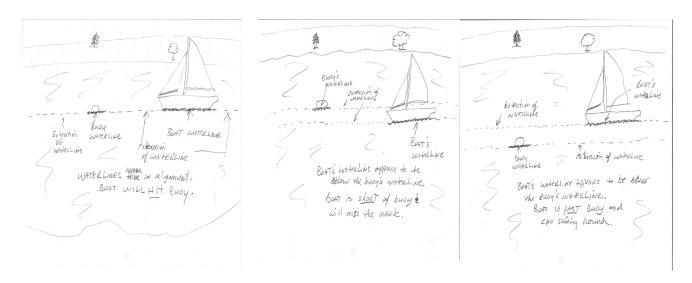
The Waterline Trick

By Bob Szczepanski

How many times have you gotten a good lead, or caught up to the leaders, only to miss the mark by going on the wrong side? If you are much over 40 and don't have the 20/20 eyesight and depth perception of a teenager, you probably answered – more than once..... grrrrr! There is probably no faster way to lose many places and move from an upper fleet to mid-fleet finish, or worse. Beside that, it is well... embarrassing!

There is a "tool", some might call it a trick, to easily tell if your boat is a) past the mark, b) even with the mark, or c) inside the mark. While it is a visual thing, it removes the need to have the great depth perception that becomes a rare commodity as we age. I call it the "Waterline Trick" and it has been adapted from flying RC gliders. Glider flyers compete in "Contests" as opposed to regattas. Typically, one part of a flying task (we call these heats) is a precision landing that provides the opportunity to add to your score. Landing on or near the spot adds significantly to your score, which is a good thing at a flying contest, since the highest score wins! To maximize landing points, the flyers use an <u>over, under, on</u> technique to determine what corrections are needed to land on the spot. The same technique can be used by observing the waterline on the buoys, we use as marks, and then comparing that to the waterline on our boat. Look carefully at the Figures.



If the waterlines of the mark and your boat appear to be in line, your boat is <u>even</u> with the mark and is in danger of hitting the mark, if a course correction is not made. If the waterline of your boat appears to be <u>lower</u> than the waterline on the mark, you are inside the mark and will pass on the wrong side, if a correction is not made. Last, if the waterline of your boat appears to be <u>higher</u> than the waterline of the mark, you have sailed past the mark and can make your rounding without the danger of being short of or hitting the mark. Another way to think of the position of the waterlines is that the lower waterline is nearer and the higher waterline is further away from you. This may seem a bit confusing to some, but is very easy to see by testing this "trick" out on the water. First, sail well past the mark to observe the boat's waterline appear to be above the waterline on the mark. Then, sail well inside the mark and see the boat's waterline appear to be lower than the waterline on the mark. The more distance between the waterline extensions means the more you are either over standing or are short of the mark. Finally, to really demonstrate your new found skill, steer the boat so that it's waterline and the mark's waterline are aligned. Pick a soft buoy, because odds are you will hit it dead center!

This "trick" does take some practice, but after a very short while, a quick scan of the waterlines will tell you what you need to do to avoid sailing short of the mark. Oh yeah, it also works, boat to boat, to help avoid those equally embarrassing collisions.