

# Settings and Techniques to Maximize Boat Speed In Wind Range 0-3 Kts

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In super light conditions it is tough to get the sails working so wind flow over the upper 1/3<sup>rd</sup> of the main and jib become the most important factors in trimming the sail and producing the correct sails shape.

**Halyard Tension** – In order to open up the leaches in the top of the sails, the jib and main halyard must be looser than normal. The best way to judge halyard tension is to sail down wind and tighten the halyards until there are no wrinkles in the luff of the sails. When sailing upwind there should be some horizontal wrinkles in both the main and jib luffs.

**Boat Heel** – Heeling 5-10 degrees to leeward can help open up the main and jib leaches. The more you heel the boat, the more gravity assists pulling the leech of the main and jib outward. An added bonus to heeling the boat to leeward in 0-3 kts is that you are reducing the wetted surfaces of the bottom of the boat which reduces drag. When sailing downwind heeling to leeward helps to get the spinnaker/Main slot opened as well.

**Sail Trim** – The jib should be trimmed outward from normal closed hauled medium wind conditions. The telltale at the top of the jib should be flowing and the leech should be 2-3 inches outside of the leeward shroud. The main should be trimmed out to the corner of the boat and the upper telltale on the top batten should be flowing. The telltales on both the main and jib should be checked by the skipper and crew to identify any stalling and make subtle adjustments in the trim to keep the upper 1/3<sup>rd</sup> of both sails flowing.

**Steering Technique** – The wind flow through the jib/main slot is dynamic which means that your steering angle will affect the amount of flow through the slot. In order to accelerate from slow speed, the **sails must be trimmed out about 1 inch from where they would be at top speed**. The skipper needs to steer so that **both telltales on the jib are flowing perfectly straight back** which will maximize the flow. Remember, if you pinch or foot the boat it will take longer to build pressure. Once pressure has been built with the sails trimmed 1 inch out you can start to allow the boat to point a little. The best way to point in light wind is to **allow the weather helm and the leeward heel to slowly point the boat up**. When you allow the helm to point the boat you will not create any unnecessary drag. **Once pressure has built up you can shift your weight out and trim in both the main and the jib 1 inch** to point a little bit better. Your overall strategy is to have a **smooth change from building pressure to pointing** and if you happen to **stall or hit a lull then you need to go back to promoting flow in the upper part of the sails**.

**Jib Track Position** - Moving the jib leads aft on the tracks can also help flow in the upper part of the jib leech because it helps open up the slot and simultaneously allows the sail to twist more. Be careful. Once the wind picks up over 3 kts, you will want to move the jib tracks forward again.