

**GULF YACHTING ASSOCIATION, INC.**  
**ORGANIZED 1901 – REORGANIZED 1920**

**PHRF**  
**GYA PHRF By Laws Revised January 13, 2008**  
**BY-LAWS**

(Areas highlighted in ARIAL BLACK, SUCH AS THIS, WERE APPROVED AND IMPLEMENTED AT THE JANUARY 13, 2008 BOARD MEETING)

**I. PERFORMANCE HANDICAP RATING SYSTEM**

- A. The intent of the Performance Handicap Racing Fleet (PHRF) is to provide a simple handicapping system that gives sailboats with different speed potential the same opportunity to win. Sailboat speed over a racecourse is dependent upon boat design (class), skipper skill, wind strength, and chance. Skipper skill includes crew selection, boat preparation, and racing technique. The PHRF Board of Handicappers assigns a rating to a sailboat class to compensate for speed difference due solely to sailboat design.
- B. A PHRF rating is sailboat speed measured in seconds per nautical mile, thus faster boats have lower ratings than slower boats. Ratings are in increments of 3 seconds per nautical mile. The race committee records the elapsed time to sail the race course for each boat. The corrected time for each sailboat is its actual elapsed time minus the product of its PHRF rating multiplied by the race distance in nautical miles, rounded to the nearest whole second (.5 is rounded to 1). The sailboat that has the lowest corrected time wins the race.
- C. Performance handicaps are not measurement ratings. Each reflects an estimate of a sailboat's speed potential determined as far as possible through knowledge of previous racing experience, supported by a consensus of the effect of different parameters for hull and rig. Performance handicaps are arrived at through an empirical process based upon observation and analysis of race results.
- D. As faster designs appear, they are handicapped accordingly. Therefore, one of the major benefits of the PHRF system is to provide handicaps such that older boats can race competitively with the latest designs.
- E. PHRF discourages rule beating. If a skipper modified his boat, PHRF will attempt to compensate for the new speed potential. The use of taller masts, longer spinnaker poles, extra ballast, gutted interiors or other modifications intended to increase speed is compensated for by the rating assigned.

## **II. HANDICAPPING PROCEDURE**

- A. 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 handicap record that the boat is not a standard class boat.
- B. 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.
- C. A provisional rating is given to all new classes of sailboat that enter the GYA PHRF system. The rating is provisional for the two years from the date the certificate was issued.
- D. PHRF utilizes analytical methods to calculate race results and to collect statistics by boat class. Each class is handicapped against the performance of the fleet as a whole and the handicap raised or lowered as required for good racing. However, winning races does not automatically lead to an adjustment of the handicap.
- E. PHRF ratings are based on potential boat speed over a wide variety of courses, including, but not limited to triangles, windward-leeward, Olympic, Gold cup, and government fixed marks, all sailed in varying wind conditions. Ratings are not based on strict triangle courses. Boats that excel on certain type of courses and/or in certain wind conditions are rated more towards their optimum conditions.
- F. The PHRF Committee requests race results for input to the race results database for races within the GYA area. The type of races excluded from the GYA database are races in storm or drifting conditions, staggered start races, point A to point B races, races sailed at anytime in the dark, races that had to be shortened, and races for less than three boats.
- G. The PHRF committee will review ratings at Board meetings based on requests for rating adjustments, the annual review of all ratings, or based on an Area Handicappers request for review. The Board will, in all cases, give careful consideration of the race data on file, a review of regional US-PHRF handicaps from selected areas, and other data, including on the water observations, where available. Any rating change made as a result of this review process will be made in a sincere effort to maintain equity to the best of the Board's ability between all yachts racing under the GYA-PHRF rating system.

## **III. PHRF COMMITTEE**

- A. The GYA-PHRF Committee functions as a committee of the Offshore Council of the Gulf Yachting Association. The GYA-PHRF committee and the Board of

Handicappers are one and the same.

- B. The four areas of the GYA for PHRF handicapping are Louisiana, Mississippi, Alabama, and Florida. Louisiana shall have two Area Handicappers on the Board.
- C. Handicappers shall be appointed at the annual meeting of the GYA. The Chairman shall be appointed by the Commodore of the GYA on the recommendation of the Chairman of the Offshore Council. The five Area Handicappers shall be appointed by the Chairman of the Offshore Council on the recommendation of the Chairman of the PHRF committee.
- D. Each Area Handicapper will serve a three-year term, and may be re-appointed by the Chairman for one successive two-year term. An appointment made to fill an unexpired term will be made for the balance of the unexpired term. Terms will expire after the annual review and prior to the next meeting.
- E. The Board of Handicappers shall establish all PHRF ratings to be effective for the GYA.
  - 1. The Board of Handicappers shall establish a valid list of all boats with PHRF handicaps and issue individual ratings to each PHRF boat upon application by the owner.
  - 2. After receiving the application and recommendation from an Area Handicapper, the Chairman of the GYA Board of Handicappers will present the rating for consideration by the Board of Handicappers either by poll, or at the next meeting of the GYA Board of Handicappers. The rating recommendation will be reviewed by the GYA Board of Handicappers and either affirmed or changed by the decision of the Board of Handicappers.
  - 3. The Board of Handicappers must review the valid list at least annually. Each rating change must be voted on separately. At the discretion of the Board of Handicappers, valid lists may be reviewed more often.
- F. A handicap will be affirmed and established by a simple majority vote of the Board of Handicappers. The Chairman of the Board of Handicappers may only exercise a vote in the case of a tie decision on the handicap.
- G. The Area Handicapper may send an assistant handicapper as his representative to a meeting of the Board of Handicappers. The Chairman of the Board of Handicappers must approve the selection. If the vote of a representative decides the outcome of an issue, then the Area Handicapper must confirm his representative's vote. The Chairman of the Board of Handicappers will table an issue requiring a vote confirmation.

#### **IV. PHRF SUB-COMMITTEE**

- A. Each Area Handicapper shall appoint assistant Handicappers from the local area PHRF sailing organizations to serve with him on a local handicapping committee. This committee should work with the Area Handicapper in establishing preliminary ratings for any new boats joining the area fleet. In consultation with this local area board, the Area Handicapper recommends initial ratings for consideration by the GYA Board of Handicappers.
- B. When requested by the applicant (normally just prior to a race), a provisional rating may be issued by the Area Handicapper, or the Chairman, if (1) a completed, signed application has been received along with the appropriate fee and (2) a national rating for the boat has been published or is available through US Sailing. The Handicapper should use the national rating as a guide as different regions rate boats differently.

#### **V. PHRF RATING CERTIFICATE**

- A. To obtain a PHRF certificate a boat must be a mono-hull with a self-bailing cockpit and must be self-righting with fixed righting ballast for the duration of the race. Self-righting boats with movable weighted keels, swing keels, dagger boards, or keel/centerboards, where the weight is required to make the boat self-righting, shall not raise the righting ballast at anytime during the race. Further, any boat that uses water as ballast must be fully water ballasted while racing and may not shift ballast from one side to the other while racing.

THE FOLLOWING SHADED AREA DELETED JANUARY 13, 2008

- A. 1) Mono-hull Boats that do not meet the requirements in A. shall be assigned a special PHRF rating certificate, designated SPHRF. SPHRF certificates are not valid for regattas where the Notice Of Regatta (NOR) and/or the Sailing Instructions (SI) require a valid GYA PHRF Certificate to enter and do not specifically accept SPHRF certificates.
- B. Rating certificates shall be valid for 24 months from issue unless terminated or changed by the Board of Handicappers. Each valid certificate must be renewed every 24 months by the owner at a cost to be established by the PHRF committee.
- C. Any Area Handicapper or the Chairman, may, for any reason, request the Board of Handicappers to review a rating. Such review may be by poll, conference call or at a meeting of the Board. Any adjustment in rating caused by such review will be issued in writing to the certificate holder within 10 days of the decision. Such decision will be effective when made.
- D. If an already issued rating is changed by the Board of Handicappers at one of its

regular meetings, the new rating will not take effect until 30 days after the action of the Board of Handicappers. Rating changes based on an owner's appeal of his own boat will take effect immediately. A new certificate will be issued and such certificate shall indicate the effective date of the new rating.

- E. A provisional rating may only be changed by the Board of Handicappers, either by poll, or at a meeting of the Board. Changes to provisional ratings are effective when the decision is made.
- F. It is the responsibility of the owner or skipper to notify the Area Handicapper or GYA PHRF Chairman of changes in the hull, appendages, interior, rigging, or sail dimensions that are different from the information on the boat's current rating certificate. The Board of Handicappers will notify the owner of the new rating if a change in rating is required, and the applicable fee for the change in rating. Failure to report a modification may result in suspension of the PHRF certificate.
- G. Anyone making a change to a boat's hull, appendages, interior, rigging or sails dimensions should anticipate a change in that boat's rating. Fairing the hull, keel, and rudder to design specifications is allowed. The committee may apply rating adjustments based on guidelines in Appendix B; however, such adjustments are at the discretion of the committee and will always be made to achieve an equitable performance rating between boats.
- H. No change and/or modification that would affect the rating of a boat may be made by the owner or skipper until written notification is provided to the Board of Handicappers, and until receipt by the owner of the new rating certificate from the Board of Handicappers.
- I. All changes and/or modifications of a boat are subject to review by the Handicap Committee to determine if the modifications have created a new type Class for purposes of assigning a base rating.

## **VI. RATING APPEAL:**

- A. Any person holding a valid PHRF handicap issued by the Board of Handicappers of the GYA may request a rating adjustment of his boat or of another boat holding a valid PHRF handicap issued by the Board of Handicappers of the GYA. The requester, when requesting an adjustment of another persons boat, must mail a copy of the request to the other person at the same time it is submitted to the GYA PHRF Committee.
- B. All requests submitted in proper form will be heard at the next meeting of the Board. Any person requesting a rating adjustment must submit a request at least two (2) months prior to the GORC, CHALLENGE CUP, and WFORC, or by December 1st for the Annual review, to be considered at the board meeting scheduled prior to these events. The chairman will notify the requester within 10

days of the decision of the Board. Such decision is effective when made.

- C. Requests must be submitted in proper form to the Chairman of the PHRF Rating Committee, with a copy given to the Area Handicapper. Proper form is the approved GYA-PHRF Rating Adjustment Request Form, which may be obtained from the Area Handicapper or the Chairman.
1. Use of this form is mandatory for submitting a rating adjustment request. The details on the form provide the committee with specific information about your boat that the committee would not otherwise be aware of, such as age and condition of sails, type of bottom paint, how often applied, and how often cleaned before regattas, experience level of crew, etc.
  2. The notice of request must contain (1) justification for the rating change requested based on specific data concerning the appropriate factors (waterline, sail area, age of each sail carried, displacement dates boat hauled and bottom repainted, etc.) that affect the performance of a boat compared to similar factors on other boats of a like nature, (2) appropriate data from actual races including corrected times, which would establish the validity of the appeal, and (3) any other pertinent data.
  3. On the bottom of page 2 is a box to check if the appeal is to be reviewed by the GYA Offshore PHRF Appeal Committee because the PHRF Committee did not agree to an adjustment. If this box is not checked the appeal will end with the decision of the PHRF Committee. Refer to Appendix A for information about the GYA Offshore PHRF Appeals Committee.
  4. In reviewing a request, the committee will also review race data recorded in the PHRF Race Results database, US-PHRF listing of ratings for the same boat class in other areas of the country as compared to reviewed boat class and similar classes rated in each area, and observations made by the Area Handicappers and their assistant handicappers. The PHRF committee is as thorough as possible, given the data provided and the activity of the boat. The review starts with the Rating Adjustment Request Form and other submitted supporting data.
- C. Boats are required to sail in at least 3 races of at least a total of 45 miles after a rating change before they can appeal the change. This rule will not apply to changes made at the board meetings that are not based on an appeal, as well as changes based on an appeal where the person whose rating is being appealed was not notified. This rule is not applicable to boats that did not have an opportunity to present their position to the committee, either in writing or in person, prior to the change being made.

## VII. STANDARD PHRF BOAT

- A. 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, radar antenna, etc.). However, if the basic hull and rig differ from others in its class, it will, of course be rated uniquely.
- B. PHRF base handicaps are made on the assumption that the boat is in racing condition, the boat uses a spinnaker pole and not a pole sprit, the SPL is equal to the J dimension, the spinnaker maximum width is 180% of SPL, the luff limit of the spinnaker is  $0.95 \cdot (I^2 + J^2)^{0.5}$ , the genoa LP dimension is 155% of the J dimension, the main sail has no more than five battens that can be full length, the boat has a folding or feathering propeller or outboard motor (outboard motor may be stowed while racing), the hull and appendages are unmodified, the boat has pulpits and lifelines consistent with or very similar to the Designer's/Manufacturer's specifications and/or recommendations including placement on deck, and the boat has an auxiliary propulsion system suitable for the boat's design. Any auxiliary propulsion system must be capable of producing a boat speed in knots equal to 1.0 times the square root of the length of water line in feet.
- C. Boats are rated for use with large or small headsails with 155% of LP dimension being the dividing line. Once a boat is rated with a large headsail, this rating must be used, even though wind conditions may preclude use of the sail. A skipper is not allowed to have his boat re-rated frequently by choosing his headsail to fit expected race conditions.
- D. Spars must be banded (black band on white spars, etc.) for the proper P (mainsail luff) and E (mainsail foot) dimensions listed on the PHRF certificate. Ketch rigs will have  $P_y$  and  $E_y$  banded.
- E. Boats with lifelines must have all lifelines taut. Lifelines must be able to support a 10 pounds weight hung from a single lifeline in the middle between two stanchions, without deflecting more than 2 inches.
- F. No trapezes, hiking straps, movable athwartships ballast, or other hiking devices are permitted. No exception to this rule for boats with PHRF certificates regardless of class rules where a PHRF boat is rated as a strict "OD" one design.

THE FOLLOWING SHADED AREA DELETED JANUARY 13, 2008

F. 1) Exception to rule F. is made for boats rated with SPHRF certificates (see

Article V. A. 1) above). These boats are permitted to sail in their One Design configuration.

- G. A skipper may experiment with different ways of improving the performance of his boat. Fairing the hull, keel, and rudder to design specifications is allowed. 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. If possible deviations on the part of the owner become apparent, other contestants are urged to appeal to the area handicapper.
  
- G. The GYA-PHRF uses the sail measurement rules in Appendix B. All headsails over 140% must be marked for size by a sailmaker. A member of his firm can mark the personal sails of a sailmaker.
  
- H. Boats that do not meet the Standards as described above, and cannot adjust the base rating for changes to the Standards using the published APPENDIX –C ADJUSTMENT GUIDELINES, shall be rated as One Design to Manufacturers specifications (or Custom specifications if only one boat produced).



**APPENDIX - A**  
**GYA OFFSHORE PHRF APPEALS COMMITTEE**

The Chairman of GYA Offshore will annually appoint a GYA Offshore Appeals Committee Chairman. The GOPAC Chairman, who will be non-voting, shall appoint a committee of three to hear any appeals that may come before him. The three voting committee members shall be selected from sitting members of the Offshore Council (OC). If the Chairman cannot fill his committee from this venue, he may then appoint from past Offshore Councils. If he' is still unable to fill the committee, the Chairman of GYA Offshore will select the necessary committee members at random. The only other restrictions on the selection of committee members are: (1) he must not be a member of any club(s) that the appellant belongs to, (2)' No current member of the GYA-PHRF Committee or current member of an area handicapper's advisory committee may be selected. The GOPAC Chairman is the only permanent member of the committee. The three voting members will be appointed on an appeal-by-appeal basis, although there is no restriction on a committee member serving on more than one appeal.

GOPAC will meet 4 times annually, those meetings being approximately 30 days after each regularly scheduled GYA-PHRF meeting. GOPAC is not required to meet if there are no appeals pending following that particular GYA-PHRF meeting. No appeals will be considered except at these scheduled meetings.

The circumstances under which a GYA-PHRF certificate holder may proceed to the GOPAC level are as follows: The certificate holder is denied a rating adjustment appeal by GYA-PHRF. He must meet all requirements stated on the GYA-PHRF appeals form and he must have checked off on the box that states that he will go forward to GOPAC if he does not get a rating adjustment based on his proper appeal to GYA-PHRF. The only requirement above the GYA-PHRF appeal requirements is that the base rating of the appellant's boat must be more than 4.5 seconds per mile off the arithmetic average of the base ratings assigned in at least two (but including all referenced areas providing a rating) from the following PHRF areas: Chesapeake Bay, New England, Southern California, Northern California, Lake Erie, Lake Michigan, YRALIS, Southeast Florida, Narragansett Bay, Galveston Bay, and Mid-Atlantic (NJ). Only those areas from this group having the particular boat class will be used for averaging purposes.

If the appellant does not receive any seconds per mile in rating adjustment, and has indicated (by checking the box described above) that the appellant will go forward to GOPAC, GYA-PHRF will, within 10 days of the decision, forward the appeal and the GYA-PHRF basis for their decision to the Chairman of GOPAC. Concurrently, the basis for the GYA-PHRF decision will be forwarded to the appellant. The appellant will have two weeks from the date of the decision to the Postmark date of his response to submit to the Chairman of GOPAC and the Chairman of the GYA-PHRF, any rebuttal to the decision made by the GYA-PHRF, strictly limiting his response to the basis of the decision written by GYA-PHRF. The introduction of new data, such as race results not previously discussed by either the appellant or the GYA-PHRF, may be

grounds for restarting the appeal process beginning with the GYA-PHRF's next scheduled meeting.

The appellant will be notified in writing of the decision by GOPAC within 7 days of the hearing. The names of the members of the committee will not be made public until this time. GYA-PHRF and the appellant will be bound by the decision for two years from the date of the hearing, unless the boat is modified during that period. There are no restrictions as to rating change if the boat is modified in any way. The rating change is effective upon notification.

If the appellant does not receive any additional seconds in rating from GOPAC, the appellant may continue forward in the process to the US-PHRF National Appeals Committee. Upon receiving written notification from GOPAC, the appellant must notify GOPAC within 14 days of the date of the notification that he intends to go forward to US-PHRF. The same eligibility restrictions and conditions apply to go to US-PHRF as apply to go to GOPAC. There is an additional fee of \$25 to GOPAC plus the fee required by US-PHRF. The two-year rule and modification rule also apply to any decision made by US-PHRF.

## **APPENDIX – B GYA PHRF SAIL RELATED DEFINITIONS**

1. Jibs
  - a. A jib is any sail, other than a spinnaker, set in the foretriangle. In any jib the mid girth measured between the mid points of luff and leech, shall not exceed 50% of the foot length nor shall the length of intermediate girth at 25% and 75% of the luff and leech from the head exceed values similarly proportioned to their distance from the head. The distance measured on the surface of the sail, between the midpoint of the foot and the midpoint of the luff shall not exceed 0.55 of the length of the leech.
  - b. No jib may have a mid girth measured between the mid points of the luff and leech more than 50% of the foot length. Thus headsails with mid girths between 50% and 75% shall not be allowed.
  - c. J shall be the actual foretriangle base. It is measured horizontally from the foreside of the mast at its lowest point above the deck or coach roof to the center line of the foremost stay on which jibs are set (the center line of the luff if the foremost jib is to be set flying), extended if necessary, to intersect the level of the shear line, or to a bowsprit if used.
  - d. The dimension I shall be the genoa height. It is measured from the point of

attachment of the forestay to the mast structure, or the intersection of the centerline of the forestay with the foreside of the mast where the point of attachment is internal, to the level of the sheerline abreast the mast.

- e. The LP of jibs shall be measured on the perpendicular from the luff (outside edge of the sail and/or luff rope) to clew (intersection of the lines of the foot and leech). A wrap-around jib shall be measured on the perpendicular from the line of junction of the wrap-around parts to the clew.
- f. The length of the luff shall normally be the distance between the lowest part of the sail on the luff rope at the tack and the highest point on the sail on the luff rope at the head.

## 2. Spinnakers.

- a. A sail shall not be measured as a spinnaker unless the mid girth is 75% or more of the foot length. A symmetrical spinnaker is a sail that is symmetrical about a line joining the head to the center of the foot. An asymmetrical spinnaker has a luff that is longer than the leech. The area of an asymmetrical spinnaker that is only used on a sprit pole cannot exceed 123% of the area of a regular symmetrical spinnaker with a standard length pole. Limiting the mid girth (SMG) to greater than 75% of the foot (SF) prevents an upwind jib being used on sprit poles for light air.
- b. SPL shall be the length of the spinnaker pole when forced outboard in its fitting on the mast and set in a horizontal position athwartships, measured from the center line of the boat to the extreme outboard end of the pole and any fittings used when a spinnaker is set.
- c. ISP shall be the height of the spinnaker halyard. It shall be measured from the underside of the spinnaker halyard, when drawn horizontally forward from the mast, to the level of the sheer line abreast the mast.
- d. SMW shall be the spinnaker maximum width, whether at the foot or across the body of the sail between points on the luff and leech equidistant from the head.
- e. SL shall be the greatest length of spinnaker luff and leech measured around the edges of the sail.
- f. SMG shall be the distance between the midpoints of the luff and leech measured in the shortest path on the surface of the sail.
- g. JC shall be the corrected base of the foretriangle taken as the greater of the three measurements J, SPL, or SMW divided by 1.80.
- h. The sail area for both symmetrical and asymmetrical spinnakers is calculated by

using the America's Cup formula:

$$\text{AREA} = [(\text{SLU} + \text{SLE}) * .25\text{SF}] + [(\text{SMG} - .5\text{SF}) * (\text{SLE} + \text{SLU}) * .33]$$

Where: SLU = luff, SLE = leech, SF = foot, SMG = mid girth

Symmetrical: SLU = SLE                      Asymmetrical: SMG > .65SF

- i. The luff limit shall be  $0.95 * (\text{ISP}^2 + \text{JC}^2)^{0.5}$ . The spinnaker maximum width (SMW) shall be  $1.8 * \text{JC}$ . It is the limit value of SMW for any spinnaker carried on the boat.

### 3. Mainsail.

- a. P shall be the measured length of the hoist of a jib headed mainsail. It is the distance along the afterside of the mainmast from the highest level to which the head of the sail, or any part of the headboard carriage abaft the track or mast grove, may be set to the lowest position on the track. PY is the measured length of the hoist of a jib headed mizzen sail. The method of measurement is that used for the hoist (luff) of the mainsail.
- b. E shall be the length measured along the boom from the aft side of the mast including any external track or grove, or its fair extension parallel to the axis of the mast, to the aftermost position to which the sail is permitted to extend. EY is the measured length of the foot the mizzen sail. The method of measurement is that used for the foot of the mainsail.
- c. Mainsail Headboard (HB) shall be the maximum fore and aft dimension from the luff of the mainsail, projected if necessary, to the extreme aft edge of the leech measured across the widest part of the headboard. The HB limit is the larger of  $(0.04 * E)$  or 0.5 feet.
- d. The mainsail shall be either fully secured at the foot or fully loose footed. Spare mainsails are permitted to be carried on board. Battens must be equally spaced across the mainsail. Mainsail area formula and limitations to the  $\frac{3}{4}$  girth (MGU) and the  $\frac{1}{2}$  girth (MGM ) dimensions in feet are: (IOR 848.2)

$$\text{MGUL} = \text{Greater of } 0.28 * E + 0.016 * P + 0.85 \text{ or } 0.38 * E$$

$$\text{MGML} = \text{Greater of } 0.50 * E + 0.022 * P + 1.20 \text{ or } 0.65 * E$$

- e. The mainsail cross measurements shall be distance from the leech measurement points, to the nearest point on the fore edge of the sail including the boltrope. The points on the leech from which the cross measurements are taken shall be determined bridging any hollows in the leech with straight lines. The mid-point of the leech shall be determined by folding the head to the clew and the quarter and three-quarter leech points by folding the clew and the head to the mid-point leech.

## **APPENDIX - C ADJUSTMENT GUIDELINES**

### 1. Sails:

- a. Headsail adjustment is based on the largest genoa and is determined by the LP/J ratio stated as a percent. From 136% to 155% requires no adjustment, 156% to 170% the adjustment is -3 seconds, 171% to 180% the adjustment is -6 seconds. Over 180% the adjustment is assessed at the option of the Board. Headsail credit is +3 seconds for 135% to 111% and +6 seconds for 110% and smaller.
- b. Spinnaker adjustment is based on the largest spinnaker, and is determined by the girth/J ratio or girth/JC, stated as a percent. Up to 180% no adjustment, 181% to 190% the adjustment is -3 seconds, 191% to 200% the adjustment is -6 seconds, and over 200% the adjustment is assessed at the option of the Board.
- c. Boats with working roller furling mainsails that have no battens (or any other means of stiffening the sail material) will receive +6 seconds of rating adjustment.
- d. No adjustment will be assessed for five (or less) tapered battens up to and including full length battens that are approximately equally spaced between the head of the sail and the clew. Each additional batten (over five) will be adjusted - 3 seconds, unless considered a class standard.
- e. Cruising spinnakers and gennakers are permitted in spinnaker class racing without adjustment, only if they are tacked to the jib tack at the bow and are the only type of spinnaker on board.
- f. This asymmetrical spinnakers sail limitation for non-sprit boats will apply to asymmetrical spinnakers, including cruising spinnakers. Limitations for asymmetrical spinnakers are as follows: the asymmetrical spinnakers area must be less than or equal to the maximum allowed symmetrical spinnaker area, the SMG dimension must be larger than 75% the SP dimension, the tack must be set in the normal genoa position, and tack pennants are limited to 2.5 feet.
- g. A boat may carry symmetrical or asymmetrical spinnakers, not both, and choice

must be declared on PHRF certificate, otherwise PHRF certificate will be for symmetrical only.

- h. The calculation of the area of asymmetrical spinnakers shall be computed by using the America's Cup formula.

2. Spinnaker pole:

- a. Any spinnaker pole, which exceeds the J dimension, is subject to a rating adjustment as follows: -3 seconds for up to a 10% increase over J. Increases greater than 10% but equal to or less than one foot, will only be assessed a -3 second change. Increases greater than 10% and greater than 1 foot will be assessed additional seconds on a case by case basis.
- b. Boats rated with oversized spinnaker poles will use the JC dimension (spinnaker pole length) for computing the percent of maximum girth for spinnakers rather than J and will not be assessed a spinnaker adjustment unless they exceed the JC dimension by more than 180%

3. Spinnaker Hoist:

- a. Spinnaker hoists (ISP) greater than the I dimension will be given a rating adjustment as follows: -3 seconds for up to 5% increase over the I dimension, -6 seconds for increases from 5% up to 10%. Increases greater than 10% will be assessed additional seconds on a case by case basis.

4 Pole sprits:

- a. Add a pole sprit, similar to J-Boats: -3 seconds per 2.5 ft of extended pole (which includes going to the larger asymmetrical spinnaker). The asymmetrical spinnaker, measured in accordance with the America's Cup formula, can not exceed 123% of a standard PHRF symmetrical spinnaker without penalty.
- b. Change from a pole sprit and asymmetrical spinnaker to a traditional spinnaker pole and symmetrical spinnaker: +3 seconds per 2.5 ft of reduced pole. The boat will lose its one-design classification and all PHRF rating guidelines will be assessed as appropriate.
- c. Modification of a stock boat to include a pole sprit (similar to J-80, Melges 24, etc.) requires that the PHRF committee be given complete details of the modification, including length of extended pole, is it retractable, the dimensions of the largest asymmetrical spinnaker to be flown, and the fact that the pole sprit will not be used for genoa headsails. Each request will be evaluated separately as the PHRF Committee observes the performance characteristics as compared to the stock boat of similar configurations.

5. Mast and boom:
  - a. For every increase in the total change to any combination P and I, the adjustment shall be -3 seconds for up to 5% increase of the average of the I & P dimension combined. Increases greater than 5% will be assessed additional seconds on a case by case basis.
  - b. Increase to the E dimension will be assessed a rating adjustment as follows: -3 seconds for up to 10% increase in the E dimension. Increases greater than 10% will be assessed additional seconds on a case by case basis. Mainsail measurements based on the E, such as the Head Board, MGUL, MGML and mainsail cross measurements, as described in Appendix -B, GYA PHRF SAIL RELATED DEFINITIONS, paragraph 3. b, 3.e, 3.d and 3.e must be complied with for the revised E dimension.
  - c. Masthead spinnaker on a fractional rigged boat: -3 seconds for every 2.5 feet (or fraction there of) increase in spinnaker hoist.
  - d. Carbon fiber mast in place of an aluminum mast that saves weight aloft and allows more sail area in stronger breezes: -6 seconds for carbon fiber replacement.
  - e. For each additional set of spreaders over original design number: -3 seconds.
6. Change the shape of the keel to elliptical, putting the weight lower, improving the sail carrying capability: -6 seconds. Appendage changes and modifications will be reviewed on an individual basis.
7. Change in the draft: -3 seconds for every 0.5 foot (or fraction there of) increase in depth of +3 seconds for every 0.5 foot decrease in depth. Appendage changes and modifications will be reviewed on a case by case basis
8. Boats without pulpits and/or lifelines will be assessed -3 seconds.
9. Boats that remove an auxiliary propulsion system will be assessed a rating adjustment as follows, subject to additional adjustments on a case by case basis:
  - a. Less inboard engine (shaft, strut and propeller in place) -3 seconds
  - b. Less inboard engine (shaft, strut and propeller removed) -6 seconds
  - c. Less outboard motor -3 seconds (removed from the boat)
10. Two-blade fixed props +6 seconds and three blade fixed props +12 seconds
11. Dry sailing:

- a. A boat that does not have a permanent wet slip or does not have anti-fouling bottom paint, or a boat that has anti-fouling bottom paint but is normally kept out of the water, should state DRY sailed on her PHRF certificate (no adjustment in rating will be made).

## **APPENDIX - D ONE DESIGN CONSIDERATIONS**

1. One-Design (OD) boats are raced in their one-design national class rule configuration. Boats rated in PHRF as “OD” to a strict one Design class requirement will have all class restrictions incorporated in the base rating, (including requirements for pulpits, lifelines, and auxiliary propulsion) with the following exceptions:
  - a. Crew number and weight limits will only apply if called for in race instructions and then will be equal to that recommended on the PHRF Certificate.
  - b. Hiking limitations are always in effect.
2. No modifications will be permitted to boats rated as “OD” except boats with “pole sprits” such as J-80’s, Melges 24’s, J-105’s, etc. All boats with “pole sprits” will be rated as “OD”, with modifications assessed as modifications and changes in rating will be on a case by case basis. Other non-pole sprit boats rated as “OD” will lose their “OD” classification and be rated as a standard PHRF boat if any modifications to the class rules are made.
3. All boats not rated as OD to their class rules are considered to have Pulpits and taut lifelines and auxiliary propulsion systems, and must notify the PHRF committee if they wish to remove any of these items.
4. Modifications to any One Design Mainsail dimension will require modifications to all other mainsail dimensions that the Standard PHRF boat is based on (see Appendix –B, paragraph 3. “MAINSAIL”). The Class authorized One Design dimensions will be divided by the Standard PHRF dimensions based on P, E, and HB. The PHRF to OD factor will then be applied to any modification to the OD authorized dimension. Changes in rating based on the modifications will be adjusted on a case by case basis.



**APPENDIX – E**  
**ROLLER FURLING CREDIT**

The PHRF committee allows +6 seconds per mile in rating for a roller furling headsail and/or +6 seconds for a roller furling mainsail. (SA/DSPL must be less than 18.0)

1. Uses a working roller furling headsail attached to an above deck mounted roller furling system. Roller furling headsails must be tacked above the drum and may be interchangeable with other working roller furling headsails while racing.
2. Uses a working Roller Furling mainsail, which has no battens and is furled vertically by rolling rather than flaking.
3. Must have an inboard auxiliary propulsion system. (Outboards are excluded from this credit)
4. Has a sail area/displacement of less than 18.0. This value (SA/DSPL) is not a simple division, but is based on the following formula:

$$SA/DSPL = SA / (DSPL/64)^{2/3}.$$

Sail area and displacement values will be based on the standard dimensions published for the boat class in the US Sailing Association PHRF Fleet Handbook.

5. Each boat has to apply for this credit individually, and the committee reserves the right to refuse the credit to boats that they deem to be more racing than cruising.