



**MEASUREMENTS REQUIRED FOR CALCULATING
THE TIME CORRECTION FACTOR (TCF)
TO SAIL TRAINING INTERNATIONAL'S
RATING RULE**

NAME OF VESSEL: _____

RIG OF VESSEL: _____

NAME OF OWNER/ORGANISATION: _____

The Time Correction Factor (TCF) can be worked out from ANY of the following:

- (a) Drawings (sail plan, including masts and hull down to the waterline AND either lines plan or mid section drawing) and all details in Section C.

OR

- (b) International Offshore Racing Certificate (any mark), plus additional information (measurements 2,10,11,12, and all details in Section B and C). Note: **not** IMS or Channel Handicap Certificate.

OR

- (c) The measurements and answers to ALL the questions on the attached form (the position at which the measurements must be taken is shown on the enclosed drawing at page 6).

NOTES

1. For square rigged vessels, including brigs, brigantines etc **a sail plan MUST be provided.**
2. Any drawings supplied must be accurate and to a scale from which accurate measurements can be taken. The scale must be included on all drawings and if they are copies at a reduced rate, the scale of the copy must be given.
3. The measurements and details given below must be certified correct by a Yacht Designer, Official Measurer of the Royal Ocean Racing club or similar national authority, a shipyard manager, the Race Director or a nominated technical consultant of Sail Training International.
4. **NO MEASUREMENT FORM WILL BE ACCEPTED BY SAIL TRAINING INTERNATIONAL UNLESS THE NAME, ADDRESS, QUALIFICATION AND SIGNATURE OF THE MEASURER/CERTIFIER, AS SPECIFIED IN NOTE 3 ABOVE, IS WRITTEN IN THE SPACE PROVIDED ON PAGE 5 OF THIS FORM.**
5. Whenever possible, measurements must be taken to the nearest 2 Centimetres or inch.
6. Attention is drawn to Rule 28 of the 2006 Edition of Sail Training International's Racing & Sailing Rules "Setting Sails".

SECTION A HULL MEASUREMENTS

			METRES/FEET (Please delete as necessary)
1*	LOA	Length overall measured from the fore side of stem post to aft side of stern post, counter or transom	
2	LWL	Length on Waterline	
3*	BMAX	Maximum Beam	
4*	BWL	Beam at Waterline taken from the same station as BMAX	
5*	DM	Maximum Draft of Hull. This is the maximum draft, not necessarily the draft at BMAX station.	
6	DM + CD*	Maximum draft with centre-board or lee boards (if any)	
7	MD	Midship Depth. This measurement is taken at the same station as BMAX vertically from a line joining the top of the deck at the sides of the vessel to a point on the outside of the vessel's skin one quarter of BMAX out from the Centre Line	
8*	FMD	Freeboard measured from the waterline to the top of the main deck at the side of the vessel at the same station as BMAX	
9*	FFD	Freeboard measured from the waterline to the top of the main deck at the side of the vessel one quarter of LWL aft from forward waterline ending	
10	BK	Height measured from top of the bulwark, rail cap or toe rail (NOT the lifelines/guard-rails) to the top of the deck at the same station as BMAX	
11	BSPT	Length of bowsprit (if any) measured from the fore side of stem post to the point of attachment of the outer stay on which a headsail is set	
12	"Sheds"	If any part of the deck is raised above the main deck level, and extends to the sides of the vessel (e.g. quarterdeck), the length at main deck level and height above main deck level must be given	
12(a)		At Bow	Length
			Height
12(b)		At Stern	Length
			Height

* Measurements marked with a * are included on all IOR Certificates

SECTION B SAIL PLAN MEASUREMENT

(This Section must be completed if a sail plan is NOT provided)

13*	I	Height measured down the fore side of the mast from point of attachment to the mast of the highest stay on which a headsail is set to the main deck (not the coach roof)			
14*	J	The horizontal distance between the fore side of the forward mast at deck level and a vertical line passing through the point of attachment of the foremost stay on which a headsail is set to the deck or the bowsprit (if any)			
15	Spinnaker	Class D only - Will a spinnaker be carried?	YES/NO		
16	Poling Out	Class B, C and D only – Does your vessel carry a poling out spar?	YES/NO		
17 HEADSAILS A Headsail is defined as a sail flown forward of the foremast whose midsection girth, measured from the midpoints of its luff and leach, does not exceed 50% of its foot and no other intermediate girth exceeds a percentage similarly proportioned to its distance from the head of the sail.					
17(a)	Number Of Headsails	What is the maximum number of headsails (Not a spinnaker) which will be set at one time, e.g. for a single masted vessel, is she a sloop, a two headsail cutter, or a three headsail cutter?			
17(b)	Area of Largest Headsail (ALH)	Using the definition of a headsail above, what are the dimensions of the largest headsail on board the vessel?			
		Luff			
		Foot			
		Leach			
18 SAIL DIMENSIONS Complete column A for single masted vessels. For two masted vessels complete column A for the fore mast and column B for the after mast. For three masted vessels complete column A for the fore mast, column B for the main mast, and column C for the mizzen mast. Four masted vessels should add a column D					
			A	B	C
18(a)	Bermudan Sails	Length of luff			
		Length of foot			
18(b)	BAD*	Boom above deck [†] . The height of the top of the boom above the deck (not the coach roof). (For vessels with loose footed sails, the height of the tack above the deck).			
19(a)	Gaff Sails (including spankers etc)	Length of luff			
		Length of foot			
		Length of leach			
		Length of head			
19(b)	BAD*	Boom above deck [†] The height of the top of the boom above the deck (not the coachroof)			

† IOR Certificates may have 'BAS' instead of 'BAD'

20	Gaff Topsails	Length from head to lower side of gaff at mast			
		Shortest distance between luff and clew			
21	Between Mast Staysails	If a staysail (i.e. mizzen staysail) is to be carried on the centre or after mast, the following measurements are required:			
21(a)	Triangular Staysails	Length of luff			
		Length of foot			
		Length of leach			
		Are any of the above staysails set on a stay?	YES/NO	YES/NO	YES/NO
21(b)	Quadrilateral Staysails	Length of luff			
		Length of foot			
		Length of leach			
		Length of head			
24	SQUARESAILS	<p>1. If there is more than one squaresail, measurements must be given for each sail</p> <p>2. For any vessel setting square sails, including topsail schooners, galeases etc, a sail plan MUST be provided</p> <p>3. For Raffee sails, please provide length of leach and length of foot (measured between clews)</p>			
24(a)	Course	Length of head			
		Length of leach			
24(b)	Lower Topsail	Length of head			
		Length of leach			
24(c)	Upper Topsail	Length of head			
		Length of leach			
24(d)	Lower T'gallant	Length of head			
		Length of leach			
24(e)	Upper T'gallant	Length of head			
		Length of leach			
24(f)	Royal	Length of head			
		Length of leach			
24(g)	Studding sails	Total area in metres ² /feet ²			
25	MBA	Minimum Bracing Angle. The smallest angle (in degrees) that ANY yard can be braced, taken from the fore and aft line to the line of the yard when fully braced		°

Attention is drawn to Rule 28 of the 2006 Edition of Sail Training International's Racing & Sailing Rules "Setting Sails".

SECTION C

OTHER NECESSARY INFORMATION

(This Section must be completed for ALL vessels)

26	Age	Year in which vessel was launched	
27(a)	Engine	Is the engine petrol or diesel?	
27(b)		Engine horsepower	
27(c)		Speed under power in smooth water Knots
28(a)	Propeller	Number of propellers	
28(b)		Fixed, folding, feathering, variable pitch or fully feathering - variable pitch?	
28(c)		Mounted on the Centre Line or the quarter of the vessel?	
28(d)		Number of blades on each propeller	
29	Mast	Is the mast (or masts) made of wood, steel, GRP or light alloy?	
30	Keel	For vessels with LWL of less than 21.34m (70ft), is the keel configuration of this vessel of the Fin and Skeg type. (i.e. is the rudder stock separated from the main keel?)	YES/NO
31	Hull Material	Specify the type of hull material, i.e. wood, GRP, steel, etc.	

MEASUREMENTS CERTIFIED CORRECT BY: (See note 4 on page 1)

NAME IN BLOCK LETTERS: _____

SIGNATURE: _____

ADDRESS: _____

_____ **Tel:** _____

QUALIFICATION FOR MEASURING/CERTIFYING (delete as necessary)

DATE MEASUREMENTS TAKEN: _____

MEASUREMENT FORM DIAGRAM

