Off Soundings Club
2026 PHRF REGULATIONS*

Performance Handicap Racing Fleet of the

**Changes to regulations made mid-season are posted in the OSC Regulations online and serve as the official version.*

I. GENERAL REGULATIONS

OSC Handicap ratings are determined for each boat as the sum of its base boat rating and any adjustments applied that address modifications to the standard boat, its sail plan, spars, propulsion, etc., as outlined in this document. Base-boat ratings for windward/leeward and random leg courses (see **section XIV**) are established based on speed potential and observation in accordance with the design of a standard boat, equipped as intended by the original manufacturer with US Coast Guard-required safety equipment, which is expertly sailed, well-equipped, and conditioned. PHRF is a performance-based rule and investment in an innovative new sail type, configuration, or technology should not be viewed through the lens of yielding a performance advantage over the rest of the fleet. Innovation is encouraged, but the principle of PHRF requires that any performance benefit be offset with adjustments. These regulations aim to equitably assign handicaps, as Time Correction Factors, for conditions likely to be found in and about Eastern Long Island Sound. Time correction factors are determined using the following formula:

TIME CORRECTION FACTOR
(TCF) = 650/(PHRF+550)

- **A Standard Boat** is equipped to the degree intended by the manufacturer, including those appointments and equipment supplied or intended by the manufacturer, such as joiner work, galley equipment, standing rigging, etc. Class rules notwithstanding.
- **A One-Design Boat (ODR)** must meet active class requirements as published for its hull, appendages, and sails (number of sails, materials, shapes, and sizes). Practices permitted by the class but otherwise prohibited by these Regulations or the Racing Rules of Sailing, such as the use of trapezes or movable ballast, shall not be allowed.
- **A Custom or One-Off Boat or a Boat that has been substantially modified** is reviewed as initially presented on a case-by-case basis, and handicapped "as Sailed" based on observed performance and other parametric data. It is documented to include configuration, equipment, appointments, and sails on board during the period of observation. Subsequent changes may be treated as a Modified Boat per below. Boats that are new to the area without documented performance data may benefit with certified weight data. Forms are available from ECSA PHRF.
- **A Modified Boat** is any boat that has been changed in some way that might affect its performance from the original design.

MODIFICATIONS

Older boats often require substantial restoration to be maintained in a safe and competitive condition. These repairs and improvements have the potential to affect boat speed when compared to the base boat upon which the rating is established. It is the same for newer boats that are modified. For this reason, modifications and significant repairs made to any boat need to be documented and evaluated, and rating adjustments considered on a case-by-case basis to maintain fair racing for all. All restorations, repairs, and modifications described below and listed in Section XI of these Regulations, whether performed by you, others, or previous owners, must be reported and noted on your PHRF application, whether or not they replicate the original design.

Modifications of interest typically include changes to the hull shape or structure, appendages, spars or sail plan, boat weight or propulsion. While some modifications may be allowable under One-Design class rules where all boats are the same, they may require a rating adjustment for racing under PHRF. The Handicapping Council assumes the role of assessing repairs or modifications to determine whether there is a significant effect on performance requiring adjustment of a boat's handicap. Though only some modifications may require that a rating adjustment be considered, it is not the owner's responsibility to assess the speed significance of a change or to decide which modifications qualify. For this reason, we offer the general guidelines below on what to report (and what not to report) on your rating application.

Modifications, Repairs, and Upgrades Which Must Be Reported:

1. Hull and Appendages: Changes that alter the weight of the boat or the flow of water over wetted surfaces (i.e.: size, shape, contour, length, materials, weight, location, center of gravity, etc.)

2. Structure: All structural work including changes, repairs, additions, or replacement to the original manufactured design and construction of the hull, keel sump, rigging, weight, or weight distribution. This includes (but is not limited to) interior bulkheads, longitudinal stringers, keel sump bracing, tie rods, and compression struts.

3. Spars: Changes to weight, length, cross-section, design, materials (Carbon Fiber, etc.), external support structure, standing rigging design or materials etc. The modification or addition of a sprit.

4. Sail Plan: Guidelines are provided in this OSC PHRF REGULATIONS document for all applicable **Rated Sails** and the addition or removal of headsail roller furling devices. Any changes or replacements of Rated Sails, not previously reported, MUST have documented sail measurement certificates before they can be used in OSC events. **Rated Sails** include your largest Symmetrical, Asymmetrical, Code Zero Spinnakers, Mainsail, Mizzen sail, Headsails, and Free-Flying Headsails. Other innovative changes to the sail plan, including Roller Furling gear, must be reported.

5. Interior Amenities: Changes that affect the weight of the boat, including removal or addition of hatch tops, doors, tables, head, battery, tanks, other furniture, or components of the basic boat. Replacement of any of these made with lightweight materials. Cushions are specifically exempt from this requirement.

6. Mechanical Propulsion: Changes from the original production installation that affect location, weight, and/or underwater drag.

Modifications Which Need Not Be Reported:

1. Fairing and Smoothing of the hull, rudder, keel, or centerboard that conforms to the original design except as limited by One-Design class rules.

2. Additional Sails that are no larger than the **Rated Sails**.

3. Sail Material such as Mylar, Kevlar, Carbon, Dacron, Nylon, etc.

4. Changes to Running Rigging or additions of sail handling gear such as head foil systems, winches, blocks, sail track, sheeting arrangement, removal or addition of chokers, outhauls, and Cunningham, mast, or boom hardware.

5. Cosmetic Changes to the hull, interior, or rigging of the boat not affecting the structure, weight, trim, or speed of the boat.

OWNERS RESPONSIBILITY

The fairness of ECSA/ELIYA TCF handicaps depends entirely on accurate information being provided to the Handicapping Council and on a boat being maintained in compliance with that rating. The handicapping council takes that accuracy and compliance very seriously. If you have questions concerning data or conditions, contact your handicapper.

It is the sole responsibility of each boat owner to provide accurate information and to advise the PHRF Handicapping Council of any repairs, improvements, or modifications, including those made by previous owners. At its discretion, the Handicap Council may verify information provided for a rating certificate by inspecting a boat with the owner. Failure to permit such inspection upon request may result in suspension or withholding of the boat's certificate until the inspection is completed. The boat must then be maintained as such for its rating certificate to remain valid. Failure to maintain a valid certificate is a clear breach of **RRS Rule 78.1** and may also violate **RRS Rule 2** (Fair Sailing). Competitors, Technical Committees, and Race Committees are encouraged to protest (and Protest Committees to penalize) boats that fail in this regard. Race and Protest Committees are requested to report any such penalties to OSC for possible further action, including considering possible disqualification from competition for season trophies. If OSC finds such violations to be intentional and/or part of a pattern of non-compliance, it may well also consider that behavior or any attempt to cover it up as gross misconduct and call a hearing to take further action under **RRS Rule 69** (Gross Misconduct) as prescribed in that rule.

QUALIFICATIONS

To qualify for a handicap, a boat must be single-hulled and self-righting. OSC may, at its discretion, issue a certificate for a boat utilizing foils or water ballast, provided the applicant submits a valid ORC or ORR rating for the boat. This is an exception to RRS Rule 51. In all other cases, the use of movable ballast (water or other), a trapeze, hiking straps, hiking boards, or any other hiking aid is not permitted.

OSC PHRF certifications are issued for one year. A boat shall not have more than one current OFF SOUNDINGS PHRF handicap at any time. If a boat incurs equipment damage (rigging, sails, appendages, or propulsion) or undergoes a permanent refit, its handicap rating shall be reevaluated midyear on an exception basis. Rating

changes based on a change in headsail size or a new **Rated Sail** will be limited to one per season. Mid-year rating changes with the intent or perceived intent of optimizing for a race, series, or seasonal trends shall not be considered.

Rating adjustments for all hull and rig modifications not covered by the regulations that follow will be handled on a case basis. Typical rating adjustments for modifications to mast, rudder, or displacement are available on request. For rating appeals, refer to OSC PHRF Bylaws. [Note: All dimensions shall be given in decimal feet to two places. Please use: 1 Meter = 3.280833 Feet]

II. DEFINITIONS

AMG Asymmetric spinnaker mid-girth, measured from the midpoint of the luff to the midpoint of the leech.

ASF Asymmetric spinnaker foot length, measured in a straight line from tack to clew.

ASLIM Equal to: $1.15\sqrt{(ISP2 + TPS2)}$.

BAL Ballast of vessel in pounds.

BEAM Maximum width of the vessel.

DECK HEIGHT The height of the sheer line abreast of the mast.

DISP Displacement of vessel in pounds, without any water, fuel, etc.

DRAFT Distance from bottom of keel to LWL. Also include draft with board down if a centerboard vessel.

E Distance from the after face of the mast along the boom to the center of the outhaul sheave or band, whichever is less.

EC Calculated value of an E dimension such that max girths become allowable under Section V of these Regulations.

EY The mizzen correspondent of "E".

I The distance above sheer line to the point of intersection of the head stay and the mast.

ISP The distance above sheer line to the highest headsail halyard.

J Horizontal base of fore triangle measured from head stay intersection at deck edge to front of mast.

HHW The length measured from the midpoint of the leech to a point perpendicular to the luff of a jib.

LLY Luff length of the largest mizzen staysail (mule, etc.).

LOA Length overall of hull.

LP Distance perpendicular from the luff to the clew of the jib. [Also referred to as **LPG**.]

LPY Distance perpendicular from the luff to the clew of the largest mizzen staysail.

LWL Load Waterline Length.

MAT Construction material of the keel or mast, e.g., lead, iron, carbon, aluminum.

MGL Mainsail girth measurement from a point along the leech, one-quarter (1/4) of the distance from the clew to the head, to the nearest point of the luff.

MGM Mainsail girth measurement from a point along the leech, halfway between the clew and the head, to the nearest point of the luff.

MGT Mainsail girth measurement from a point along the leech, seven-eighths (7/8) of the distance from the clew to the head, to the nearest point of the luff.

MGU Mainsail girth measurement from a point along the leech, three-quarters (3/4) of the distance from the clew to the head, to the nearest point of the luff.

P Height of main luff between black bands or from bottom of upper band to bottom of fixed boom track. (Use top of halyard sheave if no upper band).

PY The mizzen correspondent of "P".

RFR Roller Furling Restrained, see Section IV of these regulations for description, application, and limits.

SFL The length of the foot of a symmetric spinnaker, measured between the clews.

SL Length of symmetric spinnaker measured along either luff from head to tack, with only enough tension to remove wrinkles. Sail to be stretched flat while measuring.

SLE Asymmetric spinnaker leech, measured from head to clew, with only enough tension to remove wrinkles. Sail to be stretched flat while measuring.

SLIM Equal to: $0.95\sqrt{(\mathbf{I}^2 + \mathbf{J}^2)}$, [or $0.95\sqrt{(\mathbf{ISP}^2 + \mathbf{TPS}^2)}$, if **ISP** is greater than **I** or **TPS** is greater than **J** or both].

SLU Asymmetric spinnaker luff, measured from head to tack, with only enough tension to remove wrinkles. Sail to be stretched flat while measuring.

SPL Spinnaker pole length measured from the centerline of the mast to the outboard end of the pole when set in a horizontal position, athwart ship.

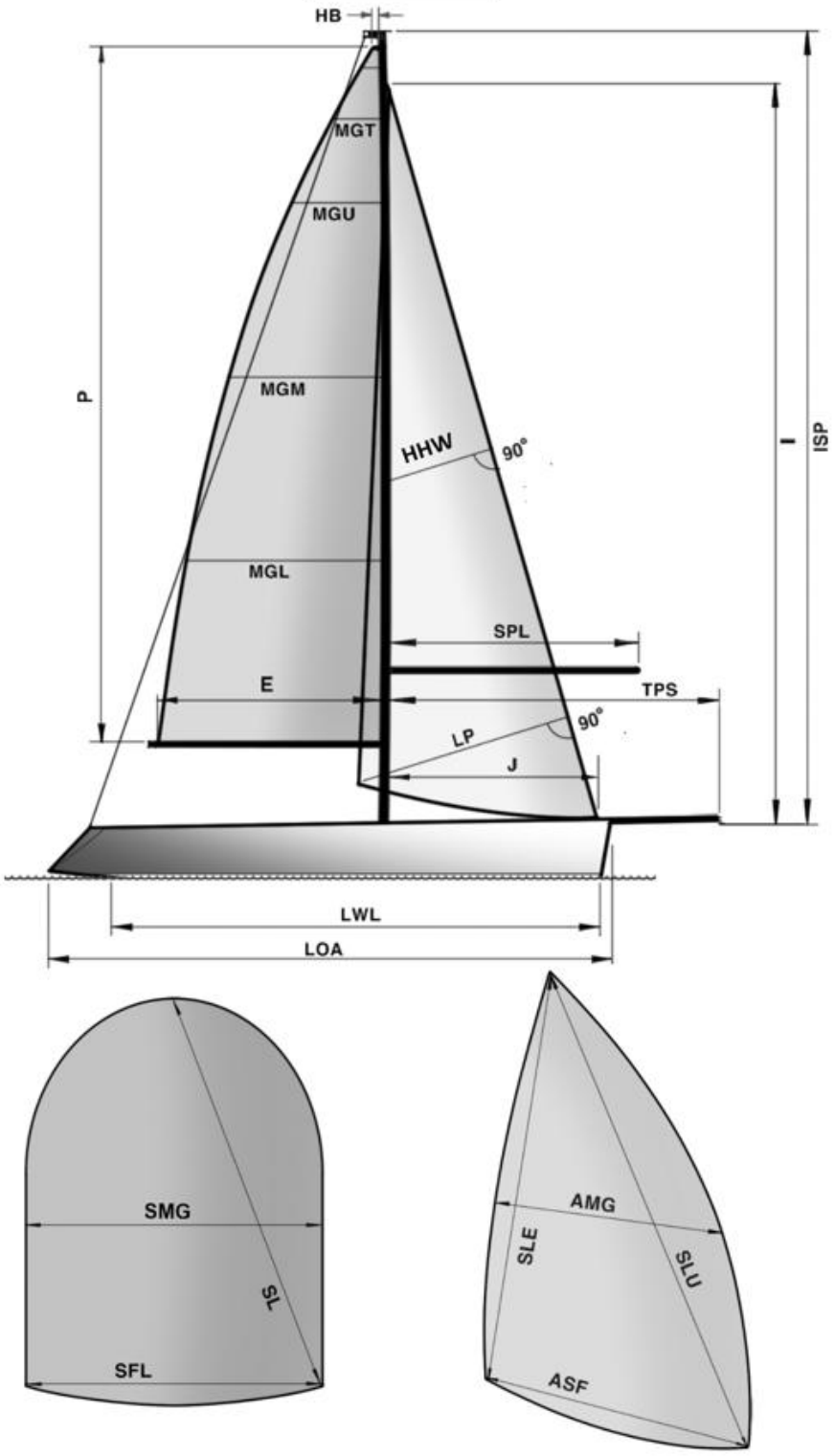
SMW Maximum symmetric spinnaker girth measured luff to leech (Previously was "**G**").

TPS Tack Point Spinnaker: the horizontal distance from the front of the mast at its lowest point above the deck to the point of attachment, at deck level, of the

foremost tacking point of an asymmetric or symmetric spinnaker or to the extreme forward end of any bowsprit in its maximum extended position. If a symmetric or an asymmetric spinnaker is flown from a pole, **TPS** is equal to **SPL**. **TPS** replaces the former terminology referring to **JSP**.

WPL Whisker pole length. Measured similarly to **SPL**.

IIa. Definitions



ADDITIONAL NOTES

Measurements All measurements shall be in decimal feet to two decimal places [Note: 1 Meter = 3.280833 Feet]

Modification: Any restoration, repair, or change made to a base boat since manufacture, as detailed in **Sections I and XI** of these regulations.

Rated Sail Those sails upon which the handicap is based; specifically, the largest Jib/Genoa, Mainsail, largest Symmetric, Asymmetric, and Code Zero Spinnaker.

III HANDICAP ADJUSTMENTS:

Non-Spinnaker Handicap

Non-Spinnaker handicaps are based on the ratio of mainsail size (including mizzen sails, if applicable), to fore triangle size as follows: Ratio = **(P x E + [PY x EY] + [0.6xLLY x LPY]) / (ISP x TPS).**

Ratio	Rating Adj.
.3 but less than .4	+26
.4 but less than .5	+25
.5 but less than .6	+24
.6 but less than .7	+23
.7 but less than .8	+22
.8 but less than .9	+21
.9 but less than 1.0	+20
1.0 but less than 1.1	+19
1.1 but less than 1.2	+18
1.2 but less than 1.3	+17
1.3 but less than 1.4	+16
1.4 but less than 1.5	+15
1.5 but less than 1.6	+14
1.6 but less than 1.7	+13
1.7 but less than 1.8	+12
1.8 but less than 1.9	+11
1.9 but less than 2.0	+10
2.0 but less than 2.2	+ 9
2.2 but less than 2.4	+8
2.4 but less than 2.6	+7
2.6 but less than 3.0	+6
3.0 but less than 3.4	+5
3.4 but less than 4.0	+4
4.0 but less than 4.0	+3
5.0 but less than 6.0	+2
6.0 but less than 7.0	+1
7.0 + greater	0

Non-Spinnaker handicaps for **cat-rigged** vessels shall be equal to their Spinnaker handicap **minus** 6 seconds per mile.

IV. HEADSAILS

A standard-rated Headsail (Jibs, Jib Tops, and Genoas) shall have a mid-girth (**HHW**), which is not more than 50% of its Luff Perpendicular (**LP**) and will be rated using the formula **LP/J*100**. Except for ODR boats, if the HHW of the rated sail exceeds 50% of the LP, the sail will be rated as follows: **Rated LP = (2*HHW)/J*100**. Bloopers and spinnaker staysails are classed as headsails.

Limitations on Headsails. These limitations do not apply to bloopers and staysails, except that their size may not exceed other **Rated Sails**.

A. Jibs must be sheeted from only one point on the sail except while in the process of reefing.
B. All jibs must be tacked on the centerline and must have the luff fully attached to the headstay.
D. No headboards shall be used.
E. Battens may be used only if the LP is 117% or smaller. The number of battens is limited to four, which must be arranged with approximately equal spacing between the head and clew. There is no limit on batten length.
F. Only one headsail shall be flown at any one time from the head stay (except during a sail change).
G. No headsails may be set to extend aft of the LP line used to establish the handicap.
H. No headsail (including stay sails) may be flown that has an LP greater than the rated LP.

Free Flying Headsails are allowed for use in the Spinnaker Class only. A Free Flying Headsail is one that is set flying, tacked forward of but not attached to the headstay. The sail does not meet the definition of either a spinnaker or jib with the distance between half luff point and half leech point between 50% and 75% of foot length. A flying headsail shall be tacked down on the boat's centerline or non-articulating sprit and shall not be used when any spinnaker is set. It shall be without battens and may be entirely furled but shall not be set reefed or partially furled while racing.

Flying Headsails shall not be allowed without a rating review and/or adjustment on a case-by-case basis. Applications require a UMS sail measurement certificate from a recognized sailmaker for both a spinnaker and a jib, and shall include dimensions for headsail luff, leech, foot, and mid girth measured between the midpoints of luff and leech. These sails are measured as spinnakers in order to establish girth ratios and dimensions but must also be measured as a headsail to establish LP. Ratings shall be provisional.

Emerging sail technologies that enable free-flying headsails to be used on upwind points of sail must be declared as such to the handicapping

committee. Any attempt to circumvent the rules with a rule-beater must be reported by the owner.

Roller Furler Restrained (RFR) A boat, not subject to One Design or Class rules, which sails with ALL head stay jibs that are tacked to the top of an above deck mounted functional roller furler, and are raised within a head foil (excluding inner stays or free flying staysails), and using a head stay swivel such that the sails can be furled, shall be considered "Roller Furler Restrained" (**RFR)**.

Boats sold by the original manufacturer in the RFR configuration or a custom boat configured as RFR upon which the base boat handicap is established is referred to as an RFR Base Boat. All other boats, whether equipped with a roller furler or not, are referred to as a Non-RFR Base Boat. In all cases, owners MUST SPECIFICALLY indicate their configuration in the application process.

An RFR Base Boat sailed in a non-RFR configuration will receive a (-3) rating adjustment. A Non-RFR Base Boat sailed in an RFR configuration will receive a (+3)rating adjustment.

Headsail Adjustments

NOTE Headsail handicap adjustments shall not apply to boats with One-Design Ratings. For unmodified series production boats use the designed "**J**" dimension when determining the adjustment:

Spinnaker Class

LP/J Size Range	**Rating Adjustment**
Less than 1.00 is adjusted proportionally.	
Greater than 1.00 to 1.10	+7
Greater than 1.10 to 1.20	+6
Greater than 1.20 to 1.30	+5
Greater than 1.30 to 1.35	+4
Greater than 1.35 to 1.40	+3
Greater than 1.40 to 1.45	+2
Greater than 1.45 to 1.51	+1
Greater than 1.51 to 1.55	0
Greater than 1.55 to 1.60	-1
Greater than 1.60 to 1.65	-2
Greater than 1.65 to 1.70	-3
Greater than 1.70 is adjusted proportionally.	

Non-Spinnaker Class

LP/J Size Range	**Rating Adjustment**
Less than 1.00 is adjusted proportionally.	
Greater than 1.00 to 1.10	+16
Greater than 1.10 to 1.20	+13
Greater than 1.20 to 1.30	+10
Greater than 1.30 to 1.40	+7
Greater than 1.40 to 1.48	+4
Greater than 1.48 to 1.51	+1
Greater than 1.51 to 1.55	0
Greater than 1.55 to 1.60	-1
Greater than 1.60 to 1.65	-2
Greater than 1.65 to 1.70	-3
Greater than 1.70 is adjusted proportionally.	

V. MAINSAILS

Unless standard for a class, unpenalized mainsail girth shall be limited as follows: Headboard shall not exceed the greater of 0.04 E or 0.5 feet.

MGT (7/8 leech) shall not exceed 0.22 **E**
MGU (3/4 leech) shall not exceed 0.38 **E**
MGM (1/2 leech) shall not exceed 0.65 **E**
MGL (1/4 leach) shall not exceed 0.87**E**

Individual girth or headboard dimensions that exceed the standard fraction of actual E MUST be declared and will be addressed on a case-by-case basis. IMS Rule 826 will be used for guidance. If actual **E** or **EC** is greater than standard **E**, a penalty of up to 2 second/mile shall be assessed for each 5% or fraction thereof in excess. Handicap adjustments for Square-top mainsails will be addressed on a case-by-case basis based on increased area and raised Center of Effort.

VI. ASYMMETRIC SPINNAKERS

An **Asymmetric Spinnaker** is defined as having unequal leech (**SLE**) and luff (**SLU**) lengths that differ by more than 5%, and a midgirth (**AMG**) of not less than 75% of its foot length (**ASF**). Asymmetric spinnakers shall have a free-flying luff. Asymmetric spinnakers may be flown from a pole, the deck (or an extension thereof) with a pennant not exceeding 2 feet in length, or from a **non-articulating sprit.** If **ASLIM** is greater than standard, convert this to excess girth using a similar methodology as for symmetric spinnakers, except that **AMG** shall be substituted for **SMW**, and the average of the leech and luff lengths will be substituted for **SL**. See **Section VII**

Sprit-Flown: If a boat model comes standard from the manufacturer with a sprit, i.e., TPS>J, the "base boat" handicap is based on the largest standard (**ODR**) asymmetric spinnaker, as specified by the boat manufacturer, provided that the boat is sailing in one design (**ODR**) configuration. All boats

choosing to sail outside their **ODR** configuration (i.e., with PHRF sails) are subject to the **Allowable AMG/TPS** values listed below. **The use of articulating sprits, whisker poles, or outriggers attached to either the tack or clew of an asymmetric spinnaker on sprit boats is prohibited. Symmetric Spinnakers MAY NOT be flown from a pole on a boat with a sprit.**

Deck-Tacked: An **AMG of up to180% x TPS** and an average of the leech and luff lengths **((SLE+SLU)/2)** not exceeding **ASLIM**, shall be permitted without penalty, provided that **TPS** (**SPL**) is **≤1.20 x J**. For Deck-tacked asymmetric spinnakers on boats where **TPS > 1.20 x J, use the table below for the Allowable AMG/TPS values.**

An **AMG of up to180% x TPS** and an average of the leech and luff lengths **((SLE+SLU)/2)** not exceeding **ASLIM**, shall be permitted without penalty, provided, provided that **TPS ≤ 1.20 x J**. For Deck-tacked asymmetric spinnakers on boats where **TPS >1.20 x J**, use the table **below for Allowable AMG/TPS values.**

Allowable AMG/TPS values

ODR Boats and all others (including modified boats) sailing in PHRF configuration with a sprit flown asymmetric spinnaker shall be allowed a max AMG as shown in the table below without penalty, provided that an average of the leech and luff lengths ((**SLE**+**SLU**)/2) not exceeding **ASLIM**. Oversized sails will be subject to the adjustment as noted below:

TPS/J	Max AMG/TPS
Less than or equal to 1.20	1.80
Greater than 1.20 to 1.30	1.75
Greater than 1.30 to 1.40	1.70
Greater than 1.40	1.65

A (-3) second adjustment will be applied for every 0.05 or fraction over the Max AMG/TPS shown above, except that for every 0.03 above 1.80, a (-1) second adjustment will be applied.

Pole-Flown: An **AMG of up to 180% x J** and an average of the leech and luff lengths ((**SLE+SLU**)/2) not exceeding **ASLIM**, shall be permitted without penalty. Boats may fly Asymmetric Spinnakers interchangeably from a spinnaker pole or deck-tacked, without penalty, where **TPS=J.** Excess girth will be treated the same as for symmetric spinnakers shown in **Section VII**.

Both Symmetric and Asymmetric Spinnakers MAY be flown from the pole on a boat without a sprit.

Code Zero Spinnakers

Code 0, Close Reaching Spinnakers are designed to fill a hollow in the polar diagram. They normally have an area of about 60% of a full-sized asymmetric and are effective in 40 to 80 degrees of apparent wind. These sails are characterized as being made of a laminate or aramid material and have a substantial luff rope for the large luff tensions that these sails require. For handicap purposes, a Code 0 spinnaker shall be treated as an asymmetrical spinnaker with unequal leech (**SLE**) and luff (**SLU**) lengths that differ by more than 5%, and a midgirth (**AMG**) of not less than 75% of its foot length (**ASF**) with a free flying luff. Battens are not permitted, and they shall be sheeted from only one point. Currently, no handicap adjustment is offered for a Code Zero Spinnaker. **Measurement certificates for all Code Zero Spinnakers are required, with dimensions noted on OSC rating certificates.**

VII. SYMMETRIC SPINNAKERS

A Symmetric Spinnaker shall have a mid-girth (**SMW**) that is greater than 75% of its foot length (**SFL**) and be symmetrical about a line joining its head to the center of its foot.
Note: **SMW**=**SHW** x **2.0.**

Spinnaker rating adjustment is based on the largest spinnaker measured by the **SMW/J** ratio and the **SL/SLIM** ratio. A luff length equal to SLIM is standard. The maximum girth (**SMW**) without penalty is equal to 1.800 x **J**. If spinnaker luff length is greater than standard, excess length is converted to excess girth. Convert the excess luff to excess girth using the following formula: **SMW/J** Rated = (**SMW/J** Actual) x (**SL/SLIM**).

Girth Adjustments for Symmetric Spinnakers

SMW/J	Rating Adjustment
Up to 1.80	0
Greater than 1.80 to 1.85	-1
Greater than 1.85 to 1.90	-2
Greater than 1.90 to 1.95	-3
Greater than 1.95 to 2.00	-4
Greater than 2.00 to 2.05	-5
Greater than 2.05 to 2.10	-6

Greater than 2.10 will be adjusted proportionally.

Maximum Spinnaker Pole Length (SPL) Without Penalty

For spin. where **SMW** is $\leq$ 1.8 x **J**, TPS**=J.**
For spin. where **SMW** is>1.8 x **J**,**TPS=SMW**/1.80.

If TPS exceeds both **J** and **SMW**/1.8, use the Girth Adjustment Tables (substituting 1.8 TPS/J for SMW/J) to determine pole penalty.
The spinnaker/pole penalty shall be the greater of either the girth penalty or the pole penalty, but not both.

Whisker Poles- Whisker Poles must be declared but there is no whisker pole length (**WPL**) limit.

VIII. MAST

Mast Height Adjustments

(Only applicable when "**I**" & "**P**" change equally.)
Standard Mast Height is "**ISP**"
Excess or deficient height is measured by mast ratio where Mast Ratio= Actual "**ISP**"/Std. "**ISP**"

Mast Ratio	Rating Adjustment
Greater than 0.91 to 0.93	+12
Greater than 0 .93 to 0.95	+ 9
Greater than 0.95 to 0 .97	+ 6
Greater than 0.97 to 0.99	+ 3
Greater than 0.99 to 1.00	0
Greater than 1.00 to 1.03	- 3
Greater than 1.03 to 1.05	- 6
Greater than 1.05 to 1.07	- 9
Greater than 1.07 to 1.09	-12
Greater than 1.09 to 1.11	-15

Greater than 1.11 is adjusted proportionally.

IX . PROPULSION

When an Engine or prop is too small to drive vessel at **KTS = 0 .8 (1.3√LWL)**the correction will be -6 (Not applicable if temporary engine outage.)Engine conversions will be treated as modifications.

Propellers Adjustments for Outboard Engine

Std. retracted when racing	0
Engine not retracted; prop immersed on both tacks:	
2 blade	+6
3 blade	+12

Propeller Adjustments for Inboard Engine

2, 3 or 4 blade folding or feathering	0
Solid 2 blade aperture	0
Auto Prop	+3
Solid 2 blade exposed to water	+6
Solid 3 blade in aperture	+6
Solid 3 blade exposed to water	+12

X. ADDITIONAL NON-SPINNAKER REGULATIONS

A. The intent of non-spinnaker racing is that boats sail off the wind with the same sails they use to sail on the wind. Therefore, ketches and yawls may not fly staysails off the wind.
B. Except when changing headsails, participating yachts rated as sloops, may only fly one headsail at a time.
C. A yacht permanently rigged as a Cutter may fly a staysail. The inner forestay shall be set up at all times.
D. Any boat, not subject to One Design or Class rules when sailing in a non-spinnaker class, is eligible for a non-spinnaker handicap adjustment.
E. All headsails must have the luff fully attached to the head stay.
F. See the Roller Furler Restrained (**RFR**)adjustments in **Section IV** above.
G. Handicap Percentage Correction
Standard handicap adjustments are set in fixed increments of seconds per mile, regardless of a boat's speed potential. However, these adjustments impact a boat's performance as a percentage of its speed rather than a fixed number of seconds. We now include a correction factor for non-spinnaker boats based on a percentage of the boat's speed.

Correction=(Non spin base - spin base +all adjustments) X (spin base-130) / 680

XI. BOAT MODIFICATIONS

Proper Racing Trim:

Yachts shall race as rated with at least all the equipment and furnishings supplied as standard by the manufacturer. A yacht that has altered or has removed bulkheads, permanently attached furniture, or structural interior components shall be considered a custom or modified yacht. Drawers, headliners, cabinet and locker doors, steps, ladders, and engine enclosures shall remain in place as supplied as standard equipment. If they do not remain, then the yacht shall be considered a modified yacht and rated accordingly. Lifting keels (not designed to be adjusted while racing) must be fixed and locked in the lowered position while racing.

Modified Structure:

All aftermarket structural work must be reported by the applicant and reviewed by the Council on a boat-by-boat basis. Refer to **Section I** above for guidance regarding what needs to be reported. When possible, we recommend that plans be reviewed with your handicapper before work is started. Alternately, documentation of modifications previously completed by you or others should include as built photographs and/or as-built drawings with notes on materials and dimensions.
Any modifications in the bow area to add or modify a SPRIT must be reported, providing the TPS length.

Removal, or partial removal, of an OEM roller-furling device is considered a modification and must be reported. All modified boats will be reviewed and assessed on a case-by-case basis.

XII. RECREATIONAL CREDITS

Recreational Credits provide a means for cruising-equipped boats to be race-competitive by giving credit for options that are not performance-enhancing. The purpose of these credits is to encourage and widen the scope of boats that participate in OSC events. Recreational Credits are only for boats in divisions AB and C, racing in either cruising canvas or spinnaker classes. Implementation of these credits in no way implies less knowledge or experience on the part of the skipper.

Recreational Headsail Credit: Recreational credits are available for both Spinnaker and Non-Spinnaker classes with a Dacron/Polyester headsail on a roller furling system. Credits of +6 seconds for the Spinnaker Class and +9 seconds for the non-Spinnaker class are available, inclusive of the standard roller furling credit. Qualifying boats must meet **ALL** the following requirements:

1. Limited to one headsail other than Storm Jib or Heavy-Weather Jib less than 90% LP.
2. The sail must be made from woven Dacron/Polyester (no laminates or reinforcing fibers) and include a minimum of a 4oz woven UV cover on leech and foot.
3. The headsail must be hoisted on an above-deck roller furling system and must be stored on the headstay when not racing.
4. The headsail is regularly used as the primary genoa/headsail when the boat is day sailing or cruising.

Headsail Adjustments for LP/J percentages remain in effect and are additive. There shall be no penalty for use of a Storm Jib or Heavy-Weather Jib whether or not use precludes Drum & Swivel attachment.

Recreational Mainsail Credit: If not included in the standard base-boat rating, an **In-mast** RFR Mainsail will receive (+12) rating adjustment and an **In-boom** RFR Mainsail will receive (+6). Sails must be constructed of woven Dacron or other polyester fibers.

XIII. SHORTHAND NON-SPINNAKER DIVISION

A Shorthanded non-spinnaker division (SH non-spin) was added to the Offshore Circuit in 2022. Any boat may compete in SH non-spin races, but in order to compete for OSC Offshore points in this division, a boat must be registered in OSC and elect to compete in the SH non-Spin division at the start of the season.

Guidelines and Restrictions for SH Racing:

1. Boats choosing to race SH shall be crewed by no more than 2 persons.
2. Use of Auto Pilots is permitted for boats racing in an SH class.
3. Shorthanded non-spinnaker boats shall use their non-spinnaker rating when racing Shorthanded.

XIV. RANDOM LEG HANDICAP RATINGS

The PHRF single-number rating system was developed in the 1970s for displacement boats with symmetric spinnakers. It has become less effective

over time as lighter, high-performance boats and sport boats have emerged.

To address this, Spinnaker class boats now receive two ratings: one for Windward/Leeward courses and one for Random Leg courses. The Windward/Leeward rating is unchanged from the previous single-number rating. The Random Leg predictive model is based on the following characteristics, which reflect different speed potentials and mitigate inherent differences between boats.

Random Leg Performance Model

The Random Leg adjustment is not a penalty or bonus, but a separate predictive model. The factors below are considered together to represent overall speed potential on mixed-leg courses.

Average Performance Index (AvPI)

AvPI is a widely used ratio that combines Upwind SA/D (sail area/displacement), Downwind SA/D, and Displacement-to-Length. It represents a boat's ability to accelerate and sustain speed, particularly in variable conditions. It reflects how efficiently a boat converts sail power into forward motion rather than top speed alone. In general, lighter boats with higher sail power exhibit higher AvPI values, while heavier boats exhibit lower values.

AvPI = ((UpSA/D + DnSA/D)/D/L)/2

Waterline Length (LWL)

Longer waterline length generally produces higher sustained speeds, especially on reaches. This is a fundamental speed advantage.

Sprit Length / Spinnaker Configuration

Boats flying asymmetric spinnakers from sprits generally perform better on reaches than boats flying symmetric spinnakers. Longer sprits increase projected sail area and reaching power. The model accounts for this performance difference relative to pole-flown symmetric spinnakers.

Spin Length = TPS/J

These elements are combined to determine a boat's Random Leg adjustment relative to its Windward/Leeward rating.

Random Leg Adjustment Table

RL adjustments for the metrics in each column are tied to the **ADJ** in the same row and are additive.

TPS/J	LWL	AvPI	ADJ
≥ 1.6		≥ 0.7	-6
≥ 1.5		≥ 0.6	-5
≥ 1.4	≥ 48.00	≥ 0.5	-4
≥ 1.3	42.00–<48.00	≥ 0.4	-3
≥ 1.2	36.25–<42.00	≥ 0.3	-2
≥ 1.1	31.00–<36.25	≥ 0.2	-1
< 1.1	26.25–<31.00	≥ 0.15	0
	22.00–<26.25	≥ 0.10	1
	18.00–<22.00	≥ 0.03	2
	< 18.00	< 0.03	3

Windward/Leeward Course Definition

A course intended to consist primarily of upwind and downwind legs that do not strongly favor one tack and have little or no intentional reaching. Scored using the **W/L rating**.

Random Leg Course Definition

A course that includes a mix of upwind, reaching, and downwind legs, often using fixed or government marks. Scored using the **RL rating**.

Application of Ratings: The Race Committee designates the course type **before the start** of the race, in the NOR, SI, or on the course board. The designated rating applies for the **entire race** and does not change due to wind shifts.

Wind Shifts

Wind shifts occurring after the start do not change the course designation or the rating used for scoring. If conditions prevent the course from providing a fair or safe test of skill, the appropriate remedy is course adjustment or abandonment, at the discretion of the PRO, rather than using a different rating.

Summary

The OSC Random Leg rating is intended to provide **fair and consistent handicapping** on courses where reaching-performance materially affects results. By incorporating AvPI, LWL, and sprit length, the model reflects modern boat designs while preserving the integrity of the Windward/Leeward rating for traditional courses.