

2014-2016 SBCC Handicap Regulations and Rules

THE HISTORY OF PHRF

Before 1976, cruising yachts raced under various handicap measurement rules. Each rule used a formula to predict the potential speed of the yacht compared with the speed of the others. The calculated result was the yacht's rating in equivalent feet. This was used to determine the time allowance handicap. Most measurers charged fees, and the classes charged fees for running the rating calculations. Some of the rules also required the yacht to be lifted out of the water and weighted. This improved measurement accuracy but added to the cost.

When yachts are similar in design, a simple rule with few measurements can be equitable. As boats vary more widely in their design, a fair rule becomes more complex and difficult to develop, requiring more measurements and becoming more expensive for the owners. Good yacht designers study measurement rules to find ways to design yachts that are fast but appear slow to the rules. To correct the handicaps of such "rule-beaters" requires adjustment of the rule. Most any adjustment affects not only the rule-beater, but all other yachts in the class as well, sometimes unfairly or contrary to the intent of the rule makers.

What was needed was an inexpensive handicapping system that could correct the handicaps of individual rule-beaters without affecting other yachts in the class. The boating industry expanded rapidly during the 70's. Low maintenance fiberglass boats were built by the thousands, hundreds out of the same molds. The number of new sailors racing increased just as rapidly. Many of them came from one-design day sailor fleets. They did not understand the measurement rules and they didn't want to spend a lot of money on ratings. They simply wanted to get out on the water and race. Many of the "old salts" as well were tired of the expense and complication of the measurement rules.

In Southern California a group of yachtsmen developed a new approach to handicapping, and organized the Pacific Handicap Racing Fleet. The British were already using the Portsmouth Yardstick system of handicapping different classes of day sailors to facilitate their racing together. Portsmouth numbers were assigned on the basis of observed performance. Similarly, the Pacific Handicap Racing Fleet assigned handicaps to classes of cruising boats based on observations of actual performance, instead of operating on measurement or design information. They made supplemental use of the same measurements when performance data was not available, but not in a rating formula. The system was inexpensive, easy to administer, and produced ratings quickly. The method of rating yachts became popular and spread to other parts of the country, where "Pacific" in Pacific Handicap Racing Fleet was changed to "Performance" to become Performance Handicap Racing Fleet, which we now know to be PHRF.

PHRF is a locally administered handicapping system that uses the perceived speed potential of a yacht as the basis for the handicap. An initial handicap is assigned based on comparisons with similar yachts. The handicap may then be adjusted based on the performance of the class of the yacht. In most fleets there is no credit for lack of sailing skill or boat preparation. The handicap is based on the yacht being sailed by a top notch crew with the best equipment. The PHRF system handicaps yachts, not sailors.

PERFORMANCE HANDICAPS

Performance handicaps are not measurement ratings. Each reflects an estimate of a sailboat's speed potential of a boat determined as far as possible on knowledge of previous racing experience supported by a consensus of the effect of differential hull and rig parameters. Performance handicaps are arrived at through an empirical process based upon observation and analysis of race results. It is the intent of the performance handicapping process to produce a relative measure of speed such that any well maintained and well sailed boat has a good chance of winning a race. Therefore, performance handicaps are adjusted on the basis of a boat's performance so that each well sailed boat has an equivalent opportunity to win. This is the fundamental concept of performance handicapping monohull racing/cruising sailboats.

Performance handicaps are not intended to reflect skipper and crew capability. Handicaps are not adjusted to encourage a poor or careless skipper, and conversely no handicap adjustment is made to penalize proficiency. The intensity of competition and the influx of new and aggressive sailors require each skipper to maintain consistently high performance in order to place. For SBCC sanctioned races monohulls and multihulls may not race competitively against one another.

Performance handicaps are assigned locally or regionally by a Performance Handicap Racing Fleet (PHRF®). Each local or regional PHRF® organization issues and validates handicap certificates according to the rule and ASSOCIATED regulations described in this document. Some PHRF® organizations may also sponsor and manage races, but this is not a requirement for a certificate issuing body. The SBCC provides handicapping data and certificates for all its races and provides handicaps for its members and invited boats if requested. The SBCC will also publish this data on its website under the Racing section (www.sbccsail.org) where able and to US Sailing to publish in its PHRF Handbook (www.ussailing.org).

THE PHRF RULE AND MONOHULL AND MULTIHULL BOAT DESIGNS

The PHRF® is an open rule. There are few national hull or sail restrictions other than those consistent with standards of safety for offshore monohulls. **For the SBCC, unless specifically exempt, all competing monohulls must be self-righting and conform to the basic US Coast Requirements concerning safety.** There are no other fundamental limitations on ingenuity other than those contained in the US SAILING rules or prohibited by the SBCC PHRF Regulations. Class restrictions may be applied locally but are not a matter for national policy.

Well designed and constructed boats are expected not to be made obsolete by newer designs under PHRF®. PHRF® does not use measurement to determine base handicaps. 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.

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 are compensated for by the rating assigned.

IS PHRF REALLY FAIR?

This is the bottom line question and the answer is yes or no, depending on your particular philosophy, "Yes" if you can afford or wish to spend enough money to equip your boat as well as the best in the fleet, and "no" if you are racing with equipment that is not as up to date or extensive as your competition and expect to beat them on a one to one basis. As well, in common with every other rating system, *PHRF makes no allowance for an individual's racing ability.*

EQUIPMENT

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).

BASE PERFORMANCE HANDICAPS FOR MONOHULLS

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. ***In the South Bay Cruising Club, monohulls and multihulls cannot be scored in the same division. If needed, another class will be provided, and will follow the same guidelines as the monohulls.*** PHRF® time allowances are not related to other systems. PHRF® base handicaps are made on the assumption that:

- The spinnaker pole length is equal to **J**,
- The spinnaker maximum width is 180% of **SPL**,
- The spinnaker maximum length is equal to $(.95\sqrt{J^2+I^2})$
- The Genoa LP is between 150% and 155% of **J** (unless the stock boat configuration is with a different size jib. See section J),
- The number of battens and the length of the battens are restricted by class rules or as permitted by PHRF® fleet rules,
- The boat is in racing condition
- The boat has a folding or feathering propeller, or a two bladed solid propeller in an aperture or a retractable outboard motor, and/or removable outboard secured below on the centerline and not moved while racing.
- The hull and appendages are unmodified.

CHANGES TO DESIGN OR EQUIPMENT

A skipper may experiment with different ways of improving the performance of his boat. 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 and not reported; other contestants are urged to file an appeal to the SBCC handicapper for inspection. These changes must be reported on the bottom of the SBCC Handicap form by the owner and will be evaluated on a case by case basis if needed by the Handicap Committee. These changes must be permanent for the racing season and can only be changed once a year. i.e. changing headsail size for rating purposes, furling systems, folding/2-3 blade props or any other sec/mile adjustment item listed in this document. Each owner should renew its SBCC PHRF Certificate every 2 years to keep the SBCC database current or when requested by the Handicap or Regatta Chair.

EXPRESSING HANDICAPS

The handicap of an individual boat is expressed in seconds per nautical mile. The smallest increment of performance normally used for rating is 3 sec/mi. Observations of numerous races show that it is impossible to spot a boats potential speed or performance more accurately than this because of the multiple factors involved. Differences in skipper and crew skill represent a much larger factor than 3 sec/mi.

Because headsail size has so much to do with boat speed, SBCC PHRF® uses this factor as a means of handicapping. Boats are rated for use with large or small headsails with less than 155% of LP being the dividing line (see section J for exceptions). 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. Maintaining the proper LP on file will be done by a bi- annual declaration of LP certificate by filing an adjusted SBCC Handicap Certificate, therefore renewing and updating the yachts existing SBCC PHRF certificate on file.

HANDICAPPING PROCEDURE

A new boat in an established class is given the regional base rating for the class if available. 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 and the reason for the adjustment. Sometimes these adjustments may be provisional and subject to constant review.

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 appropriately and monitored through results and observations, and is adjusted as performance data becomes available. These ratings will be maintained by the SBCC

Handicap and Measurement Chairman and Committee and adjusted as needed. Reviews and monitoring will be frequent and can be initiated by appeal or request by SBCC members.

PHRF SBCC utilizes a valid computer scoring program providing 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 may be raised or lowered as required for fair racing. However, winning or losing races does not automatically lead to an adjustment of the handicap.

SBCC SCORING INFORMATION

SBCC races will be scored using the Time on Distance method. A boat's corrected time will be based on its assigned handicap and the distance of the measured course. The boat with the lowest corrected time is the winner. When races involved with Spin and Non Spin classes or dual scoring, as in the case of awarding one of the many SBCC Perpetual Trophies, there will be a handicap adjustment applied. The adjustment will be based on reported windspeeds, and applied to the Spinnaker boat as follows:

Less than 10 knots of avg windspeed	30 sec/mile Reduction in Handicap
10 to 19 knots of avg windspeed	24 sec/mile Reduction in Handicap
20 Knots or greater avg windspeed	18 sec/mile Reduction in Handicap

Race Committees are urged to provide a race that promotes fair sailing under the SBCC PHRF Program. Guidelines that have been established by the club members and available online and often discussed at Skippers Meetings. It cannot be emphasized enough that the success of our sailing program, rating system, scoring program, and handicaps are based on standardized measured courses, windward/leeward courses with minimal reaching whenever possible, and no dangerous downwind starts. If conditions vary from the normal expected standards, it should be noted and the outcome reviewed.

APPEALS

Formal appeals of ratings are made to the local Board of Handicappers (SBCC Handicap Committee) 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 valid supporting information. When the appellant is not satisfied with the resolution of the appeal, a national appeal may be invoked when both the local fleet and appellant agree to abide by the national appeal procedure much like a protest appeal and information for that would be supplied by the Handicap Chairman or delegate.

ADJUSTMENTS

The following are adjustments that the South Bay Cruising Club (SBCC) normally makes to a base boat for non standard equipment. The base boat is assumed to be in as-built configuration with:

- A genoa LP between 1.46 to 1.55 times J
- A spinnaker/whisker pole length equal to ***J and marked clearly to J when deployed***
- A spinnaker width equal to 1.80 times J ,
- A spinnaker height equal to .95 times the square root of I squared plus J squared
- Either a folding or feathering propeller on an exposed shaft, or a two bladed solid propeller in an aperture, or a removable/retractable (tilting) outboard motor.

Sport boats will be handicapped in the configuration as built by the manufacturer and handicapped with standard class sails defined by their governing authority. Variations from the class standard will have a handicap adjustment on a case by case basis.

"WHAT IS A "STANDARD BOAT"?"

A standard boat is basically an unmodified boat with PHRF "standard equipment" (defined later). It is possible however, that a boat may not be considered "standard" even if it hasn't been modified. What can happen is that the first boat rated becomes the standard by default and subsequent boats, even if completely unmodified, may be slightly different and therefore not considered "standard".

For example, later built boats might have improvements that change the rig or hull. It's common to have a variety of mast heights for a single type of boat over five or ten years of production. If the later boats still fit in within acceptable tolerances they may be considered standard, but if a significant change occurs, a new class category is generally initiated. We have had, for example, two versions of C&C 25s, C&C 30s, C&C 29s, three types of Catalina 30s, and countless varieties of O'Days, Hunters, and Morgans, many with vague descriptions. Unfortunately, manufacturers do not generally publicize these manufacturing changes, so PHRF Handicappers must be aware of variants as published by US Sailing or individual manufacturers, so measurements to keep the "standard boat" is up to date, or when a new model variant should be created, or to identify the correct boat is handicapped fairly. These models are published by US Sailing when discovered and how to determine which models are described.

A modified boat is a standard boat that has been changed in some way that might affect its performance. Some boat "modifications" are ignored by SBCC PHRF while some require that a rating change be considered. If there is some clarifications or evaluations needed, please contact the Handicap Chair, Committee member or Regatta Chair for advice.

Some (not all) of the modifications which must be considered are:

- Modification to the shape, construction material or placement of the hull, mast, keel, or rudder.
- Changes to the sailplan. This includes larger sails and bigger spars.
- Structural changes that affect boat height or weight distribution
- Changes in mechanical propulsion.(Changes from gas engine to diesel or inboard to outboard)
- Spinnaker Poles exceeding J dimension

Boat modifications (not all) that are generally not considered are:

- Head-foil systems.
- Fairing and smoothing of the bottom (Extreme fairing may be considered if it alters the keel/rudder profiles from the normal configuration).
- Addition of sail handling gear such as winches (size and type), blocks, line material, sail track, or genoa tracks.

- Additional sails no bigger than the maximum standard.
- Sail material such as Mylar, Kevlar, Dacron, etc.
- Cosmetic changes to the hull, interior, or rigging of the boat not affecting the speed of the boat.

IF THE BOAT DIFFERS FROM THE BASE BOAT, THESE ADJUSTMENTS APPLY -

A. Headsails

Adjustment is based on the largest jib and is determined by the **LP/J** ratio stated as a percentage (See section J for exceptions) - This table is based upon boats that are designed for a nominal 155% LP: Boats that come standard with a standard jib as base and reflected in its standard handicap are not eligible for adjustment credit and may be penalized if a larger sail than standard is used This will be determined by the handicap committee on a case by case basis. *(For example, most Hunter sailboats cannot fly a larger sail than the factory supplied due to its sailplan/deck layout and spreader width. Its base handicap would reflect the standard jib as 0 and no adjustment for size applied).*

LP / J % Adjustment Code

- >176 - 185% -9 sec.
- >166 - 175% -6 sec.
- >156 - 165% -3 sec
- >146- 155% +0 sec.
- >136 - 145% +3 sec.
- >126- 135% +6 sec.
- >116- 125% +9 sec
- >106 - 115% +12 sec.
- >105 and less +15 sec.

*NOTE: No headsails may be set to extend aft of the **LP** line used to establish the handicap.*

B. Spinnakers

Adjustment is normally based on the largest spinnaker and determined by the **SMW/J** ratio stated as a percentage.

SPIN % Adjustment Code

- 228.1% and higher -12 sec/mi
- 213.1-228.0% -9 sec/mi
- 198.1-213.0% -6 sec/mi
- 180.1-198.0% -3 sec/mi
- 168.1-180.0% 0 sec/mi
- Asymmetrical 0 sec/mi (if properly approved and reported)
- No spinnaker 0 sec/mi

*NOTE: If the spinnaker pole (SPL) is greater than **J**, then the SPIN % is equal to **SMW / J** or 1.80 times **SPL / J**, whichever is greater. Spinnaker poles exceeding **J** are subject to penalty corresponding to LP penalty. Asymmetrical Spinnakers may be used as spinnakers without penalty providing the following conditions are met and they otherwise meet the existing standards for spinnakers. Sails not complying with these conditions may in some cases be permitted with appropriate penalties if:*

1. The average of the lengths of the luff and leech do not exceed the luff length permitted for a standard spinnaker (95% of the square root of I squared plus J squared).
2. The girth at any height in the sail, found by measuring between points on the luff and leech that are equidistant from the head, does not exceed the girth permitted for a standard spinnaker (1.80 x **J**).
3. The point at which the sail is tacked is not at a greater distance from the mast than the value reported for SPL on the certificate.
4. The SBCC PHRF Committee is notified that such a sail is being used.

C. Mast and or Boom –

The effect on performance of changes from standard rig dimensions varies from boat to boat to so great an extent that no rational table of rating changes based on rig size can be formulated. Accordingly, these changes are treated on a case by case basis. If your boat is one of a class and your rig differs from the standard for that class, you must notify the Committee of that fact. If you have a custom boat and your rig is changed from that described on your rating application, you must notify the Committee of the changes. A "change" refers not only to length, but also to material, weight, wire size, number of spreaders, diameter, etc. These changes will be reflected in the MISC area of the Handicap Certificate.

Both I and E increased Adjustment

• Standard Rig	0
• 0.5% to 3%	-3
• 3.01% to 5%	-6
• 5.01% to 7%	-9
• 7.01% to 9%	-12
• 9.01% to 11%	-15
• 11.01% to 13%	-18
• 13.01% to 15%	-21

Increase in Boom Length Adjustment

• Standard Boom	0
• 0.5% to 10%	-3
• 10.01% to 20%	-6

It is intended not to give credit for minor reductions in sail area. However boats designed with both conventional and RF Main rigs need to be evaluated carefully. Credit will not be given unless a significant reduction is made or not compensated for. An example would be that you would have to reduce the boom length (mainsail foot) by at least 5% to get a credit. The value will be decided on a case by case basis.

D. Propulsion -

Prop Installation Adjustment

• Folding/Feathering Out of Aperture	0
• Fixed 2-Blade In Aperture	0
• Outboard Retracted When Racing	0
• Outboard Not Retracted	+12
• Fixed 2-Blade Out of Aperture	+6
• Fixed 3-Blade In Aperture	+6
• Fixed 3-Blade Out of Aperture	+12
• Non-Standard As estimated by handicapper.	NS

E. Crew Weight -

Added crew weight is a huge advantage upwind when the wind is up. The intent of SBCC is to encourage fair participation in racing and cruising and due to this major performance gain the SBCC PHRF Handicap Committee established crew weight limits. (Consistent with practices used by other clubs and the SBCC's previous rules). *The intent of the weight limit is to maintain consistent fair sailing principles and sportsmanship between competing yachts, by having a general rule which limits the number of crew (including skipper) as set forth in the table below, but also provide the flexibility to exceed the crew limit so long as the total maximum weight (excluding crew under the age of 15) does not exceed the applicable amounts set forth in the table listed below. Note - the maximum crew weight limitation only applies in a particular race if the number of crew (including the skipper) as set forth in the table below is exceeded. Crewmembers under 15 yrs old do not count in crew weight calculation. This is an added incentive to promote Junior Sailing programs in our area. The Regatta Chairman reserves the right to waive the weight limit in a single race/series if the need becomes apparent or requested on a case by case basis. This in no way changes the intent of the weight limit rule, but may be a tool to allow more sailors to participate due to seasonal circumstances.*

Up to and including Base Weight # of (195 lb.)

LOA(ft)	Limit (lbs)	Crew Members
• 22-25	975	5
• 26-29	1170	6
• 30-33	1365	7
• 34-37	1560	8
• 38-41	1755	9
• 42-45	1950	10

LOA shall be mathematically rounded to the nearest whole number. For example, a 25.49 foot boat is rounded to 25 feet LOA and is allowed a base crew weight of 975 lbs, and a 25.50 foot boat is rounded to 26 feet LOA and allowed a base crew weight of 1170 lbs.

The base weight limit is for everyone aboard, including the skipper. The base weight limit will be printed on the PHRF Certificate. Once per calendar year, the crew weight may be declared to be more or less than the base crew weight, with an evaluation in the rating on a case by case basis by the handicap committee.

F. Roller Furling Adjustment -

Limited sail inventory on jib roller furling system. The boat must have a working roller furling system with the sail tack and head attached to swivels and above deck drum are required. The largest headsail must be flown from the roller furler. If the drum is below deck, the credit will be halved. Boats that come with built in roller furling, as in many sport boats, are not eligible for this credit. In cases where the intent of this adjustment is not honored, the credit will be denied. The credit may also be reduced on performance oriented boats to 3 seconds per mile. *As a rule of thumb, the foot skirt should not exceed 3 percent of the foot length in depth.* If the boat is cutter rigged, the staysail must also be roller furling and be capable of being used upwind. This is noted in the MISC adjustment column

- Below deck w/UV Cover any type +3 sec/mi adjustment.
- Above deck w/heavy weight UV Cover +9 sec/mi adjustment.
- Above deck w/lightweight UV Cover +6 sec/mi adjustment

G. Roller Furling in Mast/Boom Main Adjustment

- Boats equipped with RF Main as option +12 sec/mi
- Main with vertical battens or positive roach +6 sec/mi
- Main with battens or extra large roach +3 sec/mi
- In boom furling with battens (review by Handicap Committee)

H. Hull/Ballast Changes/Interior Modifications/Shoal Draft Version of STANDARD

RATED boat not already handicapped or listed-

On a case by case basis it will be assumed that the modification was made to improve speed. Contact the SBCC measurer if you feel your rating should be modified.

I. Asymmetrical Spinnakers

- If part of standard boat configuration 0 sec/mi
- In addition to a symmetrical spinnaker 0 sec/mi
- Top down furling system 0 sec/mi
- If only spinnaker on boat and flown from bow without pole or sprit (May be attached to headstay or Jib tack fitting. This credit is **lost** if a spinnaker pole is carried on board.) +9 sec/mi

If a fixed or removable sprit is added to conventional boat the following criteria apply, and are recorded on the boats handicap certificate. For asymmetrical spinnakers only:

- **SL** = average of **SLU** and **SLE** (Does not apply to boats where this spinnaker is standard).
- Maximum width = $1.80 \times \mathbf{JC}$ (Does not apply to boats where this spinnaker is standard. Sport boats are handicapped with the largest class spinnaker.
- Minimum mid girth, mid leech to closest luff point = $.75 \times \text{max width}$
- Boats that have an asymmetric spinnaker as standard will be handicapped in the class configuration. Variations from the class standard will have a handicap adjustment.

The following shall be reported for asymmetrical spinnakers:

- How the sail will be attached to the boat (i.e., centerline tacked on bow, on fixed sprit, on articulating sprit, pole, etc.) If a boat has multiple asymmetric spinnakers that are attached in different manners, the largest of each must be reported separately.
- The luff, leech, and foot dimensions.
 - The area of the sail as measured using the IACC formula. **A. Area = $((\mathbf{SLU} + \mathbf{SLE}) * (0.25 * \mathbf{SF})) + ((\mathbf{SMG} - 0.5 * \mathbf{SF}) * ((\mathbf{SLU} + \mathbf{SLE})/3))$** The average of the lengths of the luff and leech do not exceed the luff length permitted for a standard spinnaker. $(.95\sqrt{(I2+JC2)})$
 - The foot (SF) does not exceed $1.80 \times \mathbf{JC}$.
 - The point at which the sail is tacked is not at a greater distance from the mast than the value reported for SPL on the certificate.

One design boats with their standard asymmetric spinnaker, and other boats that come standard with a sprit, will have such reflected in their base ratings and not subject to additional penalty. The Committee will consider the need for an adjustment for all other boats on a case-by case basis. In evaluating adjustments, the goal of the committee will be to presume that in order for identical hulls each with different asymmetric spinnaker configurations (fixed sprit, articulating sprit, centerline, pole) to all go the same speed (averaged across a variety of wind strengths and angles), the sail area of the more efficient configurations will have to be reduced compared to that of the standard symmetric configuration.

Asymmetric spinnakers flown on a bowsprit not standard to the boat that meet the following conditions will be considered as standard and not subject to penalty when properly tacked to the end of a non articulating spar. This has been evaluated at length and appears to be equal in overall performance. However, during any race if a boat that has both a symmetrical and asymmetrical spinnaker in its inventory and reported on its certificate, can only fly that type of sail design for the entire race. No switching of sail type during the race is permitted, even if the sail is damaged. Boats that have both a bowsprit and standard spinnaker pole cannot fly the spinnaker off its spinnaker pole unless tacked to the deck and SMG is 1.80 of J or less. (Cannot fly a TPS rated spinnaker on a spinnaker pole or anything that articulates)

- When tacked to bowsprit on centerline (**TPS**): The average of the lengths of the luff and leech do not **exceed $1.24 \sqrt{(I2+TPS2)}$** .
- SMG does not exceed $1.80 \times \mathbf{TPS}$.
- The foot (SF) does not exceed $1.75 \times \mathbf{TPS}$.
- TPS does not exceed $1.24 \times \mathbf{J}$.

J. PERFORMANCE BOATS

Defining just what a performance boat can be challenging. Sport boats usually have the following characteristics, among others:

- Displacement-Length Ratio less than 100
- Upwind Sail Area-Displacement Ratio greater than 40
- Downwind Sail Area-Displacement Ratio greater than 75

The above criteria are guidelines. There can be exceptions, one way or the other, from these criteria. The bottom line is that if it looks like a duck and quacks like a duck, it might be a duck. Sport boats may not follow many of the guidelines used to handicap boats and therefore sport boats are handicapped in their "as presented" configuration, whatever it is. Their handicaps reflect the type boat they are and need no further corrections to their handicap and are generally handicapped through experience and observation. Ratings include spinnaker and jib sizes as well as mainsail girths that are standard to their class. The base handicaps will be with the class spinnaker, with the exception of the J-80 where the "jumbo" spinnaker is considered the base spinnaker and working jib base headsail. If a change is made in this configuration, it must be reported to the Handicap Chair.

K. SAIL MEASUREMENT LIMITATIONS AND RATING CERTIFICATE FILINGS -

The ratings assigned by the PHRF Committee assume that sail dimensions and Hull information not specifically stated on the certificate conform either to the yacht's class or to limitations that have long been standard in all measurement rules. Any departure from these limitations amounts to a change from the standard or norm. Therefore, notice of the departure must be given to the Committee. Omissions will result in a default listing of standard specifications and may not reflect your yacht's rating adequately. In the case of yachts not belonging to a one-design class, attention is specifically directed to the following:

- Mainsail headboards may not exceed in width the greater of 6 inches or 4% of **E**.
- Mainsails and mizzens may have no more than four battens, approximately evenly spaced along the leech. The top batten may not exceed 10% of **E** plus one foot, or 21% of **E**, whichever is greater. The bottom batten may not exceed 10% of **E** plus one foot, or 25% of **E**, whichever is greater. The middle battens may not exceed 12% of **E** plus one foot, or 34% of **E**, whichever is greater.
- Mainsails with full battens are allowed without penalty if the roach of the mainsail has not been increased from the roach of a mainsail with battens as described in paragraph above.
- The **SL** may not exceed 95% of the square root of the sum of **I** squared plus **JC** squared.
- A sail may not be measured or used as a spinnaker unless its mid-girth is at least equal to 75% of its foot length.
- A sail may not be measured or used as a jib unless its mid-girth does not exceed 50% of its foot length, and the length of any intermediate girth does not exceed a value similarly proportionate to its distance from the head of the sail.

L. NON SPINNAKER LIMITATIONS -

Jib Limitations: Non-spinnaker racing is defined, for this purpose, as prohibiting the use of any headsail whose mid-girth (mid-luff to mid-leech) measurement is more than 50% of its foot measurement. Except when changing headsails (which while doing so, must be done rapidly and both sails on the same side), participating yachts may not fly more than one headsail at a time. (Yachts that are permanently cutter rigged may fly their staysails.) In either SPIN or NON Spinnaker races, at no time can a headsail be flown with a boom, outrigger, spinnaker pole, arm/body appendage, unmarked whisker pole that exceeds the boats **J** dimension. Doing so can be grounds for protest and rating re-evaluation. See your handicap certificate to determine your proper length.

M. 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 in a way that improves the speed potential has an obligation to notify the handicap committee.

N. OWNERS OBLIGATION TO DISCLOSE ALTERATIONS -

SBCC PHRF ratings are based on information supplied to the SBCC PHRF Committee by the boat owner. This is done through bi-annual filing of the Handicap forms or whenever a modification to the boat or ownership occurs. The success of the program is entirely dependent upon the integrity of the participants. In signing an application for a rating, or for the renewal of a rating, the owner attests to the accuracy of the information supplied. Any subsequent changes in the boat or alterations in that information must be reported to the Committee.

Changes to the Handicap Information, Rating Systems and Scoring Programs will be published as needed, and may change as required to continuously maintain fair and equitable racing and the needs of our members. Updates will be published in the Masthead, on the SBCC website, as well as current handicap lists. Any questions should be directed to the Handicap Chairman or the Regatta Chairman for review.

O. CRUISING BOATS THAT RACE (WHITE FLEET)

In order to promote better and fair sailing for boats that do not normally race, a "white fleet" has been established to better handicap sailing between yachts. Strict rules that were once in effect have been streamlined or eliminated to allow anyone not familiar or properly equipped to race to sail together. It is assumed that those in this fleet are novices to racing or their yacht is provisioned with "Cruising Gear", and that all these boats would be equal in equipment, sail inventory and experience. No spinnakers or light air sails of any type can be used. To make sailing in this fleet straightforward, all boats intending to sail in this division or requesting to sail in this division will be automatically applied the average handicap listed by US Sailing's PHRF table by the handicap chairman and scorer. When needed, a special start in the regular SBCC sailing program will be provided.

P. PROVISIONAL HANDICAP

A provisional handicap can be applied for by the skipper of any boat that has not placed in a race according to SBCC club rules in the last 2 years. The adjustment will be 6-12 sec/mi on a conditional basis. Upon placing in any race the provisional handicap will be reviewed and possibly removed. The designation for a provisional handicap is noted on the handicap under PROVISIONAL and will be granted by request to the committee or as felt necessary by the handicap chairman, Race Scorer or Regatta Chairman. The committee will review any changes.