

Start Racing



Redditch Sailing Club 2020

Start Racing- Sessions

This series of 30 minute sessions is aimed at those new to racing.

Sessions:

1. Overview of Races and Race Preparation
2. **The Start and the Beat**
3. Mark Rounding and Offwind
4. Tactics, Strategy and Basic Rules

The Start and The Beat

- Start line and timing signals
- Importance of the start
- Five essentials when beating
- Tacking
- Wind shadow and wind shifts



The Start and The Beat

- Most races start with a beat and a line at 90 deg to the wind
- Think about the Five Essentials to prepare for the beat...
 - Steer to edge of no go zone
 - Sails pulled in
 - Boat Balanced
 - Trimmed with weight forward
 - Centreboard down



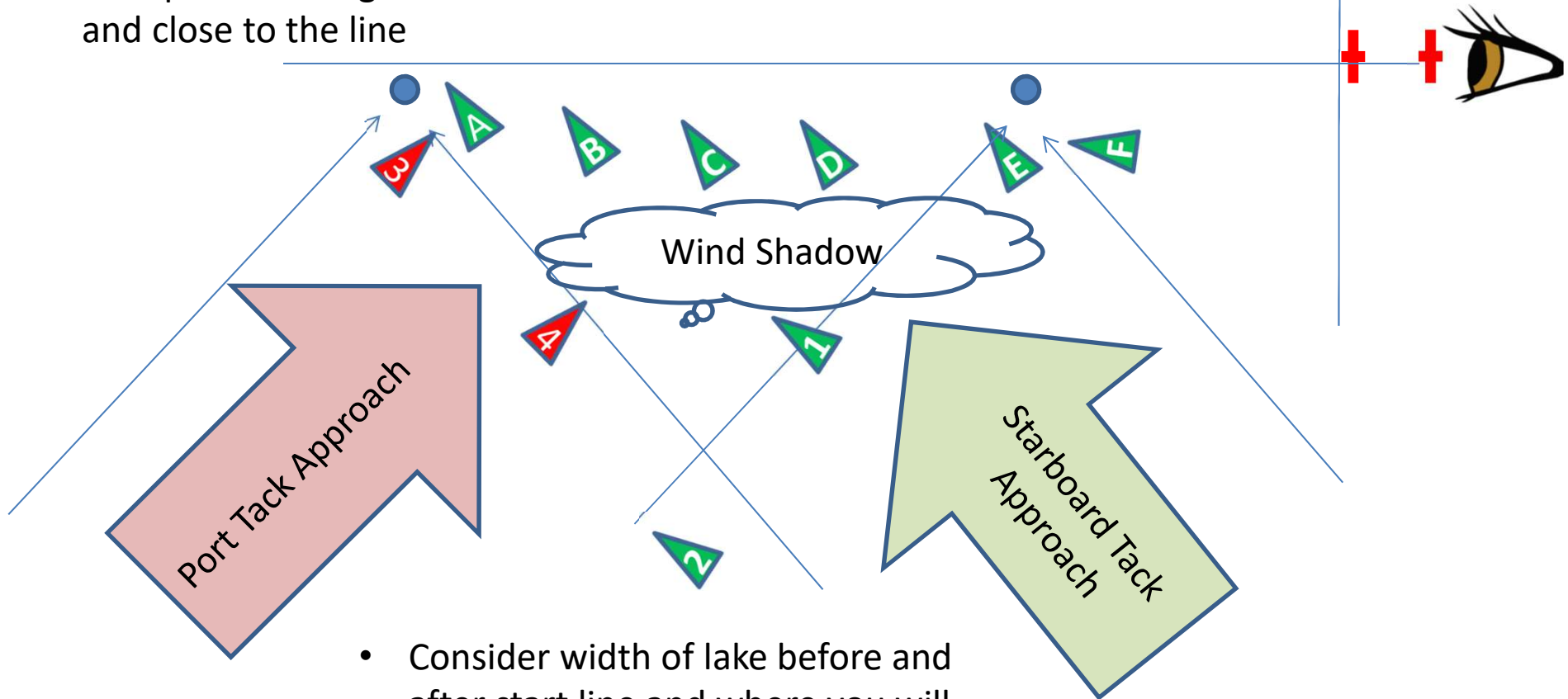
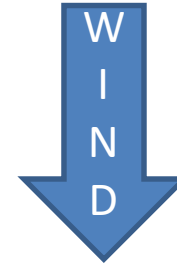
Start Procedure

- (10) – 5 – 4 – 1 – 0 (Pursuit signals)
- Flags v. Sound Signals
- On Course Side (OCS) and recalls (X & 1st Sub)
- No “Dip Starts” at Redditch – must go around the ends
- Plan your approach (do some timed “trials” at the line if you can)
- Don’t be “line shy”

Lots to talk about here!

- Port v Starboard
- Wind shadow from other boats
- Full speed at the gun and close to the line

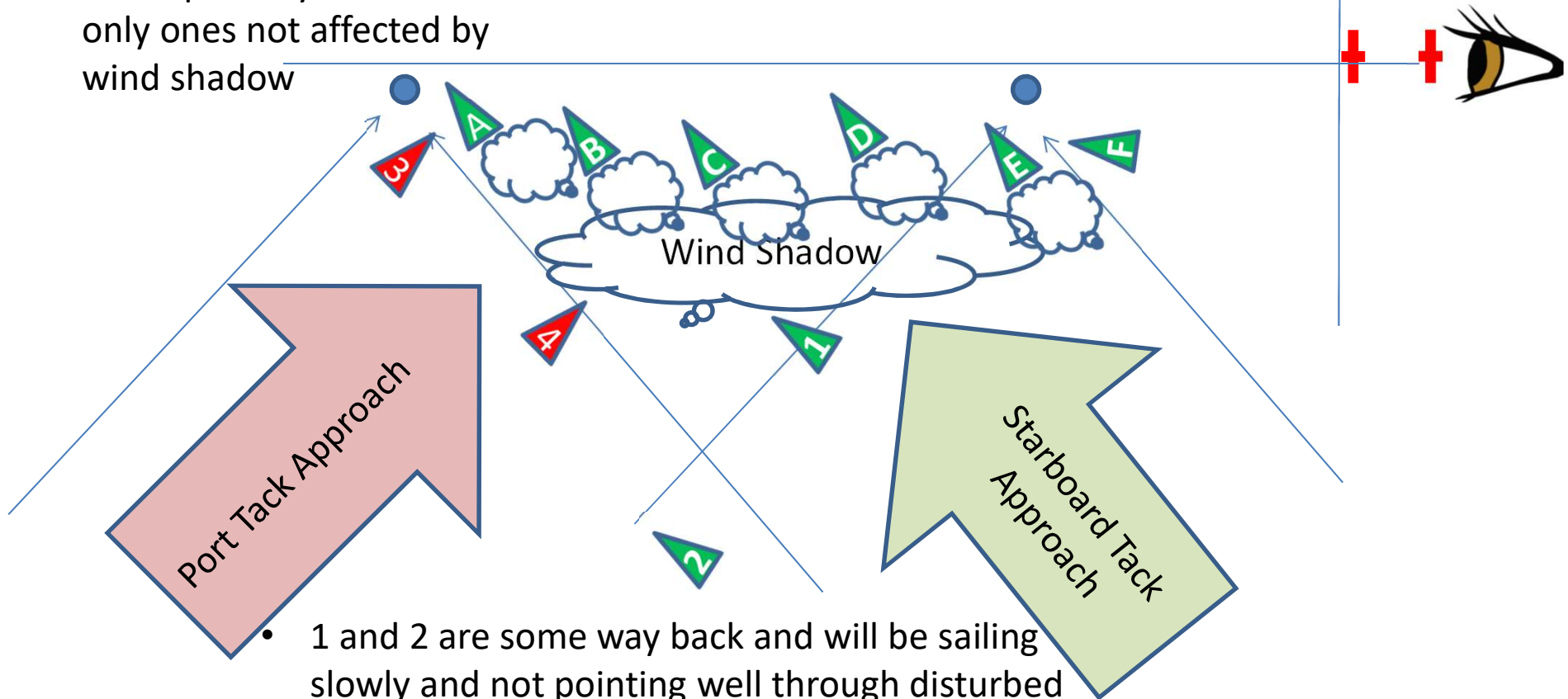
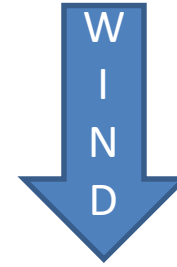
Start Line



- Consider width of lake before and after start line and where you will be relative to other boats in 30 seconds...
- Transits may not be on the line. Only indicative

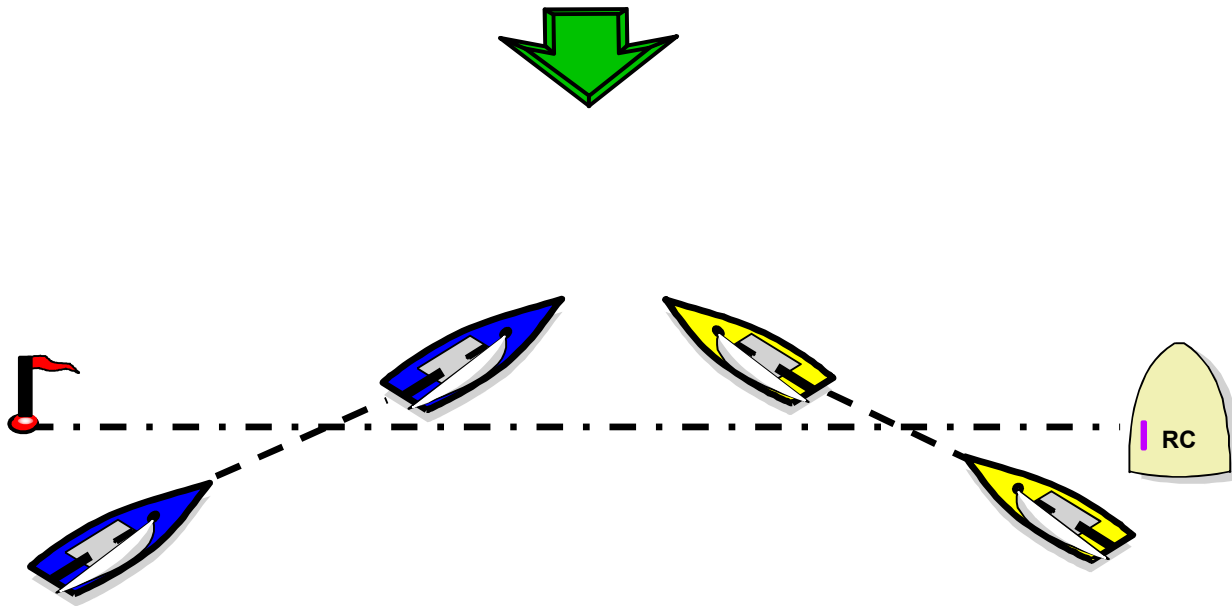
- A to E are making good starts on starboard
- E is the only one who can tack immediately
- A and possibly D are the only ones not affected by wind shadow

Start Line



- 1 and 2 are some way back and will be sailing slowly and not pointing well through disturbed wind
- 3 and 4 are on port and will have to duck the fleet
- You can't call for Water at a start mark, so F can't barge in

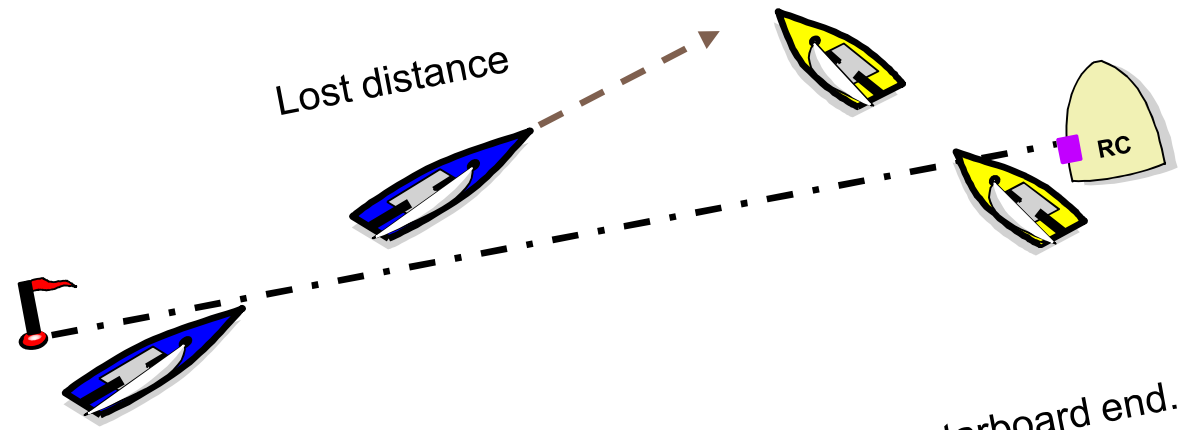
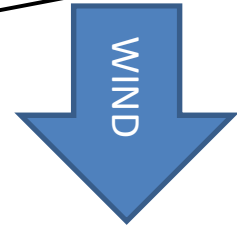
Square Line Starts



Square Line

A Square line is perpendicular to the wind direction. All boats get an even start.

Starboard Bias Starts

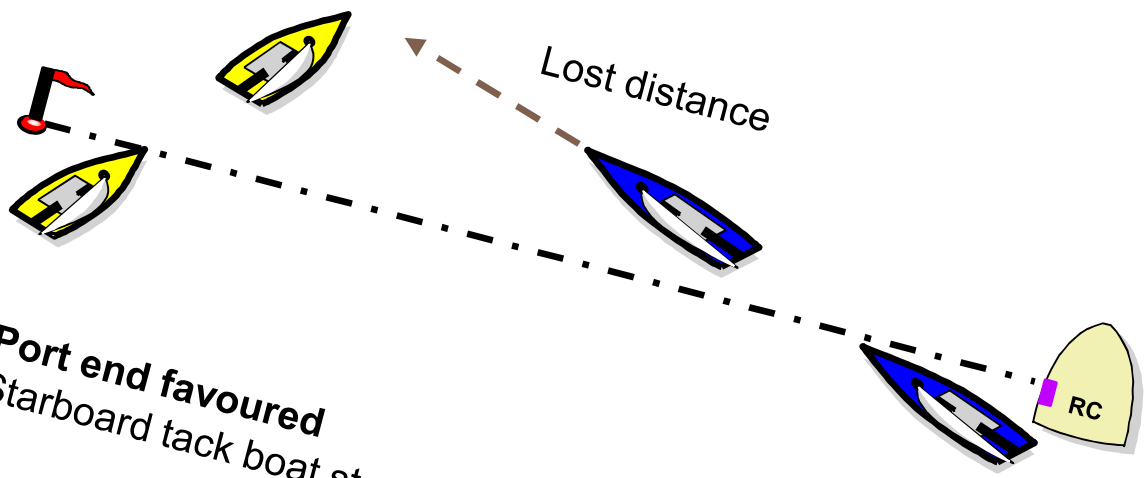


Starboard end favoured

Port tack boat starts 1 length behind boat from starboard end.



Port Bias Starts



Port end favoured
Starboard tack boat starts 1 length behind boat from port end.



Squib National Championships 2009 at Weymouth – 108 boats on the line
Note line “sag” in middle. Difficult to judge where line is! How many boats
can tack safely?



No prizes for being in the second row here!



The Start and The Beat

- **Virtual Regatta Start Video**
- **Race Q's Podcast "The Dinghy Start"**
- **Look at <https://raceqs.com/podcast> for lots of good 5 minute videos**
- **2 other videos of 49ers starting**

The Start and The Beat

- Top takeaway points for The Start

- **If you are a couple of boat lengths late at the start you could lose 10 more boat lengths by the windward mark because of the wind shadow. Your options are limited.**
- **Hit the start line at speed and on time!**
- **Never get too far from the line. It always takes longer than you think to reach it**
- **Practice slowing right down, holding your position and accelerating just before the gun**
- **Use your tell tales to make sure you are on the edge of the “no go” zone**

QUESTIONS?

The Start and The Beat

- Think about the Five Essentials to prepare for the beat...
 - Steer to edge of no go zone using tell tales as primary guide
 - Sails trimmed in to manage sail shape
 - Boat balanced (or slightly heeled in light conditions)
 - Trimmed with weight forward
 - Centreboard down
- All very important but the first is easiest to quantify:
 - 5 degrees off an ideal 45 deg. Course means you sail nearly 10% further. 10 deg. means 20% further – at Redditch this can put you 20-25 boat lengths back!



Heeling too much!



Sails set well
Tell tales good
Boat balanced
Trim looks good



Heeling too much!

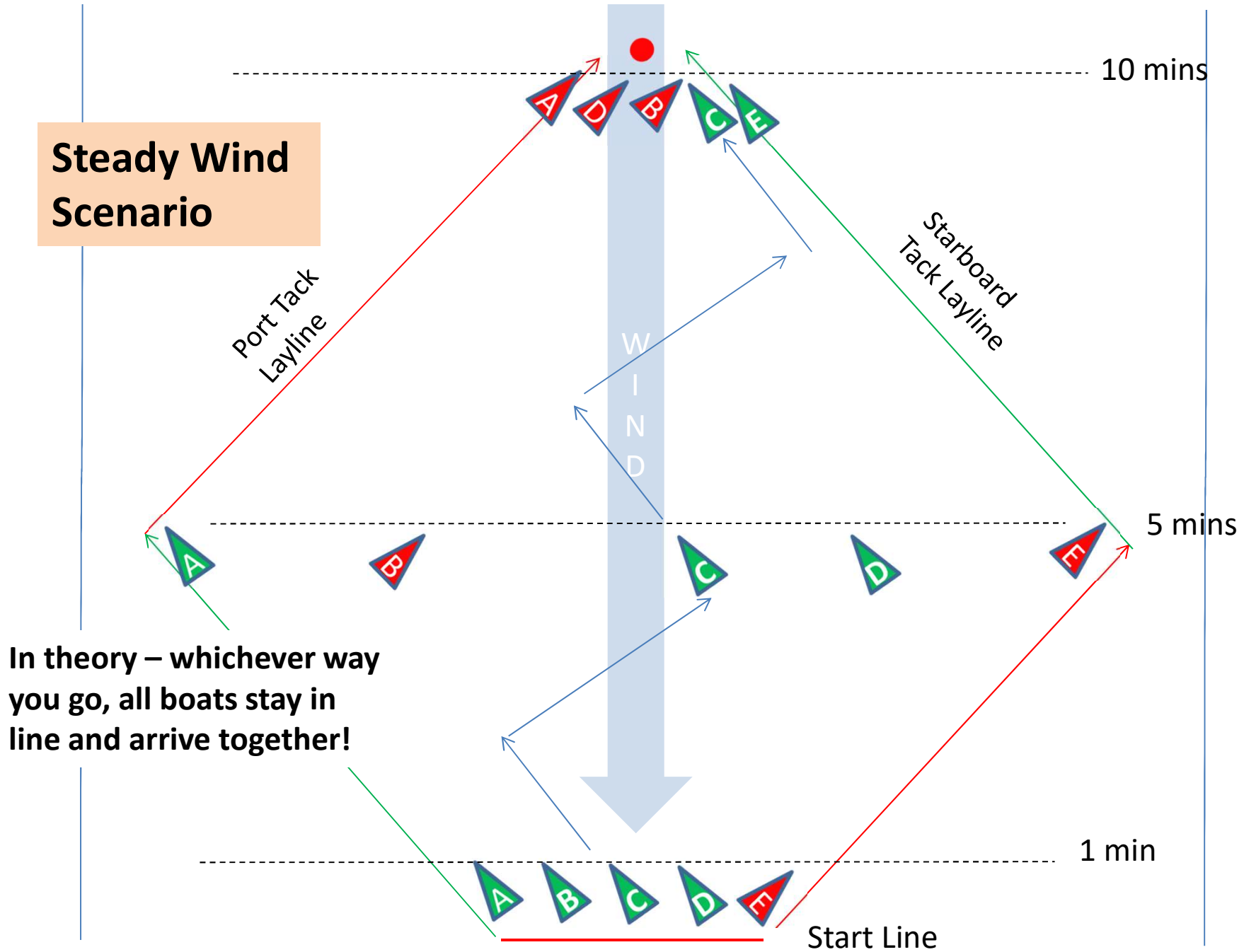


Not enough kicker.
Top of the leech is open



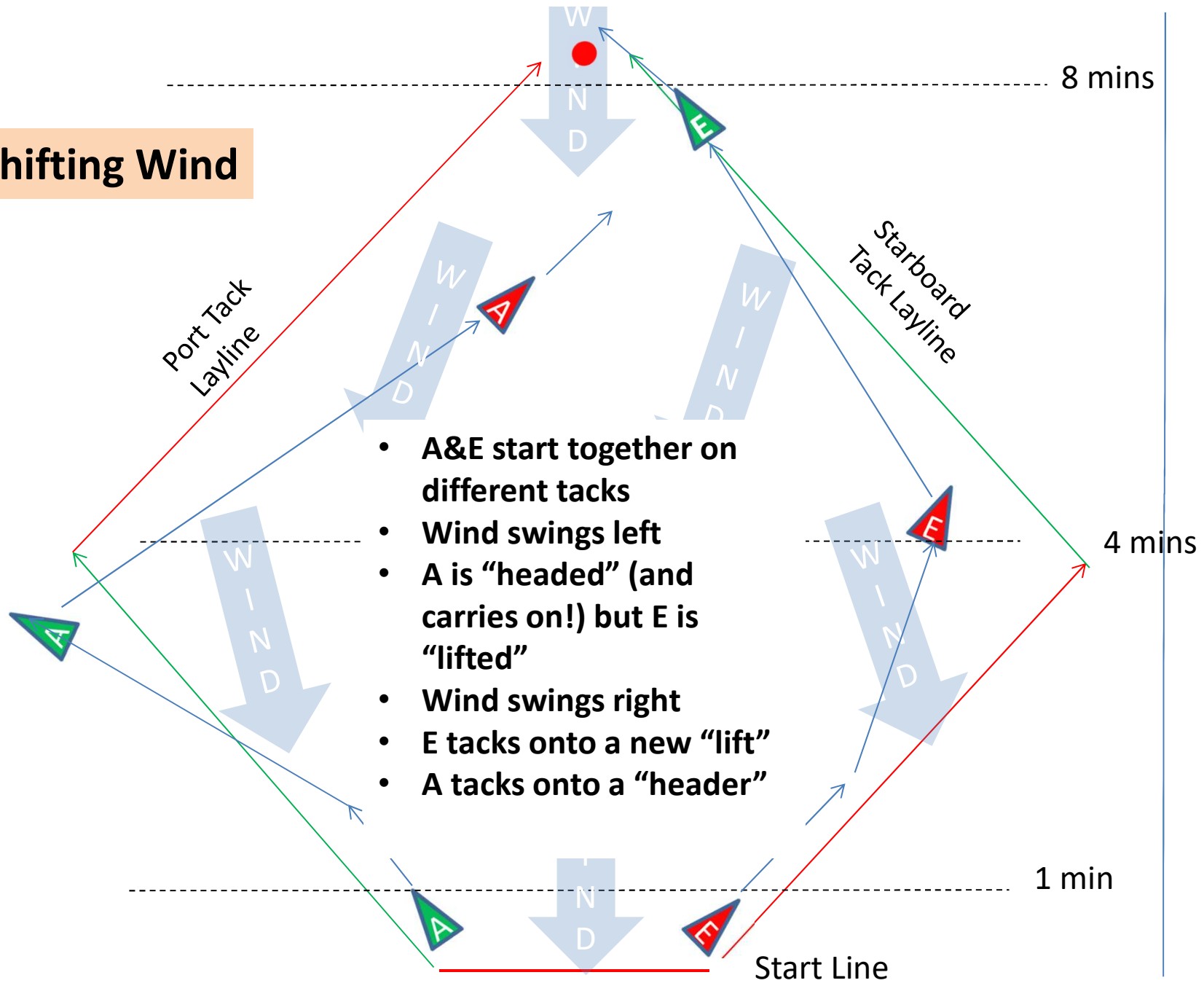
Look at the rudder stalling

Steady Wind Scenario

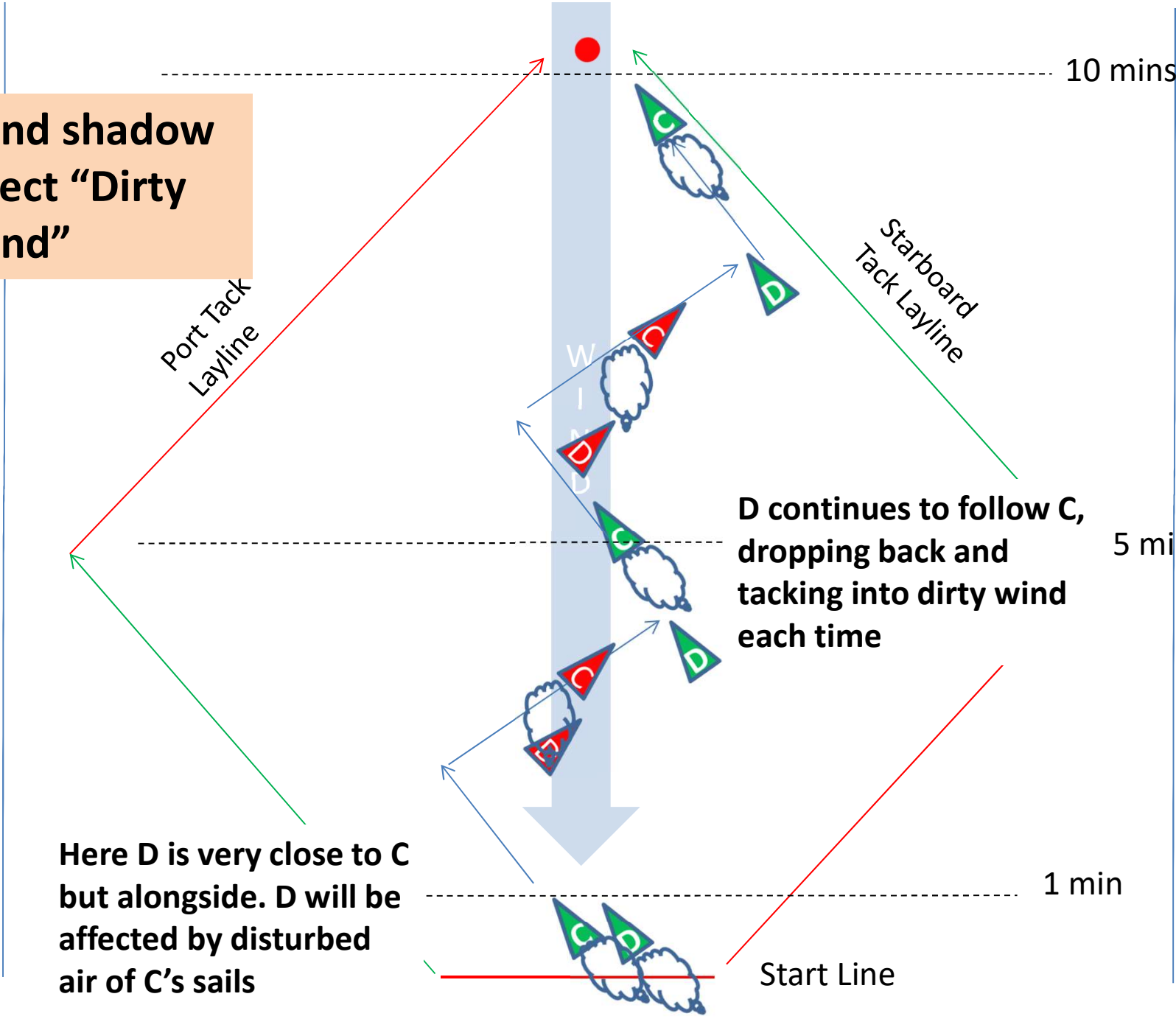


In theory – whichever way you go, all boats stay in line and arrive together!

Shifting Wind



Wind shadow effect "Dirty Wind"



Port Tack Layline

Starboard Tack Layline

WIND

10 mins

D continues to follow C, dropping back and tacking into dirty wind each time

5 mins

Here D is very close to C but alongside. D will be affected by disturbed air of C's sails

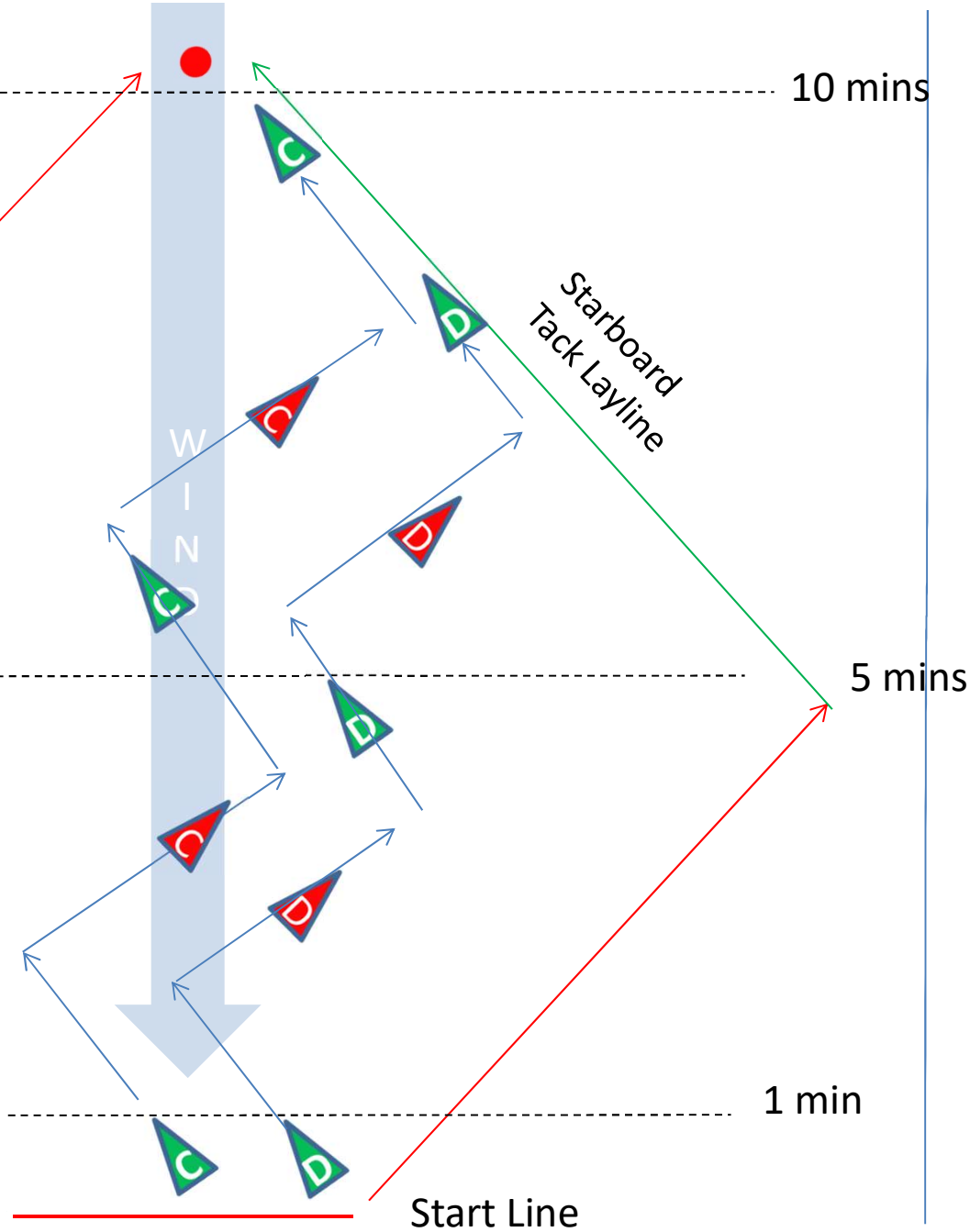
1 min

Start Line

Poor tacking

Knowing you are going to lose distance each tack limits your options – particularly at Redditch!

Here D is a bit further from C but always tacks badly – losing a boat's length each time

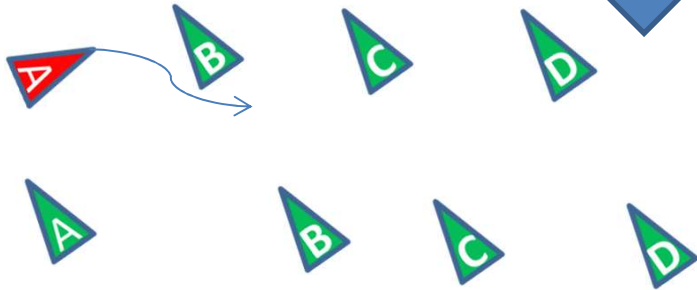
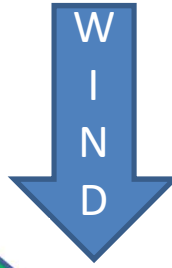


The Start and The Beat

Good video to watch on roll tacking:

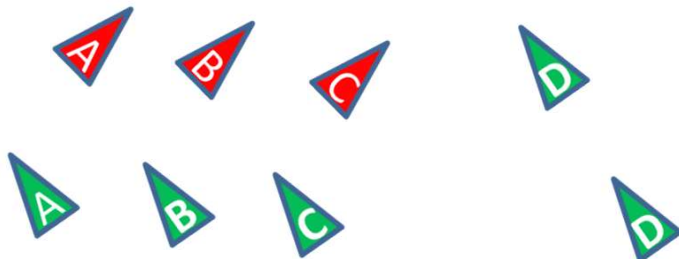
<https://www.youtube.com/watch?v=2evQHbKZIEo>

Calling for Water - 1



Scenario 2

- A,B,C &D approach bank on Stbd tack
- A calls for “Water”
- B believes A can complete her tack and then bear away to duck under her stern safely and asks A to do this. B must be sure that this is possible given ability of boat A. If there is any doubt, B has to prove it!

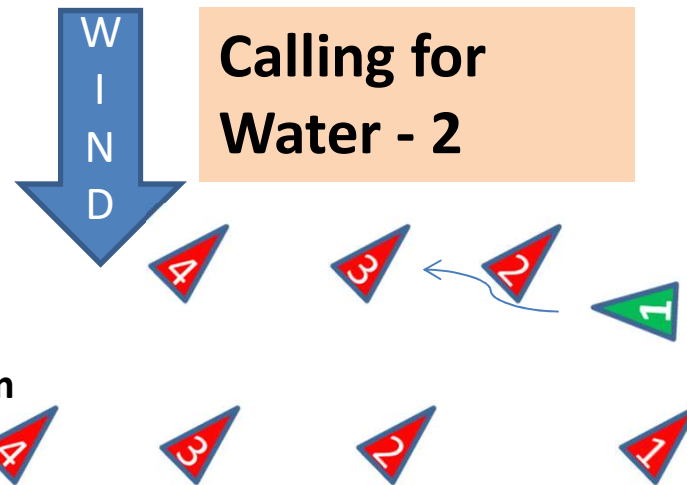


Scenario 1

- A,B,C &D approach bank on Stbd tack
- A calls for “Water”
- B sees she will have to tack and calls water on C
- A,B & C tack
- D is approaching a bit further away and calls “Starboard”
- C has to give way by either tacking (after calling for water for stbd boat on B and A), or ducking under D. If the latter, then A&B can duck D as well and ask for room if nec. from C
- If A,B &C all tack, within 30 secs they will all be calling for water from D!

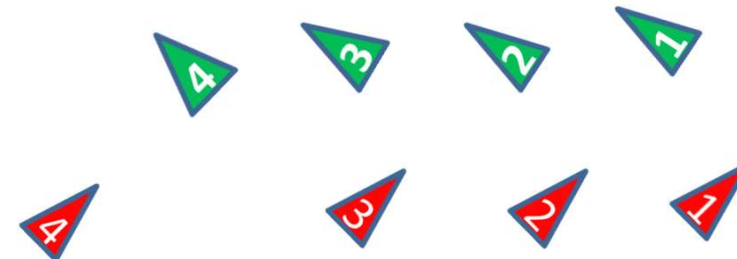
Scenario 2

- 1,2,3 &4 approach bank on Port tack
- 1 calls for "Water"
- 2 believes 1 can complete her tack without hitting her (this is critical and at 2's risk)
- 2 can call "tack and go behind me" (Though if 1 thinks she won't make it she should shout again)
- 1 will have Stbd tack rights but won't have got them in time for 2 to react
- So 1 will have to bear away to duck 2
- If there is any doubt, 2 has to prove it!
- Note 3 might have to see this coming and be ready to keep out of 1's way!



Scenario 1

- 1,2,3 &4 approach bank on Port tack
- 1 calls for "Water"
- 2 sees she will have to tack and calls water on 3
- 1,2 &3 tack
- 4 is approaching a bit further away and is on Port. She has to tack or duck all the others.



The Start and The Beat

- Top takeaway points for The Beat

- **Boat speed and Direction (Five Essentials)**
- **If the tiller is straight the boat is fast**
- **Look at “Rigging and Sail Control” video on our website**
- **Watching for headers and lifts using tell tales (Wind shifts)**
- **5 deg off the ideal direction = 10% more distance**
- **Pick your route around others (wind shadow etc). Create wind shadow on others!**
- **Tack well - learn how to roll tack**
- **Calling for water to tack (for bank or Stbd boat) – plan ahead!**

- **QUESTIONS?**