



RG65 OPEN CLASS RULES
2022 (Draft)
Version 0.9(d)

DRAFT

Introduction

The Intent of the RG65 class is to promote friendly competition in the Corinthian Spirit and innovation in the design and construction of small radio yachts.

In order to achieve this intent the Policy of the RG65 Class is to have a rule set that is sufficiently simple to be understood by novice radio sailing enthusiasts, broad enough to promote innovation and resist type forming, and supported by procedures based on trust in competitors.

The Class Rules for the RG65 Class are “Open” Class Rules where anything not specifically prohibited or specified by the Class Rules is permitted. Individual rules may require, limit, or prohibit as necessary.

While wanting to keep the class as open as possible we should all try to work within the “spirit” of these rules and where a rule interpretation or amendment is needed you should address this through the appropriate channels.

This introduction does not form part of the Rules

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Part A. ADMINISTRATION

A.1. LANGUAGE

A.1.1 The official language of the class is English and in case of dispute over translation the English text shall prevail.

A.1.2 Any drawings are shown for ease of interpretation of these Rules only. Where any drawing contradicts any text in these Rules, the text shall prevail.

A.1.3 The word “shall” is mandatory and the word “may” is permissive.

A.1.4 Except where used in headings when a term is printed “underlined” the definition in these class rules applies.

A.2. DEFINITIONS

Appendage	The rudder and/or keel.
Boat	A boat that shall comply with the RG65 <u>class rules</u> .
Certification	The process of certifying that equipment used is in compliance with the class rules, either through <u>Self Certification</u> or <u>Official Certification</u>
Class Rules	The rules of the RG65 class
Constitution	The RG65 ICA Constitution
Datum Waterplane	A waterplane determined through measurement of the hull which may not be the same as the true waterplane when the <u>boat</u> floats.
Event Limitation Mark	A mark added at an event to signify that the item was declared to the event organisers
Hull	The hull shell including any transom, the deck including any superstructure, the internal structure including any cockpit or deck hollows and the fittings associated with these parts.
Measurer	A measurer that is recognized by the ICA or/and by an NCA/NCS. A Measurer shall carry out fundamental measurement of the <u>boat</u> and its <u>rigs</u> , in accordance with these <u>class rules</u>
Monohull	A <u>boat</u> with one <u>hull</u>

Official Certification	A <u>measurer</u> may certify a <u>boat</u> and its <u>rigs</u> , enabling the relevant NCA or NCS to deliver a certificate of measurement
Regulations	The RG65 ICA Regulations
Rig	The <u>spars</u> , spreaders, rigging, fittings and sails
Self Certification	The methods by which a <u>boat</u> and its <u>rigs</u> are declared by its owner/operator that they conform to the <u>class rules</u> .
Spar	The main structural part(s) of the <u>rig</u> to, or from, which sails are attached and/or supported.

A.3. ABBREVIATIONS

ICA	RG65 International Class Association
NCA	National Class Association
NCS	National Class Secretary

A.4. AUTHORITIES

A.4.1 The class authority is the ICA.

A.4.2 No legal responsibility with respect to these class rules, or accuracy of certification, rests with:

the ICA;
any NCA;
any NCS;
any measurer.

No claim arising from these class rules can be entertained.

A.5. ADMINISTRATION OF THE CLASS

A.5.1 The administration of these class rules shall be carried out by the ICA which may delegate the administration to an NCA or NCS.

A.6. SAILING INSTRUCTIONS

A.6.1 Apart from amendments permitted in A.6.2, sailing instructions may vary these class rules only with the prior agreement of the ICA.

A.6.2 Sailing instructions or notices of race for an event may:

A.6.2.1 specify a maximum depth allowance for boats.

A.7. CLASS RULES AMENDMENTS

A.7.1 Amendments to these class rules shall be proposed according to the ICA Constitution and Regulations

A.8. CLASS RULES INTERPRETATION

A.8.1 GENERAL

Interpretation of class rules shall be made in accordance with the ICA Constitution and Regulations.

A.8.2 AT AN EVENT

Any interpretation of class rules required at an event may be made by the event technical committee or by a group formed of a minimum of 2 measurers so long as none of those measurers would gain any unfair advantage over the rest of the competitors. Such interpretation shall only be valid during the event and the organising authority shall, as soon as practical after the event, inform the ICA.

A.9. CERTIFICATION

A.9.1 Certification

Certification of a boat is by means of Self Certification or Official Certification requiring the operator of a boat or a Measurer to declare that all components of the boat are in accordance with the rules.

A.9.2 Certification Declaration

Declaration of certification shall be made using the forms made available by the ICA and shall be presented to event officials on request. Failure to supply completed certification documents may result in exclusion or expulsion from an event.

A.9.3 Boat Registration Number and Boat Certificate

A.9.3.1 After certification an NCA or NCS may deliver a boat number;

A.9.3.2 After official certification an NCA or NCS may deliver a boat certificate.

A.10. COMPLIANCE WITH CLASS RULES

A.10.1 A boat ceases to comply with the class rules upon:

A.10.1.1 use of equipment that does not comply, or causes the boat not to comply, with limitations in the class rules;

A.10.1.2 a change of class rules that causes equipment in use to cease to comply, except where the equipment may comply with the class rules in force at the time of its previous certification.

A.10.2 A boat that has ceased to comply with the class rules may be brought into compliance by replacing equipment that does not comply with the class rules with equipment that does comply.

Section B. BOAT ELIGIBILITY

For a boat to be eligible for racing, it shall comply with the rules in this section.

B.1. CLASS RULES AND CERTIFICATION

B.1.1 The boat shall:

- B.1.1.1 be in compliance with the class rules;
- B.1.1.2 have a Certificate delivered by;
 - (a) an NCA or NCS after Measurer certification;
 - (b) the owner or operator after Self Certification.
- B.1.1.3 have valid certification marks as required;
- B.1.1.4 at a National, Continental, or International event, have a valid certificate issued by an NCA or NCS.

Part B. REQUIREMENTS AND LIMITATIONS

The competitor and the boat shall comply with the rules in Part B when racing.

Certification control to check compliance with rules of Section C is not part of certification.

Equipment Inspection is used to check compliance with the rules of Section C.

Section C. CONDITIONS FOR RACING

C.1. COMPETITOR

C.1.1 Limitations

- C.1.1.1 One competitor only shall control the boat.
- C.1.1.2 The competitor shall not be substituted during an event.

C.2. HULL

C.2.1 LIMITATIONS

- C.2.1.1 The geometry of the hull shall not be changed during an event.
- C.2.1.2 The same hull shall be used during an event except when the hull has been lost or damaged beyond repair.
- C.2.1.3 Replacement of the hull may be made only with the approval of the race committee who shall then remove or cancel any event limitation mark attached to the replaced hull.

C.3. HULL APPENDAGES

C.3.1 LIMITATIONS

- C.3.1.1 The same appendages shall be used during an event except when an appendage has been lost or damaged beyond repair.
- C.3.1.2 Replacement of appendages may be made only with the approval of the race committee who shall then remove or cancel any event limitation mark attached to the replaced appendage.

C.3.2 USE

The Appendages:

- C.3.2.1 containing or forming the ballast shall not be rotated relative to the hull;
- C.3.2.2 shall be attached to the hull at the centreplane;
- C.3.2.3 shall not project fore or aft of the hull in relation to the datum waterplane as found in *Hull Measurement*;
- C.3.2.4 Shall not project outside the beam of the hull as found in *Hull Measurement*;
- C.3.2.5 shall not be shifted, articulated, retracted, or extended.

C.4. RIG

C.4.1 LIMITATIONS

- C.4.1.1 Not more than four rigs shall be used during an event.
 - (a) Spars lost or damaged beyond repair may be replaced only with the approval of the race committee who shall then remove or cancel any event limitation mark attached to the replaced item.

C.4.2 USE

The rig shall not project fore or aft of the hull in relation to the datum waterplane.

C.4.3 DIMENSIONS

The dimension from the highest point of any rig to at least one point on the deck centreline shall not exceed 110 cm. Any wind indicator need not be part of this measurement.

C.5. SAILS

C.5.1 LIMITATIONS

- C.5.1.1 Not more than four rigs, each consisting of one or more sails, shall be used during an event.
- C.5.1.2 A sail of one rig shall not be used with a sail of another rig.
- C.5.1.3 A sail shall not be omitted from a rig.
- C.5.1.4 Reefing is prohibited.
- C.5.1.5 The race committee may attach event limitation marks to sails at an event.
- C.5.1.6 When a sail has been lost or damaged beyond repair it may be replaced only with the approval of the race committee who shall then remove or cancel any event limitation mark attached to a replaced sail.

C.5.2 IDENTIFICATION

- C.5.2.1 The class insignia shall be shown.
- C.5.2.2 All sails shall carry identification numbers.
- C.5.2.3 The largest sail may carry national letters.

C.6. EQUIPMENT

C.6.1 EQUIPMENT

- C.6.1.1 No more than two control units shall be used.
- C.6.1.2 A rudder control unit shall control the rudder only.
- C.6.1.3 A sheet control unit shall control the sail(s) only.
- C.6.1.4 Except where achieved by mechanical systems connected to a control unit, automated control of rig and/or sails and automated steering and/or navigation are prohibited.
- C.6.1.5 On board camera(s) and/or the use of images from any source while racing are prohibited.
- C.6.1.6 Except for the establishment and maintenance of a radio control link, control unit positioning information, signal strength, and battery status information, radio transmissions from the boat while racing are prohibited.

Section D. HULL

D.1. GENERAL

D.1.1 RULES

The hull shall comply with the current class rules.

D.2. HULL

D.2.1 DIMENSIONS

D.2.1.1 The maximum hull length in relation to the datum waterplane is 66.1 cm.

D.2.2 MATERIALS

D.2.2.1 All materials used shall be legally and commercially obtainable and usable without restriction in the territory where the boat is being operated.

D.2.2.2 At the bow, at least the first 0.4 cm of the hulls length shall be made of elastomeric material.

D.2.2.3 The elastomeric material in B.2.2.2 shall be a minimum of 0.3 cm wide at one point.

D.2.3 CONSTRUCTION

D.2.3.1 The hull shall be a monohull.

(a) Except for the trunking for appendages the hull shall not have:

- (i) voids in the waterplane;
- (ii) voids in the profile below the waterplane;
- (iii) hollows in the plan view that exceed 0.3 cm;
- (iv) hollows in the profile under the waterplane that exceed 0.3 cm;
- (v) transverse hollows in the undersurface of the hull that exceed 0.3 cm when tested parallel to the waterplane.

D.2.4 FITTINGS

Fittings shall not project outboard of the hull.

Section E. APPENDAGES

E.1. GENERAL

E.1.1 RULES

Appendages shall comply with the current class rules.

E.1.2 MATERIALS

All materials used shall be legally and commercially obtainable and usable without restriction in the territory where the Boat is being operated.

Section F. RIG

F.1. GENERAL

F.1.1 RULES

Rigs shall comply with the current class rules.

F.2. SPARS

F.2.1 SPAR DIMENSIONS

The maximum permitted cross section of the main structural part of a spar, and the combined cross section at junctions of spars, is 1.2 cm.

F.2.2 SPAR FITTINGS

Spar fittings that do not form part of the spar itself are not limited in cross section provided that they are not used to unreasonably increase sail area or similar.

Section G. SAILS

G.1. GENERAL

G.1.1 RULES

Sails shall comply with the current class rules.

G.1.2 CERTIFICATION

The following marks shall be included:

- G.1.2.1 at the head an alphanumeric reference to link the Sails in the Certification documents;
- G.1.2.2 at the tack the area of the sail in square centimetres and rounded to one decimal place;
- G.1.2.3 permanent marks indicating the extremes and special points of the divisions used for its surface area calculation.

G.1.3 CERTIFICATION CONTROL AND EQUIPMENT INSPECTION

- G.1.3.1 During certification and equipment inspection:
 - (a) battens need not be removed;
 - (b) stays not exceeding 0.1 cm in diameter inside luff tabling need not be removed;
 - (c) tell tales overlapping the sail edges shall be ignored;
 - (d) discontinuous attachments on the luff shall be disregarded provided their total length measured along the luff does not exceed 15% of the luff length and the longest attachment is no more than twice the shortest.

G.2. SAIL AREA

G.2.1 LIMITATION

The measured sail area of each rig shall not exceed 2250 cm².

G.2.2 CALCULATION

- G.2.2.1 The measured sail area of each rig is the sum of the areas of the sails used together in each rig.
- G.2.2.2 All sail material shall be included in the calculation of the sail area apart from any arc segment that may be excluded under clause H.3.1.3.

Section H. MEASUREMENT

H.1. MEASUREMENTS AND CALCULATIONS

- H.1.1 Linear measurements shall be taken in centimetres and rounded to one decimal place
- H.1.2 Calculated values in square centimetres shall be rounded to one decimal place
- H.1.3 Maximum and minimum values of limitations in the class rules shall be taken as absolute limiting values.

Part C. APPENDICIES

H.2. SAIL IDENTIFICATION

H.2.1 Display

- H.2.1.1 A boat shall display on her largest sail the class insignia as per B.2.
- H.2.1.2 A boat shall display on her largest sail national letters if required by and in accordance with H.2.2 and H.2.4.
- H.2.1.3 A boat shall display on all sails a sail number as in H.2.3 and H.2.4.

H.2.2 National Letters

- H.2.2.1 National letters shall be carried at international events denoting the country of:
 - (a) her NCA/NCS;
 - (b) residence of her owner;
- H.2.2.2 and may be carried at any other event

H.2.3 Sail Number

- H.2.3.1 The sail number shall be two digits.
- H.2.3.2 The sail number shall be the last two digits of the number allocated by their NCA or NCS and may be:
 - (a) RG65 competitor's personal number;
 - (b) boat registration number;
 - (c) RG65 owner's Personal number;
 - (d) RG65 Sail Number
- H.2.3.3 Single digit numbers shall be preceded by a zero.
- H.2.3.4 At an Event when there is a conflict between sail numbers, or when a sail number may be misread, the race committee may require that the sail numbers of one or more boats be changed to numeric alternatives.

H.2.4 Sail Numbering and Lettering Specifications

H.2.4.1 Numbering Dimensions

Dimension	Minimum	Maximum
Height of sail numbers	8 cm	10 cm
Stroke thickness of sail numbers	0.8 cm	
Spacing of adjacent sail numbers	1.5 cm	2.5 cm

H.2.4.2 Lettering Dimensions

Dimension	Minimum	Maximum
Height of national letters	4 cm	5 cm
Stroke thickness of national letters	0.4 cm	
Spacing of adjacent national letters	1 cm	2 cm

H.2.5 Positioning

H.2.5.1 The class insignia, sail numbers and national letters shall be positioned:

- (a) on both side of the sail;
- (b) with those on starboard side uppermost;
- (c) approximately horizontally;
- (d) with no less than 3 cm vertical spacing between marks on the opposite sides of the sail.

H.2.5.2 The class insignia shall be positioned in the top $\frac{1}{3}$ of the sail

H.2.5.3 Sail numbers shall be positioned in the middle $\frac{1}{3}$ of the sail

H.2.5.4 National letters shall be positioned in the bottom $\frac{1}{3}$ of the sail

H.2.5.5 Sail numbers shall be positioned such that there shall be space in front of the sail number for a single numerical prefix.

H.2.6 Sail Numbering and Lettering Adjustments

H.2.6.1 Where the size of the sail prevents compliance with the above rules, they shall be amended as follows and in the following order of precedence :

- (a) sail numbers may extend below the specified line.
- (b) vertical spacing between sail numbers and national letters and/or between national letters may be reduced to no less than 1 cm.
- (c) height of national letters may be reduced to no less than 3 cm or shall be omitted.
- (d) vertical spacing of sail numbers may be reduced to no less than 1 cm.
- (e) height of sail numbers shall be reduced to less than 7 cm, but no less than 6 cm, or shall be omitted.

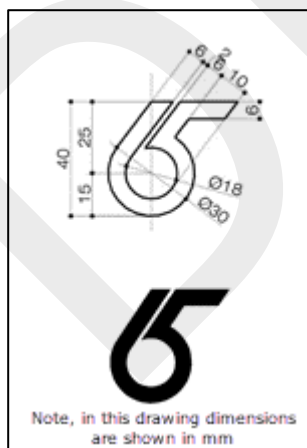
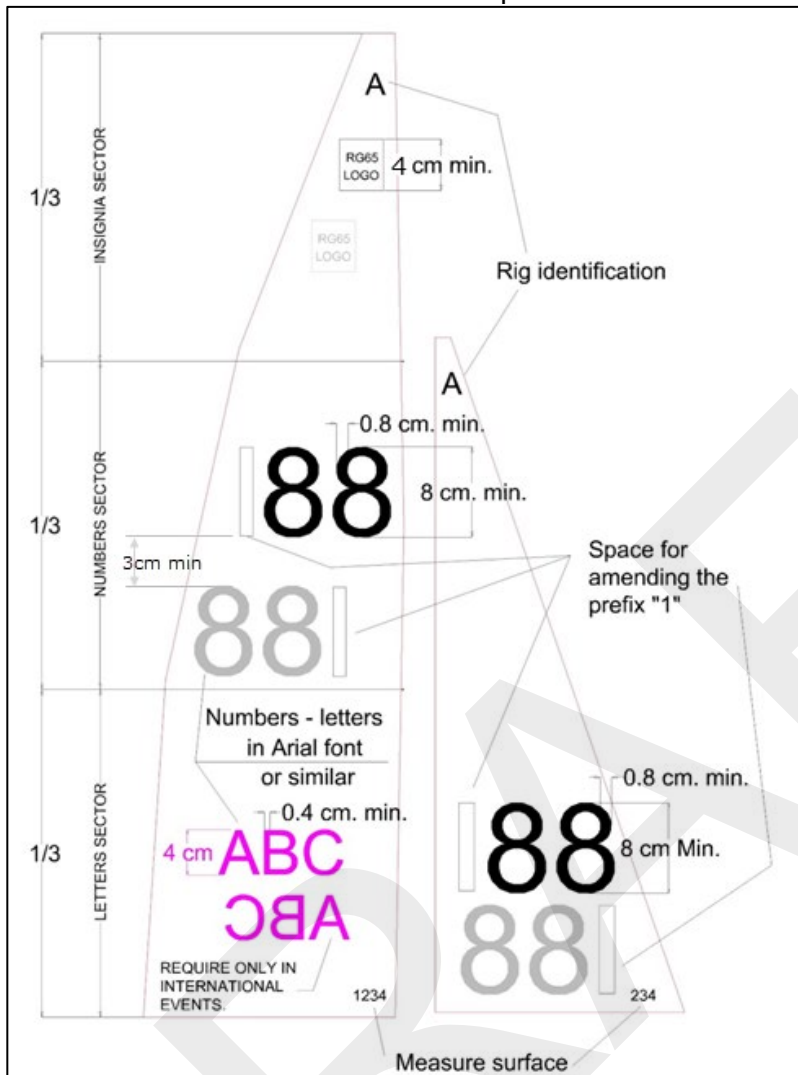
H.2.7 Class Insignia

H.2.7.1 The Class Insignia attached to sails shall be a minimum of 4cm high

H.2.7.2 Class Insignias larger than 4cm high shall retain the aspect ratios of the example shown.

H.2.8 Drawings

H.2.8.1 Sail Identification Examples



H.3. SAIL MEASUREMENT

H.3.1 Measurement

- H.3.1.1 For the calculation of sail area, each sail shall be divided into trapezoids, triangles and/or arcs.
- H.3.1.2 The trapezoids, triangles and arcs shall include all of the sail material.
- H.3.1.3 If the edge of the sail forms an arc of more than 0.2 cm on an edge of a trapezoid or triangle, the segment of the resulting arc shall be included in the surface calculation.
- H.3.1.4 The radius of an arc segment shall be a constant radius.

H.3.2 Total area of a sail shall be the sum of all of the trapezoids, triangles and arcs.

H.3.3 Cross widths shall be taken:

- H.3.3.1 on a double luff sail: with the supporting spar in place, to the luff, or to the fore edge of the spar, along the surface and whichever gives the greater dimension;
- H.3.3.2 on a sail with the luff set in a track in the spar, to the aft edge of the spar;
- H.3.3.3 on other sails, to the luff.

H.3.4 Calculation

- H.3.4.1 The partial surfaces corresponding to divisions shall be calculated as follows:
- H.3.4.2 Simple trapezoids

$$(B_0 + B_1) * h / 2$$
- H.3.4.3 Triangles

$$bt * ht / 2$$
- H.3.4.4 Segments of Arc:

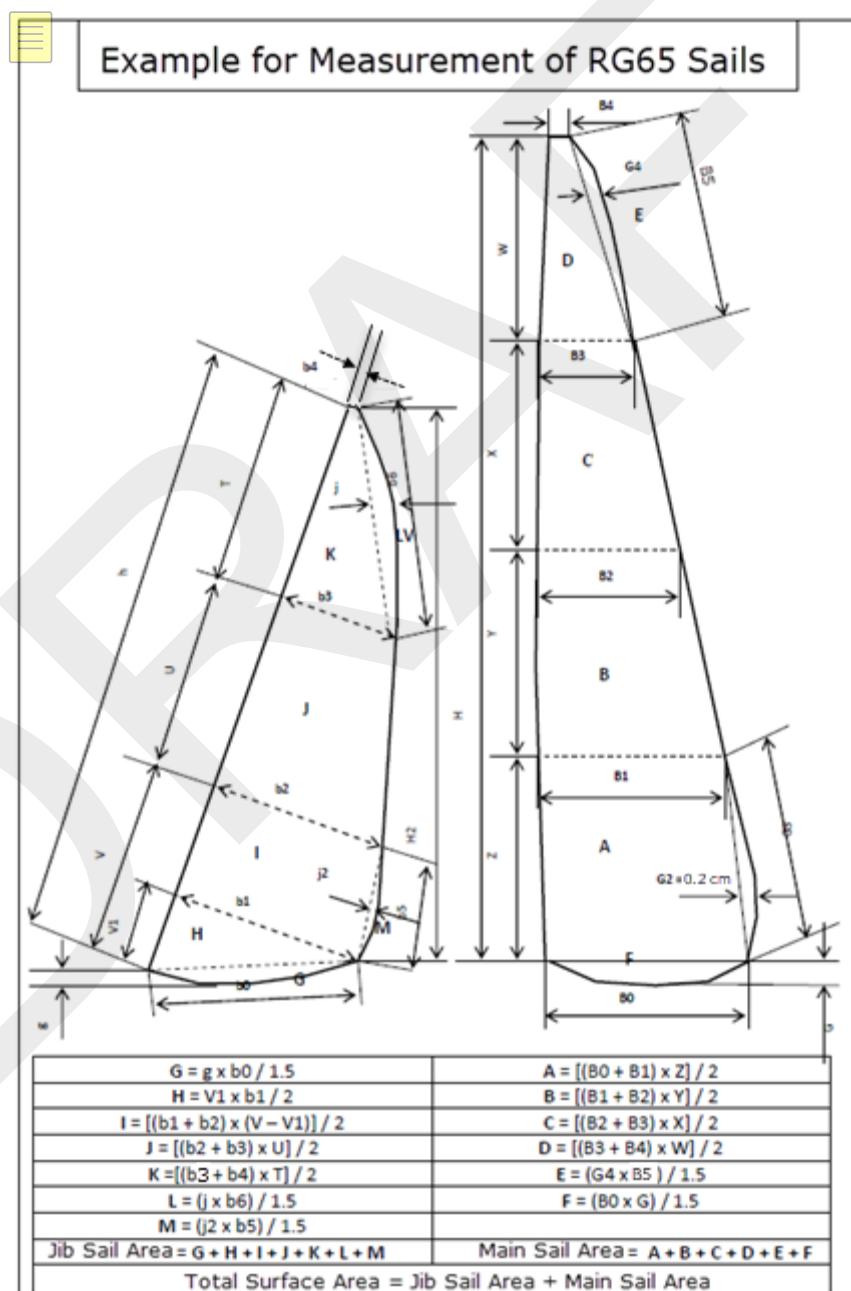
$$c * f / 1.5$$

Where:

B_0, B_1, \dots, B_n = Width of the trapezoids
 h = Height of the trapezoids
 bt = Base of the triangle
 ht = Height of the triangle
 c = Cord of the segment of arc
 f = Arrow of the segment of arc

H.3.5 Checking the dimensions

- H.3.5.1 Each sail shall have permanent marks indicating the extremes and special points of the divisions used for its surface calculation.
- H.3.5.2 Dimensions are measured and from edge to edge of the sail.
- H.3.5.3 The minimum tension will be applied to the sails as necessary to eliminate wrinkles along the dimension verified.
- H.3.5.4 When checking declared dimensions, a tolerance of:
 - (a) 0.5 cm may be accepted in total measurement between clew point and tack point and between the tack point and head point;
 - (b) 0.2 cm may be accepted in partial measurements (bases, heights, arrows of subdivisions).

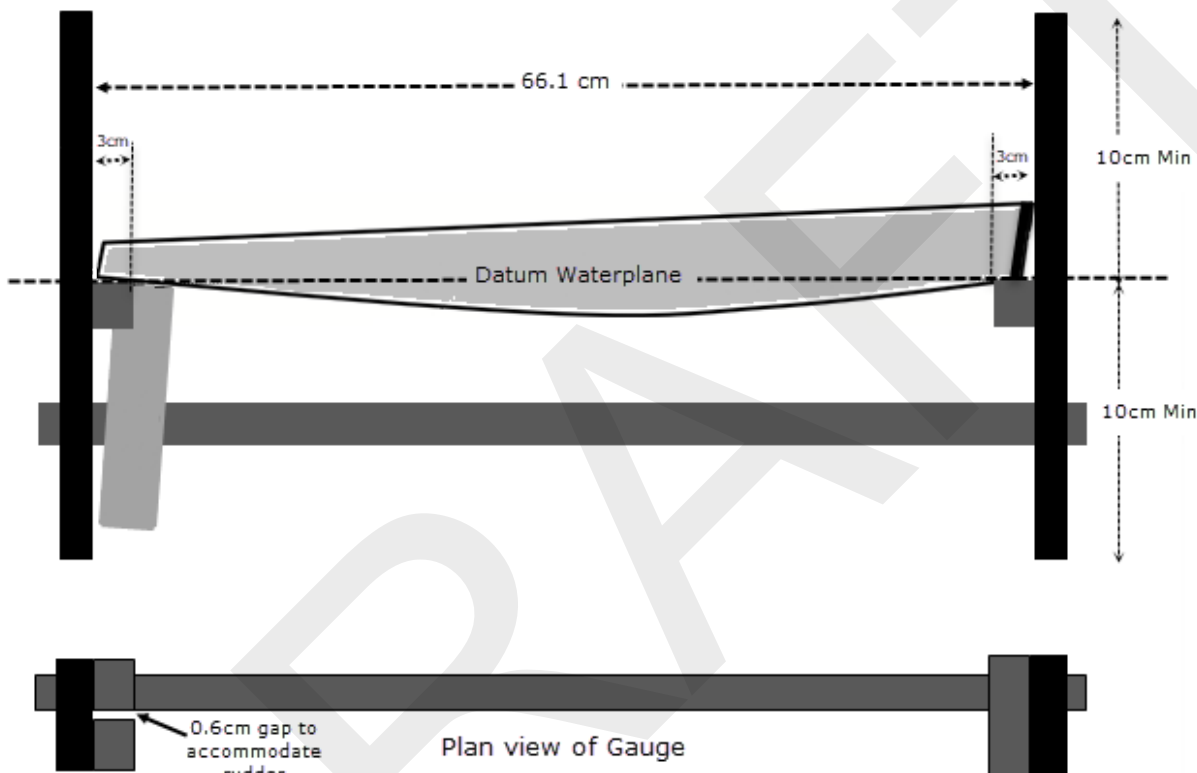


H.4. HULL MEASUREMENT

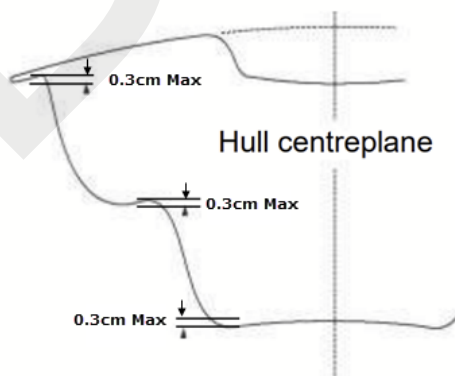
H.4.1 Measurement Gauge

Hulls shall be measured using a gauge that enables hull length to be measured relative to the datum waterplane of the hull.

- H.4.1.1 A 3cm step inside each end of the gauge is used to establish a datum waterplane. The step may include a slot of 0.6 cm to accommodate the rudder when the hull is in the gauge.



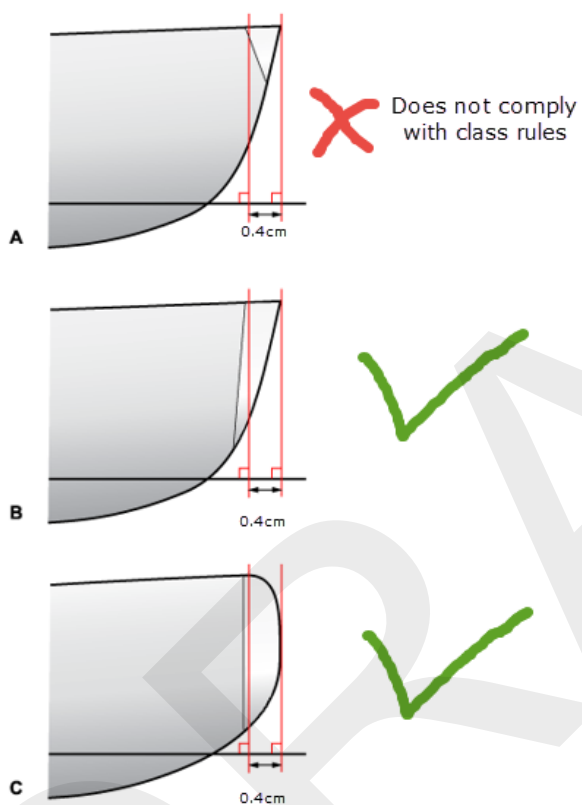
H.4.2 Transverse Hull Hollows



H.4.3 Bow Bumper

The Class Rules require that at least the forward 0.4cm of the hull shall be made of elastomeric material.

The following diagrams indicate what may or may not be acceptable bow bumper shapes.

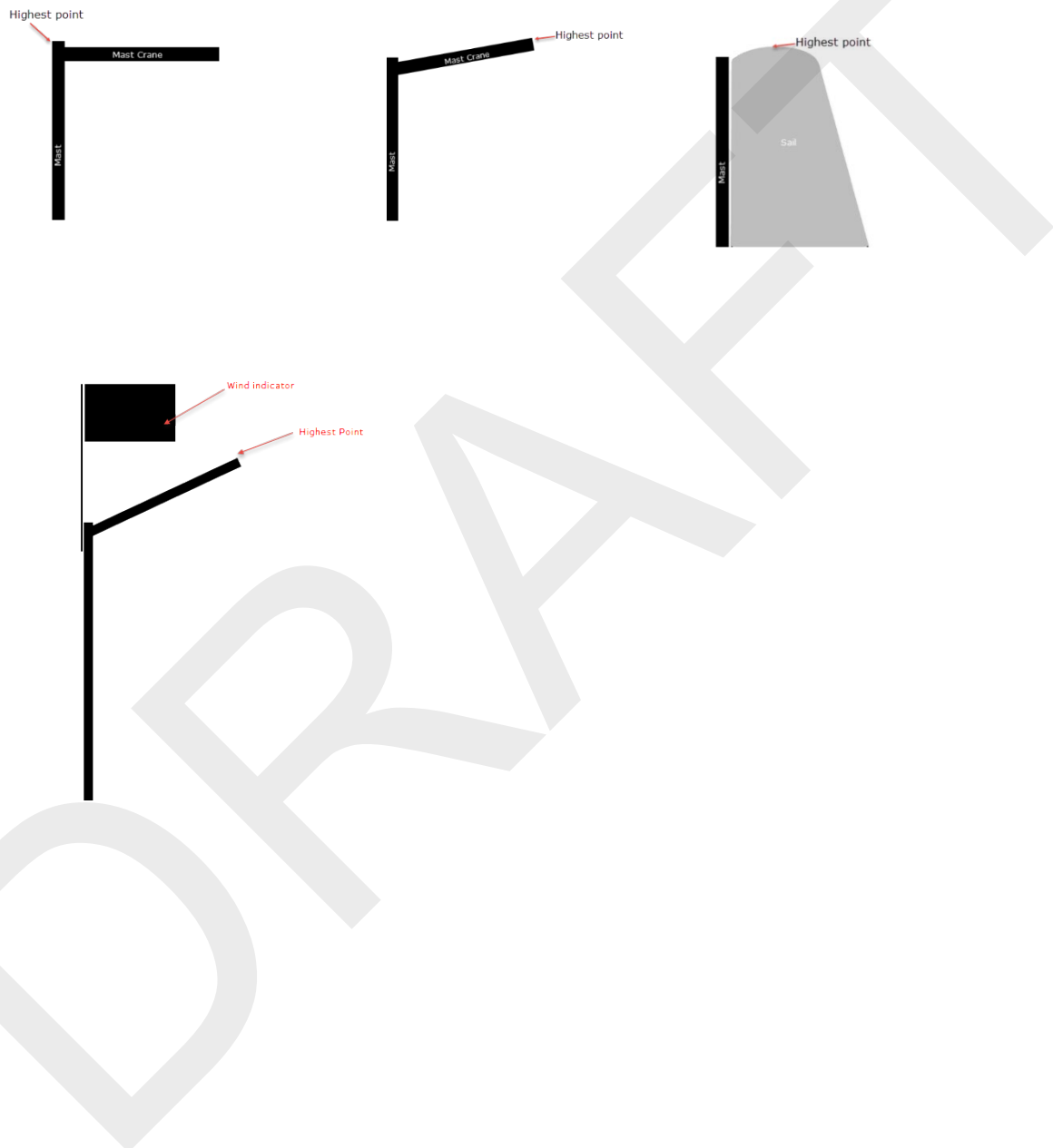


H.5. RIG MEASUREMENT

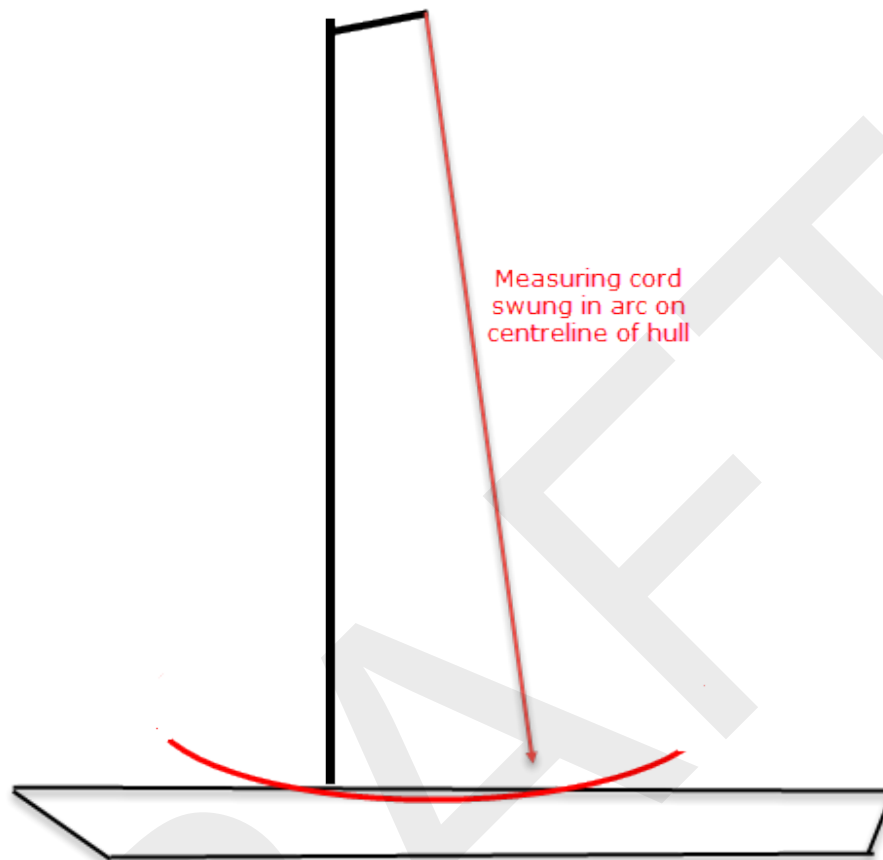
H.5.1 Rig Height Measurement

H.5.1.1 A cord 110cm long shall be used to ensure that the highest point of the rig does not extend more than 110cm above at least 1 point of the hull on the centreline

H.5.1.2 Examples of the Highest Points of Rig

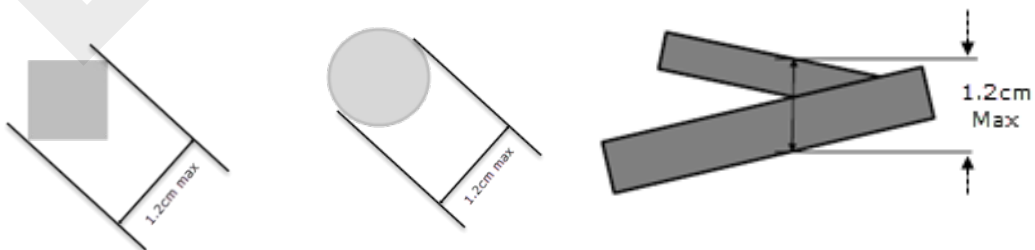


H.5.1.3 Measuring maximum height of Rig



H.5.2 Spar Diameter

H.5.2.1 Spar Cross Sections



H.6. CERTIFICATION

H.6.1 Certification Forms


- H.6.1.1 Certification forms used shall be the version of forms published on the ICA website at the time of certification.
- H.6.1.2 The forms may be used for Self Certification and Official Certification. The Measurer Declaration need only be completed when the certification is made by an ICA, NCA or NCS Measurer.

H.6.2 Boat Certification

- H.6.2.1 A boat certification form is only valid for the hull and rigs that were measured.
- H.6.2.2 A hull certification form shall only certify 1 hull and a maximum of 4 rigs.
- H.6.2.3 Additional rigs may be certified using additional certification forms without completing the hull certification section of the form.
- H.6.2.4 PDF certification forms are available on the RG65 ICA website

Document control - RG65ICABC2021_0.4

RG65 International Class Association
Boat Certification Form



This form is used to declare that the Hull and Rigs detailed herein conform to the RG65 Class Rules in force at the time of declaration.

Name of Owner Territory/Country
 Design Boat Name (if any) Year of Build (if known)
 Hull/Builders Number NCA/S Number Hull Colour

Hull Declaration yes / no

Is the Hull a monohull? ☐ yes ☐ no

Is the Hull length, when measured relative to the datum waterplane, no more than 66.1 cm? ☐ yes ☐ no

Is the front 0.4 cm of the hull made of elastomeric material (Bumper)? ☐ yes ☐ no

Are all appendages (keel and rudder) attached at the hull centreline? ☐ yes ☐ no

Do none of the appendages extend fore or aft of the hull in relation to the datum waterplane? ☐ yes ☐ no

Do none of the appendages project outside of the beam of the hull? ☐ yes ☐ no

Are all materials used in the hull and appendages commercially and legally obtainable? ☐ yes ☐ no

Are there no more than 2 control units with 1 unit controlling only the sails and 1 controlling only the rudder? ☐ yes ☐ no

Rig Declaration yes / no

Is the total area of all the sails on the Rig not more than 2,250 cm²? ☐ yes ☐ no

Are the sails measured in accordance with the Sail Measurement appendix of the Class Rules? ☐ yes ☐ no

Are the sails correctly marked at the Head and Tack as required by the Call Rules? ☐ yes ☐ no

Do all spars have a maximum cross section not exceeding 1.2cm as per the Rig Measurement appendix of the Class Rules? ☐ yes ☐ no

Is the distance between the highest point of any rig and a point on the deck centreline no more than 110cm? ☐ yes ☐ no

Are all Sail Numbers, National Letters and Class Insignia in accordance with the Sail Identification appendix of the Class Rules? ☐ yes ☐ no

Does no point of any rig extend beyond the bow or stern in relation to the datum waterplane? ☐ yes ☐ no

Are measurement sheets and drawings indicating measurement points for each rig attached to this declaration? ☐ yes ☐ no

Sail Area Declaration

	Rig 1	Rig 2	Rig 3	Rig 4
Rig Identifier (marked at Head)				
Jib size	cm ²	cm ²	cm ²	cm ²
Main sail size	cm ²	cm ²	cm ²	cm ²
Total sail size	cm ²	cm ²	cm ²	cm ²

If the answer to any of the above is not 'yes' then it would indicate that the Hull or Rig do not comply with the class rules and you should not sign this declaration

Owner Declaration

Name: _____

Date: _____

Signature: _____

Measurer Declaration (where applicable)

Name: _____

Date: _____

Signature: _____