

A Shifty Business



Optimist National Squad

Marvo 2011

Lift or a Header

- Lift or Header
- How does it feel when you are lifted?
- How does it feel when you are headed?
- Which telltales are useful for lifts or headers?
- Use of relative positions, the land or your compass to help you know if you have been lifted or headed

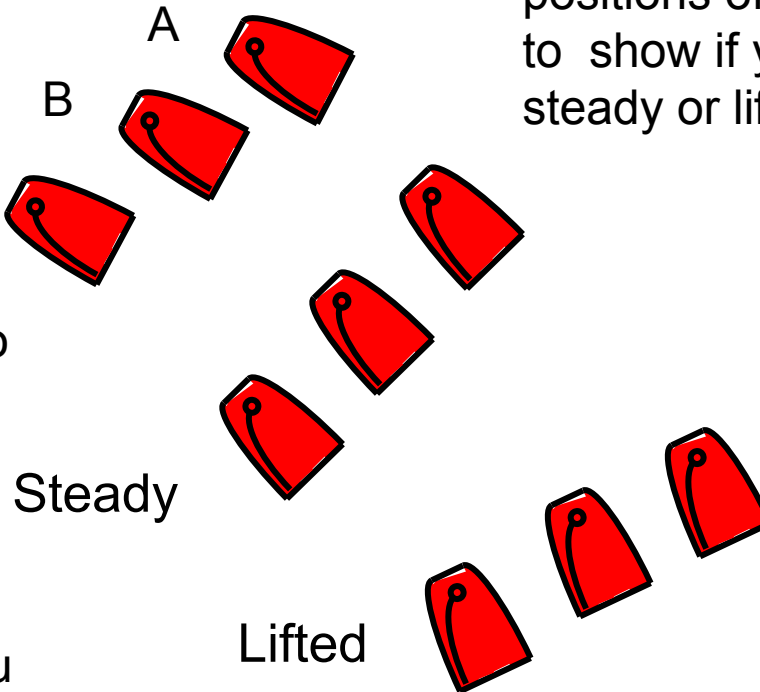
Shifty Business

Land

On a Lake or close to the shore you can use the land to show if you are headed, steady or lifted

You can use the relative positions of the other boats to show if you are headed, steady or lifted.

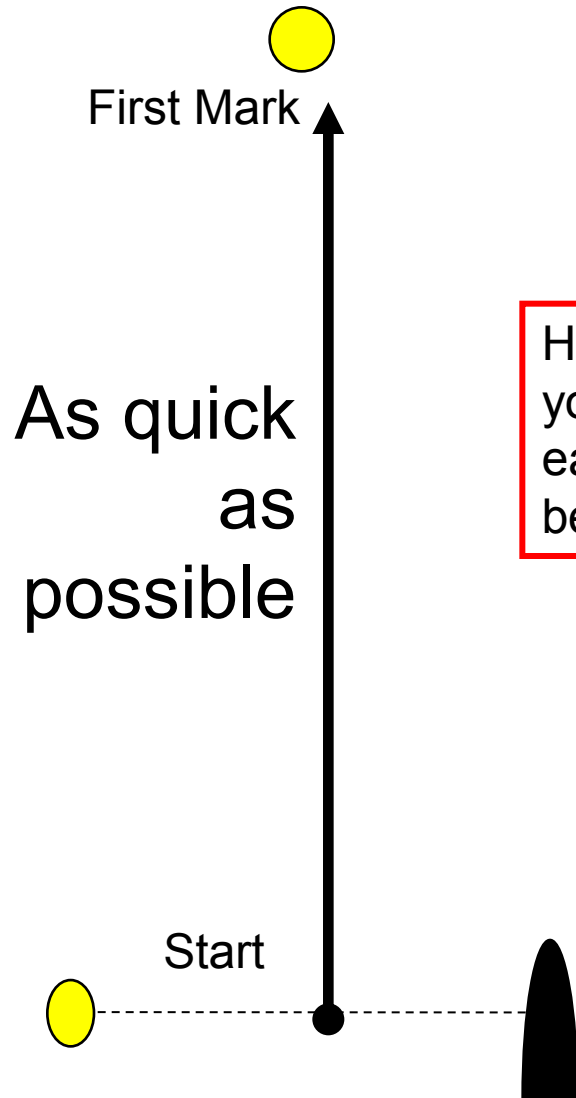
Headed
Boat C appears to move ahead



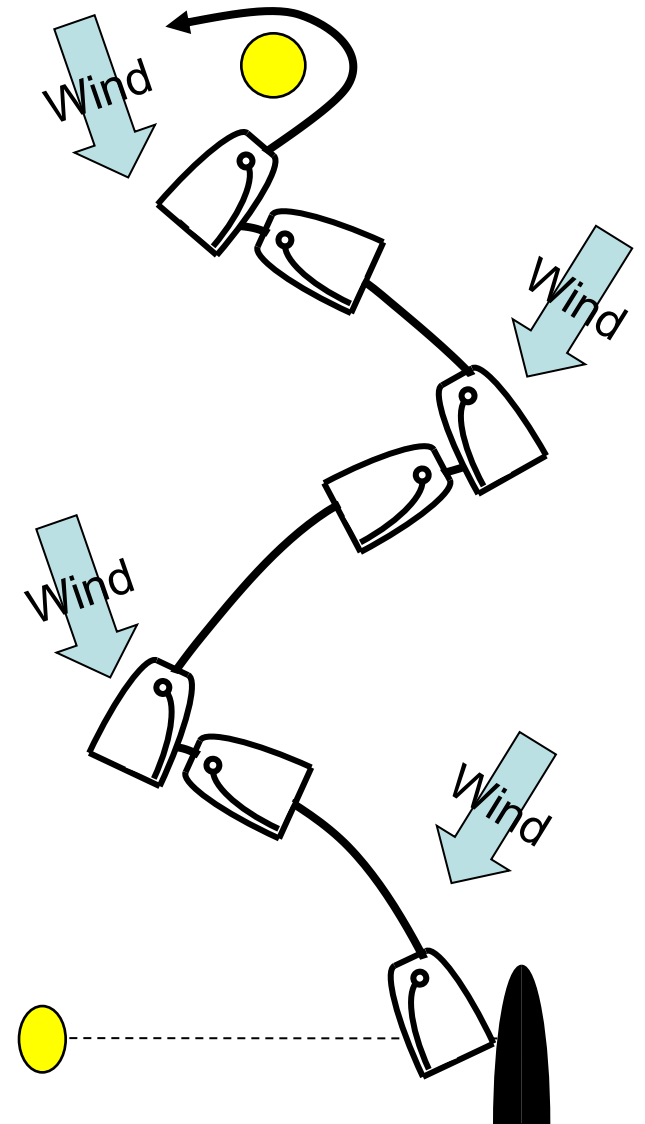
If you start to get headed and can't tack you need to hold your height or you will fall into the leebow of the boat to leeward

Boat A appears to move ahead

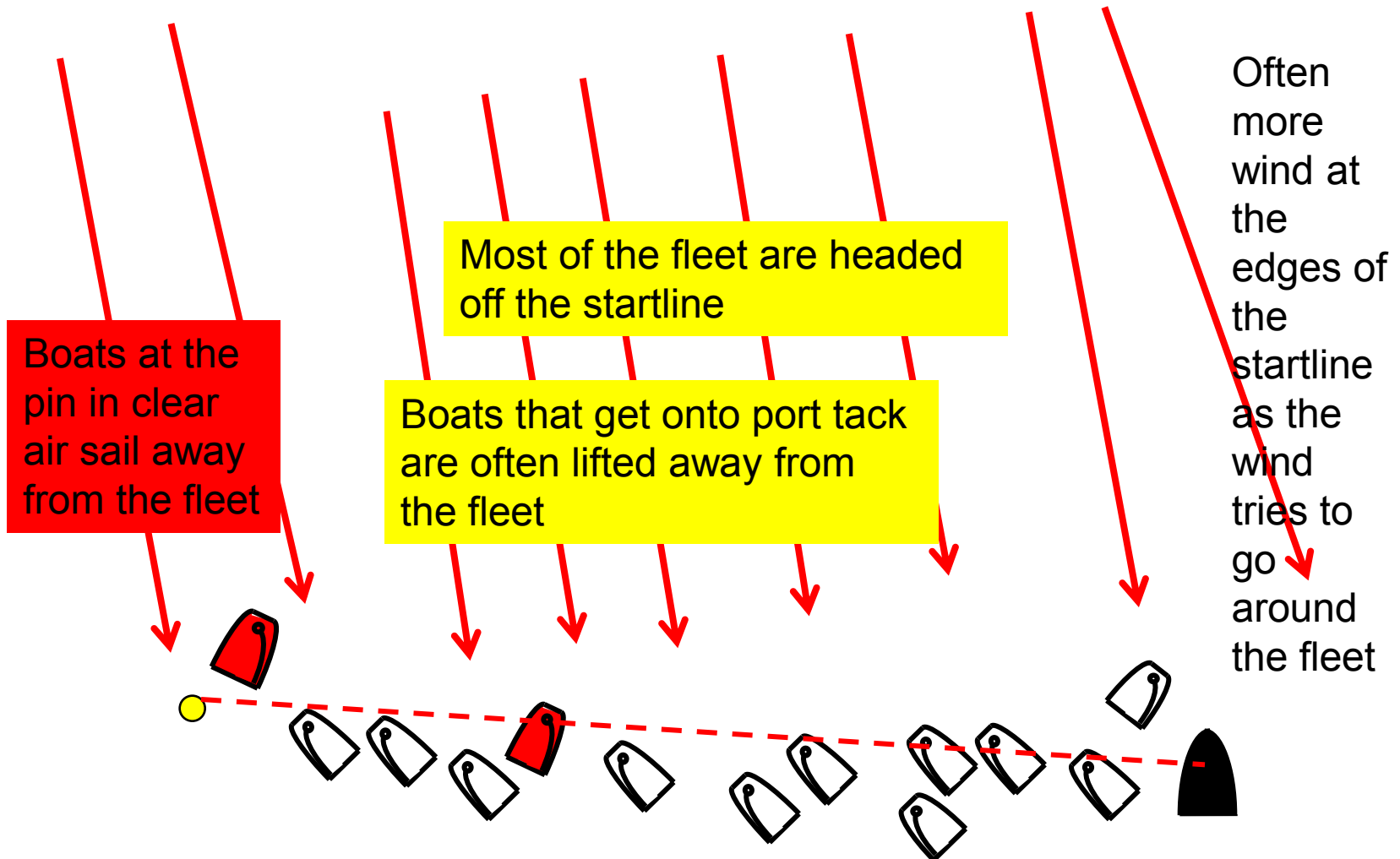
The Big Picture



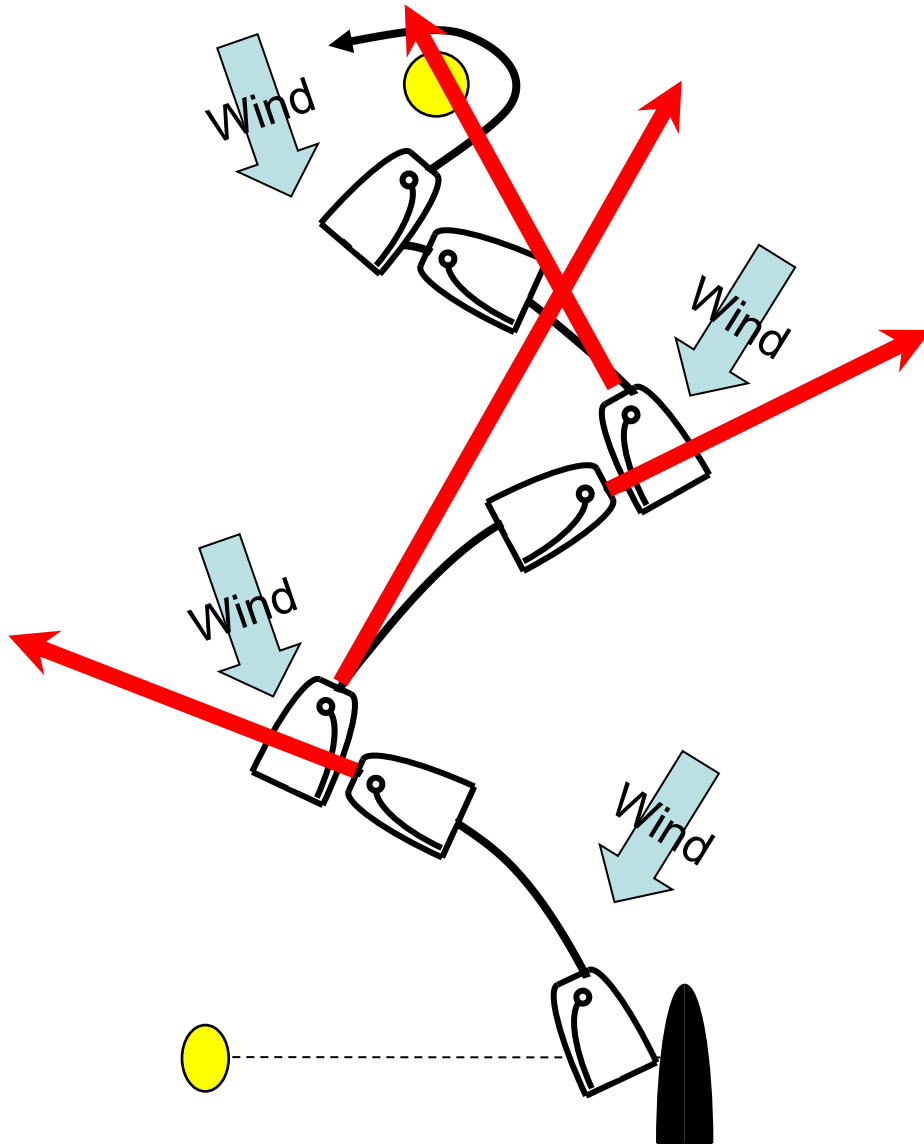
How far should you dig into each header before tacking?



Wind on the Startline (Pin Bias)



Basics



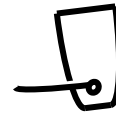
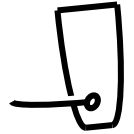
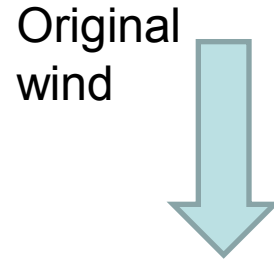
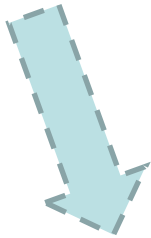
Sail the tack
which takes
you closest
to the mark

When to tack- Rule of thumb

Short and Fast Shift- tack
pretty well straight away.

Long and Slow Shift- dig into
the header before tacking

Leeward Gate



You are going down the run and the wind went left sometime ago, you know that the wind is oscillating –which mark might you round?

You are going down a run and the wind has gone left and is going to stay left –which mark do you go round?

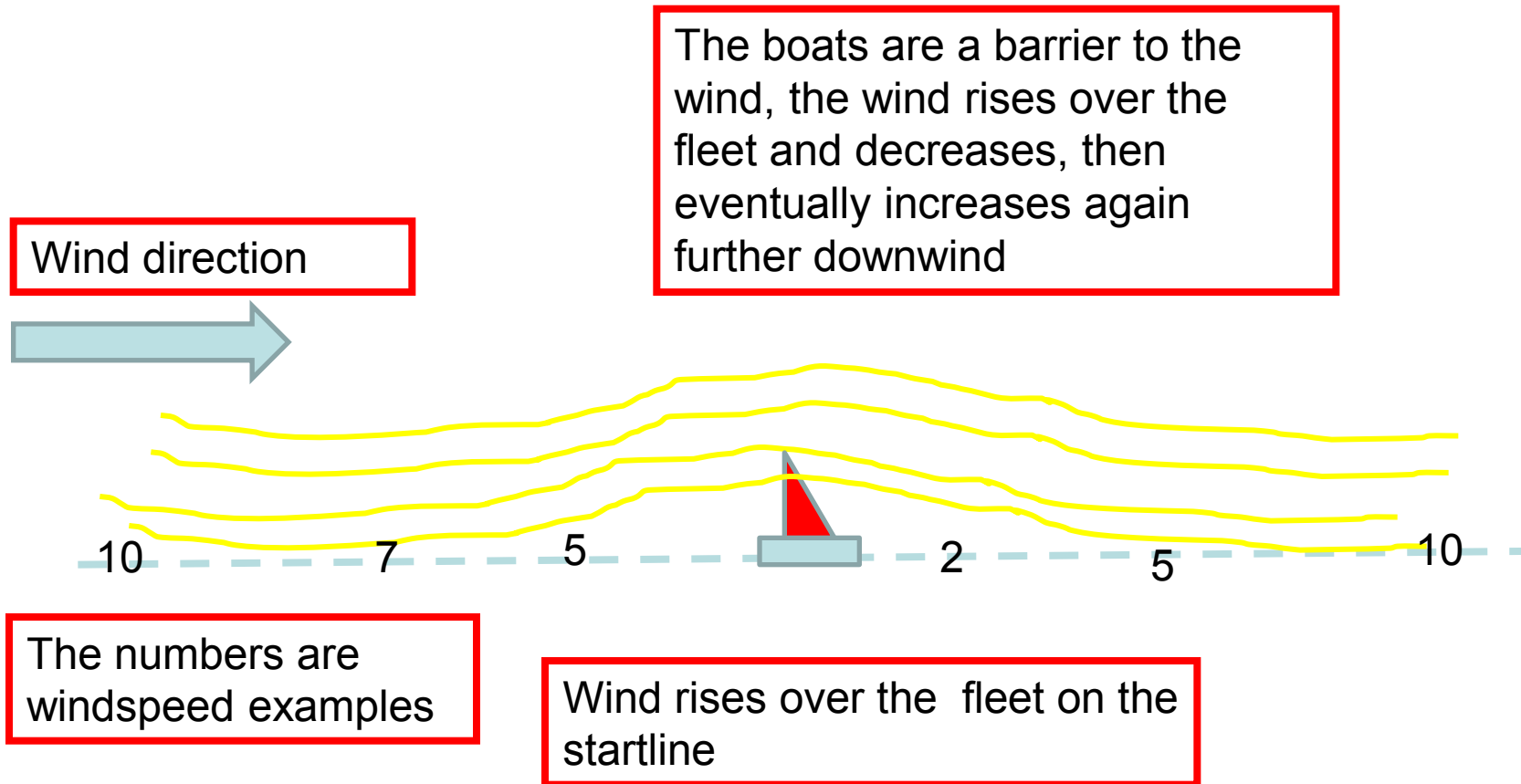


B



A

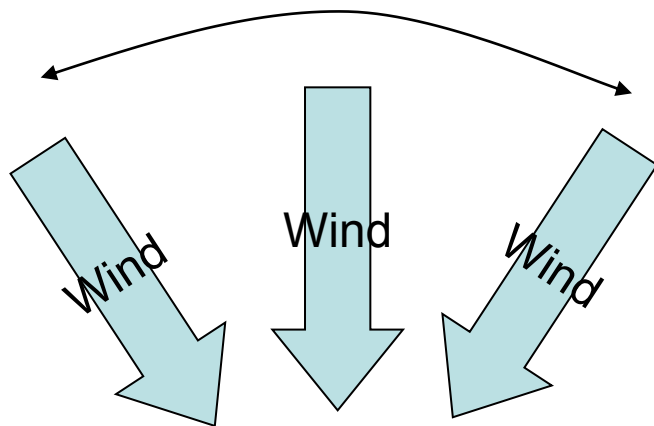
The Startline boats are a barrier to the wind



Basics

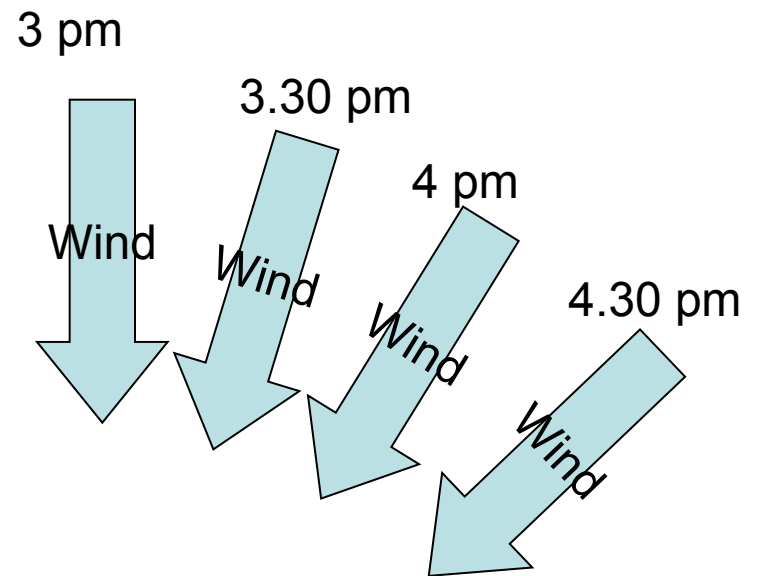
What type of windshift is it???

- Oscillating



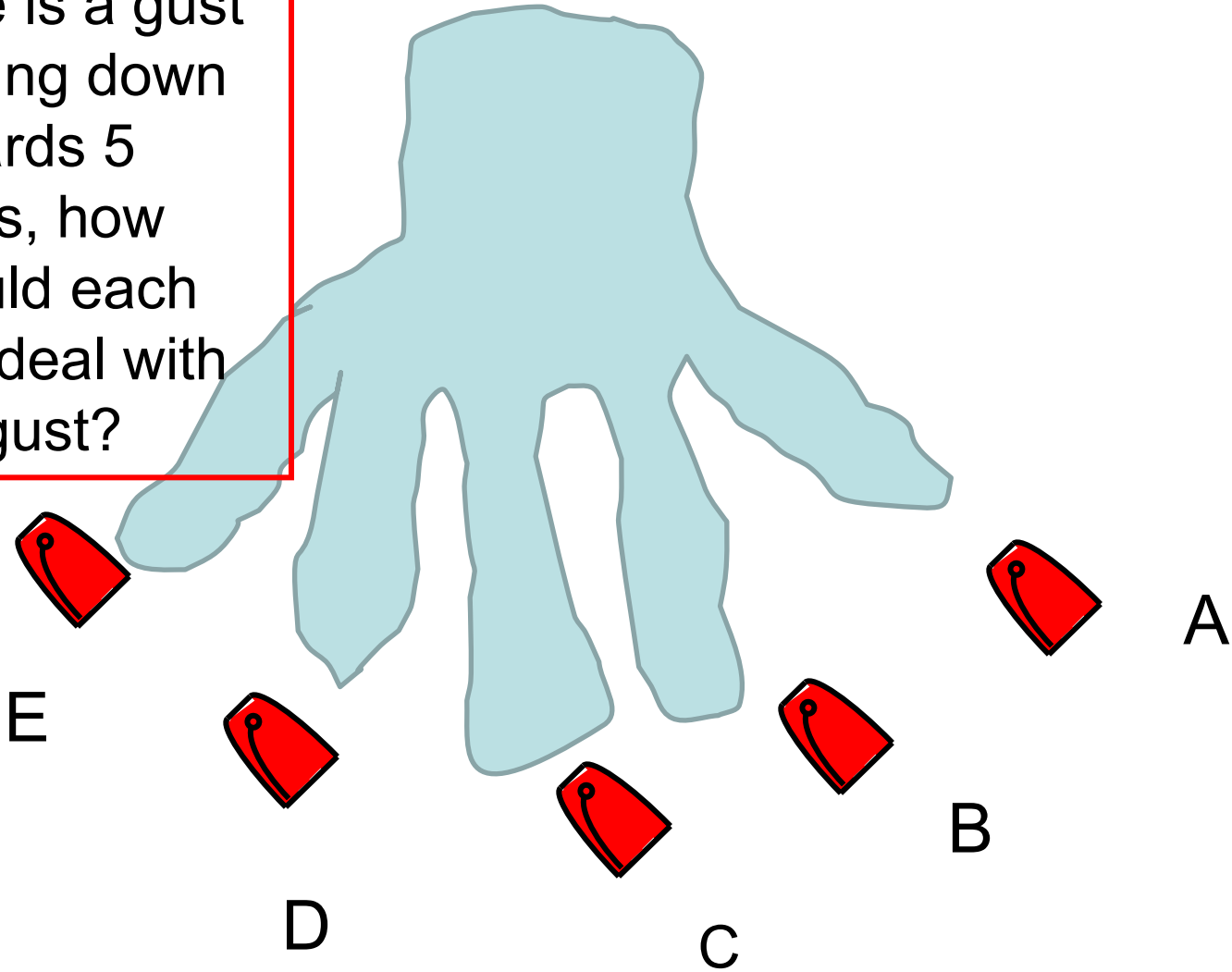
Eg. Every 3 minutes
10 degree shifts

- Persistent

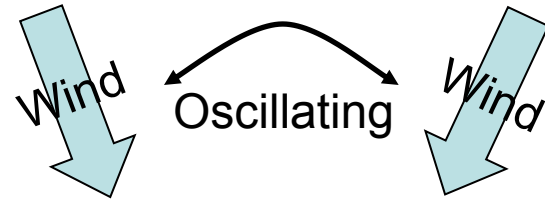


Chaotic Gusts

Here is a gust coming down towards 5 boats, how should each one deal with the gust?

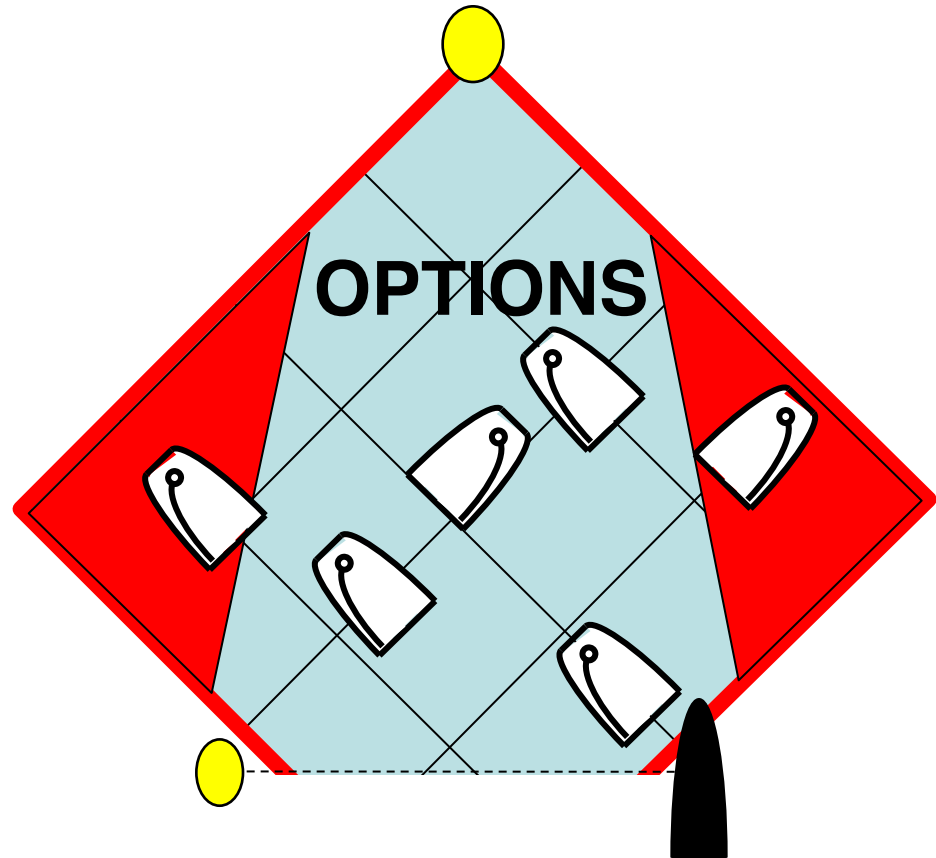


Oscillating Wind Golden Rules

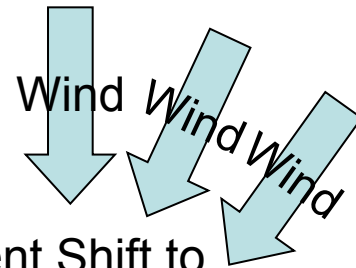


Keep your
Options
Open...

Stay OFF
the
Laylines!!!



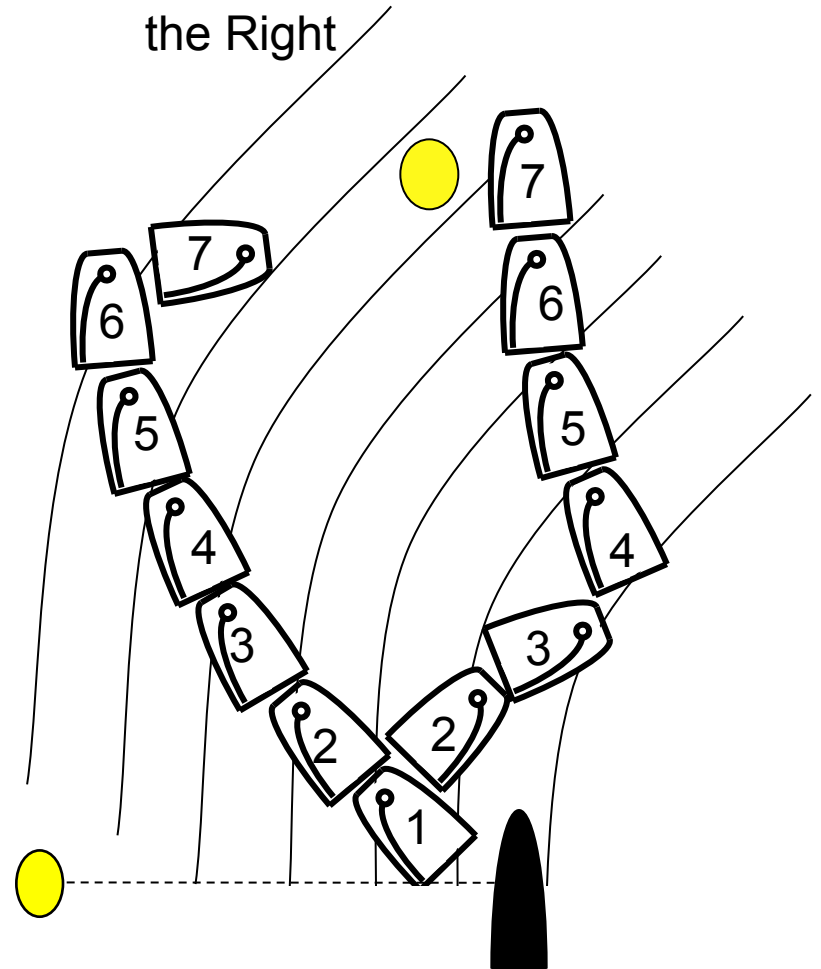
Persistent Shift



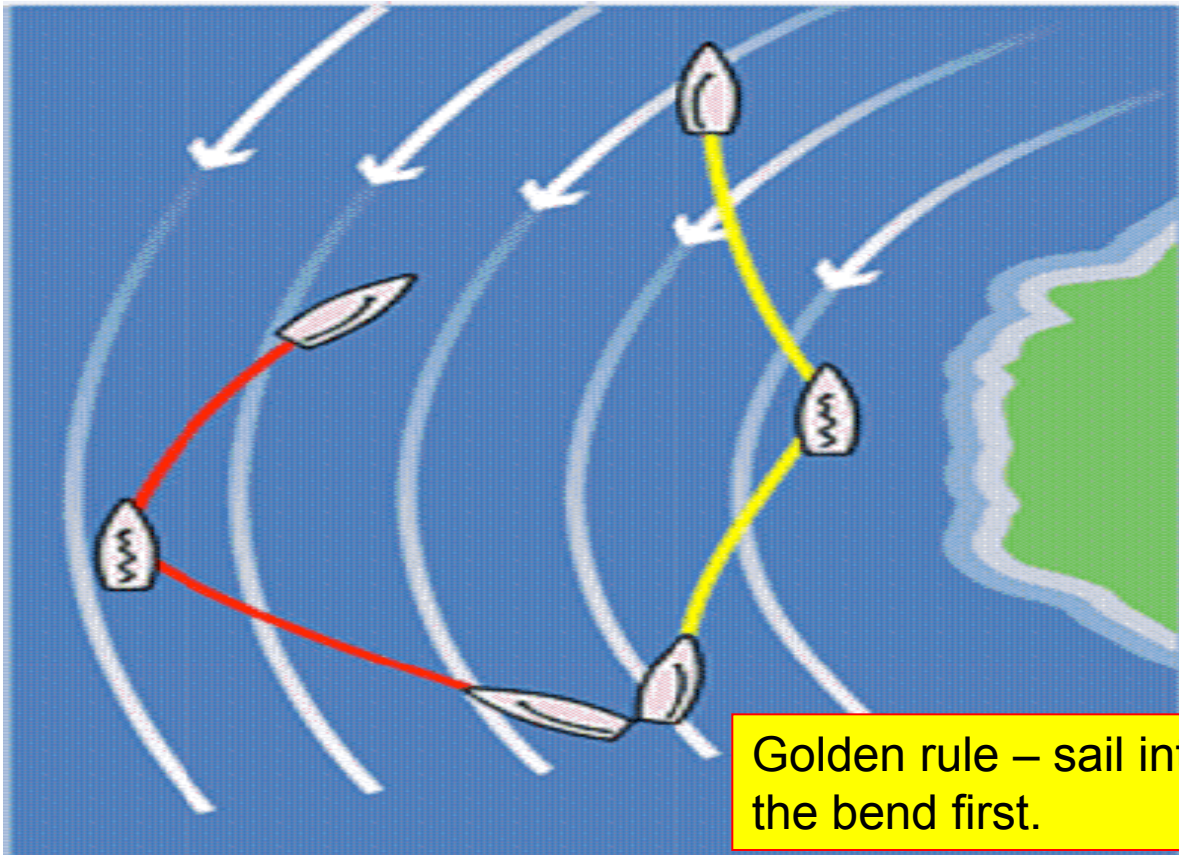
Persistent Shift to the Right

Sail into the header

Sail the inside of the Running Track



Wind Bend



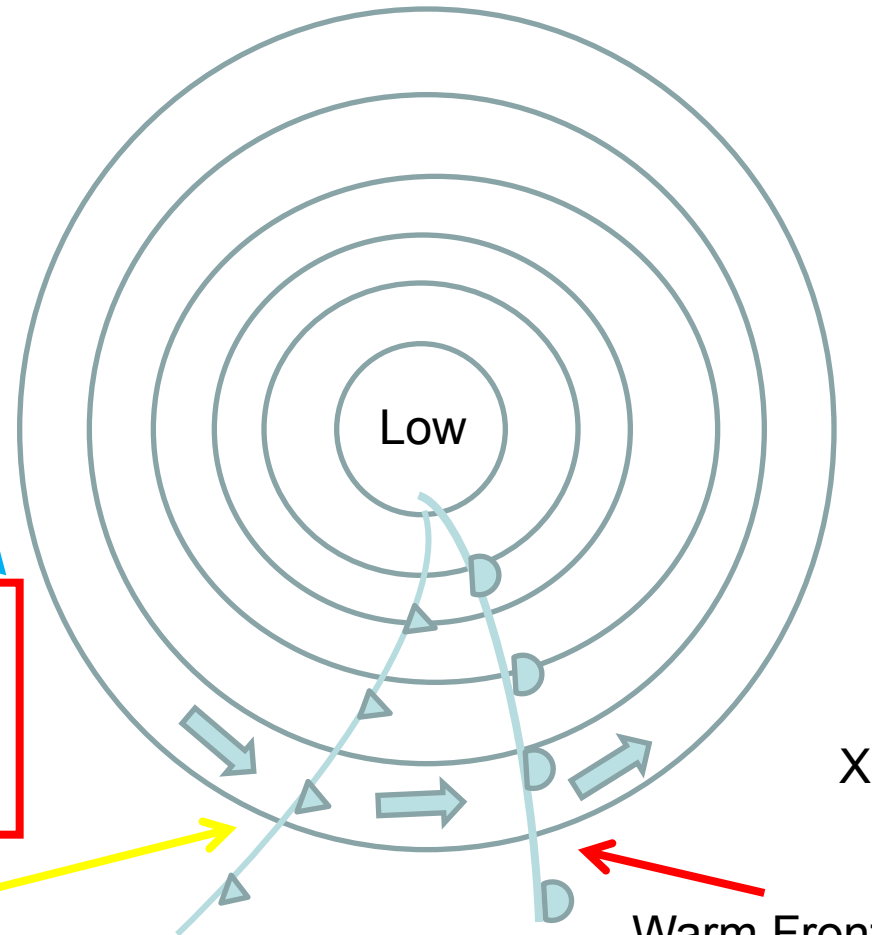
Low Pressure System- a Depression

More isobars, more pressure, more wind

Isobars

Wind anticlockwise

Generally unstable windy and wet conditions



If you were in in position x which way would you expect the wind to go when the warm front and the cold front crosses over you – Left or Right

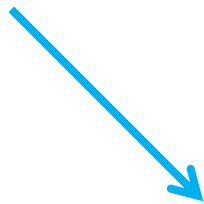
Cold Front

Warm Front

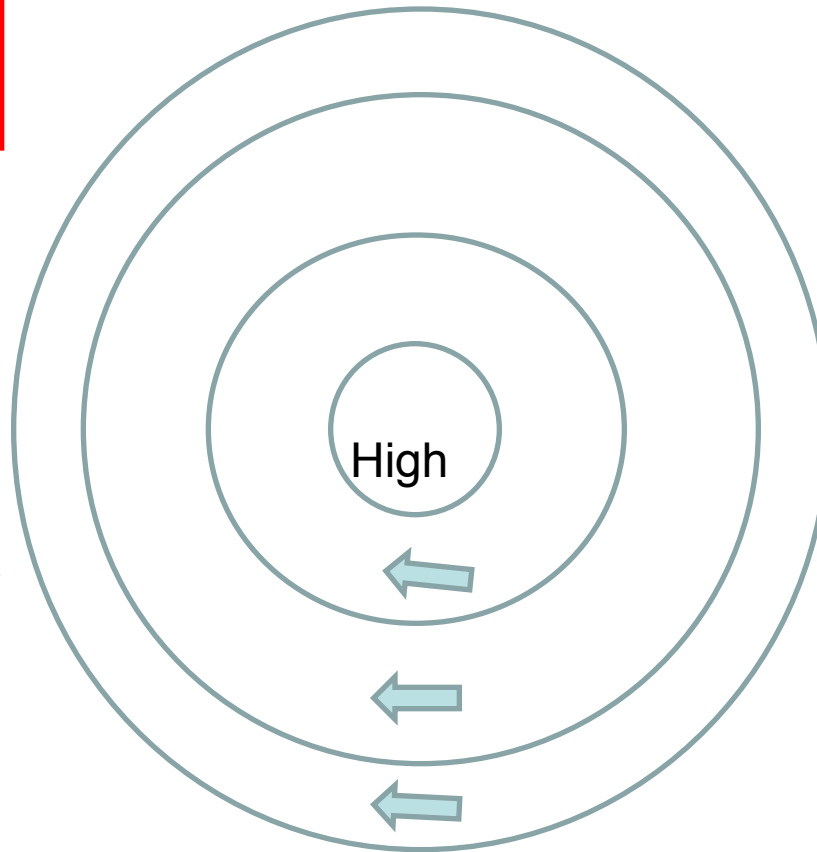
High Pressure System- an Anticyclone

Less Isobars
less pressure
-less wind

Isobars



Wind
Clockwise

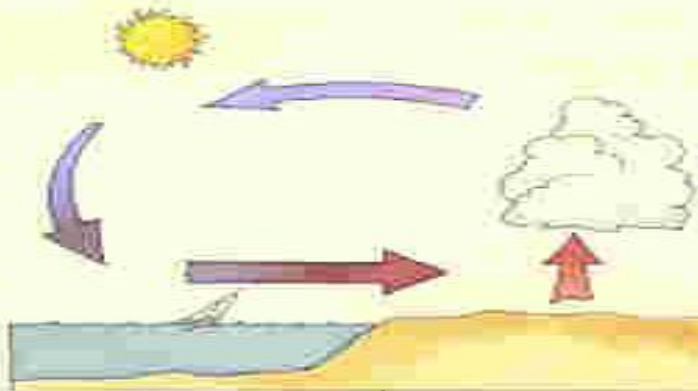


Generally
stable
conditions
and maybe
sea
breezes in
the
summer
months

Sea Breeze

Warm air rises on the land heated by the sun

Small cumulus clouds form



Cooler air comes in from the sea forming the sea breeze, the sea breeze might go right following the sun during the afternoon

As the sun gets lower late in the afternoon, the sea breeze starts to reduce.

Onshore/Offshore Wind

Offshore

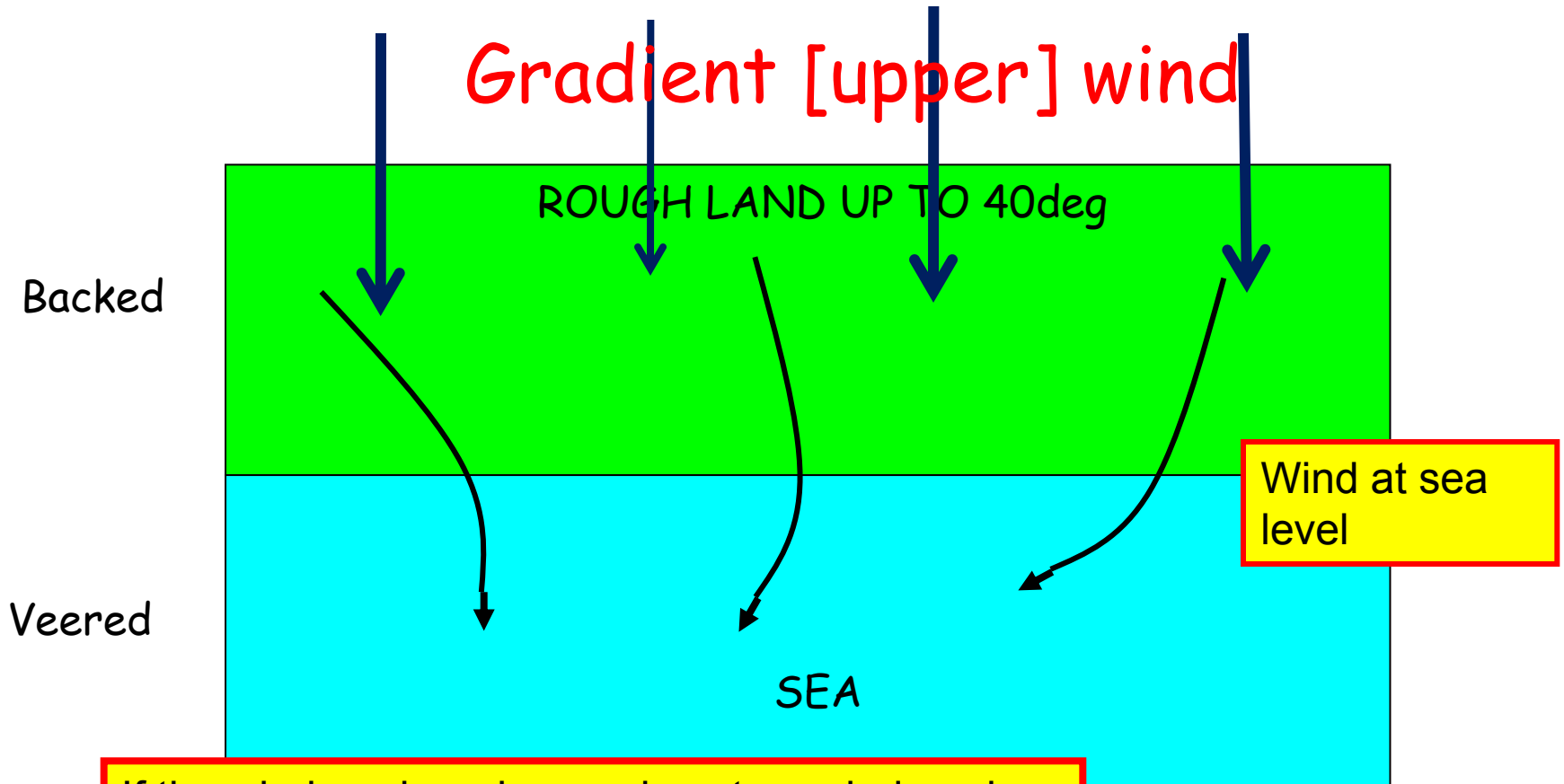
- Random chaotic close to the shore, getting less shifty further offshore

Onshore

- Less shifty
- Possibly oscillating

Friction

What does land do to gradient wind?

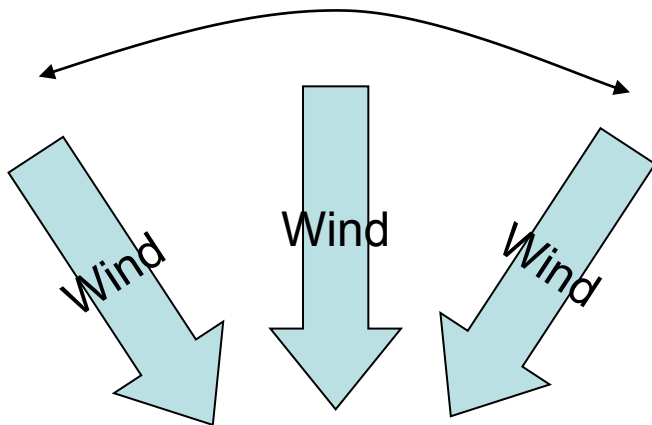


If the windward mark was close to a windward shore what would you expect the wind to do, and how might you approach the windward mark?

Quick Reminder

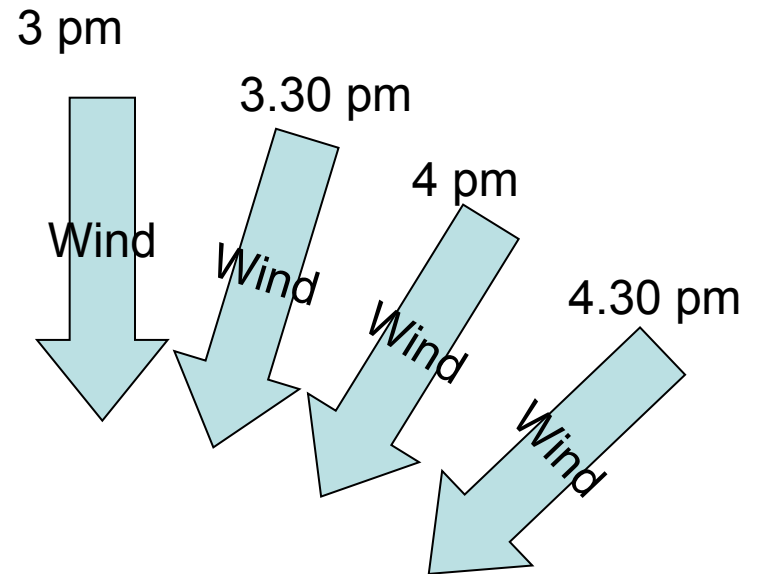
- What type of windshift is it???

- Oscillating



Eg. Every 3 minutes
10 degree shifts

- Permanent



Or Chaotic

One of the...

Hardest Decisions in Sailing

- Is it a persistent shift? Or will it shift back?

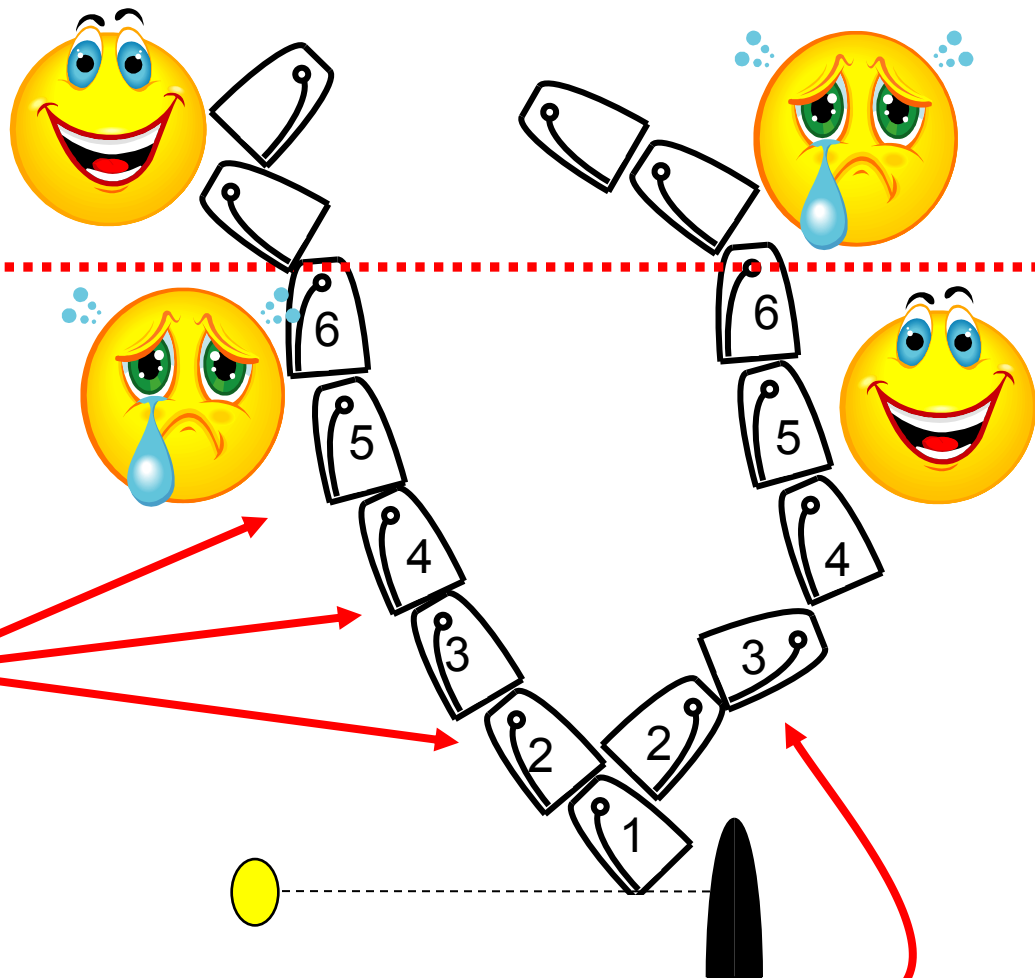
When to tack

If wind is dropping... then more chance it might become unstable, and might shift back

So hang on in there....

If wind is increasing, then will probably be stable new wind, and less likely to shift back

So get to the inside track early



Compass

- Sail some of the **First Beat** before the race
- Learn the **Lifts and Headers** - Compass
 - How big is the range?
 - How often is it shifting?



Don't Forget

- What type of venue is it?
- Get a forecast (protect one side?)
- Get a map of the venue

Also read the Optimist Handbook, RYA Tactics and the North U Tactics book