

APPLYING FOR A NEW NON-ENDORSED 2018 IRC NEW CERTIFICATE

Completion of an application is required in order to obtain an IRC certificate. The instructions below explain the steps necessary for owners to complete the application for a Non-Endorsed (i.e., not fully measured) IRC certificate.

IMPORTANT ITEMS REGARDING IRC

1. Think metric!

IRC is a metric rule. All data provided on the application must be in meters or kilograms.

- Converting decimal feet to meters: Multiply feet times 0.3048.

-- Dimensions given in feet and inches, such as 12' 4" must be first converted to decimal feet before multiplying by 0.3048.

- Converting pounds to kilograms: Multiply pounds times 0.4536.

2. All IRC applications are Microsoft Excel spreadsheets.

Certificate processing is initiated by importing the data from the spreadsheet into the database. Processing cannot begin without a completed spreadsheet application. While programs other than Excel might be able to open and save data, other programs often are not fully compatible with all the elements used on the IRC application. Please use Microsoft Excel to avoid incomplete applications and possible delays.

3. Owners must read and understand the rule.

Download 2018 IRC Rule from: <http://www.ussailing.org/racing/offshore-big-boats/rating-rules/>

PREPARING TO COMPLETE THE APPLICATION

1. Download the 2018 USA IRC New Application.xls application. Save it to your computer before starting.

- <http://www.ussailing.org/racing/offshore-big-boats/rating-rules/>

2. Gather the pertinent data.

As a measurement rule, IRC requires a lot more data than PHRF in order to produce a rating that reflects the particulars of each boat's configuration.

- Hull Data:

-- The hull does not need to be measured when applying for a Non-Endorsed certificate. Design data, owner measured data, data from the US Sailing Offshore database or RORC's Standard Hull Data can be used. However, owners need to confirm or provide a number of design parameters to ensure the data used is appropriate to their boat. A listing of the boats for which RORC has Stand Hull Data is available at:

<http://www.ircrating.org/technical-a-certification/standard-hull-data>

- Rig Data:

-- The rig does not need to be measured when applying for a Non-Endorsed. However, there is no standard rig data. Design data, owner measured data or possibly data from the US Sailing Offshore database. Again, owners need to confirm or provide a number of design parameters to ensure the data used is appropriate to their boat.

- Sail Data:

-- As sail data is different for every boat and no standardized data is available, sail measurements for all required dimensions must be provided. The best source of sail data is your sailmaker who can provide sail certificates with all the necessary individual sail dimensions.

- Source of Information: Throughout the application wherever an entry is made fill in the adjacent "Source of Information" in Column G.

3. Information and Measurement Resources.

Descriptions, drawings, etc. are available at:

<https://www.ircrating.org/technical-a-certification/>

THE APPLICATION

Don't be intimidated by the application despite its length and detail! Completing the different sections is not difficult. The following describes how to complete each section.

PART 1 - ALL BOATS

1. Boat Information

- Boat name
- Sail number - include "USA" or other prefix.
 - Line 14: Age Date - the year the boat was first launched or the year the hull was modified if this has happened. See the definition of Age Date in the IRC Rule text.
- IRC certificate number if the boat has been rated previously.

2. Design and Standard Hulls

- Line 23:
 - Under "Select Builder/Designer..." select the blank cell and then use the gray down arrow to the right of the cell to scroll through the available selections.
- Line 25:
 - Next, select the blank cell under "Now select boat model/draft..." and then use the gray down arrow to the right of the cell to scroll through the available selections.
 - Be certain to select the proper draft available for your boat model.
 - Draft is to the right of the model description and in meters, e.g., "First 36.7 2.20" or "First 36.7 1.80"
- Line 27:
 - If you want to use the Standard Hull Data available then select "Yes" from the pull down.
 - If you do not want to use the Standard Hull Data or if your design, model or draft is not listed, then leave Lines 23/25 blank and go to Line 32.

If your boat is not listed (or if Standard Hull Data is not to be used)

- Lines 32 through 36: Provide information.
- Line 37: Provide the design Series date if known.

3. Hull and Appendages

If you selected "Yes" to use Standard Hull Data:

- Do not change the LH value at Line 43 or enter any additional data except on Lines 44 and 56.
- Line 53:
 - Internal ballast (or corrector weights) - select "Yes" if installed and enter the weight (in kg).

- Line 55:
 - Draft Max - confirm the boat draft by entering your draft - use design data as a source if needed.

If you selected "No" to using Standard Hull Data or your boat model was not listed then complete all data entries. Use self-measured or design data from your owner's manual, the builder/designer web site or other sites such as

<http://sailboatdata.com/>.

- Click the "Measurement drawings" link on Line 43 for further information.

- Line 43:

- Use design LOA for the LH.

- Lines 44 through 48:

- Overhangs are not typically listed as part of the designer data. These can be estimated by scaling them off a profile drawing. Alternatively they can be owner measured. If unable to find the data then contact the IRC Manager at US Sailing for possible other data sources.

- Line 50:
 - Weight – use manufacturer’s design displacement. If you have an Americap, IMS, ORC or ORR certificate, enter 98% of the rated displacement.
- Line 52:
 - Keel bulb weight is only required for IRC keel types 10 through 12. See the "IRC keels" tab at the bottom of the application. Contact the designer to ensure the correct bulb weight is used.
- Line 60:
 - Answer "Yes" if you race with batteries and/or cushions on board.
- Lines 64 through 74:
 - Make the best selection from the pull down list.
- Line 67:
 - Single fin keel type - see the "IRC Keels" tab at the bottom. Just select the one that is closest in appearance.
- Line 68:
 - Keel fin material - most have surface fairing only regardless of material. Few have composite fairings.
 - See the text of Rule 19.2 on the "IRC keels" tab at the bottom of the application regarding fairing.

4. Rig and Sails

Rig Dimensions

- Use self-measured or design data from your owner's manual, the builder/designer web site or other sites such as <http://sailboatdata.com/>.
- Click the "Measurement drawings" link on Line 85 for further information.
- Lines 87 through 91:
 - P and E are required for all boats.
 - J is required for all except cat boats.
- Line 90:
 - FL - Forestay Length is not typically available from design data. It can be estimated by scaling it off a profile drawing. Also, calculating the hypotenuse of the foretriangle using J and I from design data will provide an acceptable value.
- Line 91:
 - Spinnaker Tack Length (STL) is not usually available from design data. STL often varies quite a bit between boats of the same model. It can be owner measured without much difficulty per the information at the "Measurement drawings" link.
- If unable to find the data then contact the IRC Manager at US Sailing for possible other data sources.

Sail Dimensions

- Sail certificates from your sailmaker are the only acceptable source of data.
- All the individual sail dimensions must be provided in order to process the application.
- Sail certificates are required for:
 - Main sail.
 - Largest area headsail.
 - Foot Offset is only needed if it is greater than $HLP \times 0.075$.
 - Longest luff headsail.
 - Largest area spinnaker.
- Line 107/108: Enter the number of spinnakers carried. Note that the minimum rated number will be 3 if fewer are carried.

Rig Configuration

- Line 118:
 - Spinnaker pole/sprit configuration. This must be answered if spinnakers are used.
- Lines 120 to 123:
 - These pertain to the IRC Single Furling Headsail Allowance. Note - this is nothing like the PHRF roller furler credit. For all the details, please contact the IRC Manager.
 - Bottom line - if you want to be able to use more than one headsail so you can change down from a #1 to a #2 or #3 as the wind builds, you cannot get the allowance.
- Line 125:
 - In-mast furler installed?
- Line 127:
 - Make the best selection from the three pull down lists.
 - Most boats are "bermudian", i.e., a marconi rig, and "sloops".
- Lines 129 through 138:
 - Complete with entries or select from the pull downs.
- Line 133:
 - Spreader sweepback angle - a visual estimate is acceptable.

5. Engine and Propeller

- Line 146:
 - Select the correct configuration entry for Engine Type.
 - Enter the approximate weight of the engine - can be from the engine specifications.
- Line 147:
 - Engine make/model/horsepower.
- Line 148:
 - Select the type and number of propellers.
- Line 150:
 - Lifelines.

6. Changes to Original Specification

- Lines 163 through 169:

PART 2 - the owner is responsible for declaring these features

1. Hull and Appendages

- Lines 164 to 176:
 - Select configuration items/enter data as appropriate.

2. Rig and Sails

- Lines 180 to 183:
 - Enter mizzen rig and sail data.
- Line 185:
 - Stored power. In most cases this refers to the use of electric winches or hydraulic systems with electric pumps. If something is manually powered then it is not the use of stored power. Specifically, hand-pumped hydraulic backstays are not stored power.
- Line 187:
 - Forestay or mast foot adjustment systems. Such systems enable dynamic adjustments while sailing. Most boats do not have these types of systems. This is not referring to the use of turnbuckles or the backstay to adjust the forestay tension.

3. Standard Fitout

- Lines 192 through 197:

-- Some boats that race as one designs have classes rules that permit the removal of door(s) and/or the cabin table. In other cases, some owners want to remove these or similar items for any number of reasons when racing.

-- Indicate if anything has been removed from the standard design layout.

-- Describe changes that have been made. For example: new design/size keel, bulb, rudder; modified transom, or other significant modifications.

PART 3 - ALL BOATS

1. Declaration and Owner Information

All self-explanatory.

- Line 228: Leave as "RORC N. hemisphere".

- Line 229: Select the region where you sail and provide your US Sailing member number.

-- US Sailing membership is required. To join or renew visit: <http://www.ussailing.org/membership/>

CONTACT:

The primary contact for all IRC matters is Eric Baittinger.

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