

## Deserve to Win

We all want to win every race, but only the crews that have put in the hard work cross the finish line first.



The ingredients necessary to win are much like those required to create the perfect meal. (Fortunately, my wife is a fantastic cook!) Whether in the kitchen or on the racecourse, success comes down to three elements:

- Ingredients
- Preparation
- Execution

Fresh ingredients are an essential part to a delicious meal. In the same way, a winning boat's key components must be kept as perfect, or "fresh," as possible, including:

- Fair hull, keel, rudder
- Keel, rudder inline to center seam
- Smooth, hard bottom finish
- Light strong hull/deck

The next ingredient is a clean well-marked deck and organized interior.



The deck should have few winches that control a variety of lines. For easy reference, any moving item needs to be labeled with either a number or color. A number should be related to the jib tracks, main traveler, halyards, backstay, and in-haul.



Here's the rule: the weight you must carry is placed midship under bunks, usually in dry bags well marked for safety requirements. The cleaner and more organized the interior, the easier it is to find the right sail or item to help the boat sail more efficiently.

Now that the base of our recipe is complete, we pay attention to the smaller details that make all the difference for a good outcome. When every element of the boat is incorporated just right, the product is much closer to perfection.

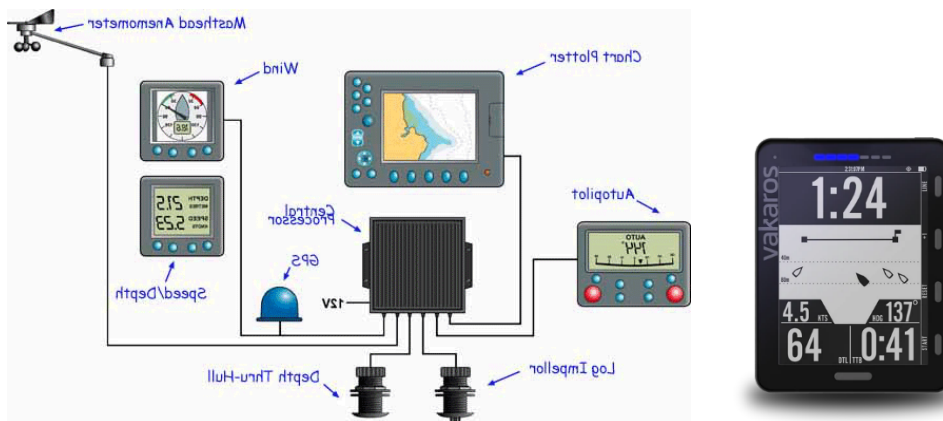
## Other Essential Ingredients

- Mast: clean, smooth, strong, adjustable minimal windage (light as possible)
- Boom: clean, smooth, strong (light as possible)
- Pole or prod: clean, smooth, strong (light as possible)
- Standing rigging: clean, adjustable minimal windage
- Running rigging: strong, light, color, well-marked



- **Instruments**

- True value boat speed, heading, true wind direction and speed
- Angles, apparent and true, opposite tack and gybe
- GPS, AIS, heel and trim
- StarLink, Expedition, computer
- Starting distance and time



It is more important to have a few accurate instruments than many unreliable ones. Place a high priority on obtaining instruments that calculate boat speed relative to the current, a compass, and wind instruments to provide true wind speed, angle, and direction. The ultimate is to connect a computer to instruments and have sailing software like Expedition to record your performance.

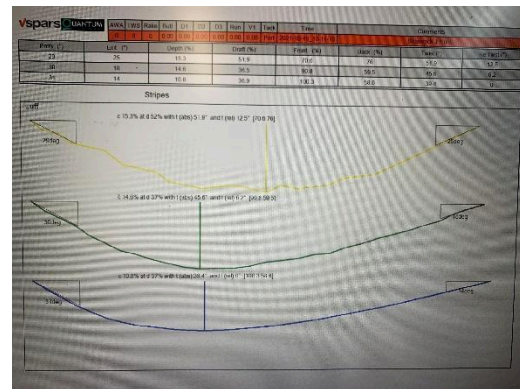
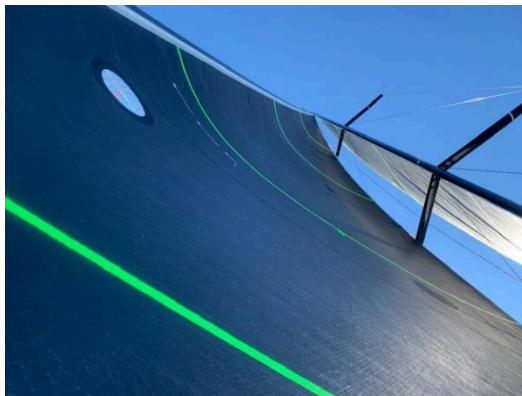


- **Essentials Below the Surface** (ideally labeled and placed in dry bags midship)
  - Life vests, anchor rode, flares, medical kit, tools, spare parts, sail repair
  - Jet boil stove, water filter, water bottles, powder electrolytes
  - Handheld VHF, hand bearing compass, binoculars, wet notes



- **Sails ( your fuel)**
  - **Primary Sails**
    - Main: light-to-medium jib, genoa-runner spinn, asymmetrical sail

The primary sails should be in the best condition in terms of strength and shape. Take photos of the primary sails once a month to ensure the shape has remained the same. Once the sail is digitized, you can tell if the shape has changed. If caught early, the shape can be adjusted back to the original design.



- **Secondary Sails**
  - Reaching sails: Code 0-A3-jib top
  - Breeze sail-#2: jib or genoa-#3, #4 jibs



### ○ Specialty Sails

- Light air spinnaker or asymmetrical sails
- Heavy air spinnaker or asymmetrical sails
- Staysails: spinnaker, genoa small IGS



Just like all ingredients are essential to a recipe, the same is true when creating the perfect boat. Each component is equally important. Start by writing down all your ingredients and giving each one a score to spot places that need to be spiced up a bit.

### **“Luck is when Preparation meets Opportunity”**

While a well prepared boat does not equal a guaranteed win, it will put you in the mindset that you deserve to win. When preparing a boat for success, I start with a checklist:

- **Team**

- Responsibilities (job)
- Race schedule (enter soon)
- Requirements (safety requirements and courses)
- Boat work (during off season)
- Clothing and gear
- Logistics for travel
- Practice dates

- **Boat**

- Bottom: keel, rudder, finish
- Hull: clean, smooth
- Deck: Clean (less is more)
  - Numerical markings on track/halyards
- Interior
  - Light ends
  - Gear low
  - Open: no slip floor
  - Safety
  - Gear: spare parts, tools (numbered dry bags)
- Hardware
  - Winches: clean, lube, increase grip
  - Tracks: clean, McLube, OneDrop
  - Hydraulic: Check for leaks, seals
  - Clutches working
  - Block vs. low friction rings
  - Halyard bags
- Running Rigging
  - Jib/genoa halyard: lowest stretch

- Low stretch main: spinaker, sheets (different colors)
- Soft shackles
- Marked for reference
- Engine
  - Maintain, oil and filter changed (replace impeller)
  - Efficient alternator
  - Working batteries (lithium?)
  - Exhaust back up
  - Prop-working well (smooth)
- Equipment Below
  - Safety (watertight, well marked)
  - Tools (less-is-more multi tools)
  - Spare parts (Lowe friction rings-soft shackles)
  - Sail Repair (sail tape, glue, ring, webbing, sewing thread)
- Sails
  - Service
    - Look over sails for holes, frayed threads, or tapes
    - Review photos for shape
    - Roll up sails for winter and fold downwind sails
- Charts
  - Crossover (sail choice for wind speed and angle)
  - Targets (VMG speed and angle)
  - Polar (VMC speed and angle)
  - Tuning (rig settings for different wind and water conditions)
  - Safety (all safety equipment below deck)

A major part of being well-prepared is having access to all the key information needed to make smart decisions during a race. This requires reliable instruments and a stable internet connection while racing.



The Mini Starlink antenna has made internet access possible on virtually any body of water. At a minimum, access to weather data is essential. Ideally, you also need a computer capable of analyzing your boat's potential performance against forecasted weather to suggest optimal routes.

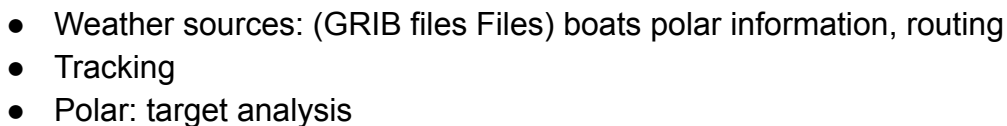
#### **Internet on board provides:**

- Weather (numerous sources)
- Current/tides
- Tracking (Yellow Brick)
- Rating information
- Race history
- Weather history
- Tracking history
- Buoy information
- Weather models





- Starting: distance to line, time to line, time to kill, favored end
- Navigation: waypoints, time and distance to laylines
- Cross over chart: sail choice relative to wind speed and angle



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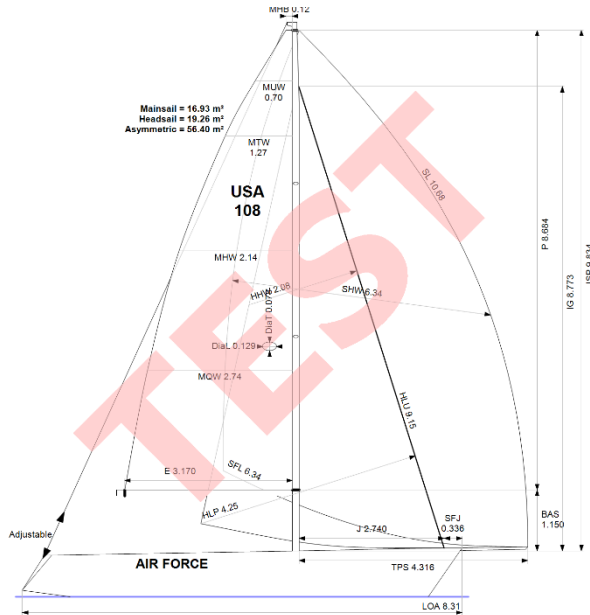
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Optimal course

Export Optimal distance: 2422.01nm Route distance: 2132.90nm Optimal route time: 8d 11h 0m

UTC	Hdg/M	Twd/M	Tws	Tws	Tag	Bsp	Lat	Lon
7/6/1995 7:20:40 PM	214°	329°	14.4	115°	145°	13.0	34.16.485N	120.16.560W
7/7/1995 8:22:17 AM	212°	348°	14.2	136°	145°	12.9	32.40.925N	122.21.441W
7/7/1995 7:42:23 PM	210°	317°	12.5	136°	145°	10.1	30.18.950N	124.24.681W
7/8/1995 8:19:50 AM	239°	030°	9.0	143°	141°	(9.9)	29.72.403N	126.29.570W
7/8/1995 7:52:33 PM	243°	025°	10.0	142°	147°	10.4	28.43.252N	128.44.459W
7/8/1995 7:29:46 AM	243°	041°	8.9	137°	141°	(8.4)	28.12.602N	131.01.159W
7/9/1995 8:56:56 PM	251°	046°	9.6	145°	142°	(10.0)	27.43.037N	133.16.737W
7/10/1995 9:31:16 AM	240°	029°	10.6	170°	145°	(8.9)	27.50.622N	135.28.162W
7/10/1995 11:44:17 PM	260°	047°	13.6	147°	145°	(11.9)	27.12.869N	137.50.323W
7/11/1995 11:21:17 AM	261°	094°	13.7	152°	145°	(10.9)	27.17.957N	140.09.396W
7/11/1995 10:12:53 PM	269°	062°	16.8	135°	147°	(12.2)	27.25.051N	142.27.901W
7/12/1995 8:47:22 AM	214°	067°	17.3	147°	147°	(13.2)	27.00.026N	144.48.715W
7/12/1995 7:41:23 PM	275°	064°	17.3	149°	147°	(12.9)	26.10.017N	146.48.095W
7/13/1995 6:01:41 AM	221°	011°	16.7	171°	147°	(12.4)	26.51.091N	149.01.562W
7/13/1995 4:31:08 PM	223°	077°	17.5	146°	147°	13.4	25.34.932N	150.55.323W
7/14/1995 2:23:39 AM	225°	076°	17.5	149°	147°	(13.0)	24.21.144N	152.48.346W
7/14/1995 11:55:31 AM	234°	078°	15.4	146°	146°	(12.4)	22.10.389N	154.40.795W
7/14/1995 9:45:42 PM	235°	066°	13.6	170°	145°	(9.8)	21.57.364N	156.31.420W
7/15/1995 6:28:40 AM	235°	066°	13.6	170°	145°	(9.8)	21.19.467N	158.02.420W

## Your Rating ORC



ORC allows you, or someone you trust, to make adjustments in sail size or other parameters and test whether the changes can improve performance. The speed table is a valuable tool for evaluating these changes based on time. It's worth investing the time to better understand the race you plan to sail and how your boat's performance can be improved through changes informed by the race's history.

## WINNING IS NOT THE RESULT OF ONE THING, YET THE SUM OF EVERYTHING

You can have the perfect boat with all the best sails and equipment necessary to win, yet without putting in the hard work, you will just be another boat on the racecourse. The hard work goes beyond just going for a sail before the race—it involves perfecting every aspect of the boat.

The single most important step in **"Deserving to Win"** is constructive practicing. I have raced on many teams that practice in a way that makes everyone feel good, eliminating the growth that happens when a team faces difficult situations. Put in the time; it's worth it.

## Practice

- Boat Handling (using numbers)
  - Tacking/Gybing (numbers allow the team to move together)
  - Setting and dousing Spinnakers / asymmetrical sails

- Changing sails
- Reefing mainsail
- Fitting storm sails
- Performance
  - Upwind
    - Trim sails for wind and water
    - Heel and trim fore and aft
    - Target speed vs. polar speed
  - Downwind
    - Trim sails using telltales
    - Heel and trim fore and aft
    - Target Angle vs. Polar angle/speed
    - Staysail
      - Spinnaker, genoa, IGS small
- Instruments (**hire a professional to help calibration**)
  - Speed: heading accurate
  - Wind angle symmetrical
  - Wind direction true tack to tack and gybe to gybe
  - Star Link, GPS, AIS
- Safety
  - Man overboard drill
  - Good medical kit
  - Trained crew person to take responsibility for team

## Execute

Now that you have a race planned, it is time to start your execution plan. The good news is that you and your team have put in all the hard work to prepare for the upcoming race. Your plan to execute starts with:

- Entered the Race
  - Turn in your rating
  - Make all logistic plans-hotel-travel-crew and boat
  - Start looking at weather
- Weather

- Looking back 10 years for patterns
- Running routes for 2 weeks out and preparing mentally for conditions
- Running routes 1 week out, every day up to race day
- Gather personal gear for potential weather conditions
- Develop a timeline relative to start
  - On course one hour prior to warning single
  - Leave dock relative to on course time
  - Arrive at boat one hour prior to dock out
  - Leave house relative to on course time
- On Course (long race)
  - Clean water line and band prop
  - Have lunch
  - Sail first heading for sail choice
  - Ping starting line from outside when possible
  - Hydrate and discuss starting location

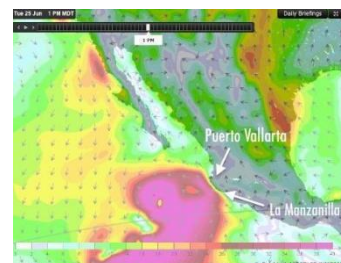
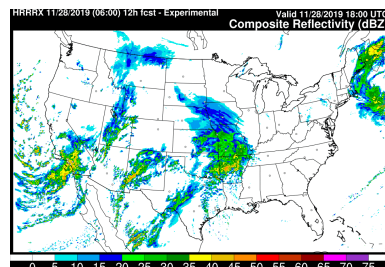
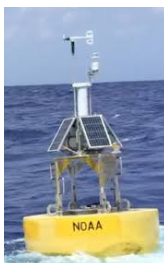
Now that you have put in all the work to become the “boat to beat”, it is time to put it all together. In all sports, the goal is to have confidence in your ability to perform at a higher level than your competitors. Confident baseball players claim the ball slows down, allowing them to hit more consistently. Confidence cannot be turned on; it comes from your team’s hard work and desire to be the best boat on the water.

Having meetings prior to leaving the dock ensures that you all are on the same page. Double-check the rig and make sure the proper sails are on the boat. Discuss weather and possible scenarios., as well as a watch system and your man overboard system.

Once your homework is finished, start the race in an area that will allow your team to execute the plan. Regardless of your start, stick to your plan and do not let other boats dictate the outcome. Use your tools to gather information and look for clues.

### Clues on Course

- Boats that started prior (watch with binoculars or look at Yellow Brick)
- Buoy information up the course (compare inshore buoys to offshore)
- Different Weather Models (compare and look for agreement)



- Your competitors (how is the plan working, need adjusting?)
- Clouds (cumulus over the land can indicate thermal wind)
- All the boats (look at tracking information hourly)

You now **Deserve** to Win. All the ingredients to create a winning team have been assembled. Once you get a taste of victory, your team will be obsessed with winning again. Continue to put in the hard work and experience the next race from the front.

Wally Cross

