

Tacoma Mountaineers Basic Crewing Course

Welcome to Session 2



What We Will Cover

- . Session 2
 - . Review dock side session
 - . Review of Winch Use and Class 1 Material
 - . Apparent Wind and the Fundamentals of Sail Trim
 - . How to : Tack, Jibe
 - . How to Slow, Stop, or Change Course

Review of Dock Side session

- . Name the some of the safety equipment you saw on the boat(s) you went aboard.
- . What did you find interesting or surprised you about the boats you were aboard?
- . What feedback or questions do you have what you saw?

Winch Use Review & Sailing Jeopardy

10 Minute Break

Apparent Wind and the Fundamentals of Sail Trim

What Is Apparent Wind



**5 kts Of
Wind
While Not
Moving**

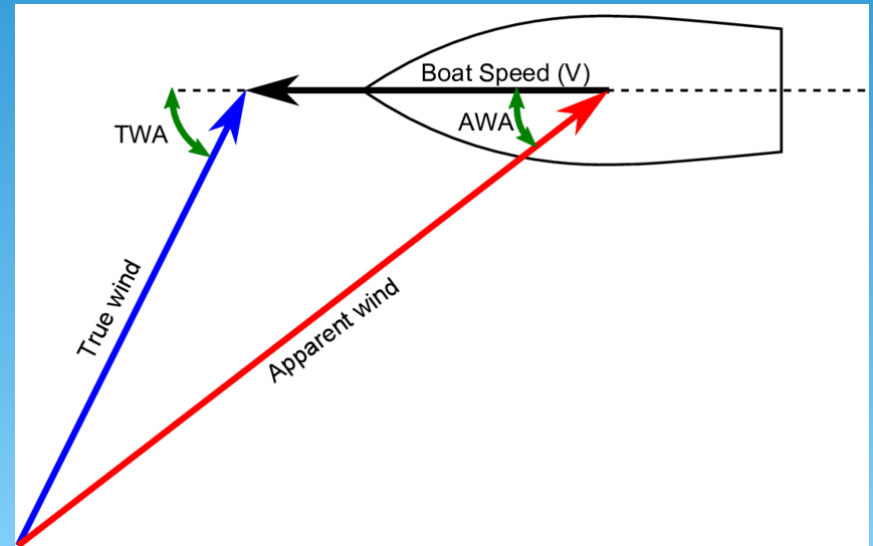
**Running Toward
Wind At 5kts
Apparent Wind
10kts**

**Running Away
From The Wind
At 5kts
Apparent Wind
0kts**

Apparent Wind

Apparent Wind is the wind you feel and experience on the boat.

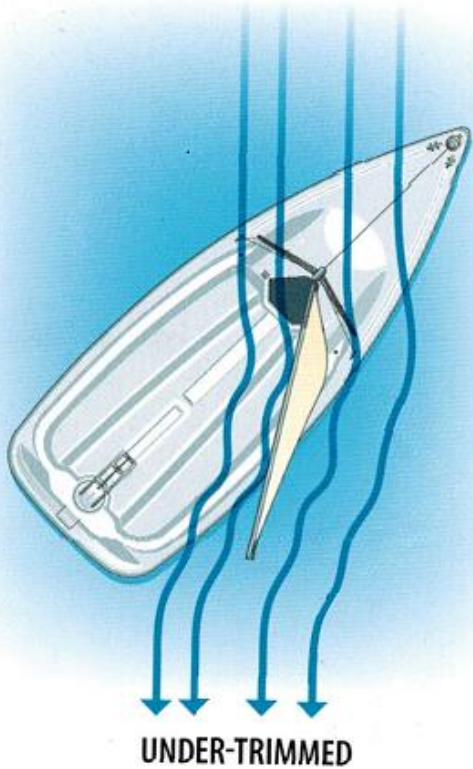
It's a **combination** of the actual wind (**True Wind**) that is blowing over the water and the wind created by **the motion of the boat**.



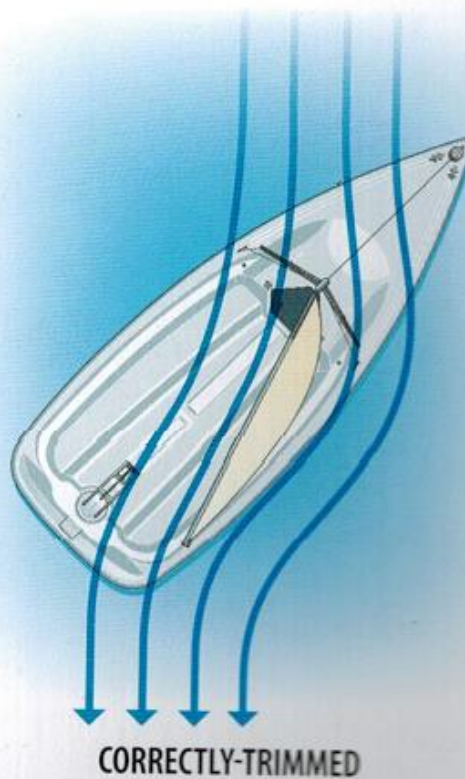
Why you care: You trim your sails to the Apparent Wind not the True Wind

Sail Trim

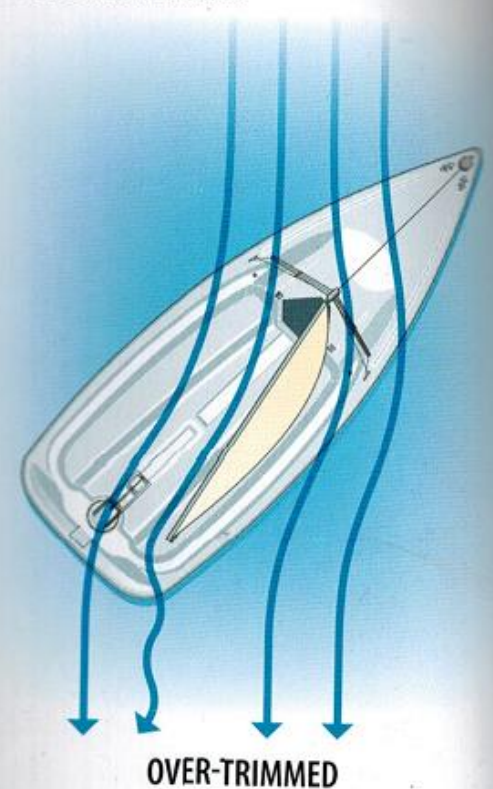
The Goldilocks Zone



Sail too loose
flogging like a flag
No lift from wind



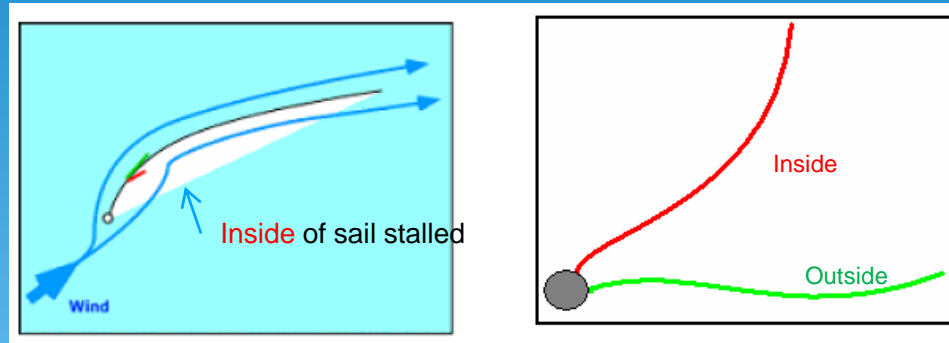
Sail Just right
Good Airflow on both sides
Best Lift from sail



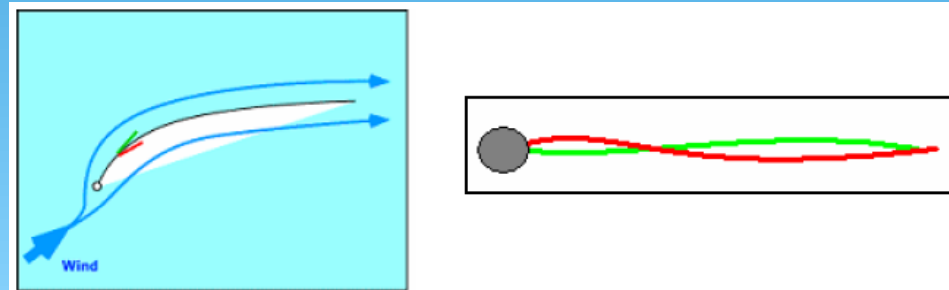
Sail too tight,
Stalling airflow
Creates drag, slowing boat

Telltails

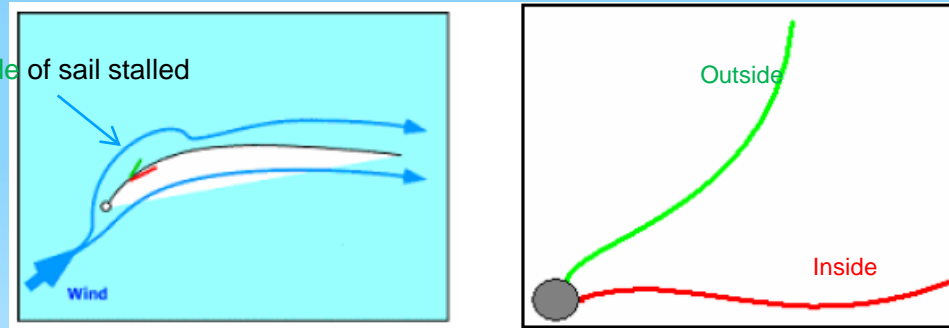
Tell the trim tale!



Trimmed too loose
Inside flying up



The goldilocks zone!
Trimmed Properly
Both telltales streaming back



Trimmed too tight
Outside flying up

Tell Tale Colors

Outside
(Starboard)

Inside (port)

Telltales Video

ASA Bites Sized Lessons:
Deciphering Tell Tales

Bottom Line

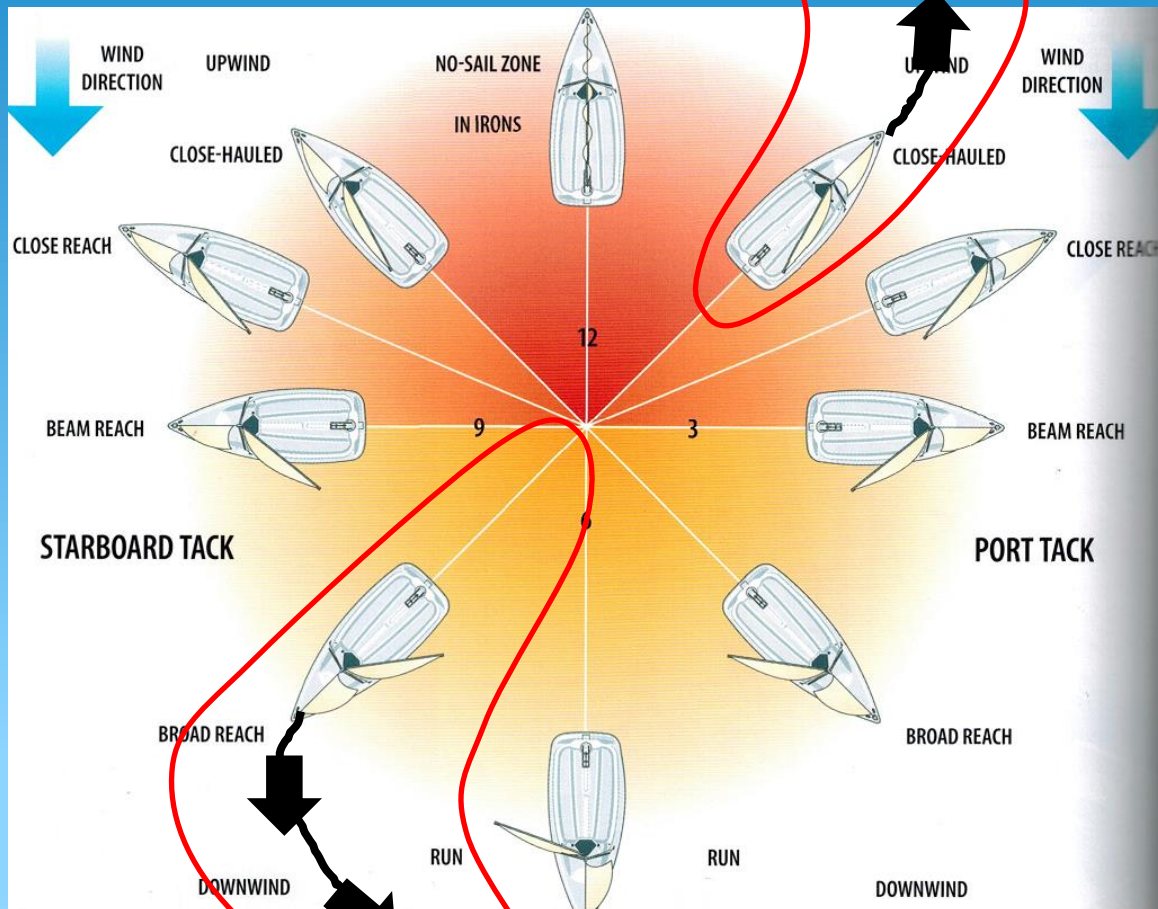
- Adjust Mainsheet and Jib Sheets in and out to control power and as the wind direct and speed changes and as you change direction
- Watch your telltales!
- Increase control-line tension to flatten and depower the sails in heavy winds

Questions?



Tacking, Jibing (Gybing), Slowing the Boat and Docking

Tack Vs. Gybe (Jibe)



Tack- Turning into the wind

Gybe- Turning away from the wind

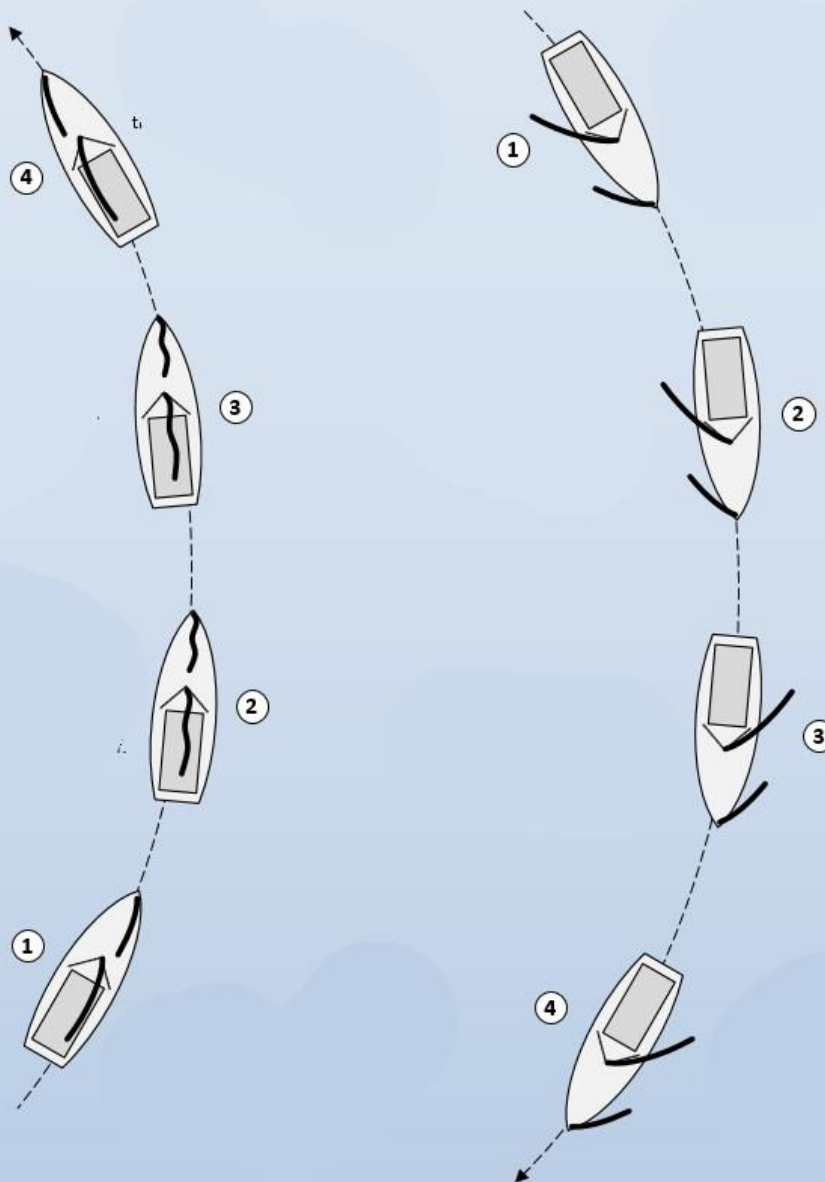
Wind Direction

Wind Direction

TACKLING AND GYBING PROCEDURES

WIND

WIND



Tacking

Changing course by turning the bow of the boat through the wind

Jibing

Changing course by turning the stern of the boat through the wind

Tacking and Jibing Demonstration

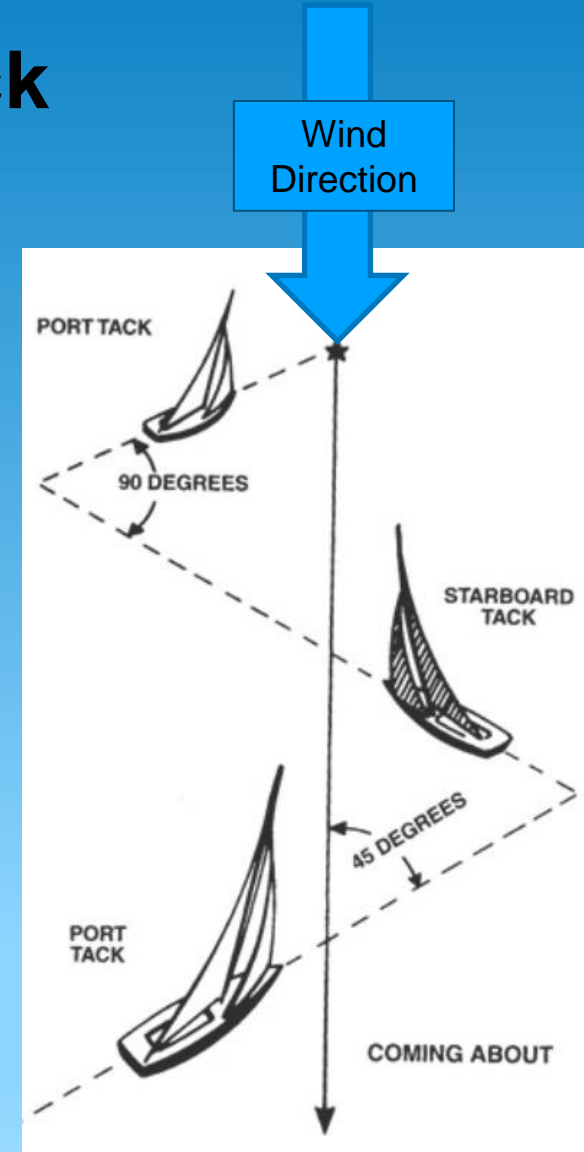
[ASA Sailing Made Easy: Tacking and Jibing Video](#)

Communication

Commands: Tack

Tacking Commands:

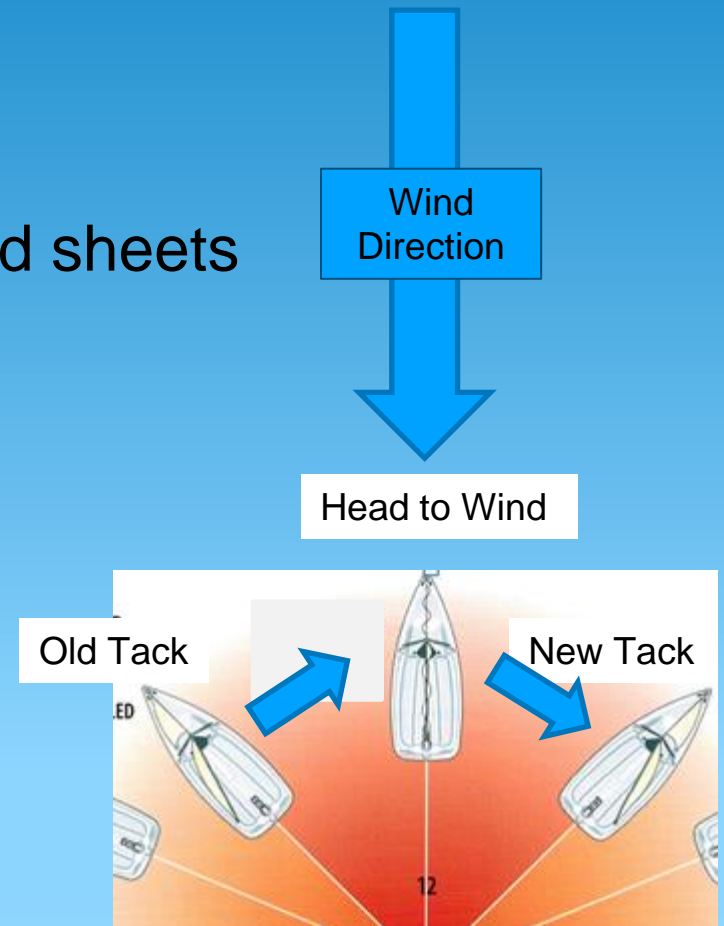
- Skipper: ***Prepare for a Tack!***
 - Crew gets into positions
 - Prepares winch, loads sheet
- Skipper: ***Ready About?***
- Crew: ***Ready!***
- Driver: ***Helms a Lee!***
 - *Initiates slow, smooth turn.*



Crew Responsibilities: Tacking

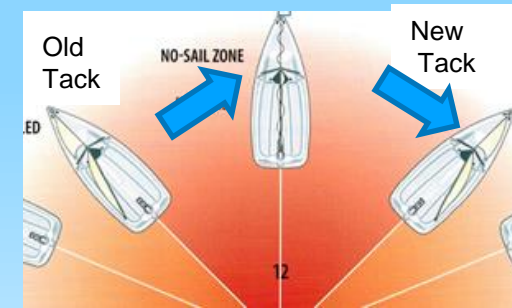
As boat goes head-to-wind...

- Be prepared with winch handle and sheets
- Keep your head low
- Release old jib sheet from winch
- Shift weight to high side of boat
- Trim in the new jib sheet



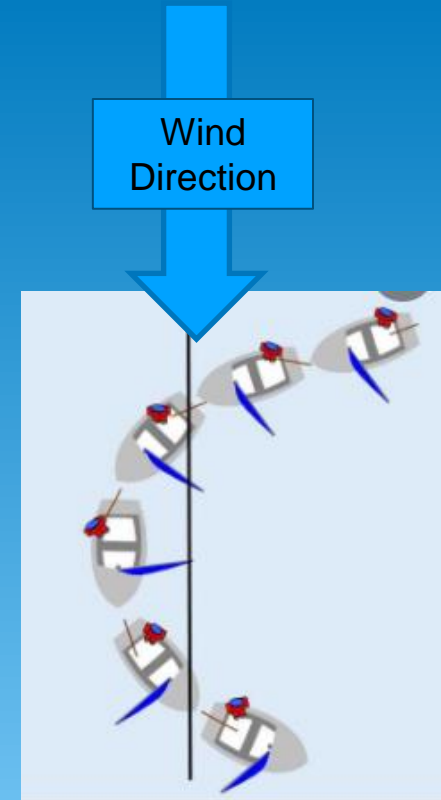
Key Insights: Tacking

- Always respect the boom!
- While steering the boat look abeam, ~90 degrees off bow, for new heading
- Tacking is about timing
- If you turn too slowly, the boat can end up “in irons.”
- If you turn too fast the crew will have a more difficult time getting the sail sheeted in.



Commands: JIBE

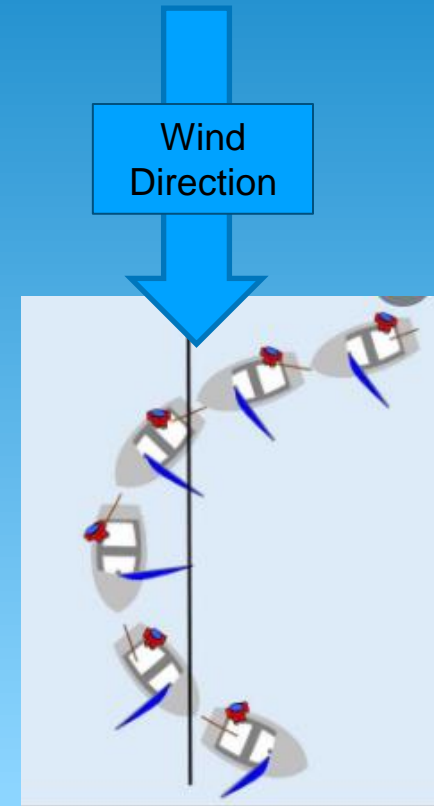
- Skipper: *Ready to Jibe?*
- Crew: *Ready!*
- Skipper: *Steers boat towards dead downwind*
- Mainsheet trimmer centers the boom.
- Skipper: *Jibe Ho!* *Pulls boom over and steers onto new course*



Crew Responsibilities: JIBING

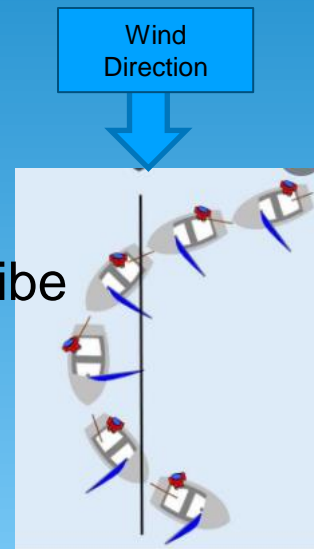
As the sails snap across...

- Be prepared with the winch handle and sheets
- Keep your head low (watch the BOOM!)
- When commanded, free old sheet-release sail
- Trim new sheet in
- Shift weight as instructed by driver



Avoiding Accidental Jibes

- Accidental jibes much more violent (and destructive) than planned jibes.
- That boom hurts!
- Most common when sailing dead downwind
 - (e.g., wing-on-wing) as a small wind shift can cause sails to jibe themselves
- So we can...
 - Avoid sailing dead downwind, stay above dead down
 - In light winds, “prevent boom” by placing crew with back to boom
 - On a loong downwind run, rig a “preventer”- line to hold boom
 - If hit with a wind shift, round up – towards the wind!
 - If noticing an accidental/uncontrolled jibe, shout “duck!” or “Boom!”



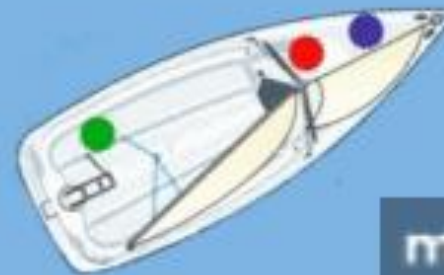
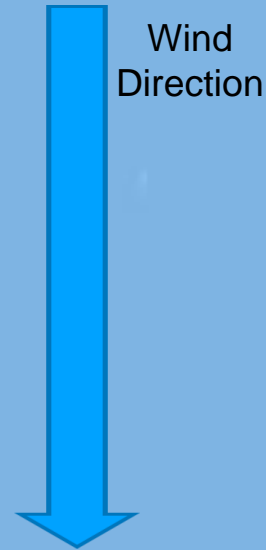
Key Insights: Jibing

- Jibes are more sudden than tacks because boat doesn't pass through "no-go zone"
- **Respect (fear?) boom:** stay low, centered, and clear of boom, mainsheet, and traveler
- Sheet boom/mainsail to center before stern crosses wind, then pull mainsheet/boom/sail across to control when boom goes across
- When releasing the active sheet do not let it go too far forward.

Slowing a Boat



How to Stop a Boat



make a gif.com

Docking

Only approach dock at speed you are willing to hit dock!

- Sailboats are very maneuverable at slow speeds,
 - No need to come in fast!
 - Make the approach slow, boring, and uneventful!



Questions?



Closing Remarks

Homework: Take quiz on Page 56 in ASA 101
Sailing Made Easy

Sign up for 2 On The Water Sails on the
Mountaineers Website

Instructions how to sign up for a sail in the
Course Materials Section

Review On the Water Student Outlines

Last classroom session next Monday