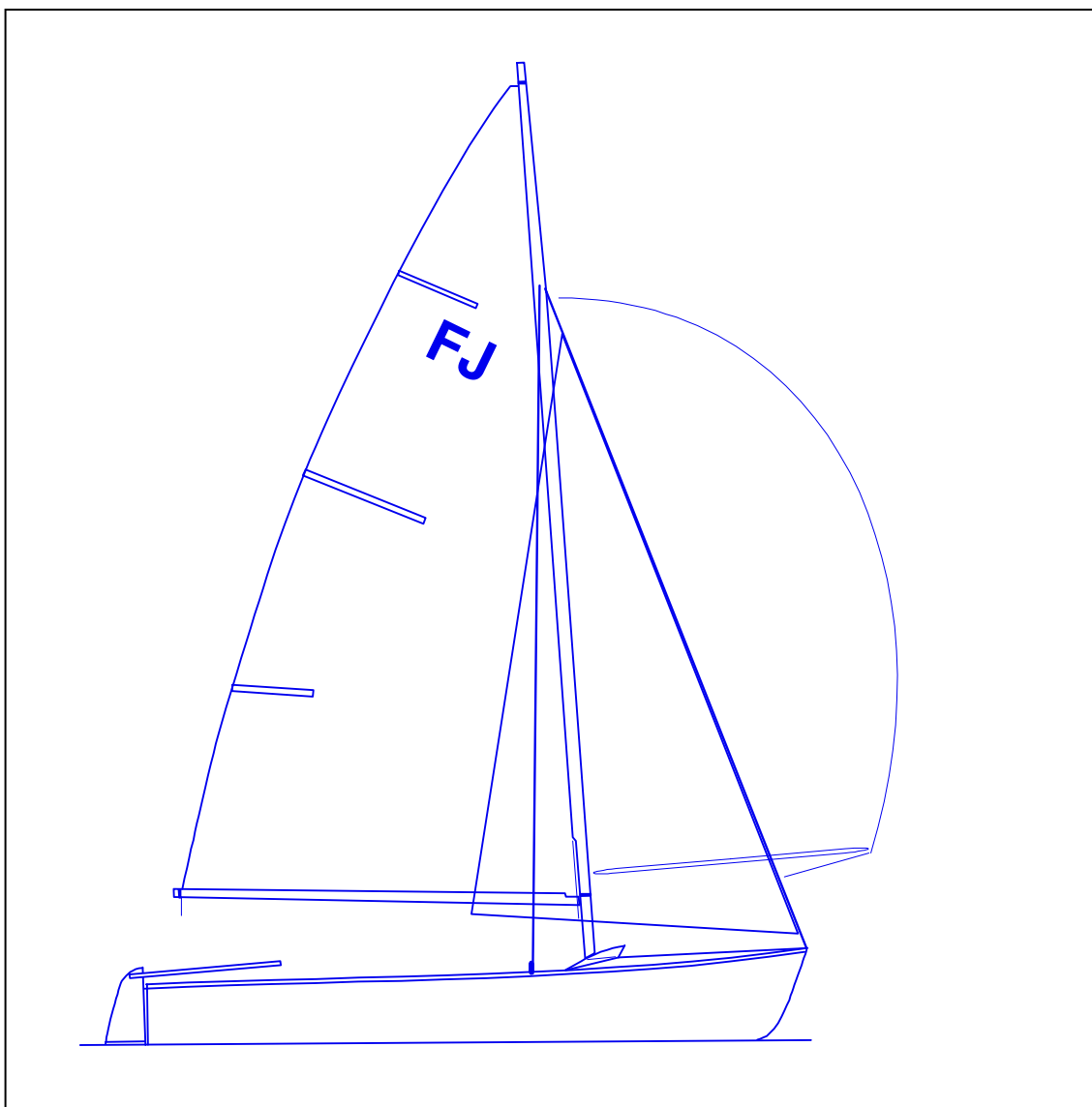




# THE INTERNATIONAL FLYING JUNIOR CLASS RULES



24<sup>th</sup> MAY 2010



The FJ was designed in 1956 by Uus van Essen in close cooperation with Conrad Gulcher, and was adopted as an International Class in 1969.

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# INTRODUCTION

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*The intention of these **Class Rules** is to ensure that boats in the International FJ Class are as alike as possible in **hull form**, **hull weight**, shape of **centreboard** and **rudder blade**, **mast spar**, **mast weight** and **sail plan**.*

*FJ **hulls**, **hull appendages**, **Rigs** and **Sails** are measurement controlled.*

*Owners and crews should be aware that compliance with rules in Section C is **NOT** checked as part of the **certification control** process. Owners and crews are also reminded of their general responsibilities as specified in RRS 78.1*

*Rules regulating the use of equipment during a race are contained in Section C of these class rules, in ERS Part I and in the Racing Rules of Sailing.*

*This introduction only provides an informal background and the International FJ **Closed Class Rules** proper begin on the next page.*

PLEASE REMEMBER:

THESE RULES ARE **CLOSED CLASS RULES** WHERE, IF IT DOES NOT SPECIFICALLY SAY THAT YOU MAY – THEN YOU **SHALL NOT**.

COMPONENTS, AND THEIR USE, ARE DEFINED BY THEIR DESCRIPTION.

# PART I – ADMINISTRATION

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## Section A – General

### 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 The word “shall” is mandatory and the word “may” is permissive.
- 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.

### A.2 ABBREVIATIONS

- A.2.1 ISAF International Sailing Federation  
MNA ISAF Member National Authority  
IFJO International FJ Organization  
NFJO National FJ Class Organization  
ERS Equipment Rules of Sailing  
RRS Racing Rules of Sailing

### A.3 AUTHORITIES AND RESPONSIBILITIES

- A.3.1 The international authority of the class is the ISAF, which shall co-operate with the IFJO in all matters concerning these **class rules**, and their interpretation for the purposes of RRS 64.3 (b).
- A.3.2 No legal responsibility with respect to these **class rules**, or accuracy of measurement, rests with: the ISAF, the MNA, the IFJO, an NFJO, the **certification authority**, or an **official measurer**.  
No claim arising from these **class rules** can be entertained.
- A.3.3 Notwithstanding anything contained herein, the **certification authority** has the authority to withdraw a **certificate** and shall do so at the request of the ISAF.

### A.4 ADMINISTRATION OF THE CLASS

- A.4.1 ISAF has delegated its administrative functions of the class to MNAs. The MNA may delegate part or all of its functions, as stated in these **class rules**, to an NFJO.
- A.4.2 In countries where there is no MNA, or the MNA does not wish to administer the class, its administrative functions as stated in these **class rules**, shall be carried out by the IFJO which may delegate the administration to an NFJO.

## **A.5 CLASS RULES CHANGES**

- A.5.1 These **class rules** shall not be varied by sailing instructions, except with the express agreement of the IFJO and prior approval of the ISAF. ISAF Regulation 26.5(f) applies.

## **A.6 CLASS RULES AMENDMENTS**

- A.6.1 Amendments to these **class rules** shall be proposed by the IFJO, subject to approval of the ISAF, in accordance with the ISAF Regulations.

## **A.7 CLASS RULES INTERPRETATIONS**

### **A.7.1 GENERAL**

Interpretation of **class rules**, except as provided by A.7.2, shall be made in accordance with the ISAF Regulations.

### **A.7.2 AT AN EVENT**

Any interpretation of **class rules** required at an event may be made by an international jury, constituted in accordance with the RRS, in consultation with the IFJO. Such interpretation shall only be valid during the event and the organizing authority shall, as soon as practical after the event, inform the ISAF, the MNA and the IFJO.

## **A.8 INTERNATIONAL CLASS FEE(S) AND ISAF PLAQUE**

- A.8.1 The builder shall pay the International Class Fee to the ISAF and shall deliver the international class fee receipt to the owner.
- A.8.2 ISAF shall, after having received the International Class Fee for the **hull**, send the ISAF Building Fee Plaque to the **hull** builder. The ISAF Plaque shall be fixed to the **hull** by the builder.
- A.8.3 The amount of the International Class Fee shall be reviewed by the ISAF in consultation with the IFJO.
- A.8.4 **Hulls** built, measured and registered before 1st July 1972 do not need to have an ISAF plaque, or have paid the International Class Fee to the ISAF.

## **A.9 SAIL NUMBERS**

- A.9.1 Sail numbers shall be issued by the MNA of the owner of the **hull**

## **A.10 CERTIFICATION**

- A.10.1 For a **hull** not previously **certified**, all items on the **certification control form** shall be measured by an **official measurer** recognized by the IFJO, and the details entered onto the **certification control form**.
- A.10.2 The official measurer shall make four certified copies of the **certification control form**. The **official measurer**, and/or the builder, shall keep one copy of the **certification control form** and supply three copies to the owner of the **hull**.

- A.10.3 The owner shall, within 4 weeks after completion of **certification control**, send three copies of the completed **certification control form** together with any **certification** fee if required to the **certification authority** in the country where the **hull** is to be registered.
- A.10.4 Upon receipt of the three copies of the satisfactorily completed **certification control form**, and the fee if required, the **certification authority** shall issue a **certificate** and forward a copy the **certificate**, which includes the **certification control form**, the sail number, address and e-mail of the owner of the **hull**, to the IFJO.
- A.10.5 The **hull** certificate shall have the following data: The stamp of the **certification authority** with signature, the **hull** builder's number, as moulded or engraved on the **hull**, the ISAF plaque number, and the sail number.
- A.10.6 A certified copy of the **certification control form** shall form part of the **certificate**.
- A.10.7 The **certification authority** shall retain an original **certification control form** which shall be transferred to the new **certification authority** when a **hull** is exported. The new **certification authority** shall inform IFJO of such transfer and the new sail number.
- A.10.8 The **certification authority** may publish the **certificate**, without signature or stamp, on a secure website.

## **A.11 VALIDITY OF CERTIFICATES**

- A.11.1 A **certificate** becomes invalid upon:
- The date of expiry,
  - Change of ownership,
  - Withdrawal by the **certification authority**,
  - The issue of another **certificate**.
  - Any alteration or repair to the **hull**, other than routine maintenance.

## **A.12 COMPLIANCE WITH CLASS RULES**

- A.12.1 A **boat** ceases to comply with the **class rules** upon:
- Alterations, replacements or repairs beyond the limits of the **class rules**.
  - A change of **class rules** that causes equipment in use to cease to be permitted, except where the equipment may comply with the **class rules** in force at the time of its initial **certification control**. Only the **hull** measurements qualify for this exclusion.

## **A.13 RE-CERTIFICATION**

- A.13.1 A **hull** shall be re-certified by the issue of a new **certificate**, showing the dates of the initial and new **certification control** as applicable:
- WHEN A CERTIFICATE BECOMES INVALID UPON CHANGE OF OWNERSHIP**  
The new owner shall apply for re-certification by sending the old **certificate**, and fee if required, to the **certification Authority** in the

country where the hull is to be re-certified. If this **certification Authority** is different from the previous **certification Authority** then the new **certification Authority** shall receive the hull **certification control form(s)** from the old **certification Authority** prior to re-certification. The new **certification Authority** may issue the hull a new sail number.

- (b) WHEN A CERTIFICATE HAS BEEN WITHDRAWN, OR WHEN THE CERTIFICATE AND CERTIFICATION CONTROL FORM(S) CANNOT BE LOCATED

The owner shall arrange for **certification control** as required for initial **certification** and then apply for re-certification by sending the hull **certification control form(s)**, and fee if required, to the **Certification Authority** in the country where the hull is to be re-certified. The **Certification Authority** may issue the **hull** a new sail number.

A.13.2 A **boat** that has ceased to comply with its **certificate** may be brought into compliance by:

- (a) WHEN THE LIMITATIONS AFFECTING THE EQUIPMENT ARE CONTROLLED BY THE CLASS RULES

By carrying out **certification control** of the affected equipment,

- (b) WHEN THE LIMITATIONS AFFECTING THE EQUIPMENT ARE ON THE CERTIFICATE

By carrying out **certification control** of affected equipment as required for initial **certification**.

A13.3 The **hull** may be measured in accordance with the **class rules** in force when it first underwent **certification control**.

## Section B – Boat Eligibility

For a **boat** to be eligible, the rules in this section shall be complied with when *racing*.

### B.1 CLASS RULES AND CERTIFICATION

B.1.1 The boat shall:

- (a) Be in compliance with the **class rules**.  
(b) Have a valid **hull certificate**.  
(c) **Sails** shall carry **certification marks**. See G.3.1.

### B.2 CLASS ASSOCIATION STICKERS

B.2.1 A valid Class Association Sticker, if required by the NFJO or the IFJO, shall be affixed to the hull in a conspicuous position.

# PART II – REQUIREMENTS AND LIMITATIONS

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The **crew** and the **boat** shall comply with the rules in Part II when *racing*. Measurement to check conformity with rules of Section C is not part of **certification control**.

The rules in Part II are **closed class rules**.

**Certification control** and **equipment inspection** shall be carried out in accordance with the ERS except where varied in this Part.

## Section C – Conditions for Racing

### C.1 GENERAL

#### C.1.1 RULES

- (a) The ERS Part I – Use of Equipment shall apply.
- (b) The following RRS rules shall not apply:
  - (1) RRS 49 is amended to permit a trapeze system.
  - (2) RRS 50.4 headsails.

### C.2 CREW

#### C.2.1 LIMITATIONS

The **crew** shall consist of 2 persons.

### C.3 PERSONAL EQUIPMENT

#### C.3.1 MANDATORY

- (a) The boat shall be equipped with **personal buoyancy** for each **crew** member to the minimum standard ISO 12402 – 5 (Level 50), EN 393: 1995 (CE 50 Newtons), or USCG Type III, or AUS PFD 1. They must be available on board at all times.

#### C.3.1 OPTIONAL

- (a) The trapeze shall consist of two wires or lines attached directly or indirectly to the mast **spar**, one on each side, to which a trapeze harness can be fastened, to enable not more than one **crew** member to stand outside the gunwale. The trapeze harness may be attached directly or indirectly to a trapeze wire or line but only by means of a single quick release system. (See also RRS 43.1 regarding trapeze harness and equipment weight)

### C.4 ADVERTISING

#### C.4.1 LIMITATIONS

Advertising shall be in accordance with the ISAF advertising code. Competitor advertising may be displayed on the **boat** in accordance with



ISAF regulation 20.3.1.2.

## **C.5 PORTABLE EQUIPMENT**

### **C.5.1 FOR USE**

#### **(a) Mandatory**

- (1) Except in boats fitted with a self-bailer, one hand bailer or bucket of capacity greater than 2.0 litres.

#### **(b) Optional**

- (1) Two timing devices and an electronic compass are permitted provided they have no data correlation capability. Devices using the GPS are prohibited.
- (2) If an anchor is prescribed in the Sailing Instructions, the anchor, chain, and rode shall weigh at least 2.3 kg, with 20 m synthetic line of minimum diameter 6 mm attached to the anchor and to the boat. The anchor shall be ready for use.

### **C.5.2 NOT FOR USE**

#### **(a) Mandatory**

- (1) Towing rope minimum 20 m long and of not less than 6 mm diameter. The rope shall not be stowed in a buoyancy tank and shall be ready to use.
- (2) One efficient paddle minimum length 0.900 m, minimum weight 0.300 kg. The paddles shall not be stowed in buoyancy tanks and shall be ready to use.

## **C.6 BOAT**

### **C.6.1 LIMITATIONS**

- (1) When specified in the Notice of Race and the Sailing Instructions the limitations on equipment for a series are:  
1 **Mainsail**, 2 **Jibs**, 1 **Spinnaker** (optional), 1 **mast**, 1 **Boom**, 2 **spinnaker poles**, 1 **Centreboard** (or dagger board) and 1 **Rudder**.
- (2) The design and layout of the cockpit is optional.

### **C.6.2 FITTINGS**

Fittings, equipment, sheets, and lines etc. required for stowing, hoisting, reefing and setting of sails are optional, except that they shall conform to these **class rules** and the RRS.

## **C.7 HULL**

### **C.7.1 FITTINGS**

#### **(a) Use**

- (1) Buoyancy tank inspection covers and drainage plugs shall be kept in place at all times while racing.
- (2) No hiking system or trapeze system shall prevent its user from instantly releasing himself/herself from the **boat**.

(b) OPTIONAL

- (1) One **mast** step
- (2) Deck handles which shall not extend outboard of the **hull**.
- (3) Foot straps fastened inside the cockpit.
- (4) Centreboard adjustment system
- (5) A stem head cover
- (6) Tiller lock.
- (7) Compass mounting

**C.8 HULL APPENDAGES**

C.8.1 CENTREBOARD/ OR DAGGERBOARD

(a) **Construction**

A stop shall be fitted on the centerboard to prevent it from extending more than 710 mm below the **Hull** shell excluding keel band.

	minimum	maximum
Depth of the <b>centreboard</b> or <b>dagger board</b> from the <b>hull</b> shell excluding the keel band		710 mm

(b) **Use**

The **centreboard** or **dagger board** shall not be turned so that the aft side faces forward, or be rotated so that its aft edge is raked forward of perpendicular to the hull shell at the point it exits the **hull** shell.

C.8.2 RUDDER

- (a) A device shall be fitted to keep the **rudder** attached to the **hull** even when capsized.
- (b) A point on the leading edge of the rudder, or its extension, and 600 mm from the Rudder Datum Point (RDP see appendix E) shall be above the extension of the **hull** keel line.

**C.9 RIG**

C.9.1 MAST

(a) **Dimensions**

	minimum	maximum
The distance from the intersection of the aft edge of the mast and the deck line to the <b>Mast datum point</b>		650 mm

(b) **Use**

- (1) The **spar** shall be stepped in the mast step in such a way that it shall not be capable of rotating.
- (2) The gooseneck construction shall prevent the boom **spar** from being set in a position that does not comply with ERS B.7.1.

## FITTINGS

### (a) OPTIONAL

- (1) One mechanical wind indicator,
- (2) One compass bracket.

## C.9.2 BOOM

## FITTINGS

### (a) OPTIONAL

- (1) Spinnaker pole stowage fittings,

## DIMENSIONS

	minimum	maximum
<b>Outer limit mark width</b>	10 mm	
<b>Outer point distance</b>		2440 mm

## C.9.3 STANDING RIGGING

The use of a forestay is mandatory.

	minimum	maximum
Distance from the intersection of the forestay with the deck to the stem, excluding any fittings and gunwale		100 mm

## C.9.3 RUNNING RIGGING

### (a) OPTIONAL

- (1) Jib furling gear which shall be attached to the forestay fitting.

## C.10 SAILS

### C.10.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) Routine maintenance such as repairing minor tears is permitted without re-measurement and re-**certification**.
- (b) Battens may be placed in the **batten pockets**

### C.10.2 MAINSAILS

#### (a) IDENTIFICATION

The sail identification shall comply with the RRS Appendix G with the exception that the class insignia do not need to be placed at different heights on the two sides of the sail provided they do not overlap.

#### (b) USE

- (1) The **sail** shall be hoisted on a halyard. The arrangement shall permit hoisting and lowering of the **sail** from the cockpit at all times.
- (2) A minimum of 3880 mm of the **Luff** and 1950 mm of the **foot** bolt ropes shall be in the **spar** grooves or attached to tracks.

### C.10.3 JIB

(a) IDENTIFICATION

No identification is required

(b) USE

- (1) The **jib tack point** shall be less than 50 mm from the forestay attachment.
- (2) The **sail** shall be hoisted on a halyard. The arrangement shall permit hoisting and lowering of the **sail** from the cockpit at all times.

### C10.4 SPINNAKER

(a) IDENTIFICATION

The sail identification shall comply with the RRS Appendix G

## Section D – Hull

### D.1 GENERAL

#### D.1.1 IDENTIFICATION

The sail number and national letters in figures and letters not less than 25 mm high shall be marked on the transom.

#### D.1.2 INTERNATIONAL CLASS FEE ISAF PLAQUE

Hulls built, measured and registered after 30 June 1972 shall carry the ISAF Plaque fixed in a conspicuous position.

#### D.1.3 DEFINITIONS

- (a) The **hull datum point** is the intersection of the **hull** centre plane, the underside of the hull shell and the transom, each extended as necessary.
- (b) The **sheerline** datum points are at the intersections of the **sheerlines** and the transom, each extended as necessary.
- (c) The keel line is the intersection of the **hull** centre plane and the underside of the hull shell, from transom to stem.
- (d) The deckline (see Appendix D) is the imaginary line on the **hull** centre plane between the upper edge of the transom and the highest point of the stem excluding fittings.
- (e) The baseline is the straight line on the **hull** centre plane through the points at the following vertical distances from the hull shell:

At hull datum point	175 mm
At section 9	100 mm

### D.2 HULL SHELL

#### D.2.1 MATERIAL

The structure of the **hull** shall be inherently buoyant, so the **hull** floats in the event of failure of all buoyancy tanks and/or bags.

#### D.2.2 CONSTRUCTION

- (a) The transom shall be set at the extreme aft end of the **hull**.
- (b) Drainage flaps shall not extend the lower surface of the **hull** shell.
- (c) Keel band, if fitted, shall not be let in or faired into the **hull** shell.
- (d) Fairleads may be fitted to the rubbing strake, but shall not project beyond the outer edge of the rubbing strake.

### D.3 BUOYANCY TANKS

#### D.3.1 CONSTRUCTION

The **Hull** shall have buoyancy tanks, and/or firmly attached buoyancy bags, sufficient to float the **boat**, plus 150 kg, approximately level with the centerboard trunk cap above the water.

- (a) **Hulls** built from 1st January 1995 shall have at least two separated watertight buoyancy tanks.

- (b) The **hull** shall have a separate bow buoyancy bag or slabs of rigid non-communicating air cell foam plastic of not less than 70 litres securely fastened or put into a tank.
- (c) Buoyancy tank inspection ports shall be of sufficient size to enable inspection of secondary buoyancy. The Covers shall be in place when *racing*, be watertight, detachable and capable of resisting accidental dislodgement.

#### D.4 GUNWALE AND RUBBING STRAKES

D.4.1 Gunwale rubbing strakes shall be fitted along the topsides at the height of the **Sheerline**.

	minimum	maximum
Rubbing strake depth	5 mm	35 mm
Rubbing strake width	5 mm	90 mm
Rubbing strake extension forward of stem		50 mm
Rubbing strake extension aft of the transom		50 mm

#### D.5 ASSEMBLED HULL

##### D.5.1. HULL MEASUREMENT

###### (a) **Templates**

- (1) Templates used for **certification control** and **equipment inspection** shall be supplied by the IFJO in conjunction with the ISAF, and shall be certified and numbered.
- (2) The sections to be measured by templates shall be planes through the following 3 points. (See measurement diagram Appendix D).

Distance from **hull datum point** measured along the keel line at:

Section 3 .....	1115 mm
Section 6.....	2227 mm
Section 9 .....	3340 mm

Distance from the sheerline **datum** points, measured along the **sheerline** on both sides of the hull at:

Section 3.....	1124 mm
Section 6.....	2237 mm
Section 9.....	3402 mm

###### (b) **Section measurement:**

The section templates shall be placed so that:

- (1) The template is situated entirely in the plane through the points on both **sheerlines** and on the keel line.
- (2) The lugs (extensions) of the templates touch the **hull** skin.
- (3) The extension of the centre line of the template is situated on the keel line of the **hull**.

(c) Hull templates

	minimum	maximum
Template gap	0 mm	20 mm
Vertical distance from the <b>sheer</b> height mark on the template to the upper side of the deck at the <b>sheerline</b>	-12 mm	+12 mm

Note: The template crossbar is precisely 100 mm above the **sheerline** mark, see appendix D.

(d) Stem measurement:

The bow template shall be placed so that:

- (1) The template is situated in the centre plane of the **hull**.
- (2) The lugs (extensions) of the templates touch the **hull** skin.

	minimum	maximum
Clearance of stem template between the end lugs with the aft end of the stem template within 6 mm of section 9		6 mm
Vertical distance from the <b>sheerline</b> mark on the stem template, to the upper side of the deck at the stem with the aft end of the template within 6 mm of section 9	-6 mm	+6 mm

(e) Keel Rocker measurement:

	minimum	maximum
Vertical distance from baseline to the outside of <b>hull</b> shell at:		
Section 0		<b>175</b> mm
Section 3	64 mm	84 mm
Section 6	18 mm	38 mm
Section 9		<b>100</b> mm
Sum of the vertical distance from the baseline to the outside of the <b>hull</b> shell at sections 3 and 6	92 mm	112 mm

(f) Hull measurement:

	minimum	maximum
<b>Hull Length</b>	4020 mm	4040 mm
Height of the transom at the <b>hull</b> centre plane	394 mm	406 mm
Angle between the transom and the extension of the keel line	78°	90°
Deck height above the deckline. The spray deflector is not part of the deck.		30 mm

(g) Inverted hull measurement:

	minimum	maximum
<b>Centreboard/dagger board slot from hull datum point:</b>		
If fitted for a <b>centreboard</b>	1288 mm	2262 mm
If fitted for a <b>dagger board</b>	1588 mm	2262 mm
Width of <b>centreboard/dagger board</b> slot		40 mm
Radius between the hull shell and the transom		10 mm
Keel band: thickness		5 mm
width		8.5 mm

#### D.5.2 FITTINGS

Spinnaker chutes are not permitted, but a flexible spinnaker sheet catcher of maximum 75 mm extension beyond the stem is permitted.

#### D.5.3 WEIGHT

	minimum	maximum
The weight of the <b>hull</b> in dry condition including all fixed fittings, buoyancy apparatus and protective finish, but excluding <b>sails, spars, rigging, rudder, centerboard/dagger board, hull appendages</b> , movable fittings, floorboards unless permanently fixed to the <b>hull</b> shell and other equipment	75.0 kg	
Total <b>corrector weights</b>		5.0 kg

#### D.5.4 CORRECTOR WEIGHTS

**Corrector weights** shall be permanently fastened to the hull when the **hull** weight is less than the minimum.



## Section E – Hull Appendages

### E.1 PARTS

#### E.1.1 MANDATORY

- (a) **Centreboard** or **Dagger board**
- (b) **Rudder**

### E.2 GENERAL

#### E.2.1 CENTREBOARD/ OR DAGGERBOARD

- (a) The **Centreboard** or **Dagger board** Datum Point (see CDP Appendix E) is defined as at the intersection of the extension of the **Centreboard** or **Dagger board** leading edge and its perpendicular, tangential to the lower edge of the **Centreboard** or **Dagger board**.
- (b) The shape of the underwater part of the **Centreboard** or **Dagger board** shall conform to the drawing in Appendix E 1 with a tolerance of  $\pm 6$  mm on the bottom and trailing edge, when the leading edge is aligned.

#### E.2.1 RUDDER

- (a) The **Rudder** Datum Point (see RDP Appendix E 2) is defined as at the intersection of the extension of the **rudder** leading edge and its perpendicular, tangential to the lower edge of the **rudder**.
- (b) The shape of the underwater part of the **rudder** shall conform to the drawing in Appendix E 2 with a tolerance of  $\pm 6$  mm on the bottom and trailing edge, when the leading edge is aligned.

## Section F – Rig

### F.1 PARTS

#### F.1.1 MANDATORY

- (a) **Mast**
- (b) **Boom**
- (c) Standing **rigging**
- (d) Running **rigging**

#### F.1.2 OPTIONAL

- (a) **Spinnaker pole**
- (b) One pair of **spreaders** with fittings which maybe adjusted at the **spreader**,

### F.2 GENERAL

#### F.2.1 RULES

- (a) The **rig** shall comply with the current **class rules**.
- (b) The **lower limit mark**, **upper limit mark** and **outer limit mark** shall be bands of contrasting colour completely around the **spar**

#### F.2.2 DEFINITIONS

- (a) The **mast datum point** is at the **lower point**, i.e. the highest point of the **lower limit mark** at the aft edge of the **spar**.

### F.3 MAST

#### F.3.1 MATERIALS

The **spar** shall be of wood or aluminium alloy. It may be anodized or coated.

#### F.3.1 FITTINGS

##### (a) OPTIONAL

**Mast** fittings, equipment, and halyards are optional, except that they shall conform to these **class rules** and the RRS.

#### F.3.3 DIMENSIONS

The **forestay rigging point** shall be above the jib halyard fitting/sheave.

	minimum	maximum
<b>Mast limit mark widths</b>	10 mm	
<b>Upper point height</b>		4850 mm
<b>Spinnaker hoist height</b>		3500 mm
<b>Mast spar curvature</b> measured at any point		40 mm
<b>Spinnaker Pole fitting projection</b>		50 mm

#### F.3.4 WEIGHTS

	minimum	maximum
<b>Mast weight:</b> if deck stepped	7.0 kg	
if stepped inside the <b>hull</b>	7.5 kg	

### F.4 BOOM

#### F.4.1 MATERIALS

The **boom** shall be of wood or aluminium alloy. It may be anodized or coated.

#### F.4.2 FITTINGS

##### (a) OPTIONAL

**Boom** fittings, and equipment are optional, except that they shall conform to these **class rules** and the RRS.

#### F.4.3 DIMENSIONS

	minimum	maximum
<b>Boom spar cross section</b>		100 mm
<b>Boom spar curvature</b> measured at any distance from <b>outer point</b>		20 mm

### F.5 SPINNAKER POLE

#### F5.1 DEFINITION

Not used

#### F.4.2 FITTINGS

##### (a) OPTIONAL

Spinnaker pole fittings are optional

#### F.5.2 DIMENSIONS

	minimum	maximum
<b>Spinnaker pole length</b>		1600 mm

### F.6 STANDING RIGGING

#### F.6.1 CONSTRUCTION

##### (a) MANDATORY

	minimum	maximum
Wire rope forestay	2 mm	
Wire rope Shrouds	2 mm	

##### (a) OPTIONAL

Shroud and forestay turnbuckles

## Section G – Sails

### G.1 PARTS

#### G.1.1 MANDATORY

- (a) **Mainsail**
- (b) Headsail

#### G.1.2 OPTIONAL

- (a) Spinnaker

### G.2 RULES

G.2.1 **Sails** shall comply with the current **class rules**.

### G.3 CERTIFICATION

G.3.1 An **official measurer** shall **certify** mainsails and jibs in the **tack**, and spinnakers in the **head**, and shall date and sign the **certification mark** with the date of **certification control**.

G.3.2 An MNA may appoint one or more persons at a sail maker to measure and **certify sails** produced by that manufacturer. Alternatively an **In-House Official Measurer** may be used.

### G.4 MAINSAIL

#### G.4.1 IDENTIFICATION

The class emblem shall be the letters “FJ” not less than 300 mm high. But the class insignia do not need to be placed at different heights on the two sides of the sail provided they do not overlap.

#### G.4.2 CONSTRUCTION

- (a) The sails shall be **single-ply soft sail**.
- (b) The **sail** shall not have more than three **batten pockets**.
- (c) The **leech** between the **aft head point** and the upper **batten pocket**, between adjacent **batten pockets**, and between the lower **batten pocket** and the **clew point** shall not be convex
- (d) The following are permitted: Stitching, glues, tapes, **tabling**, bolt ropes, corner eyes, headboard with fixings, reefing points, adjustment point eye or pulley, **primary reinforcement**, **secondary reinforcement**, battens, batten pocket elastic, leech line with a cleat in an optional position, two **windows**, telltales, one **spar** groove slider for each of the **head**, **clew** and **tack**, sail shape indicator stripes, and items permitted or prescribed by other applicable *rules*.

### G.4.3 DIMENSIONS

	minimum	maximum
<b>Leech length</b>		5260 mm
<b>Upper Width at upper leech point</b> 2565 mm from the head point		1600 mm
<b>Upper width at upper leech point</b> 1245 mm from the head point		1015 mm
<b>Top width</b>		160 mm
<b>Primary reinforcement from sail corner measurement points</b>		320 mm
<b>Luff bolt rope length</b>	3880 mm	
<b>Foot bolt rope length</b>	1950 mm	
<b>Batten pocket length:</b> Lower most: <b>inside</b> Intermediate: <b>inside</b>		525 mm 775 mm
Distance from intersection of <b>leech</b> and centreline of the lower <b>batten pocket</b> and the <b>clew point</b>	1245 mm	1365 mm
Distance from intersection of <b>leech</b> and centreline of intermediate <b>batten pocket</b> and the <b>head point</b>	2505 mm	2625 mm
Distance from intersection of <b>leech</b> and centreline of upper batten pocket and the <b>head point</b>	1185 mm	1305 mm
Distance from <b>head point</b> to intersection of <b>luff</b> and centreline of uppermost <b>batten pocket</b>		1290 mm

## G.5 JIB

### G.5.1 CONSTRUCTION

- The sail shall be **single-ply soft sail**.
- The **leech** from the **aft head point** to the **clew point** shall not be convex.
- The following are permitted: Stitching, glues, tapes, **tabling**, bolt ropes, corner eyes, hanks, **primary reinforcement**, **secondary reinforcement**, battens, batten pocket elastic, foot and leech lines with optional cleats, two **windows**, telltales, sail shape indicator stripes, and items permitted or prescribed by other applicable *rules*.

### G.5.2 DIMENSIONS

	minimum	maximum
<b>Luff Length</b>		3800 mm
<b>Leech length</b>		3500 mm
<b>Foot Length</b>		1950 mm
<b>Foot median</b>		3660 mm
<b>Top width</b>		55 mm
<b>Foot irregularity</b>		10 mm
<b>Primary and secondary reinforcement at a corner</b>		320 mm

## **G.6 SPINNAKER**

### **G.6.1 CONSTRUCTION**

- (a) The **sail** shall be **single ply soft sail**.
- (b) No sail openings are permitted in the **body of the sail**.
- (c) The following are permitted: Stitching, glues, tapes, **tabling**, corner eyes, **primary reinforcement**, **secondary reinforcement**, telltales, and items permitted or prescribed by other applicable *rules*.

### **G.6.2 DIMENSIONS**

	minimum	maximum
<b>Leech and luff length</b>		3600 mm
<b>Foot Length</b>		2400 mm
<b>Foot Median</b>		4200 mm
<b>Half Width</b>		2600 mm
<b>Primary and secondary reinforcement at a corner</b>		320 mm

## **Section H – Plans, Class Flag**

### **H.1 OFFICIAL PLANS:**

- 1 Sections and stem, full size and table of offsets
- 2 Lines plan scale 1:10 (1954)

### **H.2 FOR GUIDANCE ONLY:**

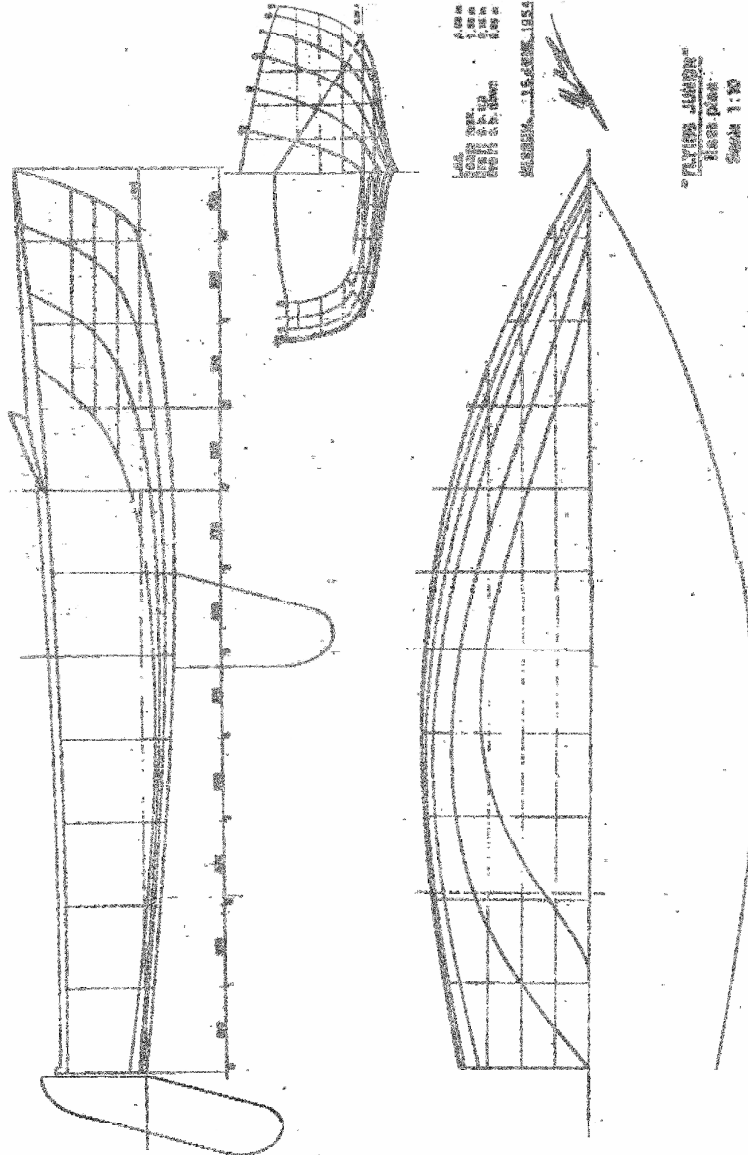
- Suggested Single bottom construction wood, scale 1:10 (1973)
- Suggested GRP double bottom construction 1:10 (1964)

### **H.3 RECOMMENDED CLASS FLAG:**

- International code flag 'Z' is recommended.

*International Flying Junior Class  
Hull Lines Diagram Appendix B 2010*

In the case of conflict, the written class rules take precedence over this Appendix

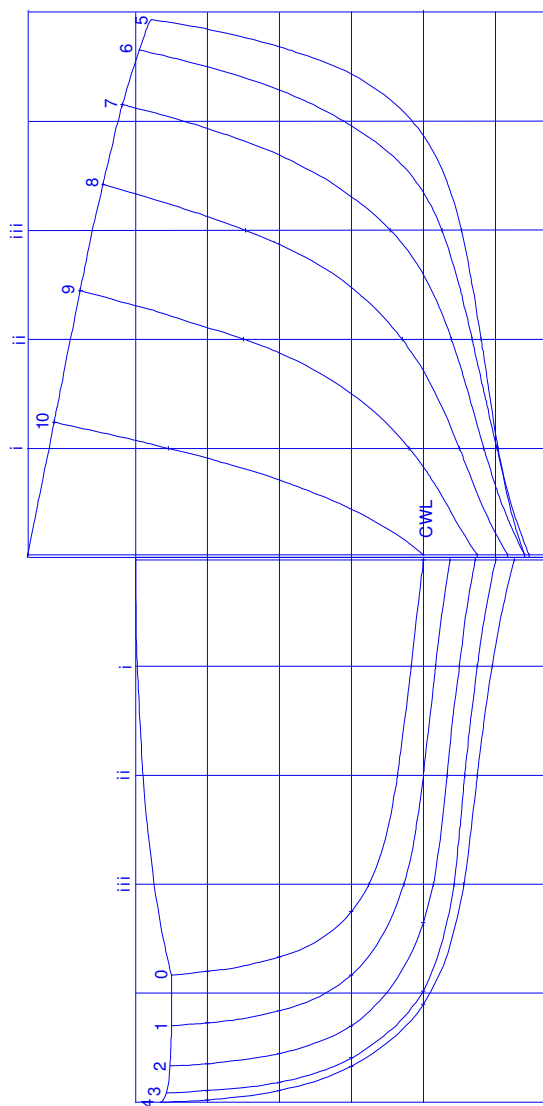


Date: 20 January 2010

NOT TO SCALE

## International Flying Junior Class Hull Sections Diagram Appendix C 2010

In the case of conflict, the written class rules take precedence over this Appendix



Flying Junior Table of Offsets

Station	Position	1/2 BR WATERLINES FROM CL				Dimensions in millimeters to outside of hull			BUTTOCKS			Keel	Sheer
		4	3	2	1	CWL	Sheer	i	ii	iii			
0	0	400	300	200	100	0	575	17	36	76	0	350	
1	370		640.5	624	575	300	644.5	-17	0	27	-37	350	
2	740		697	683	645	503	700	-50	-33	-14	-72	352	
3	1110		734	722.5	689	597	737.5	-75	-57.5	-42.5	-101	357	
4	1480		747	734	700.5	615	750	-95.5	-75	-56	-126.5	365	
5	1850		727	702.5	665	581	740	-104	-80	-53	-140.5	378	
6	2220		675	643	594	502	698	-102	-68	-25.5	-147	395	
7	2590	618	590	553	496	388.5	623	-84	-39	46	-140.5	418	
8	2960	500	469	430.5	371	257	513	-50	29.5	247	-117	445	
9	3330	346	316.5	281	225	124	367	20	250		-75	477	
10	3700	160.5	136	106	66	3.5	186	354			0	513.5	
stem	4030						3.5				550	550	

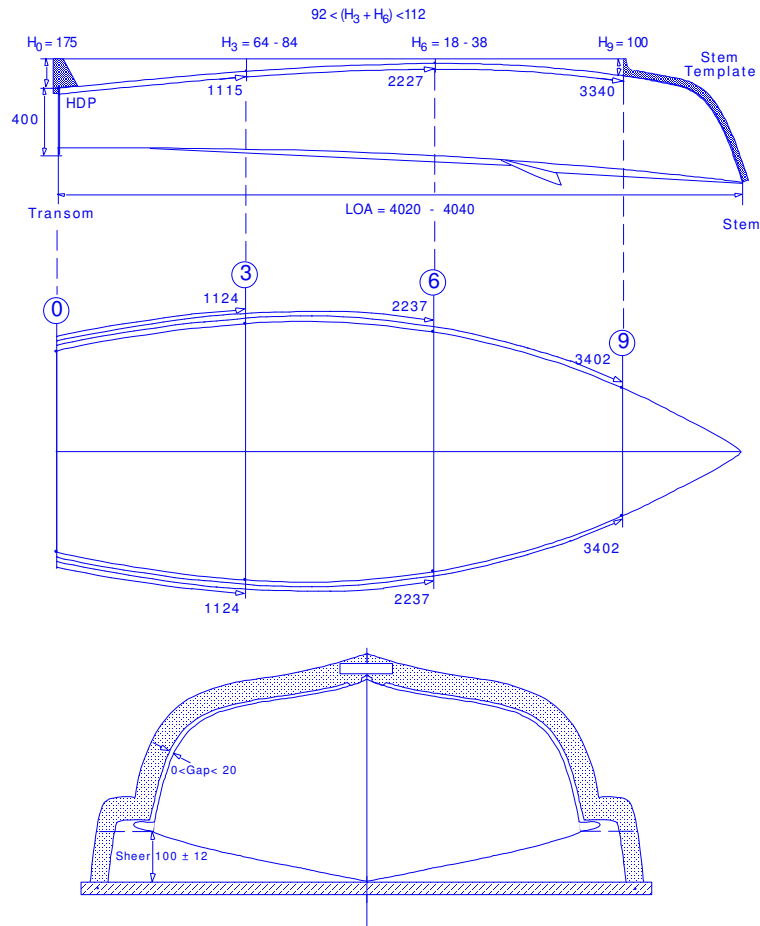
Date: 20 January 2010

NOT TO SCALE



*International Flying Junior Class*  
*Hull Measurement Diagram Appendix D 2010*

In the case of conflict, the written class rules take precedence over this Appendix



Date: 21 May 2010

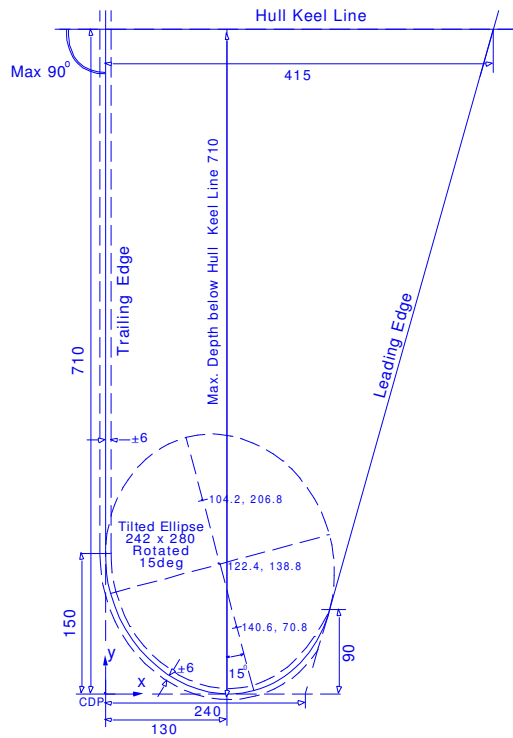
NOT TO SCALE

*International Flying Junior Class*  
*Centreboard and Rudder Diagram Appendix E 1 2010*

In the case of conflict, the written class rules take precedence over this Appendix

## Centreboard

Centreboard Head Design above the Hull Keel Line Not controlled



Notes: The Centreboard Datum Point, CDP, is at the intersection of the extension of the trailing edge and the perpendicular through the lowest point of the Centreboard.  
 The major axis and positions of the foci of the ellipse defining the curved edge are shown.

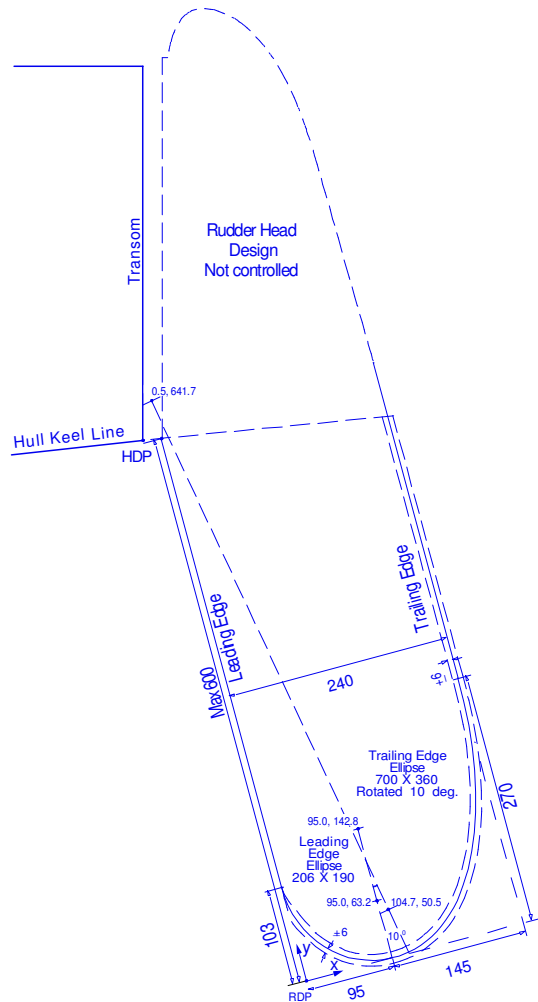
Date: 30 April 2010

NOT TO SCALE

*International Flying Junior Class*  
*Centreboard and Rudder Diagram Appendix E 2 2010*

In the case of conflict, the written class rules take precedence over this Appendix

## Rudder



Notes: The Rudder Datum Point, RDP, is at the intersection of the extension of the leading edge and the perpendicular through the lowest point of the rudder.  
 The major axis and positions of the foci of the ellipses defining the curved edges are shown.

Date: 30 April 2010

NOT TO SCALE