

Rule 18, *Mark Room* and the Weather Mark – John Ball

Note for this topic, all marks are to be rounded to PORT, unless specified. You should have a copy of the Racing Rules of Sailing. You may download a free PDF of the RRS from the World Sailing web site. To find the link go to my Racing Rules Reference Documents Page.

<https://sites.google.com/site/johnsrcsailingrulesandtactics/racing-rules-reference-documents>



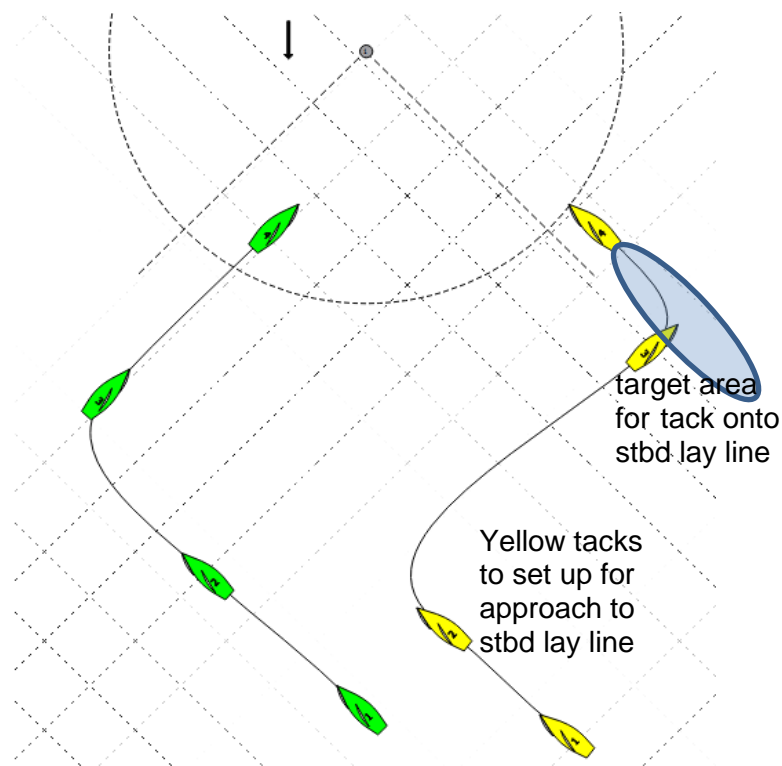
Lots of action in the zone - UK Nationals August 2014 - Photograph by Sue Brown

Weather Mark rounding 101 - Approaching the Zone

Any boat that enters the zone of the weather mark on port tack has virtually no rights and must stay clear of other boats that are already on stbd and fetching the mark from outside the zone. So tactically, it is very important to get onto the stbd lay line before entering the zone.

However, getting onto the lay line from a long way out carries its own risks, for example, you will not be able to take advantage of a wind shift, or may have to sail in dirty air if another boat tacks in front of you. So, coming in on port, try to approach the stbd lay line between six to eight boat lengths below the port lay line. To do this, plan the port tack approach as much as twenty boat lengths away. At twenty boat lengths, start to assess what the wind and the fleet are doing. You don't want to be on the headed tack, but very close to the mark, it may be necessary just to get good position, and if the distance is small, any loss will also be small.

Looking at the fleet, are there a group of boats arriving at the mark with me? Or is the fleet



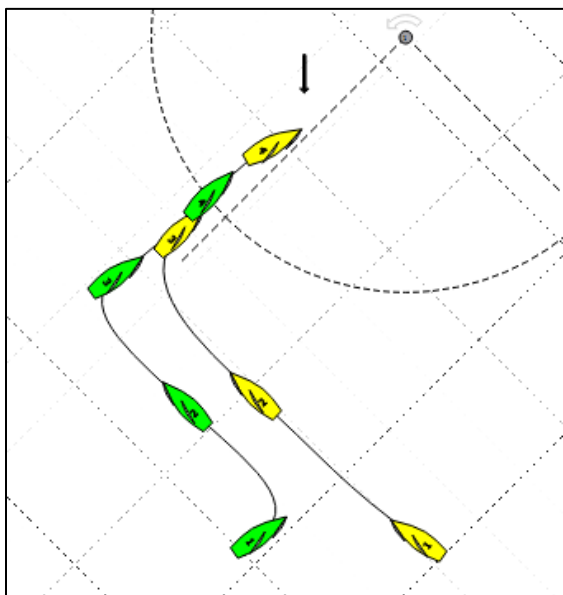
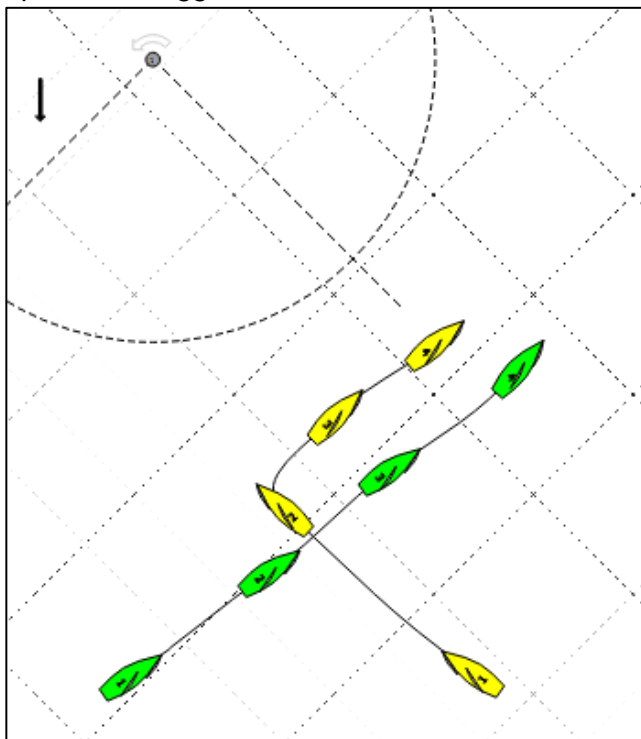
spread out? If there is going to be congestion at the mark, from which side are the boats approaching - the left or right side of the course? If I see a mess developing, then I will over stand the stbd lay line a little, so that I have a little in the bank and can sail around any congestion at the mark. If my way is clear, I can always crack off and approach the mark with more speed.

This suggestion is for Race Directors – Please try to place the weather mark as least **10 boat lengths** away from the shoreline to make the stbd lay line long enough. The above diagram shows the importance of allowing room for boats to get onto the stbd lay line before entering the zone. Some sailing venues, like San Diego, Foster City, and Salt Spring Island have prevailing winds that often favor sailing out to the left, and so many skippers approach the weather mark on port from the left side of the course. If I see a recurring pattern of a group of boats coming into the zone on port, that suggests to me that the mark needs to be moved further out to move it closer to the favoured wind and to increase access to the target tacking area on the stbd lay line.

Be in control

Approaching the weather mark, I want to get between any nearby boat and the mark so that I will be in control of the final approach to the mark – just like match racing. If Yellow tacks to port to leeward of Green and before P2, then Yellow is giving control to Green to decide when to make the final tack to lay the mark. A better tactic for Yellow is to tack to port slightly weather of Green at P2 as shown in the diagram-right, to get between Green and the mark. Yellow is now in control of when to make the final tack to stbd to lay the mark. Green cannot tack to stbd without breaking R13 (tacking too close) due to the proximity of Yellow.

At P3, Yellow could crack her sheets a little to accelerate and move forward and even closer to Green. A reminder hail by Yellow of 'No room to tack' is a good idea. At P4, there is nothing in the rules that requires Yellow to tack for the mark. She can take Green beyond the lay line so that Green gets to sail in her dirty air up to the mark. If Yellow crosses Green at P2 but delays too long before tacking to P3, then she risks allowing enough room for Green subsequently to tack to stbd first. Even worse for Yellow is to extend on stbd from P2 as she will have to risk tacking in the zone with Green now laying the mark on stbd with all the rights.



In the left diagram, and if I were Green, approaching Yellow at P1, I would not tack to stbd between P1 and P2 as is shown in this diagram. Here Green tacks to stbd after P1 and is locked outside by Yellow. Green is forced to follow Yellow around the mark.

It is better for Green to hail 'Hold your course' and to duck Yellow after P1. Yellow may carry on, giving Green the stbd tack advantage later.

Looking at R18 for the Weather Mark

There are several differences in how (or even if) we apply R18 at a weather mark compared to other types of mark rounding (reaching or downwind). The first thing to note is that, despite the title of this topic, the term 'Weather Mark' does not appear in the rules. We use the name 'Weather Mark' as a convenient label to describe the course to be sailed. However, when you look at R18, it is the sailing angle of the boats as they approach a mark that determines how the rule applies. The important wording to note in R18.1(a) is the use of the phrase 'on a beat to windward'. The boat sailing angle into the mark is what determines how R18 applies.

Some Definitions that apply at marks

The following defined terms (remember the significance of italics) are used in R18 and understanding them is important.

Clear Astern and Clear Ahead; Overlap One boat is *clear astern* of another when her hull and equipment in normal position are behind a line abeam from the aftermost point of the other boat's hull and equipment in normal position. The other boat is *clear ahead*. They *overlap* when neither is *clear astern*. However, they also *overlap* when a boat between them *overlaps* both. These terms always apply to boats on the same *tack*. They apply to boats on opposite *tacks* only when rule 18 applies between them or when both boats are sailing more than ninety degrees from the true wind.

Fetching A boat is *fetching* a *mark* when she is in a position to pass to windward of it and leave it on the required side without changing *tack*.

Mark-Room Room for a boat

- (a) to sail to the *mark* when her *proper course* is to sail close to it,
- (b) to round or pass the *mark* on the required side, and
- (c) to leave it astern.

Room The space a boat needs in the existing conditions, including space to comply with her obligations under the rules of Part 2 and rule 31, while manoeuvring promptly in a seamanlike way.

The new R 18 for 2025-2028

When boats enter the zone of a mark to be rounded to port, R 18.2 begins to apply, however if one or more boats passes head to wind (tacks) in the zone and one of them is fetching the mark, R 18.3 takes over and R 18.2 no longer applies. **This is a significant change.**

Breaking down R18

R18 contains four sections.

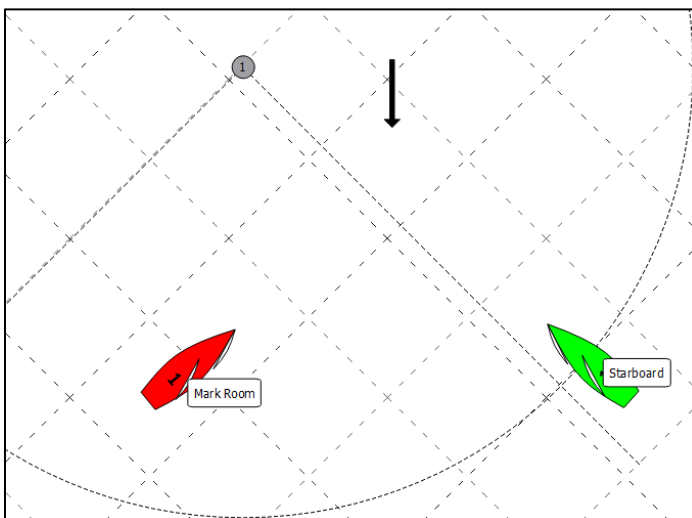
- 18.1 describes when R 18 applies and importantly, the exceptions for when it does not apply.
- 18.2 covers giving Mark Room.
- 18.3 covers tacking in the zone.
- 18.4 covers gybing in the zone.

It is important to note that R18 does not grant Right Of Way (ROW is granted in R10 through R13). All R18 does is to grant 'Mark Room', and that may place an obligation on a ROW boat to provide that room but does not alter ROW.

The Exceptions when R18 Mark Room does not apply

Opposite tacks on a beat to windward

The first of the exceptions for R18 Mark Room NOT applying is in R18.1(a). It covers boats on opposite tacks on a beat to windward. As R18 and Mark Room do not apply, it is as if the mark is not there and so we are left with a simple R10 situation, and port tack keeps clear of stbd tack. In this diagram-right, the boats are on a beat to windward, and even though they are in the zone, and Red on port, entered the zone first, R18.1(a) says that R18 and Mark Room do not apply. So, Red must stay clear of Green under R10 (P/S). The other exceptions listed in R18.1 are outside the scope of this discussion.



Note that for the RRS 2025-2028, R 18.2 has been renumbered so that the normal approach (two boats on the same tack) is covered first. As a result, the old 18.2(b) and 18.2(c) becomes the new 18.2(a) and the old 18.2(a) (which was the exception) is now moved down and becomes 18.2(c)

18.2 Giving Mark-Room

(a) When the first of two boats reaches the *zone*,

(1) if the boats are *overlapped*, the outside boat at that moment shall give the inside boat *mark-room*;

(2) if the boats are not *overlapped*, the boat that has not reached the *zone* at that moment shall give the other boat *mark-room*.

When a boat is required to give *mark-room* by this *rule*, she shall continue to do so for as long as this *rule* applies, even if later an *overlap* is broken or a *new overlap* begins.

(b) Rule 18.2(a) no longer applies if the boat entitled to *mark-room* passes head to wind or leaves the *zone*.

(c) When rule 18.2(a) does not apply and the boats are *overlapped*, the outside boat shall give the inside boat *mark-room*.

(d) If a boat obtained an inside *overlap* from clear astern or by tacking to windward of the other boat and, from the time the *overlap* began, the outside boat has been unable to give *mark-room*, rules 18.2(a) and 18.2(c) do not apply between them.

(e) If there is reasonable doubt that a boat obtained or broke an *overlap* in time, it shall be presumed that she did not.

When R18.2 applies

There are three basic scenarios for rounding the windward mark to Port.

1. If both boats enter the zone on the same tack overlapped, then R18.2(a)(1) applies and the outside boat gives Mark Room to the inside boat. If not overlapped then the boat that has not reached the zone shall give mark room to the one that has reached the zone R18.2(a)(2). (this is a subtle change for 2025-2028).
2. If one or more boats passes head to wind (tacks) in the zone of a mark to be rounded to port and one is fetching the mark, R 18.3 applies and turns off 18.2
3. If one boat enters the zone fetching the mark on stbd and the other boat tacks inside the zone, then R18.3 applies and the boat that tacked cannot take the other boat above close hauled and gives Mark Room to the boat already on stbd if she establishes an inside overlap.

If you keep these conditions in mind, understanding Mark Room becomes much easier. The trick though is to understand that R18.2(a) or R18.3 normally apply first, and R18.2(c) only applies when those two rules do not.

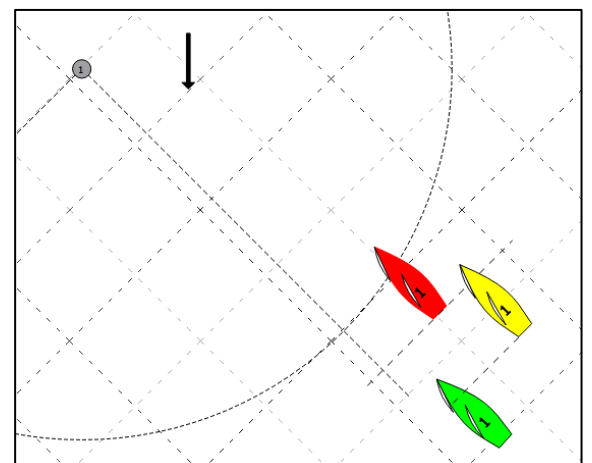
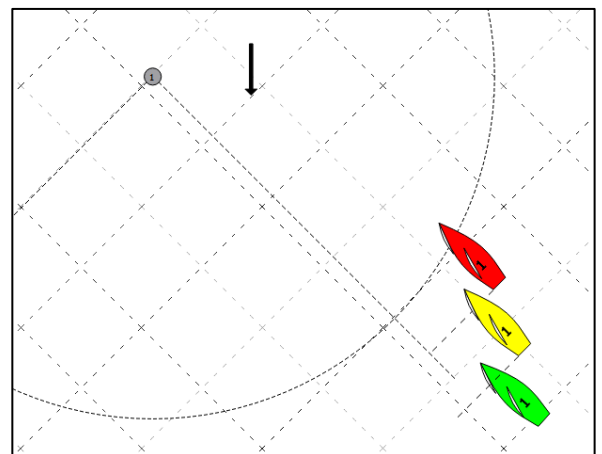
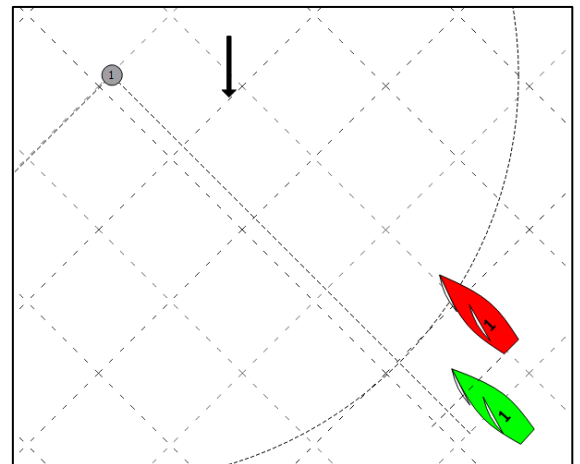
Same Tack and Overlap

This diagram (right) shows the most common application of R18.2 and Mark Room. Red and Green are approaching the mark from outside of the zone, already on stbd tack and above the lay line (the dotted line). So they can both be described as '*fetching*' the mark. Before they reach the zone, they are overlapped, and Green has ROW under R11 (windward/leeward). Red touches the zone first, and as they are overlapped when the first boat reaches the zone, the inside boat, Green is entitled to Mark Room under R18.2(a)(1).

Now let's look at a similar situation but add Yellow as the middle boat. This extends the concept of overlap (see the definition earlier) to include an intervening boat. As Red is overlapped with Yellow and Yellow is overlapped with Green and Yellow is between Red and Green, the overlap extends over all three boats. This means that Red has to give Mark Room to BOTH Yellow and Green, and Yellow has to give Mark Room to Green if Yellow and Green are still overlapped when Yellow reaches the zone.

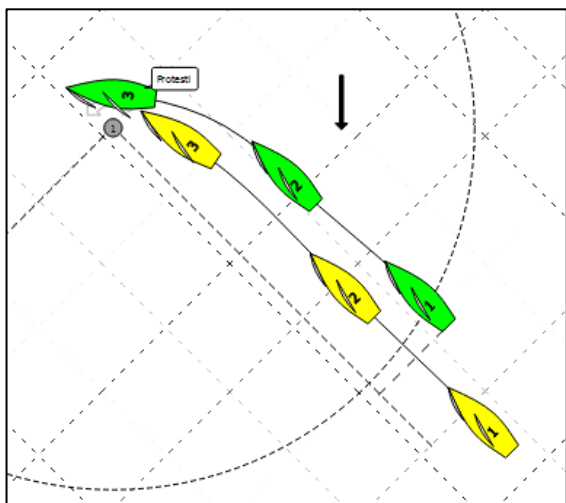
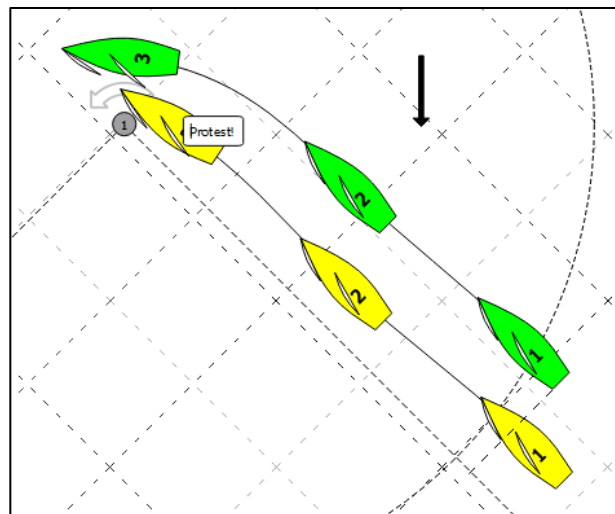
Taking this one step further, now look at the diagram-right. In this case while Red and Yellow overlap, and Yellow and Green overlap, but Yellow is NOT between Red and Green, she is outside.

So in this example, Yellow gives Mark Room to Red and Yellow gives Mark Room to Green. Red is clear ahead of Green with no overlapping boat between them when Red reaches the zone so Green must give Mark Room to Red and must avoid Red as she bears away around the mark. But note that Yellow must also give Green enough room to avoid Red.



More on R18.2 Clear ahead compared to overlapped

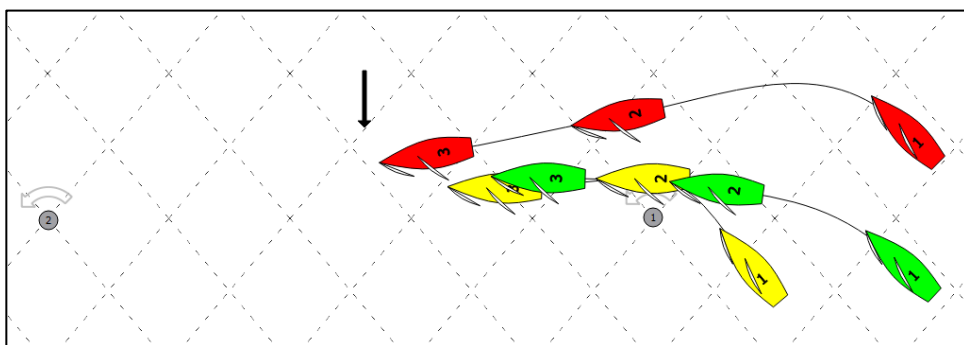
In the right diagram, Yellow and Green were overlapped when the first boat entered the zone, so Yellow is entitled to Mark Room. At the mark, Green bears away for the next leg, causing Yellow to hit the mark. Green breaks R18.2(a) by failing to give Mark Room to Yellow. Yellow breaks R31 Touching a Mark but is exonerated under R43.1(b) Exoneration.



In the left diagram, Green entered the zone clear ahead of Yellow and so Green is entitled to Mark Room from Yellow. That room includes room to bear away to sail her proper course and so Yellow breaks R18.2(a)(2) by failing to give Mark Room for Green to sail her proper course, close to the mark. For Yellow, it is dangerous to stick your bow inside Green. Better to anticipate Green's turn at the mark and cross her transom and get outside, to avoid being trapped.

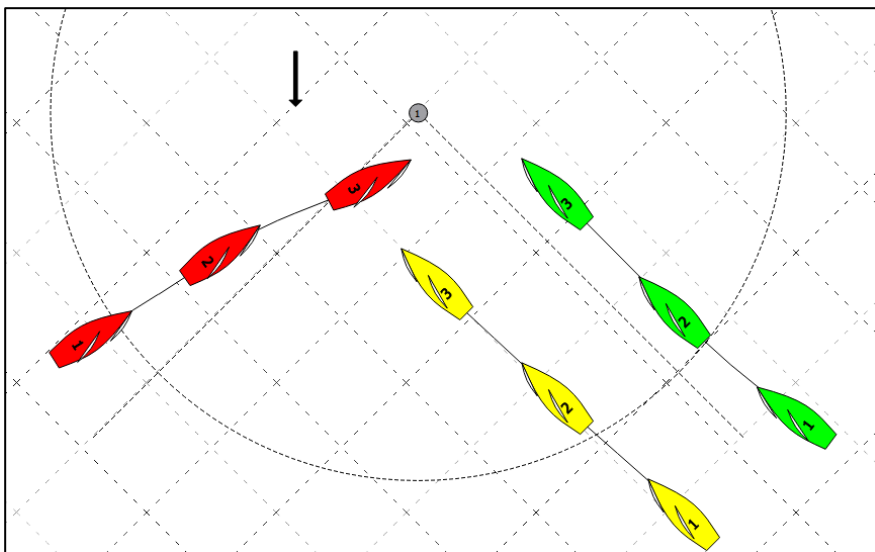
Proper Course and Mark Room

In this diagram, look at each boat as if the other boats do not exist. These boats are all demonstrating sailing their proper course from different starting positions. If a boat has Mark Room, then another boat has to allow the Mark Room boat to sail to the mark when her proper course is to sail close to the mark, and room to round the mark to sail the course. Here we have a weather mark and an offset mark. From their starting positions at P1, and with Mark Room, Yellow and Green may sail close the weather mark, and then sail towards the next mark. However Red at P1 does not need to sail close to the weather mark as her proper course and course to the next mark is a higher line. So, Red has left a hole that another boat could sail into.



Fetching a mark

Fetching is a defined term as it is in *italics* in the rules. This diagram-right shows the concept of '*fetching*' the mark. The lay lines are shown by the dotted lines. Green is fetching the mark as she is able to sail up to and around the mark without the need to tack. Yellow is not fetching the mark as she is below the starboard lay line and will need to tack twice before rounding. Red also needs to tack to round the mark and so is not fetching the mark either.



R 18.3 & Tacking in the Zone

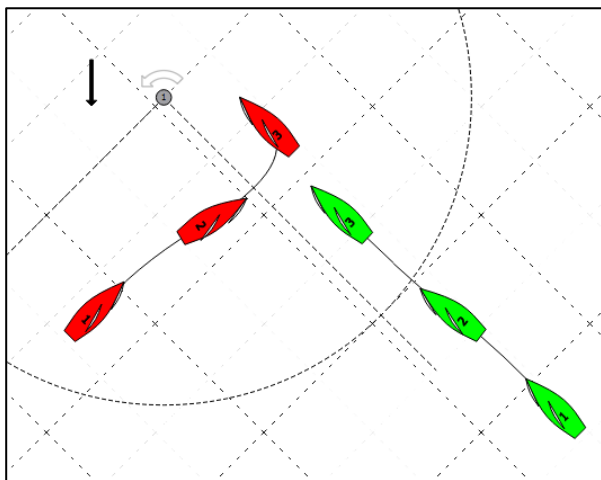
One boat tacking in the zone is the second most frequent application of R18, and is covered by R18.3. The main item to note is, when a boat tacks in the zone, she does not gain *Mark Room* over any boats already fetching the mark on stbd, and if the boat enters the zone already fetching the mark on stbd, the boat that tacked has to give her *Mark Room* if she gains an inside overlap.

18.3 Tacking in the Zone

If a boat passes head to wind from *port* to *starboard tack* in the *zone* of a *mark* to be left to port, rule 18.2 does not apply between her and another boat on *starboard tack* that is *fetching* the *mark*. If the other boat has been on *starboard tack* since entering the *zone*, the boat that passed head to wind

- (a) shall not cause the other boat to sail above close-hauled to avoid contact, and
- (b) shall *give mark-room* if the other boat becomes *overlapped* inside her

There are several possibilities for a port tack boat approaching a stbd tack boat entering the zone on stbd. She can either tack clear ahead of, or tack inside or tack outside of the stbd tack boat or duck and go behind. Note that when R18.3 applies, R18.2 does not apply between them, and it sets out a new obligation for the boat that tacked.

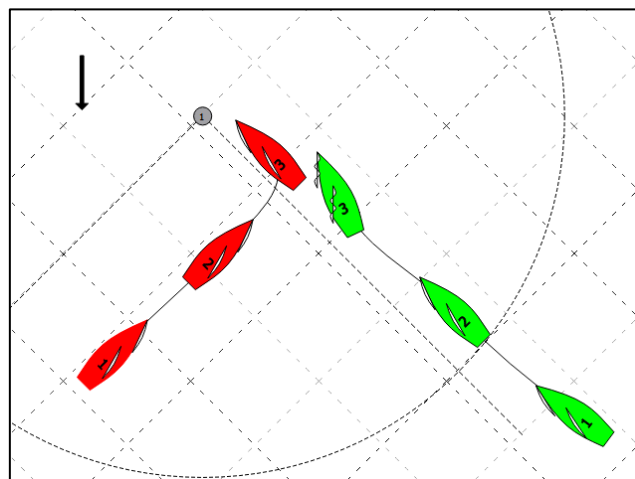
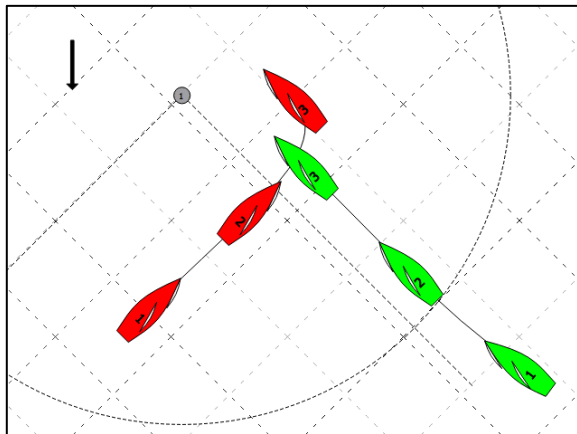


Tacking clear ahead of another boat

If Red is able to tack clear ahead of Green and round the mark, she has done well. However, if she slows down due to the tack and Green gets an inside overlap, Red has to give *Mark Room* to Green! R18.3(b).

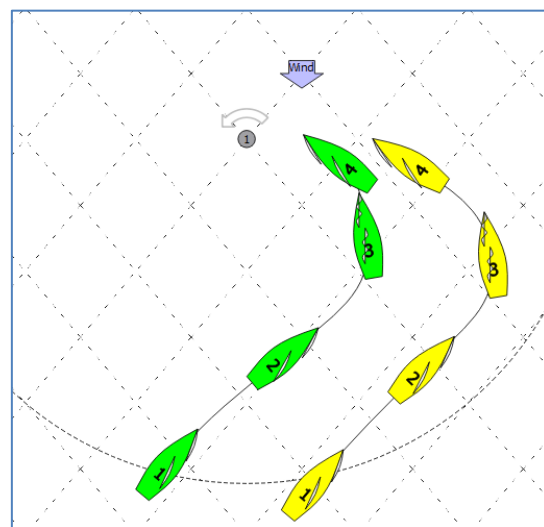
Tacking inside another boat

If Red tacks inside Green, such that they become overlapped, then R11 says that Green, to weather, must stay clear of Red, to leeward. However, if Green has to luff above close hauled to avoid Red, then Red has broken R18.3(a). Green can try to dissuade Red from tacking inside by hailing “No Room – don’t think of going in there”. If Red tacks, and Green protests, that hail will be compelling evidence in a hearing.



Tacking outside another boat

If Red tacks outside of Green and they become overlapped, then Red must give Mark Room to Green under R18.3(b).



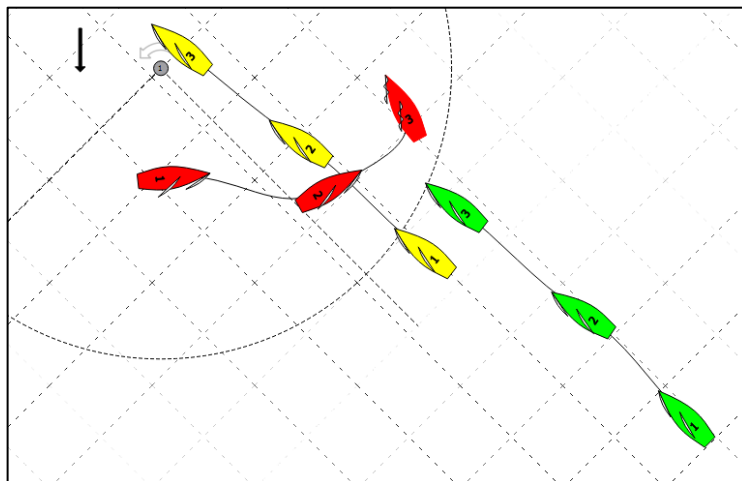
New for the RRS 2025-2028

Look at this diagram. Under the old RRS 2021-2024, Green would gain mark room under (old) 18.2(a) but under the new RRS there is a big change. The new 18.3 wording turns off 18.2 when the boat tacks to stbd and the other boat is fetching the mark. So this new wording prevents Green from obtaining mark room under new R 18.2(c) as R18.2 is turned off.

As Green does not gain mark room, she is subject to the rules of Part 2 (eg R 13 Tacking, R 15 give room when ROW changes, R 16.1 ROW alters course; without the protection of exoneration.

Entering the Zone on Port tack

Despite my earlier tactical advice about getting to the stbd lay line before entering the zone on stbd tack, it happens! You get pushed out to the left side of the course and are forced to come into the zone, close to the mark on port tack. Basically, not only do you have to keep clear of other boats while you approach and while you tack, but you have to give Mark Room to any boats inside you, or gaining an inside overlap from astern. So, you need to find a hole in the line of stbd tack boats, and you may need do a quick circle, or bear off and sail low to find a hole



big enough. Once you find a path, it is better to go beyond a stbd boat before tacking – that way you avoid breaking R10 (P/S) and/or R13 (Tacking too close).

In the diagram above, Red ducks Yellow and then crosses ahead of Green before tacking. If Red tacked in front of Green between P2 and P3, she risks breaking R13, and Green could either duck inside and gain Mark Room or luff up beyond close hauled and protest. Either way, Red would become a sitting duck. By going beyond Green, you are conceding inside overlap, but Green was going to get inside at the mark anyway. At least now you give up only one place – much better than risking a penalty and losing more places while doing your turn!

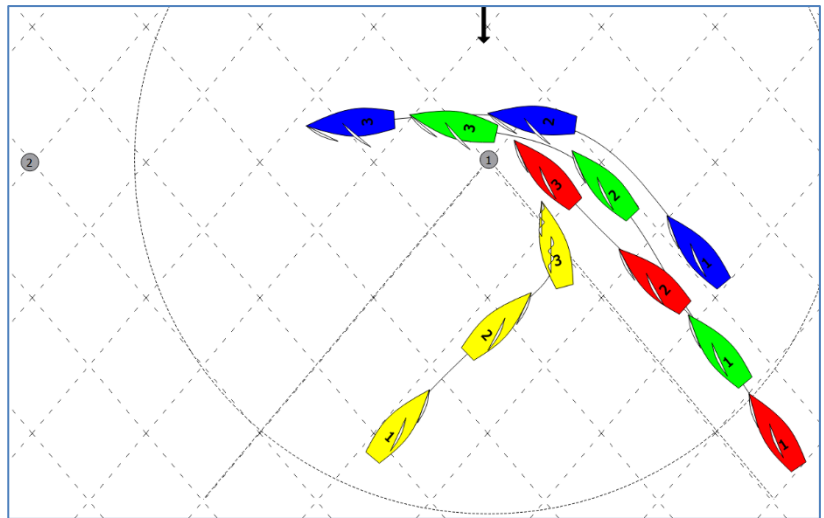
A fine example of sportsmanship – from the 2014 IOM New Zealand Championships – White boat #71 (Ian Vickers) and Yellow boat #64 approach the weather mark on Port. Yellow makes it ahead of the approaching stbd boats, but there is no room for White. White makes a quick turn and tries again – but still no room, so she circles then bears off and sails down the line, looking for a hole. Video by Neil Deverell.

https://www.youtube.com/watch?feature=player_detailpage&v=F7jP5eGAIM8#t=93

A Common error

This diagram shows a frequently seen error, made especially by new skippers. Blue and Green have rounded the mark, leaving disturbed air and turbulent water right at the mark. This makes it difficult for a tacking boat to regain attached flow on sails and fin to be able to accelerate and point.

When Yellow tries to cut inside Red, she has a hard time to make the mark, pointing up and sliding sideways and going slower and slower, ending up stalled against the mark where she becomes a big hazard for any other trailing boats.

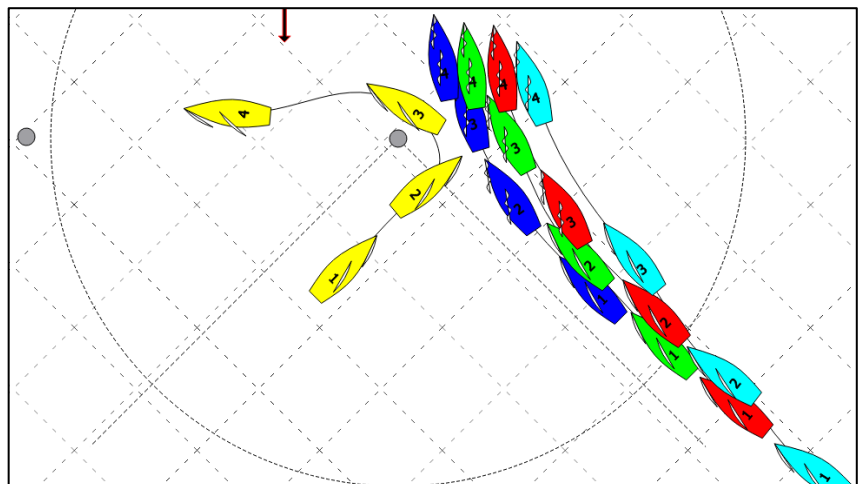


The better approach for Yellow, anticipating the disturbed air and water, is to pass behind Red to get above the lay line to be able to pass the mark comfortably. Being greedy just ends up stuck against the mark losing a lot of distance and may cause other trailing boats into a raft.

Significant Advantage Penalty

Generally, it is considered very poor sportsmanship to come crashing in on port, just hoping to tack into a hole and not hit anyone – you are spoiling the race for the other affected skippers.

If you come in on port and squeeze around the mark but cause several stbd tack boats to become fouled up with each other avoiding you, then you may be found to have gained a significant advantage and have to do multiple turns until all those boats are in front of you and the advantage is eliminated Appendix E 4.3(b).



E4.3 Taking a Penalty

(b) if the boat gained an advantage in the heat or race by her breach despite taking a penalty, her penalty shall be additional One Turn Penalties until her advantage is lost;

So, you gained no advantage; you spoiled the race for several competitors and generally will become very unpopular. Here above, Yellow breaks R 18.3(a) and also gains an advantage over the other four boats, requiring many penalty turns until they are all ahead of her. See Call B2 in the World Sailing Call Book for Radio Sailing. To find the Call Book link go to my Racing Rules Reference Documents Page.
<https://sites.google.com/site/johnsrcsailingrulesandtactics/racing-rules-reference-documents>.

Hailing for Mark Room

There is no explicit requirement to hail for room at the mark, or to hail an overlap. R18.2 says that the outside boat or boat clear astern “shall give” . . . The problem is that there is no neat circle drawn in the water – we have to guesstimate where the zone starts. The hail helps to reinforce the relative positions of the boats as they approach the zone. If two boats have been overlapped for some time, then there is usually no issue with Mark Room. However, when a late overlap is established or broken, then a hail helps focus the situation in everyone’s mind. R18.2(e) places the burden of proof on the boat making a late claim that an overlap was created or broken.

(e) If there is reasonable doubt that a boat obtained or broke an *overlap* in time, it shall be presumed that she did not.

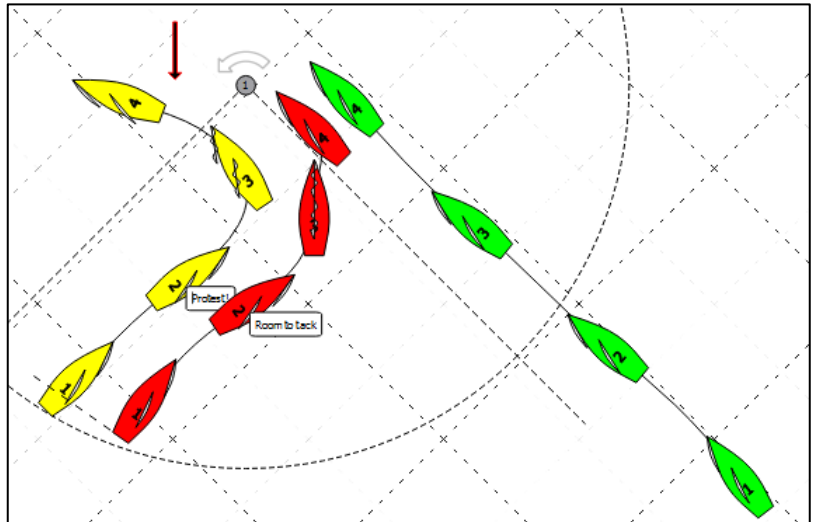
Meeting an obstruction in the zone – Conflict between R18 and R19

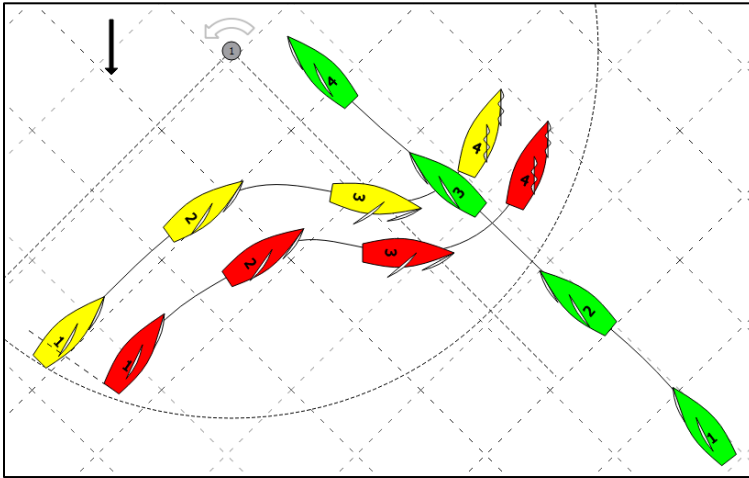
In this diagram, Red and Yellow enter the zone on port tack and R18 .2(a) applies between them, and Yellow with Mark Room is entitled to pass the mark on the correct side. But Green is approaching on stbd and R18.1(a) says R18 does not apply between boats on opposite tacks. Green, with ROW, is an obstruction to Red and Yellow, so we have an incident that involves both R18 and R19. So which rule takes precedence? The answer lies in a little-known rule, R 20.2(e).

Red and Yellow were overlapped when the first one entered the zone and Yellow is entitled to Mark Room R18.2(a)(1) from Red. However approaching Green – the

obstruction, Red as leeward, has ROW over Yellow and under R19, Red gets to choose which side of Green to pass, either tack to leeward and stay on her port side, or cross astern and go to her stbd side.

Red could hail for room to tack under R20 at P1 or P2, and that hail turns off R 18 Mark Room for Yellow under rule R20.2(e). If Red hails for room to tack at P1 or P2, Yellow **MUST** respond, even if it takes her to the wrong side of the mark – BUT Red must tack promptly and likely also ends up on the wrong side of the mark too.



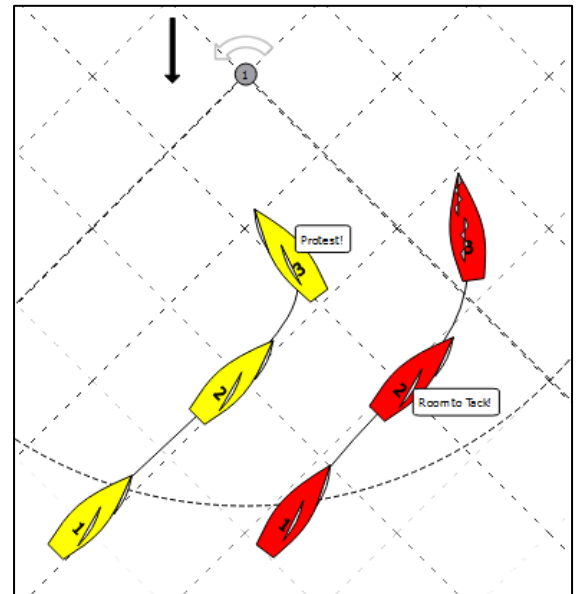


This diagram shows the better option for Red as she chooses to bear away to pass astern of Green – but remember, under R19.2(b), she must allow room for Yellow also to pass astern of Green.

Improper Hail - Hailing for Room to tack at the lay line – NO OBSTRUCTION

Red and Yellow are overlapped as they approach the starboard lay line. Red wants to tack to round the mark, but Yellow does not want to tack just yet, as she has not yet reached the lay line. There is no Obstruction, so R19 and R20 should not apply but Red hails for Room to Tack.

If When Red hails for Room to Tack, Yellow MUST respond, even if it puts Yellow below the lay line. In this case, Yellow SHOULD protest Red immediately, for an improper hail, under R20.1(a) as there was no obstruction. Yellow should file a protest citing R20.1(a) but also R2 Fair Sailing, and request redress under R62.1.d.



The Protest Committee should DSQ Red for the incorrect hail and may find that Red broke R2 Fair Sailing in which case Red is scored DNE (non-excludable). Only if they apply R2, may they also award some redress to Yellow.

All the above relate to rounding the windward mark to port, but what happens if the Race Committee sets a 'Marks to Stbd' course – turn to the next page!

And now for something completely different - Marks to Starboard



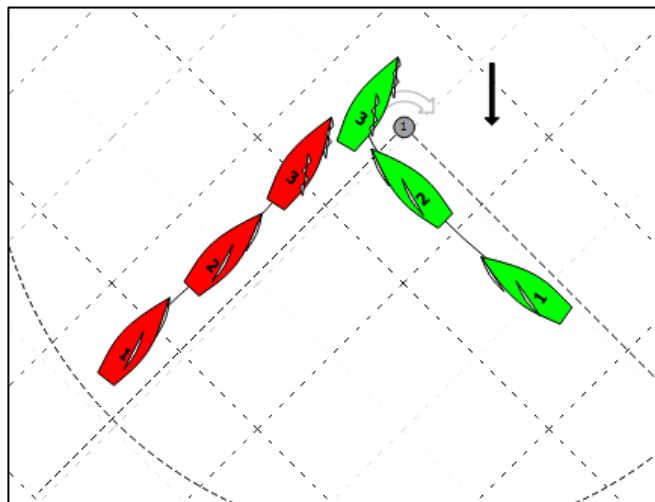
UK Nationals August 2014 - Photograph by Sue Brown. Marks to stbd – 38 is hiding the mark and is just rounding

As you can see from the above photograph, the preferred tactic for a stbd rounding, is to approach the mark on stbd, close to the stbd lay line, and then luff up and tack around the mark, while avoiding interfering with any oncoming port tack boats during the luff.

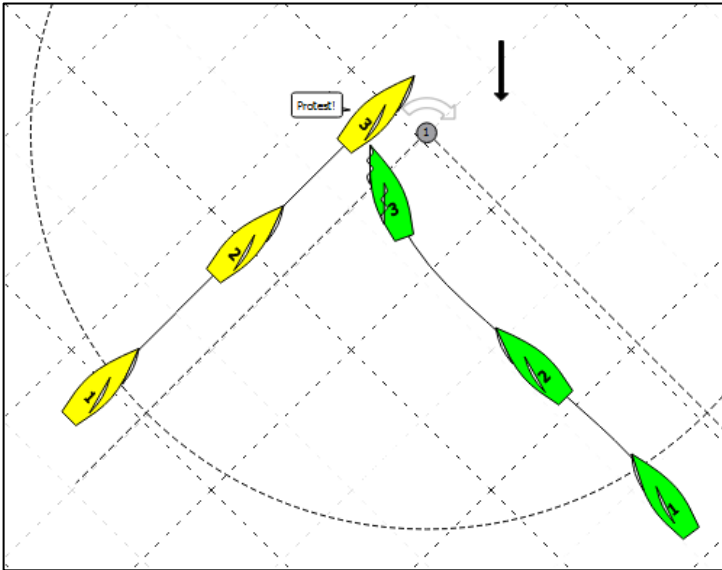
There are only two basic configurations for rounding the windward mark to Starboard – either R18.2(a) or R18.2(c), as R18.3 applies only for Marks to Port.

1. If two boats enter the zone on opposite tacks, and one boat tacks inside the zone or if both boats tack in the zone and become overlapped, then R18.2(c) applies, and the outside boat gives Mark Room to the inside boat.
2. If both boats enter the zone already fetching the mark, then R18.2(a) applies and the outside overlapped boat or the boat clear astern gives Mark Room to the inside or clear ahead boat.

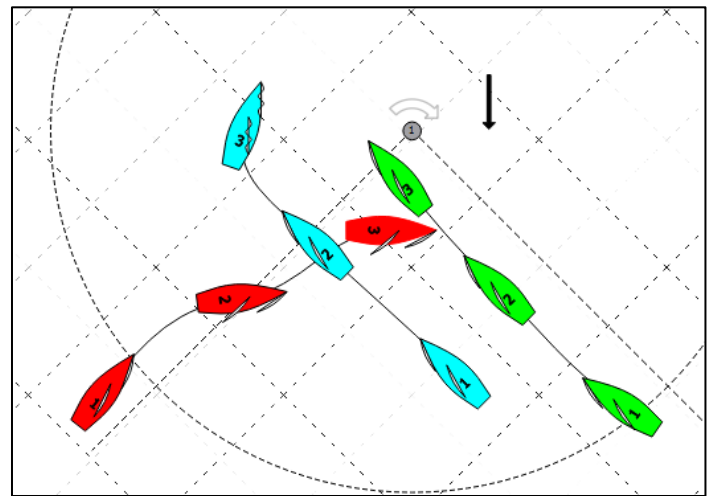
'Marks to Stbd' creates various complex rules situations and as a result, is popular in Match Racing. While that is fine when there are just two boats on the racecourse, those complex situations are multiplied and become collisions and lead to protest hearings when stbd roundings are used in fleet racing. The problem occurs as a boat approaches the mark on stbd but has to luff up and then tack to round the mark.



Here Green approaches the mark on stbd for a stbd rounding. Until she tacks, Green has ROW over Red, approaching on port (R10) and R18.1(a) says R 18 Mark Room does not apply. As soon as Green starts to luff she has to give room for Yellow to stay clear under R 16.1(ROW alters course). After Yellow passes head to wind, she is tacking and must stay clear under R13. However, as they are now on the same tack and overlapped, R18.2(c) applies and grants mark room to Green and the outside boat must give Mark Room to the inside boat. If there were contact, Green would be exonerated for breach of R13 under R43.1(b).



Here, Green breaks R16.1 by luffing into Yellow without giving room for Yellow to stay clear and Yellow hails "Protest".



If you sail out to the port lay line and come into the mark on port, you have to watch for stbd tack boats and may have to duck one – and then another – and suddenly, you are not making the mark anymore! So, if you plan to come in on port, you may want to over stand by a couple of boat lengths. Here, Red did not over stand enough and ends up below the mark.

There is a second issue in this diagram. Blue was clear ahead of Green when they entered the zone on port tack, and Blue gains mark room under 18.2(a)(2). However that mark room ends when Blue passes head to wind - R18.2(b), and she becomes keep clear boat while tacking under R 13. Once Blue is on port, she becomes keep clear boat under R 10. Also note that mark room does not apply between Blue and Green as they are now on opposite tacks on a beat to windward (R 18.1(a)). After Blue tacks to port, she has to stay clear of Green who is still on stbd.

Ok – now you have finished the beat to windward, so it's time to set up for the run and I suggest that you check out the chapter on the Downwind Gate – or for some general rules, check out the chapter on Hailing.