

Class Rule Changes

International Tornado Association

Effective date: 2025-06-01

Status: Draft



Amendment One

A.5 WORLD SAILING RULES

Delete:

~~A.5.2—Except where used in headings, when a term is printed in “**bold**” the definition in the ERS applies and when a term is printed in “*italics*” the definition in the RRS applies.~~

Amend to add

A.1.3 Except where used in headings, when a term is printed in “**bold**” the definition in the ERS applies and when a term is printed in “*italics*” the definition in the RRS applies.

Amendment Two

A.8 CLASS RULES INTERPRETATION

Amend to delete:

~~A.8.3—Any interpretation of class rules required at an event may be made by an international jury constituted in accordance with the RRS. Such interpretation shall only be valid during the event and the organizing authority shall, as soon as practical after the event, inform the World Sailing the MNA and the ITA.~~

Reason:

it is duplication of and could contradict A.8.1

Amendment Three

A.9 INTERNATIONAL CLASS FEE AND ISAF PLAQUE

Old:

A.9 INTERNATIONAL CLASS FEE AND ISAF PLAQUE

Amend to read: A.9 INTERNATIONAL CLASS FEE AND **WORLD SAILING PLAQUE**

Amendment Four

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B.4 NON-COMPLYING BOATS

Old:

- B.4.1 Boats built using prohibited materials shall remain illegal. However, they shall be permitted to race in the club and local events for evaluation purposes, provided that they are registered with ITA (not the MNA) and also provided:
- 1) Both hulls are indelibly marked on the outside of the transoms with a letter `X' and with a number allocated by the ITA.
 - 2) The mainsails have a letter `X' of size and position in accordance with boat the class rules. The letter `X' shall be either in addition to or instead of national letter(s).
- B.4.2 The International Class Fee as stated in A.9 shall be paid in respect of each experimental boat although such a boat remains illegal.
- B.4.3 Such illegal boats will not be permitted to race in qualifying open meetings of any kind, National Championships, Continental Championships, World Championships or the Olympic Games unless approved by the ITA and the World Sailing.

Amend to read:

- B.4.1 Boats built using prohibited materials shall remain **non-compliant**. However, they shall be permitted to race in the club, local **or international** events for evaluation purposes, provided that they are registered with ITA (not the MNA) and also provided:
- 1) Both hulls are indelibly marked on the outside of the transoms with a letter `X' and with a number allocated by the ITA.
 - 2) The mainsails have a letter `X' of size and position in accordance with boat the class rules. The letter `X' shall be either in addition to or instead of national letter(s).
- B.4.2 The International Class Fee as stated in A.9 shall be paid in respect of each experimental boat although such a boat remains non-compliant.
- ~~B.4.3 Such illegal boats will not be permitted to race in qualifying open meetings of any kind, National Championships, Continental Championships, World Championships or the Olympic Games unless approved by the ITA and the World Sailing.~~

Reason: To comply with WS wording

Amendment Five

C.1 GENERAL

Old:

C.1.1. (d) RRS 50.4 shall not apply

Amend to read:

C.1.1. (d) RRS **55.4** shall not apply

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Amendment Six

C.2 CREW

Old:

C.2.2 MEMBERSHIP

During World Championships and Continental Championships events each **crew** member shall be a current member of the ITA.

Amend to read:

C.2.2 MEMBERSHIP

During ~~World Championships and Continental Championships~~ all International events each **crew** member shall be a current member of the ITA.

Amendment Seven

C.3 PERSONAL EQUIPMENT

Old:

C.3.1 MANDATORY

(a) Each **crew** member shall wear at all times when racing, a **personal buoyancy** device capable of keeping the **crew** member and all of his/her **personal equipment** afloat.

C.3.2 OPTIONAL

- (a) Trapeze harnesses for each **crew** member
- (b) All other **personal equipment**

Amend to read:

C.3.1 MANDATORY

(a) **For use:**

- (i) Each **crew** member shall wear at all times when racing, a **personal flotation device** to the minimum standard ISO 12402-5, or USCG Type III, or AS 4758 Level 50 or equivalent. Inflatable buoyancy vests are not permitted.

C.3.2 OPTIONAL

(a) **For use:**

- (i) **Crew harnesses** of maximum 2.4kg for each **crew** member. ~~Crew Trapeze harnesses shall not weigh more than 2.4kg. This changes RRS 50.1 (b).~~
- (ii) Each **crew** member may carry a cutting device with a blade length of no more than 150mm.

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- (iii) Each **crew** member may wear a helmet that shall be to the minimum standard EN1385, EN1077, EN 966, ASTM 2020, Snell S98 or equivalent.

Reason:

To comply with WS standards

Amendment Eight

C.4 ADVERTISING

Old:

C.4.1 LIMITATIONS

(a) Advertising shall only be displayed in accordance with the World Sailing Advertising Code.

Amend to read:

C.4.1 LIMITATIONS

a) Advertising shall only be displayed in accordance with the World Sailing Advertising Code.

b) For the purpose of the World Sailing Advertising Code, the **gennaker** shall be deemed a **spinnaker**.

c) The area above the 4th batten of the **mainsail** shall be kept free of competitor advertising, and shall be reserved for the Class Insignia and national flag, as specified in C.10

Amendment Nine

C.5 PORTABLE EQUIPMENT

Old:

C.5.1 FOR USE

(a) Optional

1) Magnetic compass(es)

2) Mechanical timing device(s)

3) Electronic devices that provide timing, heading, and heading memory but which do not transmit or receive data.

4) Emergency Position Indicating Radio Beacon (EPIRB) devices.

Amend to read:

C.5.1 OPTIONAL

(a) For use:

(i) Boat heading function in one device using magnetic input. If digital/electronic, the device with magnetic input may combine and store boat heading direction together with wind shift detection and timing functions.

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- (ii) The device display letters and numerals shall be not more than 30 mm high and show only;
 - boat heading (damping may be adjusted manually),
 - Calculated wind direction determined from manual input and adjustment of tacking angles manually for windshift detection,
 - time,
 - race timing information,
 - identification,
 - battery condition, system error, adjustment and calibration.
- (iii) Magnetic compasses having no electronics
- (iv) Camera recording equipment and attachments and/or race tracking equipment (GPS) where permitted by the Notice of Race and/or Sailing Instructions.
- (v) Spare parts, tools, shockcord, rope, blocks, rings, and plastic balls.

Amendment Ten

C.6 BOAT

Old:

C.6.2 CORRECTOR WEIGHTS

- (a) Corrector weights of lead shall be attached on the outside of the main beam and shall be removable for the purposes of measurement when the boat weight, as specified in C.6.1, is less than the minimum requirement.
- (b) The total corrector weight shall not exceed 5kg. This shall apply to boats first registered after February 1977.

Amend to read:

C.6.2 CORRECTOR WEIGHTS

- (a) Corrector weights of lead shall be fastened to the inside of the dolphin Striker (V Bar) at locations avoiding the intersection of the front cross beam and the dolphin striker rod and shall be removable for the purposes of measurement when the boat weight, as specified in C.6.1, is less than the minimum requirement. The location must allow application of event limitation marks and allow visual inspections.
- (b) The total corrector weight shall not exceed 5kg. This shall apply to boats first registered after February 1977.

Amendment Eleven

C.9 RIG

Delete:

~~C.9.8 (a) 3) — At least one foot of each crew member using the trapeze gear must be in contact with the hull.~~

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Amendment Twelve

C.10 SAILS

Old:

C.10.2 MAINSAIL

(a) IDENTIFICATION

The Class insignia, national letters and sail numbers shall comply with the RRS Appendix G except where specified otherwise in Appendix D of these class rules.

(1) The Class insignia, National Flag (when applicable) and Sail Letters and Numbers shall be placed in the following locations below the head point:

	8-batten mainsail	9-batten mainsail
Class Insignia	3rd panel	4th panel
National Flag	4th panel	5th panel
Sail Numbers & Letters	5th panel	6th panel

This amends RRS Appendix G1.3

(2) The Class insignia specified in Class Rule Appendix D shall be placed back-to-back with the 'tail' aft and a minimum of 60mm below the batten pocket. This amends RRS Appendix G1.3(b).

(3) The national letters and numbers which are on the same side of the sail shall be placed on the same line, a minimum of 60mm below the batten pocket, and a minimum of 60mm from the leech. This amends RRS Appendix G1.3(c).

(b) NATIONAL FLAGS

At the International Tornado Class World Championship and Continental Championships, the national flag corresponding to the national letters shall be placed on the starboard side of the mainsail on the panel specified in C.10.3(a)(i). The national flag is optional at all other events. The flag shall be nominally 1200mm wide x 750mm high, positioned approximately central on the panel.

To read:

C.10.2 MAINSAIL

(a) IDENTIFICATION

The Class Insignia, national letters and sail numbers shall comply with the RRS Appendix G except where specified otherwise below.

(1) The Class insignia shall conform to the dimensions and requirements as detailed in RRS Appendix G and as specified in Figure 1 below. The Class insignia shall be placed back-to-back with the 'tail' aft. This amends RRS Appendix G1.3(b).

(2) The national letters and numbers which are on the same side of the sail shall be applied according to the dimensions as defined below.

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- (3) Personal sail numbers that are issued in compliance with RRS G.1.1(c) and registered with the ITA are permitted.

8 batten mainsail



9 batten mainsail



(b) NATIONAL FLAGS

At International events, the national flag corresponding to the national letters shall be applied on the starboard side of the mainsail, as specified above. The national flag is optional at all other events. The flag shall be nominally 1200mm wide x 750mm high, positioned approximately central on the panel.

Amendment Thirteen

D.2.2 CERTIFICATION

Amend to delete:

~~(b) An MNA may appoint one or more persons at a manufacturer to certify hulls built by that manufacturer in accordance with the World Sailing In-house Certification guidelines.~~

Amendment Fourteen

D.2.3 MODIFICATIONS, MAINTENANCE AND REPAIR

Old:

(c) Routine maintenance such as filling, sanding, painting and polishing is permitted without re-measurement and re-certification.

Amend to read:

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- (c) **Maintenance** such as filling, **sanding**, painting and polishing is permitted without re-measurement and re-**certification**

Amendment Fifteen

D.3.1 MATERIALS

Old:

- (b) Aramid (Kevlar) or other high modulus core materials require prior approval of the ISAF. The criteria for permitting these materials shall include: structural properties, cost, and durability

Amend to read:

- (b) Aramid (Kevlar) or other high modulus core materials require prior approval of the **World Sailing**. The criteria for permitting these materials shall include: structural properties, cost, and durability

Amendment Sixteen

D.3 HULLS

Amend to add:

D.3.3 DIMENSIONS

- (a) The **hulls** shall be inverted. The bow template shall be applied with the projections touching the skin, and:
 - 1) Template No. 5 shall be positioned 5 meters from the aft edge of the bow template and shall touch the skin at the keel and be equidistant from the **sheerlines**.
 - 2) The bow template shall be adjusted to bring the inscribed datum line in coincidence with a base line, which shall be horizontal and pass through the datum point at the centre of the hole in template No. 5.
 - 3) The remaining measurement templates shall be positioned 0, 1, 2, 3.3 and 4.2 metres from the aft edge of the bow template. Each template shall touch the skin at the keel and at each station the template shall be equidistant from the sheerlines.
- (b) Each of the templates positioned 0, 1, 2, 3.3, 4.2 and 5 meters from the aft edge of the bow template shall touch the hull at, either the centerline inscribed on the template, or within the raised section on the template, and on both sides of the inscribed centreline.
- (c) The base line shall pass through the holes in the templates and shall clear template positions 1, 2, 3.3 and 4.2.
- (d) The sheerlines at all stations shall not be above or below the tolerance marks on the templates.

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- (e) The major axis of the sections shall be parallel to the sheer.
- (f) With the deck crown template normal to the deck and square across the hull, the clearance between deck and template shall be not more than **5mm** except in way of recesses or pads for ports and fittings

Hulls inverted and horizontal, with templates in place, the clearance between skin and:

	Minimum	Maximum
stem template		10mm
any template above central projection		10mm
central projection of template position 0		3mm
central projection of templates positions 1; 2; 3.3; 4.2 and 5 (per D.6.4.b)		2mm
Aft most point of hull to aft end of bow template	5085mm	5096mm
Aft surface of the transom, at sheerline level, forward of the aft most point of the hull	30mm	50mm
Hulls - upright and assembled		
Difference between deck centreline separation and keel centreline separation immediately aft of main beam		10mm
Deck centreline separation	2610mm	2630mm
Difference between diagonal lengths, measured from the tip of each bow to the aft edge of the opposite transom at the inner sheerlines		25mm
Clearance between deck and template at any point along length of hull		5mm
Radius at sheer, measured perpendicular to both the deck and the topside datum, as inscribed on the bow template	3095mm	3115mm
Aft edge of main beam from stem head length plate		
Forward edge of rear beam from stem head length datum, as inscribed on the bow template	5324mm	5344mm
Shroud attachment point distance aft of aft most edge of main beam, measured along the sheer to the point of intersection with the plane of the shrouds	708mm	728mm
Distance between the outer surface of shroud chain plate and the outer surface of the topside		15mm
Forestay stop attachment point forward of aft edge of main beam	1965mm	1980mm
Forestay stop attachment points from sheerline		50mm
The main beam and rear beam lower surfaces below the inner sheerlines	25mm	35mm

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Amendment Seventeen

D.4.3 CONSTRUCTION

Old:

- D.4.3.(i) The main beam shall be fitted with a strut and tie
1) The tie shall be flat stock the leading edge of which may be may be rounded, but not sharpened.

Amend to read:

- D.4.3.(i) The main beam shall be fitted with a strut and tie
1) The tie shall be flat stock, the leading edge of which may be ~~may be~~ rounded but not sharpened.

Reason: Correct grammar "may be" appeared twice

Amendment Eighteen

D.6 ASSEMBLED HULLS

Delete:

~~D.6.1—BUOYANCY
The builder shall certify that the boat with full racing equipment, and with both hulls swamped, shall support 160kg~~

Reasons: Included in C.6.3

Old: D.6.2 CONSTRUCTION

Amend to read: D.6.1 CONSTRUCTION

Reason: change of enumeration

Old: D.6.3 FITTINGS

Amend to read: D.6.2 FITTINGS

Reason: change of enumeration

Delete:

~~D.6.4—DIMENSIONS—should be in Hulls and not in Assembled Hulls
(a)—The hulls shall be inverted. The bow template shall be applied with the projections touching the skin, and:
1)—Template No. 5 shall be positioned 5 meters from the aft edge of the bow template and shall touch the skin at the keel and be equidistant from the sheerlines.~~

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- ~~2) The bow template shall be adjusted to bring the inscribed datum line in coincidence with a base line, which shall be horizontal and pass through the datum point at the centre of the hole in template No. 5.~~
- ~~3) The remaining measurement templates shall be positioned 0, 1, 2, 3.3 and 4.2 metres from the aft edge of the bow template. Each template shall touch the skin at the keel and at each station the template shall be equidistant from the sheerlines.~~
- ~~(b) Each of the templates positioned 0, 1, 2, 3.3, 4.2 and 5 metres from the aft edge of the bow template shall touch the hull at, either the centerline inscribed on the template, or within the raised section on the template, and on both sides of the inscribed centreline.~~
- ~~(c) The base line shall pass through the holes in the templates and shall clear template positions 1, 2, 3.3 and 4.2.~~
- ~~(d) The sheerlines at all stations shall not be above or below the tolerance marks on the templates.~~
- ~~(e) The major axis of the sections shall be parallel to the sheer.~~
- ~~(f) With the deck crown template normal to the deck and square across the hull, the clearance between deck and template shall be not more than 5mm except in way of recesses or pads for ports and fittings~~
- ~~Hulls inverted and horizontal, with templates in place, the clearance between skin and:~~
- | | Minimum | Maximum |
|--|--------------------|--------------------|
| stem template | 10mm | |
| any template above central projection | 10mm | |
| central projection of template position 0 | 3mm | |
| central projection of templates positions 1; 2; 3.3; 4.2 and 5 (per D.6.4.b) | 2mm | |
| Aft most point of hull to aft end of bow template | 5085mm | 5096mm |
| Aft surface of the transom, at sheerline level, forward of the aft most point of the hull | 30mm | 50mm |
| Hulls upright and assembled | | |
| Difference between deck centreline separation and keel centreline separation immediately aft of main beam | 10mm | |
| Deck centreline separation | 2610mm | 2630mm |
| Difference between diagonal lengths, measured from the tip of each bow to the aft edge of the opposite transom at the inner sheerlines | 25mm | |
| Clearance between deck and template at any point along length of hull | 5mm | |
| Radius at sheer, measured perpendicular to both the deck and the topside datum, as inscribed on the bow template | 3095mm | 3115mm |
| Aft edge of main beam from stem head length plate | | |
| Forward edge of rear beam from stem head length datum, as inscribed on the bow template | 5324mm | 5344mm |
| Shroud attachment point distance aft of aft most edge of main beam, measured along the sheer to the point of intersection with the plane of the shrouds | 708mm | 728mm |
| Distance between the outer surface of shroud chain plate and the outer surface of the topside | 15mm | |
| Forestay stop attachment point forward of aft edge of main beam | 1965mm | 1980mm |
| Forestay stop attachment points from sheerline | 50mm | |

Reasons: Moved in D.3.3.

Amendment Nineteen

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E.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

Old:

(b) Routine maintenance such as filling, sanding, painting and polishing is permitted without re-measurement and re-certification

Amend to read:

b **Maintenance** such as filling, **sanding**, painting and polishing is permitted without re-measurement and re-**certification**.

Amendment Twenty

E.2.3 CERTIFICATION

Amend to delete:

~~(b) An MNA may appoint one or more persons at a manufacturer to **certify hull appendages** built by that manufacturer in accordance with the **World Sailing In-house Certification Guidelines**.~~

Reasons: Does not apply.

Amendment Twenty-one

E.3 CENTREBOARDS

Old:

E.3.1 RULES

(a) Two centreboards shall be fitted in the centreboard cases, one in each hull.

Amend to read:

E.3.1 RULES

a) Centreboards shall comply with the current **class rules**.

Amendment Twenty-two

E.4 RUDDERS & TILLERS

Old:

E.4.1 RULES

Two rudders shall be hung on the transoms, one on each transom.

Amend to read:

E.4.1 LIMITATIONS

Rudders and tillers shall comply with the current **class rules**

Reasons: The term "**Limitations**" more accurately reflects the intent of the rule

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Amendment Twenty-three

F.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

Old:

(c) Routine **maintenance** is permitted without re-measurement and re-certification.

Amend to read:

(c) ~~Routine **maintenance** is permitted without re-measurement and re-certification.~~ Spars may be painted, varnished, anodized, powder **coated** or **coated** in any way depending on their materials with a protective or UV protective coat provided that it does not change the bend characteristics of the spar.

(d) **Maintenance** is permitted without re-measurement and re-certification.

Amendment Twenty-four

F.2.4 MANUFACTURER

Old:

- (a) **Mast** manufacturers shall be licensed by ISAF/World Sailing.
- (b) All **mast** moulds shall be approved by ISAF/World Sailing.

Amend to read:

- (a) **Mast** manufacturers shall be licensed by **World Sailing**.
- (b) All **mast** moulds shall be approved by **World Sailing**.

Amendment Twenty-five

F.3.3 CONSTRUCTION

Amend to add:

(o) The lower part of the carbon **mast spar** tube may be reinforced with a ring-shaped construction of carbon fibers or stainless steel. The reinforcement shall start at the lowest part of the carbon **mast spar** and have a maximum length of 50mm and a maximum thickness of 5mm. Sharp edges shall be rounded. Along its height to the top, tapering of the reinforcement to the original mast surface is allowed.

Amendment Twenty-six

F.3.4 FITTINGS

Old:

F.3.4 (b) 3) **mast** may be have reinforcement pads at fitting attachment points

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Amend to read:

F.3.4. (b) 3) **mast** may ~~be~~ have reinforcement pads at fitting attachment points.

Reasons: Grammar

Amendment Twenty-seven

G.3 MAINSAIL

Delete:

~~G.3.1 IDENTIFICATION~~

~~(a) The class insignia shall conform to the dimensions and requirements as detailed in RRS Appendix G.~~

Delete:

~~G.3.2. (b) Sail reinforcement~~

~~1) Primary reinforcement is permitted within a distance of 595mm from each sail corner.~~

~~2) Secondary reinforcement is permitted within a distance of four times the limits prescribed for the primary reinforcement (2380mm) from each sail corner.~~

Reasons: In G.3.3 DIMENSIONS

Comments: change the enumeration accordingly

Amendment Twenty-eight

G.4.2 CONSTRUCTION

Old:

(b) Sail reinforcement

1) **Primary reinforcement** is permitted within a distance of 440mm from each sail corner

2) **Secondary reinforcement** is permitted within a distance of four times the limits prescribed for the **primary reinforcement** (1760mm) from each **sail corner**.

3) Chaffing patches are permitted.

Amend to read:

(b) Sail reinforcement

~~1) Primary reinforcement is permitted within a distance of 440mm from each sail corner~~

~~2) Secondary reinforcement is permitted within a distance of four times the limits prescribed for the primary reinforcement (1760mm) from each sail corner.~~

1) Chaffing patches are permitted.

Reasons: The deleted points 1 and 2 are already in G.4.3 DIMENSIONS

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Amendment Twenty-nine

G.4.3 DIMENSIONS

Old:

Luff length	-	6300mm
Luff Perpendicular	-	1680mm
Foot round	-	80mm
Sail reinforcement, measured from sail corner measurement points		
Primary reinforcement		440mm
Secondary reinforcement		1760mm
Window safety rectangle height parallel to foot	-	1000mm
Window height parallel to foot		1500mm

The "triangulation" method of measurement shall be used if the width of the sail at the head exceeds 50mm. For the purpose of this rule the width at the head shall be measured at right angles to the luff through the highest point of the sail on the luff to the line of the leech extended if necessary.

Amend to read:

	Minimum	Maximum
Luff length	-	6300mm
Luff Perpendicular	-	1680mm
Foot round, as the maximum perpendicular distance from the straight line connecting the tack and clew points to the lowest point along the sail's foot edge.	-	80mm
Sail reinforcement, measured from sail corner measurement points		
Primary reinforcement		440mm
Secondary reinforcement		1760mm

If the width of the **sail** at the **head** exceeds 50mm, the **luff** length shall be measured by extending both the **luff** and **leech** lines until they intersect at a point where the **head** width is no more than 50mm. The distance from the **tack** to this intersection point shall be taken as the effective **luff** length.

The width at the **head** shall be measured at right angles to the **luff** through the highest point of the **sail** on the **luff** to the line of the **leech** extended if necessary.

Regarding the **foot** round measurement, if the **tack** and/or **clew** points are not distinctly defined by sharp corners, their positions shall be determined by extending the **foot** and **leech** edges as straight lines until they intersect to define the **clew** point, and by extending the **foot** and **luff** edges to define the **tack** point.

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Reasons: To delete the 2 last lines of the table as they are included in G4.2 (g) and to describe the “triangulation method”

Amendment Thirty

PART III – APPENDIX

Old: PART III – APPENDIX

Amend to read: PART III - APPENDICES

Amendment Thirty-one

Appendix B – Aluminium Masts

Old:

- 1 Masts may be extruded only of aluminium alloys approved by the ISAF/World Sailing.

Amend to read:

- 1 Masts may be extruded only of aluminium alloys approved by the **World Sailing**.