

2010 Rating - Bay Area Multihull Association

The Rating Committee has no responsibility for the seaworthiness or safety of yachts rated & cites US SAILING Fundamental Rule 4, "It shall be the sole responsibility of each yacht to decide whether or not to start or to continue to race".

Boat Name	<u>Cheekee Monkee</u>	Name	_____
Sail Number	<u>24</u>	Street	_____
Boat Model	<u>Corsair 31 modified</u>	City, State, Zip	_____
Manufacturer	<u>Corsair Marine</u>	Email Address:	_____
Year Built	<u>1995</u>	Day Phone:	_____
Marina	<u>Chicago YC</u>	Evening Phone:	_____
Slip Number	_____	Emergency #:	_____

Do you want an ODR (One Design Rating)?

Yes No N / A

This is a: Unmodified Class Boat **Source of the information Provided** (Circle/check all that apply)

Modified Class Boat Class Rules Sailmaker

Non-Class (Custom) Designer Owner Measurement

Cut/paste Sales Brochure Measurement Cert.

Descriptions of terms used for sails, hull measurement & sailing weight are on following pages. Sail Areas, Luff Lengths, Foot & LP generally come from the sailmaker. Where possible, please give measurements in metric or feet & decimals. Please provide drawings or pictures showing side & end views of your boat from deck to bottom & attach to the application if a modified or custom boat.

Mainsail 2001 Calvert imp.	
Area:	453.31
P (luff) (need P2)	43.83
E (foot)	13.50
MGH	4.38
MGT (large?)	6.75
MGU	8.70
MGM	11.25
MastCirc (0.765 m)	2.51
Full Batten or Soft	Full

Jib / Genoa (largest) 2002 Calvert imp.	
Area:	248.44 300.09
Luff Length	39.75
LPG	12.50
Leach	35.64
Foot	14.10
LuffL.roach + or -	-0.19
Le.roach + or -	1.32
Ft.roach + or -	0.47
Mid-Girth	8.20

Screacher 2004 Calvert	
yes/no	
Area:	594.55
Scr.Luff1	47.00
LPG	25.30
Scr.Luff2 (leach)	
Scr.MG	No data
Scr.Foot	
Sc.SMG as % Sc.SF	#VALUE!

Asymmetric Spin (largest) 2000 Calvert	
yes/no	
Area:	1133.65
SLU (luff perimeter)	52.00
SLU (leech perimeter)	45.17
SMG	27.50
SF (foot.perimeter)	30.00
SMG as % SF	92%

Symmetric Spin (largest)	
yes/no	no
Area:	
SL	
SSMG	
SSF (foot.perimeter)	
SMG as % SF	0%

Displacement (Load.cell metric or Mfg Displ)	
Wt Boat sails, motor	
CG Safety, dry(gas,h2o)	3580
WE	
Weight Sailing	3580
WCD Weight Crew Declared	
Rated Weight	3580

US Sailing and/or ISAF ERS methods of sail measurement may apply above, not class rules. Longest Luff Lengths from Class Rules & Maximum Sail Areas and will be assumed if not provided. Weight Sailing will be lightest boat in Class unless weighed w/inspection.

Hull	
Length Overall:	33.00
Waterline length	30.00
Maximum Beam	22.50
Maximum Draft	6.50
FOC Fwd Overhang	0.88
AOC Aft Overhang	0.00

Hull - Foils	
Daggerboard (y/n)	y
Centerboard (y/n)	
Ctbd Fairing (y/n)	
Keel(s) (y/n)	
Lifting Foils (y/n)	y

Other	
Masthead Spin(yes/no)	yes
Masthead Scr.(yes/no)	yes
Sprit Length	19.67
Rigging (SS, synthetic)	PBO
Holding Tank(s)	unk

Engine(s)	
Inboard (hp x type)	
Outboard (hp x type)	6 hp Nissan

Propeller (s)	
1 x feather/fold	2 x feather/fold
1 x fixed (blades)	2 x fixed (blades)

Modifications

Describe modifications / comments/ trapeze(#) or hiking straps below

Lifting Foils in amas, canting mast(6 degrees), 85 gal water ballast, carbon interior, enclosed head, ice box, galley top, nav station/table, 2 pipe berths, custom carbon crossbeams

I certify that my vessel conforms to the configuration indicated above and understand that a BAMA ratings certificate will be issued based on this information, valid only for the indicated configuration.

Electronically

Signature of Owner

Date 11/7/2010

Basic Sail Area Measurements

Cheekee Monkee, C-31.mod

GLMRA Metrics trandate 6/7/10 rec.11/7/10

It is preferred that a sail loft actually measure the sails & provide Areas w/mid-girths & metrics, or fill out this sheet. An alternative: a competitor may measure the sails. Please use feet and tenths of feet, or metric for measurement.

Mast Circumference	0.765					
Measured Sails						
Mainsail	42.11	SA= (Foot*2+MGM*3+1.5*MGU+MGT+.5*HW)*Luff/8	Imp.	Metric	Imp sq.ft	Metric sq.m
Luff / P	13.359		43.83	13.359	453.31	42.11
Foot / E	4.115		13.50	4.115		
HW / MGH	1.335	Head mainsail shall extend @ right angles not more than	4.38	1.335		
MGT	2.057	Maximum MGT (max 7/8 point girth) =	6.75	2.057		
MGU	2.652	Maximum MGU (max 3/4 point girth)=	8.70	2.652		
MGM	3.429	Maximum MGM (max 1/2 point girth)=	11.25	3.429		
MGL	0.000	Maximum MGL (max 1/4 point girth) =		0.000		
Jib - Large						
Jib - Large	23.08	SA= Luff * LP * .5	Imp.	Metric	Imp sq.ft	Metric sq.m
Luff	12.116	Maximum Luff =	39.75	12.116	248.44	23.08
LP	3.810	Maximum Overlap =	12.50	3.810		
Leech			0.00	0.000		
Mid-girth		Maximum Mid-Girth = Del Par 5.9.2c, add 4" roach.ft	0.92	0.279		
Height (=vlg)	11.389	Jib Height = 0.94 * Luff.Length				
Screecher						
Screecher	55.24	SA= Luff * LP * .5	Imp.	Metric	Imp sq.ft	Metric sq.m
Luff	14.326		47.00	14.326	594.55	55.24
LP	7.711		25.30	7.711		
smg screecher	0.000	Estimate (scaled from pencil.paper, no penalty config?)	0.00	0.000		
sf screecher	0.000	Estimate (scaled from pencil.paper ?)	0.00	0.000		
Asym.Spin.Large						
Asym.Spin.Large	105.32	SA = (Luff+Leech)*(Foot + 4*Mid Girth) / 12	Imp.	Metric	Imp sq.ft	Metric sq.m
SLU / Luff	15.850	Head to tack (luff) maximum length =	52.00	15.850	1133.65	105.32
SLE / Leech	13.768	Clew to head (leech) maximum length =	45.17	13.768		
ASF / Foot	9.144	Tack to clew (foot) maximum length =	30.00	9.144		
ASMG / mid-girth	8.382	SMG =	27.50	8.382		
ISAF ERS	105.320	SA= (SLU+SLE) x .25 x ASF + (ASMG-.5ASF) x (SLU+SLE)/3		92%		

Mainsail

- a) The HEAD shall be defined as the point of intersection of the line of the Luff, including the boltrope, and the highest point of the sail perpendicular to the Luff. The Head Width shall be measured from the HEAD.
- b) Luff is measured as the distance between two points along a line parallel to the sail Luff from which lines drawn at 90 degrees intersect the highest point on the HEAD or the lowest point on the Foot, respectively.
- c) The Foot is measured as the two farthest points along the Foot.
- d) The cross width measurements shall be taken from the seven-eighths, three-quarter, and one-half points on the Leech, located when the HEAD is folded to the Clew for the half height point, and when the HEAD is folded to the half height point to determine the three-quarter point. The seven-eighths point is located by folding the Head to the three-quarter point. Girth is measured as the shortest distance from Leech points to Luff, including the boltrope.

Spinnaker

- e) For purposes of spinnaker measurement, the mid-girth shall be measured from the one-half point on the Luff to the one-half point on the Leech. These one-half points shall be found by folding the Head to the Tack for the one-half point on the Luff, and folding the Head to the Clew for the one-half point on the Leech.

Jib

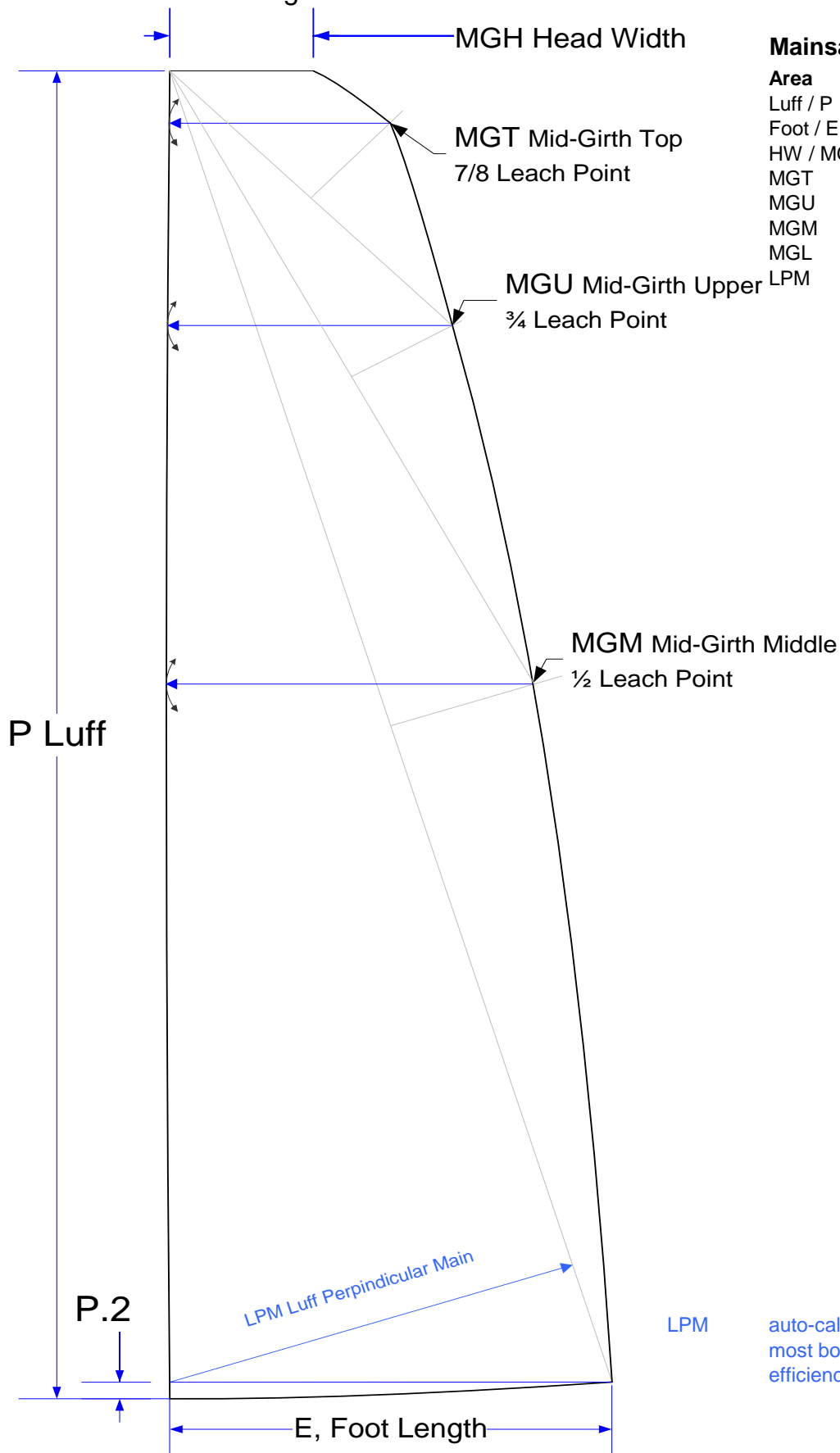
- f) For purposes of headsail measurement, the Tack is defined as the point where the Luff and Foot, if extended, would intersect each other. The Head is defined as the point of intersection of the line of the Luff, including the boltrope, and the highest point of the sail perpendicular to the Luff. The Clew is the point where the Leech and Foot, if extended, would intersect each other.
- g) The diagonal (LP) is defined as the shortest distance from the Luff to the Clew.
- h) The mid-girth is measured by folding the Head to the Clew to find the mid-leech. The distance from the mid-leech to the closest point on the Luff is the mid-girth

Screacher

- i) For purposes of Screacher measurement, the Tack is defined as the point where the Luff and Foot, if extended, would intersect each other. The Head is defined as the point of intersection of the line of the Luff, including the boltrope, and the highest point of the sail perpendicular to the Luff. The Clew is the point where the Leech and Foot, if extended, would intersect each other.
- j) The diagonal (LP) is defined as the shortest distance from the Luff to the Clew

Mainsail Measurement - Cheekee Monkee

Corsair 31.mod - US Sailing Girth Points / GLMRA



Mainsail	Metric ft ²	Imperial m ²
Area	453.31	42.11
Luff / P	43.830	13.36
Foot / E	13.500	4.11
HW / MGH	4.380	1.34
MGT	6.750	2.06
MGU	8.700	2.65
MGM	11.250	3.43
MGL	0.000	0.00
LPM		3.93

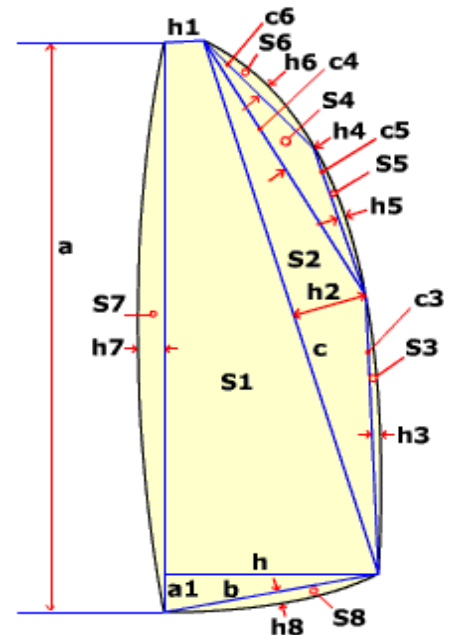
LPM auto-calculated for most boats; sets sail efficiency

ISAF Equipment Rules of Sailing (ERS)
Cheekee Monkee Jib / Spin

CM - Area of Mainsail (Sample Data)

77.370	$S1 = ((h + h1)(a - a1) + (a1 \times h))/2$
2.565	$S2 = c \times h2/2$
0.002	$S3 = 2/3 \ c3 \times h3$
0.007	$S4 = c4 \times h4/2$
0.001	$S5 = 2/3 \ c5 \times h5$
0.002	$S6 = 2/3 \ c6 \times h6$
1.257	$S7 = 2/3 \ a \times h7$
0.002	$S8 = 2/3 \ b \times h8$
81.204	$CM^* = (S1+S2+S3+S4+S5+S6+S7+S8) \ m2$
	$CM = (CM^* + \text{Area of Mast} + \text{Area of Boom}) \ m^2$
	Non-Rotating Masts add no Sail Area
	Area of Mast = (Total Length x Perimeter / 2) m ²
	Area of Boom = (Total Length x Height) m ²
	Larger Multihulls Mast Area = (MC/2 * a); a = P.luff or VLM

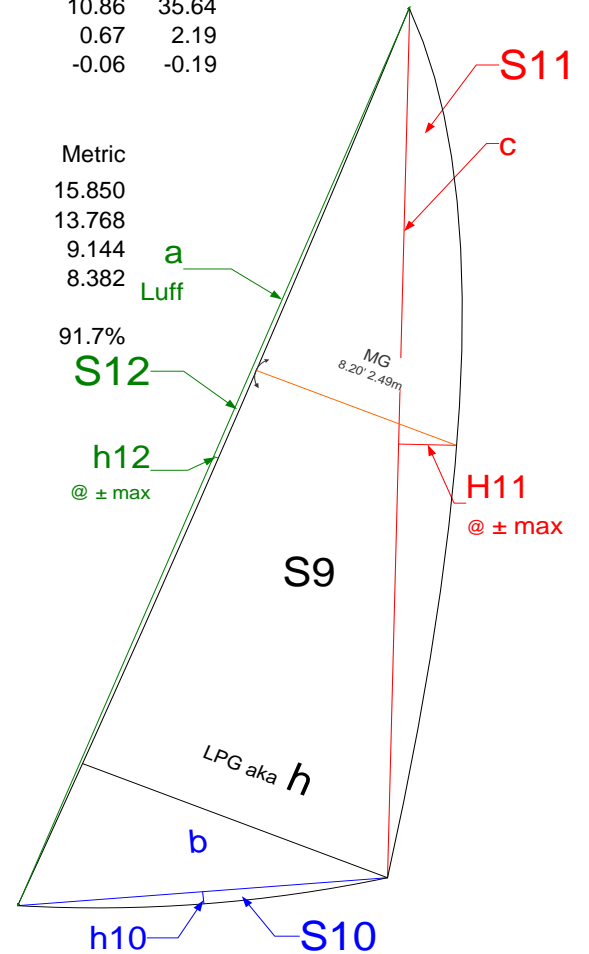
Metric	
h	7.250
h1	0.135
a	20.955
a1	0.125
c	20.517
h2	0.250
c3	0.103
h3	0.029
c4	0.109
h4	0.122
c5	0.057
h5	0.021
c6	0.055
h6	0.042
b	0.073
h7	0.090
h8	0.032



CJ - Area of Jib Cheekee Monkee 2002 Calvert Jib Mid-Girth 8.20'

23.08	$S9 = a \times h / 2$
0.44	$S10 = 2/3 \ b \times h10$
4.83	$S11 = 2/3 \ c \times h11$
-0.47	$S12 = 2/3 \ a \times h12$
27.88	$CJ = (S9 +or- S10 +or- S11 +or- S12) \ m2$
21%	Larger than pro-forma data
300.09	sq.ft

Metric	Imp
a	12.12 39.75
h	3.81 12.50
b	4.30 14.10
h10	0.15 0.50
c	10.86 35.64
h11	0.67 2.19
h12	-0.06 -0.19



CSPI - Area of Spinnaker (Cheekee Monkee 2000 Asym)

105.320 $CSPI = SF \times (SL1+SL2)/4 + (SMG^* - SF/2) \times 2/3 \times (SL1+SL2)/2 \ m2$

SL2 or SLE =
Spinnaker Leech

SL1 or SLU = Spinnaker Luff

* where $SMG \geq 75\%$ of SF
 $SMG \% SF$

SL1
 SL2
 SF
 SMG

Metric

15.850
 13.768
 9.144
 8.382

91.7%

S12

h12

@ ± max

a
 Luff

S9

LPG aka h

b

h10

S10

S11
 C
 H11
 @ ± max

MG
 8.20' 2.49m

SMG = Spinnaker Mid-Girth
 @ mid-points of Luff & Leech

Clew
 SF = Spinnaker Foot
 SLU, SLE, SF
 Measure on perimeters
 Tack

Texel AUS/NDL MEASUREMENT FORM

Weight Sailing lb 3580.0 Texel AUS/NDL Inventory Form
 Weight Sailing kg 1623.9 Equipment Declaration Form

Date: November 7, 2010

This is to **assume** that the yacht **Corsair 31 #24, Cheekee Monkee** weighs the above w/the following in a dry condition (no:water, gas). All equipment "Declared" is part of the "Inventory" that must remain on the boat for racing including a set of racing sails & **U.S. Coast Guard required equipment** applicable to the boat size. Texel Weight Equipment (WE) of individual items is waived based on inclusion of same in Sailing Weight.

Equipment	Description	Equipment	Description	WE items (list)	Kg
Engine/s	Outboard	Mainsails	One (1) on boom		
Generator	No	Mizzens			
Anchor 1	Yes, [Fortress] [3kg]lb/kg	Headsails	One (1) Jib, furling		
Anchor 2		Headsails	One (1) Screacher		
Chain (size/m)	Yes[6mm]link.dia. [3]m	Spinnaker #1	One (1) Spinnaker		
Rode (dia/m)	Yes [8mm] dia. [25]m	Spinnaker #2			
Moorings	dock lines	Screacher	One (1) w/furling gear		
Fenders	Yes (2)	Other sails			
Drogues	No	Spare sheets	Minimal		
Tools(kgs)	Yes	Mattresses No.	None		
Spares(kgs)	Minimal	Seat cushions	No		
Dinghy	No	Bunk cushions	No		
Liferaft	No	Stove type	Yes		
Outboard(hp)	Yes [Nissan], [6] hp min.	Refrig	No		
Battery #1 Amp/Hrs	30 amp hour	Awning	No		
Battery #2 Amp/Hrs	TBD (no)	T.V.	No		
VHF Radio	handheld	Video	No		
Solar panels	No	Radar	No		
Gas bottles (kgs)	No	Wine Rack	No		
Safety Category (Offshore)	Inshore - Coast Guard Req.	Other (list)			
Other (list)					

Where it is simpler to weigh items such as tools and spares, use kgs, where it is simpler to count items, use numbers etc. For example [Tools - 10kg], [Mattresses - 4], [Chain 8mm - 50 metres]. Otherwise describe, [Engine - 9.8 hp Yamaha outboard 27hp Yanmar Diesel] or mark to show it is carried [Video - X]. WE may be used for Offshore Races requiring Category X equip.

WM 1623.9 Offshore WE 0
 WM 1623.9 Inshore Wt.Sailing = (Wt.Measured + Wt.Equipment)

SIGNED:
MEASURER slackwater_sf.electronic

OWNER _____

3580 Gross: Cheekee Monkee, dry, all sails
 0 Lifting Bridle, removed for racing
 0 NIST test deviation @ 4,000 lbs
 0 Subtract: inspection zero (0) Liters gas in tank, no food, no (water-beer), no personal
 3580 Net: Cheekee Monkee dry, all sails

Mast Circumference

Boat	MC		Date	Comments
Native, Newick Tri	0.908	w	08/20/09	Blue Tape, taper above spin.halyard (img_0060...)
Humdinger, Acapella Tri	0.800	w	03/20/10	Owner TB.Verified
Corsair 31.mod Cheekee Monkee	0.765	c	11/07/10	Estimate
Formula 40 Tuki	0.760	c	07/28/09	Blue Tape
Antrim 30	0.750	t	04/05/10	TB.verified, Erin #28910
Formula 40 Shadow	0.719	a	04/04/09	Dirty blue tape, 1st pass, taper above hounds
D-Class Cat Adrenaline Marstrom	0.700	c	05/30/09	Assumption, not measured pre-Delta.Ditch @RichmondYC
Viva 27 Cat Sass	0.600	a	05/30/09	Measure pre-Delta.Ditch @RichmondYC
Contour 34SC	0.585	a	01/08/10	Blue.Tape, measured by owner
Corsair 31RS Leneman	0.554	a	05/30/09	Blue Tape, C-31RS #28543 Prime Directive
D-Class Cat Rocket88	0.495	a	07/15/10	Dirty, 1st pass
D-Class Cat Beowulf V Marstrom	0.483	c	06/01/10	Correction, Corsair 28R Section
Corsair 28R Marstrom	0.483	c	03/31/10	Blue Tape C-28R, Alameda Marina
Corsair 31R Marstrom	0.483	c	04/22/09	Blue Tape C-31R #135 Roshambo, Alameda Marina
Corsair Sprint 750	0.481	a	05/02/09	Blue Tape Sprint 750 #70 Afterburner, Alameda Marina
Corsair 24 Mk II	0.397	a	08/01/09	Blue tape C-24MkII #006 Emma Jean, Alameda Marina
Multi23	0.356	c	04/07/09	M. Leneman, US Tri.Nationals, Standard Section

Mast Circumference: wrap paper or tape around mast above boom

Mast Area added to mainsail area IFF mast rotates

Mast Area = 1/2 * Mast Circumference* P (mainsail luff, Vertical Luff Mainsail)

No Correction Factor (CF) on airfoil shape

CF - Carbon Mast may be added later (ref: Multi2000 CF.carbon-mast)

a: aluminum

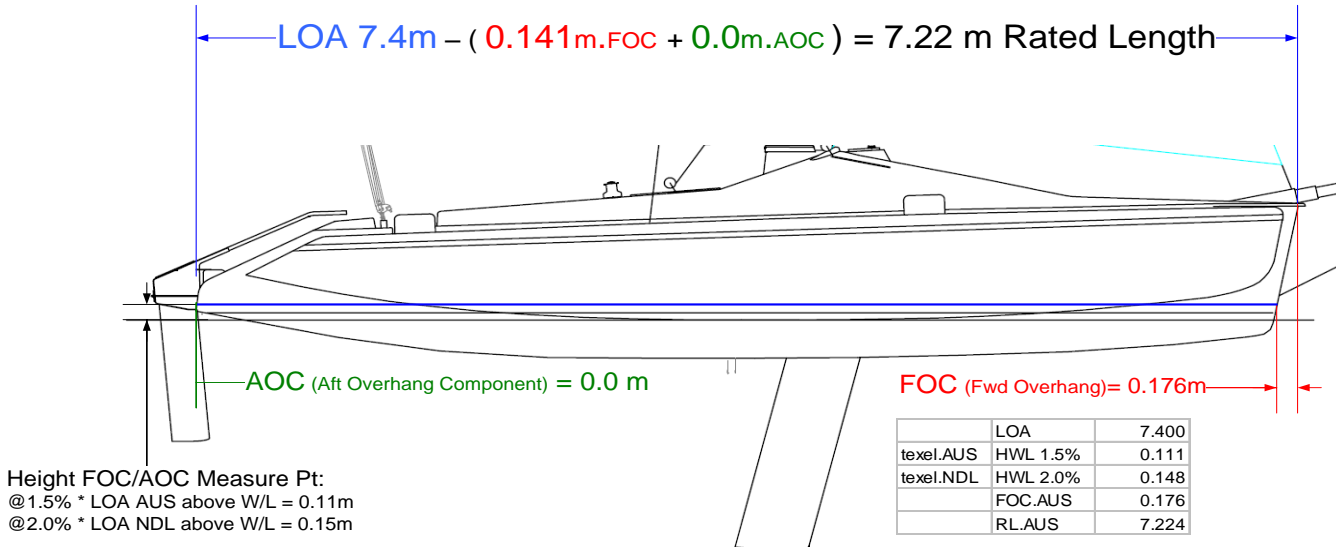
w: wood composite

t: tuttle carbon honeycomb composite

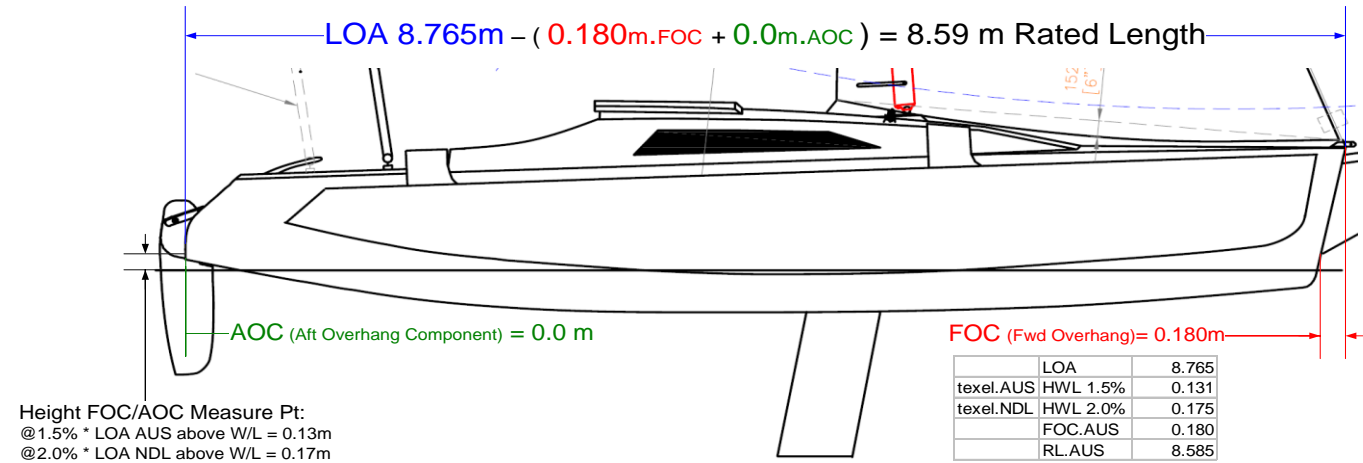
Rated Length

Cheekee Monkee Corsair 31 modified

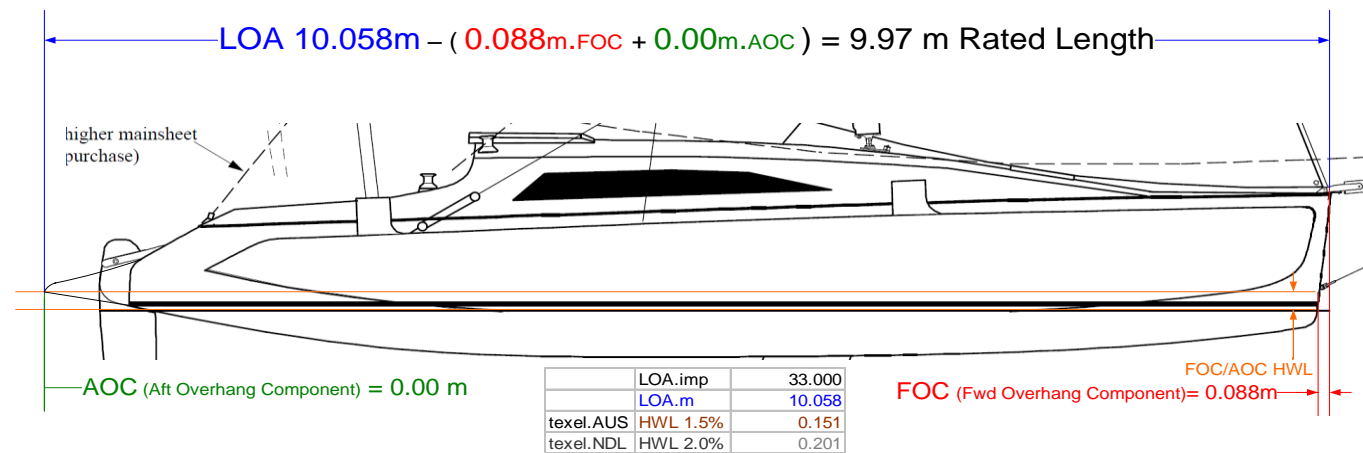
Corsair Sprint 750: Sample Forward Overhang Component (FOC) Australia (10 boats)



Corsair 28-R: Sample Forward Overhang Component (FOC) Australia & Thailand (10 boats)



Corsair 31.mod Cheekee Monkee Preliminary Forward Overhang Component (FOC) Stern Extension Visio Drawing to 33ft./10.058m



NOTE: The values on this worksheet are not used for Texel ratings, but for storage of measurements of extra sails for future possible changes.

Genoa #
 LLg
 LPG
 FG
 frg + or -
 LG
 lrg + or -
 llrg + or -

0

Area Genoa 2 **0.00**

Spinnaker #
 SF
 SL1
 SL2
 SMG
 Area of Spinnaker
 SMG as % SF

0
0.00
Must be >75%

Screecher #
 ScrF
 ScrL1
 ScrL2
 ScrMG
 Area of Screecher
 SMG as % SF

0
0.00
Must be >50%

Genoa #
 LLg
 LPG
 FG
 frg + or -
 LG
 lrg + or -
 llrg + or -

0

Area Genoa 3 **0.00**

Spinnaker #
 SF
 SL1
 SL2
 SMG
 Area of Spinnaker
 SMG as % SF

0
0.00
Must be >75%

Screecher #
 ScrF
 ScrL1
 ScrL2
 ScrMG
 Area of Screecher
 SMG as % SF

0
0.00
Must be >50%

Genoa #
 LLg
 LPG
 FG
 frg + or -
 LG
 lrg + or -
 llrg + or -

0

Area Genoa 4 **0.00**

Spinnaker #
 SF
 SL1
 SL2
 SMG
 Area of Spinnaker
 SMG as % SF

0
0.00
Must be >75%

Screecher #
 ScrF
 ScrL1
 ScrL2
 ScrMG
 Area of Screecher
 SMG as % SF

0
0.00
Must be >50%