

Basic Yacht Racing Rules

9 January 2020,

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Aknowledgements



The following slides are produced by copying a lot of what is available on the internet, and I have not given individual credits to the authors due to the magnitude and difficulties in identifying the original creator, but I hope I will be forgiven because this presentation is aimed at learning and improved safety within our sport.

Agenda

- Safety
- Racing statutes, example
- Race course
- Racing Rules (basic)
- Right of way
- Signals
- Primer on Strategy & Tactics
- Additional slides (nurdy) on racing rules



Boat handling

- Proper boat handling is fundamental.
- Only when boat handling is perfected will you have time to look out of the boat.
- Only then will you have the mental capacity to use the racing rules offensively to make strategic and tactical decisions that will gain you the advantage on the race course.
-still, you can always improve on your boathandling.
- Proper and efficient boat and sail trim is not only for the racer – a well balanced boat is far easier to sail than a sloppy trimmed one.
- Therefore we will stage an evening on

Boat Handling

on **Thursday 20 February, 2020**

in **Panama room** on **Esplanaden**

Safety

- The most obvious: stay in the boat.
- Life jacket
- Dress warm, but do not overdo it – you are going to WORK.



Racing statutes, example NVC (1)

- Every Sunday 20 Oct-19 to 12 Apr-20
- Start 10.00, back abt 13.00
- Racing Rules 2017-2020, J80 rules, except outboard and crew weight limit
- Messages from race officer, Christian Caspersen 2221 2246 or VHF channel 72
- No briefing before races
- No sailing below 2m/s or above 10m/s
- Committee boat Store Pondus from KDY
- Start 3 min sound and J80 flag
2 min sound and P flag
1 min sound and P down
0 min sound and flag #1 down



Racing statutes, example NVC (2)

- Safety:

Minimum 3 crew

All must register in logbook before leaving harbour

All must carry life jacket from when mooring is let go

Emergency:

All boats and RIB are emergency vehicles

MOB is emergency

All racing stops in an emergency

All boats must listen to channel 72

All boats must carry a first aid kit

The race committee shall be advised asap in case of withdrawal

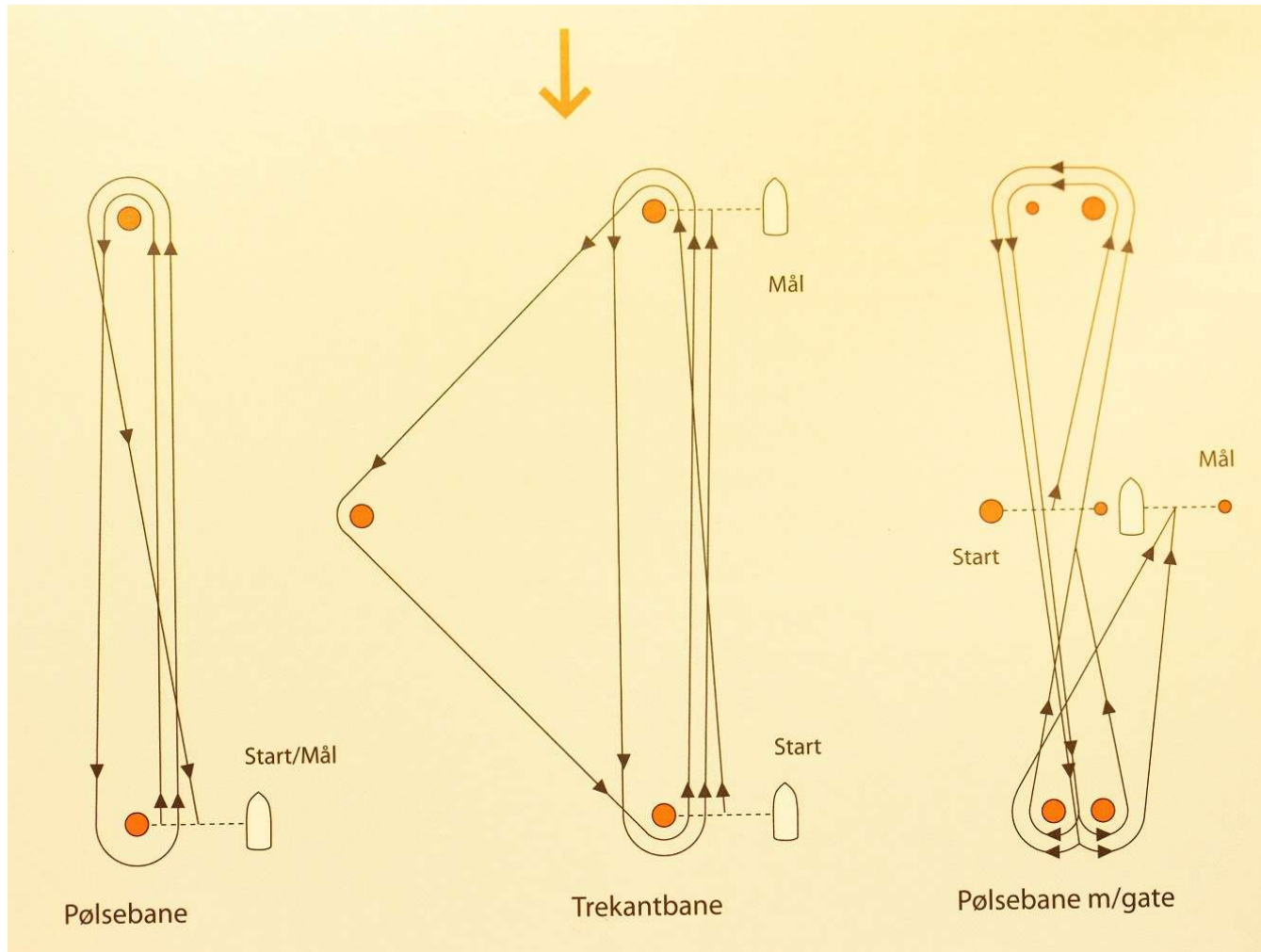


Racing statutes, example (3)

- Penalty: one round
- Time limit: More than 4 minutes after start: DNS
Finish more than 5 minutes after winner: DNF
- Protest flag
- Points system
- Prizes
- Insurance



Race Courses – there are others as well



Crew work

- Several sources, just search on Google or youtube for "J80 crew" or similar.
- Boat handling evening on 20 February



View from committee boat

Racing Rules

Why do you need to know the racing rules?
Look at the next two slides – I expect a protest or two



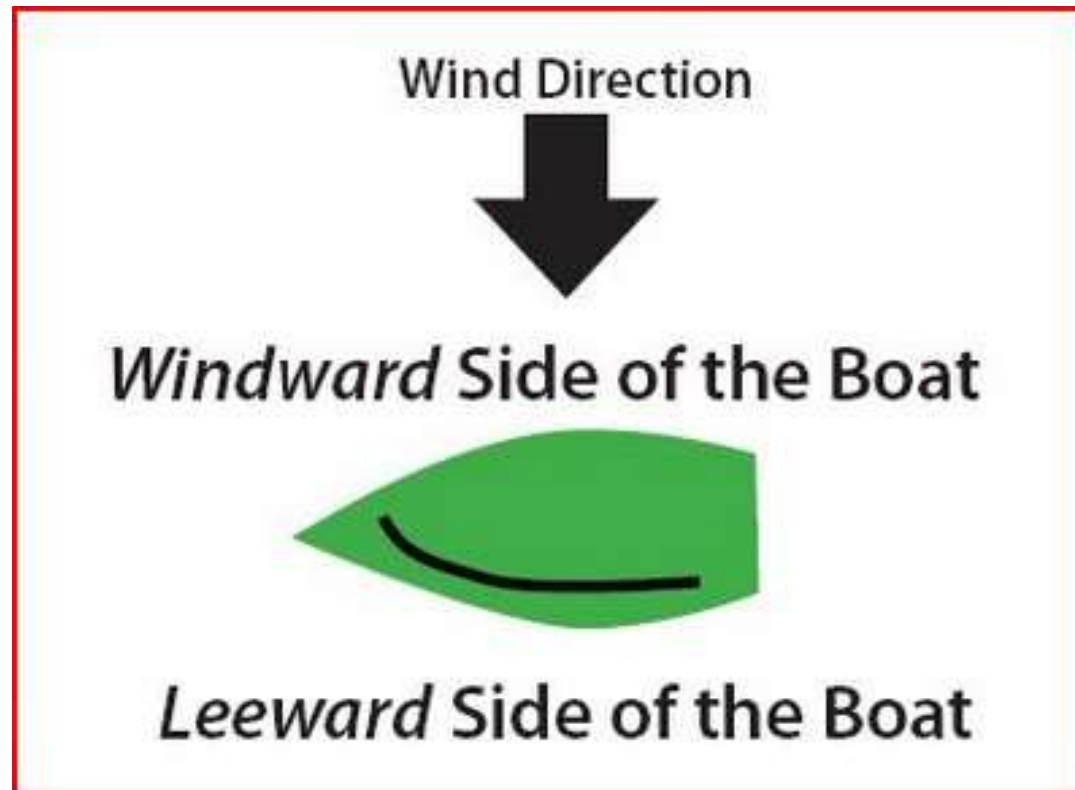
Adrenaline race start



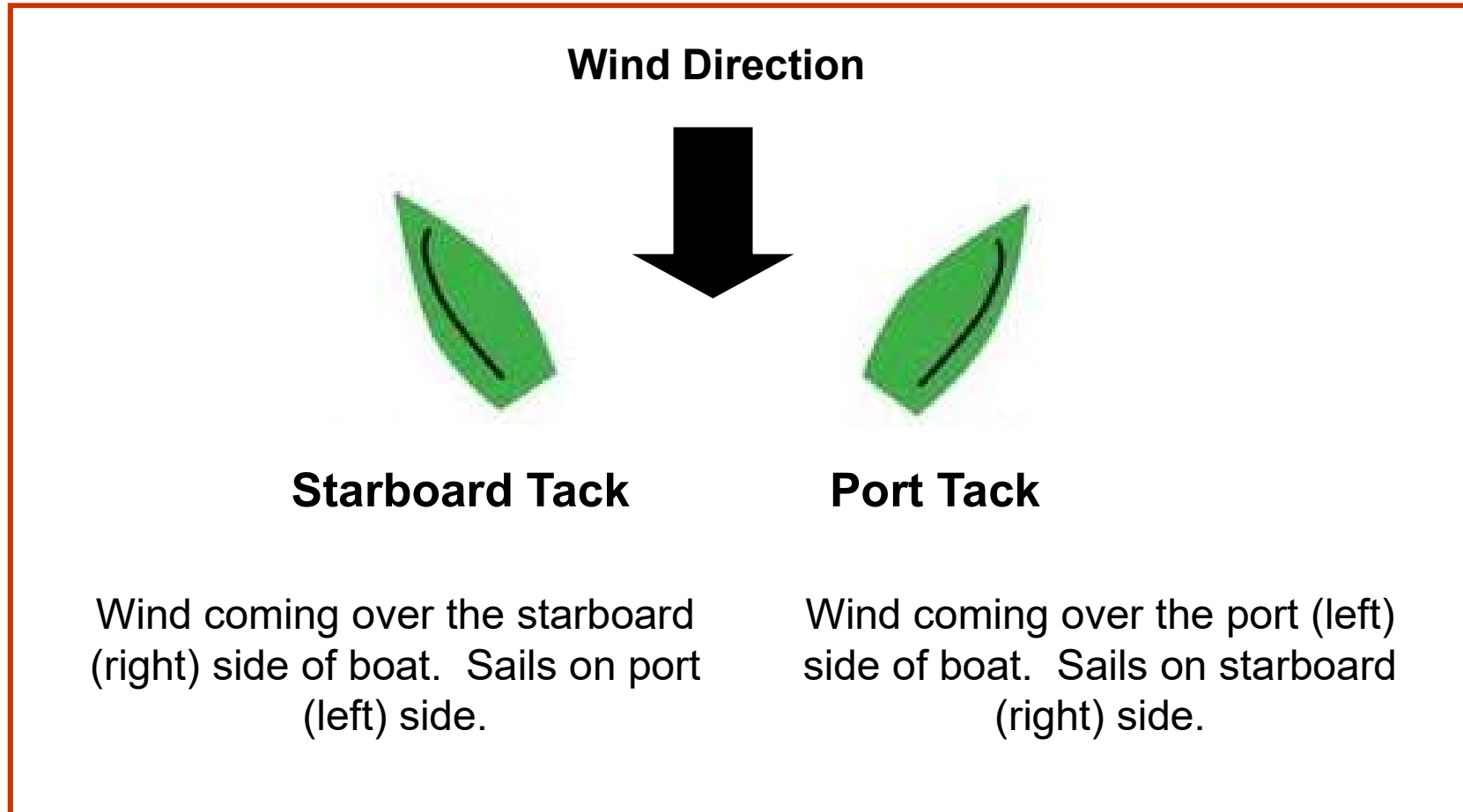
Rules

- Universal rules: *Racing Rules of Sailing* – - available at fx US Sailing, Danish Sailing Association, and others
- Is uncertainty about the rules keeping you from racing? Don't let it! Knowing just a few basic rules will take care of almost all of the situations on the race course.

Review: Windward - Leeward



Review: Starboard - Port Tack



Basic right-of-way rules

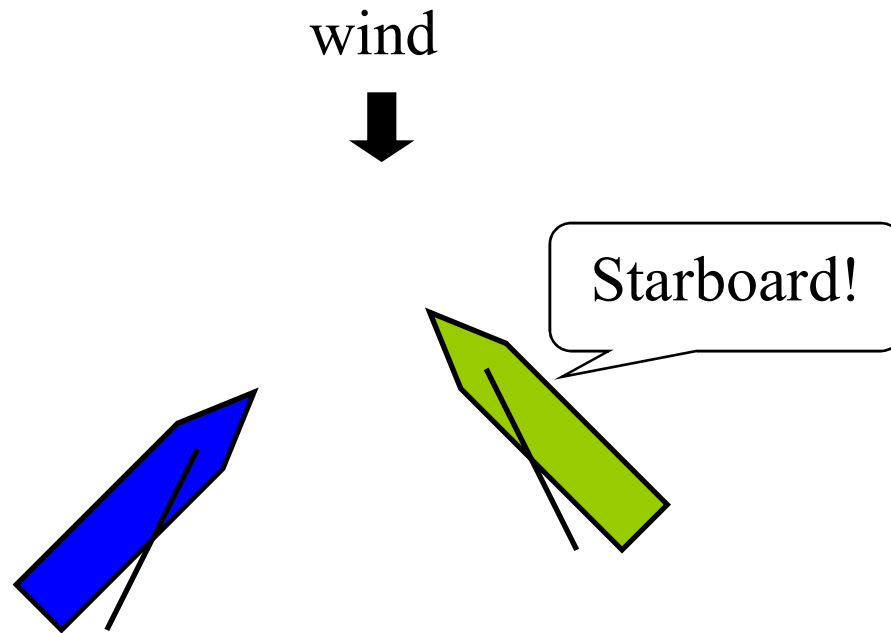
Basic rules everyone should know

- Starboard tack/port tack
- Windward/leeward
- Overtaking
- Rounding gybe or leeward marks

- Don't hit other boats, even if you have the right-of-way!

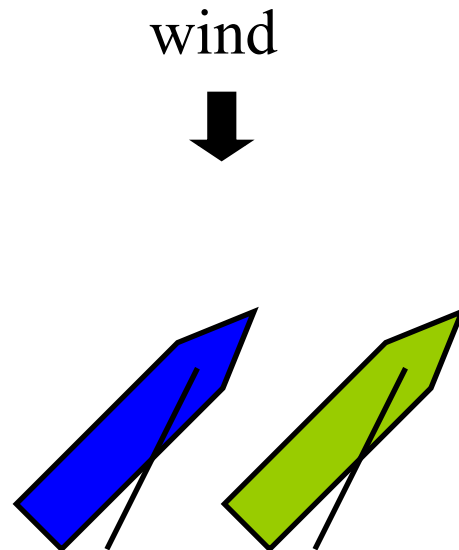
Basic Rules 1

On opposite tacks, a boat on starboard tack boat has right of way over a port tack boat.



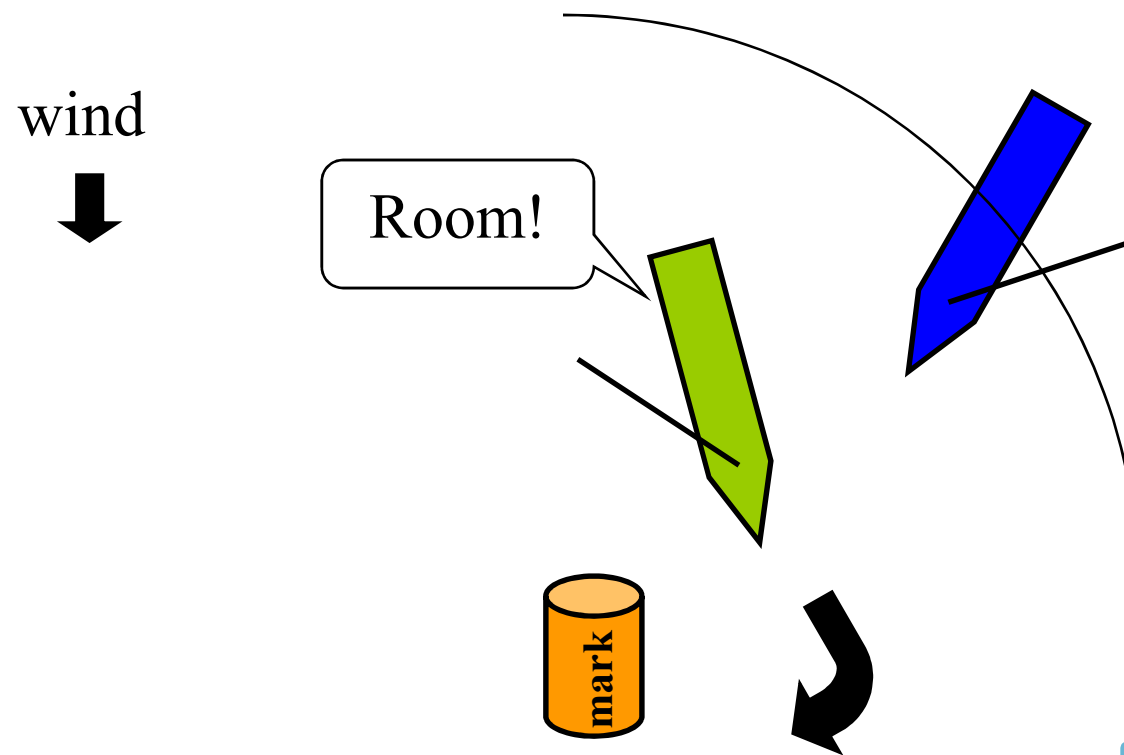
Basic Rules 2

On the same tack, a boat to leeward has right of way over a windward boat.



Basic Rules 3

When rounding a leeward mark, an inside boat must always be given room if the boats were overlapped 3 boat lengths from the mark.



Basic Rules 4

- A boat which is tacking or gybing must keep clear of one that is not
- A boat clear astern must keep clear of boat ahead on the same tack
- When a right-of-way boat changes course, she must give other boats room to keep clear

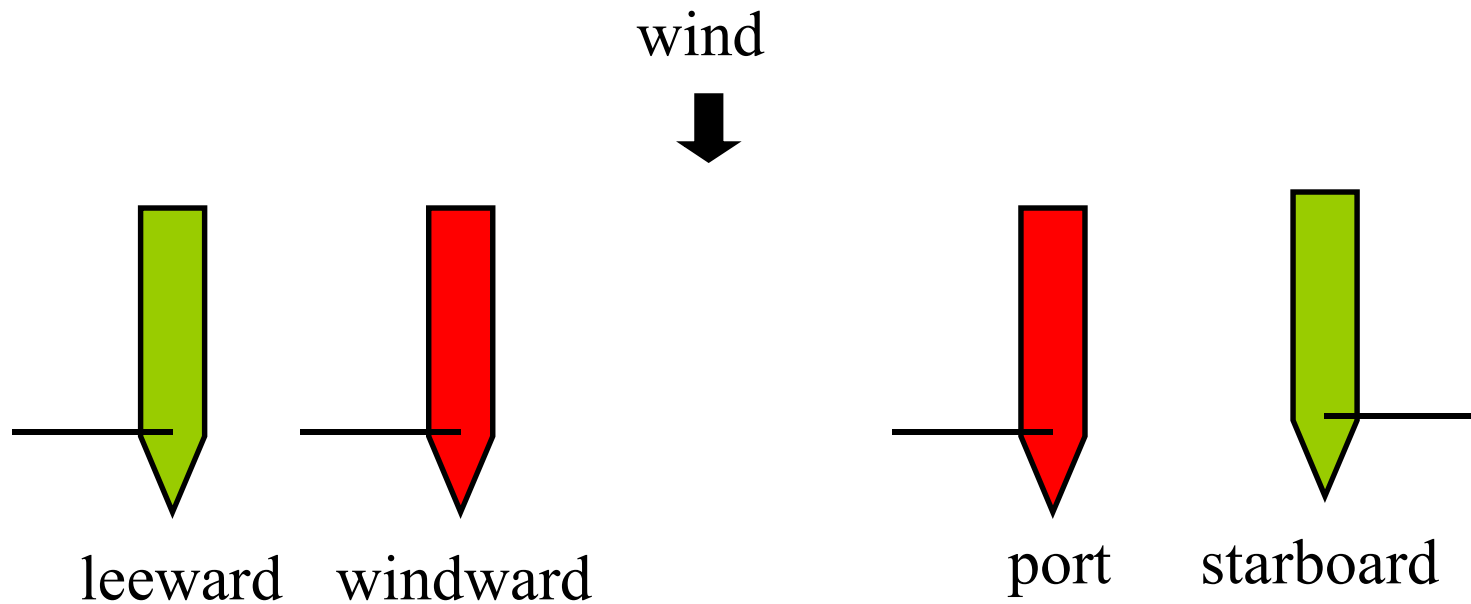
Basic Rules 5

What do I do if I break a rule?

- If you break a right-of-way rule, you must do **two turns (or one if racing statutes change general rule)** promptly after the incident
- If you touch a mark, you must do **one turn** promptly
- If there was serious damage, you must retire
- You must keep clear of other boats when doing your penalty turns

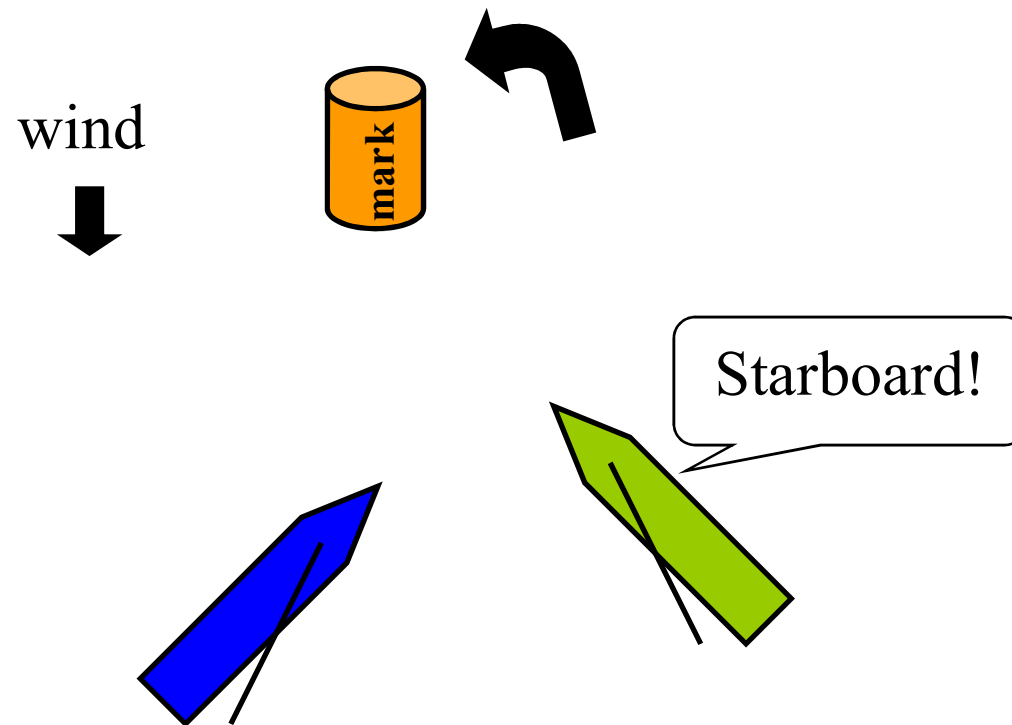
Running Situations

Tack is defined by which side the boom is on



Windward Mark Rounding

At a windward mark, a boat on starboard tack has right of way over a port tack boat, even if overlapped.








Video

- How not to approach a windward mark
https://www.youtube.com/watch?v=4Dw0srHU9_A
- The Lowdown on 2017-2020 Sailing Rules (1 hour review of rule changes) <https://www.youtube.com/watch?v=fcx5gpD9JRE>



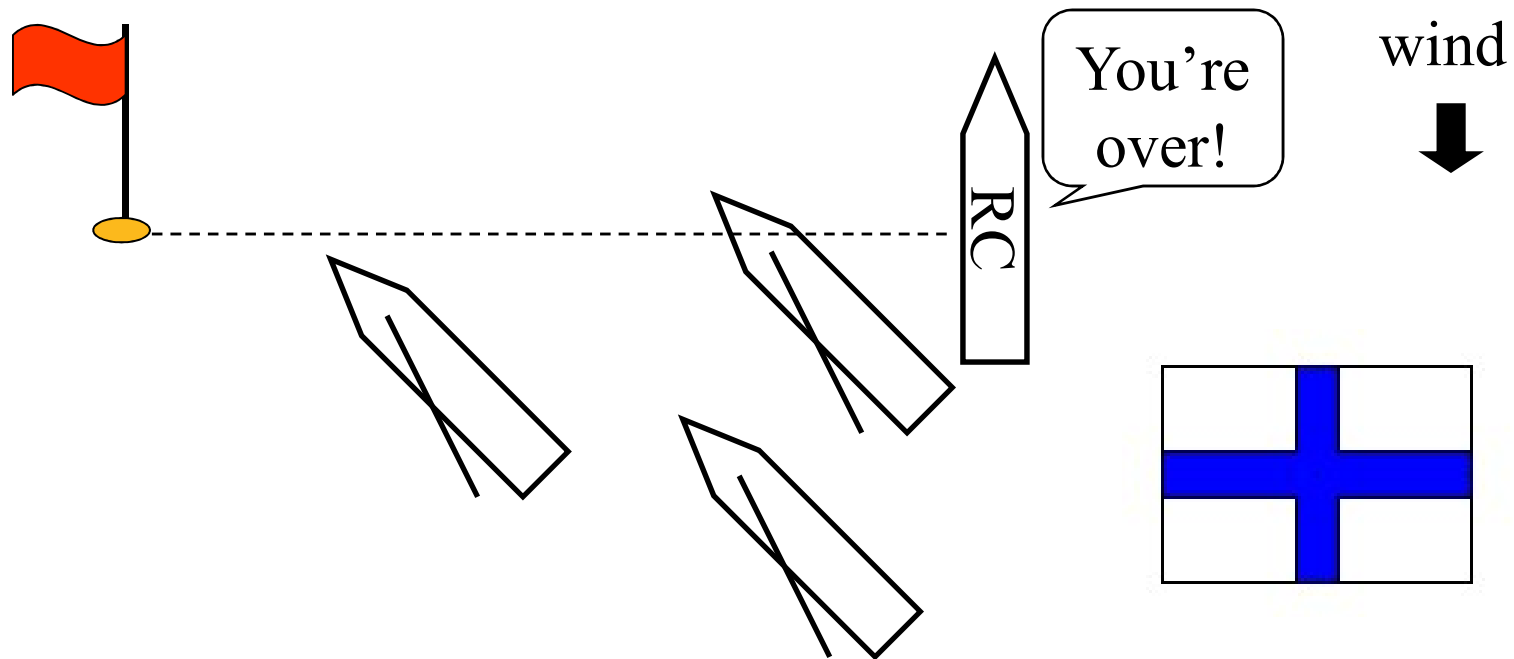
Flag signals

		Flag Horn
Individual Recall		↑ ●
General Recall		↑ ● ●
Postponed		↑ ● ●

		Flag Horn
Race is Abandoned		↑ ● ● ●
Course has been shortened		↑ ● ●

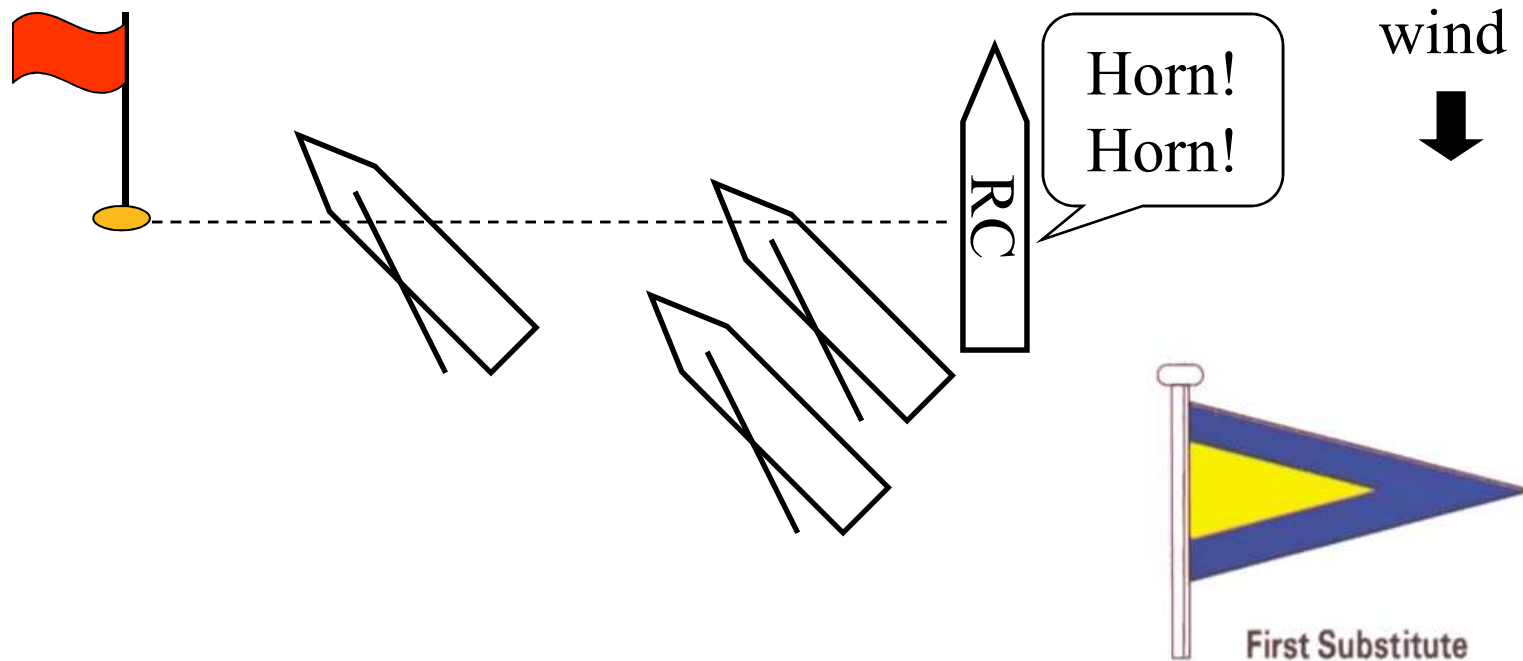
Individual Recall

The RC will raise the X flag if a boat is over the line at the start.



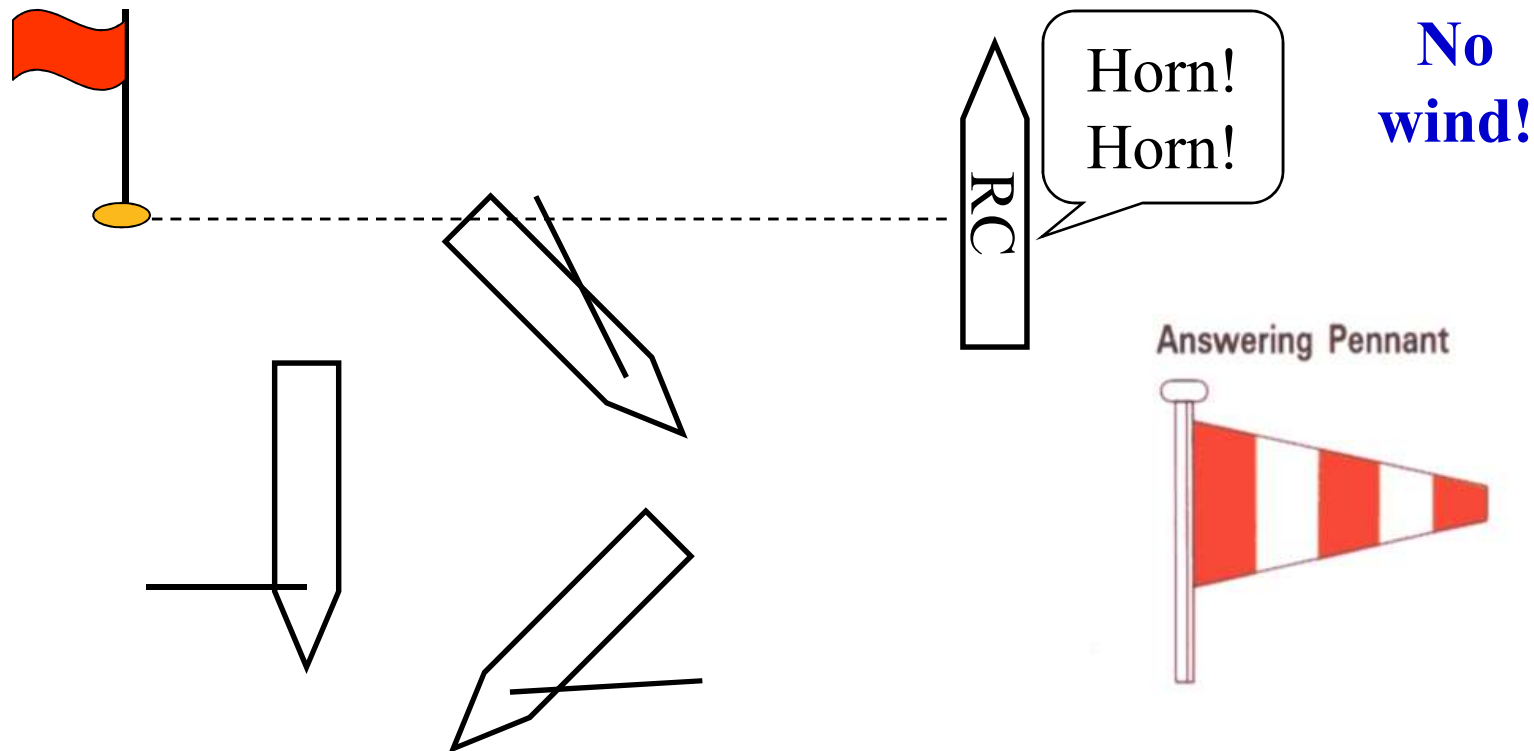
General Recall

The RC may signal a general recall if many boats are over the line at the start.



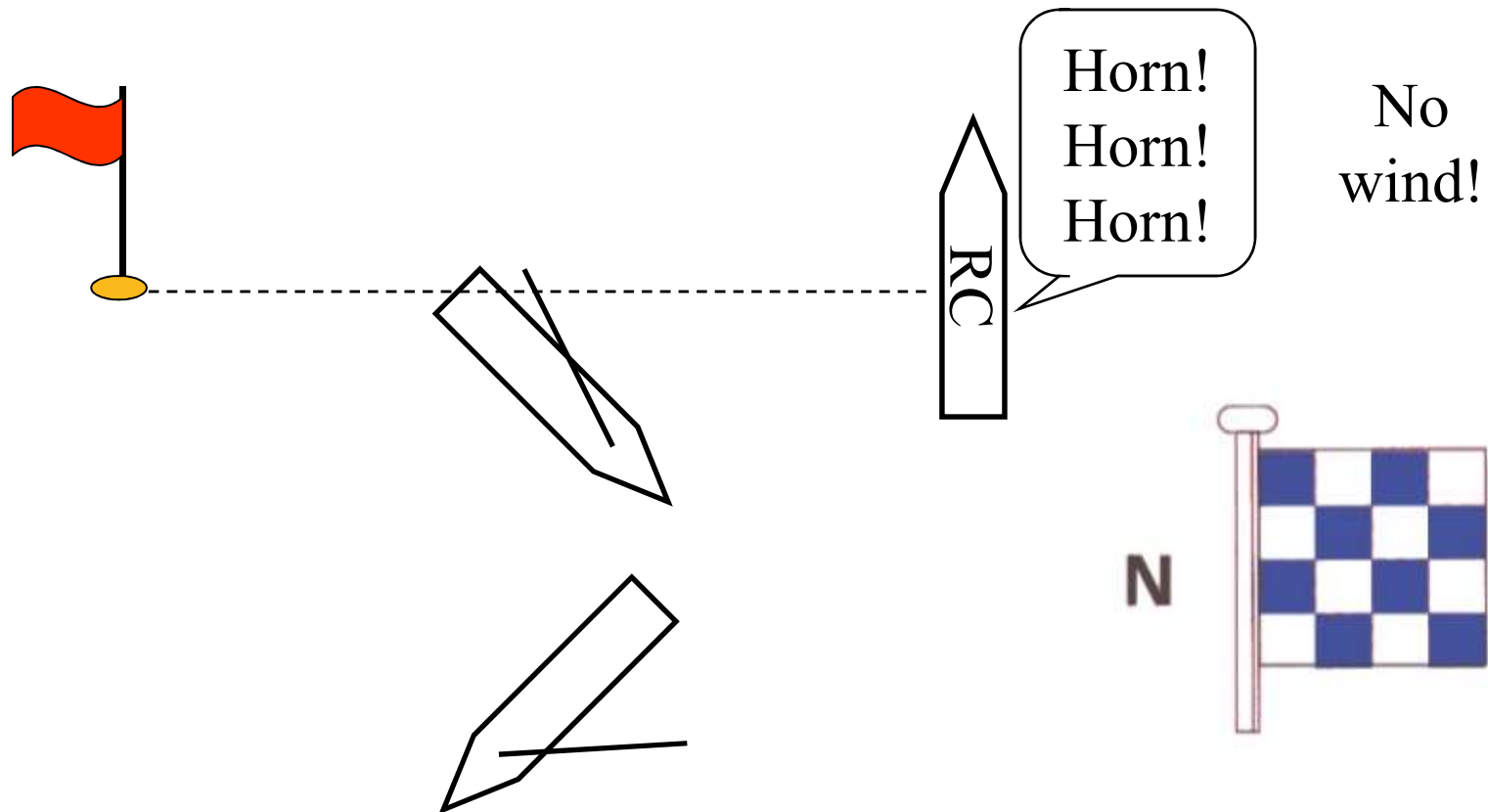
Postpone

The RC may postpone the race for lack of wind, changing wind direction, etc.



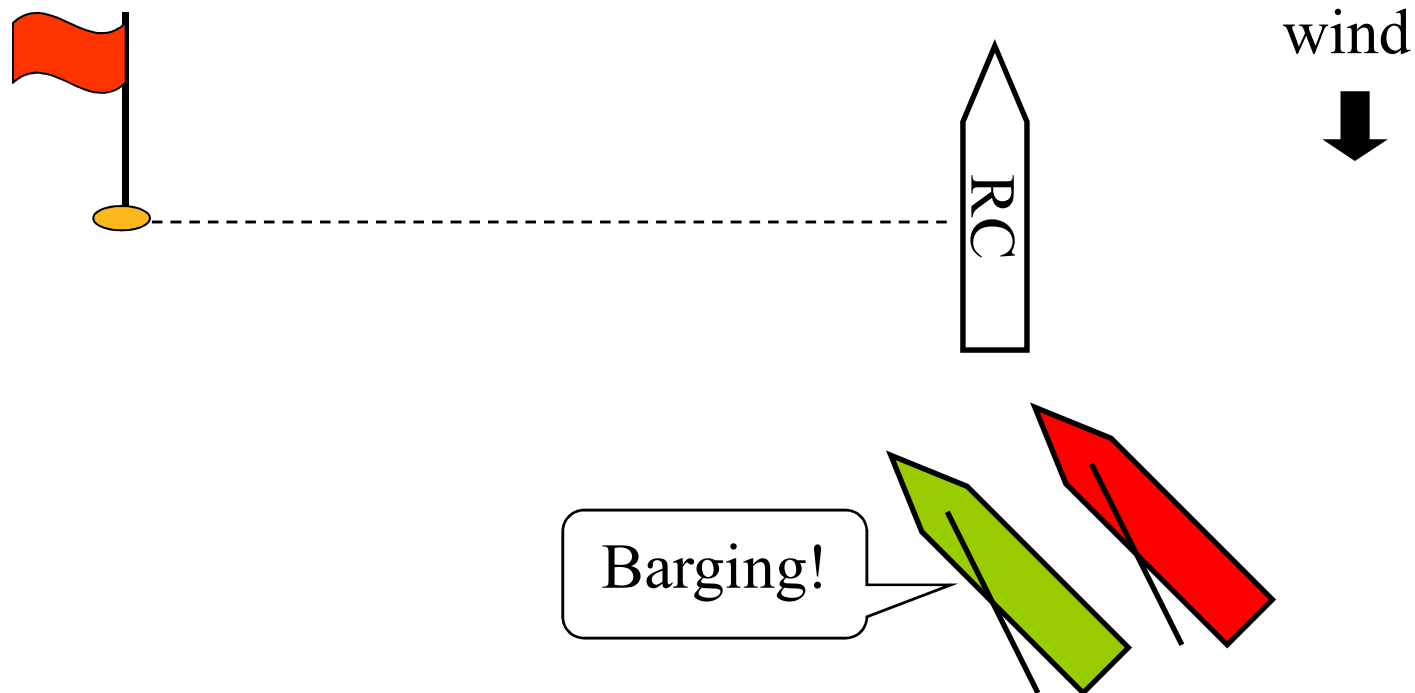
Abandon the Race

The RC may abandon the race for lack of wind, storms, etc.



Barging – not allowed

An inside boat is not entitled to room at a start mark



General Summary of Rules

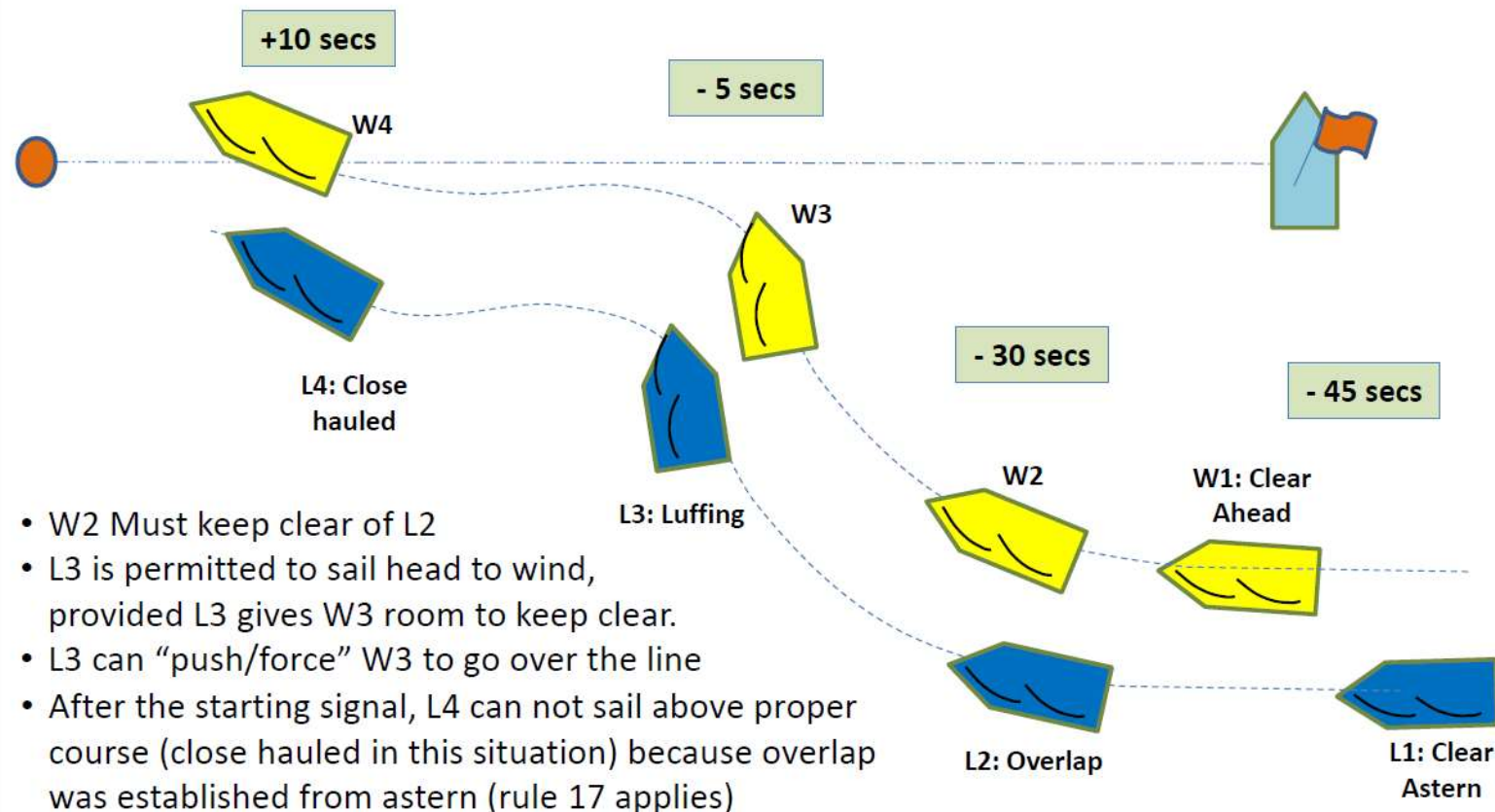
- Port keeps clear of starboard.
- Windward keeps clear of leeward
- The boat astern keeps clear of the boat ahead.
- A boat tacking keeps clear of one that is not.
- **Avoid collisions.**
- If you gain right of way or change course, give the other boat time to keep clear.
- The inside boat(s) at three boat lengths from the mark is entitled to room to round the mark, if overlapped.
- If you have violated one, take a penalty

For Kids and Small Boat Tacticians

1. Don't hit other boats. Collisions are slow and arguments are slower.
2. Port tack boat usually has to stay out of the way of everyone else.
3. Windward boats must stay away from leeward boats.
4. The inside boat gets to go around the mark first.
5. Don't hit marks. Doing circles is slow.
6. Don't hit the committee boat. First, it is a mark and second, it really makes them mad.

Luffing

Overlapped From Astern (Luffing)

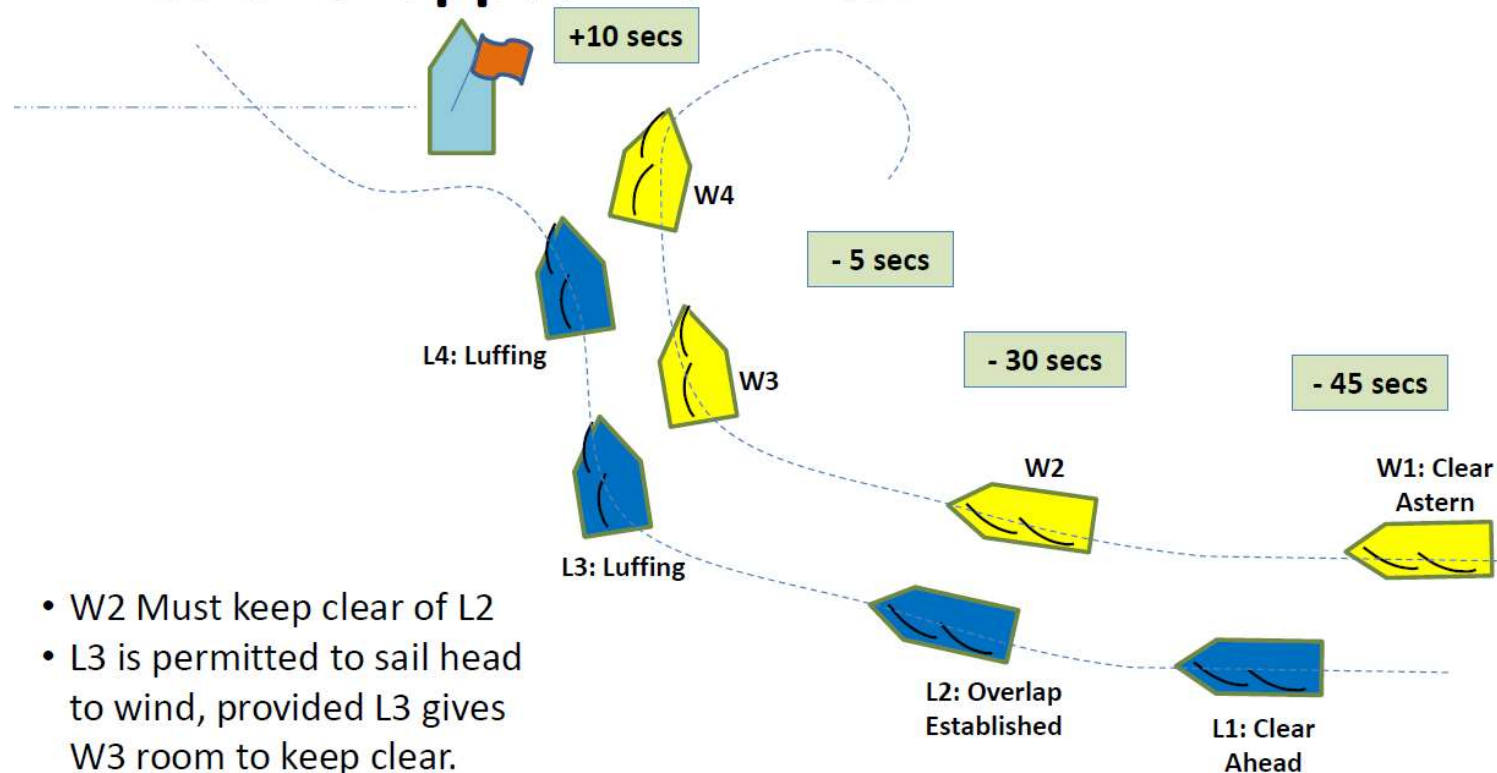


- W2 Must keep clear of L2
- L3 is permitted to sail head to wind, provided L3 gives W3 room to keep clear.
- L3 can “push/force” W3 to go over the line
- After the starting signal, L4 can not sail above proper course (close hauled in this situation) because overlap was established from astern (rule 17 applies)
- W4 does not have the right to dip below the line to start if it means interfering with L4
- L4 can sail temporarily above close hauled to “make the mark” as this would be considered a proper course for the situation

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Luffing

Not Overlapped From Astern

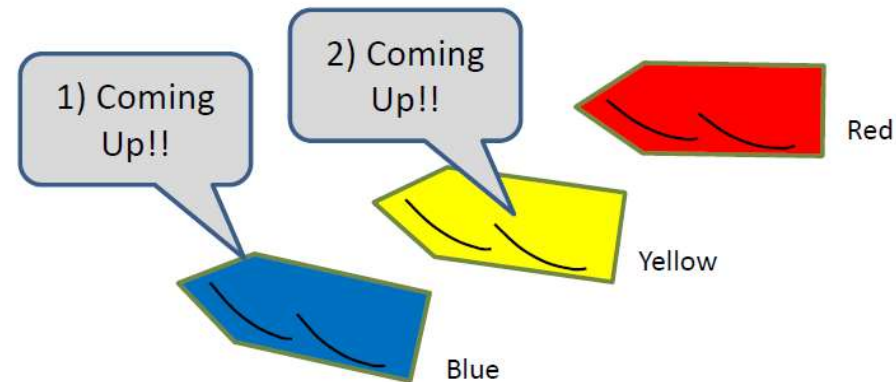


- W2 Must keep clear of L2
- L3 is permitted to sail head to wind, provided L3 gives W3 room to keep clear.
- After the starting signal, L4 can continue to sail above proper course (close hauled in this situation) because L did not become overlapped from being in a clear astern position (rule 17 does not apply). W was the clear astern boat. Hence, W4 does not get “mark room”.

8

Luffing

The sandwich:



- Red is overlapped with blue because red is overlapped with yellow which is overlapped with blue (transitive property of overlap – See definitions section of the RRS.
- Blue has to give time for yellow to stay clear, yellow has to give time for red to stay clear
- If red does not respond then only red has to do a penalty. Yellow does not since red becomes an obstruction

Primer on Strategy & Tactics

Strategy – the overall approach
Tactics – boat against boat situations

Strategy & Tactics

- Strategy – the overall approach

- e.g. Determined by risk willingness

Do we buy sails primarily for light or windy condition

Do we make aggressive starts (with risk of DSQ)

Do we sail conservative upwind, staying in the middle of the fleet, or do we go on the lay-line

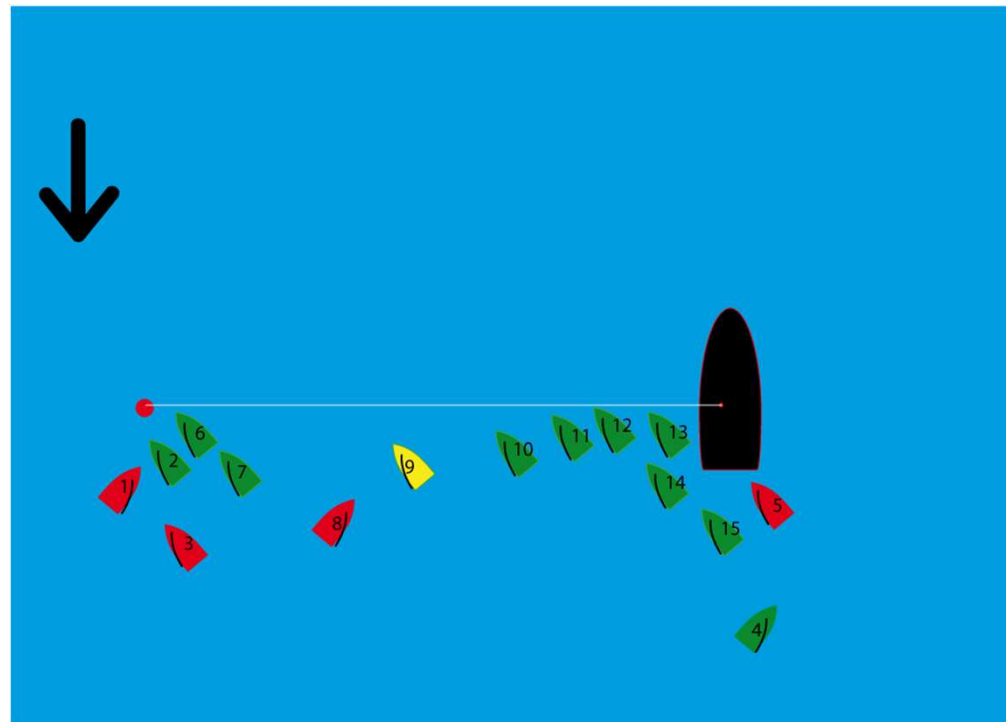
Risk willingness example

- Do we buy boat / sails primarily for light or windy condition

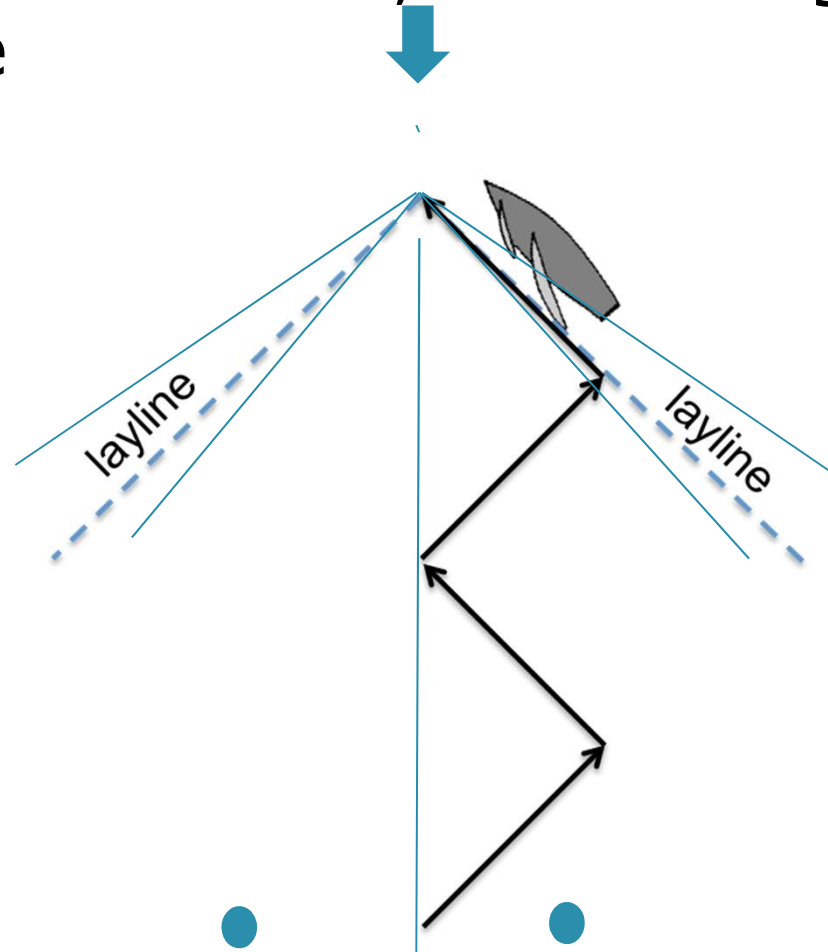


Do we make aggressive starts (with risk of DSQ)

- Margin in timing
- Seek the favored end of the line in the midst of the crowd – or go for free air
- How big advantage at one end versus risk of ending in second or third line with disturbed air

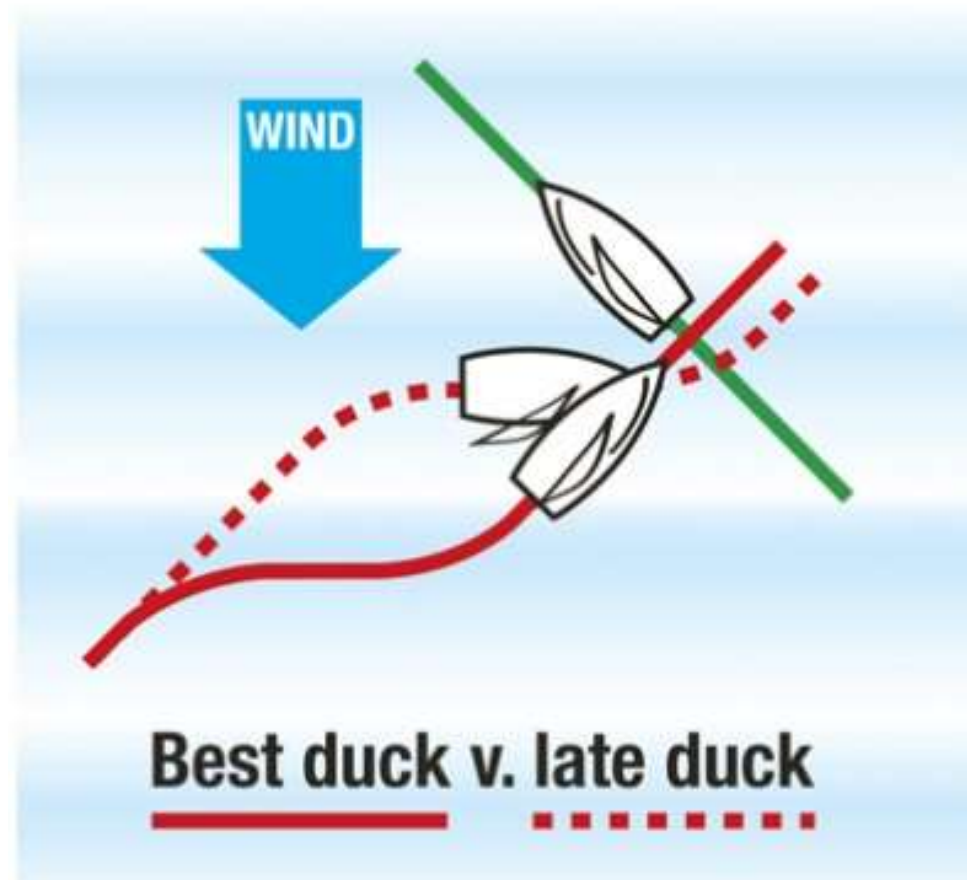


Do we sail conservative upwind, staying in the middle of the fleet, or do we go on the lay-line



- Watch <http://raceqs.com/podcast/8-a-short-introduction-to-leverage-risk-and-reward-on-the-upwind-leg/>

Duck a starboard tack boat



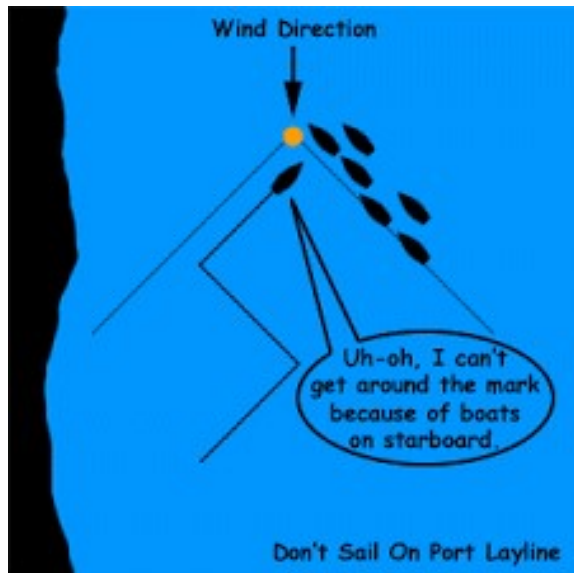
© Illustrations by Jonty Sherwill

Will he keep clear?

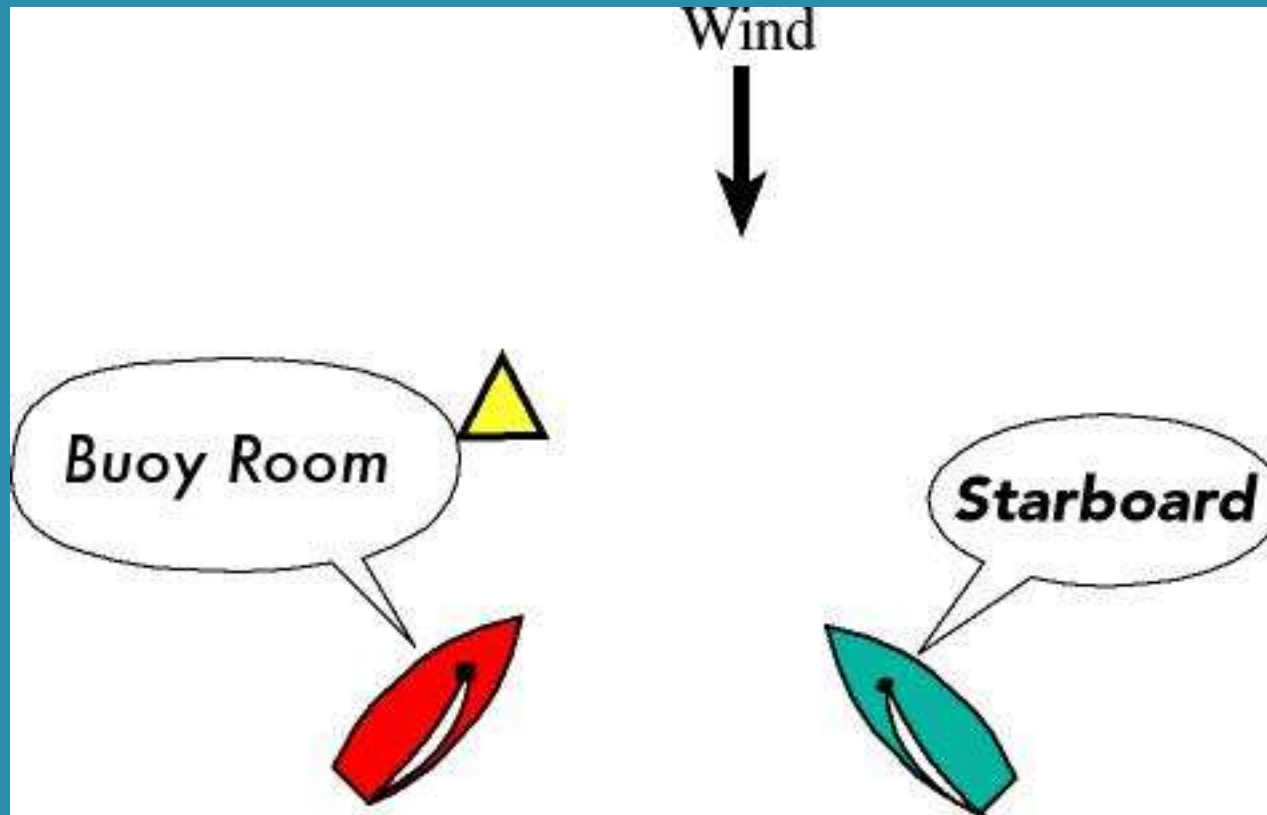


Tactics – boat against boat situations

- e.g. Do we make another tack to approach the mark on starboard
- Do we not tack on a wind shift
- Do we sail high-slow vs. low-fast
- Do we take-down genacker early to slow down and get the inner track if we are overlapped



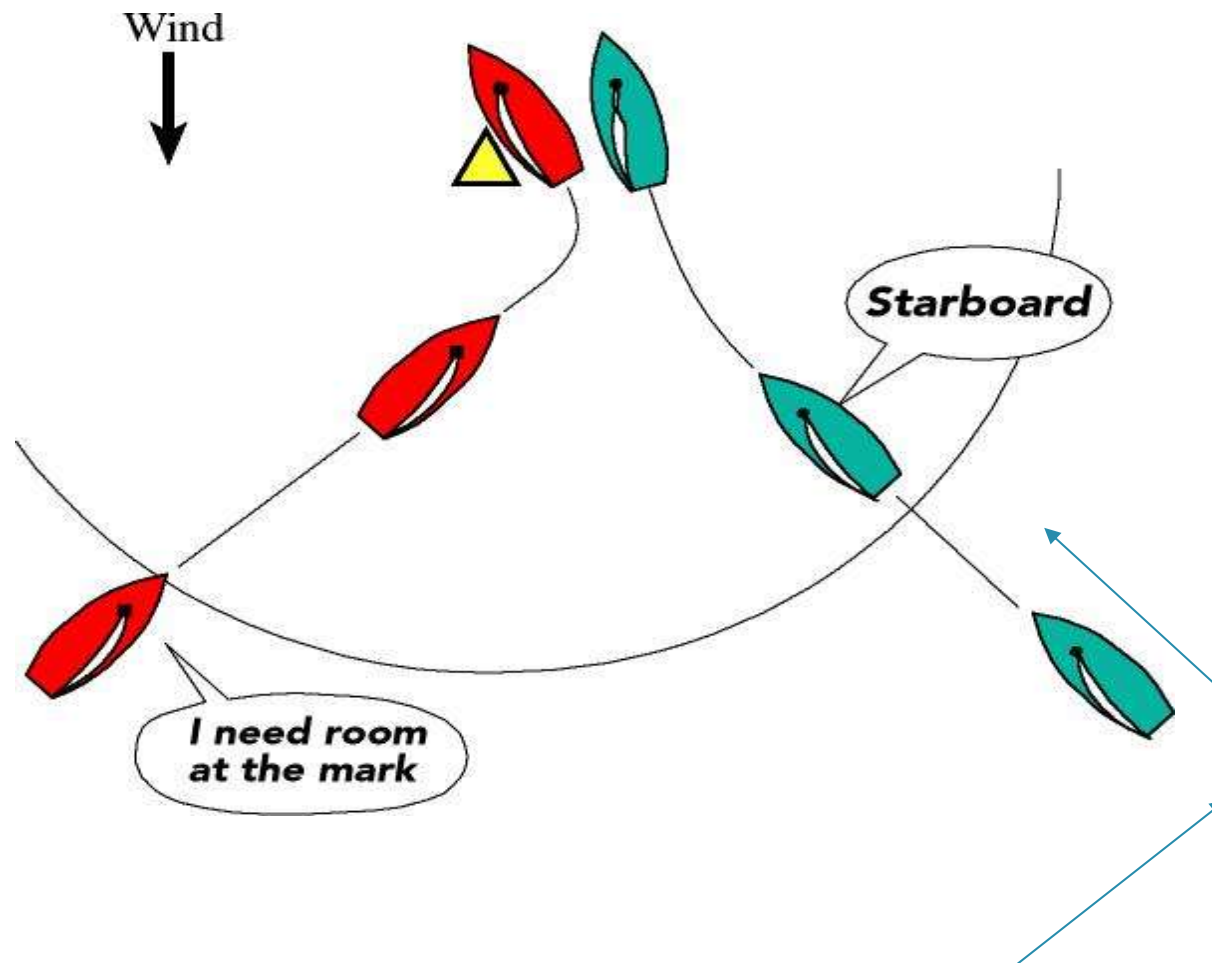
Mark-Room at the Windward Mark



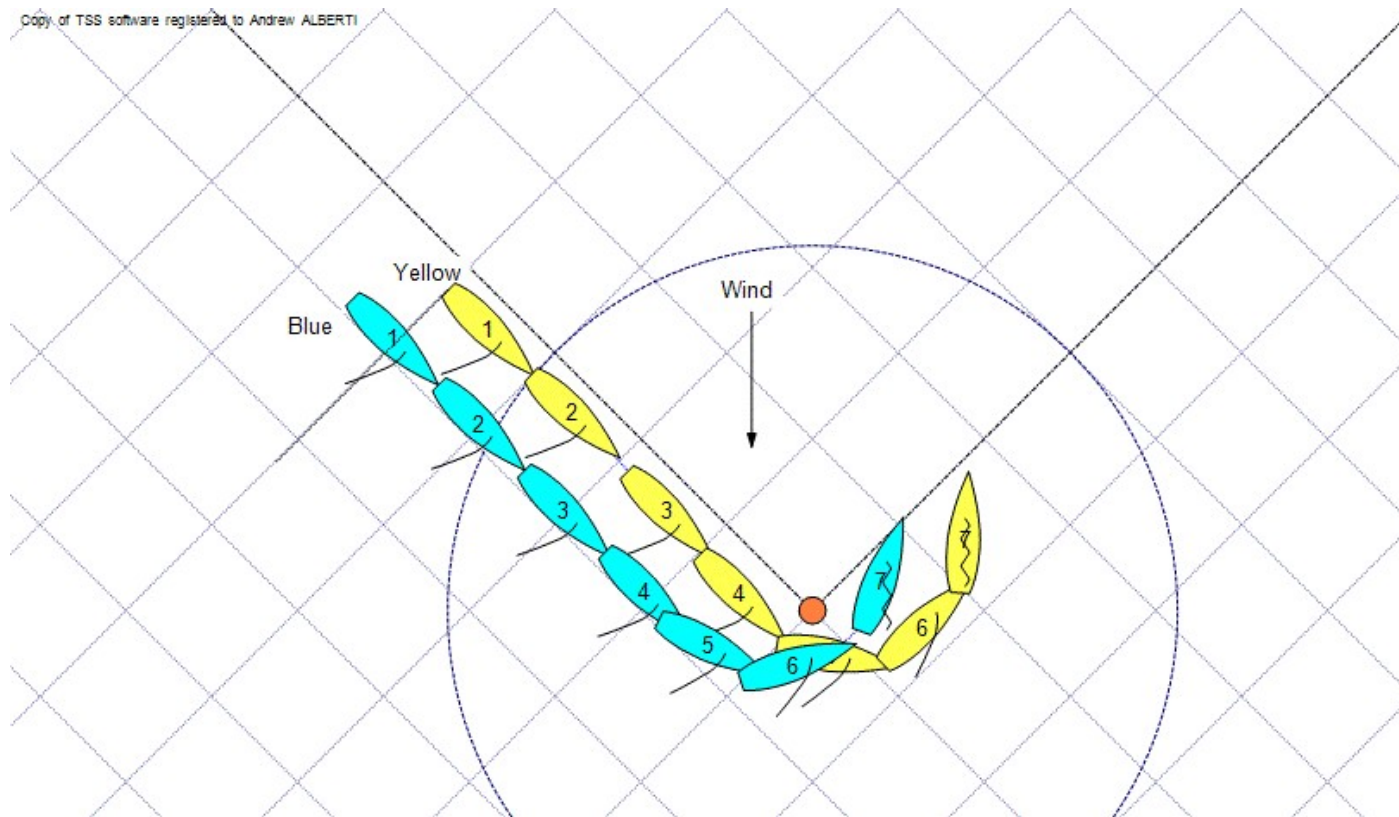
Rounding the weather mark



Do we make another tack to approach the mark on starboard

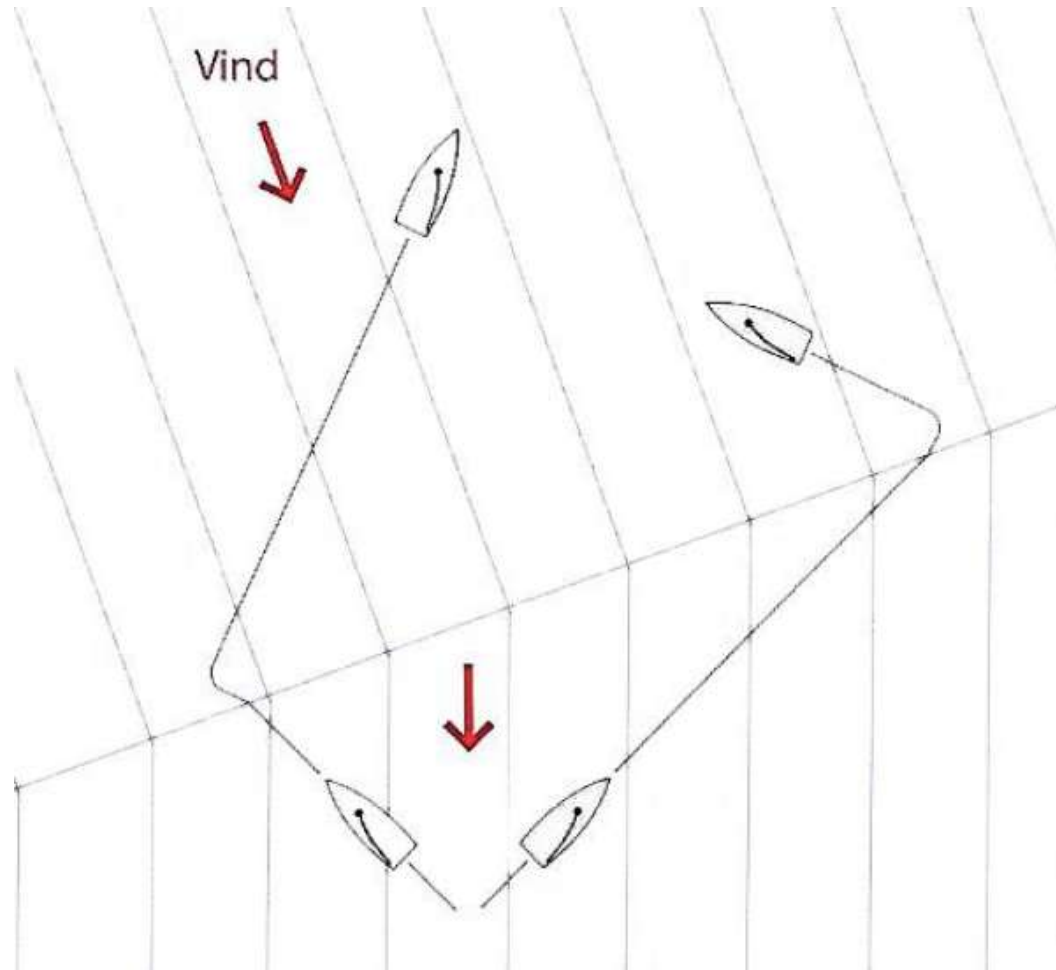


Do we take-down genacker early to slow down and get the inner track if we are overlapped

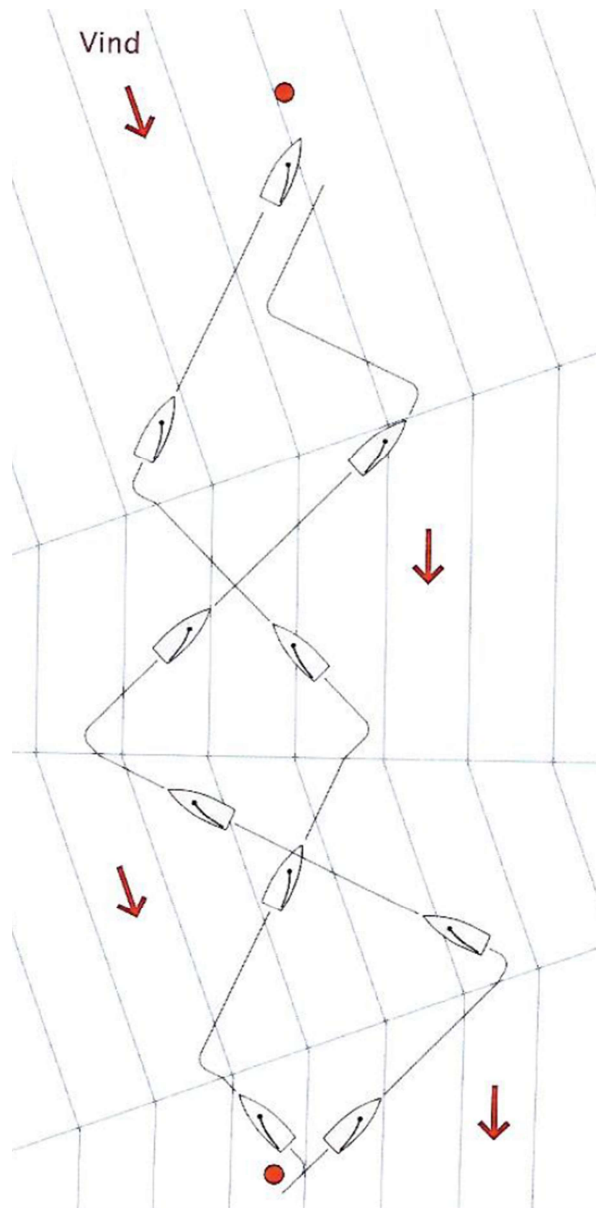


Do we not tack on a wind shift

Upwind – wind shift



Upwind



Watch

<http://raceqs.com/podcast/8-a-short-introduction-to-leverage-risk-and-reward-on-the-upwind-leg/>

Additional slides about racing rules

• **Warning - nurdy!**



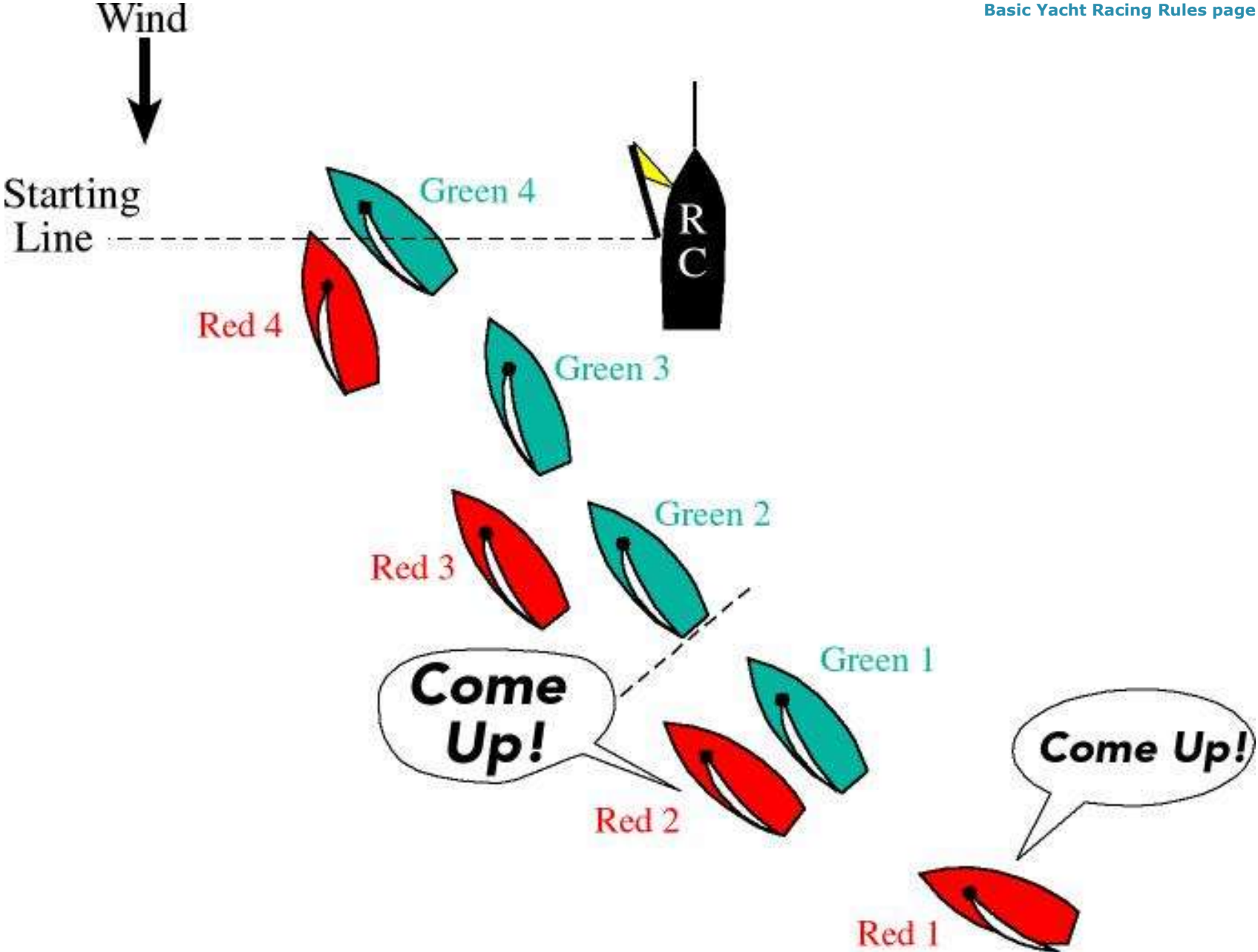
Racing

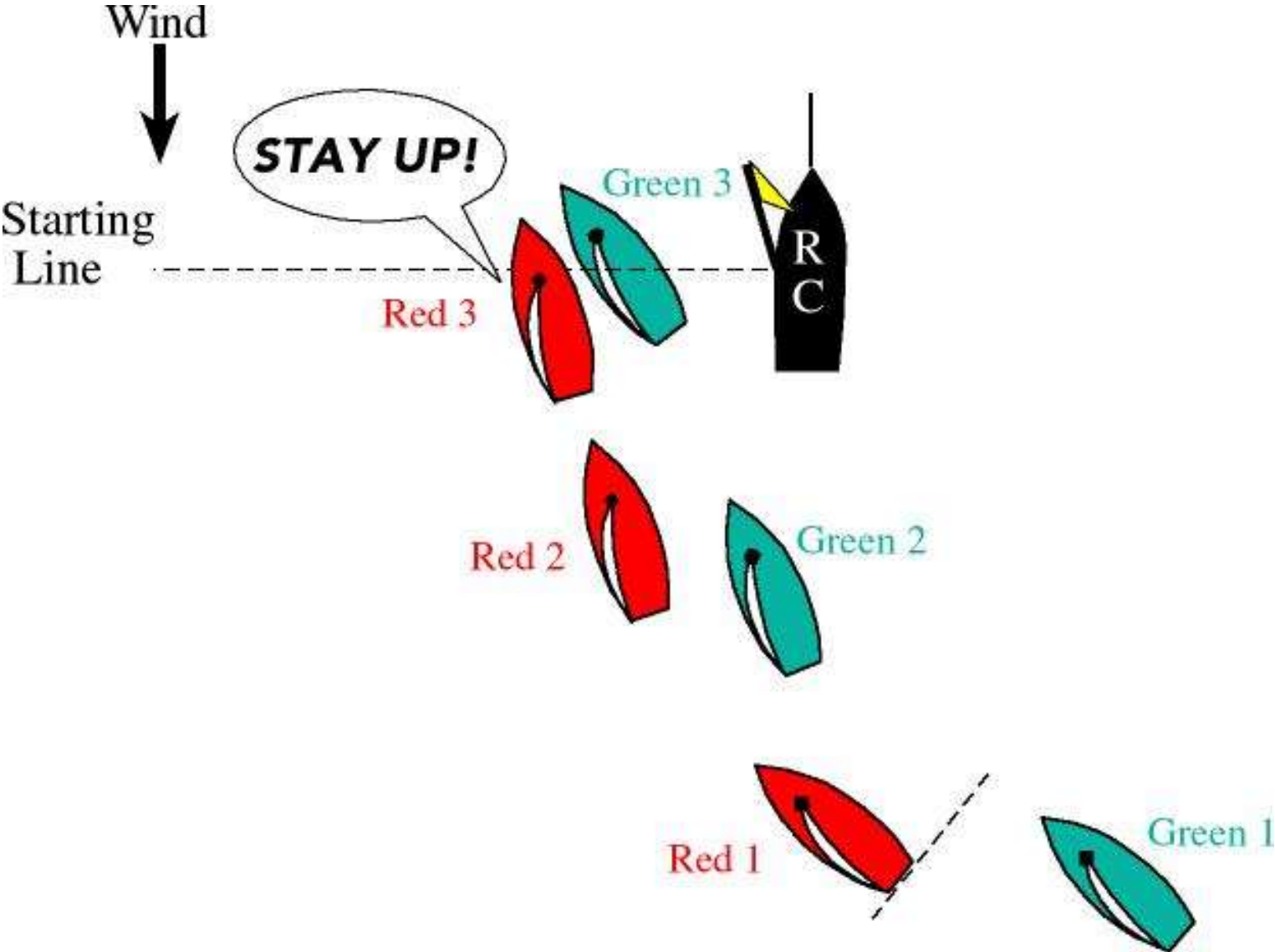
A boat is *racing* from her preparatory signal until she *finishes* and clears the finishing line and *marks* or retires, or until the race committee signals a general recall, *postponement* or *abandonment*.

Definition of Start

A boat *starts* when, having been entirely on the pre-start side of the starting line at or after her starting signal, and having complied with rule 30.1 if it applies, any part of her hull, crew or equipment crosses the starting line in the direction of the first *mark*.

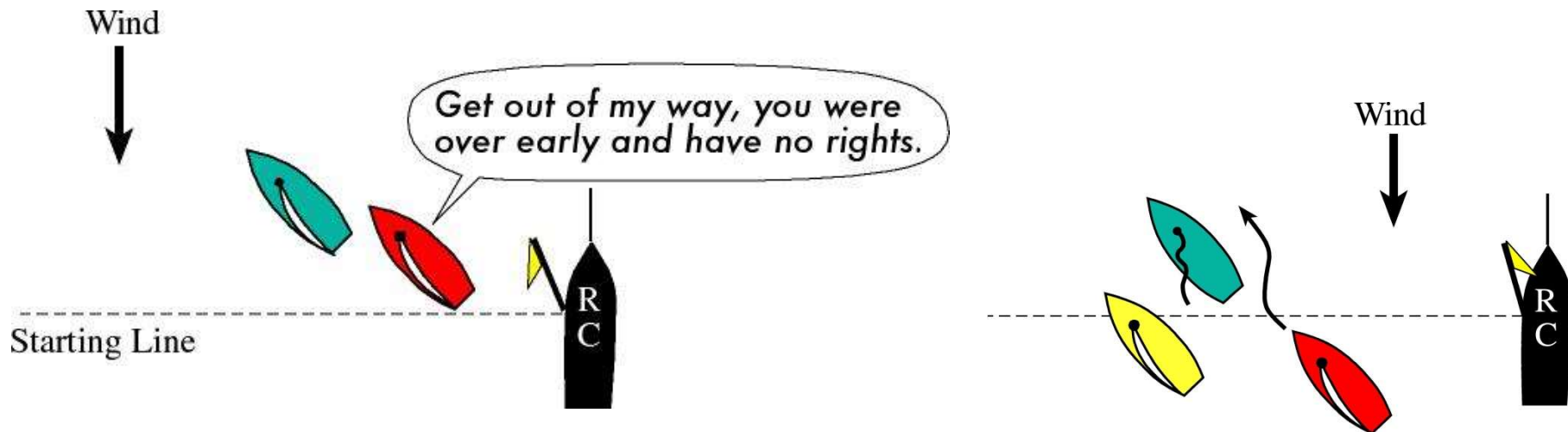
Luffing before the start





**If you are over the line
early, what are your
rights?**

22.1 A boat sailing towards the pre-start side of the starting line or one of its extensions after her starting signal to start or to comply with rule 30.1 shall keep clear of a boat not doing so until she is completely on the pre-start side.



30.1. If flag I has been displayed, and any part of a boat's hull, crew or equipment is on the course side of the starting line or one of its extensions during the last minute before her starting signal, she shall *sail* across an extension to the pre-start side before starting.

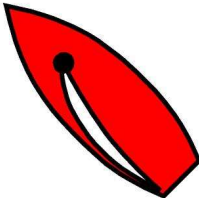
What is an *Obstruction*?

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 area 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, give her *room* or *mark-room* or, if Rule 23 applies, avoid her. A vessel under way, including a boat *racing*, is never a continuing *obstruction*.



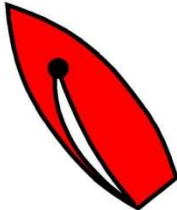
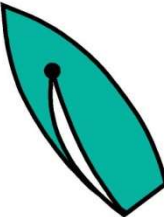
Wind



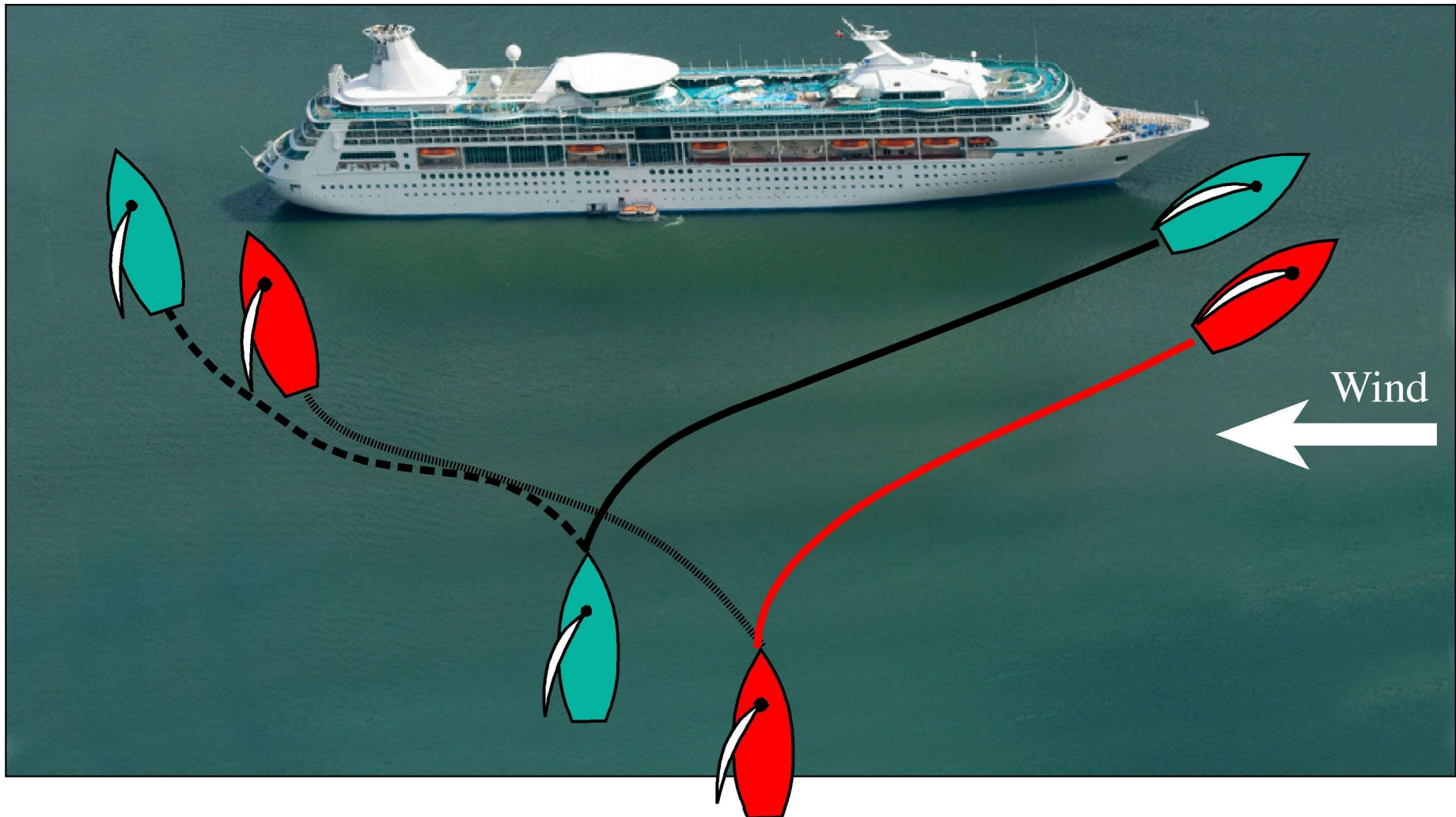
Anchored
Fishing
Boat



Wind



RULE 19: ROOM TO PASS AN OBSTRUCTION



Rule 19.2(a) A Right-of-way boat chooses which side to pass an obstruction

What is a boat's *Proper Course?*

Proper Course

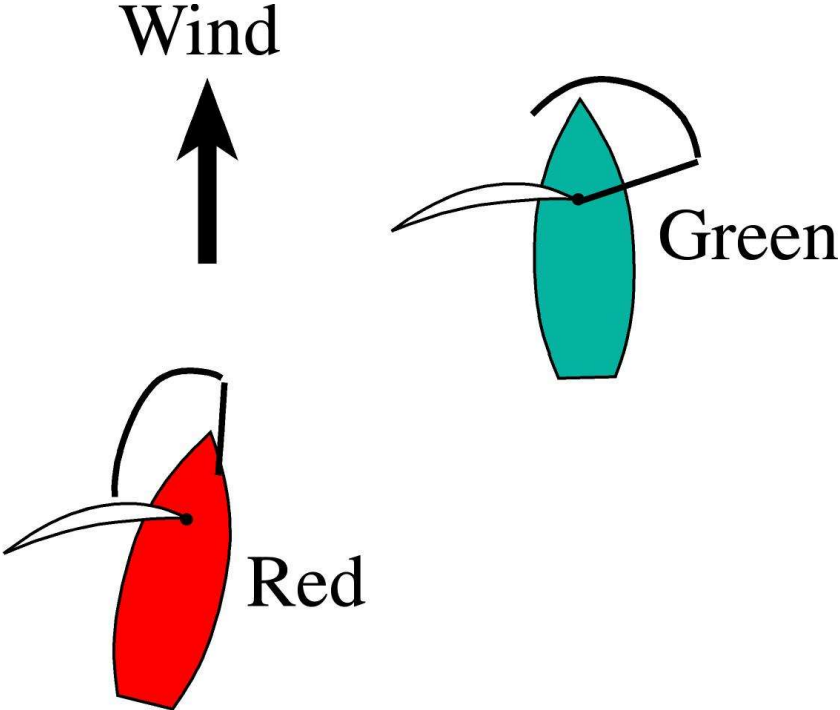
A course a boat would sail to *finish* as soon as possible in the absence of the other boats referred to in the rule using the term. A boat has no *proper course* before her starting signal.

**When do the rules say a boat has to
sail her *Proper Course*?**

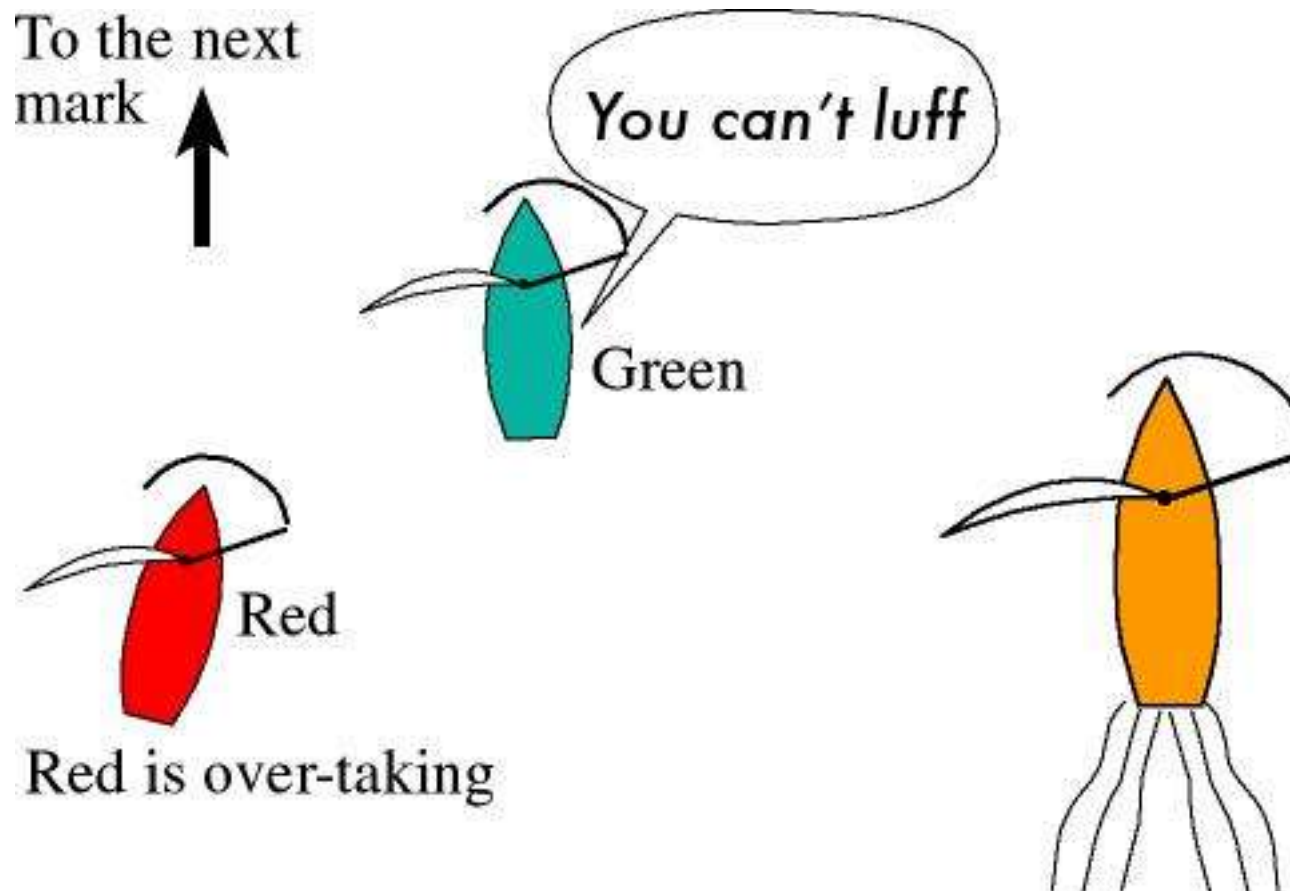
Does a boat always have a *proper course* when racing?

Can one boat's *proper course* be different from that of another boat?

- If so why?
- Because of the boat?
- Because of the skipper?



**Red and Green are both Express 37s.
Can Red, establishing an overlap from
astern, tell green to keep clear?**



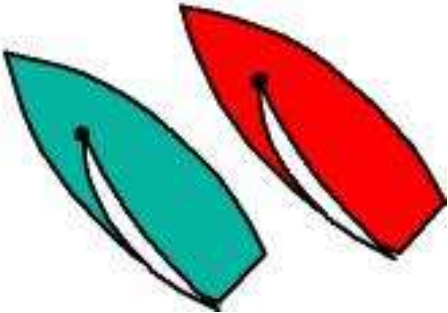
When does one boat *keep clear*
of another?

Keep Clear

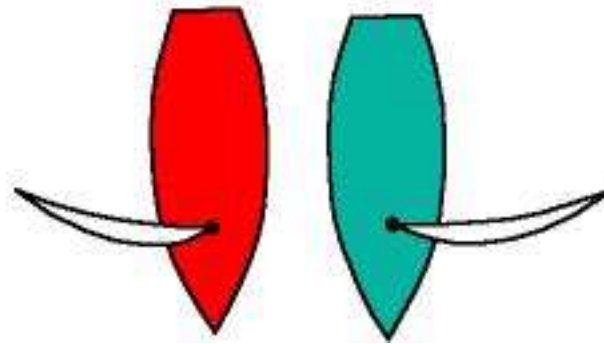
A boat *keeps clear* of a right-of-way boat

- (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.

Wind



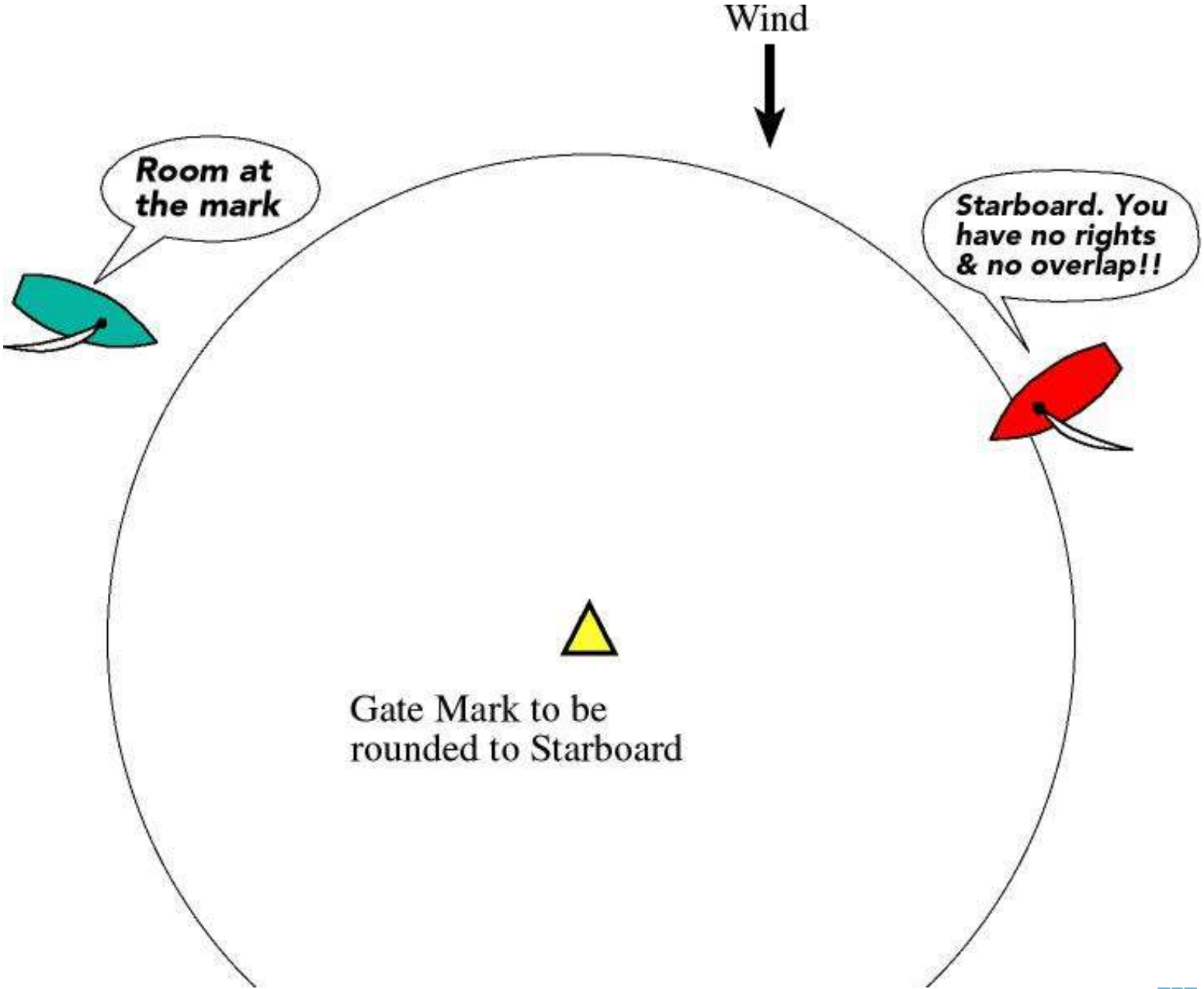
Wind



Does a starboard tack boat ever have to *keep clear* of a port tack boat?

There are a number of times when a starboard-tack boat has
To keep clear of a port-tack boat.

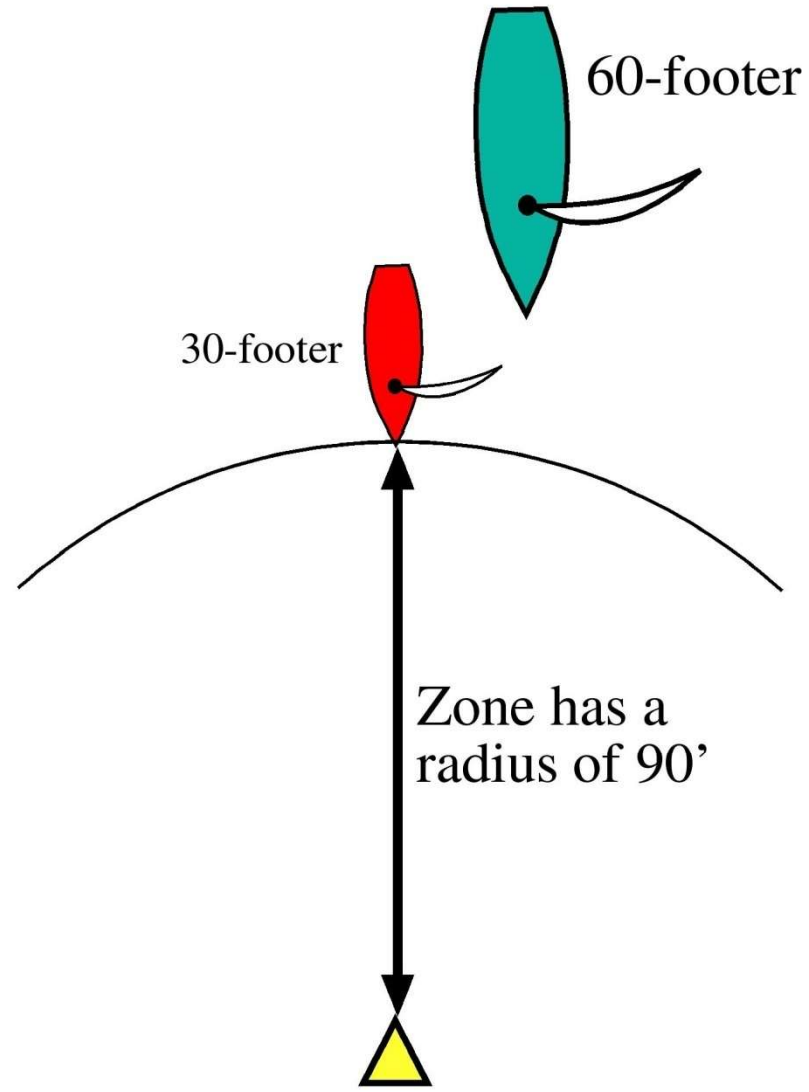
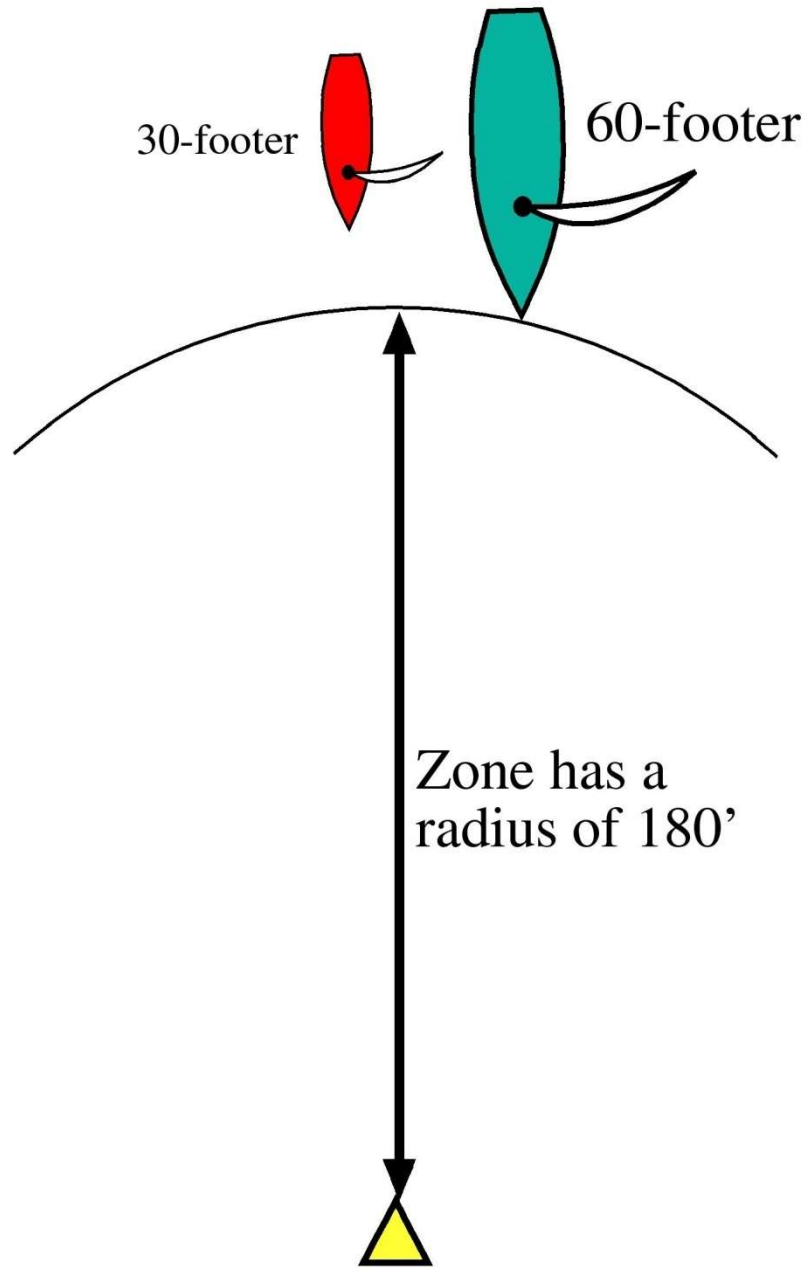
- A. While tacking (Rule 13)
- B. While sailing to the pre-start side of the line after the starting signal (Rule 22.1)
- C. While taking a penalty (Rule 22.2)
- D. While sailing astern by backing a sail (Rule 22.3)
- E. While passing a continuing obstruction (Rule 19.2c)



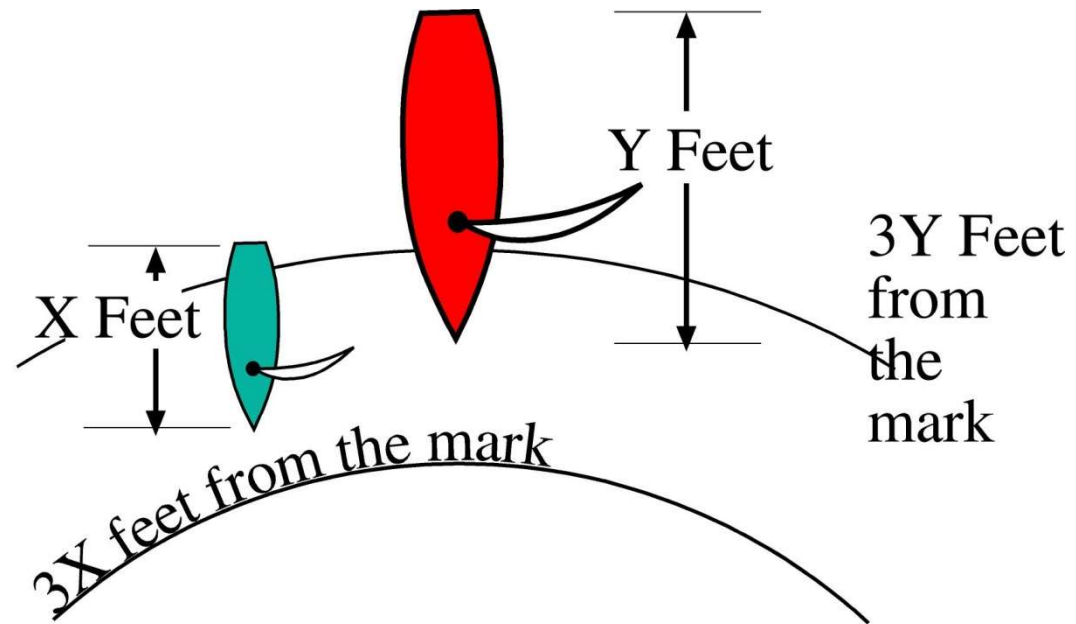
What is the *zone*?

Definition of Zone

The area around a *mark* within a distance of three hull lengths of the boat nearer to it. A boat is in the *zone* when any part of her hull is in the *zone*.



Which boat is in the zone?



What is *mark-room*?

Mark-Room

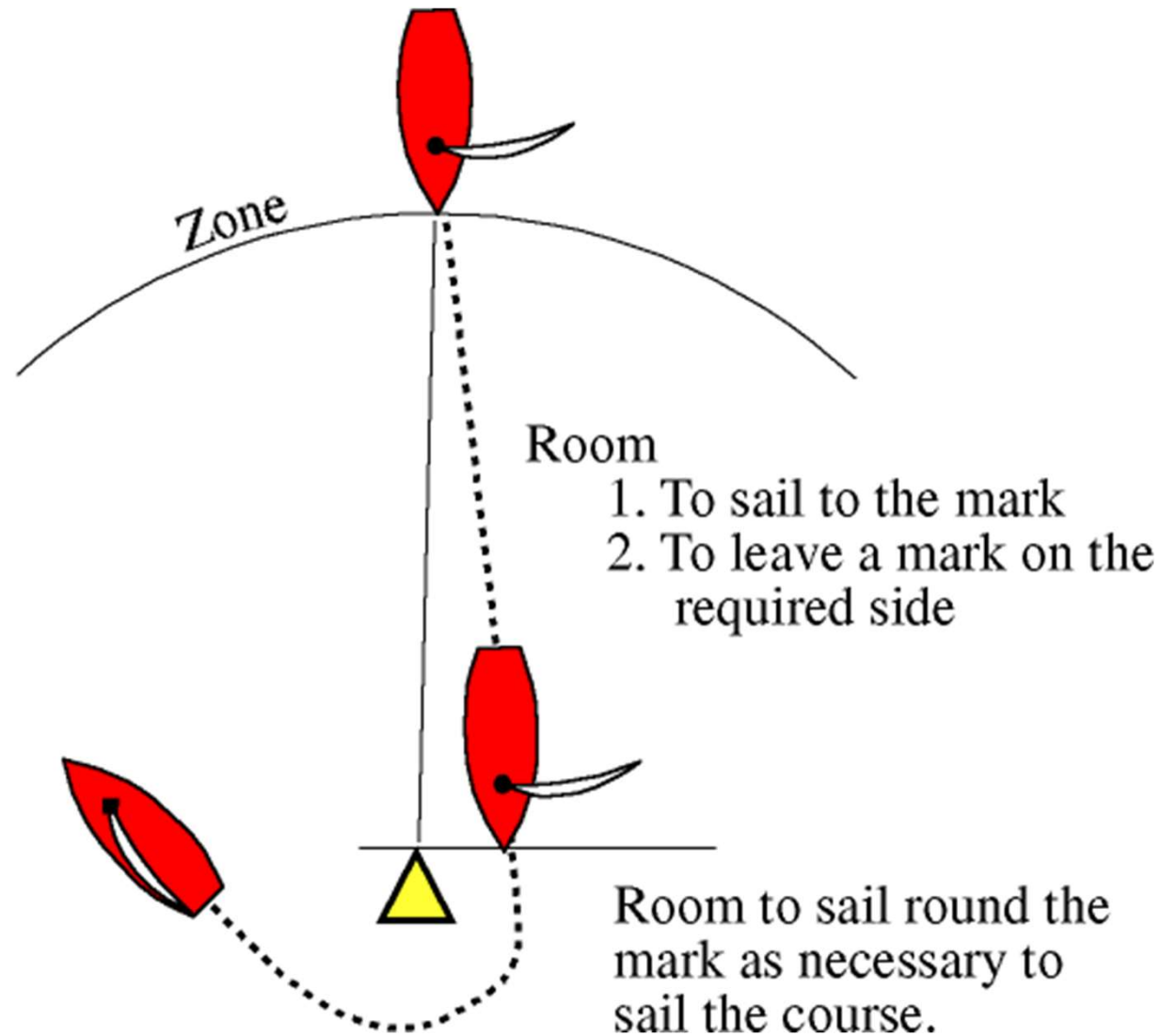
Room for a boat to leave a *mark* on the required side. Also,

(a) *room* to sail to the *mark* when her *proper course* is to sail close to it, and

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

However, *mark-room* for a boat does not include *room* to tack unless she is *overlapped* inside and to *windward* of the boat required to give *mark-room* and she would be *fetching* the mark after her tack.

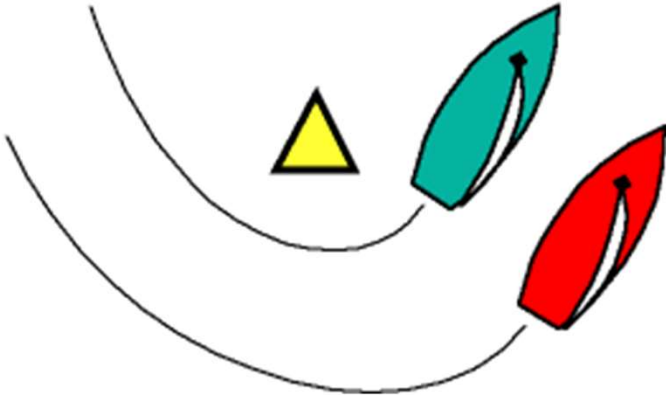
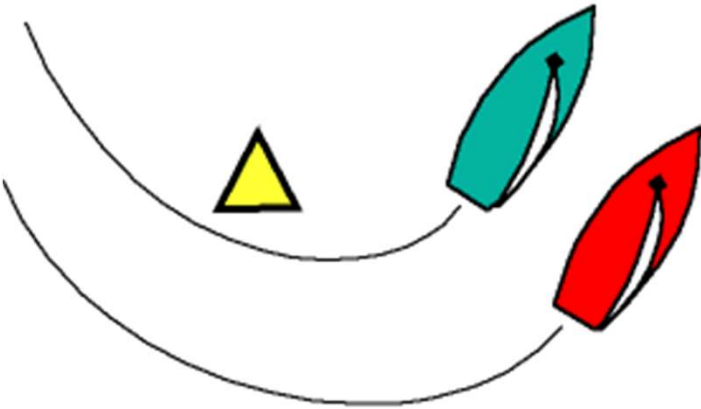
Mark Room



Wind
↓

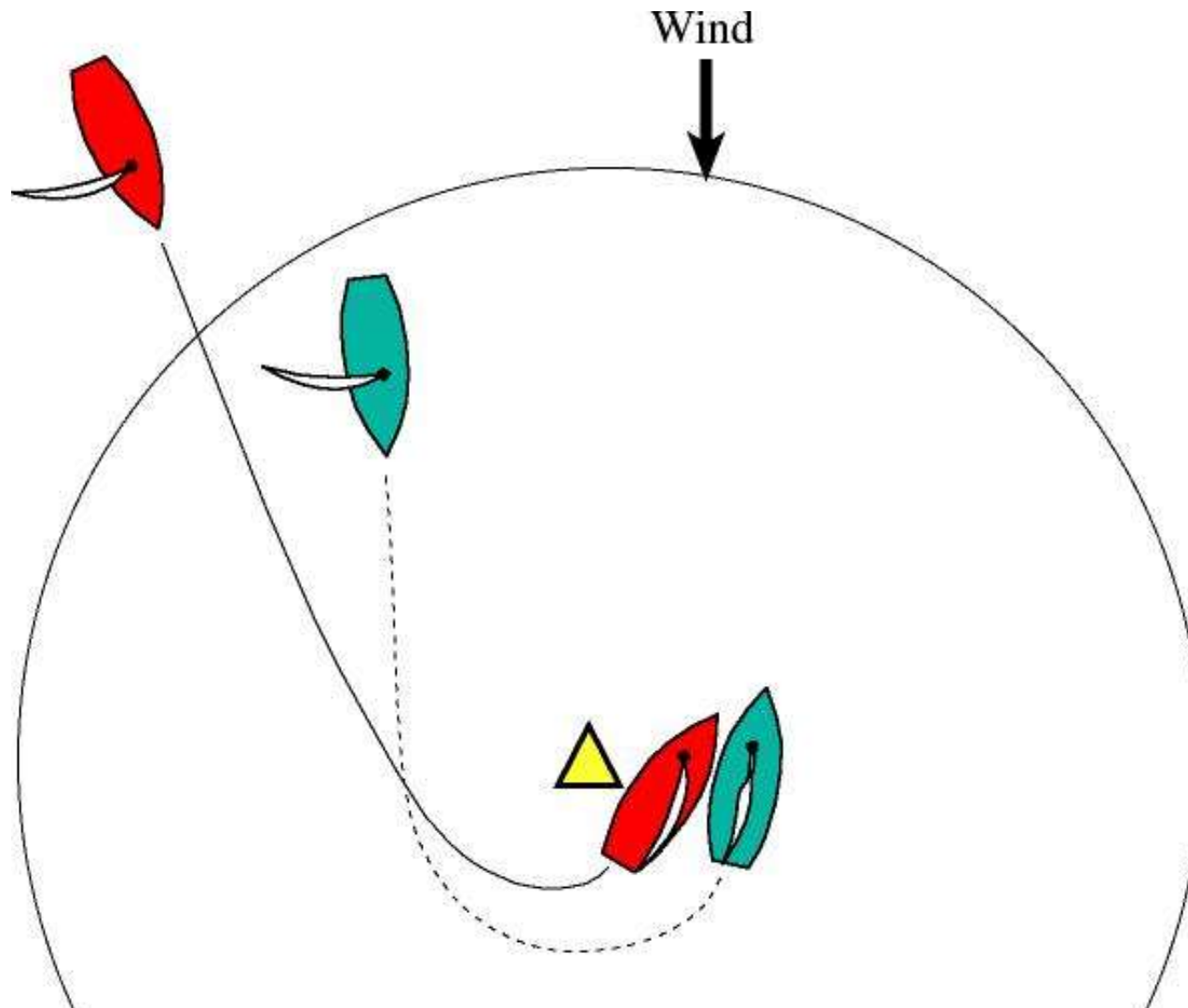
2009 - 2012

2013 - 2016



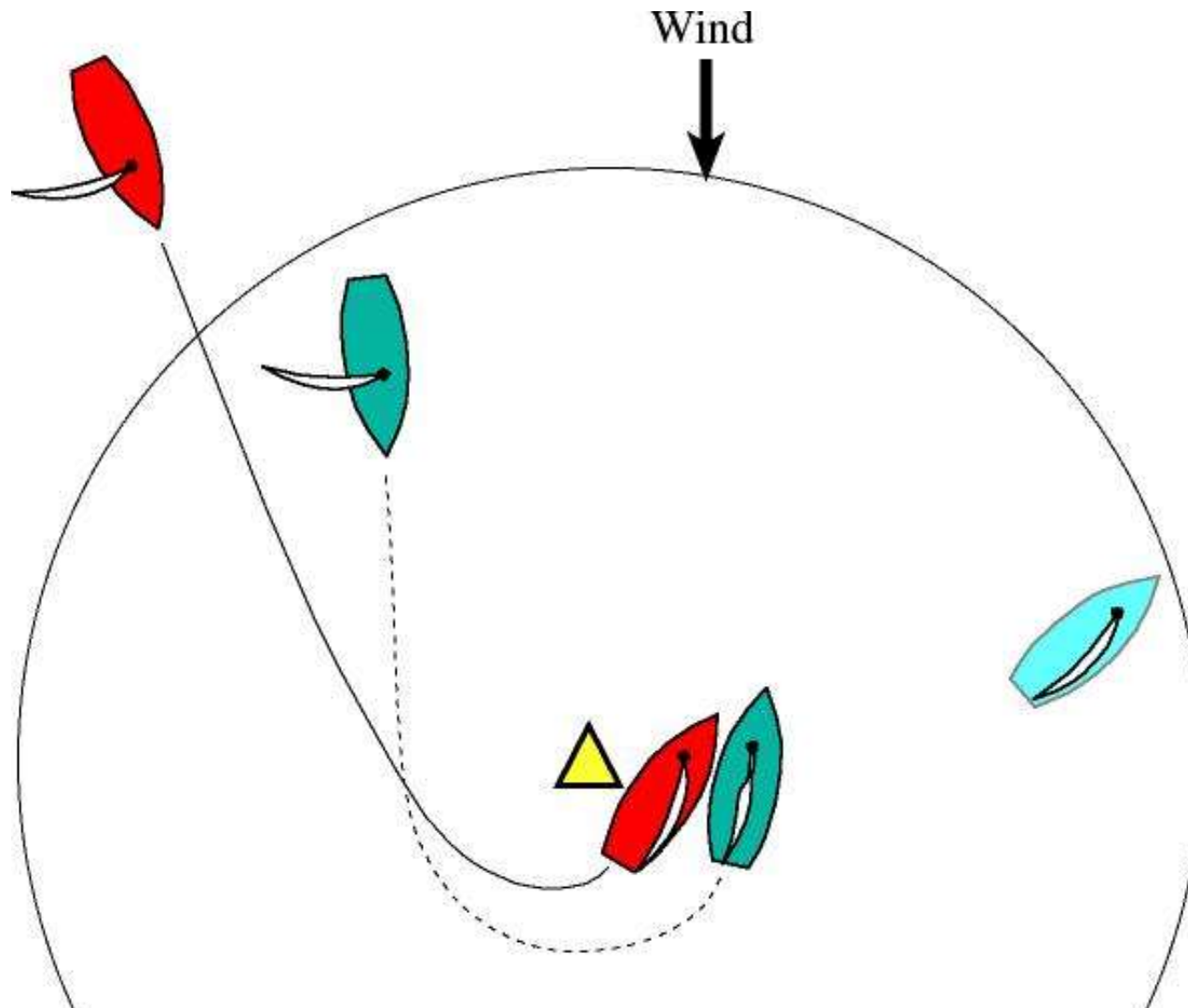
Slaming the Door

18.2c(2) When a boat is required to give mark-room by rule 18.2(b), if she becomes overlapped inside the boat entitled to mark-room, she shall also give that boat room to sail her proper course while they remain overlapped.

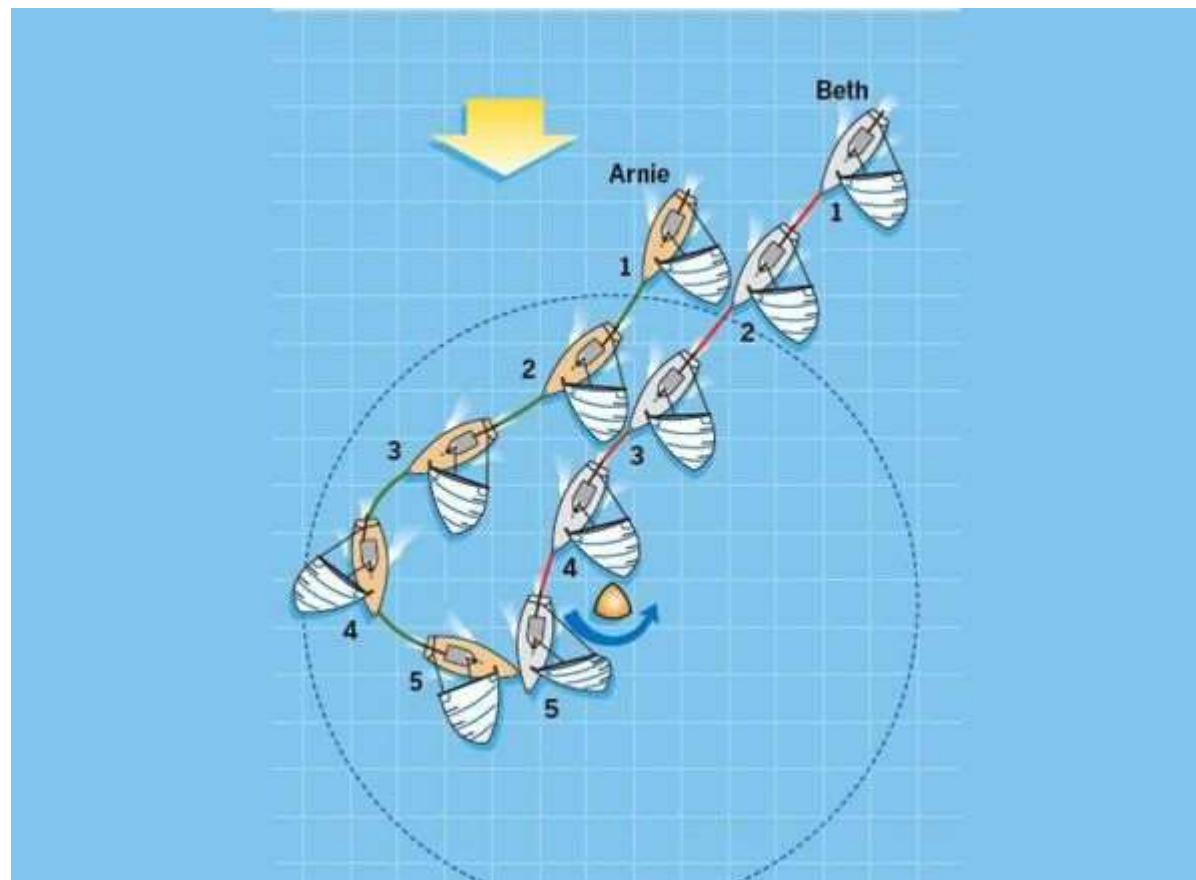


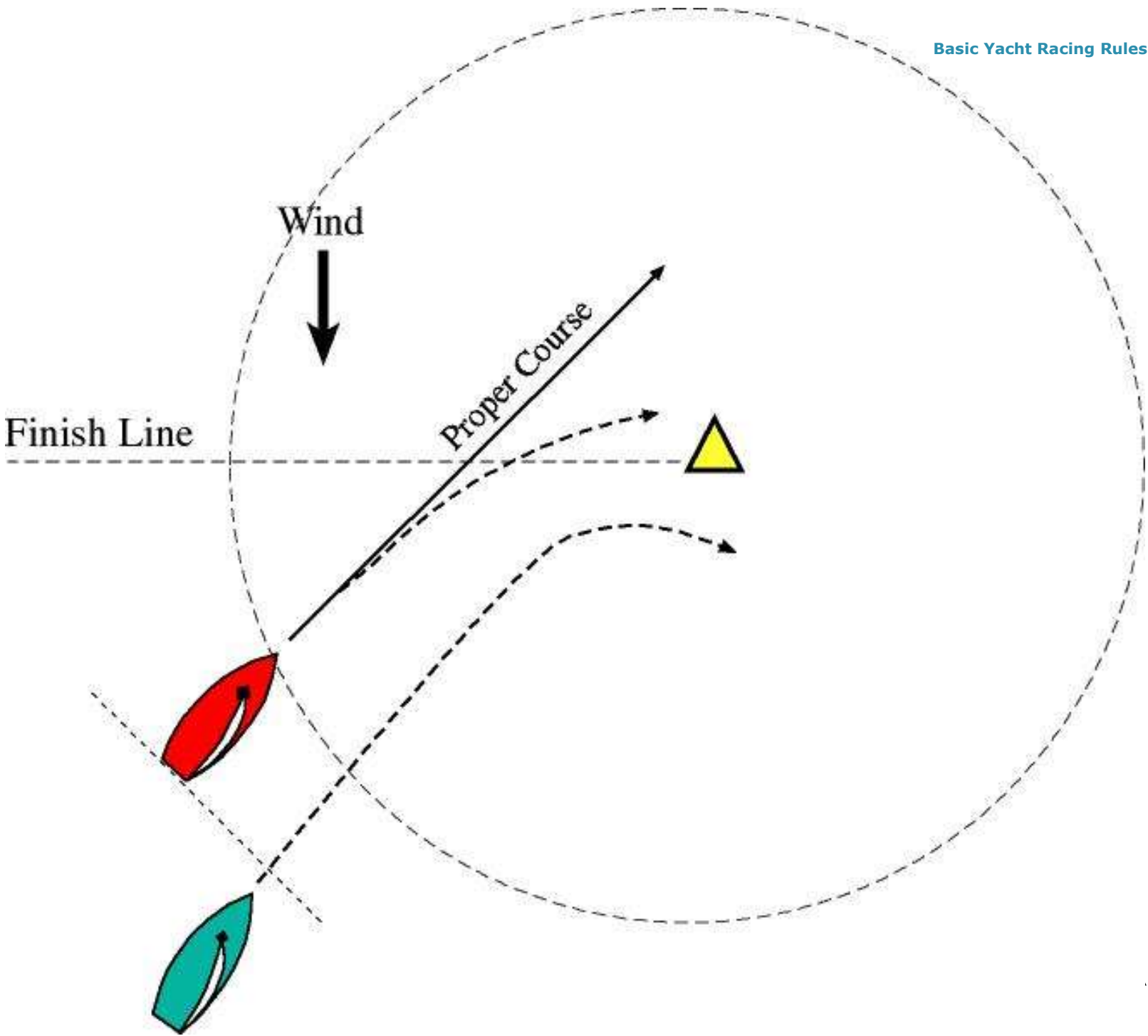
Slaming the Door

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Slamming the door





Mark-Room

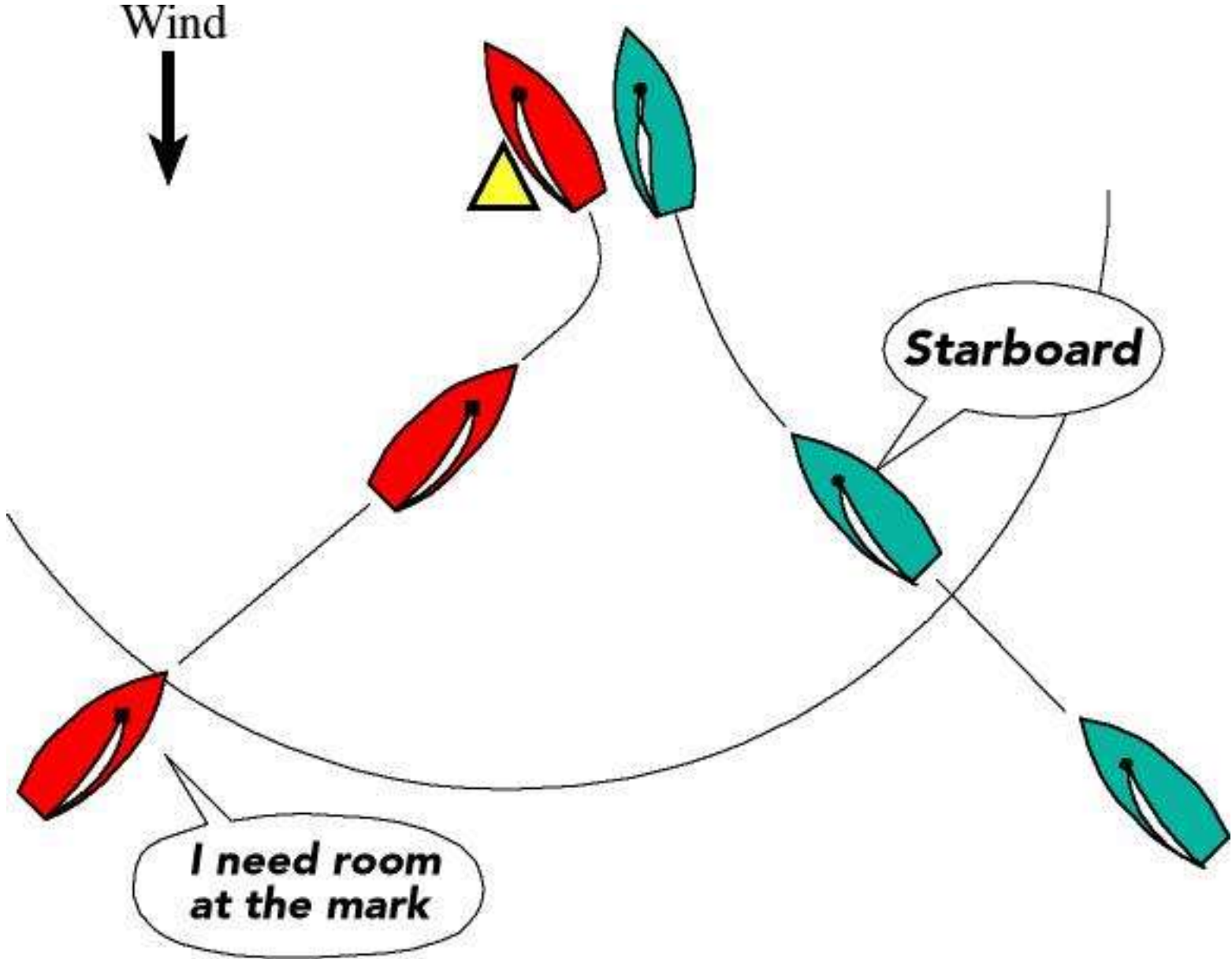
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(a) *room to sail to the mark when her proper course is to sail close to it*, and
(b) *room* to round the *mark* as necessary to sail the course.

However, *mark-room* for a boat does not include *room* to tack unless she is *overlapped* inside and to *windward* of the boat required to give *mark-room* and she would be *fetching* the mark after her tack.

What is the difference between *room*
and *mark-room*?

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.



SECTION C

AT MARKS AND OBSTRUCTIONS

Section C rules do not apply at a starting mark surrounded by navigable water or at its anchor line from the time boats are approaching them to start until they have passed them.

18 MARK-ROOM

18.1 When Rule 18 Applies

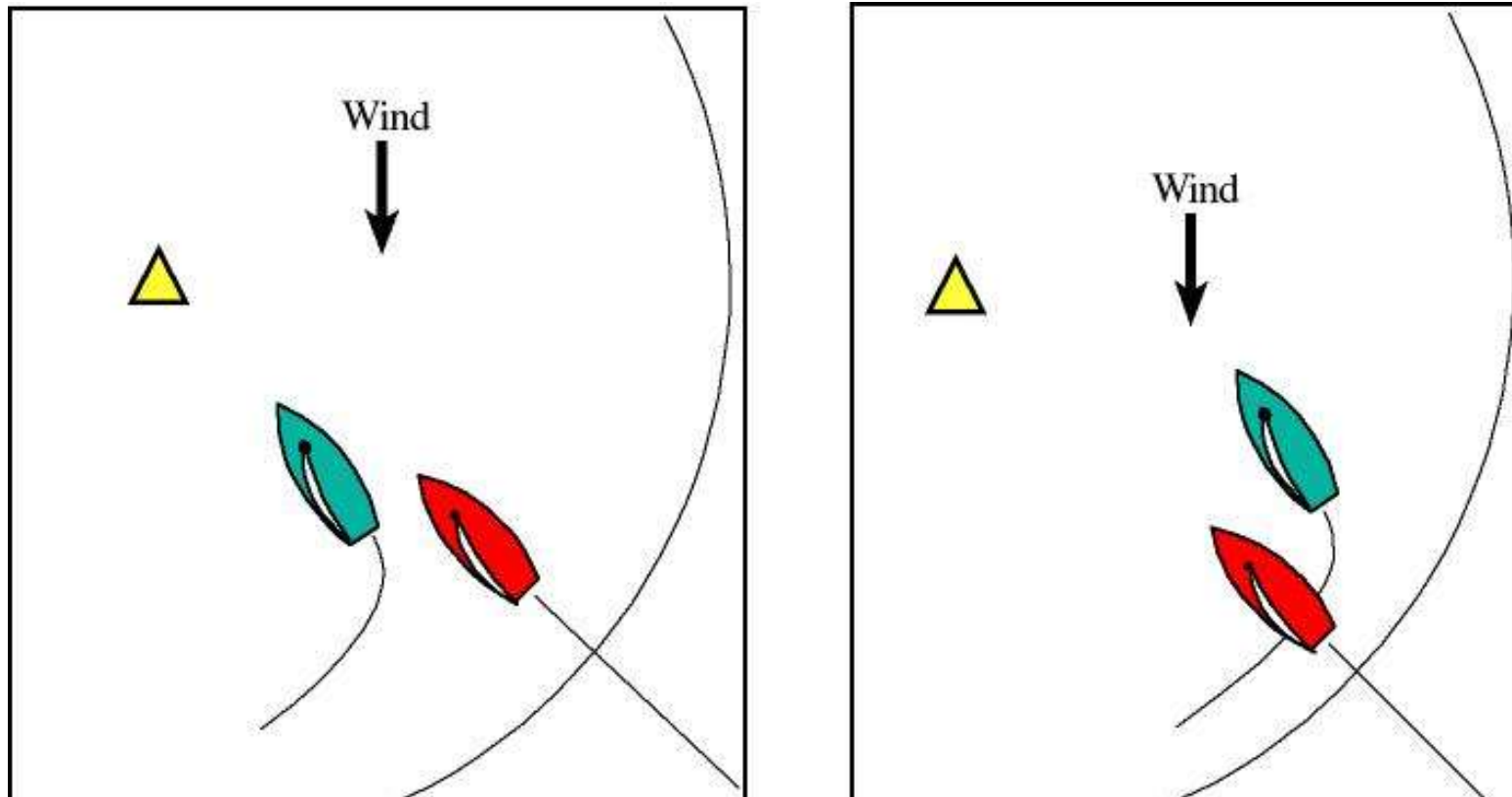
Rule 18 applies between boats when they are required to leave a *mark* on the same side and at least one of them is in the *zone*. However, it does not apply

- (a) between boats on opposite *tacks* on a beat to windward,
- (b) between boats on opposite *tacks* when the *proper course* at the *mark* for one but not both of them is to tack,
- (c) between a boat approaching a *mark* and one leaving it, or
- (d) if the *mark* is a continuing *obstruction*, in which case rule 19 applies.

18.3 Tacking in the Zone

If a boat in the zone passes head to wind and is then on the same tack as a boat that is fetching the mark, rule 18.2 does not thereafter apply between them. The boat that changed tack

- (a) shall not cause the other boat to sail above close-hauled to avoid contact or prevent the other boat from passing the mark on the required side, and
- (b) shall give mark-room if the other boat becomes overlapped inside her.



Happy Sailing!