



POA # 3 Downwind Driving

PACIFIC CUP SEMINAR
SKILLS TO DEVELOP FOR YOUR OFFSHORE ADVENTURE





We Aren't in Kansas Anymore...

- What's the same?
 - Wind
 - Boat
 - Sails (maybe)
- What's different
 - Short-handed
 - Swells
 - Staying the course
 - S-Curves
 - Stuff in the water
 - Sundown
 - Squalls



Downwind Short-Handed

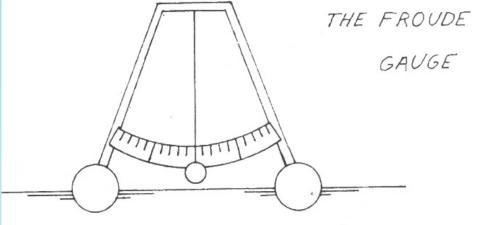


- Half or more of the crew is asleep
- On-watch crew has to do all the work
 - On a more cruise-type boat, this may not be super active
 - On a racier boat, this may mean full-time effort
- For sail changes, how many do we call up?
 - Everybody? One more body?
 - How about for a gybe?
 - How about for a wrap?

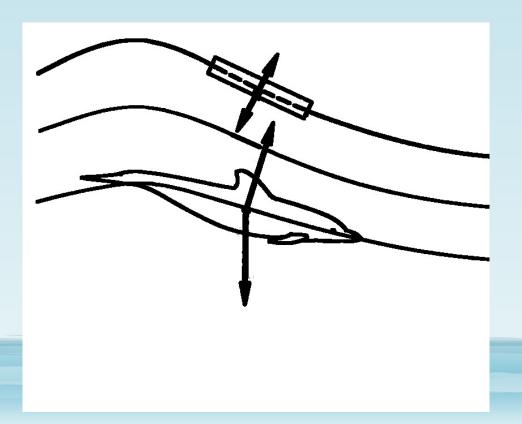


Swells

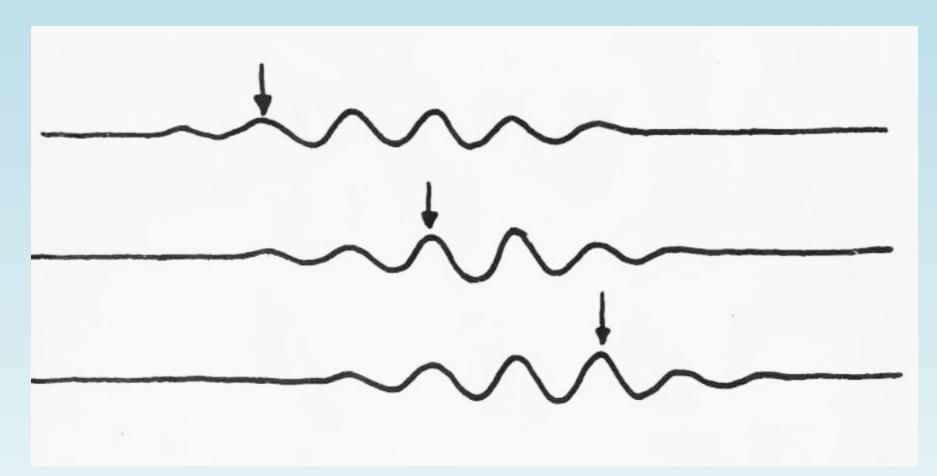
- THIS IS THE PAYOFF!
- They come from all directions, but mostly travel East to West
- Swell will either:
 - Smack your boat around or
 - Initiate a surf (this is the better thing)
- Run down the swell to go fast
- Aim for the "pocket" formed by multiple swells crossing







Wave Group Velocity





Stay the Course

- You're not racing buoy to buoy
- Need not gybe every shift; it's okay to follow the wind
 - Up to a point!
- Don't be a knots hog
 - Racking up a big number that's well above your VMG may be fun, but if you are driving toward the Pacific High, you will be sad.
- Goal: Best CMG toward your current strategic waypoint



S-Curve



- "Every wave gets a turn." (not always, but often, true)
- Aim downwind at the pocket to initiate surfing. Maybe pump the main.
- As you near the end of that swell, head up a little to maintain speed
 - · Speed is good
 - You might be going fast enough to initiate another surfing run
 - How many in a row? 2-sure. 3-great. 4? 5?

Downwind Crew

Spinnaker Trim

- If surf starts, trim fast to stay connected
- Ease at the bottom to allow S curve and match velocity shift

Grinder

- Shut up and do what you're told
- "Grind" "grind" "grind"
 - Grind





Main Trim

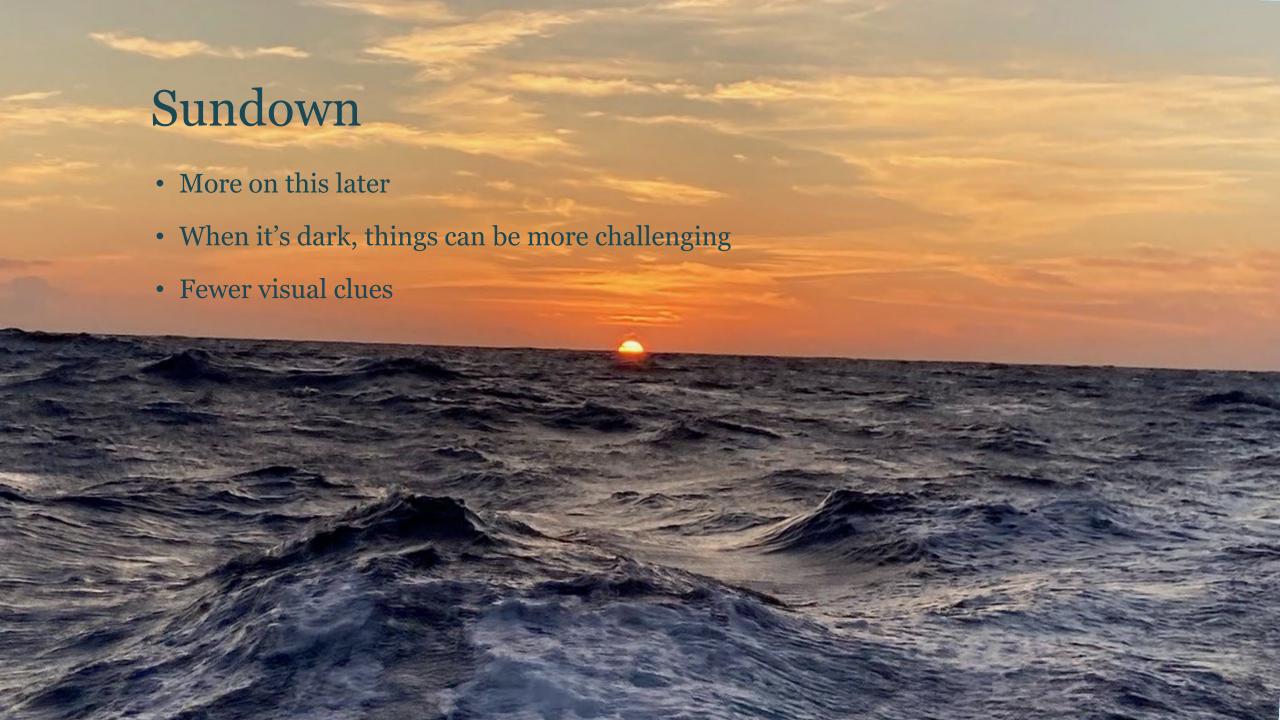
- Pump to initiate surfing (gets tiring fast)
- Trim to match wind through turns, if possible.

Stuff in the Water



- The ocean is very large, but there ARE things floating in the water
- Good to be keeping an eye out for
 - Fishing nets
 - Logs and other debris
 - Other boats (more on this later)
- "Up (or down) for flotsam (or kelp)" is a command anyone should be free to give and should be followed immediately





Squalls

- A feature of tropical waters (different from East Coast squalls)
- Typical presentation:
 - Dark clouds (stars blotted out) behind your starboard side
 - Come in at 20 degrees to the prevailing wind
 - May have rain in it (see it on Radar with rain rejection off)
 - Wind doubles when you're in it
 - · Wind dies behind it
- What to do
 - Remain calm!
 - Accept the wind increase if comfortable doing so
 - "Exit stage left" before it's scary or gone
 - https://pacificcup.org/kb/max-ebb-squalls



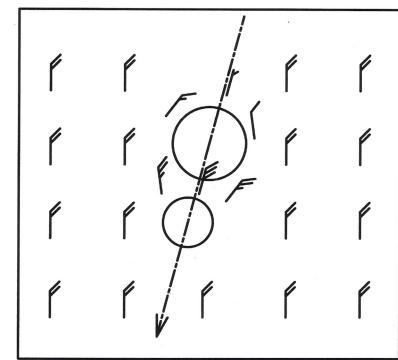
max ebb

RULES OF THUMB FOR SQUALL TACTICS:

- 1) "Incoming lane" for squall: squall should be just abaft the beam on starboard tack.
- 2) Jibe on headers to stay in the squall (sled only).
- 3) Always exit stage left.
- 4) Don't be anywhere near the last squall just before dawn. Wind dissipates at first light.

Squalls and Wind

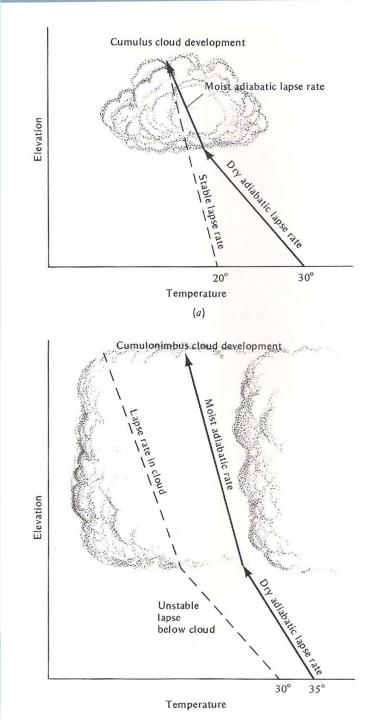






About those squalls

- Driven by temp and pressure differences
- DO NOT BE BEHIND IT (safe, but slow)





Summary

- Same, but different
- Be ready for swells and squalls
- Plan for night
- Plan for a week of the good stuff!

