

WORLD SAILING PACKAGE OF TEST RULES FOR MATCH RACING

UPDATED DECEMBER 2015

BRIEFING DOCUMENT

Background

This package of test rules is a collaborative effort across the Match Race Committee, Racing Rules Committee and Umpires Sub-Committee. A working group has been created to manage the creating and testing of these alternative rules.

The aim of this package of rule changes is to simplify some of the racing rules, and in doing so improve the consistency of umpiring decisions and make the racing more spectator friendly.

This package of rule changes is derived from the rules in the 34th and 35th America's Cup events as well as the World Match Racing Tour.

A modified version of the test rules (incorporating the lessons learnt in 2015) was approved for inclusion into the 2017-2020 *Racing Rules of Sailing* at the 2015 World Sailing Conference.

This package is now updated to reflect the rules as adopted for 2017-2020. World Sailing has approved the use of this amended package for 2016 subject to the conditions below.

Implementation

Approval by World Sailing (refer RRS 86.2) or a Member National Authority (refer RRS 86.3) is required if an Organizing Authority wishes to implement this package of new rules. Please refer to the document created by the working group entitled 'How To Implement the World Sailing Package of Test Rules at Match Racing Events.'

An Organizing Authority shall not modify the package of new rules. World Sailing will only approve the changes under RRS 86.2 if they are not altered and the working party managing this process requests that, if applicable, Member National Authorities only approve changes if the package of test rules is not altered. The reason is so the feedback on these new rules is on a consistent package of changes.

Feedback

The working group needs feedback from all Organizing Authorities that test this package of rules. Member National Authorities that require feedback are requested to forward feedback on this package of rules to the World Sailing working group (competitions@isaf.com).

We request that the feedback include:

- Opinions from sailors, umpires, the Organizing Authority and spectators.
- Details on the level of racing conducted.
- Number of incidents at the top mark, leeward mark / gate, and finishing marks.
- Description of interesting incidents involving the package of rules.

Package of new rules

The rules below in red represent changes to the 2015 test rules.

A. Add new RRS 7 to Part 1:**7 LAST POINT OF CERTAINTY**

The umpires will assume that the state of a boat, or her relationship to another boat, has not changed, until they are certain that it has changed.

B. Delete RRS 18, C2.6 and C2.7 and replace with:**18 MARK ROOM****18.1 When Rule 18 Applies**

Rule 18 applies between boats when they are required to leave a *mark* on the same side and at least one of them is in the *zone*. However, it does not apply between a boat approaching a *mark* and one leaving it.

18.2 Giving Mark-Room

- (a) When the first boat reaches the *zone*,
 - (1) if boats are *overlapped*, the outside boat at that moment shall thereafter give the inside boat *mark-room*.
 - (2) if boats are not *overlapped*, the boat that has not reached the *zone* shall thereafter give *mark-room*.
- (b) If the boat entitled to *mark-room* leaves the *zone*, the entitlement to *mark-room* ceases and rule 18.2(a) is applied again if required based on the relationship of the boats considered at the time rule 18.2(a) is re-applied.
- (c) If a boat obtained an inside *overlap* and, from the time the *overlap* began, the outside boat is unable to give *mark-room*, she is not required to give it.

18.3 Tacking or Gybing

When an inside *overlapped* right-of-way boat must change *tack* at a *mark* to sail her *proper course*, until she changes *tack* she shall sail no farther from the *mark* than needed to sail that course. Rule 18.3 does not apply at a gate *mark* or a finishing *mark* and a boat shall not be penalized for breaking this rule unless the course of another boat was affected by the breach of this rule.

C. Change definition of Mark-Room to:

Mark-Room Room for a boat to sail her *proper course* to round or pass the *mark* on the required side. If room includes a change of *tack*, such *tack* or *gybe* shall be done no quicker than a *tack* or *gybe* to sail her *proper course*.

D. Add the following new rule:

C2.14 Rule 17 is deleted.

How mark-room rules work

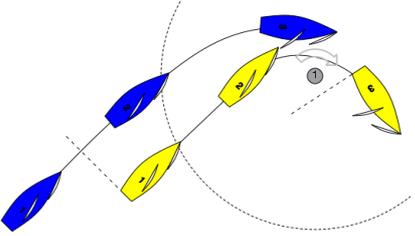
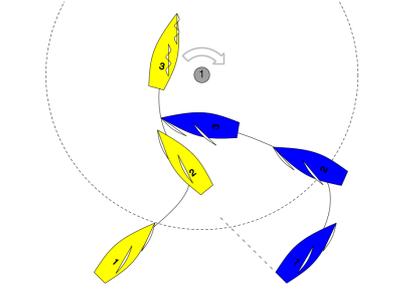
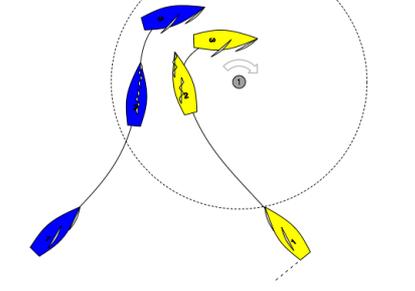
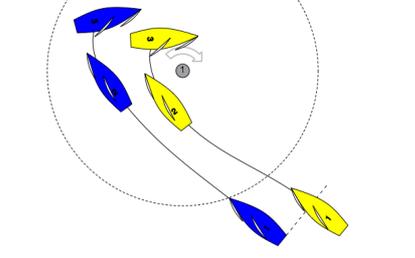
The rule for rounding marks has been modified so that if boats are not overlapped, mark-room is given to the first boat that reaches the zone of the mark, and if boats are overlapped, mark-room is given to the inside boat.

This rule applies at windward marks as well as at leeward marks and finishing marks.

The inside boat gets room to sail her proper course to round or pass the mark, whether or not she is the right-of-way boat. This room continues even if the boat tacks or gybes as part of her maneuver.

Note: If a mark is to be left to port, the port tack boat may be the inside, overlapped boat and be entitled to mark-room.

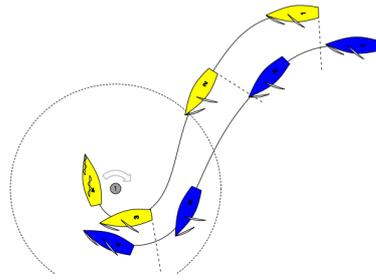
At a windward mark...

<p>Yellow reaches the zone first and is not overlapped with Blue. Blue must give Yellow mark-room.</p>	
<p>Yellow reaches the zone first and is not overlapped with Blue. Blue must give Yellow mark-room.</p>	
<p>When Yellow reaches the zone she has an inside overlap with Blue. Blue must give Yellow mark-room. Note: Rule 18.3 applies to Yellow.</p>	
<p>When Blue reaches the zone, Yellow has an inside overlap with Blue. Blue must give Yellow mark-room.</p>	

The boats end up above the windward mark.

When Yellow reaches the zone she has an inside overlap with Blue.

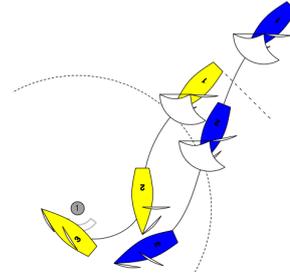
Blue must give Yellow mark-room.



At a leeward mark...

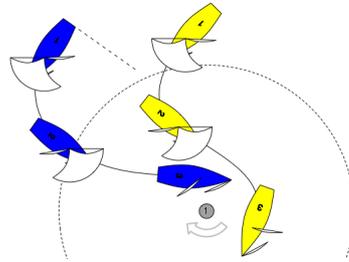
Yellow reaches the zone first and is not overlapped with Blue.

Blue must give Yellow mark-room.



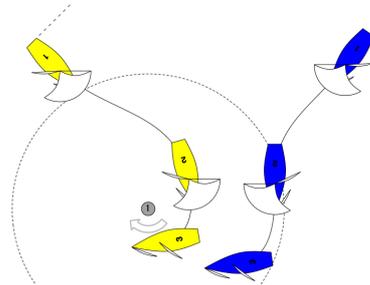
Yellow reaches the zone first and is not overlapped with Blue.

Blue must give Yellow mark-room.



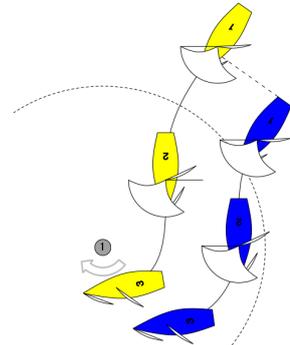
When Yellow reaches the zone she has an inside overlap with Blue.

Blue must give Yellow mark-room.



When Blue reaches the zone, Yellow has an inside overlap with Blue.

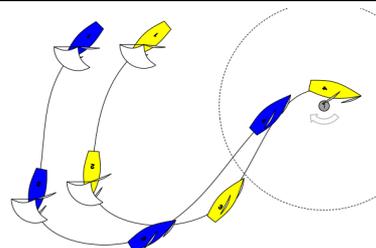
Blue must give Yellow mark-room.



The boats end up below the leeward mark.

Yellow reaches the zone first and is not overlapped with Blue.

Blue must give Yellow mark-room.



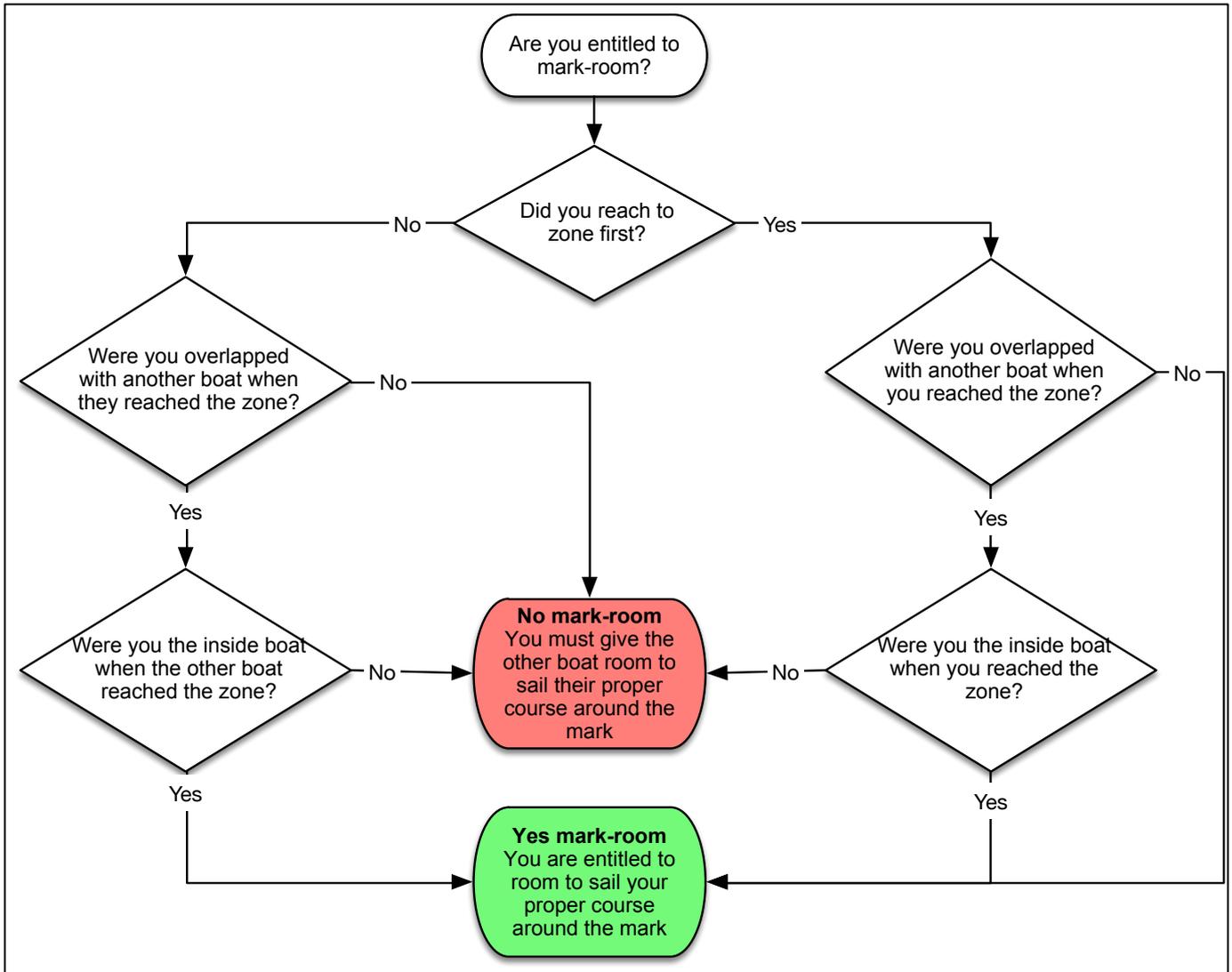
To help to first understand the test rule at a windward mark, rotate the diagram and consider the same situation at a leeward mark. The answer will be the same.

For example:

<p>This example shows a leeward mark scenario where Yellow is entitled to mark-room.</p>	
<p>Rotate the example to become a windward mark example, Yellow remains entitled to mark-room.</p>	

<p>This example shows a leeward mark scenario where Yellow is entitled to mark-room and gets room to gybe twice in order to round the mark.</p>	
<p>Rotate the example to become a windward mark example, Yellow remains entitled to mark-room and gets room to tack twice in order to round the mark.</p>	

Mark-room decision tree



Rule 18.3 – requirement to tack or gybe.

The intent of rule 18.3 is to require the right-of-way boat entitled to mark-room to have some limitation in the ability to change course or “hunt” the other boat when the only option for both boats is to round the same mark, particularly in the scenario when both boats are aiming at each other - bow on bow. The new rule gives the boat entitled to mark-room the room to tack or gybe and round the mark; therefore the previous “need” to dial down the other boat is greatly diminished, as the right to mark-room now applies throughout the rounding maneuver.

Where can rule 18.3 apply?

Single windward mark	Yes
Single leeward mark	Yes
Windward gate mark	No
Leeward gate mark	No
Finishing mark	No

Changing tack

A change of tack is to go from one tack to another. This is different to “tacking” or “gybing” (as described in rules 13.1 and 13.2).

The definitions that apply are:

“Tack, Starboard or Port A boat is on the *tack*, *starboard* or *port*, corresponding to her *windward* side.”

“Leeward and Windward A boat’s *leeward* side is the side that is or, when she is head to wind, was away from the wind. However, when sailing by the lee or directly downwind, her *leeward* side is the side on which her mainsail lies. The other side is her *windward* side. When two boats on the same *tack* overlap, the one on the *leeward* side of the other is the *leeward* boat. The other is the *windward* boat.”

Therefore at a mark, a boat does not have to complete a tack (get to a close hauled course) or gybe for the limitations of rule 18.3 to cease; it only must have changed tack (gone through head to wind/acquired a new windward side). Note: such a maneuver may result in the boat becoming the keep-clear boat under rule 13.1.

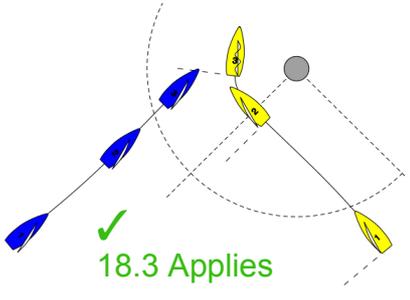
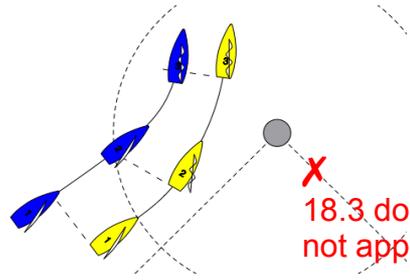
Who does rule 18.3 apply to?

This limitation only applies to the inside, overlapped, right-of-way boat.

Right of way and overlapped		Entitled to room		Rule 18.3 applies?
Yes	+	Yes	=	Yes
Yes	+	No	=	No
No	+	Yes	=	No
No	+	No	=	No

At a windward mark:

There is only one scenario where this rule effectively applies. That is when boats are on opposite tacks:

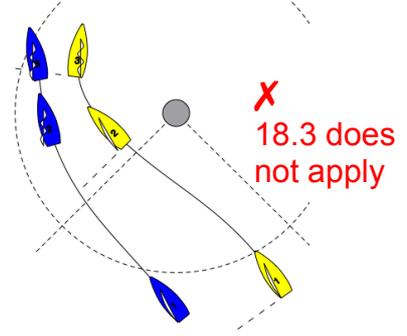
<p>Yellow is an inside overlapped right-of-way boat that has to tack to sail her proper course.</p> <p>Rule 18.3 applies to Yellow.</p>	
<p>Yellow is an inside overlapped right-of-way boat that is rounding a mark.</p> <p>Yellow <u>does not</u> need to tack in order to sail her proper course.</p> <p>Rule 18.3 does not apply to Yellow.</p>	

Yellow is an inside overlapped boat that is rounding a mark.

Yellow needs to tack in order to sail her proper course.

However, Yellow is a keep-clear boat under rule 11.

Rule 18.3 does not apply as Yellow is not a right-of-way boat.

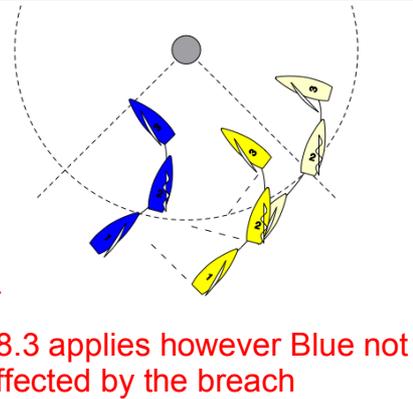


Yellow is an inside overlapped right-of-way boat that is rounding a mark.

Yellow needs to tack (twice) in order to sail her proper course.

If Yellow sails farther from the mark on port, she will not be penalized for a breach of rule 18.3, as the course of Blue cannot be affected by the breach. Blue has to give Yellow mark-room, and to do that Blue needs to tack

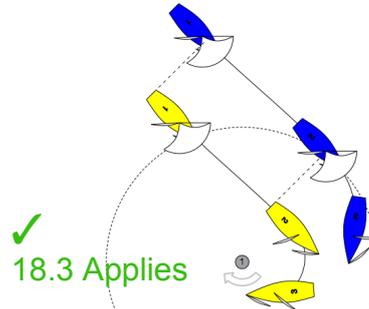
When Yellow is on starboard tack; see the example above.



At a leeward mark:

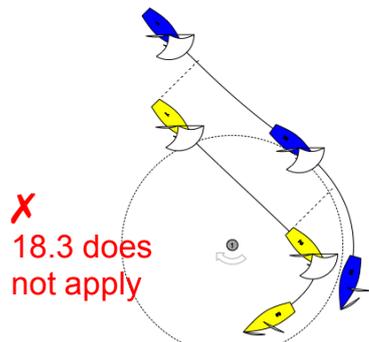
Yellow is an inside overlapped right-of-way boat that has to gybe at the mark to sail her proper course around the mark.

Rule 18.3 applies to Yellow.



Yellow reaches the zone first and is not overlapped with Blue. Blue must give Yellow mark-room.

Rule 18.3 does not apply to Yellow.

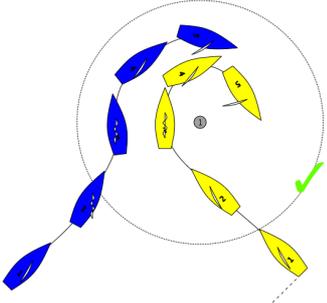
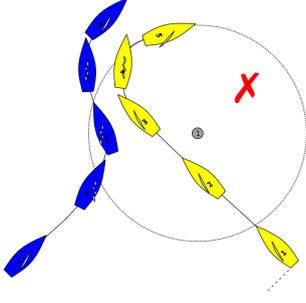
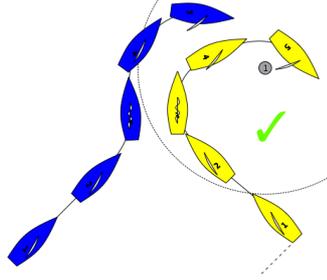
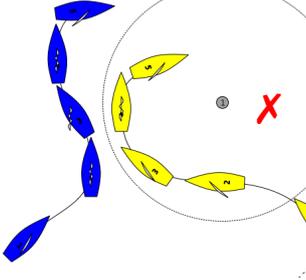
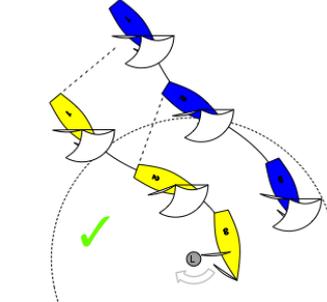
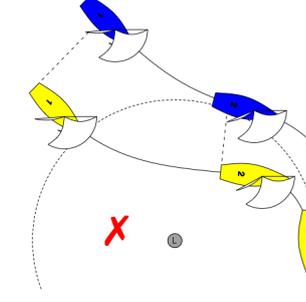
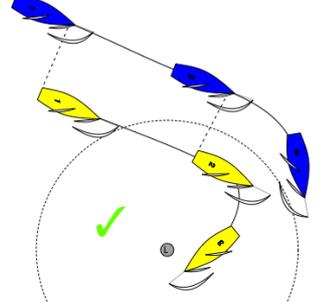
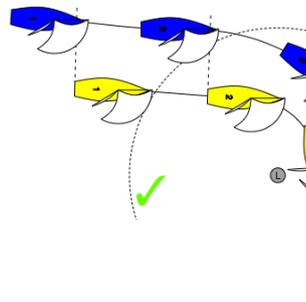


Sailing no farther from the mark.

Rule 18.3 limits the inside overlapped right-of-way boat to sail no farther from the mark than needed to sail her proper course.

This limitation applies while the boat remains the inside overlapped right-of-way boat and while her proper course is to change tack (to tack or to gybe) to sail the course. Therefore if a boat breaks the overlap, the requirements of rule 18.3 no longer apply. If the overlap is then re-established, then rule 18.3 may apply again.

In practice, the course a boat sails to round a mark changes depending on conditions, the type of boat being sailed and the angle of approach to the mark. Rule 18.3 accounts for those different courses, and the rule is only broken when it is certain that a boat has sailed farther from the mark than needed to sail her proper course.

 <p>Yellow has <u>not</u> sailed farther from the mark than needed before she tacked</p>	 <p>Yellow <u>has</u> sailed farther from the mark than needed before she tacked.</p>
 <p>Yellow has <u>not</u> sailed farther from the mark than needed before she tacked</p>	 <p>Yellow <u>has</u> sailed farther from the mark than needed (positions 2 and 3) before she tacked.</p>
 <p>Yellow has <u>not</u> sailed farther from the mark than needed before she gybed. Yellow may luff if that is part of her proper course. <small>Note 2</small></p>	 <p>Yellow <u>has</u> sailed farther from the mark than needed before she gybed.</p>
 <p>Yellow has <u>not</u> sailed farther from the mark than needed before she gybed. <small>Note 1</small></p>	 <p>Yellow has <u>not</u> sailed farther from the mark than needed (positions 2 and 3) before she gybed. <small>Note 2</small></p>

Note 1: Boats with asymmetric spinnakers or in light air may have a wider gybe angle.

Note 2: A boat entering the zone on a tight angle to the wind may approach above the mark in order to bear away and drop the spinnaker.

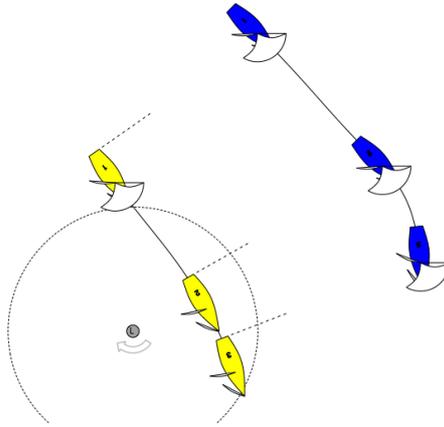
No penalty for a breach of rule 18.3

Test rule 18.3 has been modified to include the statement “...a boat shall not be penalized for breaking this rule unless the course of another boat was affected by the breach of this rule.”

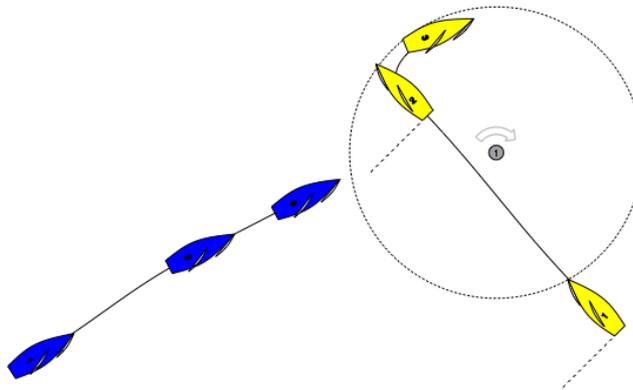
This is to make clear that a “technical” breach of rule 18.3 will not result in a penalty if there was no other boat affected by the breach.

As has been the practical experience with the current racing rules, the examples below show that Yellow has broken rule 18.3 (old rule 18.4), however such a breach is not affecting Blue. Therefore, if there was a Y-flag, the umpires would display the green and white flag.

Leeward mark:

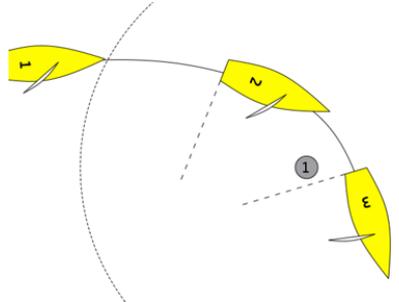
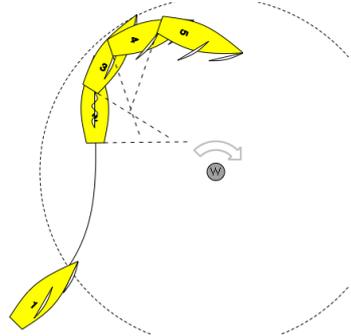
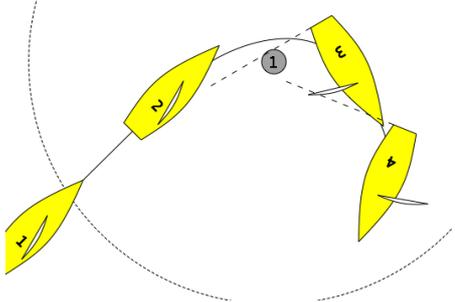
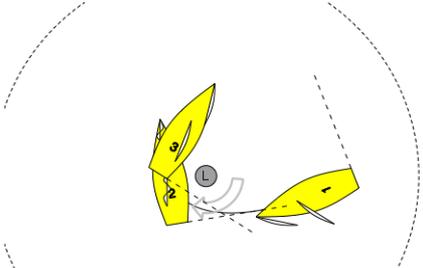
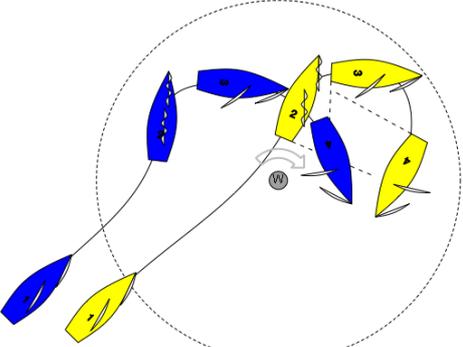


Windward mark:



When does rule 18 cease to apply?

A boat has rounded or passed the mark when the mark is clear astern of the boat and the boat is on the new leg of the course. This is consistent with room as interpreted in existing MR Call E2, and implicit in MR Call E1.

<p>Yellow has rounded or passed the mark at position 3, as the mark is clear astern and Yellow is on a new leg of the course.</p>	
<p>Yellow is still rounding the mark at position 5. The mark may be clear astern of Yellow at position 2, however she is not yet on the new leg, and when she goes onto the new leg at position 5, the mark is not clear astern of Yellow.</p>	
<p>Yellow has rounded or passed the mark at position 4 as the mark is clear astern and Yellow is on a new leg of the course</p>	
<p>Yellow has not yet rounded or passed the mark at position 3, as the mark is not clear astern of Yellow even though she is on a new leg.</p>	
<p>Yellow has rounded or passed the mark at position 2 (Yellow has mark astern and is on the new leg). Rule 18 no longer considered in this scenario. Rules 11, 12, then 13.2, then 10, all with the various limitations of rules 15 and 16.1 apply.</p>	

Impact of the package of test rules on the Call Book

World Sailing regulation 28 only allows for authoritative interpretations of the rules for match racing via *The Call Book for Match Racing*. When considering the 2016 Package of Test Rules, the test rules working group has identified the calls that need to be reviewed.

Below are the calls needed to be changed and suggested new wording where relevant. 6 amended calls are attached.

Call	Impact
	General Principle for Umpire Decisions is amended – see test rule 7.
A1	References to rule 17 should be ignored.
A3	References to rule 17 should be ignored.
D1	References to rule 17 should be ignored.
D7	Call should be deleted when considering the package of test rules.
E1	Effectively no change. Only changes are the rule references.
E2	Effectively no change. Answer simplified: Blue is entitled to sail her proper course to round or pass the mark on the required side. At position 3 Yellow has given Blue mark-room as required by rule 18.2(a)(2), and rule 21 no longer applies. If Blue gybes after this point, she will be subject to rule 13.2 and then rules 15 and 16.1. (See Test Rules Call 1.)
E3	Change to call. Suggested answer: A1: When Yellow enters the zone, rule 18.2(a)(2) applies until Yellow has rounded and passed the mark. At position 6 Yellow has not yet passed the mark. If Yellow cannot sail her proper course around the mark, Blue breaks rule 18.2(a)(2). Penalize Blue and exonerate Yellow under rule 21(a). If Yellow is able to sail her proper course around the mark, display the green and white flag. A2: Penalize Blue. See Answer 1. (See Test Rules Call 2.)
E4	References to rule 17 should be ignored.
E5	Change to call, Answer 1 only: Display green and white flag. When Yellow enters the zone, rule 18.2(a)(1) applies until Yellow has rounded and passed the mark. Blue keeps clear of Yellow and gives Yellow mark-room. (See Test Rules Call 3.)
E6	Change references to 18.2(b) in the answer to 18.2(a)(1).
E7	Change to call This call is silent on the relationship of the boats at the time the first boat entered the zone. For the purposes of this package of test rules it is assumed that Blue was overlapped inside Yellow when the first boat reached the zone. Answer 1: Yellow must give Blue mark-room from the time rule 18 applies to when Blue has rounded or passed the mark. Blue is an inside overlapped right-of-way

	<p>boat and therefore has an obligation to sail no farther from the mark than needed to sail her proper course until she tacks (rule 18.3).</p> <p>Answers 2 and 3: Refer Answer 1. (See Test Rules Call 4.)</p>
E8	Call should be deleted when considering the package of test rules.
E9	<p>Effectively no change.</p> <p>Only change is the rule reference at the start of the answer to 18.2(a)(1).</p>
G1	Call should be deleted when considering the package of test rules.
G2	References to rule 17 should be ignored.
G3	Call should be deleted when considering the package of test rules.
G4	References to rule 17 should be ignored. Change to call. Answer should be: "Yes. At the moment Yellow becomes right-of-way leeward boat, rule 15 begins to apply." (See Test Rules Call 5.)
G5	Call should be deleted when considering the package of test rules.
G6	Call should be deleted when considering the package of test rules.
G7	References to rule 17 should be ignored.
G8	Call should be deleted when considering the package of test rules.
J1	<p>Effectively no change.</p> <p>Only changes are the rule references from 18.2(b) to 18.2(a)(1) and 18.4 to 18.3.</p>
J2	<p>Change to Call.</p> <p>References to rule 17 should be ignored. Delete Question and Answer 2. Change the references from rule 18.4 to rule 18.3. (See Test Rules Call 6.)</p>
J3	Call should be deleted when considering the package of test rules.
K4	<p>Effectively no change.</p> <p>Only changes are the rule references.</p>
L9	<p>Change to call.</p> <p>Answer 1 changed to:</p> <p>Penalize Yellow. Blue is neither sailing towards the pre-start side of the starting line to start, nor sailing on 'another leg' than Yellow, so rules 22.1 and 24.2 do not apply.</p> <p>At position 2 Yellow is in the zone and is the right-of-way, inside boat that must tack at the mark to sail her proper course. Under rule 18.3, until she tacks, Yellow is required to sail no farther from the mark than needed to sail her proper course. By bearing away at position 3 Yellow is no longer sailing her proper course.</p>
M8	Change to Call. Question 2 should be deleted when considering the package of test rules.

Test Rules Calls

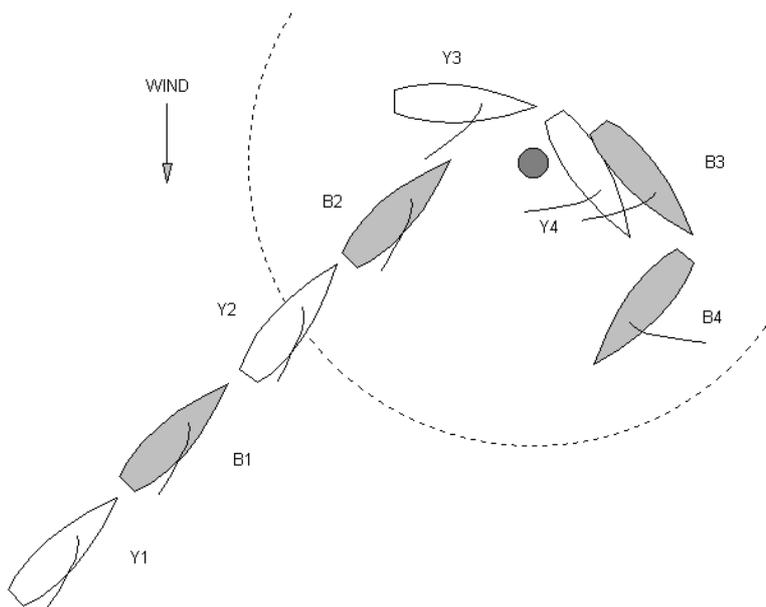
TEST RULES PACKAGE CALL 1 (See MR Call E2)

Test rule 18.1 When Rule 18 Applies

Test rule 18.2(a)(2) Giving Mark-Room

Question

Blue and Yellow approach the windward mark on port tack with Blue clear ahead at the zone. The mark is to be rounded to starboard. After passing the mark, Blue immediately gybes onto starboard tack. How far beyond the mark may Blue sail before gybing and still be entitled to mark-room?



Answer

Blue is entitled to sail her proper course to round or pass the mark on the required side.

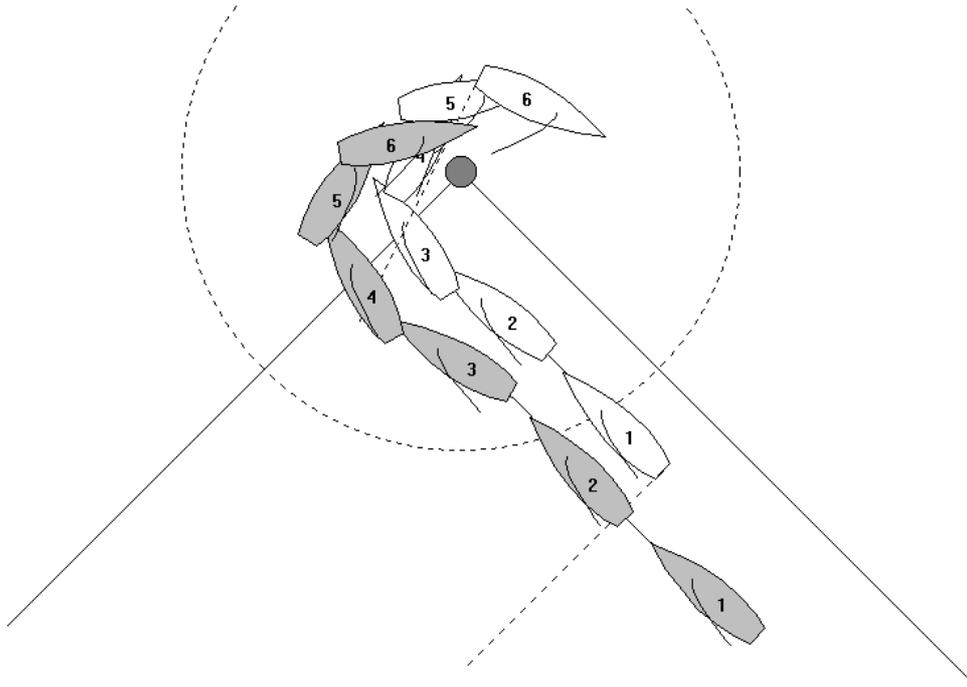
At position 3 Yellow has given Blue mark-room as required by rule 18.2(a)(2) and rule 21 no longer applies. If Blue gybes after this point, she will be subject to rule 13.2 and then rules 15 and 16.1.

TEST RULES PACKAGE CALL 2 (See MR Call E3)

Rule 15	Acquiring Right of Way
Test rule 18.2	Giving Mark-Room
Test rule Definition	Mark-Room

Question 1

Yellow enters the zone clear ahead of Blue. Both boats tack and continue to round the mark. Blue becomes overlapped inside Yellow. Both boats Y-flag, what should the call be?



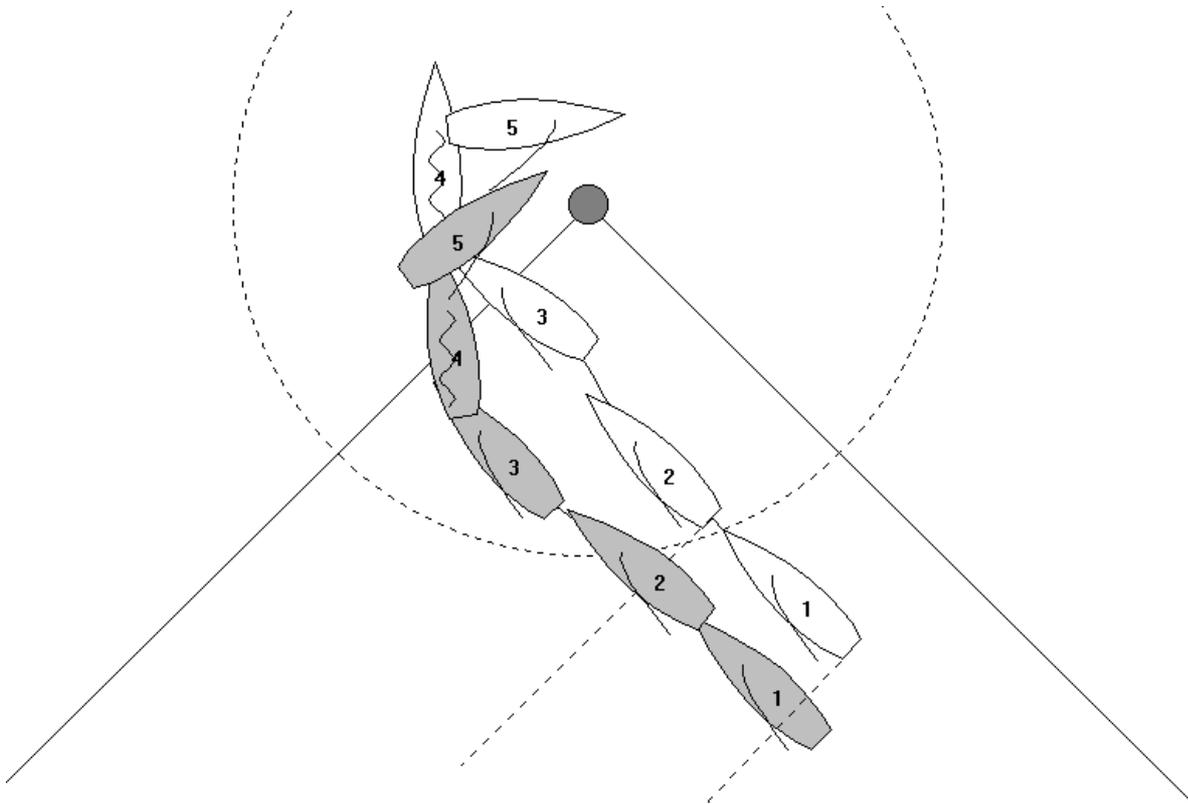
Answer 1

When Yellow enters the zone, rule 18.2(a)(2) applies until Yellow has rounded and passed the mark.

At position 6 Yellow has not yet passed the mark. If Yellow cannot sail her proper course around the mark, Blue breaks rule 18.2(a)(2). Penalize Blue and exonerate Yellow under rule 21(a). If Yellow is able to sail her proper course around the mark, display the green and white flag.

Question 2

Yellow and Blue enter the zone overlapped. Both boats tack and continue to round the mark. Blue becomes overlapped inside Yellow. Yellow's boom touches Blue's hull. Both boats Y-flag, what should the call be?



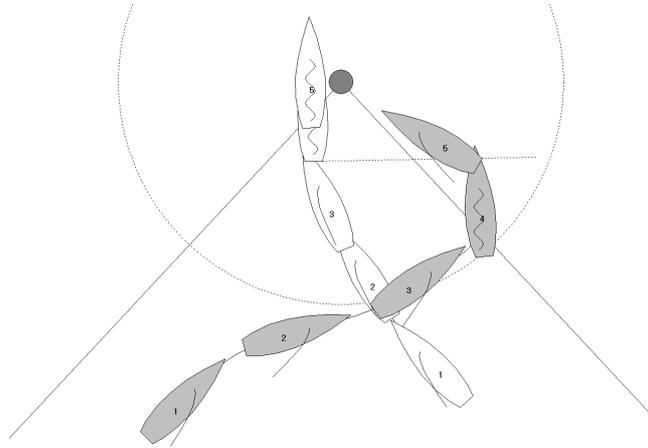
Answer 2

Penalize Blue. See Answer 1

TEST RULES PACKAGE CALL 3 (See MR Call E5)

Test rule 18.1 When Rule 18 Applies

Test rule 18.2 Giving Mark-room



Question 1

Yellow on starboard tack and Blue on port tack, both close-hauled, are approaching the windward mark. Blue bears away and passes astern of Yellow. Yellow luffs slowly and nearly stops head to wind with the mark abeam. While Yellow is luffing Blue tacks to starboard and bears away towards the mark. Yellow does not give room at the mark, and Blue luffs to avoid a collision. There is a Y-flag from Blue. What should the call be?

Answer 1

Display the green and white flag. When Yellow enters the zone, rule 18.2(a)(1) applies until Yellow has rounded and passed the mark. Blue keeps clear of Yellow and gives Yellow mark-room.

Question 2

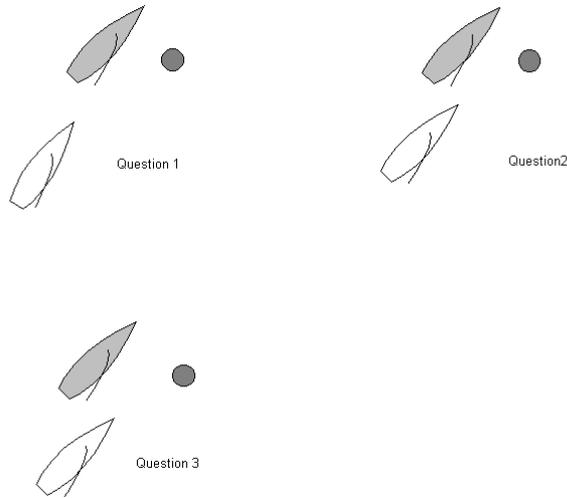
Would the answer be different if Blue completes her tack outside the zone?

Answer 2

No.

TEST RULES PACKAGE CALL 4 (See MR Call E7)

Test rule 18.3 Tacking When Approaching a Mark



In the following three questions it is assumed that the boats were approaching the mark on opposite tacks with Blue on starboard tack, overlapped inside Yellow when the first boat reached the zone.

Question 1

Blue completes her tack in the position shown as Question 1. Yellow is clear astern and can avoid an inside overlap by luffing. May Yellow create an inside overlap? What rules apply?

Answer 1

Yellow must give Blue mark-room from the time rule 18 applies to when Blue has rounded or passed the mark. Blue was an inside overlapped right-of-way boat and therefore had an obligation to sail no farther from the mark than needed to sail her proper course until she tacked (rule 18.3).

Question 2

Blue completes her tack in the position shown as Question 2. Yellow is clear astern but cannot avoid an inside overlap by luffing. May Yellow create an inside overlap? What rules apply?

Answer 2

See Answer 1.

Question 3

Blue completes her tack in the position shown as Question 3. Yellow is overlapped inside. What rules apply?

Answer 3

See Answer 1.

TEST RULES PACKAGE CALL 5 (See MR Call G4)

Rule 15 Acquiring Right of Way

Question

On a downwind course Yellow establishes an overlap to windward of Blue with her spinnaker. Yellow bears away, without breaking the overlap, and overlaps to leeward.

Does rule 15 apply?

Answer

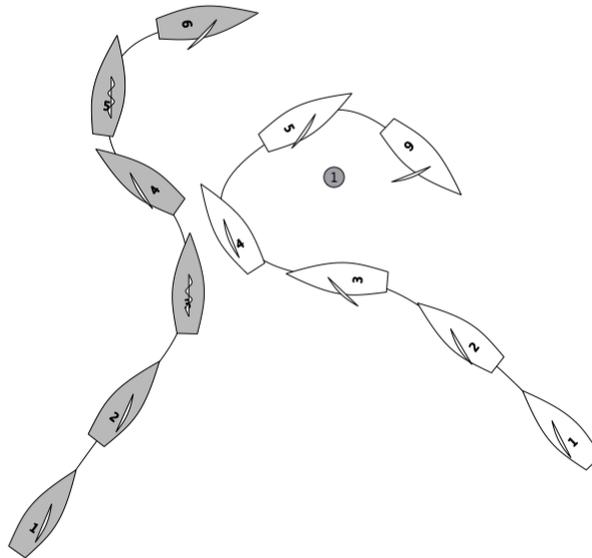
Yes. At the moment Yellow becomes right of way as the leeward boat, rule 15 begins to apply.

TEST RULES PACKAGE CALL 6 (See MR Call L9)**Rule 22.1 Starting Errors****Rule 24.2 Interfering with Another Boat**

In all the questions Blue has been signaled correctly as being OCS, but may be unaware that she was OCS and nevertheless continued sailing the course instead of returning and starting correctly.

Question 1

Yellow and Blue are approaching the windward mark. Blue is on port tack and Yellow is on starboard tack. Yellow bears away below her proper course but never to a downwind course, and passes to leeward of the mark. Blue tacks to keep clear of Yellow. Yellow tacks and rounds the mark well ahead of Blue. There is a Y-flag. What should the call be?

**Answer 1**

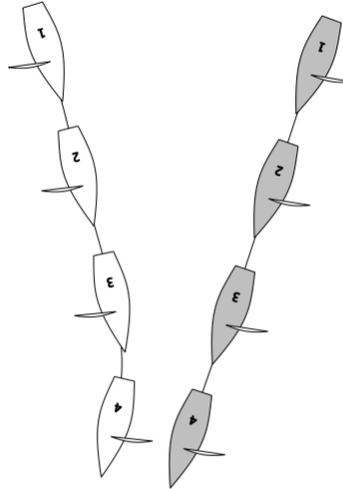
Penalize Yellow. Blue is neither sailing towards the pre-start side of the starting line to start, nor sailing on 'another leg' than Yellow, so rules 22.1 and 24.2 do not apply.

At position 2 Yellow is in the zone and is a right-of-way, inside boat that must tack at the mark to sail her proper course. Under rule 18.3, until she tacks, Yellow is required to sail no further from the mark than needed to sail her proper course. By bearing away at position 3 Yellow is no longer sailing her proper course.

Question 2

Both boats round the windward mark and bear away towards the leeward mark.

Blue on starboard tack approaches Yellow on port tack. Both boats are sailing proper courses. Yellow is forced to gybe away to keep clear of Blue. There is a Y flag. What should the call be?



Answer 2

Display the green and white flag.

Although Blue has not started correctly and may subsequently be scored OCS, she is sailing the course with full rights and obligations under the rules. Blue is not sailing towards the starting line in order to start, so rule 22.1 does not apply.

Question 3

When should boats be considered to be sailing on the same leg?

Answer 3

Boats should be considered to be sailing on the same leg when the umpires are certain that both boats are sailing to either

- a windward mark,
- a leeward mark, or
- the finish.

This applies when one of them is OCS, and it also applies when they have rounded different marks in order to get on that leg.