

Western Canadian

2.4 Race Team



This is new

RVYC

I have started this up as a focal point for all **Western Canadian 2.4 Racers** training in and around Victoria BC. So what this monthly new letter can be is a western information for all the 2.4 things that can happen or things and regatta's that need to be put into your mind for other ways to get good. So what I'm politely asking is if you have any 2.4 news or tips please email them to me and I will put it on the news letter with your name on it so persons know where it's coming from. I know some of you might have club news letters for your Yacht or sailing club. So this might be a bit much to add and put into. Or you could just copy an article from your news letter that effect any 2.4 events or regatta's. Then email me: skydog3@shaw.ca (Rod Mack)

I'll try to put this together with all I can do until if your into it, writting articles for the news letter and to give others tips and stradagy's on, Starts, Rounding, Tacks etc. Also any pictures you would like to put up for all of us to see please send themw





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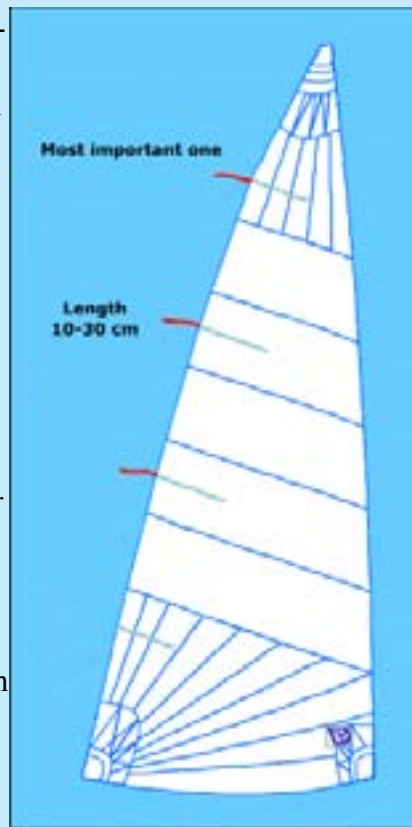
Mainsail telltails

In the mainsail telltails are only needed in the leech. Cut them out of an inch wide nylon strip and sew them into the ends of the batten pockets. The right length is from six to twelve inches. On the race course colorful strips are the best but if you are racing at night, you are better off using white telltails because they show clearly against the dark sky. That's why the telltails on offshore racers often are white.

Steering tails

The telltails near the luff of the sail are used as a steering aid when sailing upwind. If you are pointing too high the windward telltails "stall", i.e. point straight up or stream forwards or twirl around restlessly. If you are sailing too low the leeward telltails hang down and die, which is a sign of a serious steering error - the leeward telltails should always stream steadily aft. When the leeward telltails stall, the jib trimmer should ease the sheet until the helmsman is back onto his proper course again. Stalling the leeward telltails means that the whole foresail is about to stall. It then loses most of its drive and only the heeling force remains.

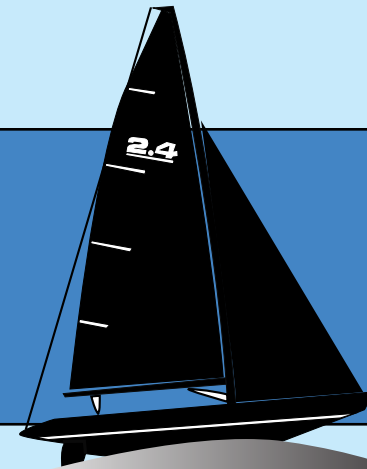
The windward telltails indicate different things depending of the wind strength. In light winds your heading is correct when both the windward and leeward telltails stream steadily aft. The maximum speed is achieved by steering so high that the windward telltails are just about to twirl. In medium winds the best speed is achieved when the windward telltails jump up at steady intervals. Telltale 1, telltale 2, tell-



tale 3 - jump - telltale 1... When the wind increases the telltales become less important as an indicator of the proper course. Steer the boat according to the heeling angle and the wave conditions and never mind the (windward) telltales.

Steering for VMG

The steering telltales are most useful when sailing upwind. Steering according to the telltales in light and medium conditions normally maximizes VMG, i.e. your speed towards the mark is the greatest. A high VMG does not necessarily mean the highest speedometer values, but indicates the ideal combination of boat speed, pointing and leeway.



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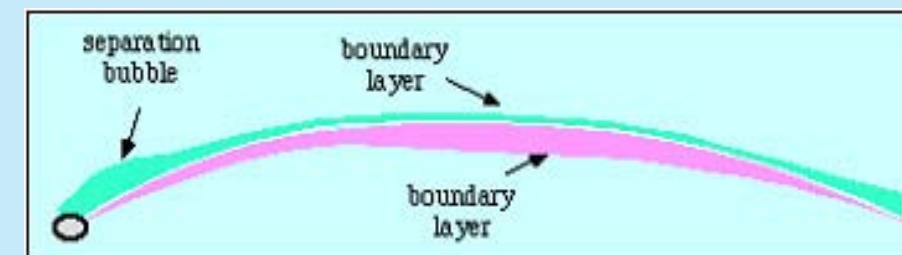
Leech tails

Both the main and the jib should have two to four telltales in the leech, used to proper sheeting. The leech tails, as well as the telltales for steering, are of the most value in light to medium air. The telltale at the end of the top batten pocket is essential when adjusting the proper twist for the main sail. When the telltale disappears behind the sail, the sheet is too tight and the sail has too little twist. In a light winds (5 to 10 kn) the top telltale should be flying for about half of the time. In less than about five knots the leech tails won't work properly. When the wind picks up, the sail is flattened and all the telltales normally stream aft. The two telltales below the top one tell us about the overall shape of the sail. When the top telltale streams steadily aft but the second one is stalling, your main is either too full in the middle and /or too flat in the top. Bending the mid-section of the mast normally helps. The stalling of the lower telltales may also indicate that your jib is sheeted too loosely, and causes the airflow to separate on the leeward side of the main. Closing the gap by moving the jib lead forward/inward or changing into a larger genoa will help.

The main sheet is the most important trimming device on your boat, and the top leech tail is the best indica-

Telltails make trimming and steering easier. One should not, however, stare his eyes out at them. If the cut of your jib is too flat, you will achieve the best speed by steering the boat so low that the leeward telltales are partly stalling. You should try to make the jib fuller by letting the head stay sag a bit. On the other hand, if your jib is too full (which inevitably happens to all sails at some stage when the wind picks up) you should steer the boat so that the windward telltales are twirling up. In strong winds, let the telltales live their own lives and steer the boat according to heel and sea conditions.

When the wind sweeps past the sail its velocity near the sail surface decreases because of the friction. This so called boundary layer can be over 2 inches thick in the middle on the windward side and in the leech on the leeward side of the sail. When the velocity of the air stream decreases to a certain point the boundary layer separates from the sail. The telltales indicate how the boundary layer is behaving at different moments in different parts of the sail. The separation of the boundary layer always means a significant loss in power and is to be avoided at all cost. This is why the telltales are so useful, and why we try to trim the sail so that they always stream steadily aft.



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The main sheet is the most important trimming device on your boat, and the top leech tail is the best indicator of the main sheet tension. The required tension on the main sheet depends of the boat you have; use the top leech tail when you

are looking for the right trim in different condition. In less than 5 knots of wind adjust the sheet so that the upper tail is visible only sometimes. In medium air the upper tail should show itself about 50% of the time, and in heavy air all leech tails must fly constantly.

Jib leech telltales

The telltales in the leech of the genoa behave somewhat differently from the ones in the main. Never sheet your genoa so tight that all the telltales in the leech stall! Before stalling, the telltales become slow and lazy; that indicates your maximum trim. However, if your boat has a high & narrow jib, with little overlap (like on some one-designs), you may allow the leech tails to stall from time to time in a light air and medium airs. The top telltale is again the most important as it is usually the first one to react to the wrong trim. In some boats the spreaders restrict how far in the genoa can come. In these boats the top telltale may still stream aft when the middle one already stalls - ease the sheet a hair. In older jibs the leech may start to hook in and the telltales become then less reliable.

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Let me know what other contacts you would like to be on this and if your ok with putting your contact on here.



Confusing? Well get use to this to look at and decipher it so it works for youw...