legs straight by moving the buttocks as far as possible
- Use the body to “rudder” the boat, climb the waves and accelerate the boat
- Keep the chest as high as possible
- Don’t exaggerate
- Straight the body as necessary and according to the fitness of the sailor
- The head scans continuously the area



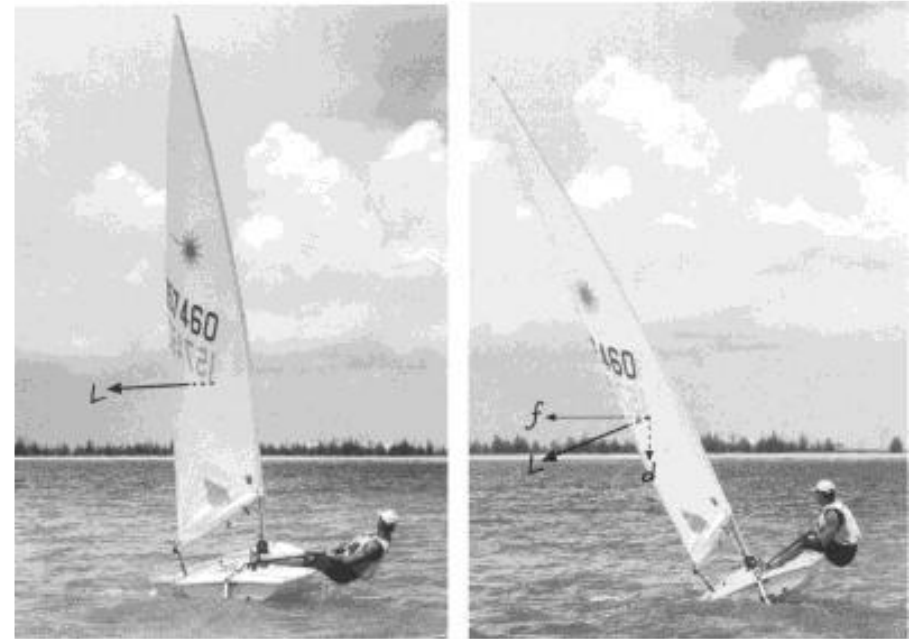
Body trim – Very Strong Wind/Over Powered

- Our aim is to control the boat and the opponent
- The main sheet and the tiller work continuously
- Try to move the body in order to ‘lighten’ the tiller
- We choose our battles, when to put more effort during start, rounding marks overpassing an opponent
- Training is important to cope with this situation



Mistakes and weaknesses

- In sailing everybody makes mistakes, the winner is the sailor who makes the less
- To hit a wave and stop or to leave the boat to heel to leeward happens to everybody
- Unfortunately, the coaches rarely applaud a good action and most commonly judge a mistake
- By pointing out the mistake, coaches try to improve the sailor's performance
- A typical problem for a sailor getting tired or not focusing



Mistakes and weaknesses

- Bend the legs more either because the sailor is tired or the hiking strap is loose
- Hike more than our physical condition allows which results to lose concentration and the whole picture
- The sailor is heavier or lighter than the class average
- Hike aft and loose in upwind angle or forward and loose speed
- The boat heels in a sudden gust or lull
- The sailor doesn't know when to push and when to relax

Movement of the body

- Vertical movement in order to balance the boat
- For and aft to control the boat from hitting a wave , to “rudder” the boat etc



The body and the rudder

Average wind the tiller follows the movement of the body

Strong wind and flat sea use the body to keep the boat flat while using the tiller more

Strong wind with big waves the body is used more to overcome the waves



2024 ILCA U 21 European Championship, Polensa, Spain www.photo.thomfouw.com