IRC Congress 2019

IRC Rule Changes for 2020
Proposed by the IRC Technical Committee

Approved by IRC Congress October 2019

A word used as defined by ERS is printed in **bold**.

A word used as defined by IRC Definitions is printed underlined.

Proposed additions are printed in blue.

Proposed deletions are printed in ~~struckthrough red~~.

Effective Date: IRC Rule changes apply from 1st January 2020, except in countries with June-May validity, where changes apply from 1st June 2020. See Rule 8.12

Original Version: 190911

This Version: 191010 post IRC Congress (change to item 7.)
191021 item 4 correction "(c) **Spinnaker pole(s)** and/or whisker pole(s) either with or without a **bowsprit**."

1. RATING CERTIFICATES

Reason for change: IRC rule 8.2 states "a **boat** *racing* under IRC shall hold a current valid IRC certificate". There is an issue between South and North rule authorities in the first half of a year where a valid certificate is a different IRC year in South and North and therefore the boats from each region will not be rated on the same basis if they race together, for example at a regatta in China, where China and Hong Kong boats race together. China is a North IRC Rule Authority and will use 2020 certificates from January 2020, whilst Hong Kong is a South IRC Rule Authority and will use 2019 certificates until the end of May 2020.

It is therefore proposed to amend IRC rule 8.2 to make it clear the certificate shall be valid in the country in which the boat is racing and that it may not hold more than one current IRC rating certificate, except when a new certificate is issued to enable a boat to race in another country with a different certificate year end.

Amend IRC Rule 8.2 as follows:

8.2 ~~Each~~ A **boat** ~~*racing* under IRC~~ shall hold a current ~~valid~~ IRC certificate valid in the country in which it is *racing*. A boat shall not hold more than one valid IRC rating certificate at any time except as permitted by Rules 8.2.1 and 8.2.2.

8.2.1 ……

8.2.2 Issue of any new rating certificate automatically invalidates the old one except when a new certificate is issued to enable a boat to race in another country with a different certificate year end.

Effect: Make it clear that a boat shall hold a valid IRC certificate for the country in which it is racing.

2. RATING CERTIFICATES – SHORT HANDED

Reason for change: IRC rule 8.2.1 states "A **boat** may additionally hold a separate short-handed certificate" and goes on to state "The short-handed certificate will be clearly identified and shall only vary from the primary certificate in respect of, **mainsail widths**, headsail dimensions, single furling headsail allowance, the use of stored power, SPA, STL, **spinnaker pole/bowsprit**, **moveable ballast** and **variable ballast**."

There is the possibility to reduce or increase the number of spinnakers on an IRC certificate and it is appropriate this can also be increased or reduced for an IRC short-handed certificate.

It is therefore proposed to amend IRC rule 8.2.1 to add number of spinnakers in the list of permitted changes for a short-handed certificate.

Amend IRC Rule 8.2.1 as follows:

8.2.1 A **boat** may additionally hold a separate short-handed certificate. This short-handed certificate shall be valid only for racing in classes, or divisions of classes, for no more than 2 **crew**, included in a Notice of Race. When specified in a Notice of Race, **boats** holding short- handed certificates, and *racing* in a short-handed class or division, may also be scored in the overall results of the race. The short-handed certificate will be clearly identified and shall only vary from the primary certificate in respect of, **mainsail widths**, headsail dimensions, single furling headsail allowance, the use of stored power, SPA, STL, **spinnaker pole/bowsprit**, number of spinnakers, **moveable ballast** and **variable ballast**. A **boat** holding a shorthanded certificate shall use that certificate for races for no more than 2 **crew**.

Effect: Allow spinnaker numbers to be varied from the primary certificate to the short-handed certificate.

3. DETACHABLE ITEMS

Reason for change: It has been noticed that IRC Rule 22.1.1 – Detachable items; includes a dispensation for bunk cushions for races requiring compliance for OSR Category 4 only. The rule does not mention the lower category of "inshore racing category". It is proposed to add inshore racing category to IRC Rule 22.2.1.

Amend IRC Rule 22.2.1 as follows:

22.1 Detachable items

22.1.1 Detachable items (such as but not limited to bunk cushions) permitted by Rule 17 to be aboard for measurement shall be carried in their normal positions while racing. For races requiring compliance with OSR Category 4 or Inshore Racing Category only (or local equivalent), a Notice of Race may state that boats rated with bunk cushions on board may remove the bunk cushions. No compensating weight need be carried.

Effect: Make it clear that a Notice of Race for an OSR Category 4 or Inshore Racing Category may state that boats rated with bunk cushions may remove the cushions.

4. WHISKER POLES RULES AND DEFINITION

Reason for change: The use of poles set to leeward to act as struts for the sheeting of headsails is becoming more common, both with boats rated for headsail only & boats rated with spinnakers who can use them provided a spinnaker is not set. The current situation on the legality of this configuration can be summarised by:

IRC Rules do not govern or limit the use of a pole set to leeward to sheet headsails. The use of these poles is governed by the Racing Rules of Sailing RRS 50.3. IRC Rule 21.3.2 states that "All sails shall be set and sheeted in accordance with RRS 50".

The IRC Rating Authority is not in a position to issue an interpretation on the Racing Rule of Sailing and the use of these poles. An interpretation would only be given by World Sailing or an Event Jury following a protest. A World Sailing Q&A has been issued regarding the use of outriggers and whisker poles here: https://www.sailing.org/88944.php

Noting the above, the IRC Technical Committee has reviewed the IRC Rules to identify if the use of these poles should be restricted or rated in the future.

It is when using the RRS definition and operation criteria as a whisker pole that these poles are deemed to be within the rules, using the following criteria:

- The pole is attached to the foremost mast.
- The headsail is sheeted to the pole (There is no definition of "sheeted" but as these poles are not attached to the clew the understanding is that sheeted is the running of the sheet through the end of or a ferrule along the length of the pole)

Based on the lack of clarity provided by the Racing Rules & ERS it is proposed to amend the current IRC Rules to clarify that the current configurations are permitted with an impact to TCC.

Amend IRC Rule 21.3.5 as follows:

21.3.5 **Boats** will be rated according to whether they use a **spinnaker pole**, whisker pole and/or a **bowsprit** according to the following configurations:
(a) No **spinnaker pole** (spinnaker tacked on deck) or a centre line **bowsprit** only.
(b) Articulating **bowsprit** only.
(c) **Spinnaker pole(s)** and/or whisker pole(s) either with or without a **bowsprit**.

Definitions:

Amend the STL definition as follows:

The greatest horizontal distance from the forward face of the **mast spar**, ignoring any fittings and tracks, measured on or near the centreline of the **boat**, to any of the following:
- the extremity of the **spinnaker pole**, whisker pole or **bowsprit**, ignoring any **outer limit marks;**

Add IRC Definition of Whisker Pole as follows:
Whisker Pole A **spar** attached to the mast **spar** to set a **headsail**. ERS F.1.4(d)(ii) does not apply.

Effect: Make it clear current configurations are permitted with an impact to TCC.

5. SAILCLOTH

Reason for change: IRC Rule 21.4 has little effect or impact on the rating and any features which increase sailing efficiency that is not rated through the rated dimensions is accounted for in rig factor. It is therefore proposed to delete IRC Rule 21.4 and add exotic sail materials to the increase in rig factor IRC Rule 21.2.2

Delete IRC Rule 21.4 as follows:

~~21.4 Sailcloth~~

~~21.4.1 Sailcloth containing exotic materials (at present none) will carry an additional rating tax.~~

~~21.4.2 Sailcloth containing exotic materials shall be declared on initial application for rating, revalidation, or when amending a **boat**'s sail inventory.~~

~~21.4.3 Only specific **sails** containing exotic materials which have been declared and noted on a **boat**'s certificate may be used while *racing* under IRC.~~

21.4 deleted for 2020

Amend IRC Rule 21.2.2 as follows:

21.2.2 RF may be increased for: fractional, racing and lightweight rigs, high aspect ratio and efficient plan forms, wing and double luff **sails**, specialised **sail stiffening**, exotic sailcloth materials, large headboards/cranes, permanently bent or highly controllable **spars**, hi-tech rigging, exotic rig materials, advanced winch and deck gear arrangements, flush/efficient deck design, and any other feature which increases sailing efficiency that is not already rated through the rated dimensions.

Effect: Simplification of the IRC rule regarding exotic sail materials.

6. WATER BALLAST AND CANTING KEELS

Reason for change: The current IRC rule 22.3.1 states "A **boat** may request permission from the Rating Authority to use **moveable ballast** and/or **variable ballast**". Hence an owner has no obligation to ask for this permission and therefore it is an unworkable sentence.
The Rating Authority is not a certification notified body and has no competence for calling into question a certification (CE certification for instance) or any other prescription coming from any Flag State.
Our proposition is to amend the Rule 22.3.1 basing this amendment on the competencies that the Rating Authority has the right to invoke.

New Rules 22.3.3 to 22.3.6
Considering the measurements required by the implementation of the new methodology as proposed by the technical committee, the Rule 22.3 is proposed to be amended in order to show clearly the difference between the 3 cases as follow:
- Boat with variable ballast only: the list angle and the maximum volume of water that can be carried on each side of the boat are required (New 22.3.3).
- Boat with moveable ballast only: the list angle is required (New 22.3.4).
- Boat with variable ballast and moveable ballast: the maximum volume of water that can be carried on each side of the boat and the list angle of the moveable ballast with empty variable ballast tanks are required (New 22.3.5).

Amend IRC Rule 22.3 as follows:

22.3 **Moveable Ballast** and **Variable Ballast**

22.3.1 ~~A **boat** may request permission from the Rating Authority to use **moveable ballast** and/or **variable ballast** for the purpose of increasing stability. The Rating Authority will generally only grant permission to **boats** specifically and originally designed to carry **moveable ballast** and/or **variable ballast** and may deny permission without giving any reason.~~ A **boat** may use **moveable ballast** and/or **variable ballast** and any such system shall be permanently installed and shall be declared to the Rating Authority. RRS 51, Moving Ballast, and RRS 52, Manual Power, are modified in respect of **moveable ballast** and/or **variable ballast** systems to the extent required by this class Rule.

22.3.2 There is no limit to the **list angle** with ballast tanks fully filled on one side of the **boat** and/or with **moveable ballast** moved fully to one side. ~~For **boats** with **variable ballast**, the maximum weight of water that can be carried on each side of the **boat** shall be declared. For **boats** with **moveable ballast**, the maximum **list angle** in the **boat weight** condition (see Rule 17) with the ballast moved fully to one side shall be declared. A physical, mechanical limit shall be fitted to **moveable ballast** to prevent it being moved further than the position for the declared **list angle**. Such a system shall not rely on sensors or measurement to prevent the declared **list angle** being exceeded unintentionally.~~

22.3.3 For **boats** with **variable ballast** only, the maximum **list angle** and the maximum volume of water, including plumbing, that can be carried on each side of the **boat** shall be declared.

22.3.4 For **boats** with **moveable ballast** only, the maximum **list angle** in the **boat weight** condition (see Rule 17) shall be declared.

22.3.5 For **boats** with **variable ballast** AND **moveable ballast**, the maximum volume of water, including plumbing, that the **variable ballast** may carry on each side of the **boat** and the maximum **list angle** specific to the **moveable ballast** in the **boat**

weight condition (see Rule 17), with empty **variable ballast** tanks, shall be declared.

22.3.6 A physical, mechanical limit shall be fitted to all **moveable ballast** system to prevent it being moved further than the position for the declared **list angle**. Such a system shall not rely on sensors or measurement to prevent the declared **list angle** being exceeded unintentionally.

22.3.7 For **boats** with **variable ballast** systems that are declared as not used, the system shall be disabled.

Clean version of the proposition (included changes):

22.3 **Moveable Ballast** and **Variable Ballast**

22.3.1 A **boat** may use **moveable ballast** and/or **variable ballast** and any such system shall be permanently installed and shall be declared to the Rating Authority. RRS 51, Moving Ballast, and RRS 52, Manual Power, are modified in respect of **moveable ballast** and/or **variable ballast** systems to the extent required by this class Rule.

22.3.2 There is no limit to the **list angle** with ballast tanks fully filled on one side of the **boat** and/or with **moveable ballast** moved fully to one side.

22.3.3 For **boats** with **variable ballast** only, the maximum **list angle** and the maximum volume of water, including plumbing, that can be carried on each side of the **boat** shall be declared.

22.3.4 For **boats** with **moveable ballast** only, the maximum **list angle** in the **boat weight** condition (see Rule 17) shall be declared.

22.3.5 For **boats** with **variable ballast** AND **moveable ballast**, the maximum volume of water, including plumbing, that the **variable ballast** may carry on each side of the **boat** and the maximum **list angle** specific to the **moveable ballast** in the **boat weight** condition (see Rule 17), with empty **variable ballast** tanks, shall be declared.

22.3.6 A physical, mechanical limit shall be fitted to all **moveable ballast** system to prevent it being moved further than the position for the declared **list angle**. Such a system shall not rely on sensors or measurement to prevent the declared **list angle** being exceeded unintentionally.

22.3.7 For **boats** with **variable ballast** systems that are declared as not used, the system shall be disabled.

Effect: To provide an effective rule framework to rate moveable and variable ballast.

7. BULB WEIGHT DEFINITION – ~~For IRC RULE in 2021~~

Reason for change: There appears to be a trend in some classes to design an overly large keel fin foot to perhaps exploit the IRC bulb weight measurement and definition. It is therefore proposed to amend the IRC definition of bulb weight to include any part of the fin foot up to the bottom of the keel fin. ~~It is proposed to introduce this rule in 2021 to give the designers, boats and industry appropriate notice~~. At IRC Congress in October 2019 it was agreed to implement this change from January 2020.

Amend the definition of Bulb Weight as follows:

Bulb Weight – the weight of the **Bulb** and any part of the **Keel** below the upper surface of the bulb (including connection plates, under-fin spacers and infills)

Effect: Rated bulb weight to include the weight of any fin foot that is inside the bulb.