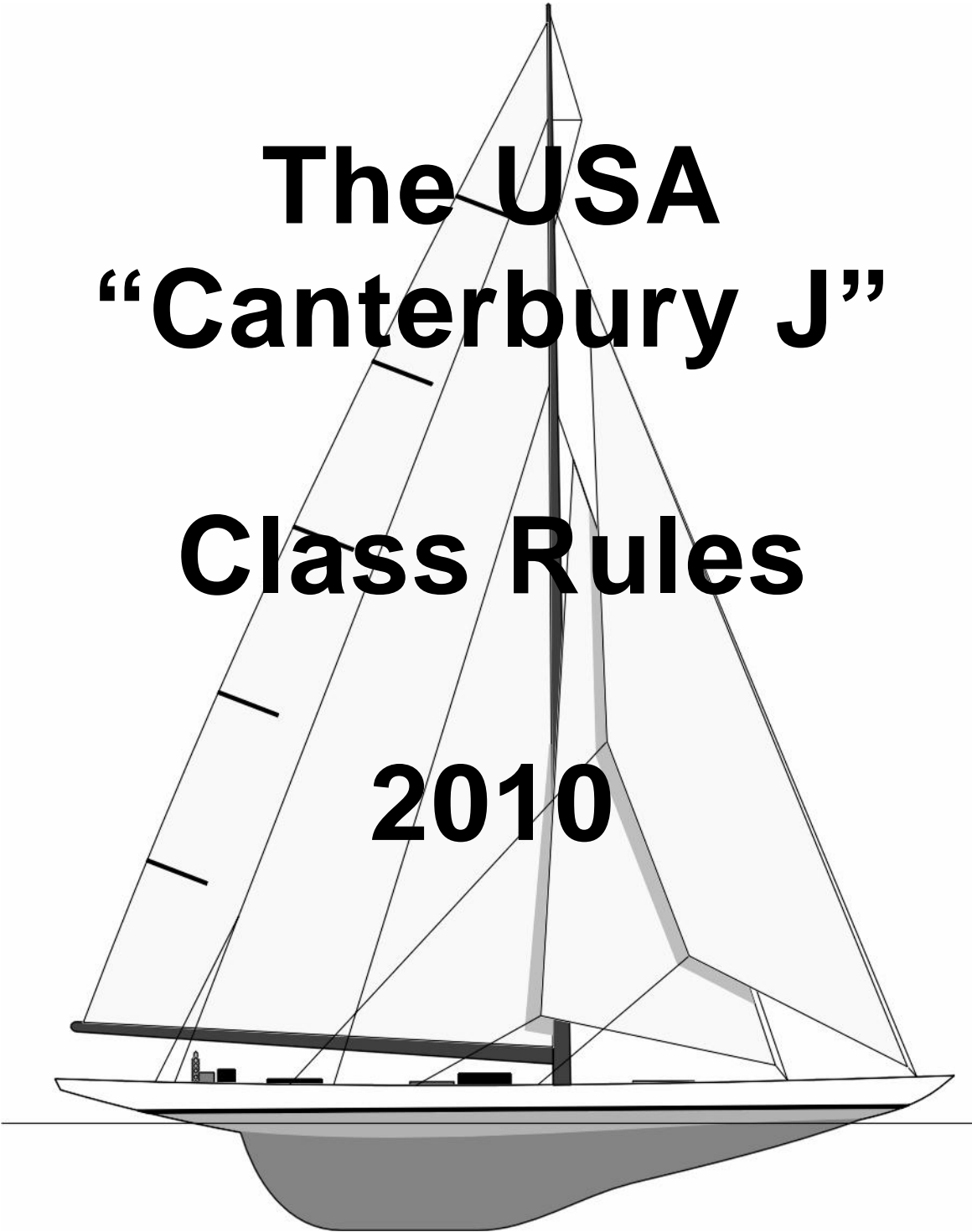


**"Canterbury J" Class Owners' Association**



**The USA  
"Canterbury J"  
Class Rules  
2010**

**As Accepted 2008 and Revised February 2010**

**Published March 2010**

# THE CANTERBURY J CLASS

## RESTRICTED DESIGN RADIO CONTROLLED MODEL YACHT

### CLASS RULES

#### 1) GENERAL

1.1 The design is based on the full sized "J" class yacht Ranger with design changes to provide a model with good sailing abilities that is easily controlled by radio. The rules serve to control the parameters of construction to allow for racing between boats of similar speed and characteristics. Material specifications and methods of construction are controlled with the intention of encouraging home building and keeping the class affordable to a large range of people. **It is intended that the rules of the class shall remain unchanged over time to ensure that all boats are able to retain a competitive position within the class and thus hold their value.**

1.2 Terminology: In these Rules the word “**shall**” and “**will**” means the pertinent rule must be strictly adhered to. The word “**may**” means that this is optional.

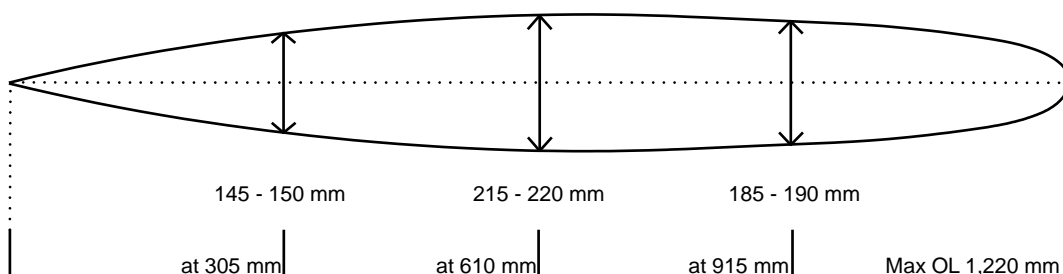
1.3 The Class **shall** consist of a fiberglass hull from the Class Association's official mould, a lead keel and trim weight from an approved mould, and rigs as per the sail plans with rigging that falls within the specifications. A bow bumper of a type approved by the Measurer **shall** be fitted and is **not** to be included within the overall length. Radio control is constrained to the use of two channels, being one rudder control and one coupled jib/main sail sheeting control.

#### 2) HULL

2.1 The hull (shell) is a one piece molding of glass reinforced polyester resin produced in the official mold. No fibers or cloth other than glass **shall** be used as a reinforcement of any resins used for completing the construction of the hull shell including its deck and rudder blade, but excluding any hull fittings that can be attached and detached from it. The registered hull number label is to be glassed into the interior of the hull in such a position that it can be seen by the measurer when certificated.

#### 2.2 Dimensions of the hull

Maximum overall length:	1220 mm = 48 inches
Beams as measured from the bow:	
at quarter length (12”):	145 -150 mm = 5.708 - 5.905 inches
at half length (24”):	215 -220 mm = 8.465 - 8.661 inches
at three quarter length (36”):	185 -190 mm = 7.283 - 7.480 inches



- 2.3.1 Lead weights as per the Class Associations official moulds, or others approved by the Association **shall** be used. No materials other than lead **shall** be used for the keel or trim weights. The keel **shall** be bolted to the bottom of the hull, in a position so as to lie fairly onto the keel stub with the minimum of filling required to provide a smooth underwater section. Such a position **shall** normally be so that any discrepancy between the keel molding and the keel stub **shall** be equaled at either end.
- 2.3.2 No additional weight in any form **shall** be inserted between the keel and the keel stub, except filling as allowed in 2.3.a. No additional weight in any form **shall** be inserted internally between the keel stub and the wooden floor.
- 2.3.3 The trim weight **shall** be bolted to the front keel bolt on the interior of the hull by drilling a hole no larger than 8 mm (.317") at a position which **shall** be 40 mm (plus or minus 3 mm) (1.575" +/- .118") from the wider end of the weight and central between either edge. The weight **shall** be positioned so that the tapered section of the weight faces forward and the weight lies flat on the timber floor. The trim weight **shall not** be lightened, weighted, reshaped, or otherwise tampered with from its original state. Fixtures **may** be attached to the trim weight.
- 2.3.4 The weight of the complete boat with mast, booms, rigging, sails, and radio gear, including batteries, of a type and size normally used in radio controlled yachts, **shall not** be less than 6.500 kg (14lbs 5oz) when carrying the "A" rig as per the measurement diagrams. Additional weight **may** be added in locations not listed above in 2.3.2 and 2.3.3

2.4 The Rudder shape **shall** be no bigger than as per the official pattern in these Rules (see page 13) with the rudder post included within this area for measurement purposes. The length of the after face of the keel **shall** be between 205 and 210 mm.(8.070"- 8.268") No fairing or appendages between the top of the rudder and the hull or between the keel and the leading edge of the rudder is permitted.

2.5 The Deck **shall** be made of wood and may be supported by wooden beams. The wood Deck may be covered with any protective material.( USA rule)

### 3) **RIG**

3.1 A rig is defined as a mast, a mainsail and its boom, a jib with its boom, all with permitted fittings and rigging.

#### 3.2 **Masts**

3.2.1 Masts **shall** comply with the measurement specifications in these Rules. The basic mast section **shall** be constructed of either aluminum alloy or wood. No other materials will be allowed. Fittings however **may** be of other materials.

3.2.2 Masts **may** be stepped on or through the deck.

3.2.3 Mast stubs **shall** be permitted.

- 3.2.4 Measurement bands **shall** be displayed on the mast, in a color that contrasts with the mast, at the top and bottom of the mainsail. The distance apart **shall not** exceed measurement "A" on the measurement diagram. An additional band **shall** be marked to reflect the maximum allowable height above the deck for the jib attachment. This band **will** be positioned **not** less than measurement "I" below the top mainsail band. For the purposes of measurements the distances being measured **shall** be between the measurement bands. Measurement bands **shall** be between 3- 10 mm ( .118"- .397")in width.
- 3.2.5 Masts **shall** be of constant circular section without grooves for internal sail tracks. Maximum diameter is 12.7 mm (1/2") and tapered spars **will** be **excluded** from the class.
- 3.2.6 The centre of the mast **will** be stepped at a point 490-540 mm (19.291"- 21.259") from the bow.
- 3.2.7 For the purposes of measurement the deck level **shall** be measured from a straight line between the gunwales at a distance of 530 mm (20.866")from the bow.

**3.3 Fittings:** Each mast **may** have:

- 3.3.1 One wind vane.
- 3.3.2 One back stay crane to extend the fixing position of the backstay to the mast head beyond the allowed roach of the mainsail.
- 3.3.3 Attachments for jib stay or halyard and shrouds.
- 3.3.4 One set of spreaders and their attachments.
- 3.3.5 Attachments for the mainsail luff, head, and tack.
- 3.3.6 Mast strut or ram and attachments.
- 3.3.7 Check stays and their attachments **shall** be allowed **only** in conjunction with a mast stub and **shall** be attached to provide support for the stub.
- 3.3.8 A gooseneck fitting and its attachments. **No** ball raced fittings will be permitted.
- 3.3.9 A kicking strap and its attachments. This **may** be combined with the gooseneck fitting.
- 3.3.10 Mast base and deck track fitting on deck stepped masts.

**4) STANDING RIGGING**

4.1 Masts **shall** be supported by:

- 4.1.1 Jib stay and/or jib halyard. Forestays of a rigid type **will not** be permitted.

4.1.2 One pair of shrouds with optional inner lower stays. Spreaders will be permitted but **shall** be restricted to one set on each mast.

4.1.3 One backstay which **may** be split into a two part bridle no higher than 300 mm (11.811”) above the deck to allow for tensioning adjustment if desired.

## 5) **BOOMS**

5.1.1 Construction: Booms **shall** be of a constant circular section. Internal sail tracks will **not** be permitted.

5.1.2 Main boom fittings: Each main boom **may** have:

- i) Attachments for tack, sheet, and clew.
- ii) Kicking strap.
- iii) A gooseneck fitting of any type or style, **excluding** ball-raced fittings

5.1.3 Jib boom fittings: Each jib boom **may** have:

- i) Attachments for jib stay, tack, sheet, clew, and topping lift.
- ii) A Boom swivel.
- iii) Counterweight which **shall not** extend beyond the bow when measured on the centerline.

## 6) **SAILS**

Sail dimensions **shall** be restricted to the three rigs A, B, and C as shown in the Measurement Diagram in these Rules.

6.1.1 Sails **may** be made of any material.

6.1.2 Sails **shall** comply with the dimensions given in the Measurement diagram in these Rules (see page 13).

6.1.3 During measurement sail battens need **not** be removed and sails **may** remain attached to the spars.

6.1.4 The same sail material and weight **shall** be used throughout the body of each sail.

6.1.5 Seams, including reinforcements and tabling, **shall not** exceed 15 mm (.590”) in width.

6.1.6 Corner reinforcements **shall not** exceed 125 mm (4.021”) in any direction when measured from the corner measurement point.

6.1.7 Telltales **may** be fitted to mainsails and to jibs.

### **6.2 Mainsails**

6.2.1 Each mainsail **shall** be made of a maximum of four panels joined by seams which **shall not** be closer than 150 mm (5.905”) to a corner. No pleat, cut or tuck **shall** be permitted on any panel.

- 6.2.2 Any method of attachment of sails to the mast is permitted with the exception of an internal grooved sail track.
- 6.2.3 The leech or foot of the sail **shall not** be convex between measurement points.
- 6.2.4 There **may** be up to three battens supporting the leach. Each batten **shall** be fixed within 3 mm (.119") of each measurement point on the sail leach. The top batten **shall not** exceed 75 mm (2.953") in length and the other two battens **shall not** exceed 100 mm (3.937") in length.
- 6.2.5 **No** part of the mainsail **shall** extend beyond the lower edge of the upper mast measurement band or the upper edge of the lower mast measurement band.

### 6.3 Jibs

- 6.3.1 Each jib **shall** be made with a maximum of three panels joined by seams that **shall** be no closer than 100 mm (3.937") to the corner measurement point. No pleat, cut or tuck **shall** be permitted on any panel.
- 6.3.2 The luff tabling **may** envelope the jib stay and a luff tube **may** be fitted provided that no support against forestay sag is gained by the fitting of such a tube.
- 6.3.3 The jib leach **shall not** extend outside a straight line drawn from the clew measurement point to a point 20 mm (.787") aft from the upper measurement point.
- 6.3.4 If used the maximum number of battens to support the jib leach **shall** be two and their positioning on the leach is optional. There **may** be only one batten if desired. The battens **shall not** exceed 75 mm (2.952") in length.

7) IDENTIFICATION MARKS

7.1 Each mainsail **shall** carry the class identification marks in accordance with the ISAF regulations.

7.2 The class insignia is the letter “J” as per the example below.



**Font**

*Helvetica / Arial and 60 mm (2.362”) in height*

7.3 Class numbers **shall** be displayed on both mainsail and jib in accordance with the ISAF regulations for model yachts.

7.4 Sail Numbering

7.4.1 The sail number **shall** be the boat’s registration number.

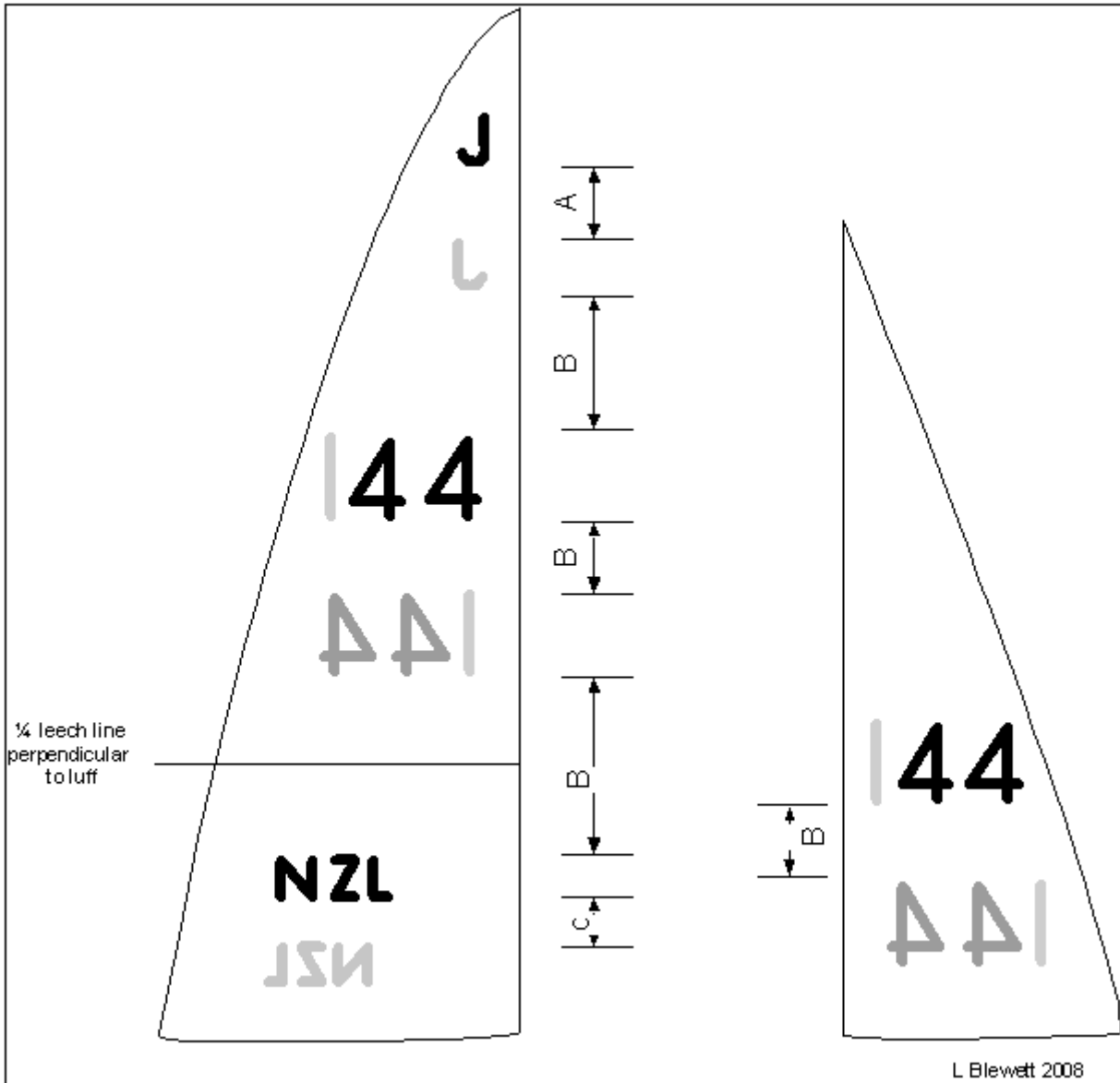
7.4.2 There **shall** be a space in front of the sail numbers for a prefix "1". The use of this prefix **shall** be prescribed by the Race committee in the event of a clash of sail numbers.

7.4.3 Where there remains a clash of sail numbers the Race Committee **shall** prescribe that sail numbers be amended to other numbers until the clash is resolved.

7.5 The size and spacing of identification marks **shall** be as so defined from time to time within the radio yachting appendix of the ISAF regulations.

*A diagrammatic representation of the 2009 – 2012 ISAF sail identification requirements for a “Canterbury J” is depicted next page.*

Diagrammatic representation of the ISAF 2009-2012 requirements  
for radio-controlled model boat sail markings



**CLASS INSIGNIA ~**

Refer to "J" Class Rules 7.1.2 (previous page) ~ Font of Helvetica / Arial and of height 2.362"

NATIONAL LETTERS (optional)	
Height	2.362"-2.756"
Spacing	.512"-.906"

SAIL NUMBERS	
Height	3.937"-4.330"
Spacing	.787"-1.181"

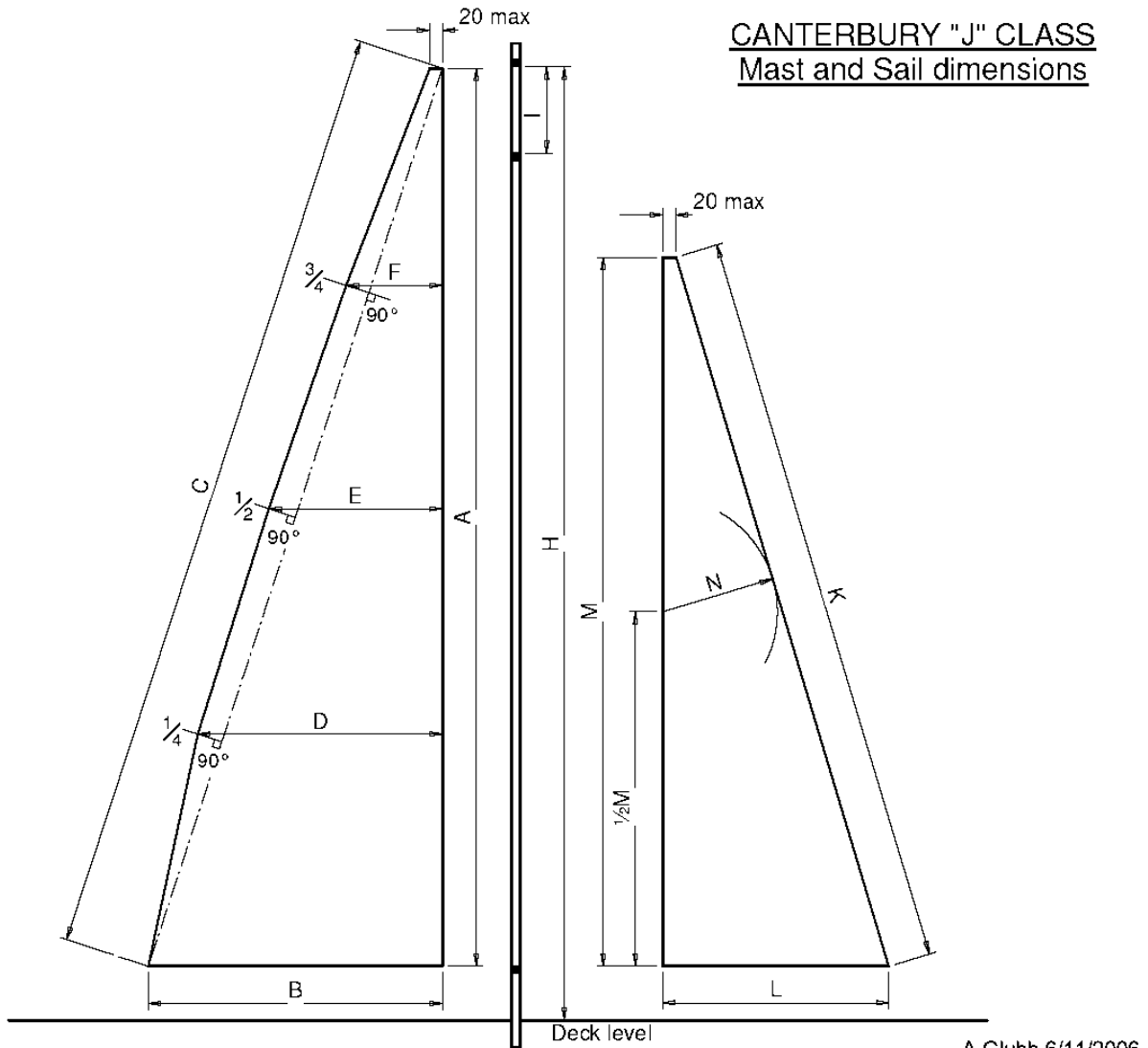
DIMENSION	"A" rig	"B" rig	"C" rig
Mainsail ~ quarter leech line	14.645"-14.764"	11.850"-11.968"	9.803" - 9.882"
A	Min of .787"		
B	Min of 2.362"		
C	Min of 1.575"		

**NOTE:**

1. "1/4 leech lines" calculated from sail dimensions "C" page 13
2. ISAF Rule "G.1.2.a" calls for the use of Arabic Font (Helvetica / Arial acceptable)
3. Should the sail be too small to achieve the above marks refer to ISAF Rule E.6.(f)
4. National Letters (i.e. "USA") **shall** be displayed for International events ~ refer to ISAF Rules



**CANTERBURY "J" CLASS**  
**Mast and Sail dimensions**



**Deck Level as per Rule 3.2.7**

Dimension (inches)	A Rig	B Rig	C Rig
<b>A</b>	max 57.087	max 45.275	max 36.220
<b>B</b>	18.659 - 18.898	18.659 - 18.898	18.659 - 18.898
<b>C</b>	58.661 - 59.055	47.440 - 47.835	39.173 - 39.567
<b>D</b>	15.354 - 15.748	15.157 - 15.551	15.551 - 15.945
<b>E</b>	10.827 - 11.220	11.220 - 11.614	11.220 - 11.614
<b>F</b>	5.905 - 6.300	6.496 - 6.900	6.496 - 6.900
<b>H</b>	60.433 - 60.827	48.622 - 49.016	39.567 - 39.960
<b>K</b>	47.638 - 48.031	38.780 - 39.173	31.496 - 31.900
<b>L</b>	14.173 - 14.567	13.583 - 13.976	13.583 - 13.976
<b>M</b>	44.882 - 45.276	36.024 - 36.417	28.150 - 28.543
<b>N</b>	7.087 - 7.480	6.693 - 7.087	6.299 - 6.693
<b>I</b>	5.512	4.921	4.330

**"Canterbury J"**  
Rudder Template  
*actual size*

