

LAKE HURON PERFORMANCE HANDICAP RACING FLEET

BY-LAWS

ARTICLE I – NAME

- 1.1 The name of this organization shall be Lake Huron Performance Handicap Racing Fleet, and shall be known as "Lake Huron PHRF", which is an abbreviation of Lake Huron Performance Handicap Racing Fleet.

ARTICLE II – OBJECTIVES

- 2.1 It shall be primary objective of this organization to promote the sport of handicap racing of sailing yachts for the enjoyment of the members of the local PHRF fleets.
- 2.2 It shall also be the objective of this organization to establish and maintain a listing of PHRF handicaps of yachts owned or chartered by members of local PHRF Fleets based on potential performance of the yachts and following generally the principles and handicaps established by US – PHRF, sponsored by US Sailing.
- 2.3 Further objectives of the organization shall be the recognition of local Lake Huron PHRF Fleets which meet minimum standards, to interchange information between the various local PHRF Fleets, to assist new Lake Huron PHRF local fleets that desire to form and to otherwise serve the needs of local Lake Huron PHRF Fleets.

ARTICLE III – ORGANIZATION MEMBERS AND LOCAL PHRF FLEET REPRESENTATIVES

- 3.1 Lake Huron PHRF shall consist of one member approved by each local PHRF fleet, each Class Captain from PHYC/SYC PHRF and Cruising classes and one member as member at large.
- 3.2 The Lake Huron PHRF members shall elect the Chief Handicapper yearly. Qualifications for the Chief Handicapper are: Experience, active interest in handicap racing, knowledge of boat performance and design, judicial temperament, organizational skills, and demonstrated leadership in yacht racing. Candidates for Chief Handicapper shall come from Lake Huron Yacht Clubs.
- 3.3 The Chief Handicapper will normally chair all Lake Huron PHRF meetings. In the course of conducting Lake Huron PHRF meetings, when such issues require a vote, the Chief Handicapper will only vote to break a tie. He/she is responsible for ensuring proper handicap records are maintained.
- 3.4 Each local PHRF Fleet, PHYC/SYC PHRF and PHYC/SYC Cruising shall each year nominate members to Lake Huron PHRF, and promptly fill any vacancy.
- 3.5 The local fleet representative shall be the recipient and sender of all communications between the Lake Huron PHRF and the local PHRF Fleet.

ARTICLE IV – AREA LAKE HURON PHRF FLEETS

- 4.1 A local PHRF Fleet recognized by Lake Huron PHRF shall be entitled to indicate its recognition by showing on stationary and so forth the fact that it is affiliated with and recognized by Lake Huron PHRF,
- 4.2 The minimum requirement for a local PHRF Fleet is that it shall be a group serving a Club or general area of Lake Huron, where sufficient yachts exist to form a viable local Fleet. In order to receive recognition the handicapping system used must be that of Lake Huron PHRF.
- 4.3 The local Fleet must agree to send, at times designated by Lake Huron PHRF, a list of all boats in its fleet and their handicaps. Lake Huron PHRF will furnish each Fleet at periodic intervals with a list of all ratings. In order to maintain the services so rendered, Lake Huron PHRF may require an annual fee to cover such services. All meetings of Lake Huron PHRF shall be open to the local PHRF Fleet Representative.
- 4.4 Lake Huron PHRF shall have sole discretion as to whether or not to grant recognition to a local PHRF Fleet and may withdraw recognition at any time, with or without cause.
- 4.5 The Chief Handicapper of Lake Huron PHRF may appoint Subcommittees as required.

ARTICLE V – FORMATION OF NEW LOCAL PHRF FLEETS

- 5.1 New groups of yachtsmen desiring to form a local PHRF Fleet may do so upon petition to Lake Huron PHRF and Lake Huron PHRF will assist in such formation if it believes such to be a potentially viable group, and, further will assist in the initial rating of all yachts in the fleet.
- 5.2 A local PHRF fleet can terminate its recognition and affiliation at any time. Following such termination, it shall no longer indicate it is affiliated with or recognized by Lake Huron PHRF.

ARTICLE VI – AMENDMENTS

- 6.1 These By-Laws may be amended at any time by a two-thirds (2/3) majority of the members of Lake Huron PHRF present at a meeting called for the purpose of amending the By-Laws.

**LAKE HURON PHRF
RULES AND REGULATIONS**

ARTICLE I – PERFORMANCE HANDICAPPING

- 1.1 PHRF ratings are boat performance handicaps. They are based on the speed potential of the boat, through the use of observations of previous racing experience.
- 1.2 It is the intent of PHRF Handicapping that any well-maintained, well-equipped, and well-sailed boat has a good chance to win.
- 1.3 PHRF ratings are not intended to be a skipper and crew handicap system. Ratings are not adjusted to encourage a poor or careless skipper, and conversely, no rating adjustment is made to penalize proficiency. Intensity of competition and the influx of new and aggressive sailors require each skipper to maintain consistently high performance in order to place well.

ARTICLE II – BOAT DESIGN

- 2.1 The PHRF is an open rule. There are no hull or sail restrictions. There are no limitations on ingenuity other than those contained in the US Sailing rules. Class restrictions do not apply to PHRF, except to boats rated under class rules.
- 2.2 Well designed and constructed boats are not expected to be obsolete by newer designs. PHRF does not use formulas to determine handicaps.
- 2.3 PHRF discourages “rule-beating”. If a person modifies his boat to go faster, PHRF will attempt to change the rating to compensate. PHRF considers a base boat to have a mainsail, genoa, spinnaker and spinnaker stay sail. The use of oversized sails or boat modifications intended to increase the speed potential will be compensated for in the rating of the yacht.
- 2.4 PHRF assumes that a boat is equipped to race. It does not attempt to rate a partially equipped boat, or a boat which differs from others in its class, in that it is unusually heavy, out of balance, or has unusual windage (as from a dinghy on davits). However, if the basic hull and rig differ from others in its class, it will, of course, be rated uniquely.
- 2.5 Normal fairing is not a modification.
- 2.6 If the hull of a yacht racing under PHRF is modified below the water line, or if its sail plan is modified, it is generally assumed that this has been done to improve its speed potential.
- 2.7 Lake Huron PHRF assumes all sails to meet ISM standards.

ARTICLE III – BASIC HANDICAP RATINGS

- 3.1 PHRF ratings are expressed in seconds per nautical mile to be deducted from elapsed times to produce corrected times. The higher rating indicates the slower boat.
- 3.2 PHRF time allowances are not related to other systems, although ratings developed under other systems will be considered when rating some boats.
- 3.3 PHRF ratings are made on the assumption that:
 - 1. The spinnaker pole length (SPL) is no greater than “J”.
 - 2. The spinnaker maximum width is 180% of SPL,
 - 3. The genoa overlap is 155% of “J” or less,
 - 4. The boat is in racing condition, and
 - 5. The boat has a folding or feathering propeller, or a retractable outboard motor.
 - 6. Standard hull and interior, keel, rudder, and rig as originally designed and built.
- 3.4 Adjustments are made to the base rating if these assumptions are incorrect.
- 3.5 PHRF ratings are set up in basic increments of 3 second/mile.
- 3.6 Once a boat is rated, this rating must be used even though wind conditions may preclude the use of certain sails. A skipper is not allowed to have his boat re-rated frequently by choosing sails to fit expected race conditions.
- 3.7 The PHRF handicappers calculate under the assumption that every yacht is in absolute top racing condition. The assumption is that the bottoms are clean and smooth, that any propeller is a folding type, that there are adequate quality sails to sail any race the yacht may enter. Furthermore, it is assumed that every skipper and crew is capable of racing the yacht to the yacht’s speed potential as calculated from the results of past performance of the yachts of the same design.
- 3.8 PHRF ratings are based on performance. If an error is made in handicapping, it should become obvious in the race results, and adjustments can and will be made.
- 3.9 Maximum sail sizes are established by the board of handicappers from the information obtained from the measurers or manufacturers.

ARTICLE IV – CLASSES

- 4.1 A base rating is established for each class, and boats within a class are assumed to be identical for rating purposes. The rating for boats in the same class will differ due to other specific factors known to affect performance. PHRF normally will assign a class rating to any boat acceptable to its own class association.

However, class rules which limit sail size or prohibit spinnakers do not apply in PHRF. Deviations from class regulations must be substantive to warrant a non-class rating. New boats must declare any deviation from class. It should be understood that, although PHRF rates like boats as a class, there is no requirement that a boat meets class rules because PHRF rates all boats individually.

- 4.2 In order to provide a broader statistical base, boats are handled on a class or type basis as far as possible, even though it is recognized that many classes or types are not carefully controlled. When it is brought to a handicapper's attention that a particular boat differs from its standard type in a way to change its speed the handicapper may pull the boat from its type grouping and handicap it individually.

ARTICLE V – HANDICAPPING PROCEDURE

- 5.1 A new boat in an established class is given the rating for the class. Adjustment may be made for any deviation from the class. If adjustments are made, an indication is made in the Valid List that the boat is not a standard class boat.
- 5.2 For new classes and one-of-a-kind boats, the rating is determined on the basis of comparison with similar boats with established ratings. Comparison is made considering type of design and principal dimensions. The rating is assigned conservatively, and is adjusted as performance data becomes available.
- 5.3 Winning or losing races does not automatically lead to an adjustment of the handicap.
- 5.4 Ratings for new boats may be assigned by the Chief Handicapper. Handicaps assigned by the Chief Handicapper shall be valid until the next meeting of the PHRF committee, at which time they shall be confirmed or revised.

ARTICLE VI – VALID LIST

- 6.1 The Valid List is a roster of boats rated by the Lake Huron PHRF. It is kept current, reproduced periodically, and distributed to members. Distribution will be made at the beginning of the sailing season. Additions and revisions will be distributed as the occasion requires.

ARTICLE VII – HOW RATINGS ARE USED

- 7.1 The rating to be used in a race is the rating in effect on the date the race is held. A Valid List showing the ratings on a certain date is mailed to members and yacht clubs. Lake Huron PHRF may adjust ratings during the season.
- 7.2 Only yachts with current handicaps assigned by PHRF may enter PHRF class races. This is necessary even for class yachts since it is the prerogative of the PHRF Handicapper to determine if the yacht meets its class definition and to assign a handicap rating. Yacht Club race committees are requested to refuse entry to yachts not listed on the most recent PHRF Valid List unless the skipper can produce a Valid List or Certificates for the current year.
- 7.3 If a PHRF member buys a new boat, his membership will be transferred to that boat and a rating will be assigned to that boat.
- 7.4 A non-member, who purchases a rated boat, is required to obtain membership and a rating will be assigned to him for that boat.
- 7.5 Yacht charters are governed and policed by US Sailing and yacht club rules, not by PHRF.

ARTICLE VIII – COURSES

- 8.1 PHRF ratings are intended to be applied to daytime closed course racing and offshore races where the entire sail inventory carried (declared) by the boat may be used.

ARTICLE IX – RACE RESULTS

- 9.1 PHRF Representatives in each yacht club are responsible for submitting results of each PHRF race sponsored by their clubs to Lake Huron PHRF.

ARTICLE X – LAKE HURON PHRF HANDICAPPERS

- 10.1 Lake Huron PHRF Handicappers representing clubs on Lake Huron determine PHRF ratings. To the extent feasible, this organization determines handicaps based on evaluation of race results. With time, the handicapper becomes familiar with the performance of all the more active boats, and is able to evaluate their characteristics. Through experience, the handicapper becomes familiar with the wind and current conditions in his area, and understands how much of an allowance to make for local conditions before evaluating boat speed in competition. Handicappers maintain a constant search for boats which require an adjustment of handicap in order to permit them to compete fairly with the balance of the fleet.
- 10.2 Handicappers are selected on the basis of an active interest in handicap racing, knowledge of boat design and performance, a judicial temperament, and demonstrated leadership in yacht racing. Most are active participants in racing, but have put aside their views as contestants to evaluate yachts fairly and accurately. Clearly, the system rests on the integrity of the handicappers.

- 10.3 Lake Huron PHRF meets periodically. New boat handicaps and petitions for a handicap are considered at each meeting. Decisions on new boats and one-of-a-kind boats are effective immediately. Decisions on class boats are held over until the next meeting so that additional information may be considered. If the original decision is sustained at the second meeting, the change is effective immediately.

ARTICLE XI – OWNER RESPONSIBILITIES

- 11.1 If there are changes to the hull, rig, sails, or other factors upon which the existing rating is based, they must be reported to the handicapper for evaluation.
- 11.2 Ratings expire on December 31 of the year it was issued and an annual renewal is mandatory.
- 11.3 It is the obligation of each owner to enter races using the latest valid rating.
- 11.4 Although PHRF does use measurers, (chief handicapper or delegate), it relies principally on the honesty and Corinthian spirit of the participants. If possible deviations on the part of the owner become apparent; other contestants are urged to appeal to the area handicapper or protest the boat directly per US Sailing Rules of Racing.
- 11.5 Changes to hull, rig or sails will invalidate any current certificate and that boat be removed from the valid list.
- 11.6 A certified sailmaker certificate is required when new sails are added to the boat. It is expected that the owner will provide a certificate to the Chief Handicapper
- 11.7 All hull or rig modifications and new sails must be reported to Lake Huron PHRF Chief Handicapper and an appropriate rating adjustment will be made. It is suggested that anticipated changes be reviewed with Lake Huron PHRF before they are executed.
- 11.8 Owners can supply acceptable verification of hull, rig and sail dimensions from current MORC, IRC and ORR certificates as an alternate to measurement for initial PHRF Certificate.

ARTICLE XII – APPEALS

- 12.1 Formal appeals of ratings are made to Lake Huron PHRF and are considered in their meetings. A skipper may appeal his own, or others' ratings. The appellant sets forth his views in writing, and documents his case with supporting information. A fee of \$25.00 shall be paid with each appeal, and Lake Huron PHRF Appeal Forms shall be used if provided
- 12.2 Subsequent Appeal to U.S. Sailing only.

ARTICLE XIII– HEADSAIL DEFINITION

- 13.1 A headsail is defined as a sail in the foretriangle. It can be either a spinnaker or a jib.
- 13.2 A sail shall not be measured as a spinnaker unless the midgirth is 75% or more of the foot length and the sail is symmetrical about a line joining the head to the center of the foot. No jib may have a midgirth measured between the midpoints of luff and leech more than 50% of the foot length. Thus headsails with midgirths between 50% and 75% shall not be allowed.
- 13.3 I is the height of foretriangle distance from deck at the mast (or from an estimated position of the deck) up to the intersection of the headstay with the forward face of the mast.
- 13.4 I is the height from the point of attachment of the forestay to the mast structure (or the intersection of the center line of the forestay with the foreside of the mast where the point of attachment is internal) to the sheer line of the deck that is perpendicular to the LOA at the foreside of the mast using sheer points on either side of the mast at the deck lowest point.

ARTICLE XIV– JIB SECTION

- 14.1 Definitions
- 14.1.1 A jib is defined as any sail, other than a spinnaker that is to be set in the foretriangle. In any jib, the midgirth, measured between midpoints of luff and leech, shall not exceed 50% of the foot length, nor shall the length of any intermediate girth exceed a value similarly proportionate to its distance from the head of the sail.
- 14.1.2 LP (Longest Perpendicular of jibs) is the distance from the clew of the jib to the luff line of the jib (or forward edge of the luff groove device) in a direction perpendicular to the luff line. If in doubt about the clew location, project the leech and foot to the point of intersection.
- 14.1.3 J is the distance from the forward side of the mast to the point where the forestay attaches to the deck or bowsprit, in a direction perpendicular to the mast.
- 14.2 Measurement
- 14.2.1 LP used for rating shall be the largest such dimension found on the jibs carried on board.
- 14.3 Limitations
- 14.3.1 Jibs may be sheeted from only one point on the sail except in the process of reefing. Thus quadrilateral or similar sails, or sails in which the sailcloth does not extend to the cringle at each corner, are excluded.
- 14.3.2 A yacht may use a luff groove device provided that such luff groove device is of constant section throughout its length and is either essentially circular in section, or is free to rotate without restraint.
- 14.3.3 No clew boards may be used on jibs, unless allowed under one-design class rules.
- 14.3.4 No headboards may be used on jibs.

- 14.3.5 Battens may be used with the number of battens being limited to four, which are approximately equally spaced between head and clew.
- 14.3.6 The distance measured on the surface, between the midpoint of the foot and the midpoint of the luff shall not exceed 55% of the length of the leech.

14.4 Penalties

- 14.4.1 Oversize Genoa: (LP/J)

Up to and including 155%	Standard
Over 155% to and including 170%	-3 seconds
Each additional 15% increment	-3 seconds
- 14.4.2 For Genoa penalties below: "J" is the standard "Design J" unless the actual "Measured J" is more than 2% of "Design J". If the "Measured J" is greater than 2%, then "Measured J" will be used for "J".

ARTICLE XV– SPINNAKER SECTION

15.1 Definitions

- 15.1.1 The following characteristics must be had:
 - 15.1.1.1 Luff and leech must be of equal length.
 - 15.1.1.2 The sail must be symmetrical about a line joining the head to the center of the foot.
 - 15.1.1.3 The midgirth shall not be less than 75% of the foot length.
- 15.1.2 SPL (Spinnaker Pole Length) shall be the length of the spinnaker pole, when in its fitting on the mast and set in a horizontal position athwartships, measured from the center line of the yacht to the extreme outboard end of the pole, including any fittings used when the spinnaker is set.
- 15.1.3 SL (Spinnaker Luff) shall be the greater length of spinnaker's luff and leech measured around the edges of the sail.
- 15.1.4 SMW (Spinnaker Maximum Width) shall be the length between points an equal distance from the head.
- 15.1.5 SF (Spinnaker or Asymmetrical Spinnaker Foot) shall be the distance from tack to clew measured in the shortest path on the surface of the sail.
- 15.1.6 SMG (Spinnaker Midgirth) shall be the distance between the midpoints of luffs measured in the shortest path across the sail.

15.2 Measurements

- 15.2.1 Spinnakers shall be measured with such tension as will remove wrinkles across the line of measurement. The measurer will sign the sail indicating the date of measurement, and the maximum length of luffs and maximum width, and his approval to all other requirements.
- 15.2.2 Where stiffening is used to extend the angles at the tack or clew of spinnakers beyond an included angle of 110 degrees the greatest length of any such stiffening in the foot of the sail, measured from the clew, shall be added to the luff to determine SL.

15.3 Limitations

- 15.3.1 Spinnakers shall be sheeted from only one point on the sail.
- 15.3.2 Battens shall not be used in spinnakers.
- 15.3.3 Spinnakers Luff (SL) shall not exceed $.95 \sqrt{(l)^2 + (\text{Design J or SPL})^2}$ without penalty.
- 15.3.4 Maximum width (SMW) shall not exceed 1.8 spinnaker pole length without penalty.
- 15.3.5 Adjustable leech lines are not permitted on spinnakers.

15.4 Penalties

- 15.4.1 Oversize Spinnaker Luff (Measured SL/SL)

Over 100% to and including 105%	-3 seconds
Each additional 5% increment	-3 seconds
- 15.4.2 Spinnaker Width or Pole Oversize (SMW/[1.8 design J]) or (SPL/design J)

Over 100% to and including 105%	-3 seconds
Each additional 5% increment	-3 seconds
- 15.4.3 Penalties for SMW and SPL are not additive. The larger of the two determines the penalty.

ARTICLE XVI– MAINSAIL SECTION

16.1 Definitions

- 16.1.1 P is the height of mainsail luff measured between the black bands on the mast.
- 16.1.2 If a sliding gooseneck is used, measurement is to be made with the boom at the extreme bottom of the slide unless the lowest sailing position of the foot is marked by the upper edge of a one-inch band around the mast.
- 16.1.3 Mainsail Headboard (HB) shall be the maximum fore and aft dimension from the luff of the main, projected if necessary, to the extreme aft edge of the leech measured across the widest part of the headboard.
- 16.1.4 E is the length measured along the boom, taken from the base of the track or forward side of luff groove to aftermost point to which sail may be extended (band).
- 16.1.5 MGL (Mainsail Girth Lower) is the length between the one quarter (25%) leech point and the luff.
- 16.1.6 MGM (Mainsail Girth Middle) is the length between the half (50%) leech point and the luff.
- 16.1.7 MGU (Mainsail Girth Upper) is the length between the three quarter (75%) leech point and the luff.

- 16.1.8 MGT (Mainsail Girth Top) is the length between the seven eighth (87.5%) leech point and the luff.
- 16.2 Measurements
- 16.2.1 Mainsail per ISM standard.
- 16.3 Limitations
- 16.3.1 Mainsail standard girth size shall be the following without penalty.
- 16.3.1.1 $HB=0.04 * E$
- 16.3.1.2 $MGT=0.22 * E$
- 16.3.1.3 $MGU=0.38 * E$
- 16.3.1.4 $MGM=0.65 * E$
- 16.3.1.5 $MGL=0.90 * E$
- 16.3.2 Loose-footed mainsails are permitted.
- 16.3.3 Spare mainsails are permitted to be carried on board but can only be used as a bonafide spare for emergency use.
- 16.3.4 Foot of mainsail shall not at any time extend past the band on the bottom.
- 16.3.5 Two one-inch bands must be painted on the mast for P length.
- 16.3.6 A one-inch band must be painted on the boom for E length.
- 16.3.7 Mainsails may have up to six full-length battens without penalty.
- 16.3.8 Full length batten construction must meet IMS requirements.
- 16.3.9 Full length battens may have only a standard leach line for control
- 16.4 Penalties
- 16.4.1 Mainsail Oversize E (E/Design E)
- | | |
|----------------------------|------------|
| 102% to and including 110% | -3 seconds |
| 111% to and including 120% | -6 seconds |
- 16.4.2 Mainsail Oversize Girths will be penalized by increased sail area versus ISM standard sail area.
- | | |
|-------------------------------|------------|
| 101% to and including 105% | -3 seconds |
| 105.01% to and including 110% | -6 seconds |
- 16.4.3 Yachts that are missing E and P bands on boom and mast could be penalized by Lake Huron PHRF.

ARTICLE XVII- ASYMMETRICAL SPINNAKER SECTION

- 17.1 Definitions
- 17.1.1 The following characteristics must be had:
- 17.1.1.1 Area no greater than a spinnaker.
- 17.1.1.2 Luff and leach of unequal lengths.
- 17.1.2 SLA (Spinnaker Luff Asymmetrical) is the length along luff of sail.
- 17.1.3 SLE (Spinnaker Leach Asymmetrical) is the length along leach of sail.
- 17.1.4 ASMG (Asymmetrical Midgirth) shall be the distance between the midpoint of the luff (SLA) and the leach (SLE) measured in the shortest path across the sail.
- 17.2 Limitations
- 17.2.1 $(SLA + SLE)/2$ is no greater than $.95 \sqrt{(l)^2 + (Design J \text{ or } SPL)^2}$.
- 17.2.2 SLA/SLE must be greater or equal to 1.1.
- 17.2.3 SF is between 1.6 and 1.8 times the greater of the Design J, SPL or Bowsprit length.
- 17.2.4 ASMG shall not exceed 1.8 times the greater of the Design J, SPL or Bowsprit length.
- 17.2.5 Asymmetrical spinnakers can be flown with or without a pole. When flown without a pole the tack must not be further forward of the mast than SPL (unless denoted by class rule).
- 17.3 Measurements
- 17.3.1 Section 13.3.2 applies.
- 17.4 Penalties
- 17.4.1 Oversize Asymmetrical Spinnaker Luff $(SLA + SLE)/2$
- | | |
|---------------------------------|------------|
| Over 100% to and including 105% | -3 seconds |
| Each additional 5% increment | -3 seconds |
- 17.4.2 Longest of Design J, SPL or Bowsprit length will be applied to rating ASMG.
- 17.4.3 Asymmetrical Width or Bowsprit Oversize $(ASMG/[1.8 \text{ Design J or Bowsprit}])$ or $(Bowsprit/design J)$
- | | |
|---------------------------------|------------|
| Over 100% to and including 105% | -3 seconds |
| Each additional 5% increment | -3 seconds |
- 17.4.4 Penalties for ASMG and Bowsprit are not additive. The larger of the two determines the penalty.
- 17.4.5 Asymmetrical spinnaker penalties for SF and ASMG are not additive. The larger of the two determines.

ARTICLE XVIII- OTHER SAILS SECTION

- 18.1 Mizzen
- 18.1.1 Section 13.4 applies to this section.
- 18.2 Staysail
- 18.2.1 Sheet leads may be to hull or rail and to mizzen boom, but they may not be sheeted to any other spar or outrigger.
- 18.2.2 A staysail must be 3 cornered (head, tack and clew). The tack or tack pennant must be secured forward of the mast and also must be secured no higher than the rail cap, deck or cabin top.
- 18.2.3 No staysail may be carried set on a sloop rig flying from the backstay.

- 18.2.4 This section applies to mizzen staysail.
- 18.3 Blooper
 - 18.3.1 A blooper is flown with a spinnaker and must be no longer on the luff than the headstay. A tack pennant not to exceed 2.5 feet can be added, conforming to the current blooper rule.
 - 18.3.2 A blooper must be tacked to the stem fitting on the bow.
 - 18.3.3 The mid-girth measured between the midpoints of the luff and leech, shall not exceed 50% of the foot length nor shall the length of any intermediate girth exceed a value similarly proportionate to its distance from the head of the sail.
 - 18.3.4 The distance measured on the surface of the sail, between the midpoint of the foot and the midpoint of the luff shall not exceed .55 of the length of the leech.
 - 18.3.5 The LP can be no longer than the largest declared headsail.

ARTICLE XIX – OTHER PENALTIES

- 19.1 Rig Penalties
 - 19.1.1 Mast or Main Hoist Oversize (Oversize I or P)
 - 19.1.1.1 Mast Head Rig
 - Oversize I or I and P – larger of (I/design) or (I + P)(Design I + Design P)
 - Over 101% to and including 103% -3 seconds
 - Over 103% to and including 105% -6 seconds
 - Over 105% to and including 107.5%-9 seconds
 - Over 107.5% to and including 110%-12 seconds
 - Oversize P (P/design P)
 - Over 101% to and including 105% -3 seconds
 - Over 105% to and including 110% -6 seconds
 - 19.1.1.2 Fractional Rig
 - Oversized I or I and P
 - Over 101% to and including 103.5%.-3 seconds
 - Over 103% to and including 107% -6 seconds
 - Over 107% to and including 110.5%-9 seconds
 - Over 110.5% to and including 114%-12 seconds
 - Oversize P
 - Over 101% to and including 107% -3 seconds
 - Over 107% to and including 114% -6 seconds
 - 19.1.1.3 Oversize J: (Bowsprit or other) (Measured J/Design J)
 - Over 102% to and including 105% -3 seconds
 - Over 105% to and including 110% -6 seconds
 - Over 110% to and including 115% -9 seconds
 - 19.1.2 In cases where the base boat has an aluminum mast, changing to a carbon mast will result in a handicap charge of between 3 and 6 seconds per mile, depending on the relative section of the aluminum mast. There is usually not a charge for changing to a carbon boom.
 - 19.1.3 A boat with shrouds and/or headstay made of something other than wire or stainless steel rod, such as PBO, will normally incur a handicap adjustment unless all boats of that class have such rigging. Backstays are excluded from this adjustment. This will be considered on a case by case basis.

ARTICLE XX – CREDITS

- 20.1 There are no credits for undersized sails, or added interior accommodations.
- 20.2 No credit is automatically applied and must be approved prior to use toward a rating.
- 20.3 A boat with a full depth keel typically has a handicapping disadvantage of up to six seconds over a shallow draft keel or a centerboard. Determination to be made by the handicappers.
- 20.4 There shall be a six (6) second credit for roller furling jibs and genoas but only upon compliance with the following:
 - 20.4.1 Furling drums must be mounted above deck and used at all times.
 - 20.4.2 All jibs and genoas on the yacht must be capable of being furled.
 - 20.4.3 There is no restriction on material used in these sails.
 - 20.4.4 If the drum is removed and the system is used as a standard headfoil, the chief handicapper must be so notified in writing, the credit for roller furling no longer applies, the existing rating certificate is invalid and a new rating certificate must be applied for at least 7 days before the boat races again.
- 20.5 There shall be a six (+6) second credit for the installation of a two bladed-fixed propeller.
- 20.6 There shall be a nine (+9) second credit for the installation of a three bladed-fixed propeller.
- 20.7 Boat with retractable outboard motor to have –6 sec penalty over identical boat with inboard engine.
- 20.8 There shall be a six (6) second credit for a roller furling main (in mast or in boom).

- 20.9 CRUISING ASM credit of three (3) seconds will given if the boat inventory is defined by these limits,
 - 20.9.1 Headsails must be flown hanked to the headstay or in the headstay groove except that asymmetrical spinnakers may be flown as provided in 20.9.4, stated below.
 - 20.9.2 Staysails may not be flown.
 - 20.9.3 Symmetrical spinnakers may not be used.
 - 20.9.4 Asymmetrical spinnakers may be flown provided they
 - 20.9.4.1 Flown without a whisker or spinnaker pole
 - 20.9.4.2 Are attached to a tack point along the center line of the yacht that is no more than 12 inches fore or aft of the jib tack. The tack location can not change during a race.
 - 20.9.4.3 The length of the tack line can not exceed 48 inches from the tack point and the tack of the sail.
 - 20.9.4.4 The tack line can not be attached or deflected between the tack point and the tack of the sail at any time.
 - 20.9.5 Whisker or spinnaker poles may be used only for headsails and must be attached to the mast when is use with a headsail.
 - 20.9.6 Whisker or spinnaker may not be longer than the SPL measurement of the boat.
 - 20.9.7 Only applicable when the boat is registered in a CRUISING ASM class as offered in a NOR.
 - 20.9.8 Boats base rated with an Asymmetrical spinnaker are not eligible for credit
 - 20.9.9 Asymmetrical can not exceed a size of $SPL = J$.
- 20.10 Jib and Main (JAM) credit of nine (9) seconds will given if the boat inventory is defined by these limits,
 - 20.10.1 Headsails must be flown hanked to the headstay or in the headstay groove.
 - 20.10.2 Staysails may not be flown.
 - 20.10.3 All sails besides Main and Jib are prohibited.
 - 20.10.4 Whisker or spinnaker poles may be used only for headsails and must be attached to the mast when is use with a headsail.
 - 20.10.5 Whisker or spinnaker may not be longer than the SPL measurement of the boat.
 - 20.10.6 Only applicable when the boat is registered in a JAM class as offered in a NOR.

