



Basic Racing “First Mark”

Overview

- The Prestart
 - Skippers' Meeting
 - Prestart Sailing
- The Start
 - The Goals and Rules
 - Ideal Strategy
 - Realistic Strategy
- The First Leg
 - Sail and Boat Trim
 - Tactics
 - Rounding

The Prestart

Gathering Information

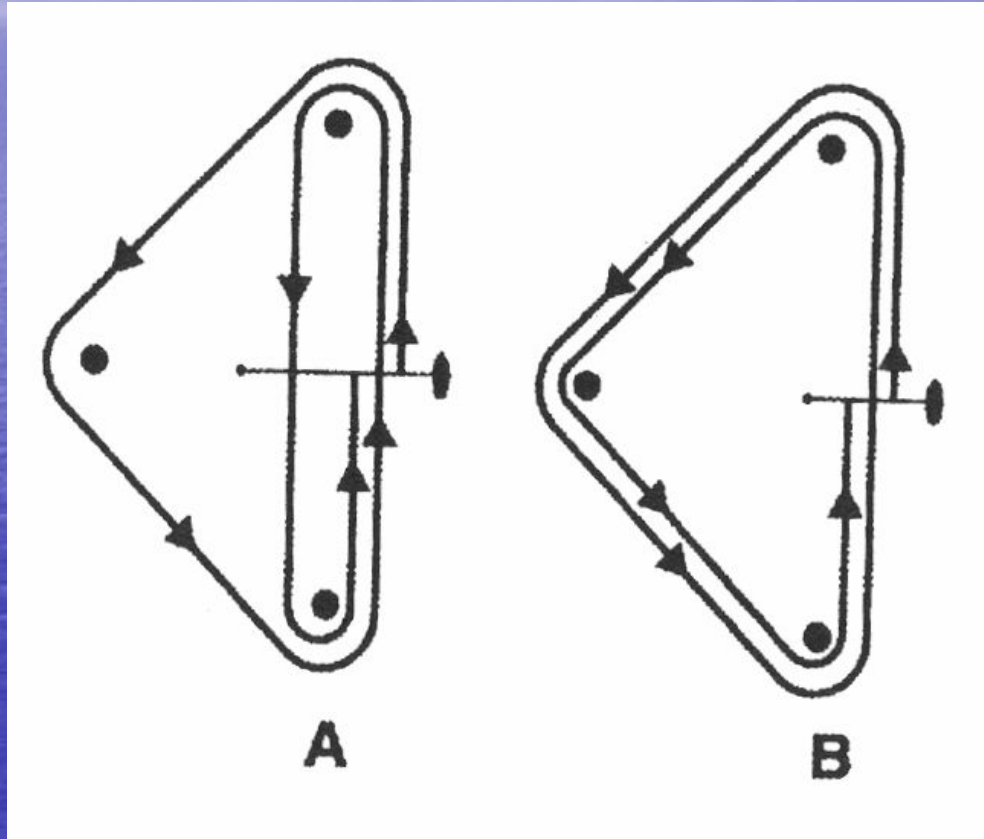
- Skippers Meeting
 - Courses
 - Rules
- Sailing Conditions
 - Square Line
 - Pressure
 - Wind shifts?

Skippers' Meeting

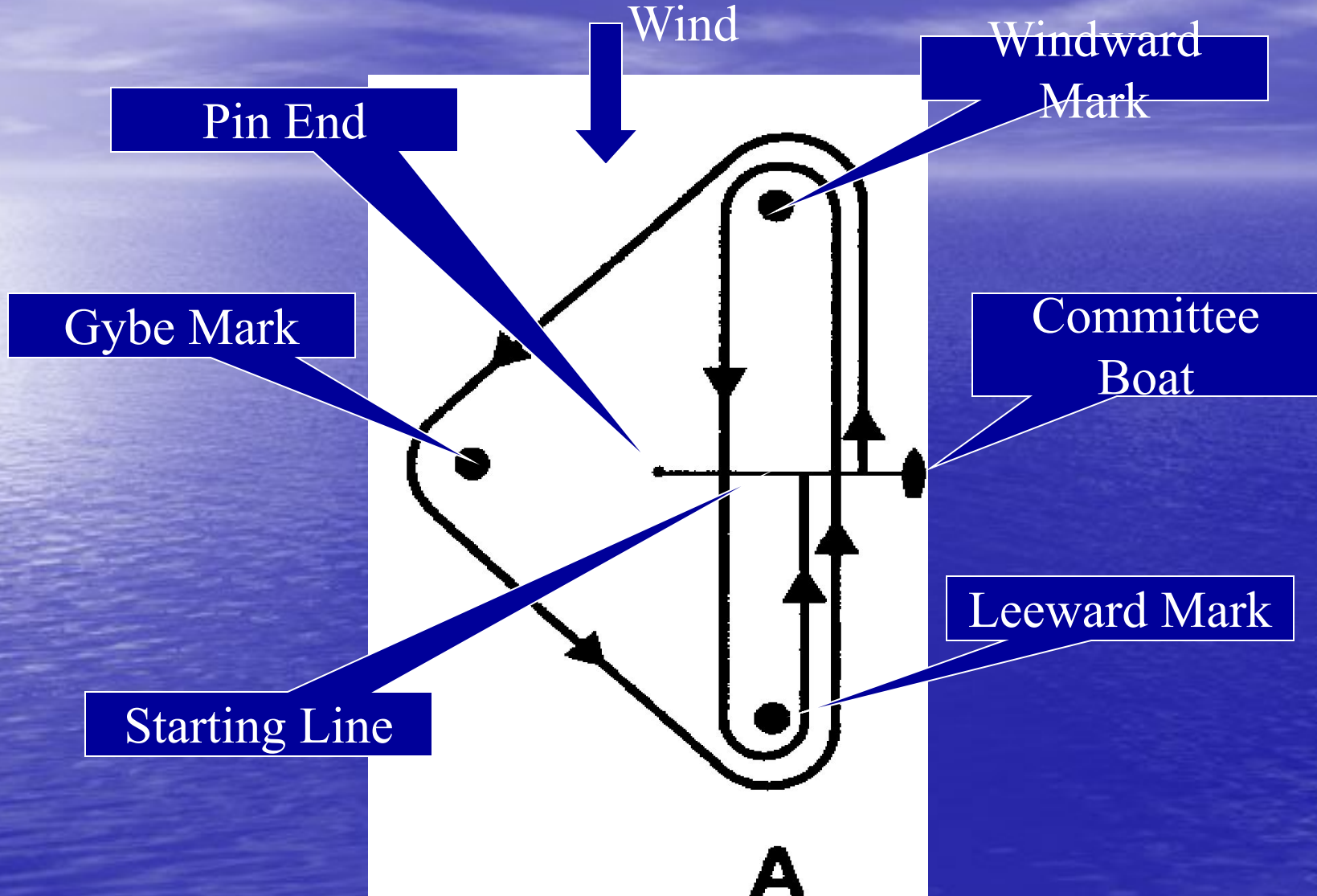
- Courses
 - A-Course (Modified Olympic Triangle)
 - E-Course (windward-leeward)
- Rules
 - One minute rule
 - Protected Line

A – Course

Wind Directly Downward

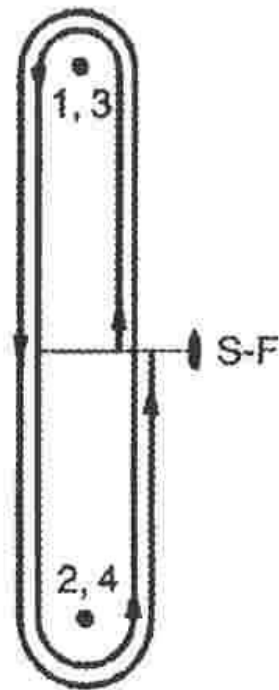


Course Layouts Definitions

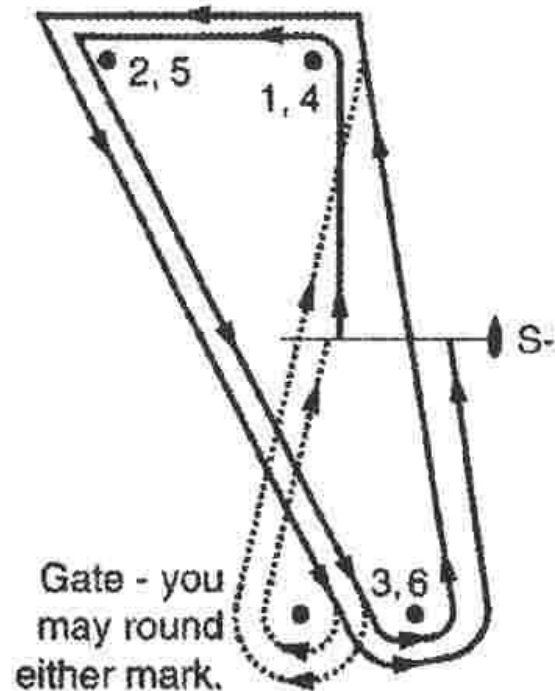


E - Course

S = Start **F** = Finish **S-F** = Start & Finish



E
Windward/
Leeward



F
Windward/Luard
(with offset & gate)

One Minute Rule

- Regular rule:
 - All boats must cross the starting line going upwind AFTER the starting gun. (P – flag)
- “Round the End – 1 min rule”
 - You may not sail across the starting line the wrong way (downwind) starting 1 minute prior to start. No Dip starts, must “round the end” if you are on wrong side of line from 1 min through start. (I – Flag)
- 20% rule (also a 1 min rule)
 - At one minute prior to start, any boat in the triangle formed by the starting line and the first mark face a 20% penalty. (Z-flag)
- Black Flag rule
 - At one minute prior to start, any boat in the triangle formed by the starting line and the first mark are disqualified. (Black flag).

Protected Starting Line

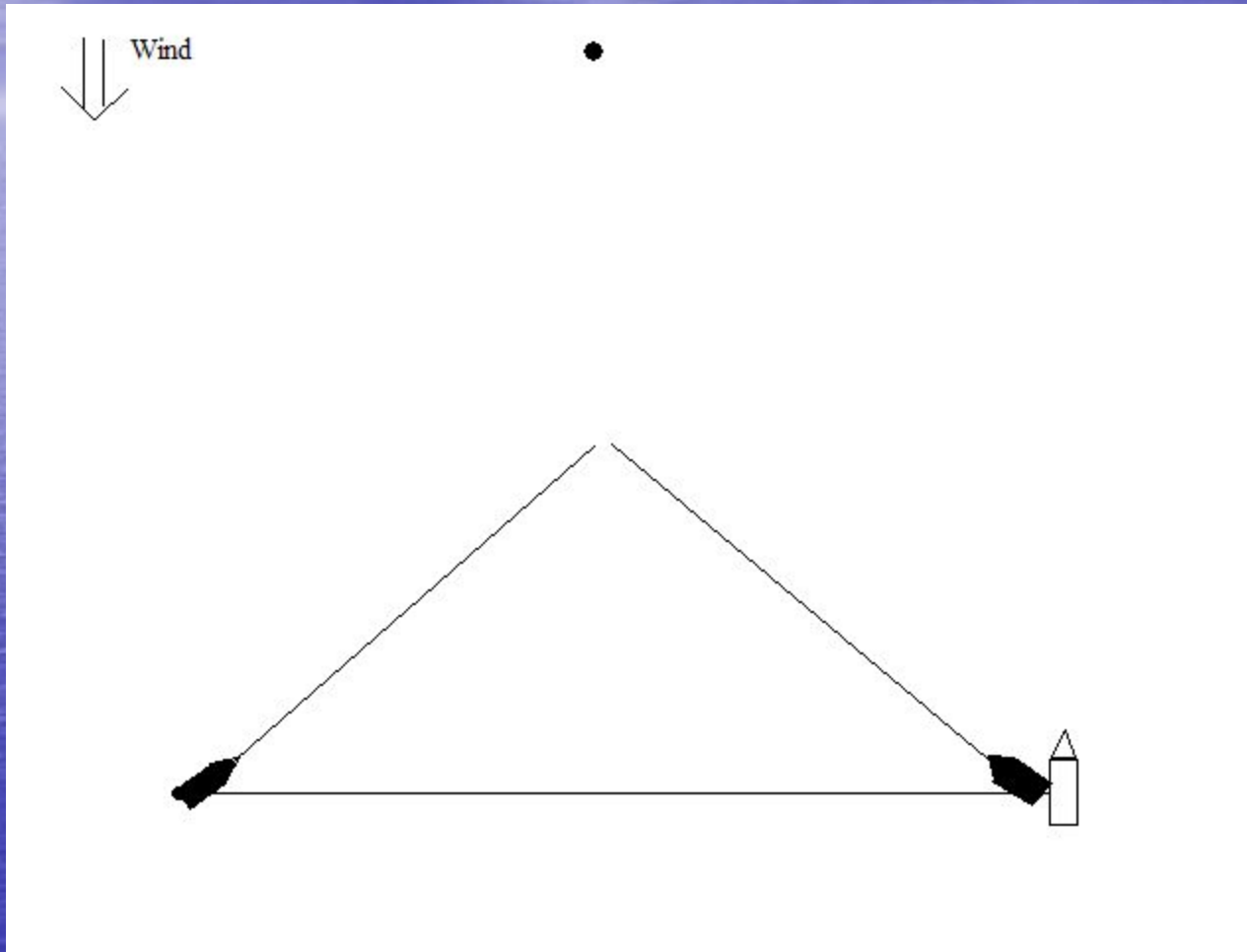
“Starting Line is an Obstacle”

May not sail across the start finish line during the race except to start or finish. You may call for sea room (as with any obstacle).

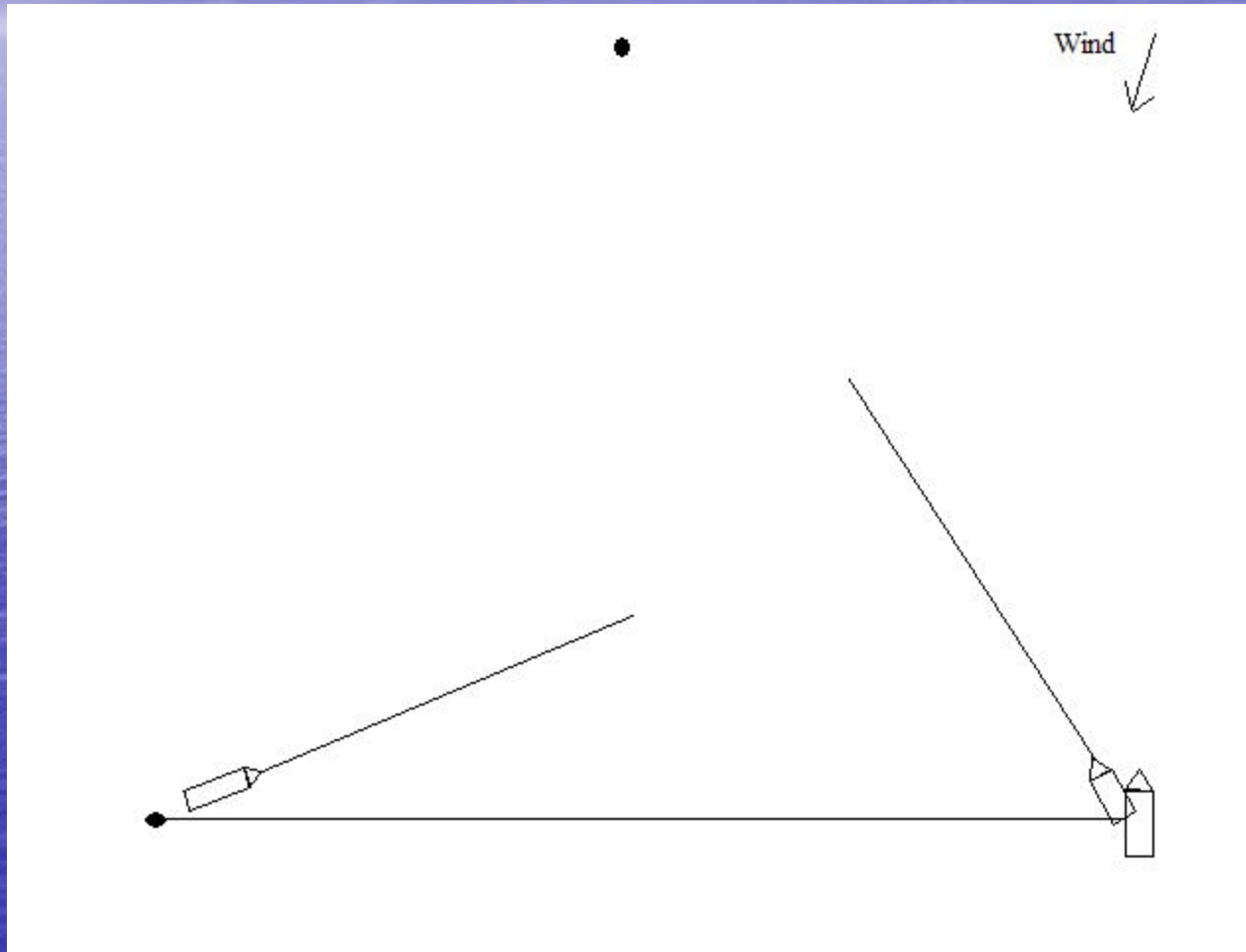
Prestart Sailing

- Starting Line – Square or favored end?
- Favored Tack on First Leg?
- Higher pressure on one side?
- Wind Shifts Along the first leg (and course)?

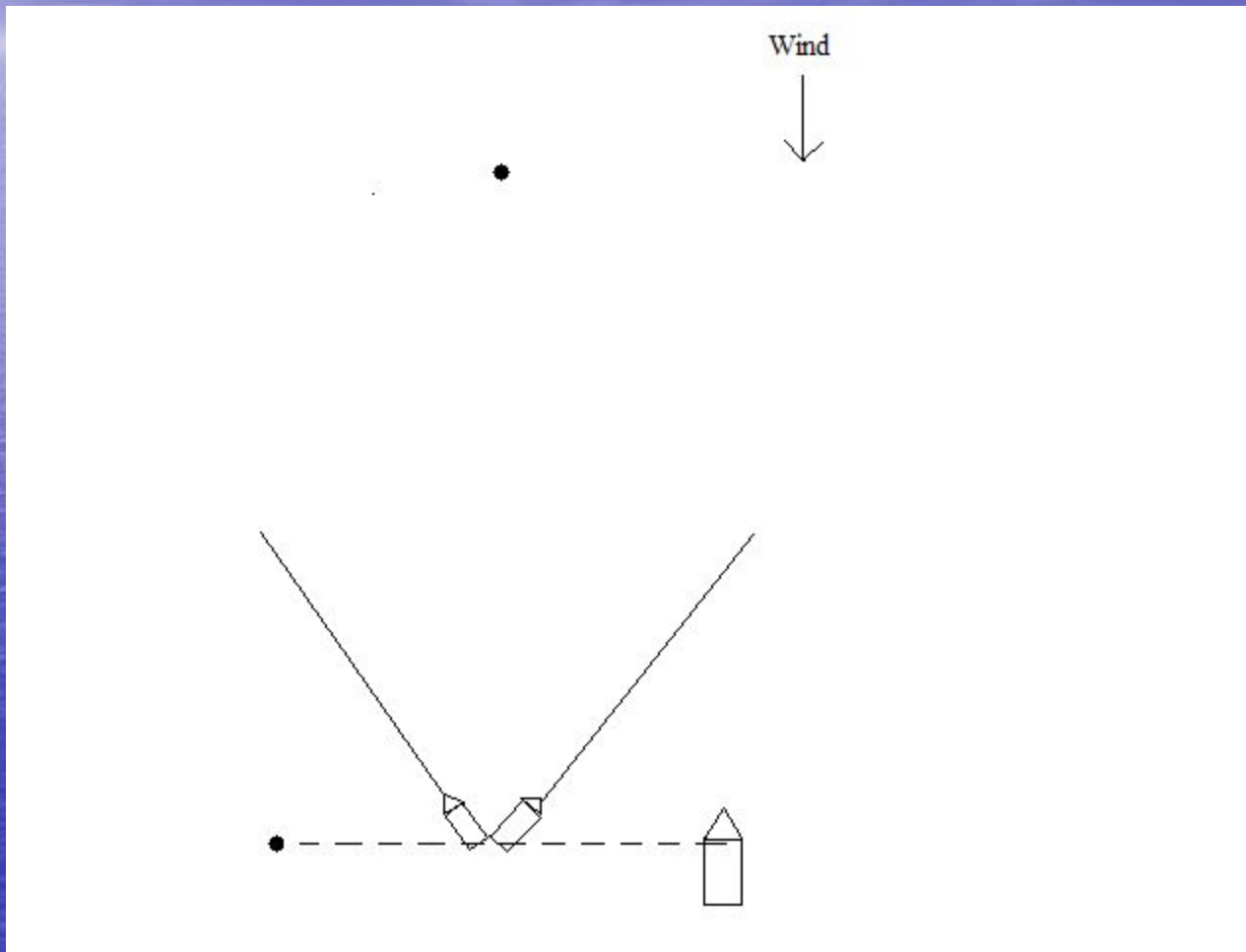
A Square Line: Two boats starting at opposite ends of the line
Will meet (at the same time) in the middle of the course.
Neither boat has an advantage.



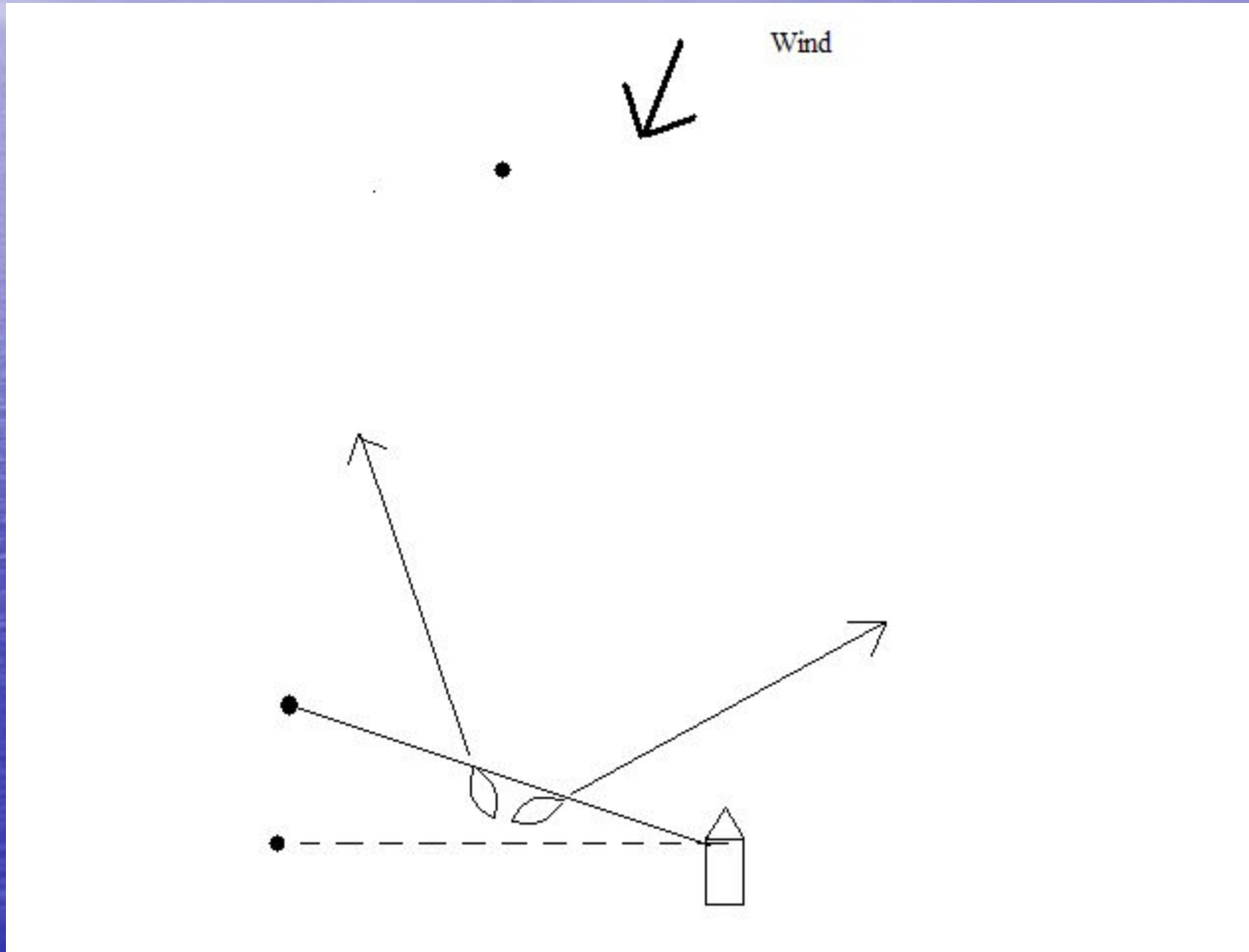
Committee End Favored: The line is not perpendicular to the wind
A boat starting on the windward end of the line (committee boat end
In this case) will be ahead of (closer to the first mark) a boat starting
further down the line.



Favored Tack: Here there is no favored tack, the course is square. The line is also square.



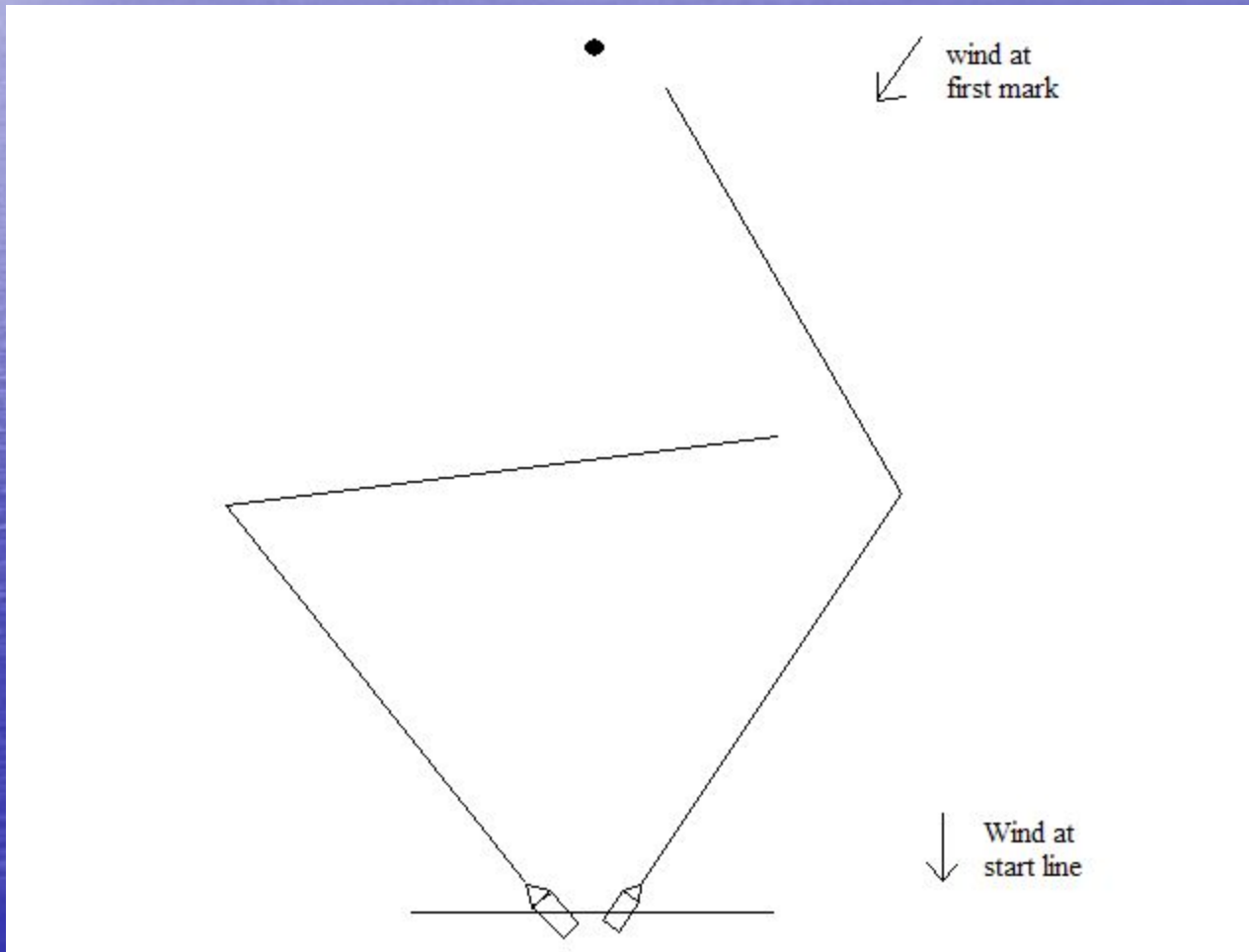
Starboard is favored here: Even though the two boats start at the same place (perhaps even on a square line), the boat on Starboard is closer to the mark after they sail the same distance.



Higher Pressure: Boats sail faster when there is more wind. The wind speed (pressure) is seldom the same all along the course.

- Hills that blanket the wind
- More breeze near the shore “Shore Breeze” (light air days in afternoon).

A wind shift along the course: two boats that start in the same Place but go to opposite sides of the course. The boat that sailed Toward the wind shift will be ahead after the shift is realized.



Review of Prestart

Gather information

- At the skippers meeting about the course, and the rules.
- On the water before the starting sequence, about the wind and the course relative to the wind.

The Start

The start is the single most important part of a race. Those ahead at the start gain significant advantage over the rest of the fleet: clear air.

- Rules
 - The sequence
 - Two Rules
- A starting plan (and a first leg plan)
 - Ideal plans
 - Realistic plans
 - Beginner plans and what to avoid

Some Starting Basics

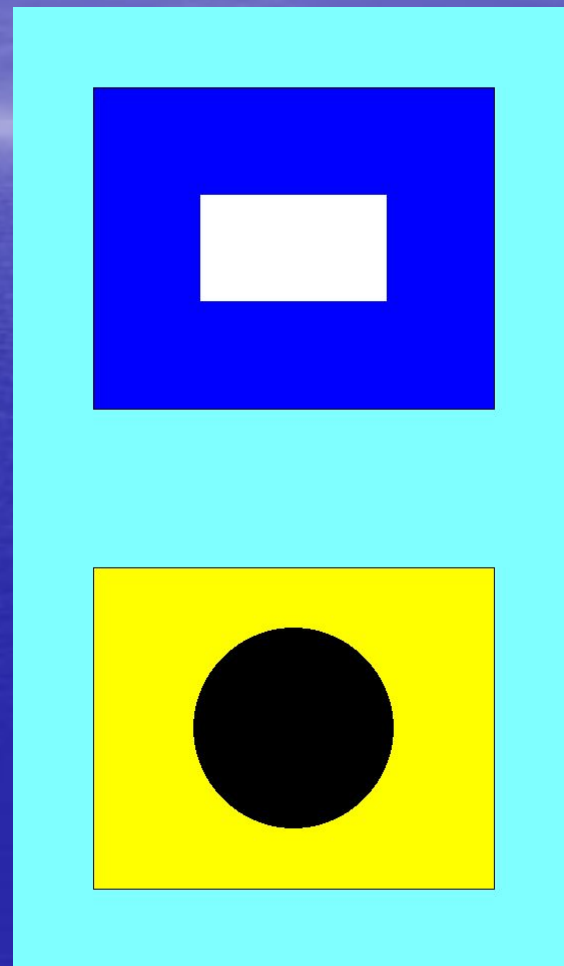
The Starting Sequence

Time	Flag	Sound
About 6 min before	None	Multiple Beeps
5 min (Warning)	Class Flag (red for us) UP	1 Horn
4 min (preparatory)	P or I flag UP (or Z or Black in special cases)	1 Horn
1 min	P or I flag DOWN	1 (long) Horn
Start	Class Flag DOWN	1 Horn

Flags

P- Flag: Blue with white Box
No 1 min rule in effect

I-Flag: Yellow with Black Circle
"Round the End" rule
Beginning at 1 min
before the start,
you must go around
the end of line if you
are upwind of the line.



Rights of Way

- Starboard Tack Boats
- Leeward Boat
 - Boats to windward must avoid
 - Can change course ('take you up') all the way to head to wind

Goals for Any Start

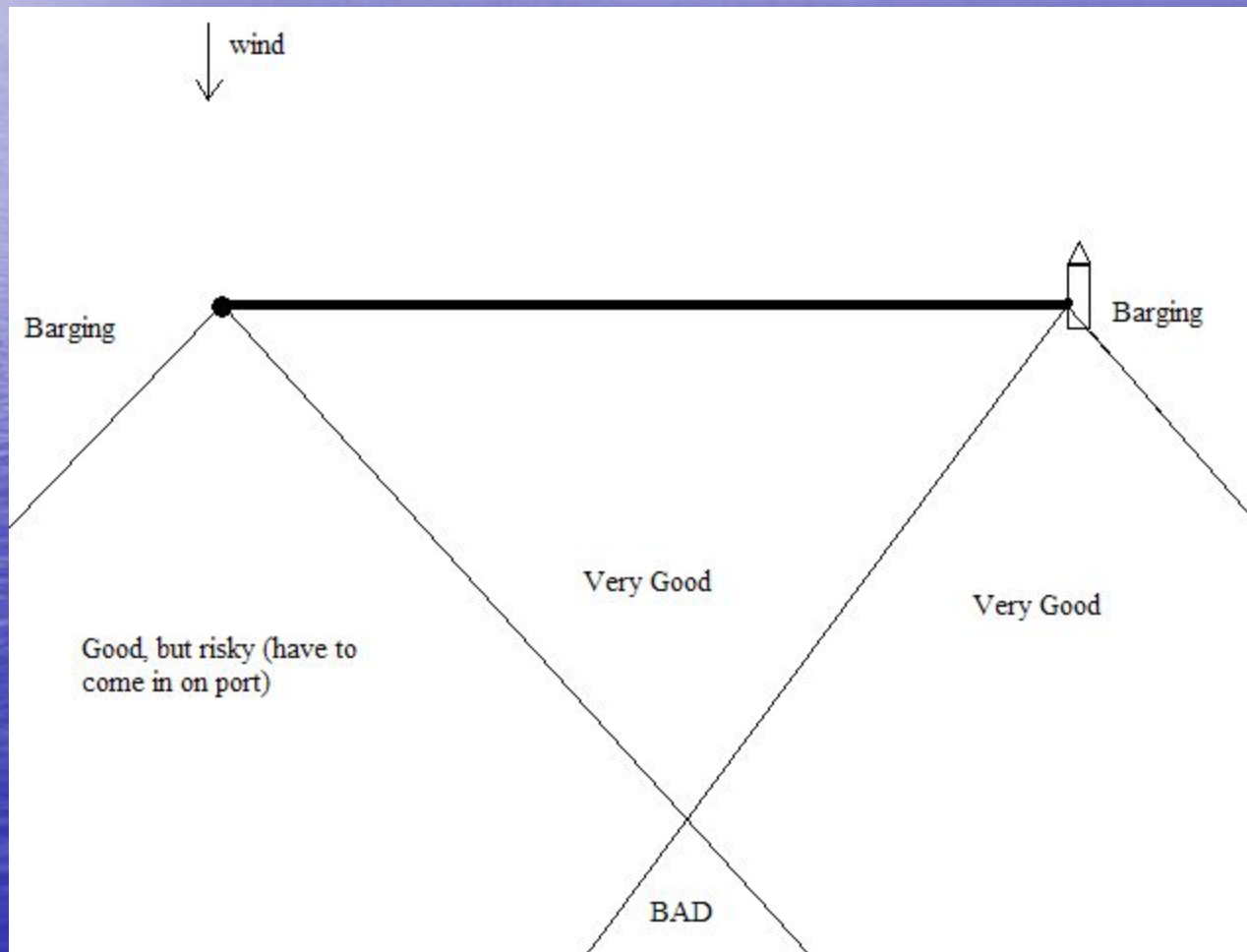
1. Boat Speed
2. On Time
3. Clear Air (or #1?)
4. Favored end
5. Favored tack or ability to tack soon
6. Position on fleet (or #5)

Thin lines represent “lay lines”.

Barging: boats starting from these areas have no rights to getting around the end of the line – other boats can force them off the line.

BAD: you can’t reach the line without some tacking

Good, But risky: you will be on port to start (or must tack shortly before)



Boat Speed

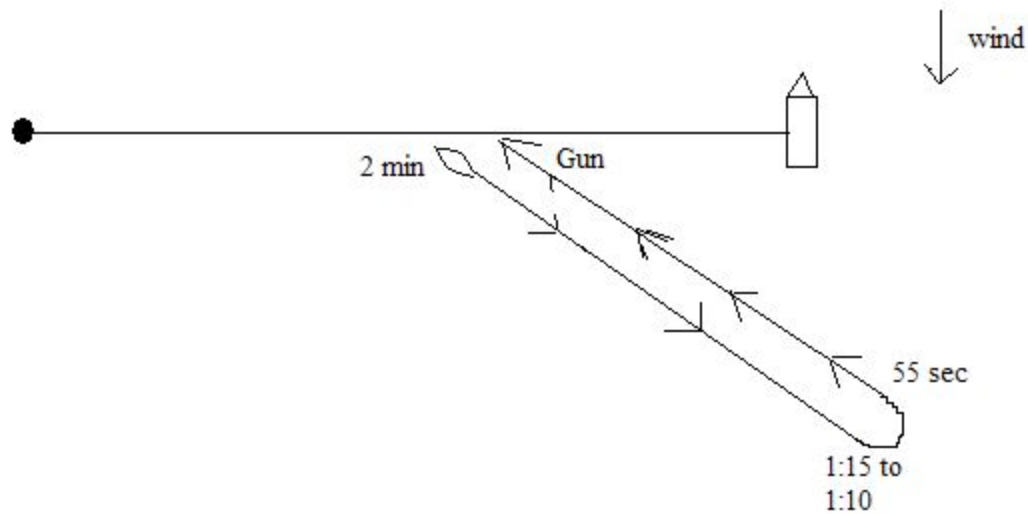
- Have your boat moving (unless you can accelerate quickly).
- Sails properly trimmed.
- Being on a reach just before the start is good.

Timing

Basic Starting Approach (Vanderbilt):

1. Pick a place on the line you want to start
2. At about 2 min before the gun sail out for about 1 min (slightly less)
3. Sail back to that point.

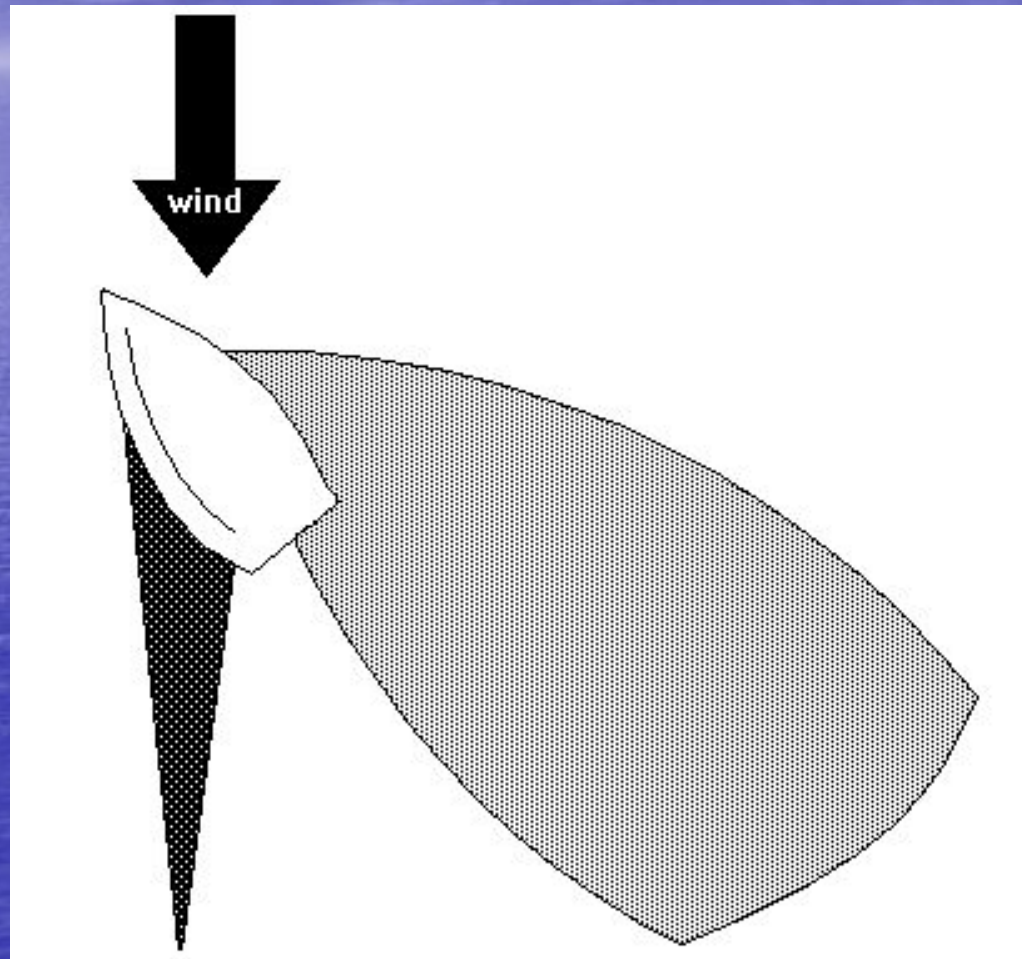
At the line at 2 min to start: sail away on a broad reach.
At about 1:10 left to go, tack around (depends on how long
Your boat takes to tack and regain speed). Sail back to line
On a close reach or close hauled.



What Point – What direction?

- Favored end
- Starboard Tack
- Position of leeward boats
- Ability to tack after the start

Clear Air



Some Advice for Beginners

- Follow a good starter (does require some boat handling ability).
- Simple Vanderbilt start – aim for middle of line or slightly to the right (committee boat end).
- Make a plan and stick to it.
- Practice.

Things to Avoid

- Avoid being slow (late with speed is fine indeed)
- Avoid being really late
 - Stay close to the line
 - Aim for a point nearer starboard end (you can reach down or fall off line if a little early)
- Avoid other boats and collisions.
 - Stay on starboard as much as possible and especially in the last 45 seconds
 - Being close hauled will likely make you leeward boat when it counts
- Avoid snap decisions and changes in plan.

Review of Start

- Boat Speed, On Time, Clear Air
- Favored End, Favored Tack (or ability to tack soon), Starboard tack.
- Make a plan and stick to it.

The First Leg

- Sail Fast
 - Properly trimmed sails and Hull
 - Watching puffs, headers and lifts.
 - Light touch on helm
- Strategy/Tactics
 - Position on fleet and meeting other boats
 - Position relative to lay line
- Getting ready for rounding
 - When to go for the layline

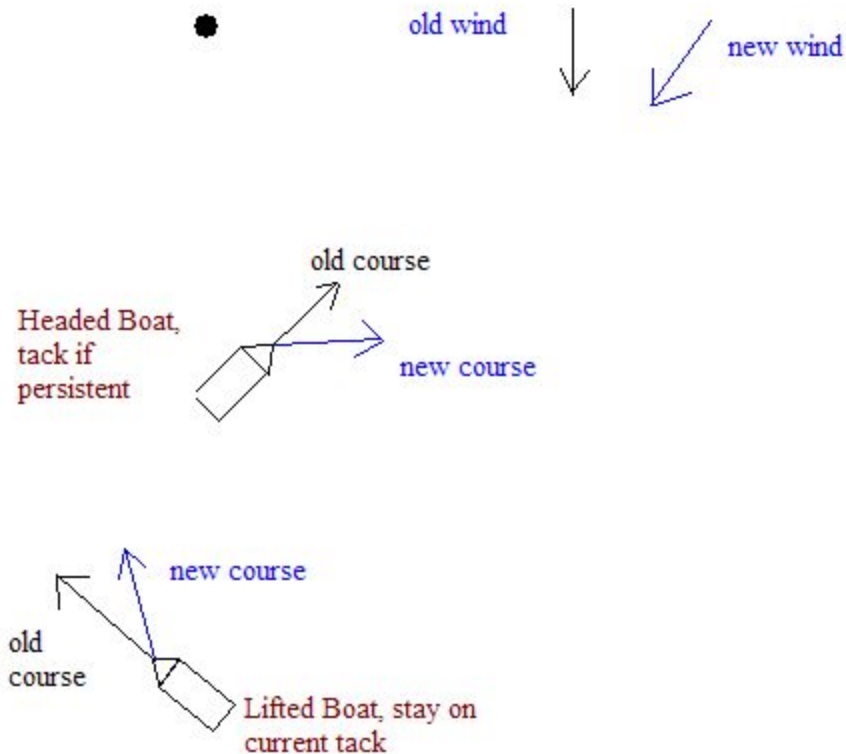
Proper Trim

- Sail close hauled
 - Sails in tight
 - Adjust lead position, traveler, outhaul, Cunningham, boom vang. Etc Etc.
 - Keep all telltales flowing.
 - Watch for weather helm – adjust sails to keep helm nearly neutral
- Hull Trim (the overlooked trim)
 - Flat is fast
 - Keep weight out of the ends: crew and skipper should be as close to the mast as possible

Headers and Lifts

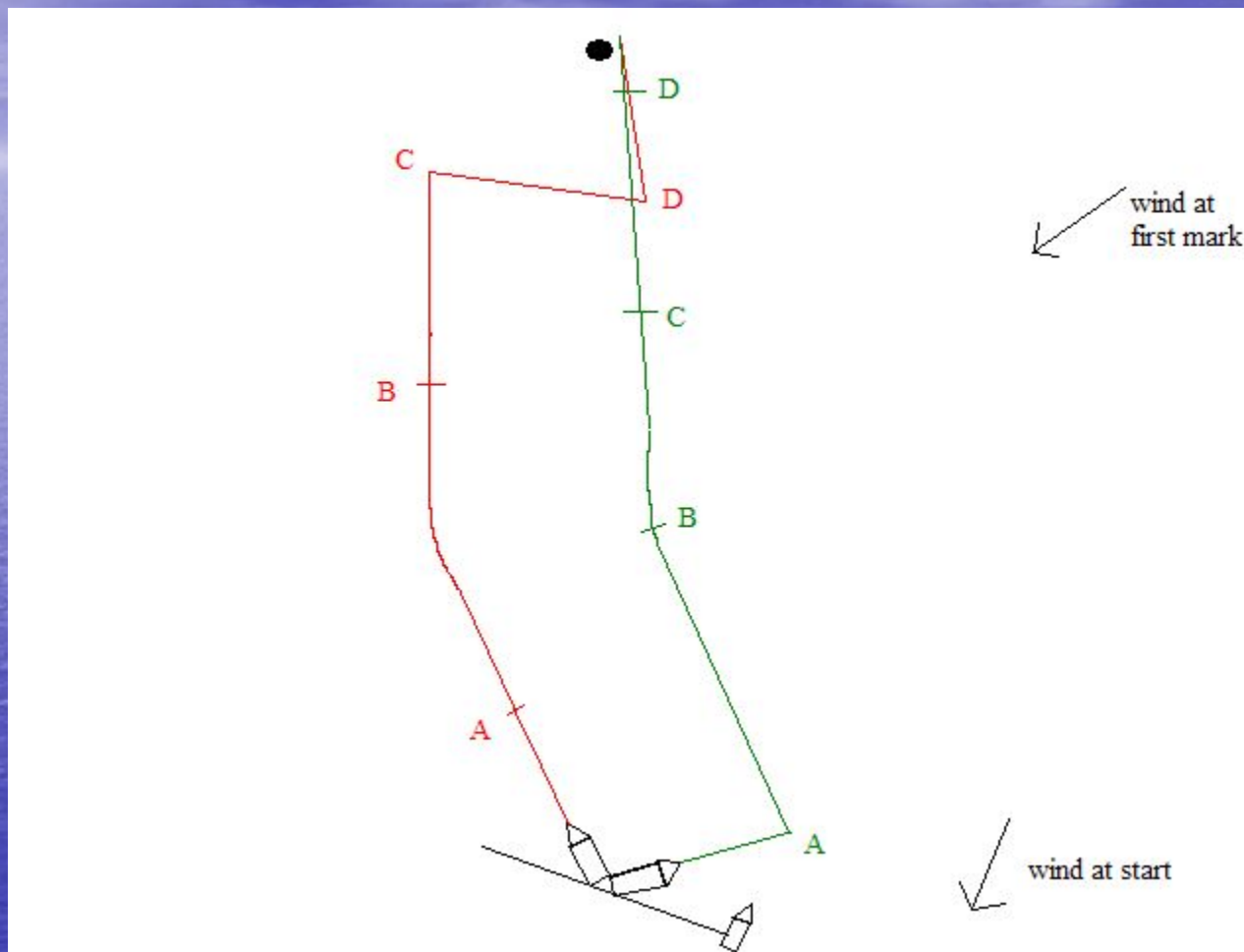
- Lift: When the wind shifts to bring your course more directly toward the upwind mark.
- Header: When the wind shifts to bring your course away from the mark.
- Tack in persistent header – stay in persistent lifts.

Watch for persistent changes in wind direction.
Continue on in lifts, tack in headers.
Note, wind oscillates regularly, only be concerned
With persistent shifts. Also pay attention to favored
Tack – small headers on the favored tack are not cause for change.



Expected Shifts

- You have information about expected shift (from prestart period)
- Sail toward expected shifts.
- If favored tack is expected to get more favored, sail on bad tack early.
- If favored tack is expected to get worse, sail on favored tack early.



Steering

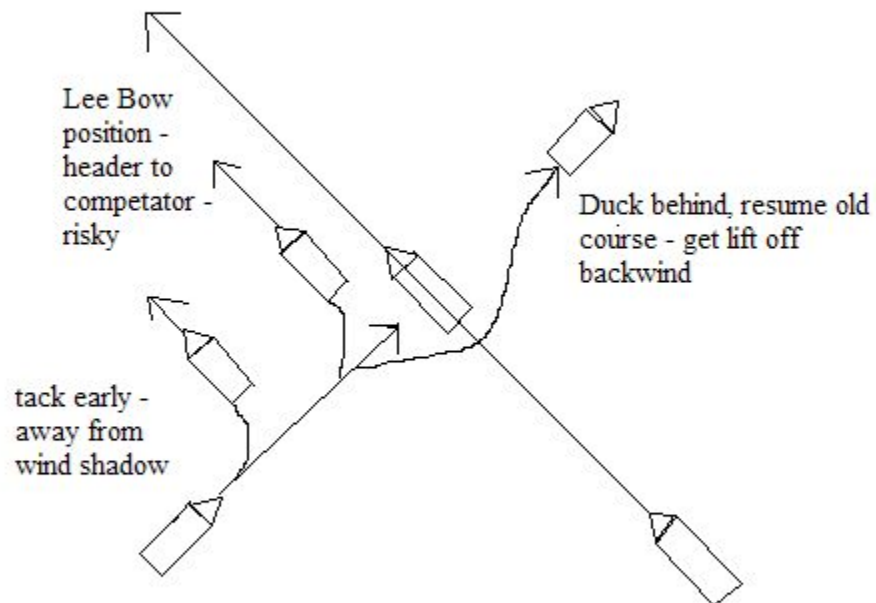
- Up in puffs (point higher) – Ease, Hike, trim
- Off in lulls
- Avoid weather helm
- Use boat heel to turn through tacks
- Avoid using helm

Tactics and Position

- Avoid extremes unless you know you are right.
- Don't sail for the layline
- Recall that starboard has right of way
 - Try to avoid crossing through fleet on port
 - Have a plan for what to do when you are on port

When you are on port you have three options:

- (1) tack early (least risky - least to gain)
- (2) duck behind and resume old course
- (3) Lee Bow position. Risky - Don't foul



When to head for layline

- Later is better
 - The layline is the extreme side of the course
 - Too high a risk of overstanding
- Avoid the “starboard tack parade”
 - Very messed up wind
 - Lots of boats, heavy traffic
- Inside (leeward) boats have right of way (provided they have overlap 2 lengths prior to mark – they can’t tack though)

A Mark Rounding Plan

- Sail for a point on starboard tack layline about 3 – 5 boat lengths from mark
- Watch “parade for hole” sail to that hole
- Tack about 1 boat length above line (avoid bad air if possible)
- Bare off slightly to gain speed
- Call for and acknowledge any overlaps

Problems

- No hole
 - What do you mean, weren't you first to mark?
 - There's always a hole, but you may have to bare off to find it.
 - Tack about 3 boat lengths below line and wait for one, then tack through it and tack again
 - Lee bow someone just below layline and pinch up (be careful – don't pinch until after tack).
- Everyone else is doing same thing
 - Aim a little closer to mark (but be sure to have a hole - riskier)
 - Aim a little farther from mark (safer, but likely to get bad air)
 - See above.

Review of upwind leg

- Sails properly trimmed, hull properly trimmed, make use of puffs
- Based on information from prestart make a sailing plan and stick to it.
- Shifts
 - Sail toward known shifts early
 - Tack in persistent headers
- Make plans for crossing on port tack
- Make a plan for rounding.

Conclusions

- None of this is easy
 - Practice (every race is a practice for future)
 - Don't get discouraged
 - Make hay out of every victory (however small)
 - Learn from your mistakes
- Make a Plan
 - Many races are lost due to indecision
 - No plan is worse than a bad plan
- Get information