

## **Handicap Adjustments**

The following are adjustments that PHRF NE normally makes to a base boat for non-standard equipment.

### **Base Boat**

Definition of a Base Boat:

- Will include all specifications per the manufacturer, including:
  - A genoa not to exceed 155% (unless a small jib is standard)
  - Spinnaker/whisker pole not to exceed the length of J.
  - Spinnaker mid girth not to exceed 1.8 X J.
  - Spinnaker hoist to be per manufacturers specifications.
  - Propeller capable of driving the boat at a minimum of the square root of the waterline length in knots.
    - Folding or feathering with exposed shaft or sail drive
    - 2 blade solid if prop is in aperture
    - Outboard
  - IMS sail definitions apply, unless boat is custom, one design or the manufacturer specifies different.

The following is a list of adjustments that will be made to a boat's base rating for variations to the Base Boat.

### **Auxiliary Power**

### **Adjust (SPM)**

- |   |     |
|---|-----|
| • Exposed shaft                                     |     |
| ○ 2 blade solid prop                                | +6  |
| ○ 3 blade solid prop                                | +9  |
| ○ 4 blade solid prop                                | +12 |
| • In aperture                                       |     |
| ○ 3 blade solid prop                                | +3  |
| ○ 4 blade solid prop                                | +6  |
| ○ 2 blade feathering or folding prop                | -3  |
| ○ 3 blade feathering or folding prop                | 0   |
| • Outboard fixed in down position                   | +6  |
| • Inboard w/shaft & folding prop replacing outboard | +6  |
| • Inboard w/exposed shaft in place of outboard      | -6  |
| • Bow thruster, not retracting                      | +3  |

### **LP Adjustment (updated May 4, 2020)**

- |  |    |
|--|----|
| • LP of genoa                                    |    |
| ○ 155.1 - 160%                                   | -3 |
| ○ Every additional 10% increase                  | -3 |
| ○ Self tacking jib system non-standard equipment | +3 |
| ○ For reduction in %LP:                          |    |
| ▪ 155%- 135.1%                                   | 0  |
| ▪ 135%- 115.1%                                   | +3 |
| ▪ 115%- 95.1%                                    | +3 |
| ▪ 95%- 75.1%                                     | +3 |

**Bloopers are considered headsails**

**Spinnaker Adjustments**

- Pole length (JC) and/or spinnaker mid-girth exceeds STD -3 per 10% increase
- Spinnaker halyard (ISP) greater than STD boat -3 per 8% increase
- Boat with Symmetrical & Asymmetrical spinnaker -3

**Increase in Rig Measurements**

**Adjust (SPM)**

- Both I and P increased
  - 0.1 - 3% -3
  - Every 2% additional -3
- Only P increased
  - 0.1 to 6% -3
  - Every additional 6% -3
- Only I increased
  - 0.1 to 5% -3
  - Every additional 5% -3
- Boom length increased
  - 0.1% to 10% -3
  - Every additional 10% -3

**Reduction in Rig Measurements I, J, P or E**

- 0 to 5% 0
- 5 to 10% +3
- Every additional 5% +3
- For every 5% reduction in mainsail area +3

**Carbon Rig Adjustment Replacing Aluminum Rig**

- Boats 40 feet and less -3
- Boats over 40 feet -6

**Non STD Standing Rigging**

- Rod instead of wire -1
- PBO, carbon etc. -2
- Backstays are excluded from this adjustment.

**Furling Mainsail Systems Not STD**

- With no battens +6
- With battens +3

**Hull/Ballast Changes**

- Addition or removal of 0.1% to 10% -3
- Every additional 10% -3

**STD Interior Fixtures Removed**

-3

**Square Headed Mainsails**

- 0.1% to 3% increase in sail area -3
- Every additional 3% increase -3

**Keel, Rudder and Hull modifications**

- Drawings and photographs will be sent to the committee for review and rating adjustment.

**Recreational Adjustment**

+6 spm

- Requirements
  - Limited sail inventory
  - Above or below deck jib roller furling with sail attached to a swivel
  - Polyester, pentex or Mylar only in working sails
  - No exotic sail materials such as Kevlar, spectra, technora, carbon
  - No vectran and/or modulus material can be used or added to sail material
  - Maximum of:
    - One nylon spinnaker
    - One jib with  $L_p > 110\%$
    - One jib with  $L_p \leq 110\%$
  - Heavy weather jibs and storm sails are allowed.
  - Staysails are allowed if the boat has a true cutter rig and the staysail is used upwind.
  - Staysails are allowed if they are only used as part of the heavy weather/storm sail configuration.
- In cases where the intent of this adjustment is not honored, the credit will be denied
- The credit may also be reduced on performance boats to 3 spm.
- Special roller furling sails are not allowed
- As a rule of thumb, the foot skirt should not exceed 3% 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
- J Boats with sprits are not eligible for the recreational handicap as the standard configuration has already been considered when establishing the base handicap

**Cruising Handicap: (updated March 26, 2019)**

- No free flying sails (includes no mizzen staysails of any kind)
- Rig type
 

	Adjust from <u>Racing Handicap</u>
○ Normal masthead rig	+12 spm
○ Fractional rig 15/16 or more	+12
○ Fractional rig 7/8 to 15/16	+9
○ Fractional rig less than 7/8s	+6
- If boat has a centerline asymmetrical spinnaker credit, this credit

will not be taken into account when determining the cruising handicap.

- A staysail is allowed on a normal cutter rig. The cutter rig staysail **must** be used upwind.
- As only one headsail at a time may be flown by a sloop, a staysail shall not be flown by a sloop.

**Removing Roller Furling Equipment**

- If roller furling is STD and part or all is removed or if non-roller furling sails are used -3

	<u>Asym tacked to</u>			
	<u>Bow</u>	<u>10% Sprit</u>	<u>20% Sprit</u>	<u>30% Sprit</u>
Adjust. (SPM)	+6	+3	0	-3

**Asymmetrical Spinnaker: (updated November 3, 2018)**

Asym spinnaker configuration:

- Part of the standard boat
  - Sprit = sprit length= distance between the forestay at the deck and the spinnaker tack
  - A physical sprit may or may not be present
- Max. spinnaker width:
  - Measured at the mid-girth, the maximum is  $1.8 \times J + \text{sprit (JC)}$ .
  - If wider than the maximum, there will be an additional charge
  - No credit for an undersized spinnaker width (mid-girth)
- Minimum spinnaker width, measured at the mid-girth (mid-point of leech to mid-point of luff), is  $.75 \times \text{max width}$ .
- Boats that have an asym spinnaker as standard will be handicapped in the class configuration.
  - Variations from the class standard will have a handicap adjustment.
  - In general, credits are intended to assist true cruising boats.
- Race boats may not get the full 6 spm credit for asym spinnakers tacked to the bow.
- In many dayboats the base configuration assumes an asym spinnaker tacked to the bow. These boats will not get additional credit.

**Code 0**

- Close reaching/Code 0 spinnakers are designed to fill a hollow in the polar diagram. Since there is no common definition of what a Code 0 spinnaker is, PHRFNE has adopted the term “close reaching spinnaker” for these. These sails are characterized as being made of a laminate or aramid material and have a substantial luff rope for the large luff tensions that these sails require.
- Code 0/close reaching spinnakers are evaluated just like any other spinnaker.
- Code 0/close reaching spinnakers no longer incur a penalty charge.

**Since all modifications cannot possibly be anticipated, other changes will be considered on a case by case basis. Obvious attempts to take advantage of perceived loopholes may result in loss of credit.**

Click [HERE](#) to see a list of modified boats.

### **Sport Boats**

- Some fleets, if enough “sport boats” are available, may want to establish a separate class as these boats are difficult to handicap with more conventional boats. Defining just what is a sport boat is a problem. Sport boats usually have the following characteristics, among others:
  - Displacement-Length ratio less than 100
  - Upwind Sail Area-Displacement ratio greater than 30
  - Downwind Sail Area-Displacement ratio greater than 75
  - Sprit length greater than 50% of J
- The above four 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 do not follow many of the guidelines used to handicap boats. Sport boats are handicapped in their "as presented" configuration, whatever it is. This includes spinnaker and jib sizes as well as mainsail girths. The base handicaps will be with the class spinnaker, with the exception of the J105 and the J130 where the "jumbo" spinnaker is considered the base spinnaker. Note that this is not the J105 One Design handicap. If a change is made in this configuration, it must be reported to the local fleet handicapper.

### **Introduction to Short Handed Handicap Ratings (Added February 3, 2021)**

- The intent is to provide short-handed ratings for disparate boats racing within short-handed only classes. This is not an attempt to equalize fully crewed boats versus short-handed boats.
- Adjustments will be made from the current regular crew PHRFNE certificate.
- The adjustments will reflect:
  - Differences in fully crewed ratings (**SH Rating Adj**)
    - Boats with lower base ratings get less credit
  - Displacement differences (**SH Displacement Adj**)
    - Heavy boats are less reliant on crew weight
  - Ease of handling (**SH Handling Adj**) differences
    - How easy is the boat to sail with two people
- As with all PHRF ratings, the adjustments are subjective and may require modification based on race results.

#### **SH Rating Adj**

	<b><u>Adjustment (SPM)</u></b>
Rating under 100	+12
101 to 200	+18
210 and above	+24

#### **SH Displacement Adj**

Displacement/Length under 100	+9
D/L 101 to 150	+6
D/L 151 to 200	+3
D/L 201 and above	0

**SH Handling Adj**

- Boats perform differently when sailing with only one or two crew on board in lieu of a fully crewed boat.
- Boats are also set up differently making it harder or easier to handle with small crew. Examples include:
  - Harder to handle: Boats with running backstays, genoas, baby stays, winches at the mast, inefficient deck lay outs.
  - Easier to handle: Boats set up for small crews with self-tacking jibs, small std jibs, and all lines led aft to one location.
  - Another variable is how the boat reacts to lack of crew. What is the impact of the loss of crew weight on the rail. Daysailer designed boat tend to suffer less without crew weight on rail.
    - An Alerion 28 with a self-tacking jib system would be an easy boat for 2 to handle with a small loss of speed due to no weight on rail.
    - A Cape Dory Typhoon would be a great double handed boat since the boat is designed for 2 people.
- Sampling of handling adjustments by boat type:

<b><u>Boat Type</u></b>	<b><u>Adjustment (SPM)</u></b>
Alerion 28	+ 3
Barberis Show 34	+12
Beneteau 36.7	+15
Bristol 51.1	+18
C&C 30 MII	+9
C&C 35 MK III	+12
C D Typhoon	-12
Catalina 27	+6
Catalina 34	+9
Ericson 38	+15
Frers 41	+12
Hunter 216	0
J 100	+ 3
J 30	+6
J 35	+9
J 42	+15
J 46	+15
Lindenburg 28	+6
Swan 38	+12
Tripp 47	+15

**Shorthanded Spinnaker Adjust (Spin Adj)**

- The standard spinnaker will be a symmetrical spinnaker with pole not exceeding J measurement and the mid girth not exceeding 1.8 X J.
- An asym tacked to the bow with mid girth not exceeding 1.8 X J will also be considered STD.
  - If a boat's original design or its one design configuration includes a sprit or oversized pole then that will be the STD configuration for that boat.
  - Boats where the asym is **not** STD will be evaluated as follows:

	<u>Asym tacked to:</u>			
	<u>Bow</u>	<u>10% Sprit</u>	<u>20% Sprit</u>	<u>30% Sprit</u>
Adjust (SPM)	0	-3	-6	-9

- Any increases in mid girth-pole length or sprit length vs STD will be -3 seconds per mile penalty for every 10% of increase

**Other Adj**

Self tacking jib -6  
Cruising vs spinnaker differential +12  
No small jib credit  
No recreational allowance  
No asym credit where asym is not STD