

# Around the Race Course



# US Sailing Presents...

**RRS Part 2:**

***Around the Race Course with  
The Racing Rules of Sailing***



Around the Race Course



# Around the Course

## What This Covers

- Key Definitions for Judging
- How do the RRS fit together around the race course?
- How do the rules that apply change as the situation changes?

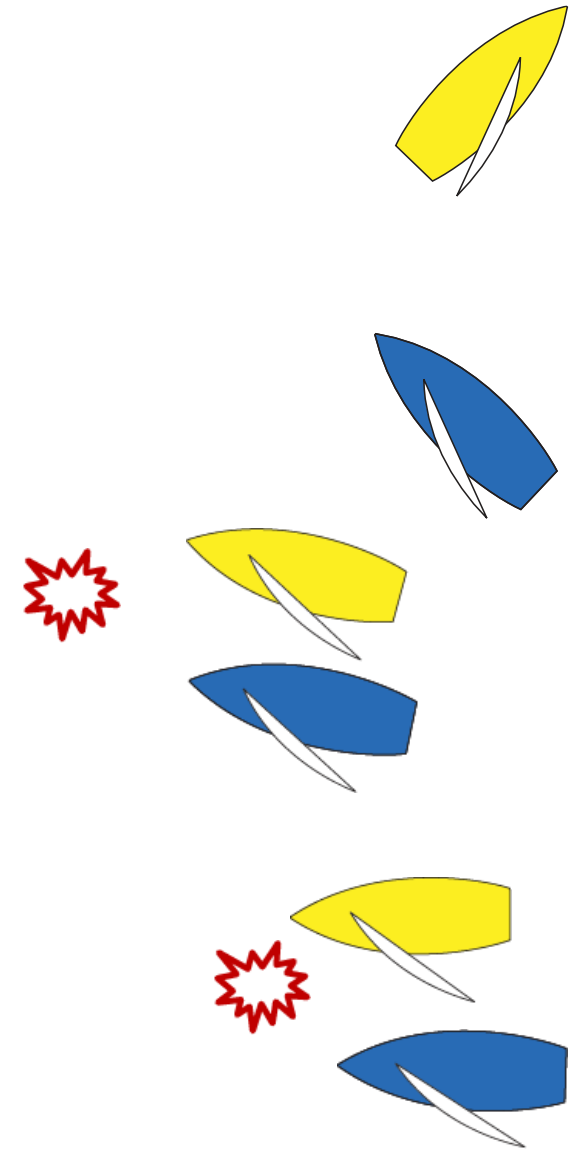


# Key Definitions

## *Keep Clear*

A boat *keeps clear* of a right-of-way boat

- a) if the right-of-way boat can sail her course with no need to take avoiding action and,
- b) when the boats are *overlapped*, if the right-of-way boat can also change course in both directions without immediately making contact.



# Key Definitions

## *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.

- **Space a boat needs** – bigger faster boats need more room
- **Existing conditions** – big waves, strong winds, current...or really light air
- **Promptly** – with little or no delay; immediately
- **Seamanlike** –befitting a competent seaman

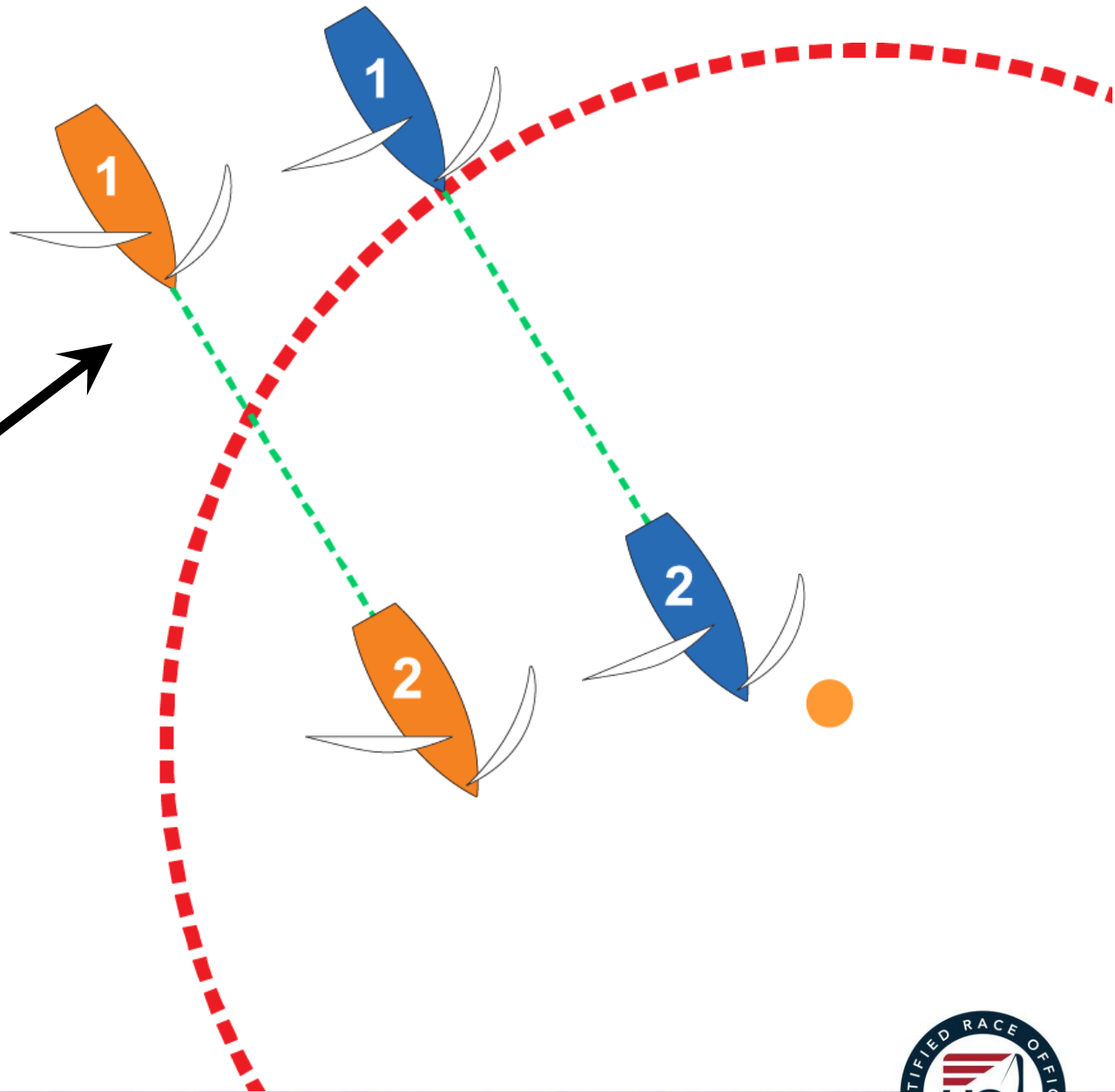
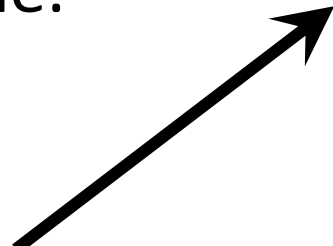
Includes ability to comply with rules of Part 2 and rule 31.

# Key Definitions

## Mark-Room

*Room* for a boat to leave a *mark* on the required side.

Orange must give *mark-room* from this point



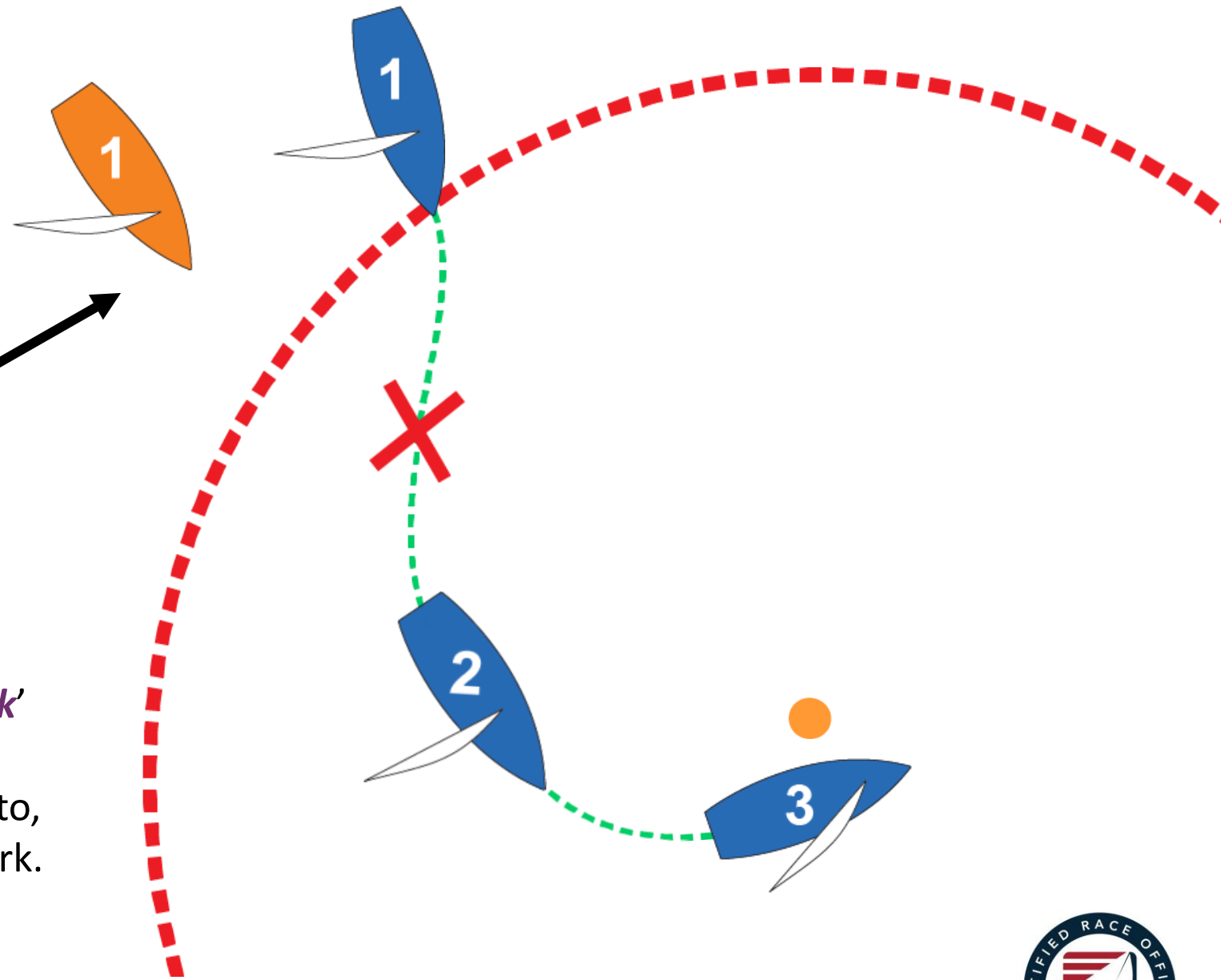
# Key Definitions

## Mark-Room

(a) *Room* for a boat to sail **TO** the *mark* when her *proper course* is to sail close to it, and...

Orange must give *mark-room* from this point.

**CASE 118** - 'room to sail to the *mark*' means space to sail promptly in a seamanlike way to a position close to, and on the required side of, the mark.



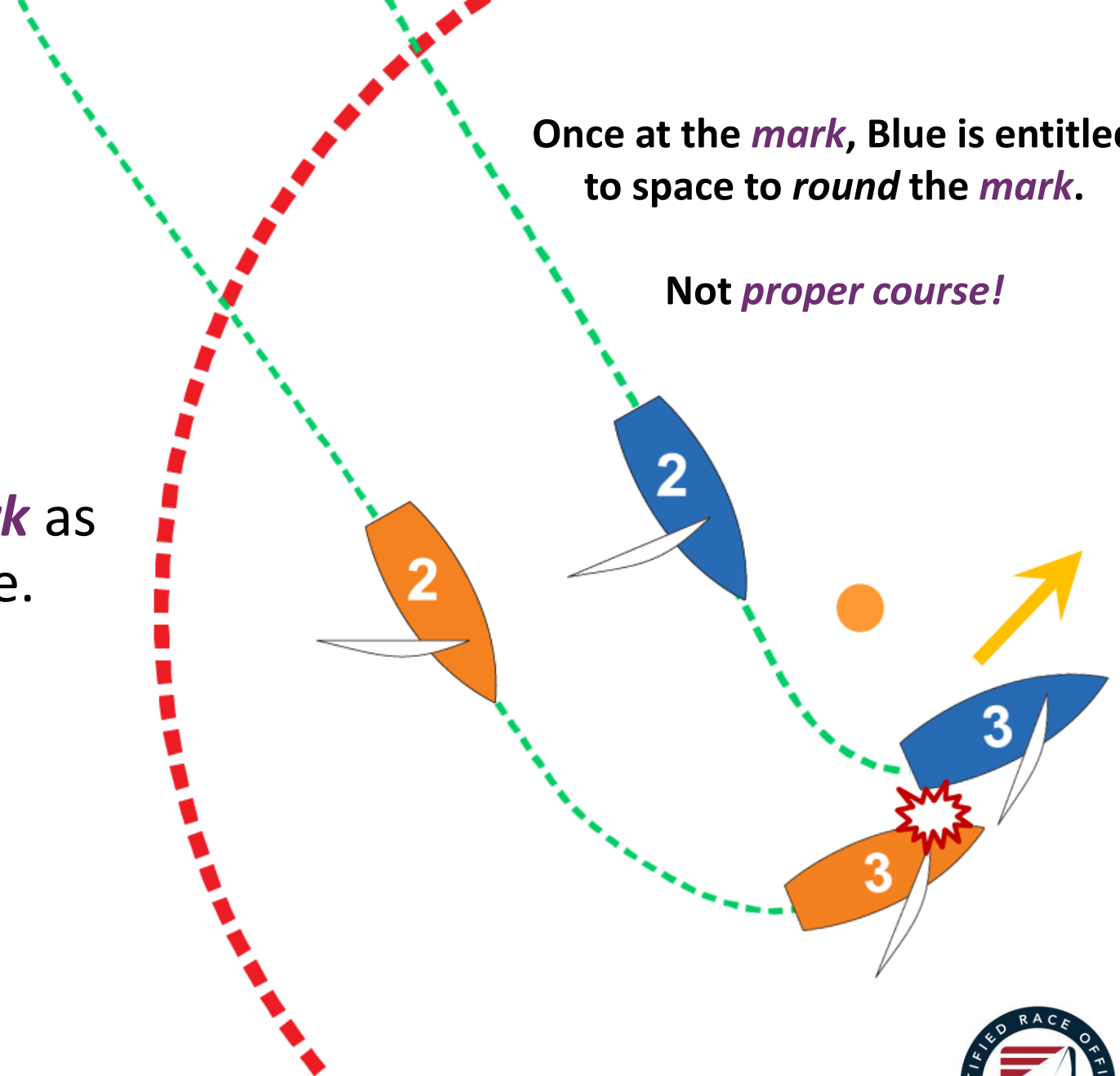
# Key Definitions

## Mark-Room

(b) *room* to round the *mark* as necessary to sail the course.

Once at the *mark*, Blue is entitled to space to *round* the *mark*.

Not *proper course*!





# Tip: Rule Deconstruction

## Rule 10: On Opposite Tacks

“When boats are on opposite *tacks*, a *port-tack* boat shall *keep clear* of a *starboard-tack* boat.”

- **Tack** – 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...
- **Keep Clear** – A boat *keeps clear* of a right-of-way boat: (a) if the right-of-way boat can sail her course with no need to take avoiding action...

When boats are on opposite *tacks*, a *port-tack* boat shall allow a *starboard-tack* boat to sail her course with no need to take avoiding action.

# Key Definitions

## *Obstruction*

An object that a boat could not pass without changing course substantially, if she were sailing directly towards it and one of her hull lengths from it.

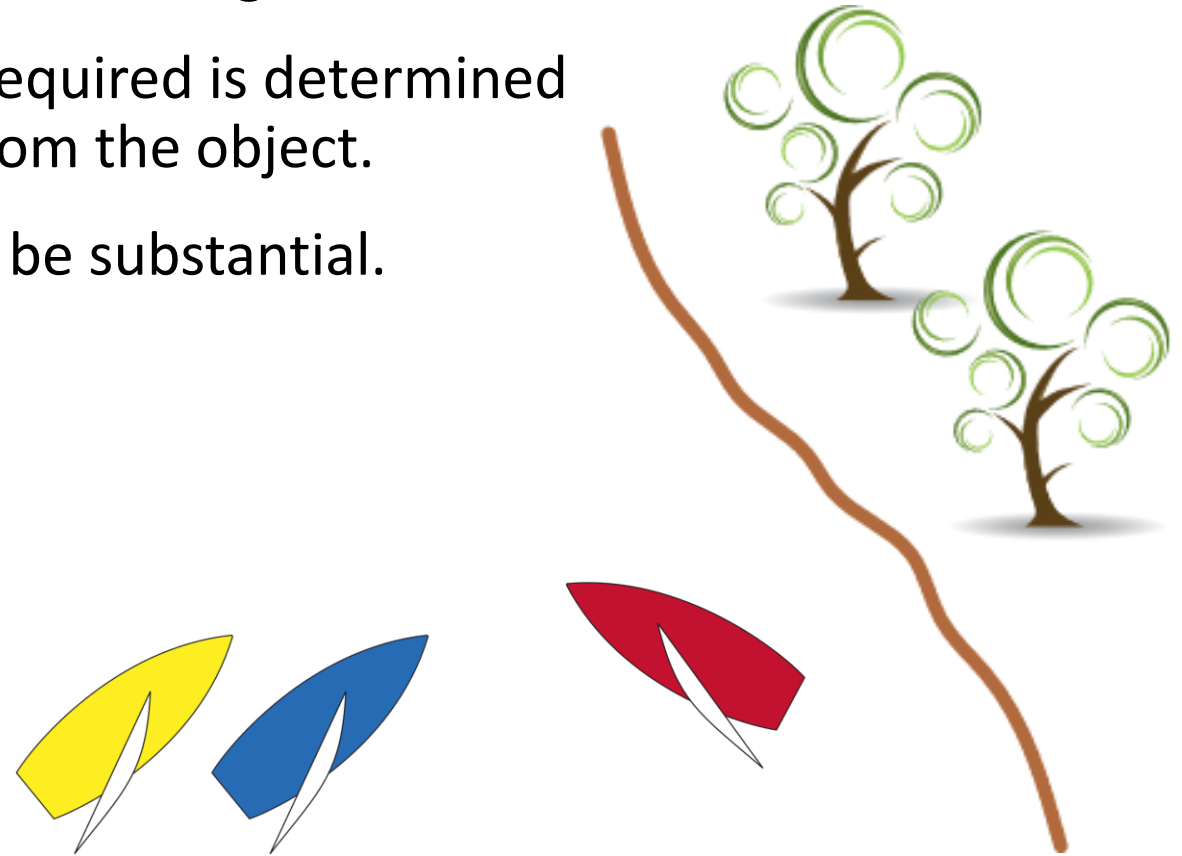
An object that can be safely passed on only one side and an object, area or line so designated by the sailing instructions are also *obstructions*.

However, a boat *racing* is not an *obstruction* to other boats unless they are required to *keep clear* of her or, if rule 22 applies, avoid her.

A vessel underway, including a boat *racing*, is never a continuing *obstruction*.

# Key Points About Obstructions

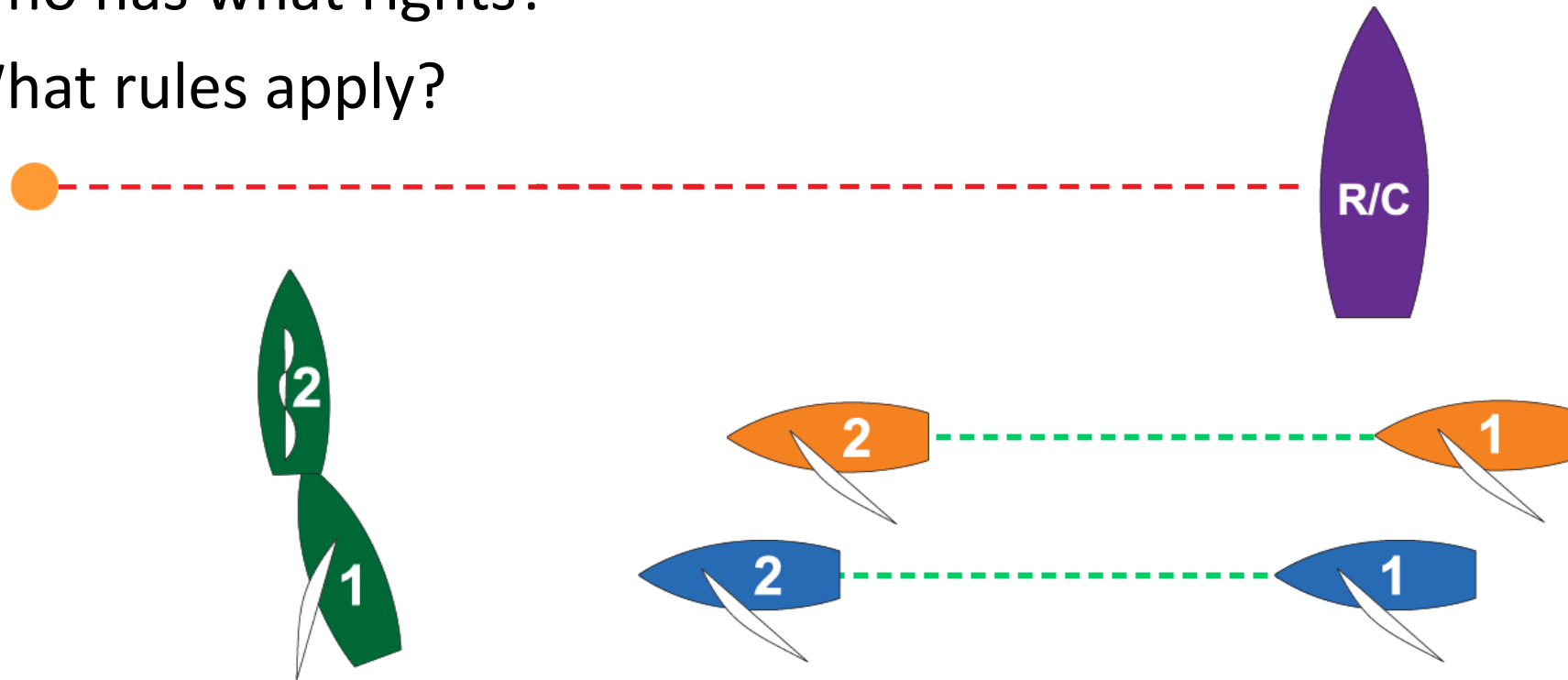
1. The object must be large enough to require a substantial course change to avoid if you were sailing towards it.
2. The amount of course change required is determined from a point one-boat length from the object.
3. The size of course change must be substantial.



# Starting Area

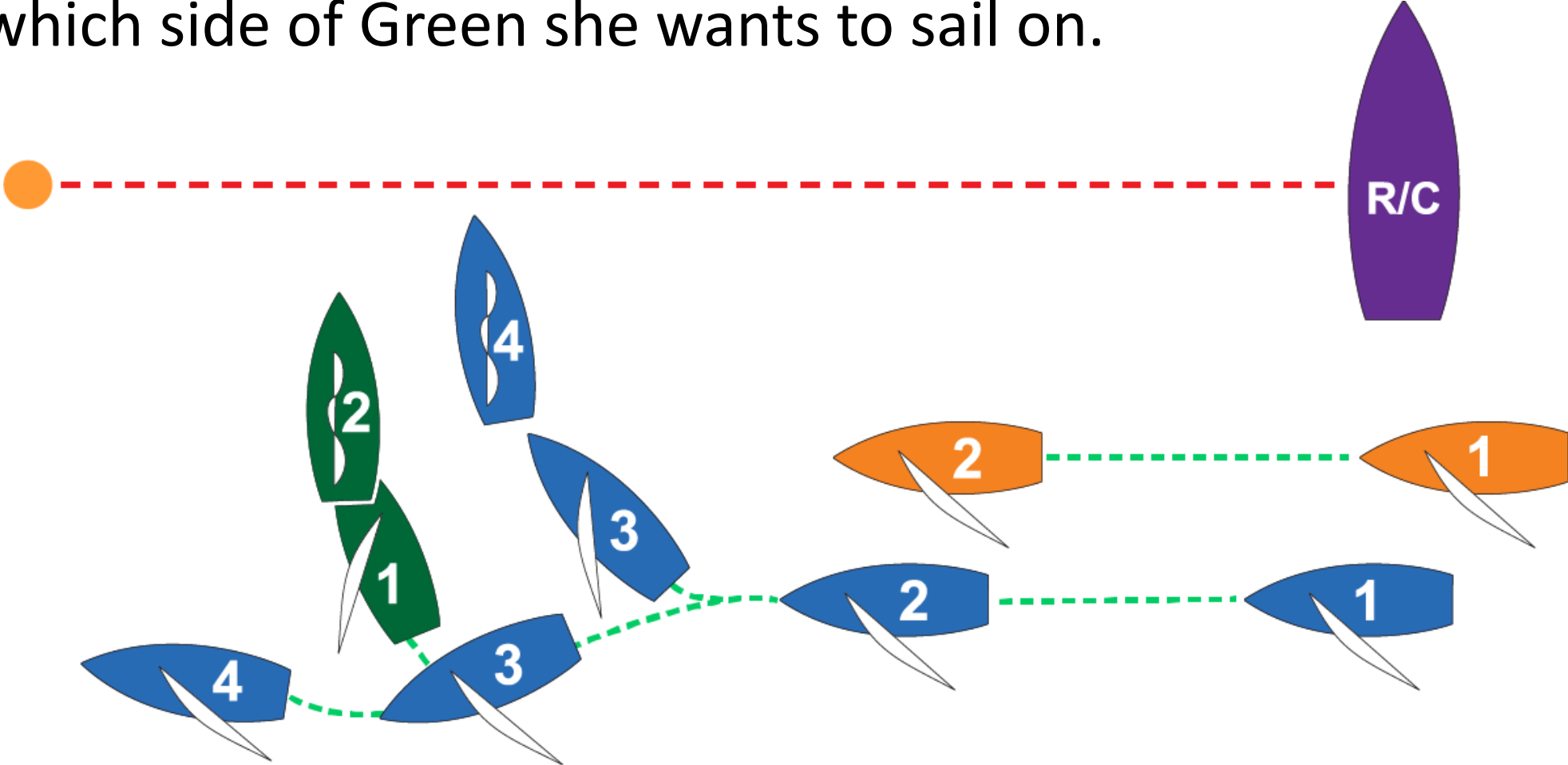
## Questions

- Is Green an *obstruction*?
- Who has what rights?
- What rules apply?



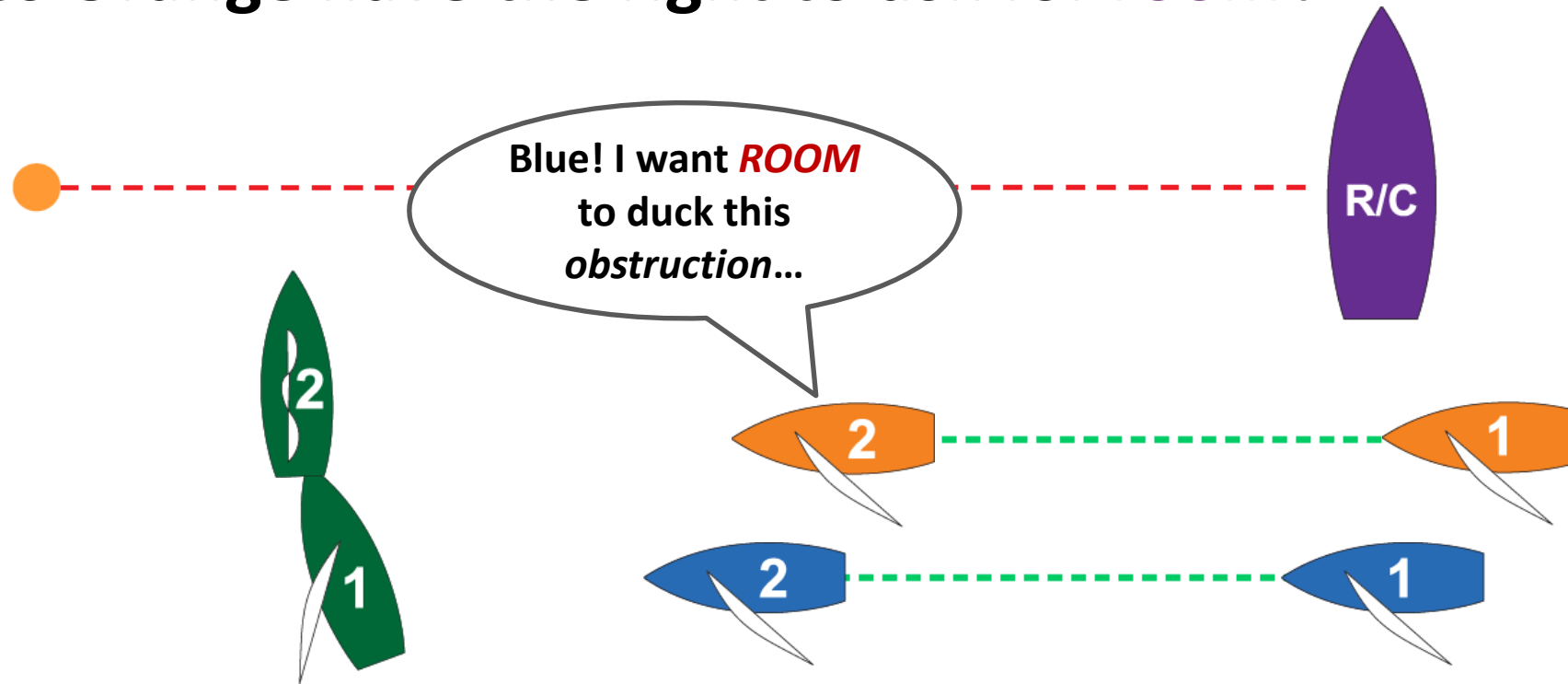
# Starting Area

As *leeward* right-of-way (RoW) boat, Blue gets to decide which side of Green she wants to sail on.



# Starting Area

Does Orange have the right to ask for *room*?

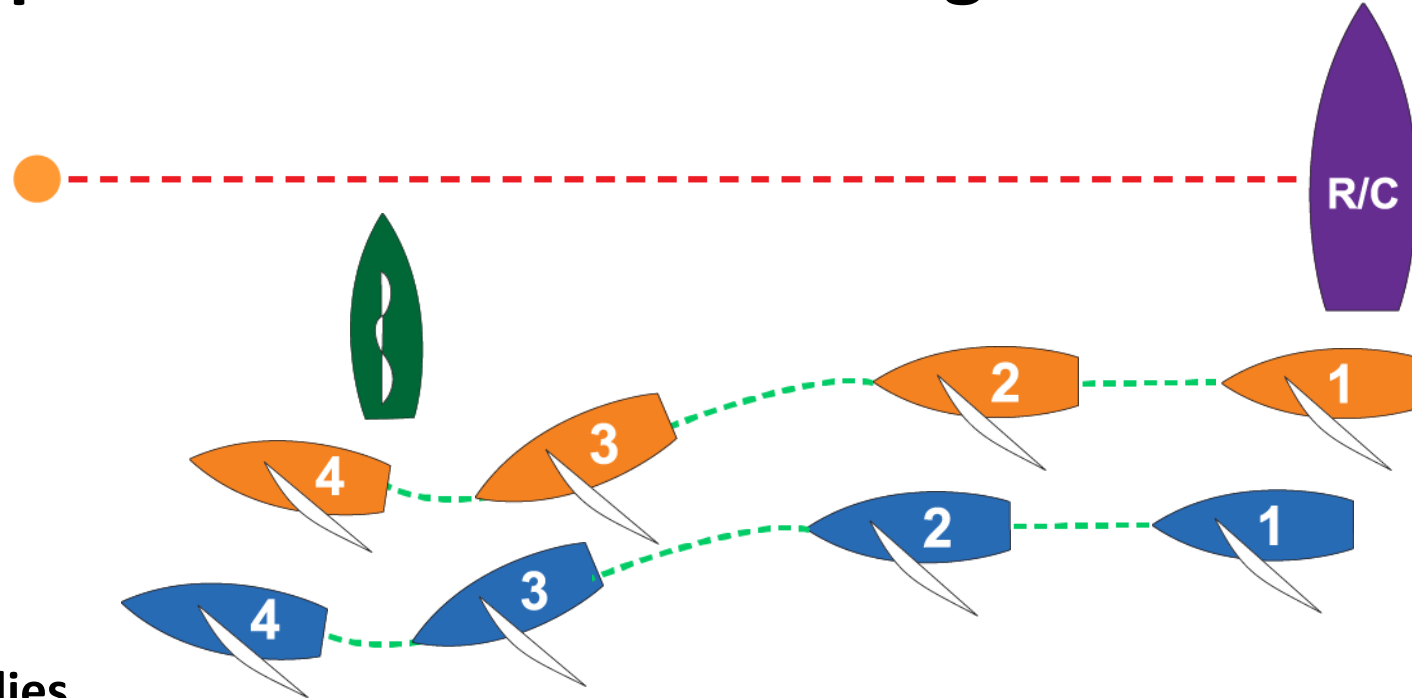


**No.**

- Green is an *obstruction*, so RRS 19.2 (a) applies.
- Blue (RoW) may choose the side on which to pass the *obstruction*.

# Starting Area

What happens once Blue decides to go to *leeward* of Green?

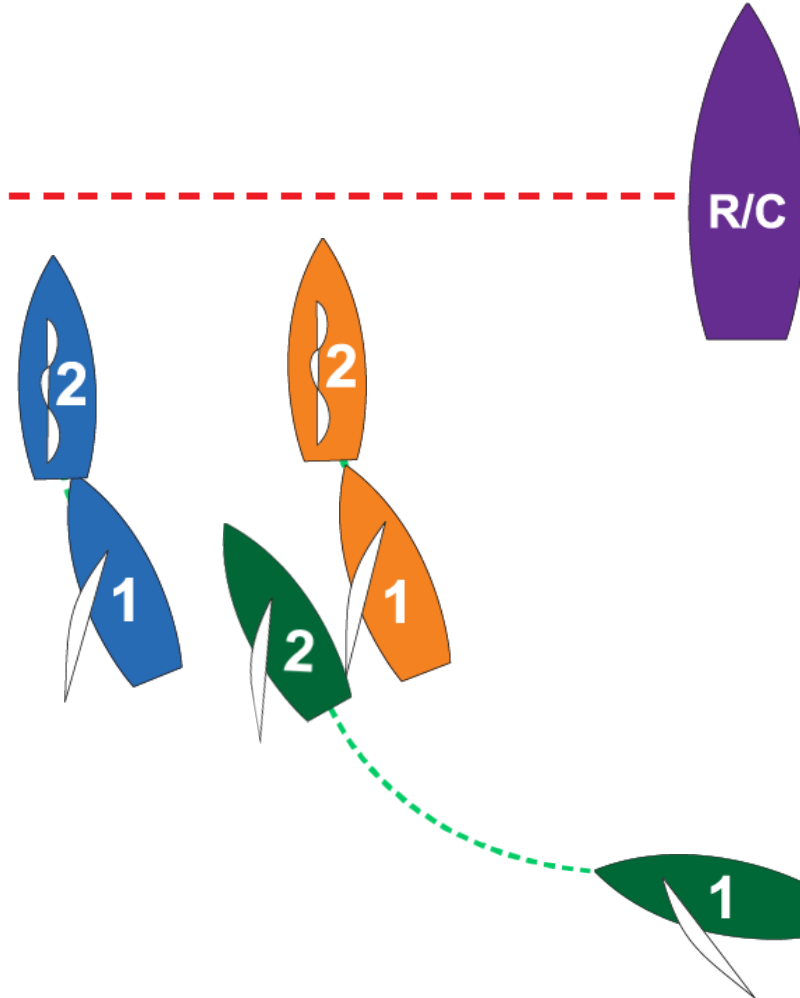


- **Rule 19 applies...**  
Green is not a *mark* of the course (rule 19.1).
- **Rule 19.2(b) – *Overlapped***  
Blue (outside) shall give Orange (inside) *room*.

# Starting Area

Is Green entitled to *room* to pass between Blue & Orange?

- Blue is an *obstruction* as both Orange (*windward* – rule 11) and Green (*same tack, clear astern* – rule 12) are required to *keep clear* of Blue.
- Blue is NOT a continuing *obstruction*. (def. *obstruction*)





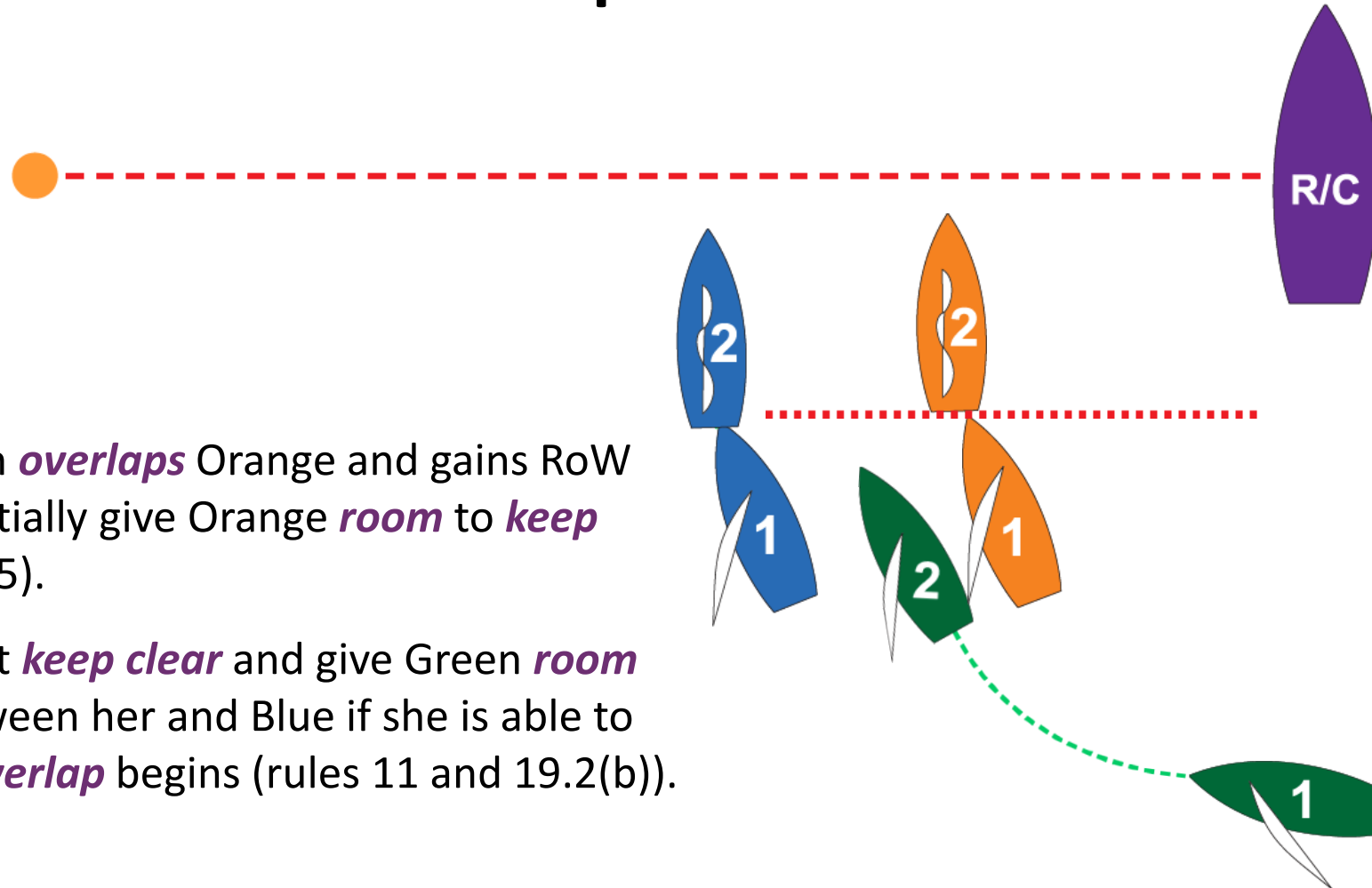
# Starting Area

Is Green entitled to *room* to pass between Blue & Orange?

It depends...

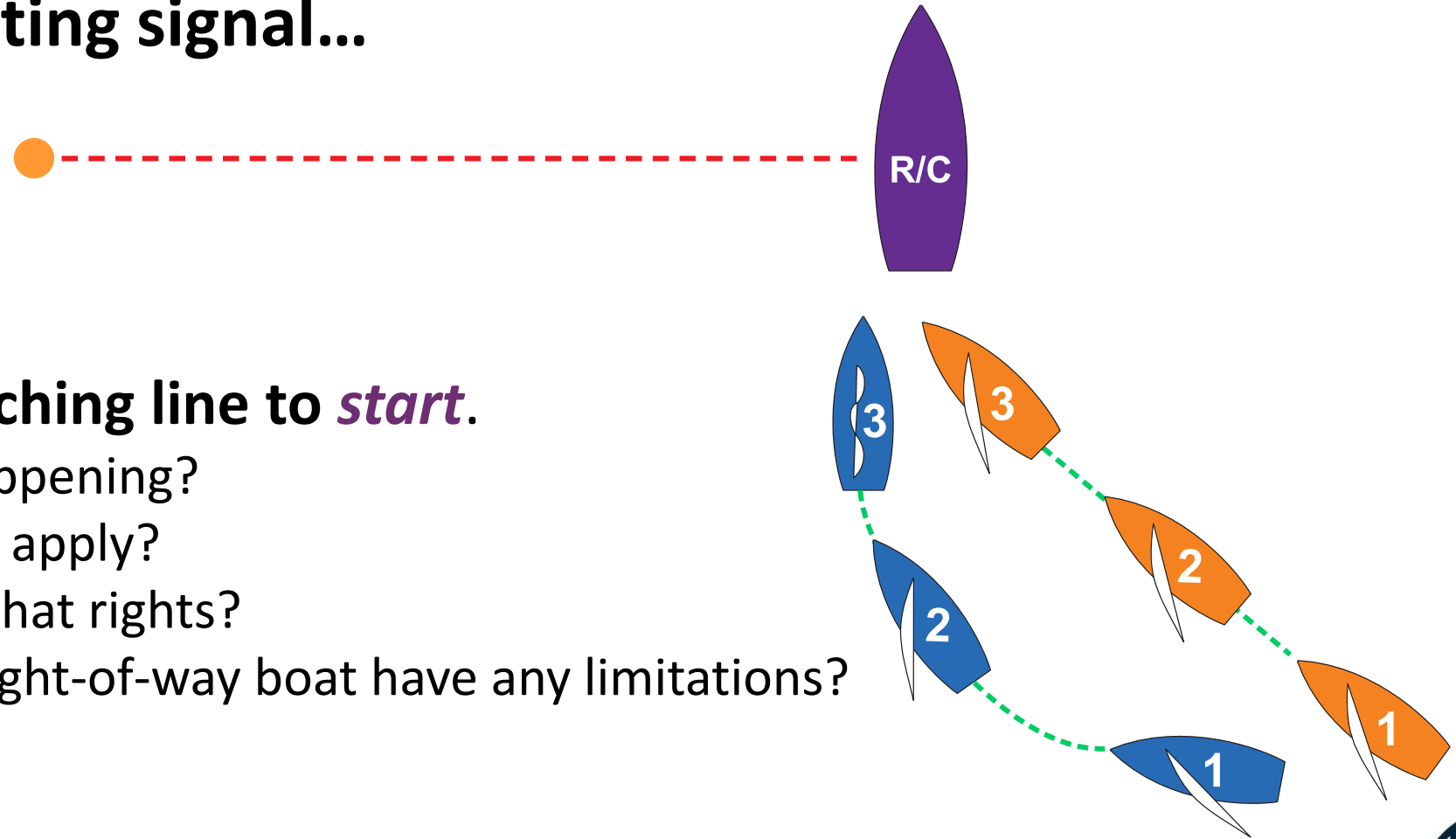
## Caveats

- When Green *overlaps* Orange and gains RoW she must initially give Orange *room to keep clear* (rule 15).
- Orange must *keep clear* and give Green *room* to pass between her and Blue if she is able to when the *overlap* begins (rules 11 and 19.2(b)).



# The Start

Prior to starting signal...



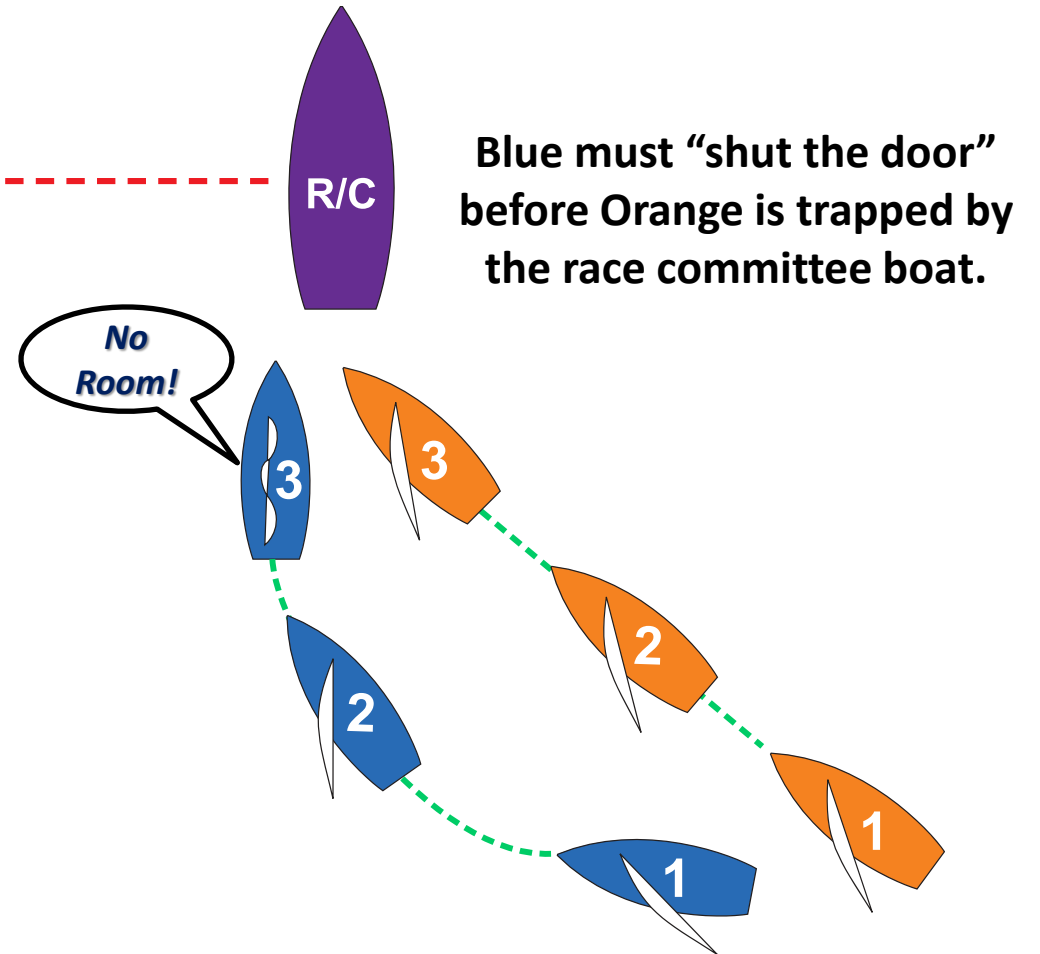
Boats approaching line to *start*.

- What is happening?
- What *rules* apply?
- Who has what rights?
- Does the right-of-way boat have any limitations?

# The Start – “Barging”

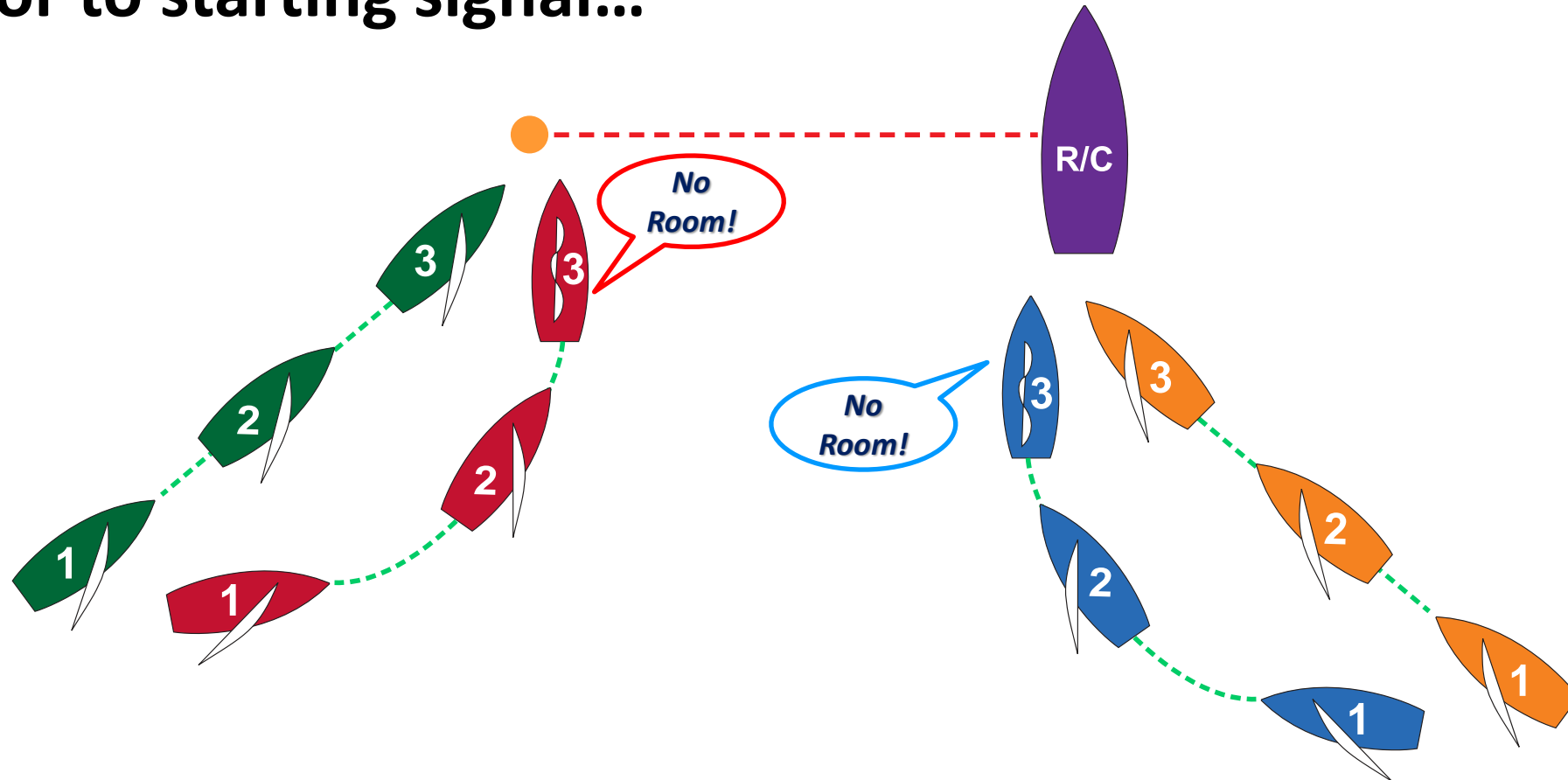
## Prior to starting signal...

- **Part 2, Section C Preamble**  
Section C *rules* (18, 19, & 20) do not apply at a starting *mark* surrounded by navigable water when approaching it to *start*.
- **Rule 11 – On the Same Tack, Overlapped**  
*Windward* boat shall *keep clear* of a *leeward* boat.
- **Rule 16.1 – Changing Course**  
As RoW boat changes course she shall give keep-clear boat *room* to *keep clear*.



# The Start – “Barging”

Prior to starting signal...

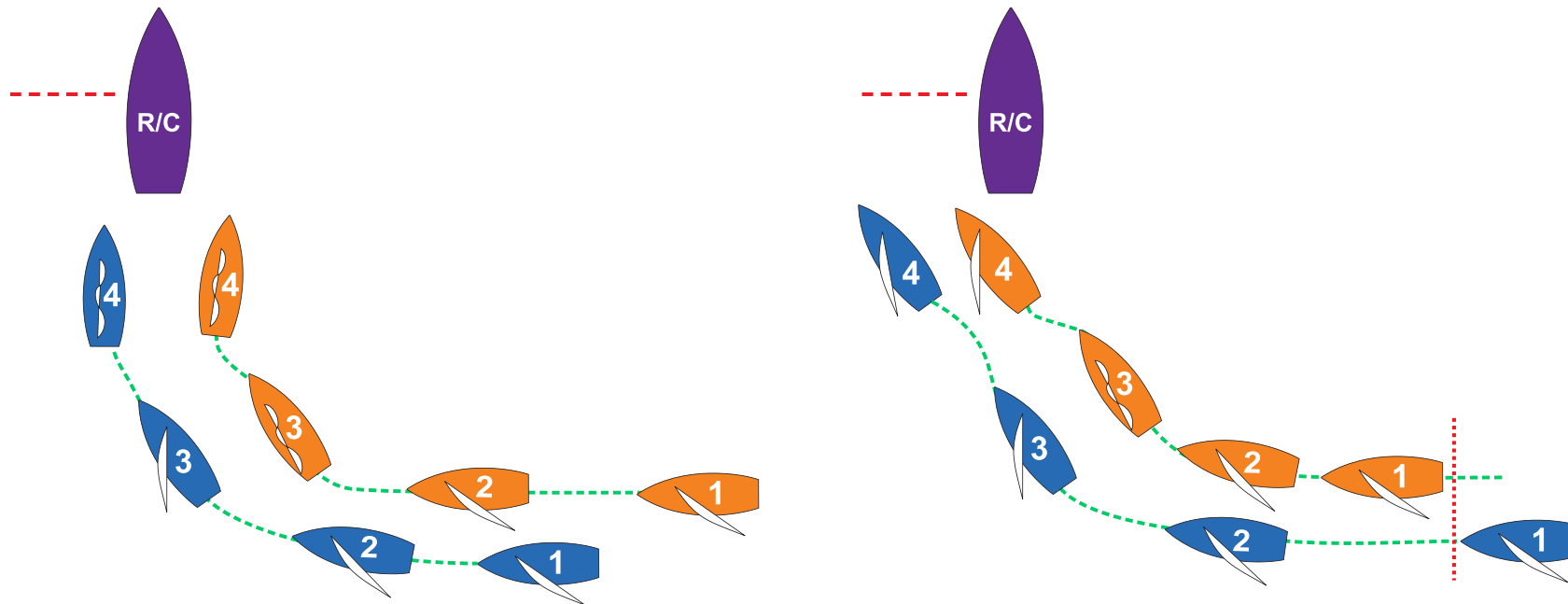


“Barging” can also apply at the pin-end of the starting line.

# Rule 17 at the Starting Line

## What about **BEFORE** / **AFTER** the starting signal?

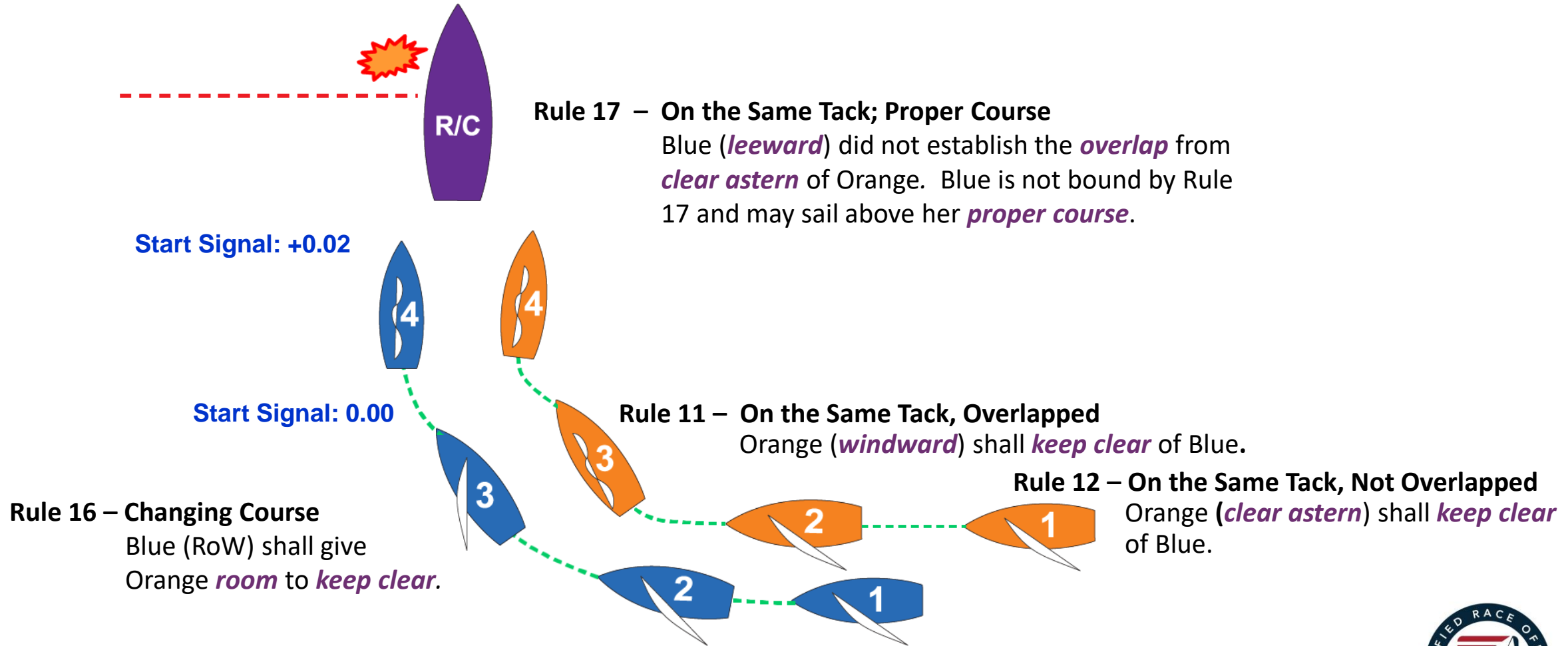
- How was the *overlap* established?
- Is there a Rule 17 *proper course* limitation on the *leeward* boat?
- Before the starting signal Blue has no *proper course*, but after the starting signal Blue may be required by rule 17 to sail her *proper course*, depending on how the *overlap* was established.



Around the Race Course

# Rule 17 at the Starting Line

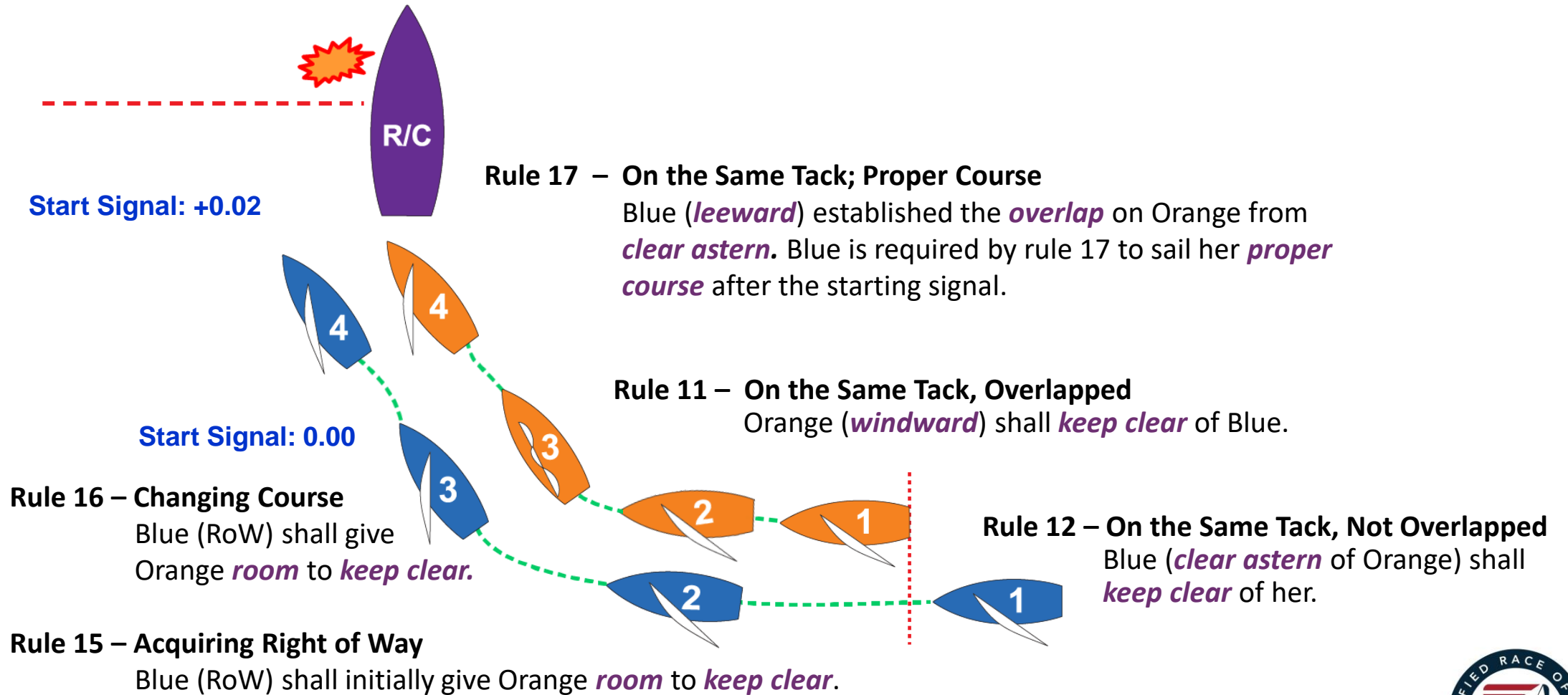
The *rules* that apply change as the situation changes...



Around the Race Course

# Rule 17 at the Starting Line

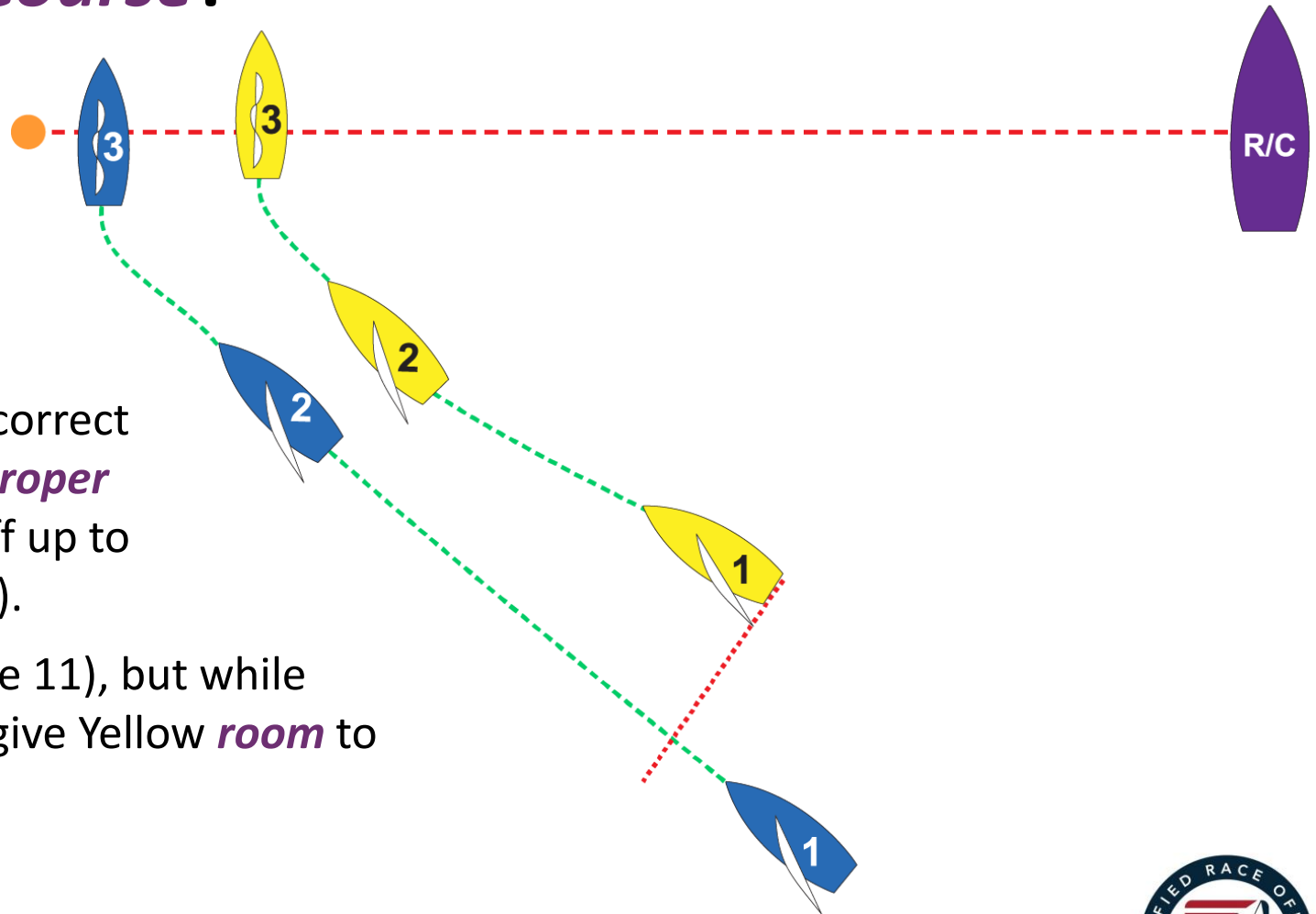
The *rules* that apply change as the situation changes...



# The Start

## What is Blue's *Proper Course*?

- After the starting signal, Blue (*leeward*) may not sail above her *proper course* (rule 17) which, when sailing to *windward*, is usually close-hauled.
- However, in order to pass on the correct side of the starting *mark*, Blue's *proper course* may be to momentarily luff up to head-to-wind (def. *Proper Course*).
- Yellow must *keep clear* of Blue (rule 11), but while Blue is changing course, she must give Yellow *room* to do so (rule 16).





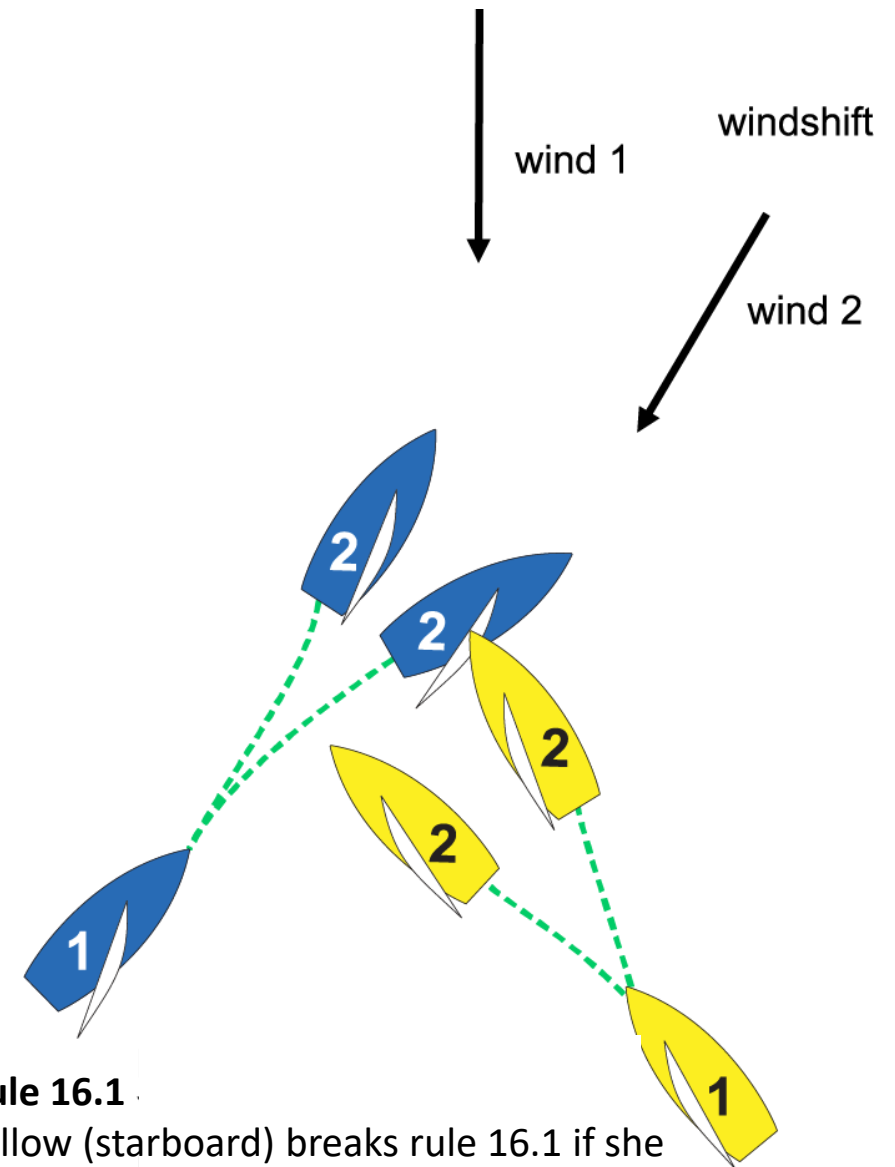
# Windward Legs

**Rule 10:** *Port* must *keep clear*.

**Rule 16.1:** Protects the *keep clear* boat from the right-of-way boat's unpredictable or last-second changes of course, which would prevent *port* from *keeping clear*.

## Possible conclusions:

- *Port kept clear*
- *Port* did not *keep clear*
- *Starboard* did not give *room* while changing course...

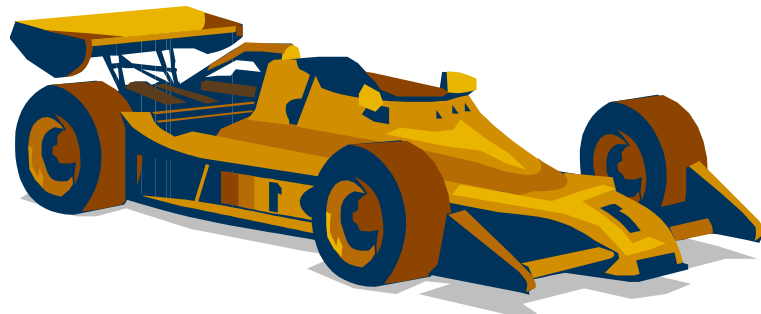


**Rule 16.1**  
Yellow (starboard) breaks rule 16.1 if she changes her course with the windshift and does not give Blue room to keep clear.

# Windward Legs

## So how close is too close?

- **On a two-lane road, when wanting to pass, *it depends...***
  - Are you driving a race car or a tractor?
  - What are you passing?
  - What's coming in the opposite direction?



# Windward Legs

## So how close is too close?

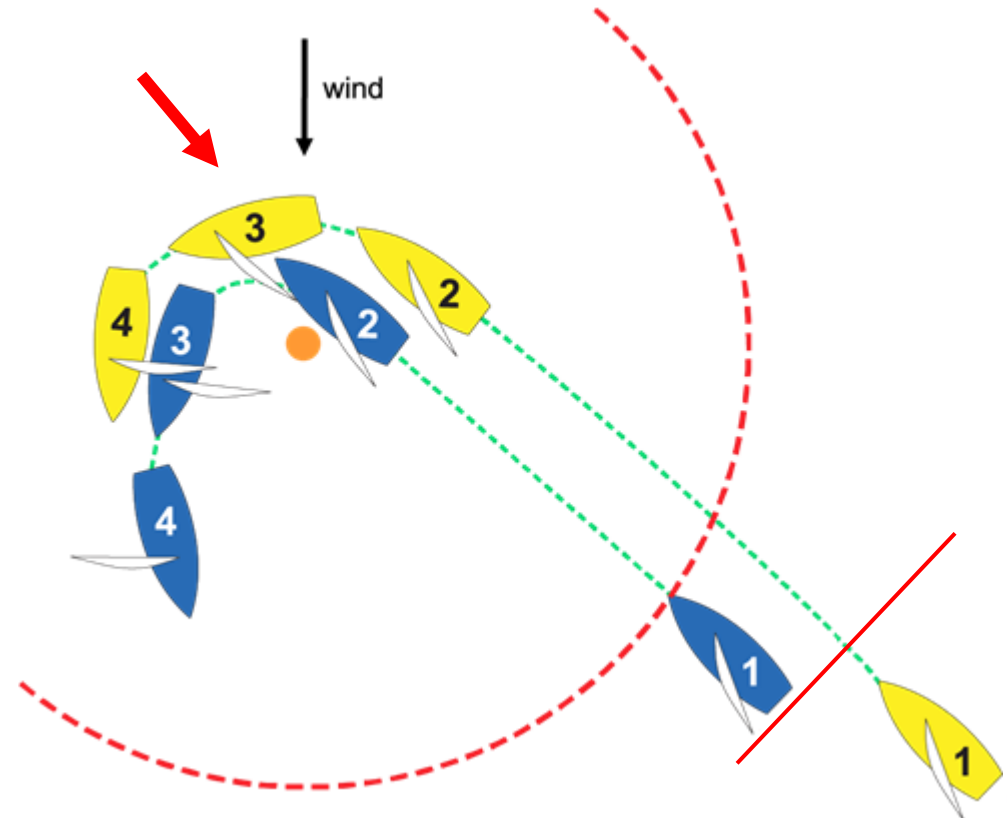
- **In sailboat racing it also depends on...**
  - Distance between boats
  - Speed of boats
  - Size, maneuverability of boats
  - Visibility between boats
  - Angle of convergence
- **These are the key facts needed to reach a conclusion.**



# Windward Mark

Not *overlapped* at the *zone* (3 hull lengths)

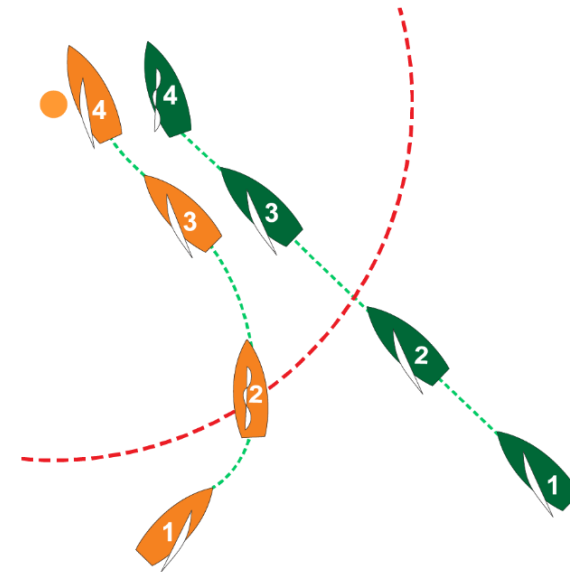
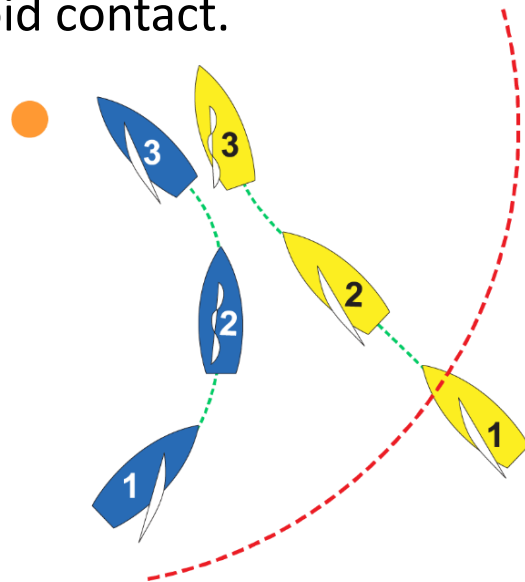
- Yellow must give Blue *mark-room*, which includes *room* for Blue to bear away to the course needed to begin sailing the next leg (def. *mark-room*).
- Rule 18 applies until Blue either has been given *mark-room*, passes head to wind, or leaves the *zone*.



# Windward Mark

## Rule 18.3 – Tacking When Approaching a *Mark* to be left to *Port*

- Blue and Orange (*port*) pass head to wind from *port* to *starboard* in the *zone* and are then *fetching* the *mark*.
- Yellow and Green (*starboard*) have been sailing on *starboard* since entering the *zone*.
- Blue and Orange break rule 18.3 by causing Yellow and Green to sail above close-hauled to avoid contact.



# Windward Mark

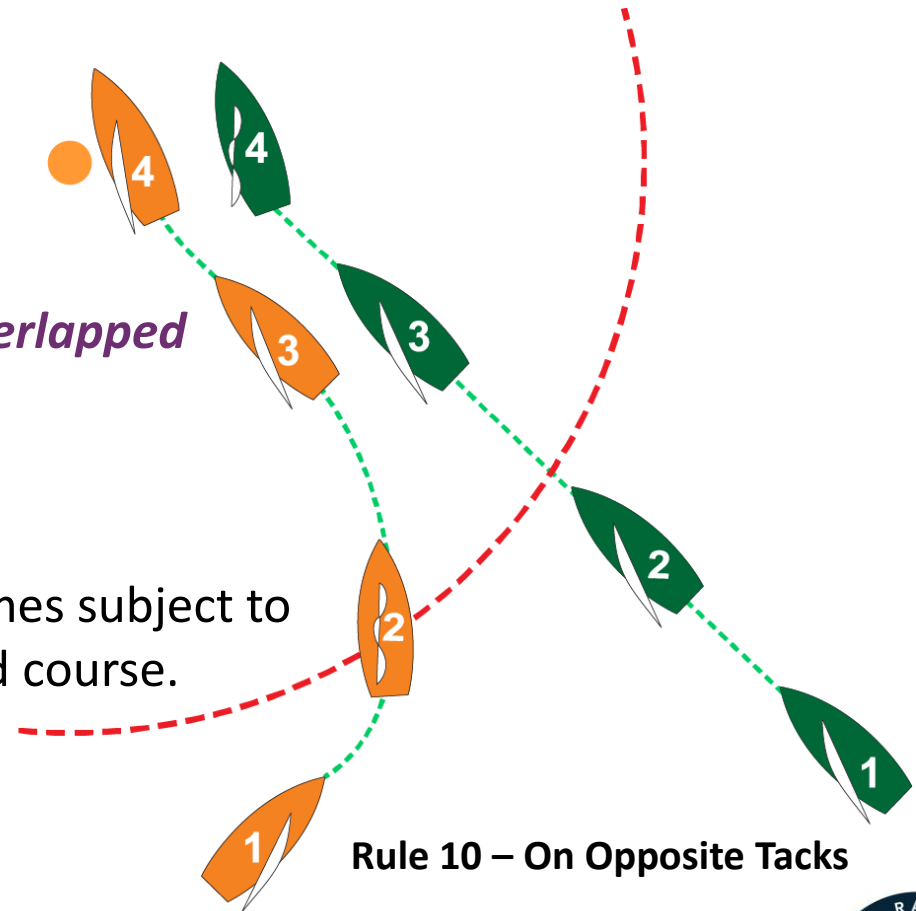
## Rule 18.3 – Tacking When Approaching a *Mark* to be Left to *Port*.

In position 4, Orange luffs above close-hauled to clear the *mark*. As a result of her luff, Green sails above close-hauled to avoid Orange. Orange breaks rule 18.3.

**Rule 11 – Same Tack, *Overlapped***  
Orange is *leeward* boat.

### Rule 13 - While Tacking

Orange passes head to wind and becomes subject to rule 13 until she reaches a close-hauled course.



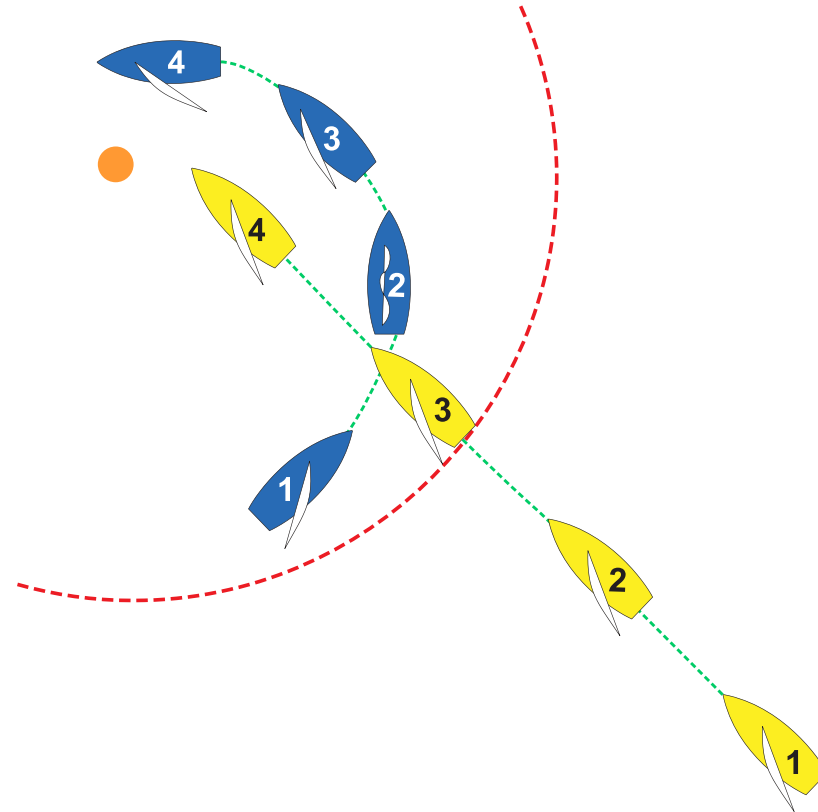
# Windward Mark

## Rule 18.3 – Tacking When Approaching a *Mark* to be Left to *Port*.

- Blue passes head to wind from *port* to *starboard* in the *zone* and is then *fetching* the *mark*
- Yellow entered the *zone* on *starboard* and has remained on *starboard*.

### Rule 18.3 applies; therefore rule 18.2 does not:

- Yellow becomes *overlapped* inside of Blue just prior to position 4.
- Blue must give *mark-room* to Yellow.



# Windward Mark

## Starboard Rounding

Blue and Yellow are approaching the windward *mark* to be rounded to *starboard*. Blue, on *port*, is *fetching* the *mark*. Yellow, on *starboard*, tacks from *starboard* to *port clear ahead* of Blue (position 2) and gets down to close-hauled just prior to position 3. Blue luffs to avoid hitting Yellow's stern (position 3).

### Who has right-of-way and what rules apply?

#### At position 1?

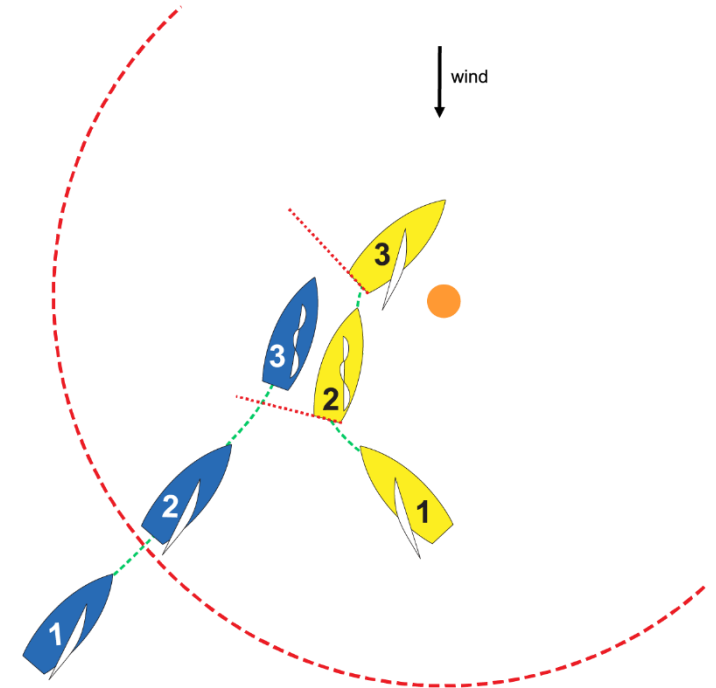
- Yellow (rule 10 – *starboard*)

#### At position 2?

- Blue (rule 13 – tacking)  
(rule 15 - acquiring RoW does not apply)

#### At position 3?

- Yellow (rule 12 – *clear ahead*)  
(rule 15 - acquiring RoW)  
(rule 18.3 –tacking in the *zone* - does not apply at *starboard* roundings)





# Windward Mark

## Starboard Rounding

Blue and Yellow are approaching the windward *mark* to be rounded to *starboard*. Blue, on *port*, is *fetching* the *mark*. Yellow, on *starboard*, tacks from *starboard* to *port clear ahead* of Blue (between positions 3 & 4) and gets down to close-hauled just after position 4. Blue starts to duck at position 3 and obtains an inside overlap at just before position 5.

### Who has right-of-way and what rules apply?

#### At position 3?

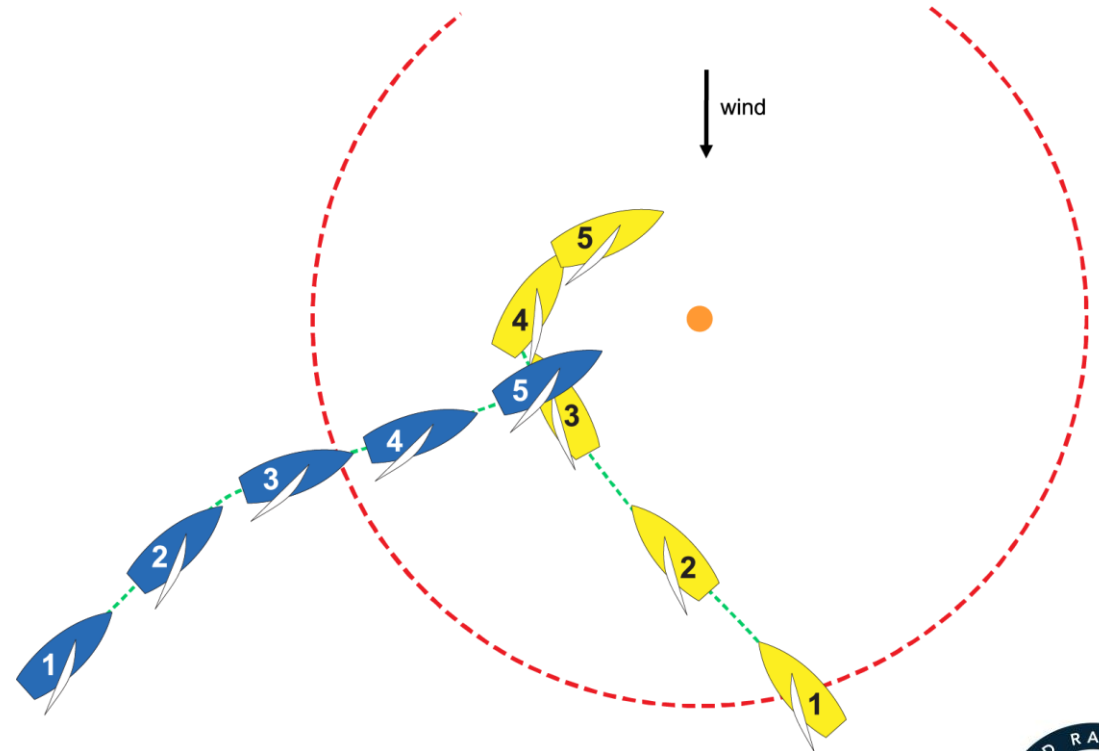
- Yellow (rule 10 – *starboard*)  
(rule 16 – changing course)

#### At position 4?

- Blue (rule 13 – tacking)  
(rule 15 – acquiring RoW does not apply)

#### At position 5?

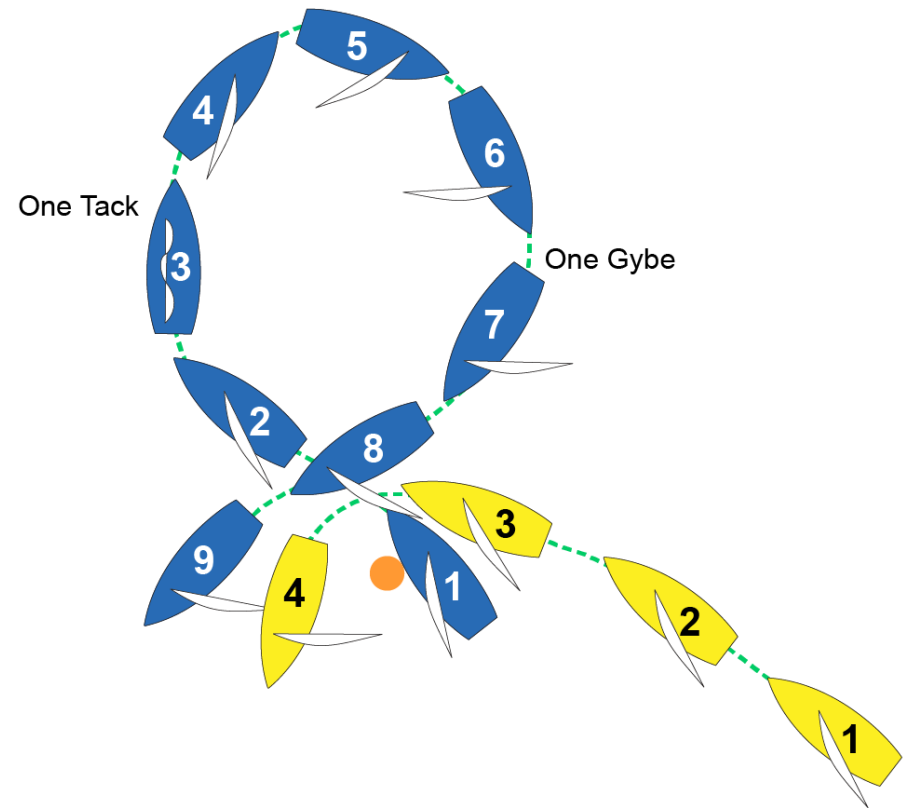
- Blue (rule 11 – *leeward*)  
(rule 18.2(a) and (f) – *mark-room*)  
(rule 18.3 – tacking in the *zone* –  
does not apply at *starboard* roundings)



# Windward Mark

## Rule 31 – Touching a *Mark*

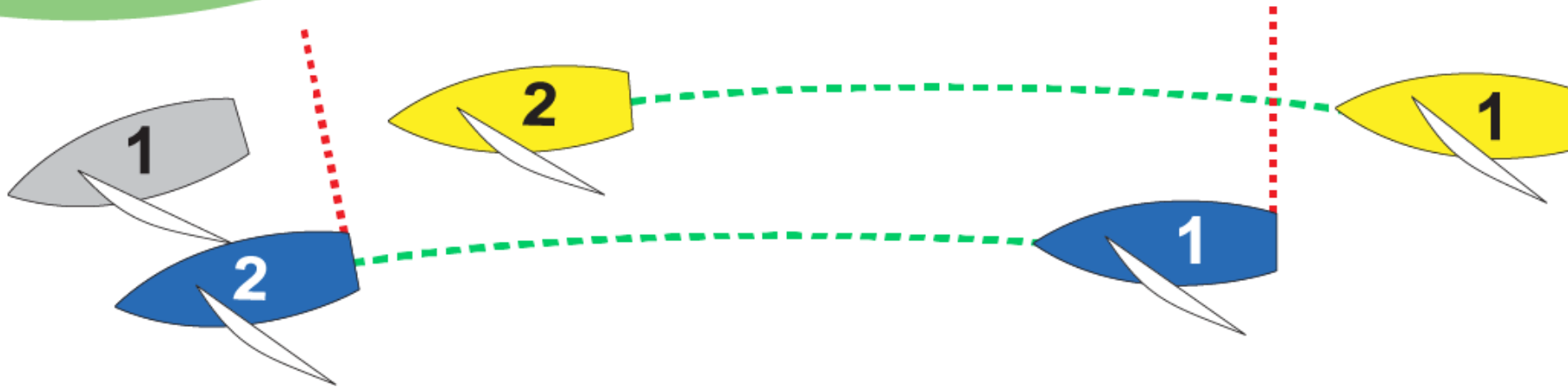
- **Rule 31** – “While *racing*, a boat shall not touch...a *mark* that begins, bounds, or ends the leg of the course on which she is sailing...”
- **Rule 44.1** – Blue may take a One-Turn Penalty for breaking rule 31.
- **Rule 44.2** – After getting well clear of other boats as soon as possible, a boat takes a penalty by making the required number of turns in the same direction, each turn including one tack and one gybe.
- **Rule 21.2** - Blue must *keep clear* of other boats while doing her penalty turn.



# Rule 19.2 (c)

## Giving Room at a Continuing Obstruction

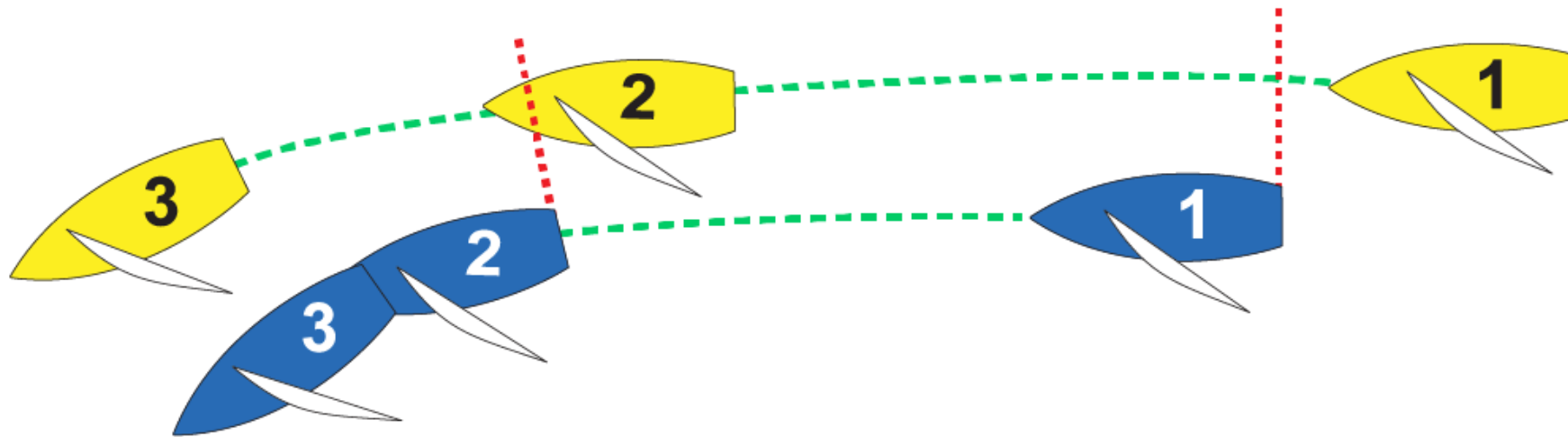
Shore



# Rule 19.2 (c)

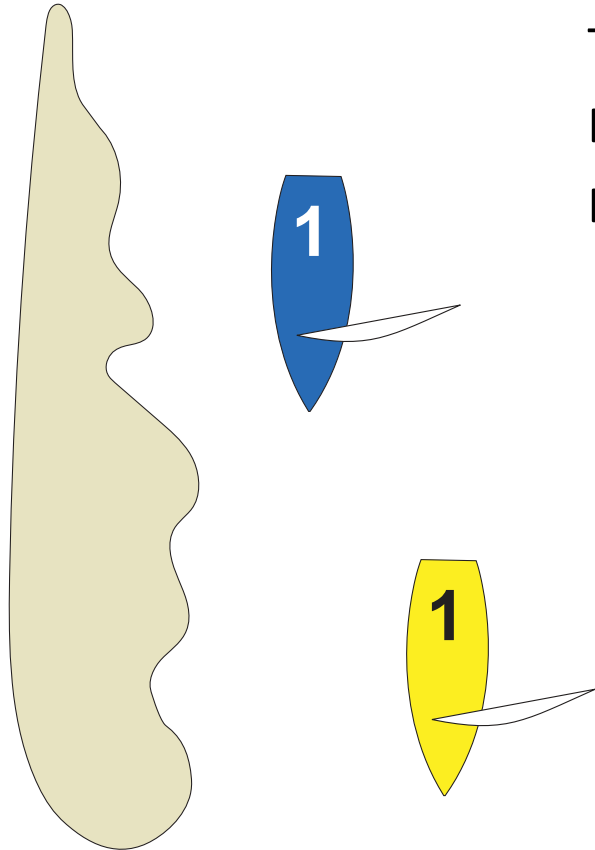
## Giving Room at a Continuing Obstruction

Shore



# Rule 19.2 (c)

## Giving Room at a Continuing Obstruction



The shore is a continuing *obstruction*.

Both Blue and Yellow are on *starboard tack*.

Blue is *clear astern* and required to *keep clear* of Yellow. (rule 12)

Blue wants to go between Yellow and the shore but at the moment Blue *overlaps* Yellow, if there is not *room* for her to pass between Yellow and the *obstruction*, she is not entitled to *room*. (rule 19.2 (c))

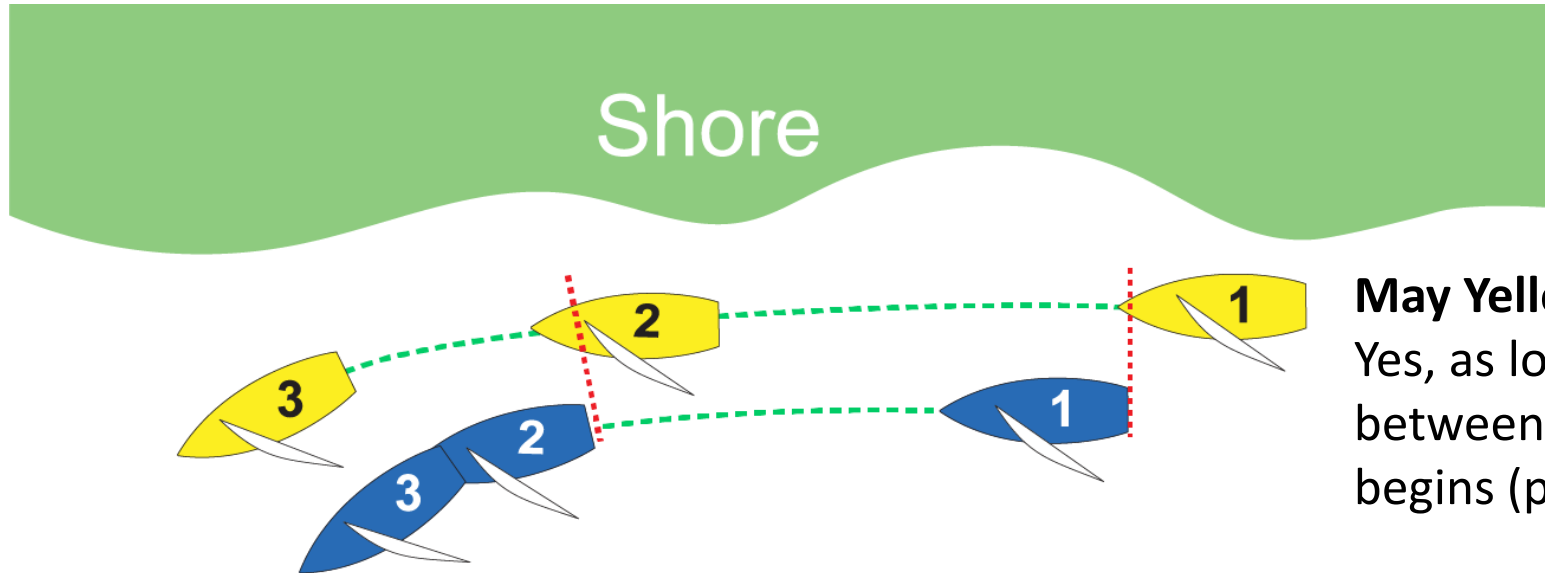
In this case Blue, with her boom out, is too wide to pass between the shore and Yellow-so she'd better not go in there.

Would the situation be different if Yellow were on *port* tack?

**Yes**, rule 10 would apply.

# Rule 19.2 (c)

## Giving Room at a Continuing Obstruction



**May Yellow go between Blue & the shore?**  
Yes, as long as there is *room* for her to pass between them at the moment the *overlap* begins (position 1).

### Is Yellow entitled to *room*?

If Yellow is *overlapped* (position 2) and needs more *room* to pass a point of land or shoal (position 3), Blue must bear off to provide that *room*.

# Downwind Leg

## Rule 17 – On the Same *Tack*; *Proper Course*

### How was the *overlap* established?

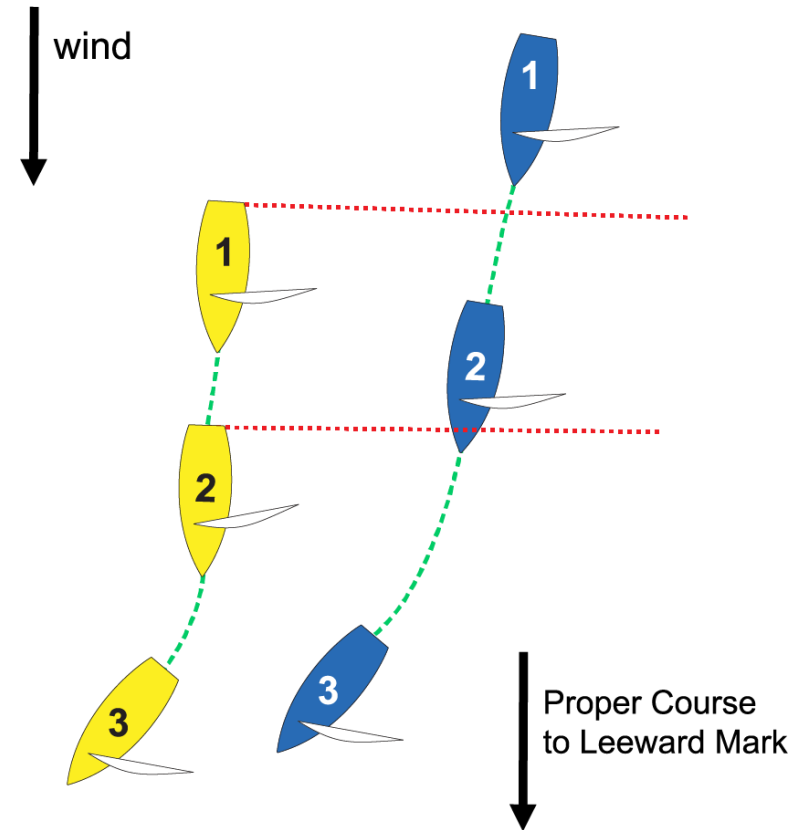
- Did the *leeward* boat become *overlapped* from *clear astern* within two of her hull lengths of the *windward* boat?

### What is *proper course*?

- A course a boat would choose in order to *sail the course* and *finish* as soon as possible in the absence of the other boats referred to in the rule using the term.
- A boat has no *proper course* before her starting signal.
- Different boats may have different *proper courses* at the same time.

# Downwind Leg

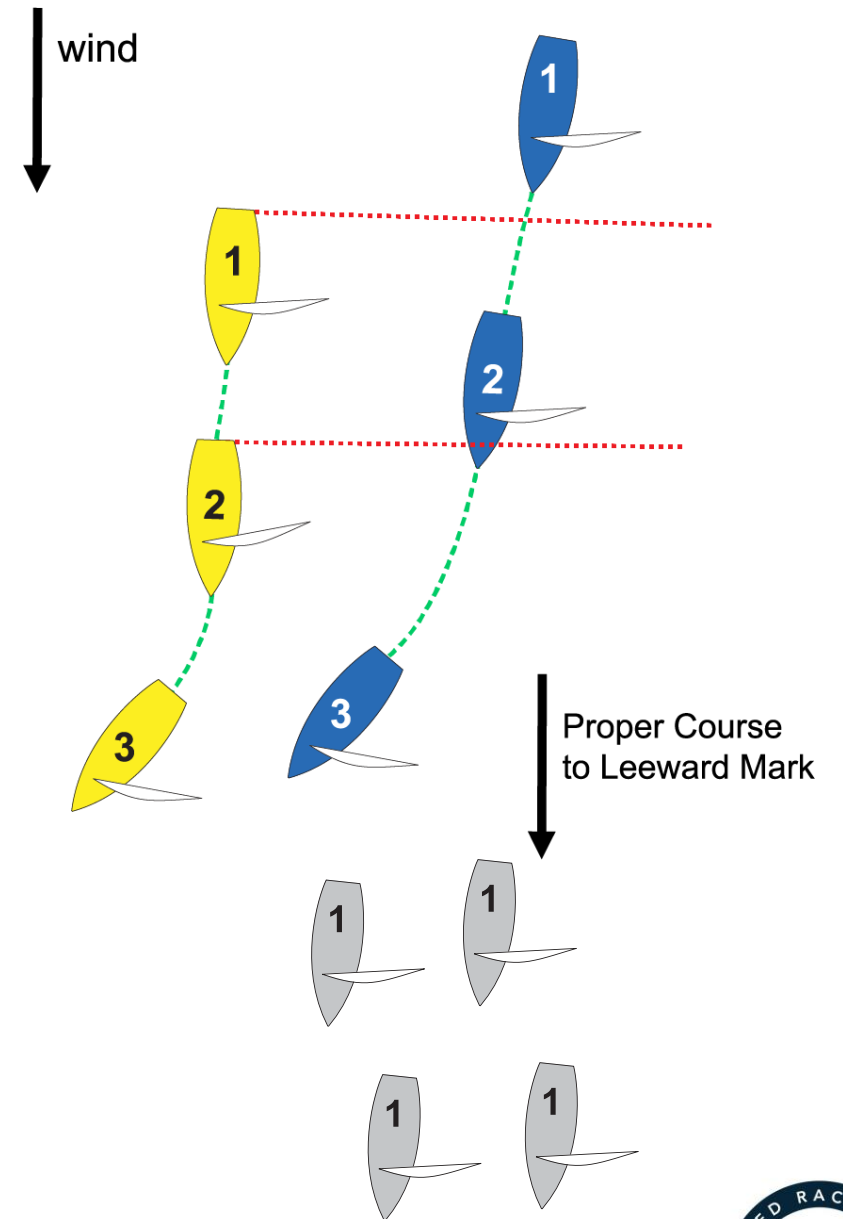
- Blue became *overlapped* from *clear astern* and then luffed above her *proper course*. The intent was to make it difficult for Yellow to stay ahead.
- In the absence of Yellow, Blue would not luff.
- Blue broke rule 17.





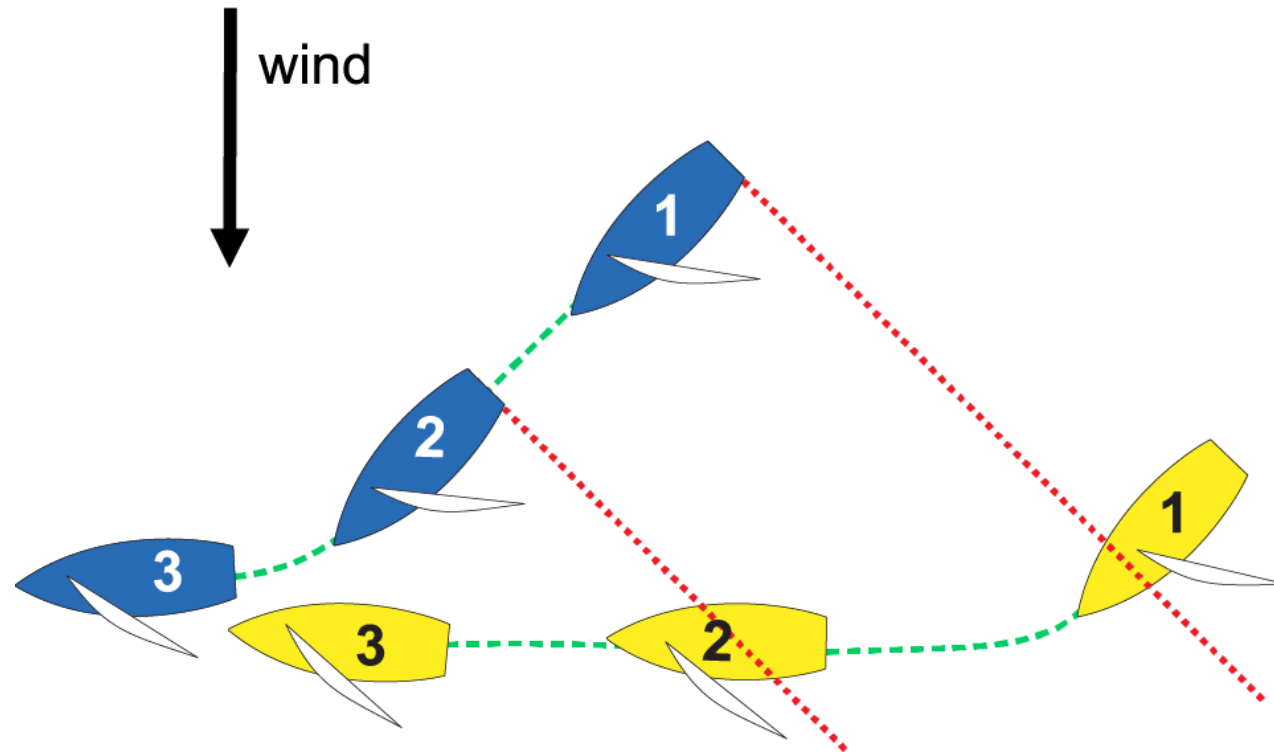
# Downwind Leg

- Blue became *overlapped* from *clear astern* and then sailed high to go above the slower gray boats in front of her.
- In the absence of Yellow, Blue would still sail high of the gray boats.
- Because she would do this even in the absence of Yellow, it is a legitimate *proper course*.



# Downwind Leg

- Yellow established an *overlap* to *leeward* while more than two hull lengths away from Blue.
- Yellow is not restricted by rule 17 and may sail up to head to wind.



Around the Race Course

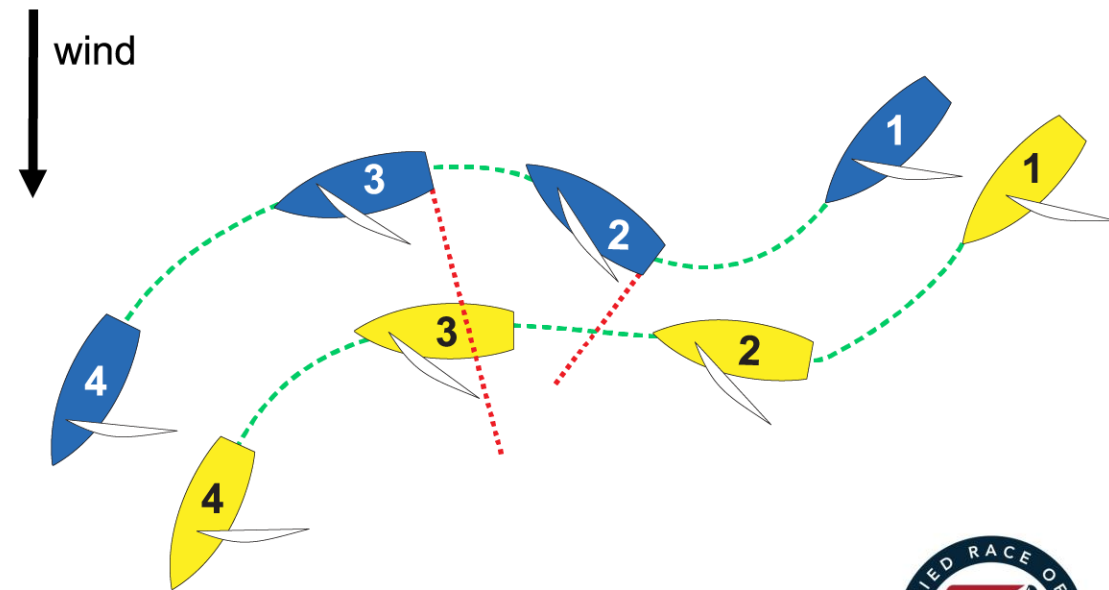
# Downwind Leg

**Position 1:** Before reaching position 1 Blue had established an *overlap* to windward of Yellow (no rule 17 restriction).

**Position 2:** Blue luffs hard breaking the *overlap*.

**Position 3:** Blue bears away causing the *overlap* to begin again. Yellow does not have to give Blue *room* to *keep clear* under rule 15 since she gained *leeward* right-of-way as a result of Blue's actions.

**Position 4:** Yellow must promptly bear away to sail her *proper course* because she obtained her *overlap* from *clear astern* of Blue.



# Downwind Leg

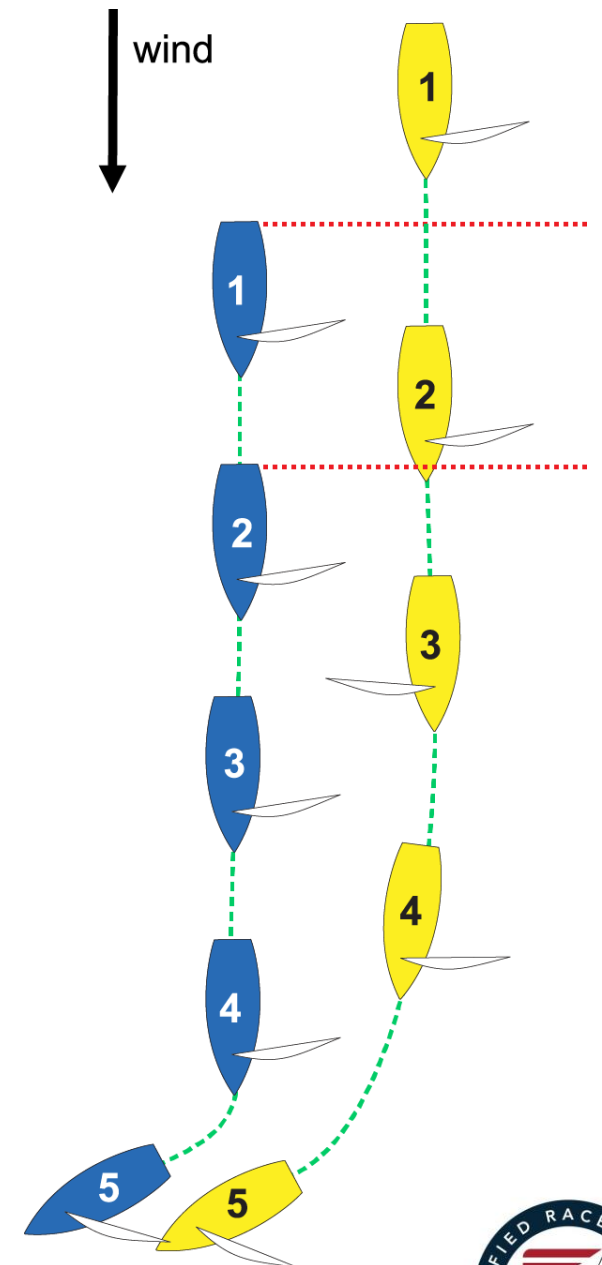
**Position 1:** No *overlap*.

**Position 2:** Yellow becomes *overlapped* to *leeward* of Blue from *clear astern* and within two hull lengths to *leeward* of Blue.

**Position 3:** Yellow gybes to *port*. Blue and Yellow are still *overlapped* because both are  $>90^\circ$  off the wind; however, rule 17 applies only while they remain on the same *tack*.

**Position 4:** Yellow gybes back to *starboard*.

**Position 5:** Yellow may luff because at Position 4 she did not become *overlapped* with Blue from *clear astern*, so she is not restricted by rule 17. However, rule 15 requires Yellow to **initially** give Blue *room* to *keep clear*. Then, as she changes course, Yellow must give Blue additional *room* to *keep clear* under rule 16.1.



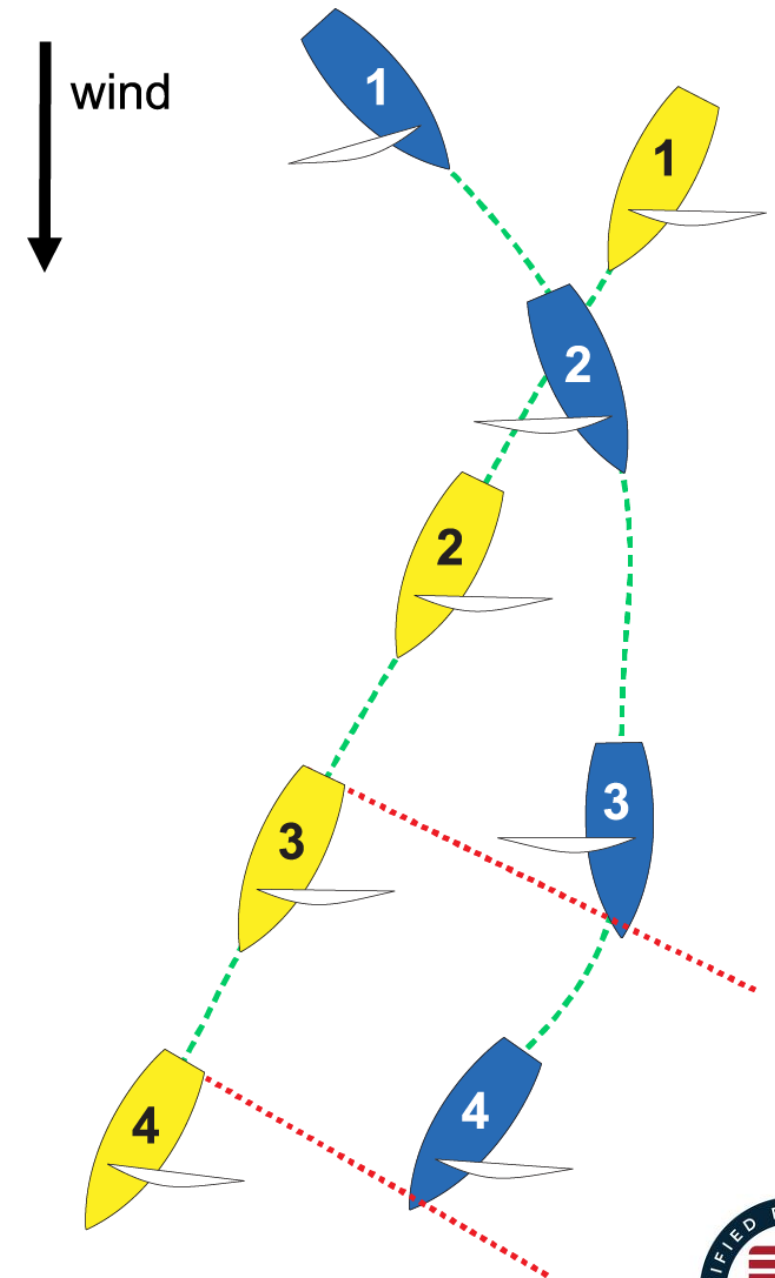
# Downwind Leg

Between positions 1 and 2 Blue (*port*) passes *clear astern* of Yellow (*starboard*).

In position 3, Blue bears away creating an *overlap*. Because Blue & Yellow are both sailing  $> 90^\circ$  off the wind, even though they are on opposite tacks they are *overlapped*.

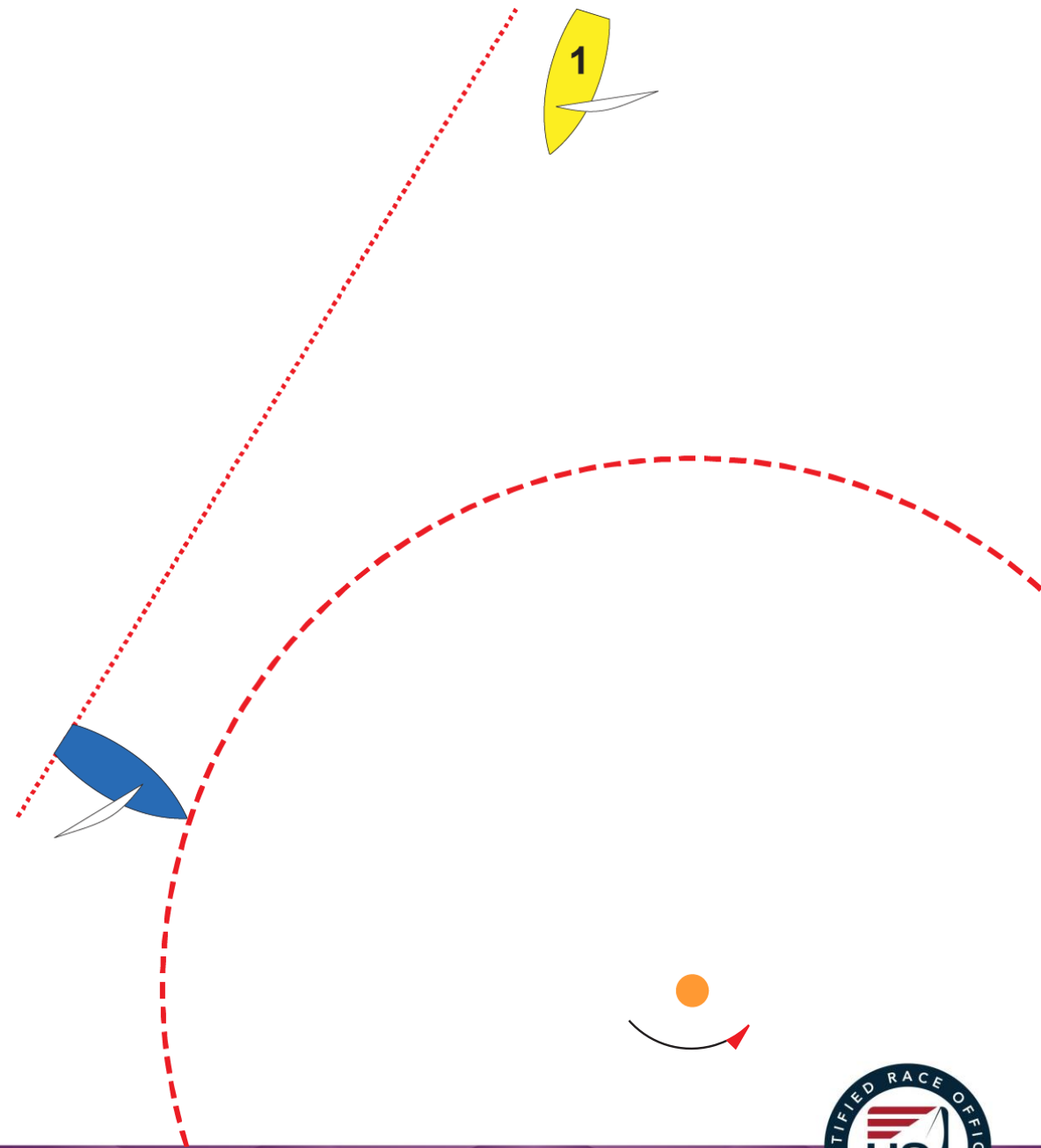
In position 4, Blue gybes. As soon as her boom crosses centerline Blue & Yellow are immediately *overlapped* on the same tack.

Because Blue established her *overlap* from *clear astern* when the boats were on opposite tacks, rule 17 does not apply and Blue can luff to head to wind, but must give Yellow *room* to *keep clear*, under rules 15 and 16.1.



# Leeward Mark

Yellow (*starboard*) is on the opposite *tack* and well behind Blue (*port*), but Yellow has an inside *overlap* when Blue enters the *zone*.



# Leeward Mark

## Giving Mark-*Room* and *Keeping Clear*

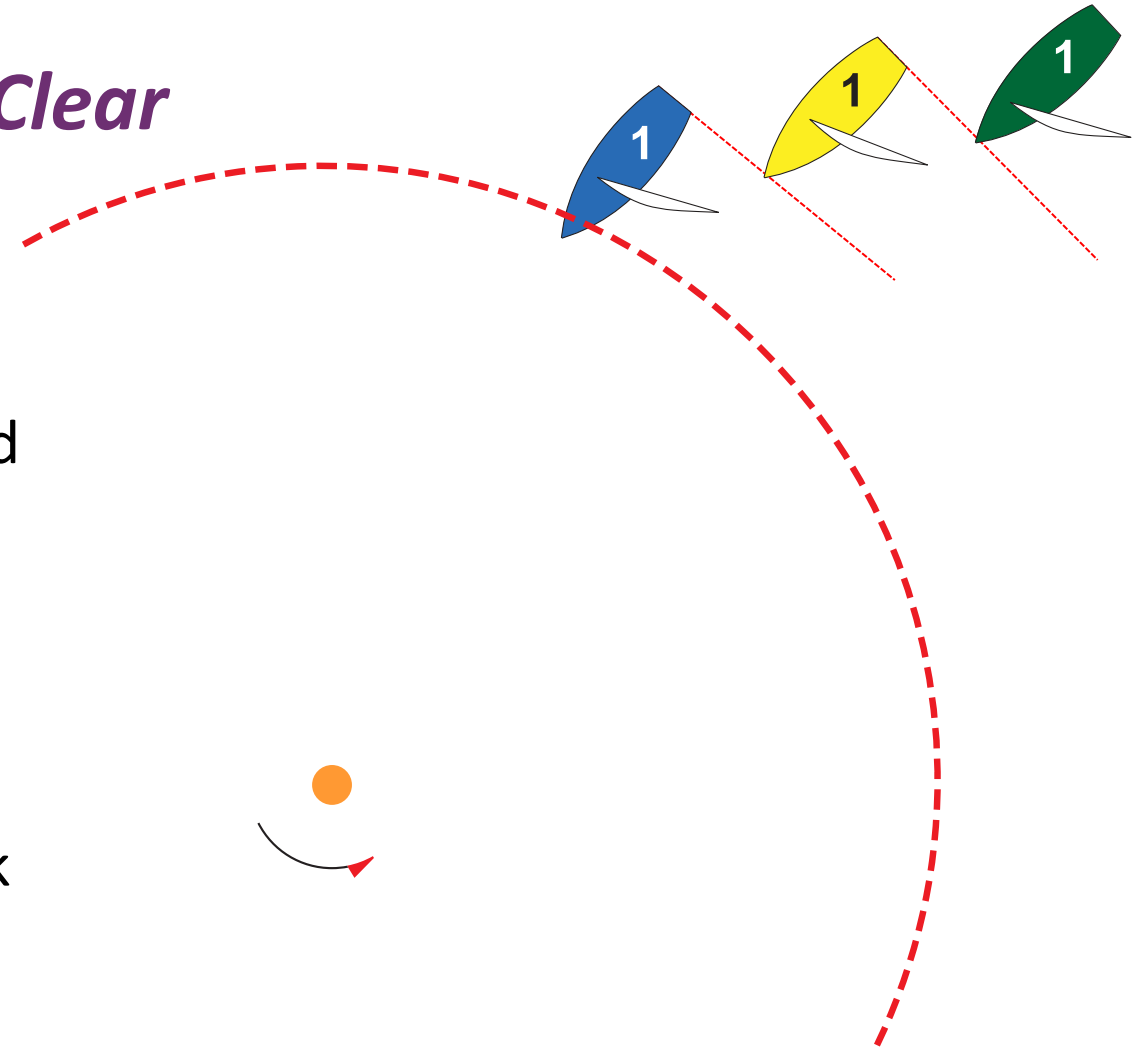
- Green is the inside *windward* boat.
- She does not have right-of-way (rule 11).
- Blue and Yellow must give Green space to sail to the *mark* when her *proper course* is to sail close to it, and then space to round the *mark* as necessary to sail the course. (rule 18.2(b) & def. "*mark-room*")



# Leeward Mark

## Giving Mark-*Room* and *Keeping Clear*

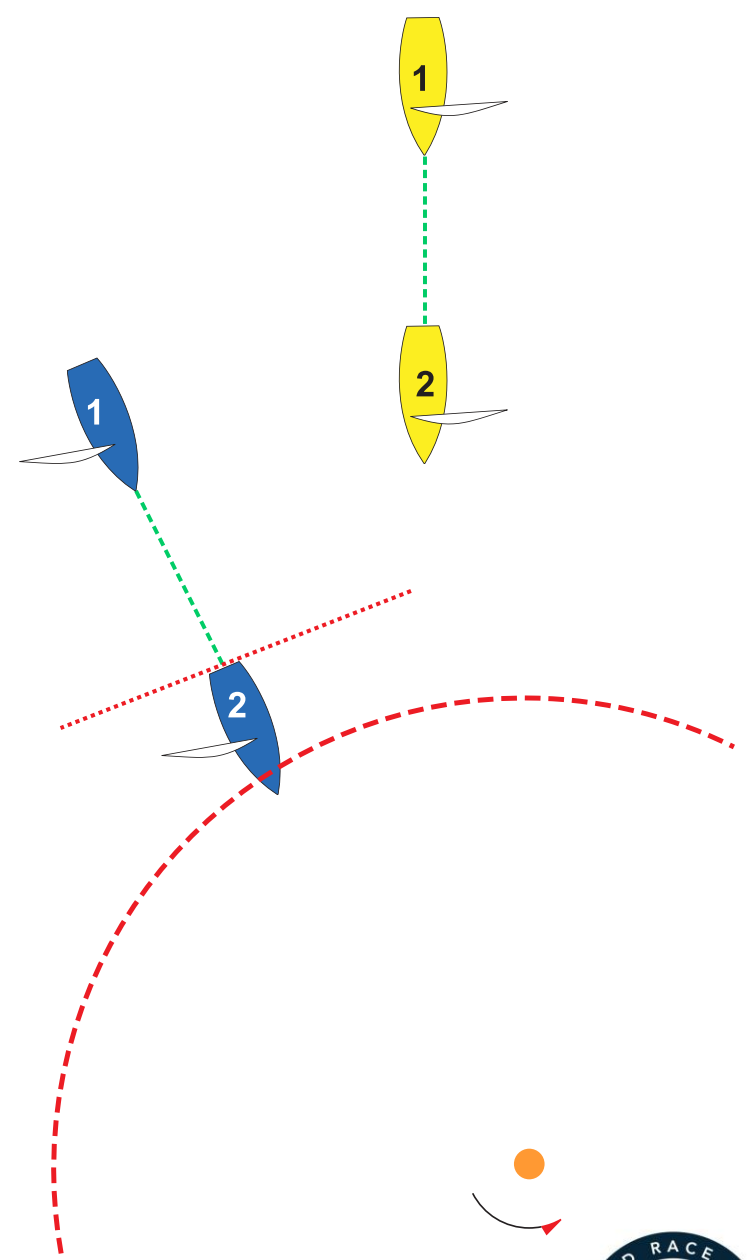
- Green is the inside *leeward* boat.
- She is the right-of-way boat (rule 11).
- Because Yellow is in-between Green and Blue, and overlapped with both, Green is overlapped with Blue (see def. *Clear Astern* and *Clear Ahead; Overlap*).
- Green and Yellow must gybe when it is their *proper course* to so do if the mark is not a gate mark (rule 18.4).





# Leeward Mark

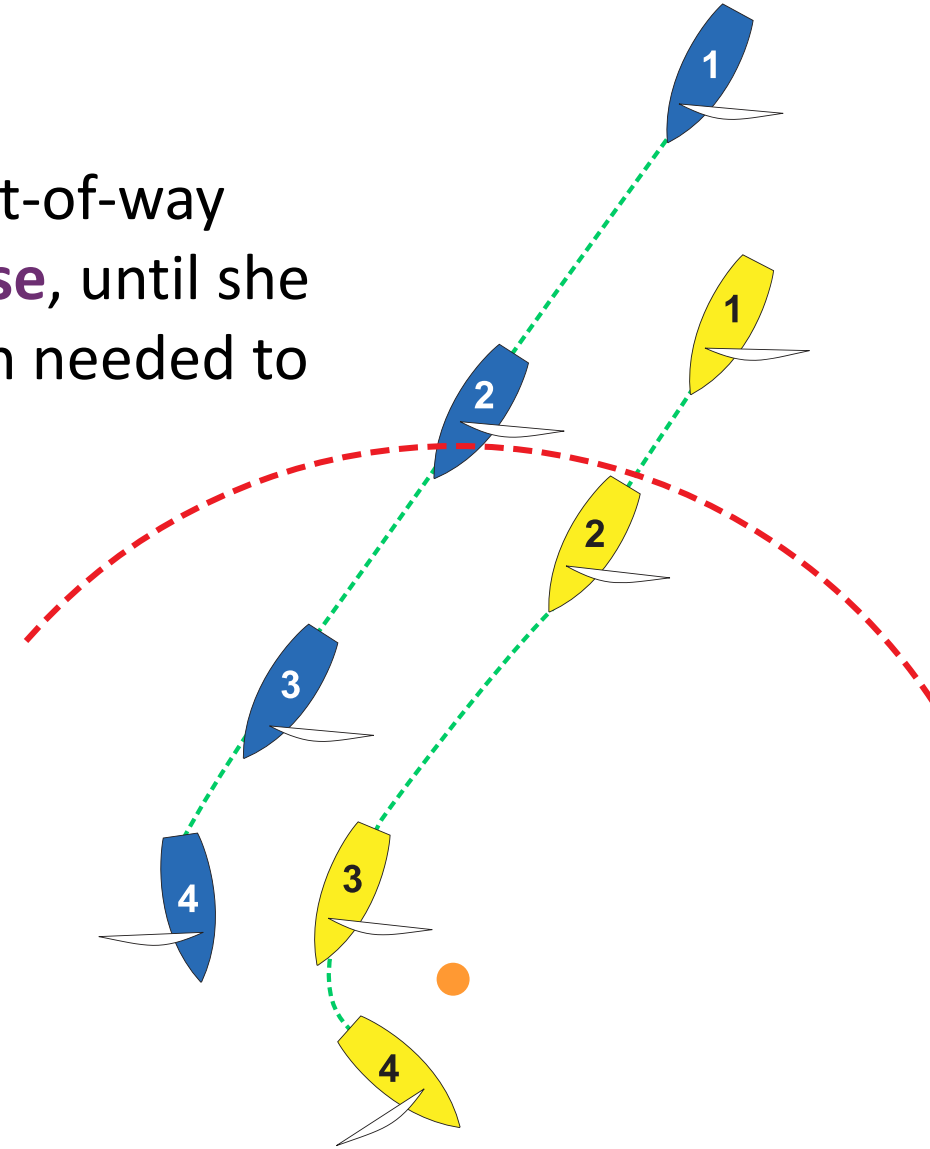
- Position 1:** Yellow (*starboard*) is the right-of-way boat. (rule 10)
- Position 2:** When Blue enters the *zone*, she is *clear ahead* of Yellow. Rule 18.2 (b) requires Yellow to give Blue *mark-room*.



# Leeward Mark

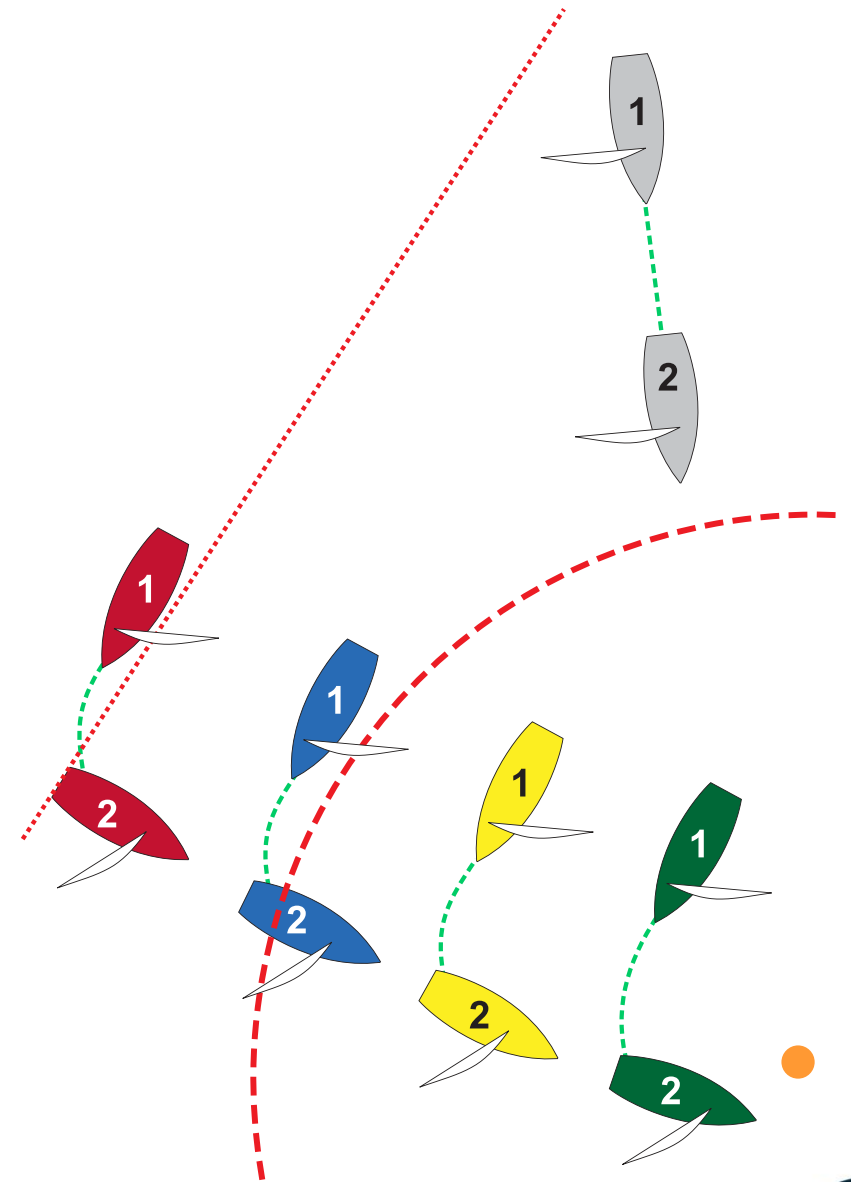
**Under rule 18.4** “when an inside *overlapped* right-of-way boat must gybe at a *mark* to sail her *proper course*, until she gybes she shall sail no farther from the *mark* than needed to sail that course. . . .”

- Yellow must gybe at the *mark*.
- Yellow may not luff away from the *mark* prior to gybing if that takes her farther from the *mark* than her *proper course* (rule 18.4).
- If this is a wing *mark* then gybing right at the *mark* might be Yellow’s *proper course*.
- If this is a leeward *mark* then making a tactical rounding (swing wide-cut close) might be Yellow’s *proper course*.
- If this was a gate *mark* rule 18.4 would not apply.



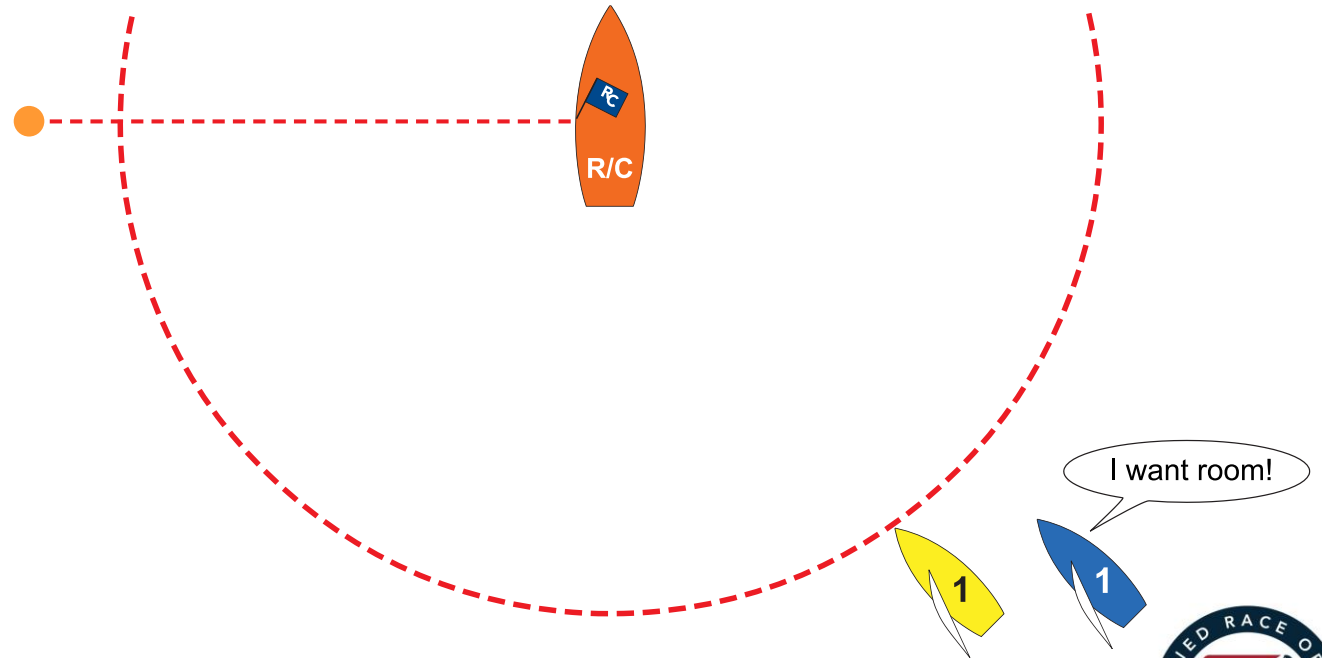
# Leeward Mark

- The positions of Green, Yellow and Blue make it obvious that Red is outside the *zone*.
- At position 2 Gray is *overlapped* with Red. (def. “*overlap*”)
- Gray and Red continue to be *overlapped* when the first of them reaches the *zone*.
- Red must give Gray *mark-room*. (rule 18.2(b) & def. “*mark-room*”)



# The Finish

- The preamble to Section C of Part 2 turns Rule 18 off at a starting *mark*, but it does not turn it off at a finishing *mark*.
- Rule 18.1(a) turns rule 18 off at a windward *mark* (including a windward finishing *mark*) when the two boats are coming into the *mark* on opposite *tacks*.
- Rule 18.2(b) requires Yellow (outside) to give Blue (inside) *mark-room*.

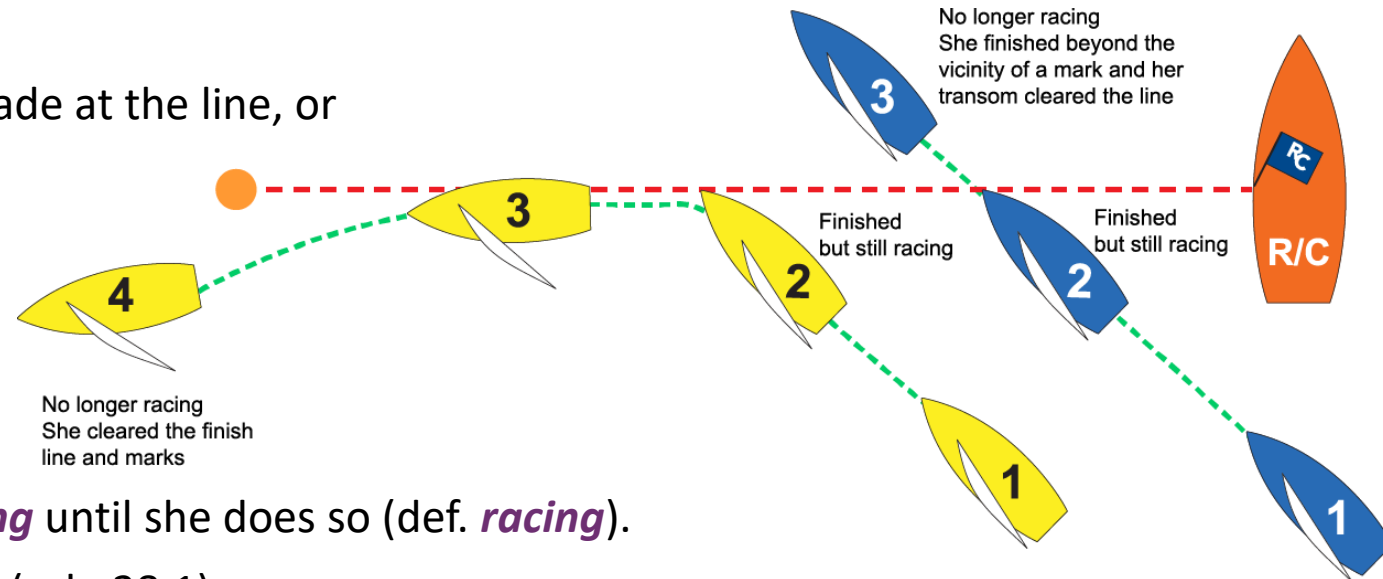


# The Finish

“A boat *finishes* when, after *starting*, and part of her hull crosses the finishing line from the course side. However, she has not *finished* if after crossing the finishing line she

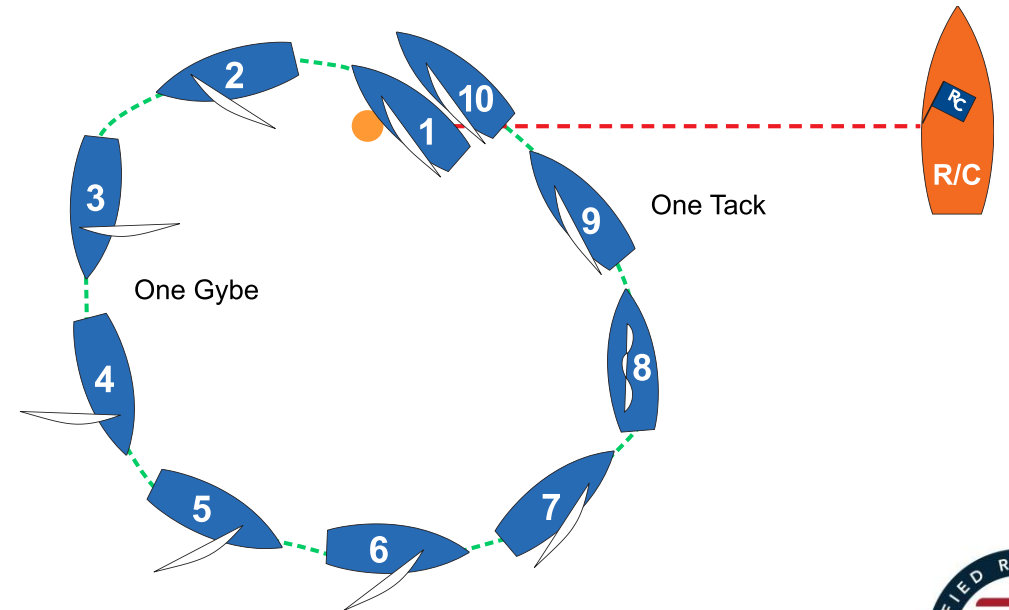
- (a) takes a penalty under rule 44.2
- (b) corrects an error in *sailing the course* made at the line, or
- (c) continues to *sail the course*.”

- A boat *finishes* when she breaks the plane of the finishing line. (Position 2 for both boats.)
- After *finishing* a boat must clear the finishing line and *marks*. She is still *racing* until she does so (def. *racing*).
- She may clear the line in either direction (rule 28.1).
- *A boat clears the finishing line and marks when no part of her hull, crew or equipment is on the line, and no mark is influencing her choice of course.* (Case 127)  
(Position 3 for Blue/Position 4 for Yellow)



# The Finish

- If a boat touches a finishing *mark* before clearing the finishing line, she must complete a One-Turn Penalty and then sail completely to the course side of the line before *finishing*.
- In this example, Blue completed her gybe (position 4) and completed her tack (position 9) then re-crossed the finishing line to *finish*.
- A boat can complete her One-Turn Penalty anywhere, but after completing it she must sail completely to the course side of the line and *finish*.

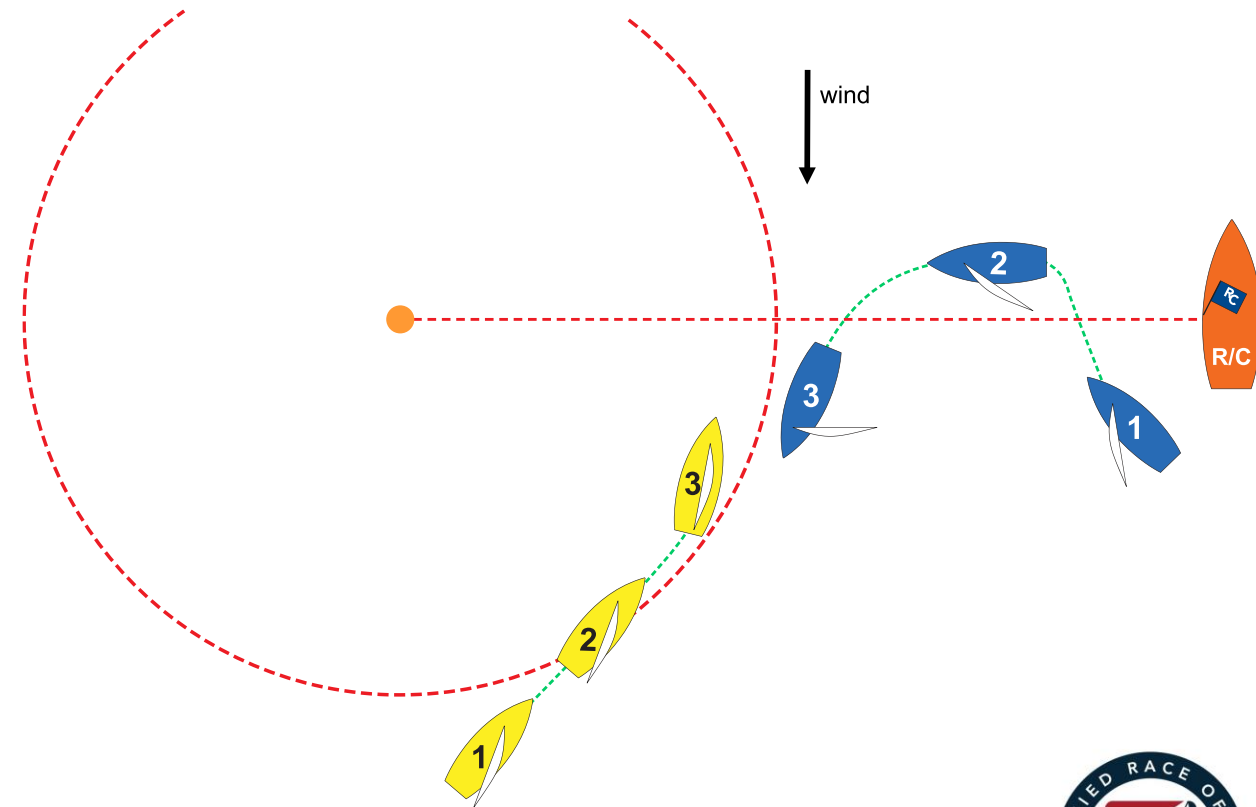


# The Finish

Rule 23.1 – “If reasonably possible, a boat not *racing* shall not interfere with a boat that is *racing*.”

At position 2 Blue has *finished* and is no longer *racing*. At position 3 she interferes with Yellow.

- Interference is adversely affecting a boat’s forward motion or maneuverability.
- This applies both before and after *racing*.
- Be careful where you sail; watch your wind shadow and physical presence.
- The Preamble to Part 2 limits penalties against boats not *racing* to those under rule 14 when injury or serious damage occurs, or to those under rule 23.1.



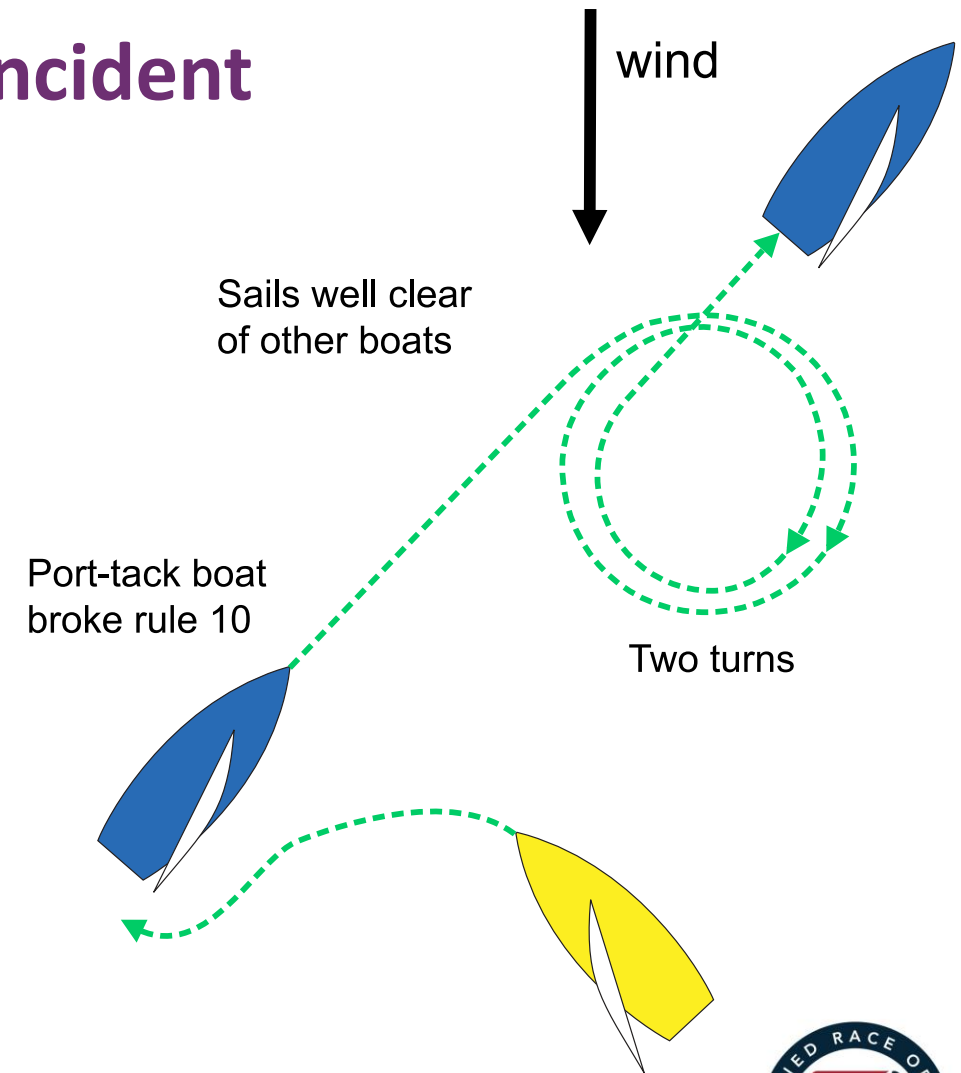
# Penalties

## Rule 44 Penalties at the Time of an Incident

“A boat may take a Two-Turns Penalty when she may have broken one or more rules of Part 2 in an incident while *racing*. . . . However, . . .

(b) if the boat caused injury or serious damage, or despite taking a penalty, she gained a significant advantage in the race or series her penalty is to retire.” (rule 44.1)

“After getting well clear of other boats as soon after the incident as possible, . . .” (rule 44.2)





*Thank you!*

**to the US Sailing Judges Committee  
for creating this presentation!**