

Olympic Boats Contribution to LA28 Format Working Party

Executive Summary

The Olympic Classes recommend the adoption of two distinct final formats across the ten Events, reflecting ongoing efforts to refine fairness and excitement in regatta conclusions.

This paper focuses on the format for the boats, aiming to balance consistency with a final day showcase, ensuring that final outcomes are both robust and dramatic. Proposed changes are grounded in stakeholder feedback and detailed event performance data, aiming to optimize athlete experience while ensuring an enticing broadcast product.

Recommendation 1: Number of Final Formats

The Olympic Classes recommend implementing two distinct final formats across the ten Olympic sailing events, most likely divided between Boards and Boats. This structure aligns conveniently with the Los Angeles 2028 (LA28) Games, which effectively consist of two separate regattas: the board classes competing at Long Beach during the first week, and the boat classes competing in San Pedro during the second week.

Historically, Olympic sailing has had limited experience designing formats specifically intended to appeal to commercial audiences or engage broader fanbases. The nature of this challenge involves numerous and competing trade-offs—balancing sporting integrity, athlete experience, broadcast considerations, and audience accessibility. Given those complexities, it is improbable that a single, perfect format will be achieved on the first attempt.

By adopting two formats, the sport can sustain engagement around this discussion rather than settle it prematurely. Fans, sailors, and commentators will naturally compare the approaches as they watch. Their feedback—on what aspects enhance storytelling, viewer comprehension, and perceived fairness—will be invaluable. The contrast between the formats can provide a live case study, allowing the sailing community to collectively learn and refine toward either a unified, improved solution or a deliberate acceptance of multiple, diverse formats that illuminate different strengths and characteristics of sailing.

Recommendation 2: Final Format Design

Boards: The board class final will continue with a straightforward and visually clear structure—four boards competing head-to-head, with the first to cross the finish line winning gold. This is a concise format well-suited to short-course stadium racing and television coverage. Further technical details are supplied in a separate report.

Boats: The boat class finals will feature an intense and condensed racing series on the final day, integrated with results accumulated from the preceding three days of competition. The final series is designed to target approximately one hour of on-water action per Event, corresponding to 52 minutes of broadcast time—an ideal balance of narrative depth and viewer engagement.

Two alternative race configurations will be tested to achieve this time objective:

- Two races with 10 boats, each targeting approximately 18 minutes in duration.
- Three races with 8 boats, each targeting approximately 11 minutes in duration.

This framework closely reflects the Working Group’s initial recommendations but maintains a continuous, low-point scoring series through to conclusion rather than switching to a “winner-take-all” final-four format. Continuing with cumulative scoring keeps sailing’s authentic character intact and ensures that outcomes reflect skill and consistency rather than the randomness of a single race.

The Series Concept in Sailing

Fleet racing has always used a series of races to determine final standings. This tradition is not mere habit—it stems from the fundamental nature of the sport. The series format reflects sailing’s inherent variability: shifts in wind, current, and circumstance influence every race. Over a series, luck tends to balance out, and the sailors who best adapt across all conditions and decisions rise to the top.

This cumulative method preserves sailing as a meritocracy on the water. It ensures that results are earned through skill, strategy, and resilience rather than decided by chance. The Olympic stage, with its complex mix of logistical constraints, media demands, and unfamiliar venues, magnifies the need for this approach. Top sailors can usually adjust to almost any condition—but rarely perfectly in every single race. A series allows time for consistency and quality to prevail, fostering compelling sporting narratives that fans and nations can rally behind.

The Showcase: Olympic Sailing as a Broadcast Experience

The final day of competition represents sailing’s best opportunity to connect emotionally with a global audience. The goal should not simply be to determine a winner, but to create a compelling, legible, and emotionally resonant sporting experience—both for on-site audiences and television viewers.

Transitioning from a single-race shootout to a short, structured series enhances this potential dramatically. It enables fans to follow momentum shifts, turning points, and redemption stories across successive races. When properly presented—with live scoring, identifiable national branding, and real-time graphics—viewers can develop emotional investment in specific athletes and teams as the suspense builds throughout the final session.

This requires an unwavering commitment to clarity. Fans must be able to immediately recognize who is leading, who is gaining, and what each result means. Country flags are essential identifiers, but the broadcast must also deploy live scoreboards, positional overlays, and GPS or 3D fleet tracking graphics. These storytelling tools are not luxuries—they are prerequisites for making sailing understandable and compelling. Without them, even the fastest and most dramatic racing will appear chaotic or meaningless to those unfamiliar with the sport.

Fast, modern boats already provide spectacular visuals. But the essence of sport lies not in isolated moments of speed or mishap—it lies in narrative. A final-day series allows broadcasters to tell that story: ebbing fortunes, tactical risks, and the emotional stakes of Olympic competition.

Points, Balance, and Competitive Fairness

Multiple scoring models can be used to balance performance across the opening series and the final day. Variables include how many points are carried forward, the number of boats per race, race weighting, total number of final races, and even the tie break methodology.

Philosophically, athletes favor systems that measure excellence across the entire regatta, valuing sustained mastery. Meanwhile, broadcast and event directors often prefer models that maximize the tension and potential reversals of the final day. The best solution likely lies between these poles—a setup where neither group gets exactly what they want, but both agree the overall product is fair and engaging.

Between these poles, without being too extreme

More aggressive approach: Teams carry forward only their overall rank as points. This creates a narrow gap—typically seven to nine points between first and last among eight to ten finalists (depending on race configuration) —intensifying final-day volatility.

Less aggressive approach: Sailors carry forward their full series points, with each final race scored at 1.5x weighting. This slightly amplifies final-day importance without distorting the competitive integrity of the prior races. However, in almost all cases this starting point allows even the last placed team to have a mathematical chance at winning a medal. (3 of 144 top 8 finishers over the past 3 Olympics would not have been within medal reach)

Recommendation 3 – simplify the starting scoresheet

The presentation of the final day scoring should be intuitive: Within the final day, all races should use single-point-per-place scoring. This is accomplished by applying all scoring adjustments to the initial starting scores, so the final day's leader starts on zero or one point and others behind by clear increments. Simplifying the arithmetic is crucial for real-time understanding by fans and media. Complexity can remain hidden in how scores are initialized, not in how they are presented.

Rank Versus Points: balancing merit versus jeopardy

The Working Party's proposal to use rank-based starting scores ahead of the semifinal offers simplicity but flattens distinct performance differences in the opening series. By imposing rank on all scorecards, two leaders of different Events could carry identical rank-based advantages into their respective finals even if one dominated their series while the other barely held a tie with second place. This outcome undermines perceived fairness and frustrates athletes who have objectively outperformed peers across the earlier races.

The composition and scale of the final series also constrain how much change is mathematically possible. For example:

- With two races of ten boats, the maximum total differential is 18 points.
- With three races of eight boats, the differential rises to 21 points.
- These define outer boundaries of potential movement between positions—although actual probability distributions show that large swings are exceedingly rare. Here are some examples of

the impact of point differential within a 3 race, 8 boat final, assuming random outcomes: a 21-point gain across three races is approximately 0.0003%

- a 15-point gain happens about 3% of the time
- 10-point gain about 23%.

This paper will now review options between these extremes to see if there is a balance between the two available.

Evidence from Past Olympics and Scoring Evaluation. This table shows how various scoring policies would have played out at the last three Olympics for the boat events. Specifically, this shows average outcomes and assumes a 3-race of 8 boat scenario.

Regatta Place	Extreme starting options		Less Extreme Starting Point Options			
	Regatta Rank	Points +	Race Rank 1x	Points + 2x	Points + 3x	Race Rank 2x
1st	1	0	0	0	0	0
2nd	2	5	5	4	2	3
3rd	3	10	8	7	5	4
4th	4	12	11	9	6	5
5th	5	15	14	12	8	7
6th	6	18	15	13	9	7
7th	7	20	17	15	10	8
8th	7	23	18	17	11	9
Points means keeping point differential from opening series						
1.5x, 2x, 3x etc, means how much the final races are multiplied by						
Rank and Rank + 2x means adjusting the opening series to only count the boats making finals						

We analyzed data from every Olympic boat class in 2016, 2020, and 2024, evaluating how different scoring models would affect competitive balance and storytelling potential. Formats included single-point, 1.5x, double, and triple weighting, as well as “race ranked” and “double race ranked” scoring. EC are not as close to this as us and may not understand what is meant by these formats (although partly explained below)

Race ranked scoring re-scores each race 1 through 8 (for 8-boat finals), effectively compressing point spreads while giving equal value to every race. This reduces the distortion caused by outlier events such as mass false starts or extreme wind shifts. The method preserves the logic of the series but provides narrower gaps, maintaining excitement into the final races.

Key evaluation metrics included the average gap between first and last, and between third and last, correlated with the probabilistic likelihood of overcoming point gaps (10, 15, and 21) – what does this mean?. While full mathematical modelling must be tailored to each event, the trends are consistent: compression increases final-day excitement but must be balanced against earned advantage and perceived legitimacy.

Mathematical contention can be differentiated from realistic contention when assessing the final-day drama. For example, a 23% chance of a boat making a 10 point gain on another boat does not mean a boat 10 points behind a medaling boat has a 23% chance of winning a medal. If we round 23% to $\frac{1}{4}$, the maths would be that both teams have to move to the 10 point differential expectation, making the odds 1/16 or 4.25%, not factoring in the performances of other boats that may also further decrease the odds of the trailing team winning a medal from 10 points back.

Recommendation 4: A defensible compromise

We recommend the Working party strike a compromise on scoring to continue the tradition of the Olympics being a true pinnacle regatta in our sport with the business needs of sailing and the IOC to provide a compelling broadcast product to sports fans.

Recommendation 5: Testing

We recommend testing scoring options at the 2026 Palma and Hyeres regattas.

- ILCA classes and 470: 2 × 18-minute races on the final day.
- 49er, FX, and Nacra 17: 3 × 11-minute races on the final day.

This recommendation is grounded in evidence from the past three Olympic cycles, where teams finishing eighth or lower almost never demonstrated championship-level form. Historically, these sailors did not merit gold medal contention based on cumulative performance, though they often remained within reach of bronze—providing sufficient national broadcast interest.

While many sailors express preference for 1.5x scoring, our analysis suggests a more aggressive option can still balance the twin needs of merit and viewer drama. Conversely, moving toward more aggressive compression—as some Working Party options propose—risks overemphasizing the final day, trivializing prior consistency, and producing lottery-like results in potentially compromised “stadium” racing environments.

True spectacle in sailing lies not in artificial suspense but authentic competition. The goal is not to manufacture jeopardy—it is to present genuine contests fought on skill.

Compromises and Trade-offs

Relative to the Working Party’s proposal, our recommendations introduce certain deliberate compromises:

a) Complexity over Simplification: We advocate for investing in advanced broadcast technology and interpretation tools to communicate sailing’s dynamics, rather than oversimplifying the sport to avoid investing in the technology needed to properly tell the story. Comprehensibility should come from better storytelling, not from diluting what makes the sport unique.

For example, it would be the simplest to run a reaching start race for 300m to a finish line. The whole regatta would be done in 1 minute, and it would be clear to a commentary and graphics free viewer what has happened, who won, and what happened.

However, as soon as we wish to do windward-leeward races, and a series, and eliminations, and have the set of rules we have, a casual viewer will always need assistance. Since we know we need to explain our racing with top commentary and graphics, we can assume those tools while we build our format.

b) Winner May Emerge Before the Final Race: In every multi-race final-day setup, there exists a nonzero probability that gold will be clinched early. Rather than designing against this entirely, we suggest embracing it as an exceptionally rare and memorable achievement—an “Albatross Moment,” celebrating dominance across both series and finals.

The racing should continue regardless, with meaningful battles for silver and bronze providing rich narrative content while the champion rightfully celebrates from the sidelines.

Attempting to artificially prevent an Albatross through dense scoring multipliers is an option, but a limiting one. No format that goes beyond 2 races and beyond n-1 rank as the initial standings can guarantee mathematically the final race will be the one that secures the gold medal. We are better off ensuring an Albatross is rare, but ensuring typical regattas are well set up rather than overly worrying about an outlier case.

Appendix

1) here is the probability chart of starting position to finish position assuming random race results and rank starting points.

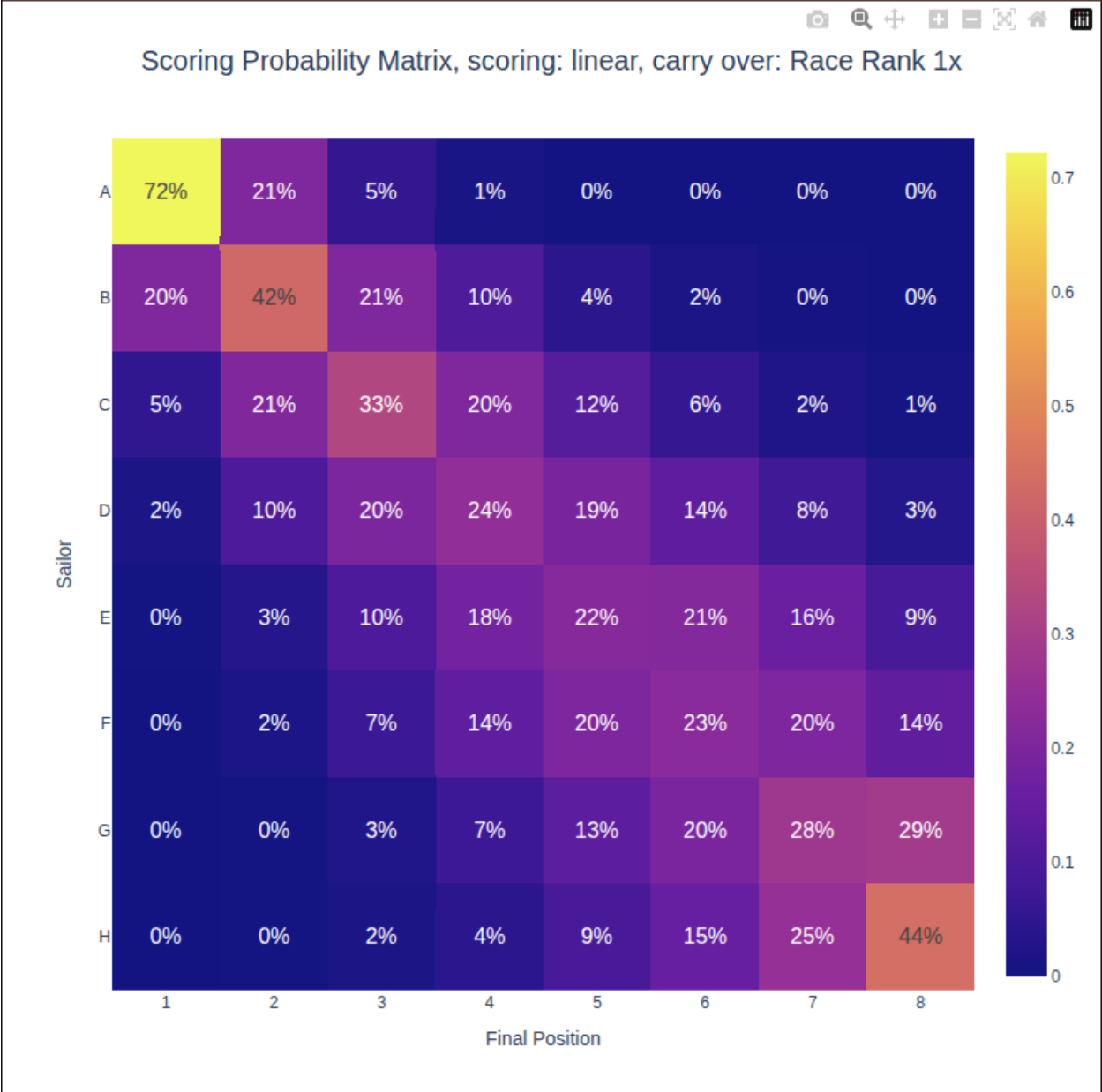
starting_ position	Starting Points	pct_finish_1	pct_finish_2	pct_finish_3	pct_finish_4	pct_finish_5	pct_finish_6	pct_finish_7	pct_finish_8
1	1	34%	21%	15%	11%	8%	5%	3%	1%
2	2	24%	20%	16%	13%	11%	8%	5%	3%
3	3	16%	17%	17%	15%	13%	11%	8%	5%
4	4	10%	14%	15%	15%	15%	13%	11%	7%
5	5	7%	11%	13%	14%	15%	15%	15%	11%
6	6	4%	7%	10%	12%	14%	17%	18%	19%
7	7	2%	5%	7%	10%	13%	16%	20%	26%
8	7	2%	5%	7%	10%	12%	16%	20%	28%

2)Here is a [link to a full view](#) of the 2016, 2020, and 2024 Olympic results table used for this analysis.

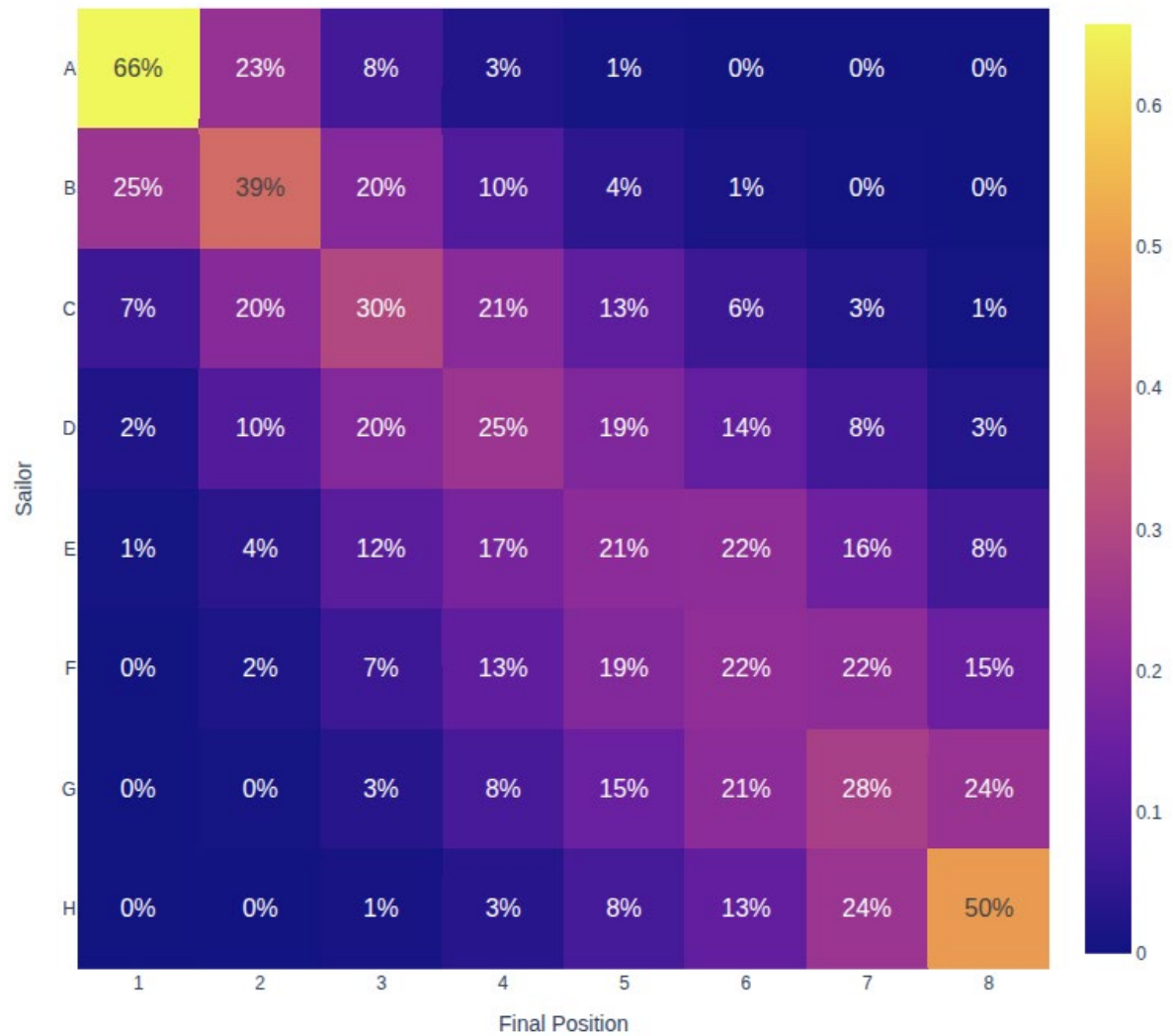
3) Here are the expected outcomes for each of the schemes outlined above, in order 1.5x, race rank x 1, 2x, 3x and race rank x2. These represent the average likely outcomes of each scheme, but the actual scenario for any individual event would be determined by how the teams faired against each other during the initial racing, with those who had great weeks starting out farther ahead and those leaders who are on tight points with their peers starting out much closer together.

Scoring Probability Matrix, scoring: linear, carry over: Points + 1.5x

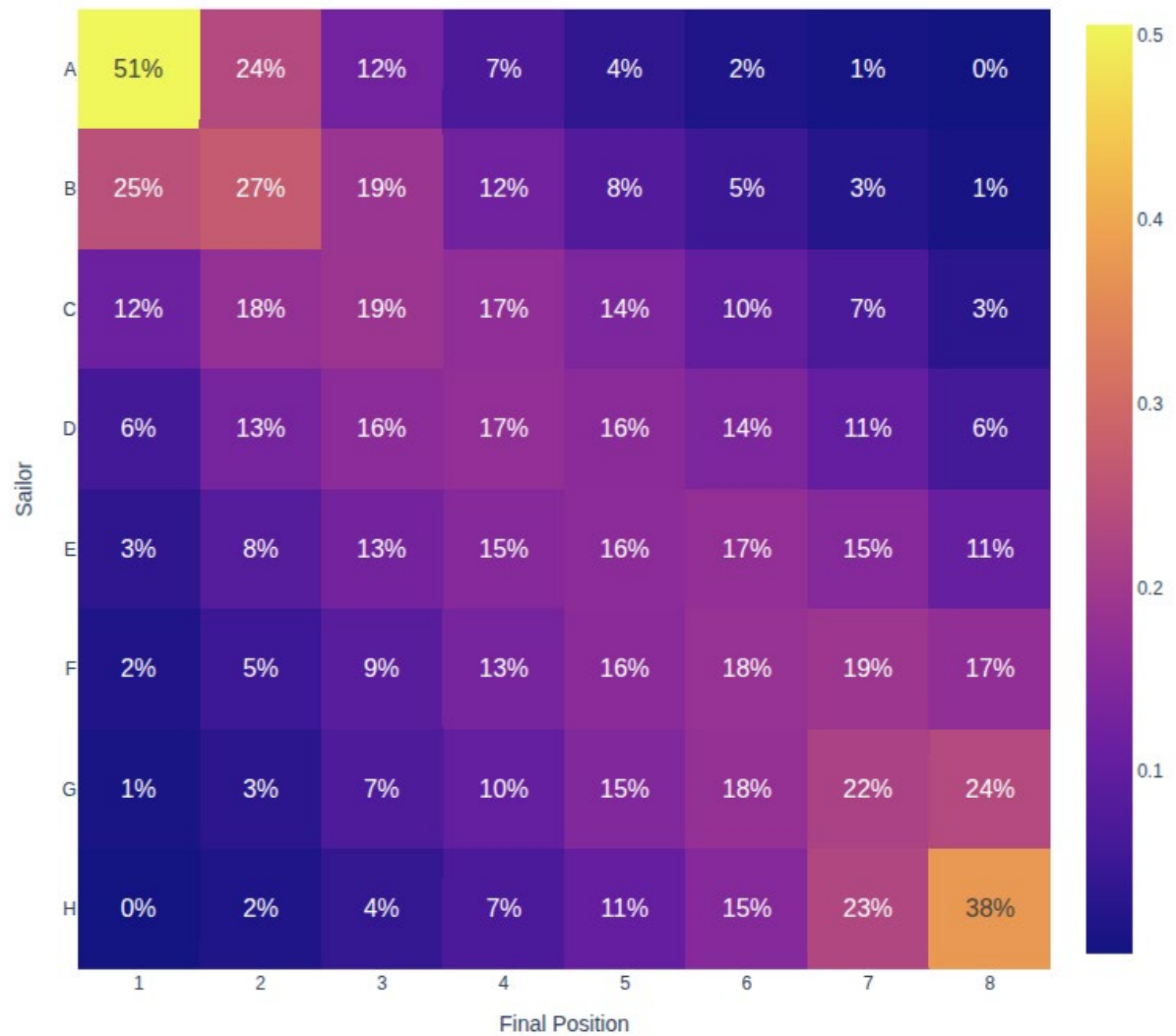




Scoring Probability Matrix, scoring: linear, carry over: Points+2x



Scoring Probability Matrix, scoring: linear, carry over: Points+3x



Scoring Probability Matrix, scoring: linear, carry over: Race Rank 2x

