



Taken from the J World Performance Sailing School – The Racing Handbook. The purpose of this is to help some of us understand some of the rules a little better. Also some basic tactics

***Course Direction:***

The first turning mark is usually upwind of the starting line and is commonly referred to as the windward mark. In 95% of the cases, all marks are rounded by turning to the left. This is referred to as “leaving marks to port”. Most race committees will set the course this way, otherwise, at the windward mark, boats rounding the mark on port tack get tangled with starboard tack boats which have not rounded the mark yet, and which remain the right-of-way boats.

***Rule 31.2 Hitting the Mark:***

If a yacht hits one of the starting marks she is required to do one 360 degree turn before she may start. While a yacht is exonerating herself she has no right and must keep clear of all yachts. The ground tackle (anchor line) attached to the mark is not considered part of the mark. A yacht may hit the anchor line with out penalty. If you hit the anchor line and drag it so the mark hits you, then you must exonerate yourself.

***Finding the favored End of the Starting Line: Five Methods***

1. *Bow Into Wind:*

This is a handy method on a shorter starting line. Simply luff your boat head-to-wind in the middle of the line (luff from starboard tack and fall back onto starboard tack to protect yourself) and see which end of the line your bow points to. This is the favored end.

2. *Arms Extended*

Luff head-to-wind in the middle of the line. Extend your arms perpendicular to the centerline of the boat; determine which end of the line is in front of your arms. The end in front is the favored end.

3. *Sailing Across the Line:*

Come head-to-wind and take a wind reading. Now sail down the line on a course that is perpendicular to the true wind reading you have just taken. If you are sailing from above the line to below the line you are heading toward the favored end. If you are sailing from below the line to above the line you are sailing away from the favored end.

4. *Reaching Back and Forth:*

Line up your bow with one end of the line and stern with the other. Set your mainsheet so the mainsail is on the verge of luffing. Cleat the mainsheet. Now, tack and head down the line in the opposite direction. Watch the mainsail. If it luffs you are heading toward the favored end. If the sheet can be let out several inches without luffing the mainsail you are sailing away from the favored end.

5. *Compass Method:*

This is similar to the No. 3, “Sailing Across the Line”. It is the most accurate method because you can determine the exact amount of line bias. If you are even slightly mathematically inclined and can make a

rough estimate of the length of the line, then with the angle of bias figured out, you can tell the actual boat length advantage of one end over the other.

Procedure- Sail down the line on starboard tack and note your compass course. Be sure your bow and stern are on the line. Now, luff head-to-wind and again note your compass heading. Calculate the difference in degrees between both headings. If the difference is less than 90 degrees, the end you are heading for is the favored. If the difference is greater than 90 degrees, the other end is favored.

Usually a good race committee will tend to favor the port end by about 5 degrees. This spreads the fleet down the line and saves the race committee boat from major barging pile-ups at the starboard end.

#### UPWIND SAILING:

After starting, concentrate on boat speed and on following the game plan you formulated for your race strategy. Be thinking of the wind shift patterns. Have your crew continually scanning the race course upwind for incoming puffs or wind lines. Monitor compass headings for new trends in wind patterns. Your ability to read “wind” on the water is one of the most important factors in winning sailboat races.

#### READING THE WATER:

You can learn to read the water and anticipate wind shifts. Try to distinguish puffs by looking for concentrations of ripples across the water. The water will usually be darker where it is disturbed. A great way to learn this is to watch a race from a high vantage point and try to predict how the wind patterns will affect the boats as the fan out across the water.

#### Lift: Picture a clock.

You are sailing upwind on starboard tack toward eleven o'clock and your destination is the top of this page and the wind is blowing from the direction of one o'clock. If the wind shifts so that it is blowing from two o'clock, then you would be able to point higher toward the twelve o'clock and thus arrive at the top of the page sooner. You have been lifted. Whenever the wind moves in the direction of the stern, it is called a lift.

#### Header:

The opposite of *Lift* is called a header – when the wind shifts toward head (bow) of your boat. An example – you are sailing toward eleven o'clock and the wind shifts from one o'clock to eleven o'clock so it is blowing from directly in front of you. Since you cannot sail with the wind on your nose, you would tack onto port tack (heading now toward one o'clock) to reach the top of the page as quickly as possible.

#### Playing the Shifts:

Use your compass as a guide, but do not swear by it. In essence it tells you the past wind so it may be in conflict with what you think is happening. Stay one step ahead of the compass and use nearby boats to confirm your decision. Have they fallen off? Are they tacking? Are they pointing Higher?

Assuming your breeze has been shifting regularly, the strategy for sailing upwind is to sail the lifted tack until the wind heads you and forces you to tack.

#### Upwind Tactics:

Seven Tactical Rules of Thumb:

1) Clear Your air- This is most important when coming off the starting line when you need clear air to help boost you out from the pack and into a good position from which to play the windward leg. Off the starting line, for every 10 boats in clear air, there are another 15-20 in bad air. In large fleets, as few as three boat lengths can separate the top 20 boats, so even the loss of one boat length can be devastating. To recover from third row starts it's helpful to be armed with a few basic tactics.

**A)** Anticipate any threats to your clear air. If, for example, you are slowly being squeezed from leeward and rolled over to windward (sandwich), start thinking of ways to “bail out”. You can either tack or reach off. Rarely does it pay to reach off unless you're at the port end and only have to clear below a few boats.. So much windward distance is lost without much increase in boat speed that tacking clear is the preferred move. Even if you cross behind many boats the bad air isn't as damaging as you think. You get an apparent lift off of everyone's transoms, and you avoid being pinned to the left side of the fleet.

**B)** Once you make the decision, take immediate action. There can be no delays at this crucial stage of the race. If you are tacking: take a quick look to windward. Make sure someone else isn't tacking above you and will be on your air. If you are obstructed from tacking by other boats on your weather quarter, the best recourse is to bear off slightly, whip your boat through a tack and then duck transoms. Try not to take any more tacks until you are clear of the fleet and in good air.

2) *Consolidate*: If you are ahead and to leeward of the fleet and you get headed, tack and cross on top of the fleet (if possible). Otherwise you will not realize a gain on the boats near you. To be greedy here is a costly mistake as the wind gods are rarely cooperative in providing a bigger header (unless, of course, you know it is a persistent shift).

3) *Head For The Mark*: When in doubt about which tack to be on, or when sailing in extremely shift conditions, always assume the best tack is the one which will tack you closest and fastest to the mark

4) *Avoid the Corners and Laylines*: It is important to stay away from the ends of the course or put yourself into a position where you have eliminated your tactical/strategic alternatives. By putting yourself onto the layline early or by shooting into the corner of the course you will not be able to play windshifts. Furthermore, when on a layline early you will lose in both headers and lifts. Also other competitors might wish to come over and tack on your wind, pushing you farther back in the race.

5) *Play the Middle*: Rule- If one side is favored, play the middle-to-favored side of the course but avoid the corner. To be sure, some boats will make out on “fliers” to the corners, but conservative, race-winning tactics are- play the favored side and slowly but surely whittle away at the lead of the boats out front.

6) *Stay with the Leaders*: If you notice a pack of boats slowly breaking away from the fleet and some them are good sailors, do not automatically assume you can separate from them completely and go for the “big Break”. The “Big Break” comes about as often as you are struck by lightning. Respect your competition. Only chase that magical puff if you are confident it will benefit you or you are very far behind.

7) *Cross, Tack or Duck?* In crossing situations ask yourself – Where do I want to go? Am I headed there?

Some this written information might be considered by some as being basic. Yes, it is, but even as I type some of this material, I found it useful. *Upwind sailing*. If it were that easy then everyone would cross the finish line at the same time. But how often while racing, the fleet quickly breaks into groups by the first windward mark. The leaders tend to be the same boats most of the time. Just remember some basic no brainers and let's close the gap on the leaders.

**Plan your upwind leg before the start**

**Which side of the course has more wind**

**Don't shoot the corners**

**Where is the wind coming from**

**Which is the favored side of the course**

**Are you in a lift or a header**

**Use your compass and competition for clues. Are they faster, pointing higher, Should you follow them.**

**Bad air-get out!! Sail in a clear lane**

**Stay on a tack closest to the mark**

**Avoid laylines**

**Approach the mark on Starboard**

**PREPARE YOUR BOAT**

### ***THE TOWN CLASS NATIONALS THIS AUG 13-15<sup>TH</sup>***

COME TO TOUISSET AND HAVE SOME FUN. THE 1<sup>ST</sup> MATCH RACE IS BEING HELD ON FIRDAY THE 13<sup>TH</sup>