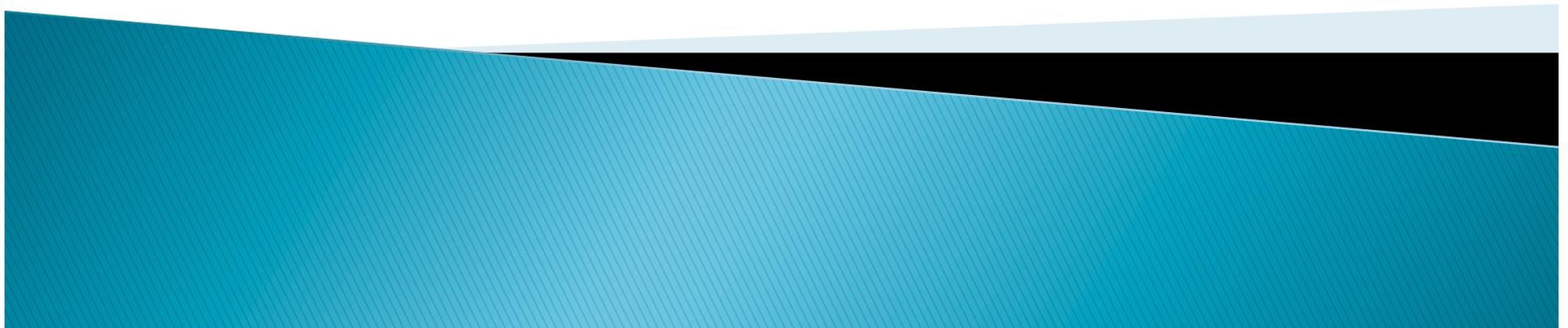


Matchracing Tactics – Downwind

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11th of April 2015



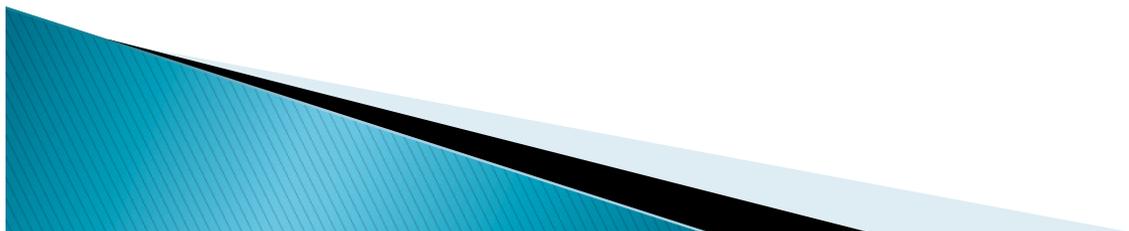
About me...

- ▶ Started racing in dinghies, Optimist and Europe class
- ▶ Got into match racing in 2002.
- ▶ Top world ranking position as 31st (in 2008?)
- ▶ Moved to Asia 2009 and sailed less, now back in Europe, living in Stockholm.
- ▶ Finnish match race champion 2014



Agenda for today

- ▶ Narrow scope
 - ▶ Time to cover downwind in some depth, also digressing into rules and maneuvers when appropriate.
1. Tactics on the run
 2. Tactics at the lower mark
 3. Tactics at the windward mark
 4. When the leading boat has a penalty



Rules – tactics – maneuvers

- ▶ Without boathandling tactics are unimportant.
- ▶ But also, without tactical understanding maneuvers become difficult
- ▶ All tactics are somehow based on rules. Without knowing the rules you can't understand tactics. So learn the rules.
- ▶ Rules, tactics and maneuvers are relevant for everybody in the crew, regardless of position!



Tactics on the run

»» Between roundings

Relevant rules

- ▶ Rule 11 (on the same tack, overlapped)
- ▶ Rule 17 (on the same tack, proper course)
- ▶ Appendix C 2.4 (while tacking or gybing)

- ▶ Of course above is just a selection



Rule 11

- ▶ ON THE SAME TACK – OVERLAPPED
- ▶ When boats are on the same tack and overlapped, a windward boat shall keep clear of a leeward boat.
- ▶ Overlap = neither boat is clear astern of the other, and they are not on opposite tacks (unless rule 18 applies).



Rule 17

- ▶ ON THE SAME TACK; PROPER COURSE
- ▶ If a boat clear astern becomes overlapped within two of her hull lengths to leeward of a boat on the same tack, she shall not sail above her proper course while they remain on the same tack and overlapped within that distance, unless in doing so she promptly sails astern of the other boat. This rule does not apply if the overlap begins while the windward boat is required by rule 13 to keep clear.



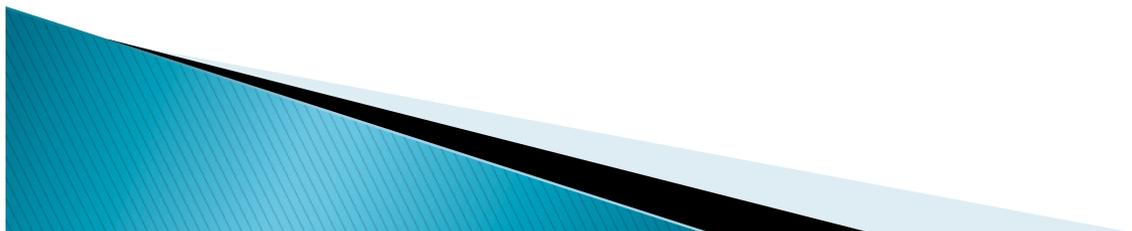
Rule 17 – continued

- ▶ This rule is both complex and – absolutely a must to understand.
- ▶ We will come back to it



Appendix C 2.4

- ▶ CHANGES RULE 13 TO:
- ▶ 13 WHILE TACKING OR GYBING
- ▶ ...
- ▶ 13.2 After the foot of the mainsail of a boat sailing downwind crosses the centreline she shall keep clear of other boats until her mainsail has filled or she is no longer sailing downwind.





Strategic considerations >>

What are the conditions?

- ▶ Wind stronger on either side?
 - ▶ Wind shifty? If yes, which shift is on now?
 - ▶ Course set straight or skewed?
 - ▶ Current?
-
- ▶ The above should be known before rounding the top mark – you want a default plan!



Early gybe or not?

- ▶ Depending on the conditions you may want to gybe immediately after the top mark
- ▶ Spinnaker set right:
 - Bear-away set?
 - Gybe set?
- ▶ All in crew aware of plan



Roll-gybes?

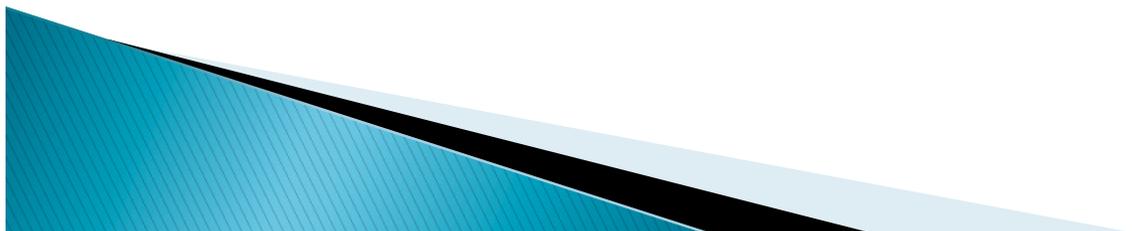
- ▶ Roll or not to roll?
- ▶ S-drive...



If behind – how to attack?

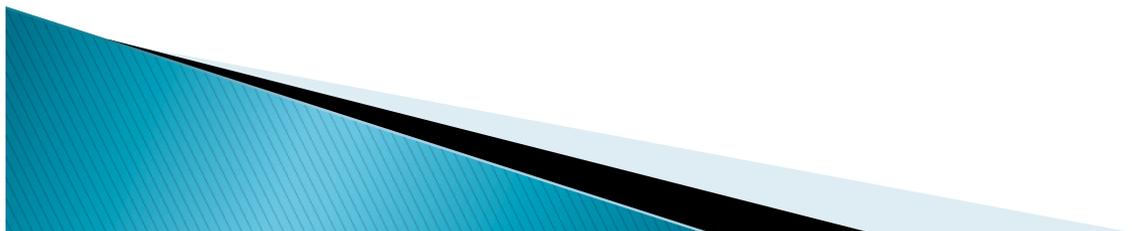
- ▶ Try to sail over on port?
 - May work if the other boat has some problem
 - Best try quickly, but you need to be close
 - Some times the only strategic option

- ▶ Where is your wind shadow?
 - Apparent wind vs true wind



If behind – how to attack (2)

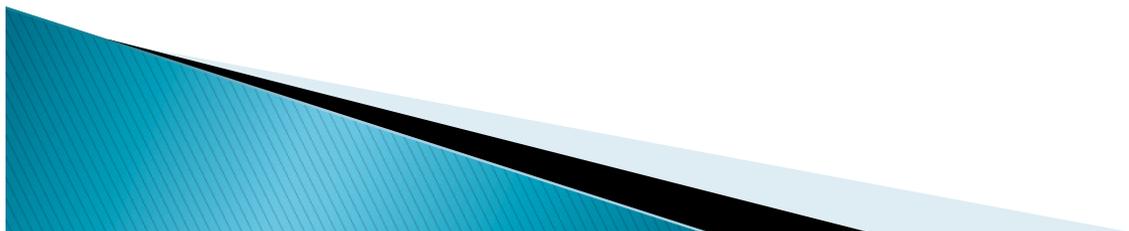
- ▶ Push down and wait to gybe on top?
 - Good try if the course is skewed to starbord tack or level
 - While on port, try to get lower than the leading boat
 - Watch them at all time, and gybe well! Don't get tricked by a fake gybe.
- You can gybe before them if you get to layline, they will anyway have to sail through your wind shadow



If behind – how to attack (3)

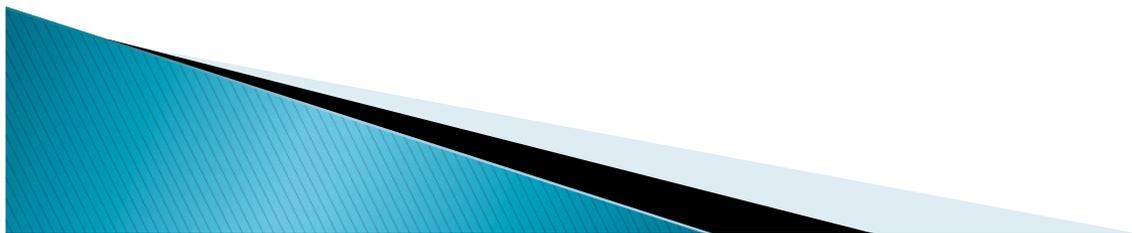
▶ Split

- The main try if the conditions aren't stable
- If you are close and gybe he will find it hard to follow
- If you are far away you can't really blanket him anyway, so just try to sail fast
- Use puffs and shifts
- Use other boats if available to get the split



If behind – how to attack (4)

- ▶ Remember that in match you don't need to find the perfect lane, pushing your opponent into a wind hole can work too
- ▶ But you need to understand the strategic conditions
- ▶ If you are behind you hope for:
 - A straight course
 - Shifty wind of variable strength
 - Light wind (sharper angles, longer run)
 - Lots of traffic



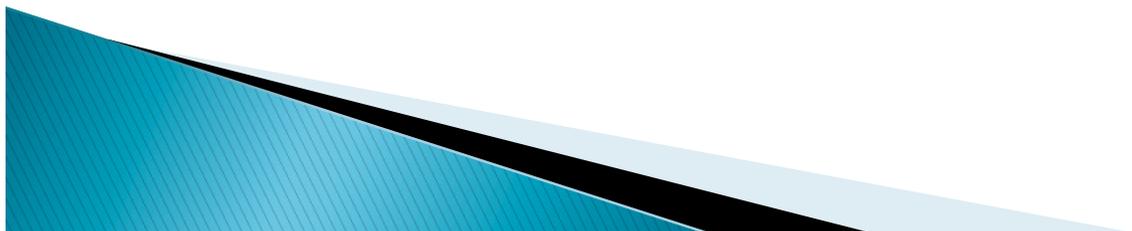
Tactician or not?

- ▶ To make decisions like an early gybe it does help with a dedicated tactician
- ▶ Matter of preference too
- ▶ If you have a tactician, what role is he doing:
 - Main only?
 - Main + spinnaker?
 - Bow?
- ▶ On the run whoever is on spinnaker can't do anything else



How to defend when ahead?

- ▶ Know where you want to go
- ▶ Start with the long tack first, unless there are good reasons not to
- ▶ Watch the opponent at all time
- ▶ Always have a decision ready – what do we do if he gybes?



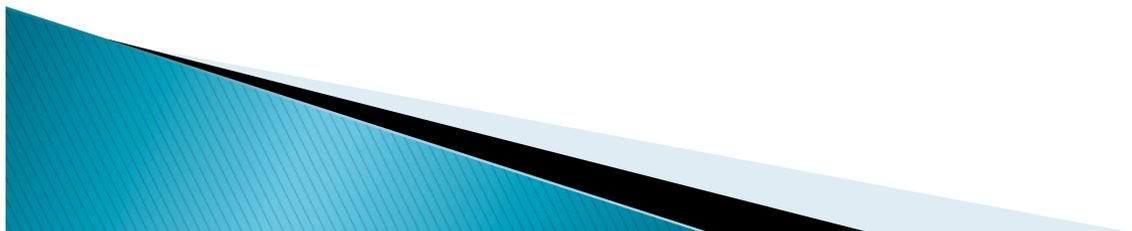
How to defend when ahead (2)

- ▶ If the opponent is set up to gybe on top of you:
 - Gybe when he has some issue; spinnaker not flying, waves etc.
 - Use boats in other matches
 - You can try a fake gybe (good to practice)
- ▶ But if you will get screwed when you gybe – rather get screwed early



If opponent gets on top of you

- ▶ If you can luff him and lock him to windward with bow forward enough – do it
 - Try to get a penalty on him
 - But remember rule 16 – first luff can't be too quick
 - Up, down, up, flag...
 - If he can't get away, drive him to the side of the course, will make it easier once you continue
 - In the luff – hold spinnaker pole down





Bastards... >>>

If opponent gets on top of you (2)

- ▶ There is wind before and after his wind shadow
- ▶ If you can't luff him successfully, don't luff him
- ▶ Wait until he takes your wind, then bear off and get the wind from behind him
- ▶ Gybing away can be difficult – need a good reason to try





The rule 17-battle >>

The rule 17-battle

- ▶ This situation often happens when the boat behind manages to roll, but the boat getting rolled defends correctly
- ▶ The windward boat manages to overtake, but not enough to gybe in front
- ▶ So the leeward boat can keep him from going towards the mark
- ▶ Or can he?
- ▶ Rule 17 may play in, remember – overlap from behind ... proper course



The rule 17–battle (2)

- ▶ For rule 17 to apply the windward boat must break overlap at some point. Then the new overlap is established from behind.
- ▶ If close to breaking overlap it can be accomplished by luffing a bit.
- ▶ Somebody on the leeward boat should keep track of this, the umpires will!
- ▶ If 17 is on the leeward boat can't go into a luffing duel any more, that wouldn't be proper course



The rule 17–battle (3)

- ▶ So if rule 17 is on, and both boats continue downwind while overlapped, then there will come a point where the leeward boat should gybe – as it becomes proper course to mark
- ▶ If he doesn't the windward boat should try an Y–flag
- ▶ If the leeward boat breaks rule 17 it does not give the windward boat the right to break rules 10 or 11.



The rule 17–battle (4)

- ▶ So as the leeward boat you don't want to come to layline with 17 on. What to do?
- ▶ Options:
 - Double gybe – then new overlap is not established from behind. Just gybe the main back and forth, and quickly.
 - Drop behind a bit, when behind there is no overlap and no rule 17, but the opponent can probably not gybe anyway. But if you can break, then so can your opponent.



The rule 17–battle (5)

- ▶ Especially in heavier winds when gybes are slower and trickier, you often see the same situation as on the beat, the starboard boat bounces the port boat away.
- ▶ The starboard boat doesn't need to gybe, but if he doesn't the rule 17 may cause problems (and double gybing in heavy winds isn't as easy).
- ▶ So it may be safer to gybe when the port boat does, and then have another go at him.





Maneuvers on the run

- ▶ Tactics require good maneuvers and on the run this mainly means consistently good spinnaker trim and good gybes
- ▶ My team used to do something we called 'crazy helmsman' – where the helmsman steers wildly and randomly downwind and the crew tries to keep max speed and the spinnaker flying.
- ▶ Go hard on yourself during practice, then you will be OK in the race





And tactics are suddenly irrelevant... >>

Tactics on the run

»» By the lower mark

Relevant rule

- ▶ 18 MARK ROOM
- ▶ 18.1 WHEN RULE 18 APPLIES
- ▶ Rule 18 applies between boats when they are required to leave a mark on the same side and at least one of them is in the zone.
- ▶ However it does not apply:
 - A) between boats on opposite tacks on a beat to windward
 - B), C) and D) – not so relevant



Relevant rule (2)

- ▶ 18.2 GIVING MARK ROOM
- ▶ A) When boats are overlapped the outside boat shall give the inside boat mark-room
- ▶ B) If boats are overlapped when the first of them reaches the zone, the outside boat at that moment shall thereafter give the inside boat mark-room. If a boat is clear ahead when she reaches the zone, the boat clear astern at that moment shall thereafter give her mark-room



Relevant rule (2)

- ▶ Some parts of 18 are not so relevant here, but:
- ▶ 18.2 d) If there is reasonable doubt that a boat obtained or broke an overlap in time, it shall be presumed that she did not.
- ▶ 18.4 GYBING
- ▶ When an inside overlapped right-of-way boat must gybe at a mark to sail her proper course, until she gybes she shall sail no farther from the mark than needed to sail that course.



All these rules ☹️

- ▶ Check an app:
- ▶ RACING RULES 2013–2016 (by US Sailing)
- ▶ Contains the rules in a good format + explanations
- ▶ Add match race case book and ready to go



Stating the obvious

- ▶ If you opponent will be entitled to mark-room when he enters the zone -> stop him from doing so, if you can!



Push past the mark

- ▶ Especially if some sideways distance to lower mark – if you can push opponent further down, do it
- ▶ But not below close-hauled layline to lower mark



Taking down the spinnaker

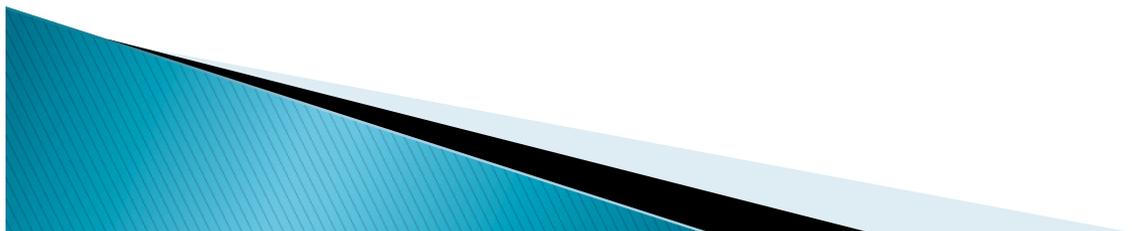
- ▶ When pushing somebody away from the mark, or getting pushed it is some times hard to decide when to take down the spinnaker
- ▶ Simple rule:
 - Once the boat comes to the point where it no longer is faster to go to the mark with spinnaker then the spinnaker should already be down.
- ▶ The decision maker should be the bowman, the helmsman will be busy looking at the opponent.



Tactical rounding / fast rounding

- ▶ Rule 18.4 doesn't mean you can't do a tactical rounding.
- ▶ What is the plan for the beat, where do you want to go?

- ▶ You did have a plan, didn't you? 😊



Tactics not on the run

- » Just before the run, at the windward mark

Skipping the rules now

- ▶ Though some of the stuff in 18 is relevant for upper mark
- ▶ (Just too much text)



Overlapped towards top mark?

- ▶ Approach on starboard
 - Don't let the windward boat get to the zone
 - Luff well and maintain maximum speed
 - Jib down?
- ▶ Approach on port
 - Take a break, try to stop him completely



Close cross at the mark?

- ▶ If you will have starboard for the cross, be on the starboard layline
- ▶ It isn't so nice to leebow on port layline if close to mark. See if you can make him tack instead



Close behind on starboard layline?

- ▶ Can you catch him when he tacks?
- ▶ He doesn't have mark-room according to 18
- ▶ Luff early so that 16 doesn't apply



Last run, leading boat
has a penalty



So you are leading, but penalized

- ▶ Taking the penalty on the beat is OK if you can catch him on starboard.
- ▶ If you can't, think in time what to do
- ▶ Will you have a chance to get enough distance to do the penalty before finish? Normally round the pin-end.
- ▶ Consider wind conditions too
- ▶ If you think you have a good chance, go for it.



No time for penalty turn?

- ▶ Then we have these options:
- ▶ A) Get a penalty on him
- ▶ B) Put him in a position where we have time to take the penalty
- ▶ C) Somehow extend enough (but we didn't believe in that)

- ▶ For A) to work you need opponents cooperation



So what then?

- ▶ A penalty is a tack on the run, and a gybe on the beat
- ▶ The cost comes down once we are past the marks where we want to go
- ▶ So that is what you try to achieve



Try at the top mark?

- ▶ If you can get the opponent past the top mark a gybe may be possible without losing him
- ▶ But remember Appendix C 7.3 b) No part of a penalty may be taken inside the zone of a rounding mark that begins, bounds or ends the leg the boat is on



Down the run

- ▶ If he comes to windward of you – luff and lock
- ▶ Defend starboard
- ▶ Does he hoist or not?



Last defence – past the finish

- ▶ At the end of the run you can give the opponent a choice:
 - ▶ A) go to windward of you and risk a luff
 - ▶ B) follow you past the finish
- ▶ If B – try to slow down beside the starting vessel going to windward – where will he be?
- ▶ But remember, a tack is not enough, you need to go bear away more than 90 degrees too.
- ▶ Rule 18 may play in too



Thanks for listening

