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Some Ways the 2016 World Sailing Match Racing Test Rules Change the Game for Sailors and Umpires by Dave Perry

These notes have been compiled by Dave Perry, and are solely his personal opinions and not those of any other body, committee or person. They are intended to be helpful for sailors and officials studying, discussing and using the 2016 World Sailing match racing test rules, and in particular to highlight the game changes caused by the rule changes.

World Sailing has published two papers regarding the 2016 match racing test rules. They can be viewed on the US Sailing Match Racing webpage (www.ussailing.org > Racing > Match Racing - click on “2016 Test Rules for Match Racing”), or follow this link:

<http://www.ussailing.org/racing/small-boat-racing/match/the-2016-test-rules-for-match-racing/>

There you will also find the text of the 2016 Test Rules, this paper, and a powerpoint I have created as a study guide.

The 2016 “Test Rules” are in fact the rules that have been approved as the match racing rules in Appendix C, Match Racing, of the 2017-2020 *Racing Rules of Sailing*.

These rules create pretty much a completely new game at the windward mark due to the changes in rule 18 (about mark-room), and a very different game on the upwind and downwind legs due to the deletion of rule 17 (about proper course). Most of the rules and tactics match racers (and sailors in general) use at the windward mark are changed, and for the most part are the opposite of what is currently used in fleet and team racing.

Rule 18 changes at the windward mark

Two major changes...

Test rule 18 (Mark-Room) applies between boats on opposite tacks on a beat to windward (note the change in rule 18.1). Therefore, when two boats are approaching the windward mark on opposite tacks, they are now “overlapped,” and the outside boat must give the inside boat mark-room.

Note also that the test definition of Mark-Room is room for a boat to sail her proper course to round or pass the mark, which includes luffing around the mark and tacking onto port tack when either is part of a boat’s proper course.

(more)

Some of the changes in the rules and tactics at the windward mark

The two boats are approaching the windward mark (to be left to starboard) on starboard tack...

- 1) The boats are approaching the mark slightly below the starboard-tack layline. As long as the boat ahead (A) enters the zone clear ahead, she can tack onto port tack directly in front of the other boat (B) and she gets mark-room, despite breaking rule 13.1 (tacking too close) and/or rule 10 (port/starboard). Therefore, B can no longer pin A from tacking in front of her. As long as A is sailing her proper course to and around the mark, she will be exonerated under rule 21 (exoneration) for breaking rules 13.1 or 10.
- 2) If both boats are approaching the mark near the starboard-tack layline, with one boat (A) a length or so to leeward and a length or so ahead of the other (B), and they both think they have reached the zone first, they will not know for sure what their rights and obligations are because they will not know which boat the umpires have decided reached the zone first, and the principle of “last point of certainty” (test rule 7) doesn’t help them to “guess” what the umpires have decided. When uncertain of which boat gets mark-room, default to the right-of-way rules to be safe.
- 3) When the boats are overlapped on starboard tack approaching the zone a length or so below the starboard-tack layline, and the leeward boat (L) is pinching slightly to try to slow the windward boat (W), the moment L reaches the zone, she needs to bear away and give W room to sail W’s proper course, which may be slightly below close-hauled to build speed if she is slow at that time.
- 4) Both boats are approaching the mark on starboard tack, with A clear ahead of B when she reaches the zone. A has a penalty and is setting a trap for B. A sails past the mark by a length and tacks, and is careful to make sure she is overlapped with the mark when her bow begins the next leg (her bow crosses the line drawn through the mark from the leeward mark). The reason for this is that A continues to be entitled to mark-room until she has sailed onto the next leg and left the mark astern. B tacks to leeward of A and A is physically able to give B room to round the mark. Under the test rules, A can shut the door on B as long as A is sailing her proper course and has not left the mark astern. (Under the current rules, A would have to give B mark-room.)

The two boats are approaching the windward mark (to be left to starboard) on port tack...

- 5) The two boats are overlapped and both are below the port-tack layline. When either one of them reaches the zone, the leeward boat (L), who is not fetching the mark and who otherwise can’t tack due to the proximity of the windward boat (W), can now simply shoot past head to wind or fully tack in order to make the mark, with no warning at all and despite breaking rule 13.1 (tacking too close), rule 15 (acquiring right-of-way), rule 16.1 (changing course) or rule 10 (port/starboard). In other words, she is no longer pinned as she would be under the current rules. Her only restriction is that her tack has to be a “proper course” tack; i.e., done with the same rate of turn as she would do all her other racing tacks (see the test definition Mark-Room).
- 6) The two boats are not overlapped and both are a couple lengths below the port-tack layline, with one boat (A) to leeward and clear ahead of the other boat (B). If B reaches the zone first, she gets mark-room, even though she is clear astern of A. The reason is that she got to the zone first and the boats are not overlapped when she reaches the zone. Therefore, as the boats near the zone, A has to luff and make sure the boats are overlapped if B is going to reach the zone first.

The two boats are approaching the windward mark (to be left to starboard) on opposite tacks...

- 7) The starboard-tack boat (S) can cross the port-tack boat (P) and tack to windward of P, leaving no ability for P to luff across her stern and get to windward of her, and can then prevent P from rounding the mark! This completely changes the balance of the game at the windward mark. Under the current rules, when the boats will converge together at the mark, S has the r-o-w but needs to be careful not to break rule 13.1 while she is tacking (tack too close). And P has the ability to “freeze” S from tacking by aiming at her and then trying to duck her and still be able to fetch the mark. Under the test rules, if P ducks S and S tacks to windward of her such that P is trapped below her, P has to give S mark-room, which means P will likely be forced to bear off and pass on the wrong side of the mark!
- 8) S is approaching the mark on the starboard-tack layline and P is slightly overstood on the port-tack layline. P is crossing S if S does not luff above close-hauled. Under the test rules, S can luff and tack around the mark (her proper course) and if she immediately makes contact with P, she breaks rule 16.1 (changing course) but is exonerated (under rule 21) because she is sailing within the mark-room (her proper course) she is entitled to. (Under the current rules, rule 18 does not apply, therefore S is not exonerated for breaking 16.1.) Rule 14 (about contact) applies as it always has.
- 9) S is approaching the mark on the starboard-tack layline and P is slightly overstood on the port-tack layline. P cannot cross or duck S. Under the current rules, S can hold her course and make P tack, and then tack to port for the mark. Under the test rules, this is prohibited! S must tack when her proper course to round the mark is to tack. If she continues past this point and affects P’s course, she will be penalized under test rule 18.3, possibly with a red-flag penalty for gaining a controlling position (because under test rule 18.3 S cannot overstand the mark and force P to tack, so S is not “controlling P coming into the mark).
- 10) S is approaching the mark on the starboard-tack layline and P is slightly overstood on the port-tack layline. P bears away to duck S. Under the current rules, S can bear away and “hunt” P and force her into a deeper duck or a tack back. Under the test rules, this also is prohibited! S cannot sail farther from the mark than her proper course. If she bears away below her proper course and affects P’s course, she will be penalized under test rule 18.3.

NOTE: test rule 18.3 does not apply at a gate mark; so if you racing to a windward gate, S **can** sail past the port-tack layline and force P to tack, and **can** bear away and hunt P as the boats converge.

With marks to port (which is common when a windward gate is used)...

- 11) When the two boats are approaching on opposite tacks, the starboard-tack boat (S) has to give mark-room to the port-tack boat (P). S is no longer in control of the race over P at a port-hand mark.

Rule 18 changes at the leeward mark

The game changes are less major at the leeward mark, though there are some major differences. For instance:

- 1) A boat can be clear ahead (A) of the other boat (B), but if B reaches the zone first and the boats are not overlapped, then A will have to give B mark-room! Therefore, as the boats near the zone, A has to bear away and make sure the boats are overlapped if B is going to reach the zone first.
- 2) An inside keep-clear boat can now sail her proper course around the mark. (Under the current rules she would be restricted to making a “seamanlike” rounding, i.e., closer to the mark on the approach.)

Rule 17 has been completely deleted

The test rules also turn rule 17 (proper course) off completely (meaning on both the upwind and downwind legs!). Here are some of the changes in the rules and tactics downwind and around the leeward mark:

- 1) Whenever a boat (B) becomes overlapped from clear astern on the other boat (A), she has no proper course limitation, meaning she can luff and sail up to head to wind! She still has to initially give A room to keep clear when she acquires the right of way (rule 15), and room to keep clear when she changes course (rule 16.1), including complying with MR CALL G2 (giving W room to drop her spinnaker), but this is a major game change! Boats ahead will have to work hard not to let boats behind overlap them to leeward (need good spinnaker sets!); and if it happens, they need to be ready to luff hard, and possibly get their jibs up and drop their spinnakers.
- 2) This can happen on the upwind legs as well, so when S is trying to defend the right by tacking to leeward and ahead of P (often as P is beginning to duck her), even if S completes her tack clear ahead of P, P can sail into a leeward overlap and immediately begin to luff S. P can sail up to head to wind and cause S to tack as well! P still needs to comply with rules 15 (acquiring r-o-w) and 16.1 (changing course).
- 3) This changes the game in the lower right corner of the downwind leg (looking downwind). If the boats are on starboard tack and B gets a leeward overlap from clear astern, under the current rules B has to then start thinking about doing a double-gybe to regain luffing rights before getting to the port-tack layline. This commonly resulted in a series of flags, fake double-gybes, etc. Under the test rules, this is all gone! B can sail past the layline and/or luff with just a one foot overlap, so she is much stronger to the point that boats need to be very careful not to put themselves in a position where they are above the starboard-tack layline to the mark with the other boat close astern.
- 4) When the trailing boat (B) rounds the windward mark within a boat length of the leading boat (A), she is much stronger. If A sees B starting to catch up and threaten to overlap A to leeward (“hook” her), one tactic is for A to sail deep, and just as B is about to get the overlap, A can gybe to starboard. If B is locked in to A’s right (looking downwind), then B will be forced to gybe to keep clear, and A can then control B for the entire leg. Of course, B will not want to allow herself to get locked in to A’s right, so B will likely luff as A is gybing. The move for A is to gybe right back (do a double-gybe), and luff B hard as B swings across A’s transom.

- 5) If the boats are rounding the leeward mark and the boat astern (B) becomes overlapped to leeward of the boat ahead (A) during the rounding, B must give A room to sail A's proper course around the mark under rule 18.2(a)(2). But once A is no longer overlapped with the mark (i.e., she has left the mark astern and therefore completed her rounding maneuver), B has no proper course limitation (no rule 17!) and can luff up to head to wind, and force A to tack, provided she complies with rule 16.1 (changing course).

Note, there are also two other major rule changes for match racing in 2016 which actually went into effect in 2015. These are not part of the test rules package:

- 1) World Sailing has changed rule C2.9 (in Appendix C, Match Racing Rules), to read: "Rule 22.3 is deleted."
Rule 22.3 is the rule that essentially says that a boat moving astern through the water by backing a sail shall keep clear of one that is not. That no longer applies in match racing. So the right of way between boats no longer changes when one boat begins sailing backwards, whether it has backed its sails to do so or not. However, when a boat that has been moving forward or is stopped begins moving backwards, she is considered to have "changed course," and rule 16.1 (changing course) requires the boat moving backwards to give the other boat room to keep clear (see MR CALL B7).
- 2) The World Sailing standard NOR and Sailing Instructions have been revised to include the following sailing instruction language:

"RRS 31 is changed to 'While *racing*, neither the crew nor any part of a boat's hull shall touch a starting *mark* before *starting*, a *mark* that begins, bounds or ends the leg of the course on which she is sailing, or a finishing *mark* after *finishing*. In addition, while *racing*, a boat shall not touch a race committee vessel that is also a *mark*.'

For an event to be graded, it must use the ISAF standard NOR and Sailing Instructions. If the sailing instructions for an event change rule 31 (touching a mark) as stated above, it means that only the hull and people on the boat cannot touch a mark. The sails, sheets and boom *can* touch the mark with no penalty. With ONE EXCEPTION which is that no part of the boat, sails, equipment or people can touch the race committee boat at the starting/finishing line! This is obviously for the safety of the boats and people on them.

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Here are some of the situations the umpires will need to decide under the test rules that they don't need to consider under the current rules:

On upwind legs:

- 1) When S is tacking to leeward and ahead of P (or the other way around), the umpires need to be in a position to decide whether P had to change course to avoid S before S reached a close-hauled course (rule 13.1); and then if P chooses to overlap S to leeward, the umps must be in the gap to judge rules 11, 15 and 16.1.

At a windward mark to be left to starboard:

- 1) If the boats are on starboard tack near the starboard-tack layline, and one is about a length to windward and a length astern of the other, such that they are even in the race, the umps will need to decide (a) which boat reached the zone first AND (b) were they overlapped or not at that moment. It will likely require the ump for the boat to windward to be right on the sternline of the boat to leeward to judge both the overlap and the moment her boat reaches the zone.
- 2) The boats are approaching the mark on starboard tack near the starboard-tack layline with the windward boat (W) just overlapped to windward of the leeward boat (L). Just before the zone, the umps have to watch for L bearing away sharply to break the overlap before she reaches the zone (not a new determination but there is more incentive now for L to try this because she then gets the right to tack onto port in front of W at the mark). Same positioning as in #1 above.

Note: the concept of the Last Point of Certainty (rule 7) will help in deciding if the boats are overlapped when the first reaches the zone, but it won't help in deciding which boat reached the zone first, which is a critical piece of information for knowing what the rights and obligations of the boats are.

- 3) If the boats are approaching the zone on port tack just below the port-tack layline and are not overlapped, now the boat clear ahead will luff and try to get the boats overlapped before the windward boat reaches the zone. Clearly the point of last certainty is available to the umpires if they cannot decide it, but it is something new for them to watch and decide.
- 4) If the boats are approaching the zone on port tack just below the port-tack layline and are not overlapped, the moment either boat reaches the zone, the leeward boat (L) can tack whenever she chooses to with no warning. Her tack needs to be a normal "proper course" tack, but in heavier keelboats in light air, a "proper course tack" may end in a course slightly below close-hauled. The umps need to be in position to judge whether the tack is a "proper course tack" and whether the windward boat (W) impeded L's tack in any way.

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- 5) When P is on the port-tack layline or overstood and S enters the zone on starboard tack, did S "hunt" (bear away from her proper course) or sail past the port-tack layline, and if so, did it affect P's course?

- Rule 18.3 requires S to sail no farther from the mark than needed to sail her proper course. Her proper course is to tack on the “layline.” The ump’s will now need to decide where that layline is.
 - Note: if S breaks rule 18.3, but the breach does not affect P’s course, then S is not penalized for breaking rule 18.3. So if the ump’s decide that S broke rule 18.3, the ump’s will then need to decide if S’s breach of 18.3 affected P’s course either before S tacked or afterwards.
 - Note also that rule 18.3 does not apply at a gate mark, so when windward gates are used, S *can* sail farther from the mark than her proper course to attack P.
- 6) When the two boats are approaching on starboard tack with one (A) clear ahead of the other (B), if A delays her tack (perhaps setting a trap for B) and tacks beyond the port-tack layline, the ump’s have to determine whether B is still in the “act of rounding the mark” as she bears away on port tack or not. If she is in the act of rounding the mark and A tries to sail between her and the mark and there is contact or B is forced to delay her rounding to avoid A, and if B is sailing her proper course, then A breaks rule 18.2(a)(2) and is penalized.

Note: a boat is in the act of rounding a mark until (a) she has left the mark astern (is no longer “overlapped” with the mark) and (b) is sailing on a new leg of the course. A boat is “sailing on a new leg of the course” when her bow crosses the extension of the line drawn through the mark from the previous mark (see rule C7.2(c)).

So the umpires will have to observe carefully to see if A is still overlapped with the mark as she tacks and bears away and crosses the line drawn through the mark. If she’s overlapped with the mark, then she is in her rounding maneuver until she leaves the mark astern, and will be exonerated under rule 21 (exoneration) if she breaks rule 11, 13.2 or 10 as long as she is sailing a proper course.

On downwind legs:

- 1) Whenever the boat astern (B) is in a position to overlap the boat ahead (A) to leeward, the ump’s must be in position to see that overlap begin, and then to judge rules 11, 15 and 16.1 and A’s attempt to drop her spinnaker, etc.

At the leeward mark:

- 1) Inside boats now can sail their proper course around the mark, whether they have the right of way or not. Ump’s will now need to judge whether a keep-clear boat is sailing her proper course around the mark (new determination).
- 2) The inside windward boat (IW) is rounding the mark with the outside leeward boat (OL) tight to leeward. The ump’s will need to determine when the mark is clear astern of IW (new determination), as IW gets to sail her proper course while rounding the mark and until she leaves the mark astern, but at that moment, OL can luff up to head to wind, so the ump’s will need to be in the gap to judge rules 11 and 16.1.

- 3) If the boats are on starboard tack near the starboard-tack layline, and one is about a length to windward and a length astern of the other, such that they are even in the race, the ump’s will need to decide (a)

which boat reached the zone first AND (b) were they overlapped or not at that moment. It will likely require the ump for the boat to leeward to be right on the sternline of the boat to windward to judge both the overlap and the moment her boat reaches the zone.

- 4) If the boats are approaching the zone on starboard tack just above the starboard-tack layline and are not overlapped, now the boat clear ahead will bear away and try to get the boats overlapped before the leeward boat reaches the zone. Clearly the last point of certainty is available to the umpires if they cannot decide it, but it is something new for them to watch and decide.

Note: the concept of the Last Point of Certainty (rule 7) will help in deciding if the boats are overlapped when the first reaches the zone, but it won't help in deciding which boat reached the zone first, which is a critical piece of information for knowing what the rights and obligations of the boats are.