

# **PHRF OF E.L.I.**

**THE PERFORMANCE HANDICAP RACING FLEET OF EASTERN LONG ISLAND**  
POST OFFICE BOX 82, NEW SUFFOLK, NEW YORK 11956

April, 2010

Dear Fellow Sailor,

Enclosed with this letter you will find an application form to renew your membership in the Performance Handicap Racing Fleet of Eastern Long Island and receive your 2010 PHRF/ELI handicap rating. Most handicap racing at the club level as well as the handicap racing program coordinated by the Eastern Long Island Yachting Association utilize these ratings. So, if you plan to compete this year, please review the enclosed material, fill out the application blank and return it with your fee as soon as possible. Remember that all rating certificates are only valid for one year and automatically expire on April 30 of the following year. Even if you held a certificate last year, it must be renewed for your rating to be valid for the upcoming season.

In addition to a renewal application form, this letter also contains general information regarding the process by which ratings are generated, the rating appeals process, and the extent of your responsibilities as an owner or master. A summary of the definitions used in the rating process as well as the Rating Adjustment Tables are included on a separate sheet attached to the Rating Application Form.

The full content of this package is also available online and can be downloaded from the ELIYA website, [elisail.org](http://elisail.org). The Rating Application Form can be completed online but it is then necessary to print out a hard copy of the form and mail it, along with the appropriate fee to one of the handicappers listed on the back of the form. In cases where there are severe time constraints, handicappers do have the capability to return completed certificates by e-mail. If you find yourself in such a situation, please include a note with your submission requesting an e-mail return. A hard copy for your records will be mailed subsequently.

## **PHRF OF ELI**

The Performance Handicap Racing Fleet is composed of a group of monohull sailboats of varying performance characteristics that are handicapped for racing on the basis of observed performance rather than measured dimensions. It is the purpose of the PHRF system to handicap yachts of various classes or types on the basis of the potential speed of a well sailed, well maintained, and well equipped specimen of each type.

PHRF of ELI is administered by a Handicap Council composed of local sailors whose names are listed on the back of the Rating Application Form. The Council

meets at 7:30 pm on the second Monday of each month at the New Suffolk School, King and Fifth Streets, New Suffolk to hear appeals and review general regulations and individual ratings. Our goal is to increase the overall effectiveness and fairness of the performance handicapping system. All meetings are open to the public and we encourage your attendance and active participation.

The Council is firmly committed to establishing handicap ratings that are as fair and objective as possible. Ratings are based on demonstrated performance or, in the absence of local race data, the projected performance of a well sailed boat, properly equipped for racing, sailing a circular random course (i.e. all points of sail) in 8 knots of true wind speed. It must be noted, however, that all handicap systems have limits of applicability and, when applied beyond those limits, will begin to yield race results of questionable fairness. By itself, no single rating system can ever compensate for inadequate or inappropriate course selections or division assignments.

### **PHRF OF ELI RATING BASIS**

In order to qualify for a handicap rating from PHRF of ELI, a boat must be a self-righting monohull sailed without the use of a trapeze, hiking boards or any other equipment specifically intended to support a body outboard of the sheerline. Wings that are a permanent and standard component of a boat's design are permitted. For purposes of handicapping, our ratings assume a boat is fully prepared and equipped for competitive racing (i.e. good sail inventory, clean bottom, etc.). Rating credits are not given for inadequate boat preparation nor are credits extended for the carrying of excessive or oversized cruising equipment or gear. Furthermore a boat's rating does not include a factor to account for the experience level of either skipper or crew. We handicap only the boat, assuming it to be sailed competitively.

**Base Boat Ratings** have been established for over 200 popular production models. All boats of a given model start with the same Base Boat Rating. That rating assumes the boat has a standard (unmodified) hull, keel, rudder and rig and is equipped to the degree intended by its manufacturer (such as joiner work, bunks, galley, etc.) A Base Boat is also assumed to carry sails of a particular size and a minimum drag engine/propeller installation. To the extent an individual boat varies from any of these base assumptions, adjustments are applied to the Base Boat Rating to arrive at a specific rating for that boat.

**One Design Ratings (ODR)** are a refinement of Base Boat Ratings and have been established for boats of an organized one design class with published class rules. Boats that hold ODR ratings must carry only class legal sails and equipment. The One Design Rating incorporates any penalties or credits that would otherwise arise from adherence to the class rules.

**Non-Spinnaker Ratings** adjust a boat's base rating to compensate for the expected loss of performance when not flying a spinnaker. Each PHRF/ELI Certificate contains both a base rating and a non-spinnaker rating. Non-spinnaker ratings are intended to be used in races against other boats racing without spinnakers, not in mixed classes where some boats may use them.

The intent of non-spinnaker ratings is that boats sail off the wind with the same sails they use when sailing upwind. Therefore, yawls and ketches may not fly staysails off the wind unless such sails are used sailing upwind. When racing in the non-spinnaker classes, all jibs must be attached along their luff to the forestay.

**Proper Racing Trim** Yachts shall race as rated with at least all the equipment and furnishings supplied as standard by the manufacturer. Production boats with modifications to the standard hull, appendages, rig or interior as well as custom designed boats must be reported to the Handicap Council and will be evaluated on an individual basis.

It is the obligation of the owner or master of any production boat that has been modified to provide details of all changes made to the boat on the rating application. Examples of such changes would include any of the following:

- Keel Modifications (depth, shape, section, material, weight)
- Weight Change (relocation or elimination of bulkheads and joinerwork, reduction of standard equipment, etc.)
- Rudder modifications (type, shape, depth, etc.)
- Hull modifications (other than normal fairing)
- Rig Changes (sail plan changes, rig size, rig material, rigging material, chainplate locations, etc.)

PHRF ratings are based on the information supplied to the Handicap Council by the boat owner. In signing an application for a rating, or for the renewal of a rating, the owner attests to the completeness and accuracy of the information supplied.

## **APPEALS**

The PHRF ratings of all currently active boats are reviewed annually by the Handicap Council and adjusted where appropriate in light of new performance data and additional observation and experience. Additionally any PHRF member can appeal the current rating of any boat (including his own) to have it raised or lowered. Appeals must be submitted in writing and are heard by the Council as soon as possible at a regular monthly meeting. Appeal decisions are voted upon at the meeting in which they were heard and become effective the following

Saturday. Please contact the handicapper serving your local area to guide you through the appeal process.

### **SAIL MEASUREMENT LIMITATIONS**

PHRF/ELI regulations allow the base jib size to vary, generally following the designer's or manufacturer's intent. For boats designed to carry overlapping genoas, the base size is between 148% and 151% of J. For boats designed to carry non-overlapping or one-design sails, the base size is that specified by either the designer or the one-design class.

Jib adjustment credits are derived from a formula that relates a boat's gain (or loss) of driving power from its jib to the ease with which its hull is able to move through the water. Driving power is estimated by means of a modified SA/D ratio. Relative hull resistance is estimated by the D/L and B/L ratios. When multiplied together, these ratios determine a Jib Correction Factor (JCF). A table is then used to convert the JCF into a seconds per mile correction. The complete formula and table are included in Part II of the PHRF Regulations which is attached.

In the case of yachts not sailing with a one-design class rating (ODR), attention is directed to the following sail measurement limitations:

Mainsail headboards may not exceed in width the greater of 6 inches or 4% of E.

Mainsail girth limits are: upper girth (MGU) cannot exceed 38% of E and the mid-girth (MGM) cannot exceed 65% of E. Increases above these limits shall be stated as a percentage. This data can usually be obtained from your sailmaker.

Full batten mainsails are allowed without penalty so long as The roach of the sail has not been increased from the above limits.

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.

Best wishes for a successful and enjoyable season.

THE HANDICAP COUNCIL of PHRF/ELI