

Fourteen Easy Steps for Maximum Boat Speed

Whether you are racing, cruising or just out there knocking around, going fast is a whole lot more fun than just sloshing about going nowhere. For beginners and veteran alike, give the following a try:

Equipment

1. *Bottom and foils* - clean and smooth (smoother than the fender of your car if possible and nicely shaped).
2. *Hardware* - In good operating order and functionally arranged to be easy to use in the worst circumstances (meaning heavy air).
3. *Safety Equipment* - All in functioning order and easy to get to (and don't be shy about using such things as life jackets!!).
4. *Sails* - In the best condition possible (after proper trimming, the largest single determinant of raw boatspeed).

Skills

5. *Know which way the wind is blowing* - Tie magnetic recording tape "tell-tales" on your shrouds so you can judge where the wind is coming from.
6. *Understand how the wind flows around your sails* - The first foot or so of a sail should be tangent to (aligned with) the flow of air. Put more tell-tales on your sails to indicate this flow. Keep as many of these indicators as possible "flowing aft" (especially the lee or downwind side).
1. *Airflow consistent from top to bottom* - Adjust your sails so indicators near the top of the sail are doing the same as they are near the bottom. Do this by adjusting sheet tension, vang (top batten parallel to the bottom), jib fairlead position and/or other adjustments. (Note: when you adjust something, try making a very large change to see what happens. Only in a few specific circumstances does a tiny change make a big difference. After a while you will get a sense of what makes a difference and what doesn't).
2. ***When in doubt, let it out!!! (some)!!!*** - And, if you don't know if you're in doubt, you are! Therefore, **let it out!!** A little too loose is **always** faster than a little too tight! (True of all sails, including spinnakers). Sails live on the edge of a luff at all times.
3. *Steer upwind* - When sailing upwind, set the sails for the wind and wave conditions, then steer the boat to follow the always-changing wind direction (and make minor adjustments for wind velocity variations).
Moderate air and smooth water - After building up maximum speed, in tight and point high (an ideal condition seldom achieved).
Light Air - Ease out slightly and foot off (i.e. five degrees)
Heavy Air - Flatten sails, ease out and foot off. Ease mainsail in puffs to keep boat upright and to accelerate.
Accelerate out of a tack - Ease out and foot off.
Any air and waves - Constantly shift in and out of acceleration mode while easing out and footing off.
4. *Trim sails off the wind* - On reaches and runs, steer to your objective and trim sails to suit the ever-changing wind (if the wind shifts going to windward, it is still shifting on the reaches and runs).
5. *Weight Distribution*
Light air - Forward and to leeward for minimum wetted area and to maintain sail shape.
Moderate Air - Boat upright, weight concentrated amidships.
Heavy air - Hike out to stay as level as possible and move aft in planning conditions.
12. *Maneuvers* - Practice makes perfect!!! Tack only from maximum speed and between waves. Try gybing while keeping all sails full of air.
13. *Sail where there is wind* - Stay away from other boats and out of traffic unless you have a very specific tactical reason to get in close. Sail forward the next shift or expected puff.
14. *Keep notes* - Write down what seems to work and what doesn't, then review later. Also, compare notes with others.

Happy Sailing!

Bob Summerfeld