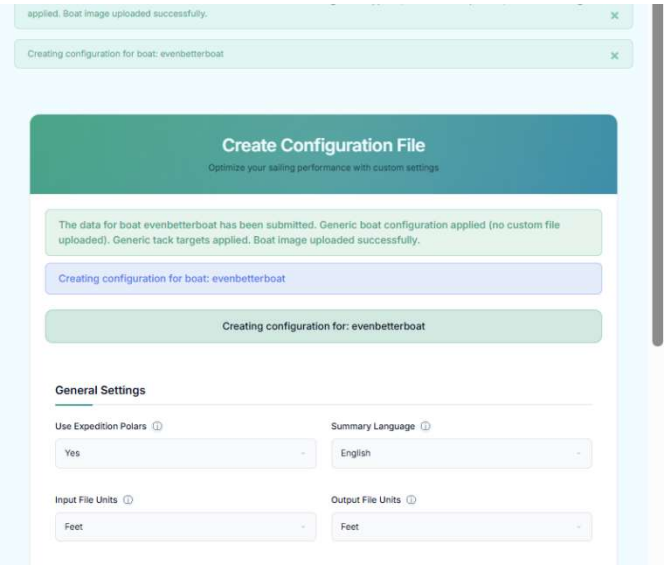
Detailing the boats configuration.

This page addresses the specifics of the data you have, how your boat behaves, how we process it and what level of detail you want to see in your reports. It is OK to accept the defaults and just create a configuration…. OR…you can configure it to your specific needs.

Section 1: General Settings. The small "Information bubble" explains each field if you need more info. Here's the fields:



Use Expedition Polars? Your exported log contains polar and target data. It's best to use it unless you're experimenting with it.

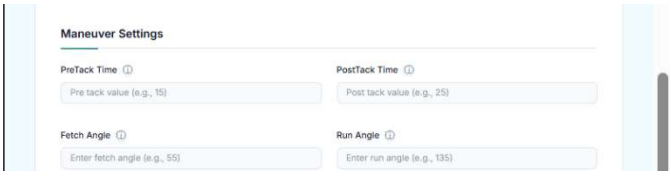
Summary Language: English. Sorry, there's no others at this moment, but if there are specific requests we will consider it.

Input File Units: The default for logging is feet, so unless you KNOW it's different, keep it this way

Output File Units: We will convert to Meters if you want.

Auto Fill Data: In general you want to say yes, as any missing data, even for a second in any required field will abandon the processing of the file.

Section 2: Maneuver Settings: This section addresses how quickly your boat goes through maneuvers. Tacks, Jibes etc. it's a good idea to look at a couple of tacks to get a good idea of what the times will be, as it is the basis of your analysis. The times shown are a good start for most modern race boats.



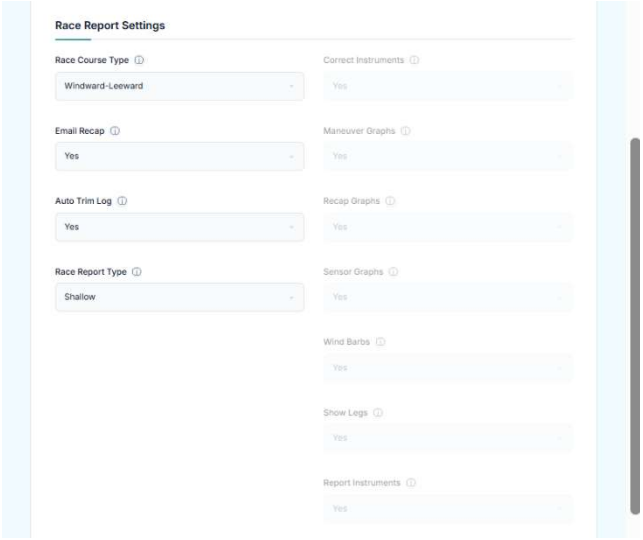
PreTack Time: This is the time before head to wind you want to include. This time should still have the boat at speed and at a normal upwind speed and trim. 10 seconds is typical

PostTack Time:. This is the time that your boat takes to get back into full upwind trim. 20 seconds is probably too low for most, and 40 is probably too much. Less is better here but it still needs to be long enough to be at full speed. We would recommend 25 as a baseline.

Fetch Angle: Normally, we do our scoring based on your TARGET speed and angle. However, at some point you're not going for best VMG and are just sailing to a mark. At this point, we change over to using POLAR speed. The TWA we use to determine this is called the "Fetch angle" It's typically 5 degrees or more than your widest target TWA. For most, 55 covers it, some could use 50.

Run Angle: This is the downwind version of fetch angle. 135 is safe.

Section 3: Race Report Settings: This section addresses the distribution, scope and complexity of your Race Reports.



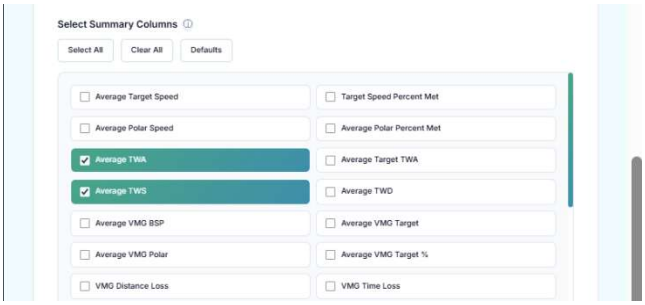
R**ace Course Type:** This is just the default and is also selectable at race file upload time

Email Recap: Do you want to send this to the crew when it's processes, or is it still a "secret"

A**uto Trim Logfile:** This actually has a large impact on how the file is processed. It tries to figure out when your race has started and when it is finished using things like your polar performance and TWA management, and it's easy for it to guess wrong. It is much better if you trim the file to length yourself. Default to NO.

Race Report Type: We have 2 basic "pre selections" Shallow, which is a basic race report, and "Deep" which has all 8 components selected. Selecting Shallow only allows the 2 sections. Selecting Deep allows you to pick any or all. Start with all options selected, and remove those that aren't useful as you gain experience.

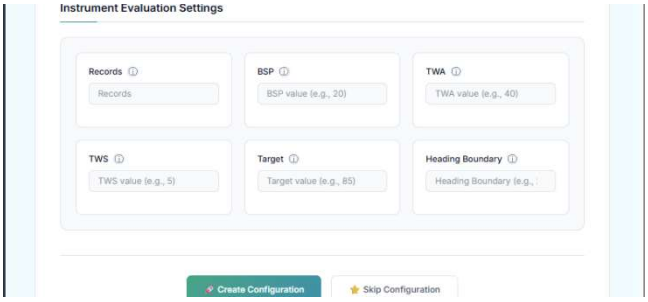
Section 4: Race Report Display Data.



These are the "summary tables "you see in the report that generally back up the graphics. The "narrow basics" would generally be the minimum you would want to see, It includes things the wind information, VMG, target and polar performance information

Everything beyond this is useful for identifying issues during maneuvers, and can get to specifics. You can look at a number of time and distance lost fields and comparisons to your polars and targets. Generally, start with a "wide" field and narrow it A detailed description of these fields is at the end of this section.

Section 5: Instrument Evaluation Settings.



Generally, we use maneuvers to QA the data. Things like checking for tack symmetry and HDG changes to see if the TWA is correct. Occur during these events. These parameters are used to "qualify" those events and to ensure the data is not misleading. Generally, they limit the records and events we use when reporting on the data.

Records: This field represents the number of records we use before and after events such as tacks to determine things like the actual tack angle and actual TWA. 15 is the default, which in normal flat water is good. Fewer records can give you a more fine grained result, but also introduce more "noise" Too many makes then subject to external factors such as wind shifts.

BSP: this is the percentage difference in BSP between the leading event and trailing event A good tack will have you at a similar speed after the tack as before the tack, and a smaller number here means you only want to review the maneuvers where you are more "identical" coming out as when you went in. The default is 20% difference in BSP. Which is fairly large.

TWA: this is the minimum TWA below which we will not bother with an analysis. This should be a couple of degrees less that your target TWA.

TWS: This is the minimum TWS under which we will not bother with an analysis as there is very little wind stability under about 4 kts. The default is 5.

Target: This is the target BSP % under which we will not bother with an analysis, as it's clear that something is different than it was 30 seconds ago.

Heading Boundary: We use passing through 90 degrees as the first indicator that you have rounded a mark, but if you have been reaching around with a TWA of 90 then it's not very helpful. This field indicated the minimum heading change associated with passing through 90. Generally 20 works well, although if the TWS is particularly light, more may be needed. Too small will give you too many legs, to big will give you too few. 20 is the default.

Summary Table – Data Columns Explained

When we read your file, we add a lot of data to it, most of which is related to times and distances at various vectors.

Field	Example Value	Definition	How we sue it
event	event 0	Sequential number starting at 0. Every maneuver, including going straight is an event.	Event numbers are how we track what's going on. When you tack, the straight prior to the tack is an event, the tack is another event, and the straight after is an event.
up_down	Up	Upwind or Downwind	TWA less than 90 is upwind, 90 and higher is downwind Used extensively in determining events. It is the primary indicator for determining if you are ending a leg and rounding a mark.
maneuver type	LR	Type of event. S=Straight, T=tack, J=jibe, WR=weather rounding, LR=leward rounding	This is what type of maneuver we believe this event data belongs to. It is based on some complex logic using TWA, BSP TWS and HDG.
port_starboard	P	P is port, S is starboard. (negative numbers on TWA are wind from port)	Used on polar presentation and in instrument evaluation
avg_BSP	7.03	STW based speed averaged for the entire event	We track 2 speeds. Your SOG (GPS reported speed) and BSP, which is your "speed through the water" used in instrument evaluation and straight efficiency measurement
avg_target_speed	9.91	Target BSP, accumulated for each record and then averaged for the entire event	the preferred source for this is the Expedition file, If it's not present we will pull it from your target table.
target_speed_percent_met	70.88	percent of target speed for the entire event. Uses STW	Used in loss/gain calcs
avg_polar_speed	10.13	Polar BSP averaged for the entire event	the preferred source for this is the Expedition file, If it's not present we will pull it from your polar table
avg_polar_percent_met	69.36	percent of polar speed for the entire event. Uses STW	Used in loss/gain calcs
avg_TWA	-17.12	TWA averaged for the entire event	negative numbers are port wind, positive are starboard wind
avg_Targ_TWA	67.03	Target TWA averaged for the entire event	the preferred source for this is the Expedition file, If it's not present we will pull it from your target table
avg_TWS	15.89	TWS averaged for the entire event	True Wind Speed

avg_TWD	138.01	TWD averaged for the entire event	True Wind Direction. Mostly used during the instrument assessment
avg_VMG_BSP	3.74	averaged VMG based on BSP	the preferred source for this is the Expedition file, If it's not present we will calculate it
avg_VMG_targ	7.71	averaged VMG based on Target BSP	the preferred source for this is the Expedition file, If it's not present we will calculate it
avg_VMG_targ_ percent	48.48	averaged VMG as a percent of BSP	Same as above
avg_VMG_polar	5.59	averaged VMG as a percent of POLAR BSP	Same as above
avg_VMG_BSP_dist	3.80	accumulated actual VMG distance	The distance you travelled to weather using VMG
avg_VMG_targ_dist	9.65	target speed projected distance	The distance you travelled to weather using VMG if you were at target speed and angle
avg_VMG_polar_dist	9.87	polar speed projected distance	The distance you travelled to weather using VMG if you were at polar speed and angle
VMG_distance_loss	-133.01	this is the distance between you being at 100%vmg and the event actual VMG	This is the basis of the S event loss
VMG_time_loss	-13.78	this is the time difference between you being at 100%vmg and the event actual VMG	VMG_distance_loss expressed in seconds @ target speed
gps_distance (ft)	136.87	the distance between the beginning and end of the event.	for straights, this is the minimum distance you could have covered, and we report it as such
actual_distance (ft)	379.85	the distance traveled using BSP, not SOG	this is the distance basis for all of our calculations
target_distance (ft)	537.52	target speed projected distance	we actually accumulate this for each record, then sum it all up for the event.
diff_btwn_gps_ actual_dist (ft)	-242.98	Distance between your position at the beginning of the event and the end minus the BSP distance accumulated.	This reveals the “efficiency” of your straight line. May also indicate current or BSP calibration issue
target_time (s)	18.79	time to travel this distance at target speed	Used in loss calculations
polar_time (s)	8.00	time to travel this distance at polar speed	Used for loss calculations when you are between your fetch and run angles
actual_time (s)	32.49	time in seconds elapsed during this event	

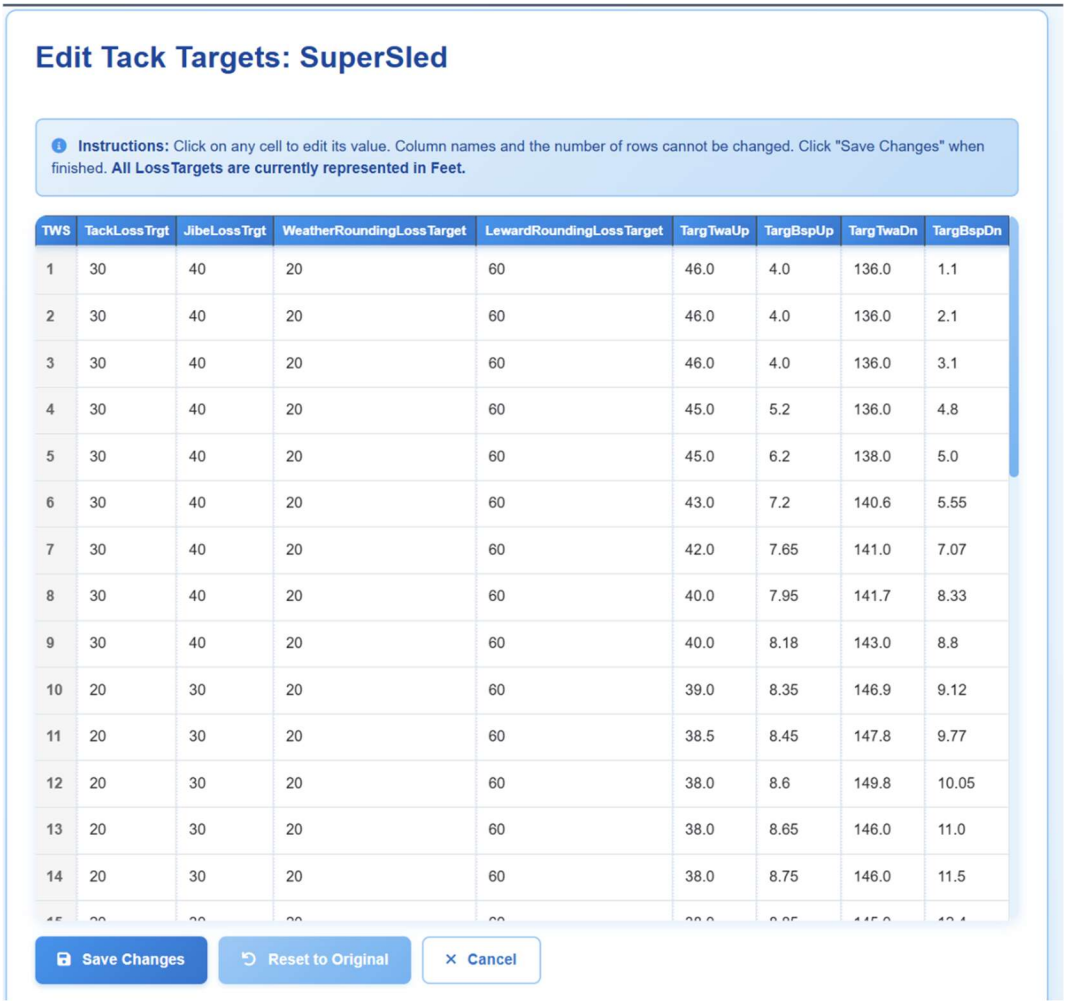
diff_btwn_targ_time _act_time_test	22.44	Time this should have taken at target speed and the actual time	
diff_btwn_pol_time _actual_time (s)	-24.48	Time this should have taken at polar speed and the actual time	
diff_btwn_pol_time _actual_time_test	17.42	Not useful at this time	
TWA_angle_loss_time (s)	4.43	If you are in VMG mode, this is the time lost or gained by deviating from your target TWA	Useful when looking at BSP vs TWA tradeoffs. Not used in any calculations for loss but an indicator as to whether running deeper or pointing higher was useful.
TWA_angle_loss_ distance	79.27	Above expressed as distance	
expected_man_loss	60	Expected maneuver loss from tack targets table	This is how we set up “expectations” for maneuvers and it is added to your maneuver time loss to give you a net gain/loss relative to expectations.
seconds_per_second _loss	0.690699	Gains/losses divided by the number of seconds in the event.	

Targets Table Explained

One of the things we do differently here at regatta-playbook is measure you against expectations. For straight lines those expectations can come directly from your polars, and hopefully directly from your Expedition data file. However, sometimes it can't, and even Expedition doesn't capture other elements. To solve this we have created the "targets table" It contains our "expectations" for your performance and is used as the baseline performance measures, so it's important that is up to date.

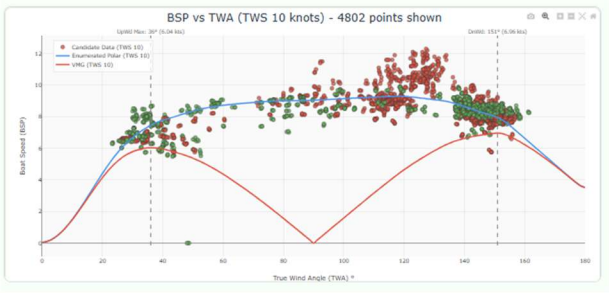
The table is organized by TWS, and has expected "losses" for each type of maneuver. Currently, it's entered in feet, so sorry you Si fans. Additionally, it has target BSP and TWA entries in case your system doesn't provide them.

To edit the file, simple select BOATS->QUICK ACTIONS..EDIT TACK TARGETS. The table can also be updated using the data from "Polar" graphic in the analysis section. ANALYSIS->POLAR



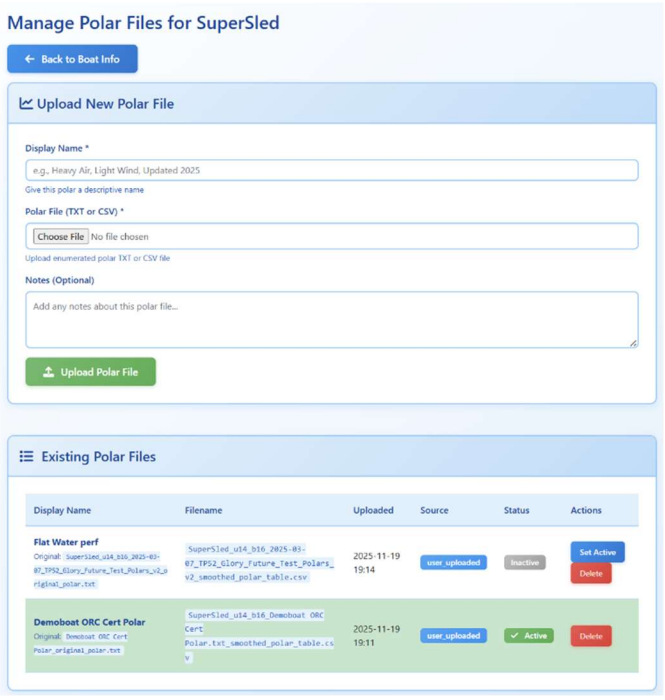
TWS	TackLossTrgt	JibeLossTrgt	WeatherRoundingLossTarget	LewardRoundingLossTarget	TargTwaUp	TargBspUp	TargTwaDn	TargBspDn
1	30	40	20	60	46.0	4.0	136.0	1.1
2	30	40	20	60	46.0	4.0	136.0	2.1
3	30	40	20	60	46.0	4.0	136.0	3.1
4	30	40	20	60	45.0	5.2	136.0	4.8
5	30	40	20	60	45.0	6.2	138.0	5.0
6	30	40	20	60	43.0	7.2	140.6	5.55
7	30	40	20	60	42.0	7.65	141.0	7.07
8	30	40	20	60	40.0	7.95	141.7	8.33
9	30	40	20	60	40.0	8.18	143.0	8.8
10	20	30	20	60	39.0	8.35	146.9	9.12
11	20	30	20	60	38.5	8.45	147.8	9.77
12	20	30	20	60	38.0	8.6	149.8	10.05
13	20	30	20	60	38.0	8.65	146.0	11.0
14	20	30	20	60	38.0	8.75	146.0	11.5

Polar Files: How and Why we have them



If you use Expedition, that data generally contains polar performance data, and when we build a Race Report we use this data. If not we use the data you loaded when you defined your boat. However in our ANALYSIS tool, we allow you to look at your performance relative to any polar file you might have. To do this we need to actually have access to a polar file. The file format we use is identical to the one Expedition uses. We support having multiple files available and toggling between them during analysis. This is especially useful if you are an IRC/ORC boat as it's easy to turn your certificate info into a polar. Once you have this, you can see how you are doing relative to your rating, and where you need to improve against your rating to stay ahead. Also, if for some reason your race data does not have polar performance data in it, we will use the active polar file to generate your polar speed

Uploading a new polar File



Choose the file from your computer and click the upload button" Once the file is uploaded, we determine the Upwind and downwind Target VMG speed and angle from that file. You can choose to apply this information to your TackTargets table at this time if you wish. You would generally only update the target VMG number from your performance polar and not your rating polar.

Managing your Polar files:

To manage the file, simple select BOATS->QUICK ACTIONS..MANAGE POLAR FILES. This screen will appear.

The upper half references allows you to upload a new file.

The lower half lets you select which one is being used. To do this simply click the "SET ACTIVE" button.

CREW

Don't show up "ready to sail" show up "**prepared to perform**"

Having the right people on board is the biggest challenge of any organization, and racing is no different. Our CREW function helps you document "who does what" and helps them understand what they need to do when

Our aim is not to tell the crew how to sail. Instead we are like that person assigned to show you around the shop floor on your first day of work. Where do you stand when the overhead crane is moving, what's the path to my workstation, and where is the better coffee in the morning. We prepare you for your day. It's up to you to do it well.

To do this, you create your crewlist, assign possible positions and document your crew's choreography, we help bring them "up to speed" before they get to the dock. This lets them bring their knowledge to you already having "learned how you do it"

Managing crew members

The first step in making sure everyone is "on the bus". The crewmember panel lets you identify the people and assign them a role and position. TO us, ROLES are for access control, POSITIONS are for sailing.

To invite a new person follow these steps:

- Click the CREW tile, (1)
- Click the "Invite Crew Member" button (2)
- Fill out their email, select a ROLE and position.
- Click Send (3)

Notes:

- Once sent, invitations must be accepted within a week as they expire.
- You can check the status of your crew and invitations on the "MANAGE CREWMEMBERS" tab