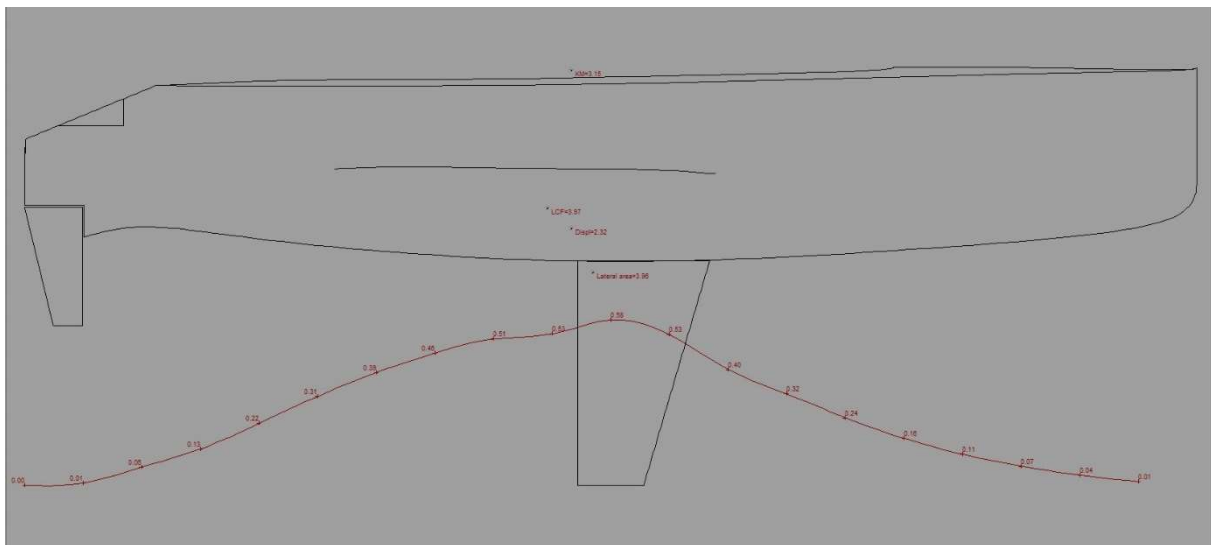


## I.O.R. Halftonner Flat out Racer #04 (development of #03)

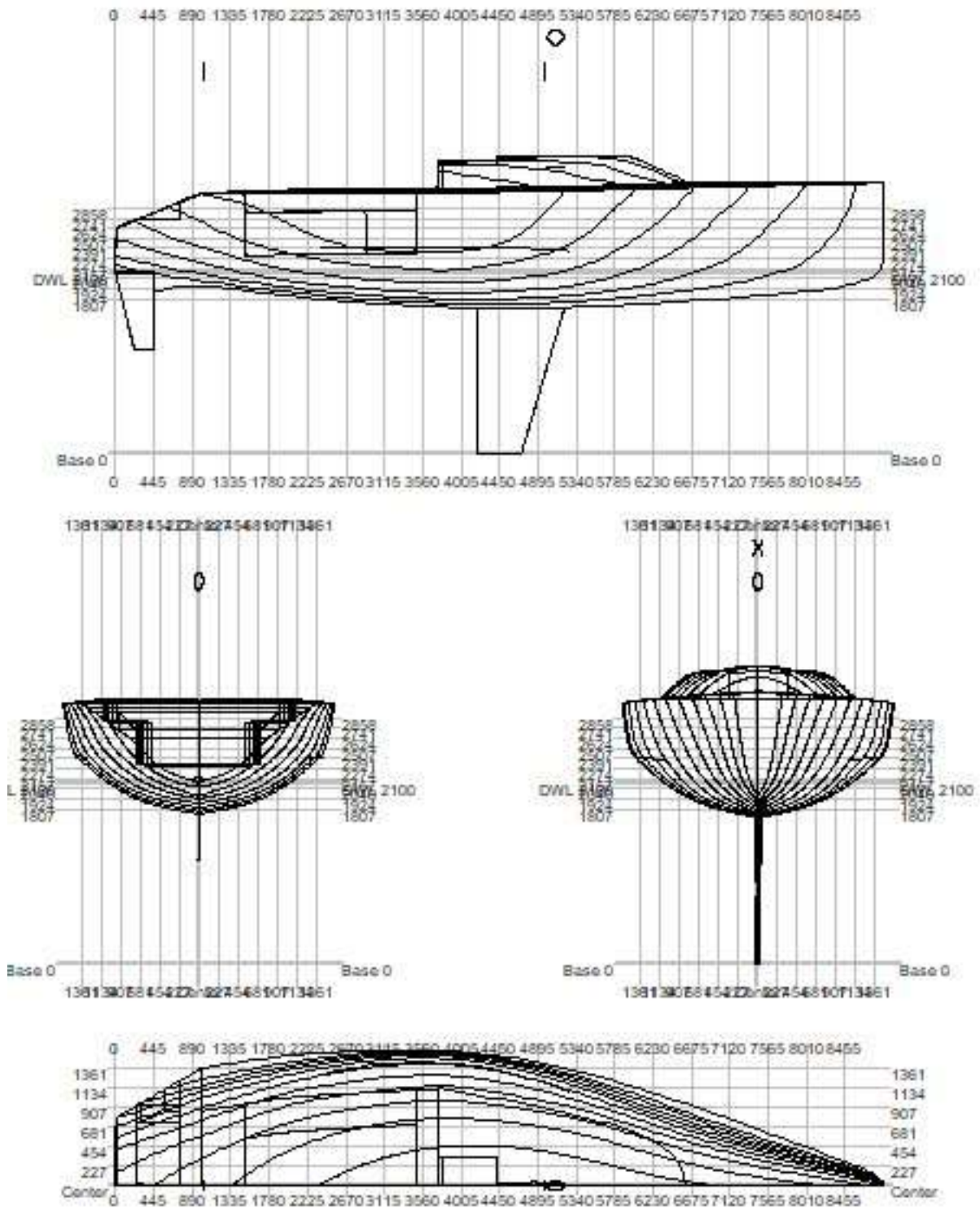
Project : I.O.R. Halftonner #04  
Designer : Delta Consultants/P.Visser  
Length over all : 8.900 m  
Beam over all : 3.158 m  
Draft : 2.100 m  
Midship location : 3.500 m  
Water density : 1.025 t/m<sup>3</sup>  
Appendage coefficient : 1.0000



### Volume properties:

Displaced volume	:	2.268 m <sup>3</sup>
Displacement	:	2.325 ton
Total length of submerged body	:	8.824 m
Total beam of submerged body	:	2.165 m
Block coefficient	:	0.0565
Prismatic coefficient	:	0.5074
Vert. prismatic coefficient	:	0.0978
Wetted surface area	:	15.641 m <sup>2</sup>
Longitudinal center of buoyancy	:	4.150 m
Longitudinal center of buoyancy	:	-2.984 %
Tranverse center of buoyancy	:	0.000 m
Vertical center of buoyancy	:	1.947 m

# I.O.R. Halftonner Flat out Racer #04 (development of #03)



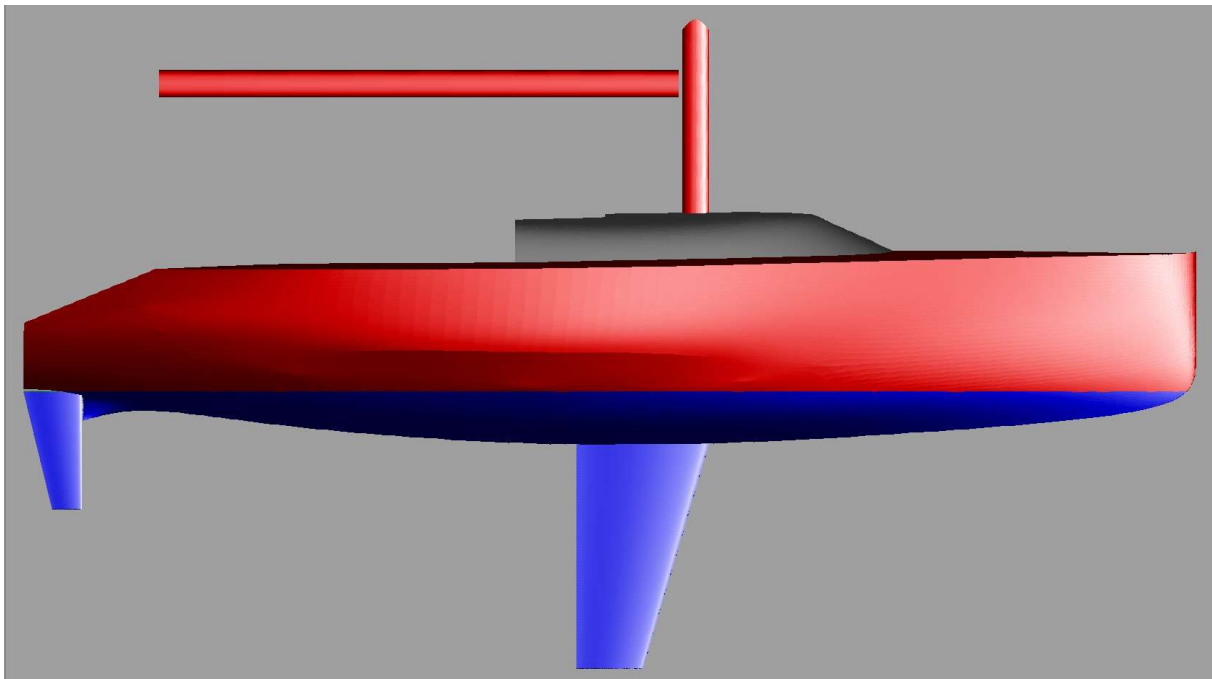
## Midship properties:

Midship section area	:	0.507 m <sup>2</sup>
Midship coefficient	:	0.1114

## I.O.R. Halftonner Flat out Racer #04 (development of #03)

### Waterplane properties:

Length on waterline	:	8.824 m
Beam on waterline	:	2.165 m
Waterplane area	:	11.044 m <sup>2</sup>
Waterplane coefficient	:	0.5782
Waterplane center of floatation	:	3.969 m
Y coordinate of DWL area CoG	:	0.000 m
Half entrance angle of DWL	:	13.105 degr
Transverse moment of inertia	:	2.719 m <sup>4</sup>
Longitudinal moment of inertia	:	37.005 m <sup>4</sup>



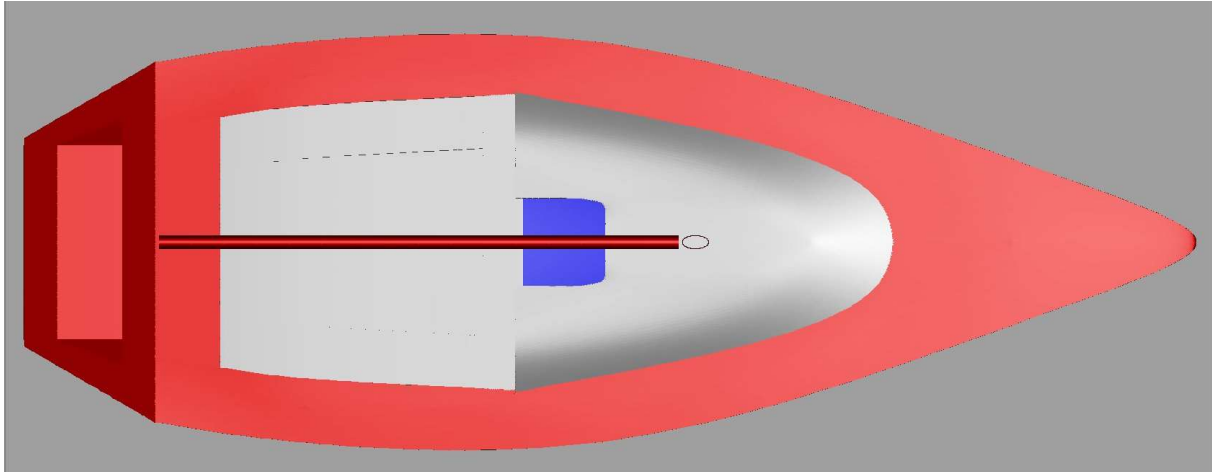
### Initial stability:

Vertical of transverse metacenter	:	3.146 m
Tranverse metacentric radius	:	1.199 m
Longitudinal transverse metacenter	:	18.262 m
Longitudinal metacentric radius	:	16.315 m

### Lateral plane:

Lateral area	:	3.962 m <sup>2</sup>
Longitudinal center of effort	:	4.313 m
Vertical center of effort	:	1.613 m

## I.O.R. Halftonner Flat out Racer #04 (development of #03)



### Hull characteristics above waterline:

Lateral wind area	:	7.886 m <sup>2</sup>
Z coordinate of wind area CoG above DWL	:	0.538 m
Distance from bow to wind area CoG	:	3.661 m

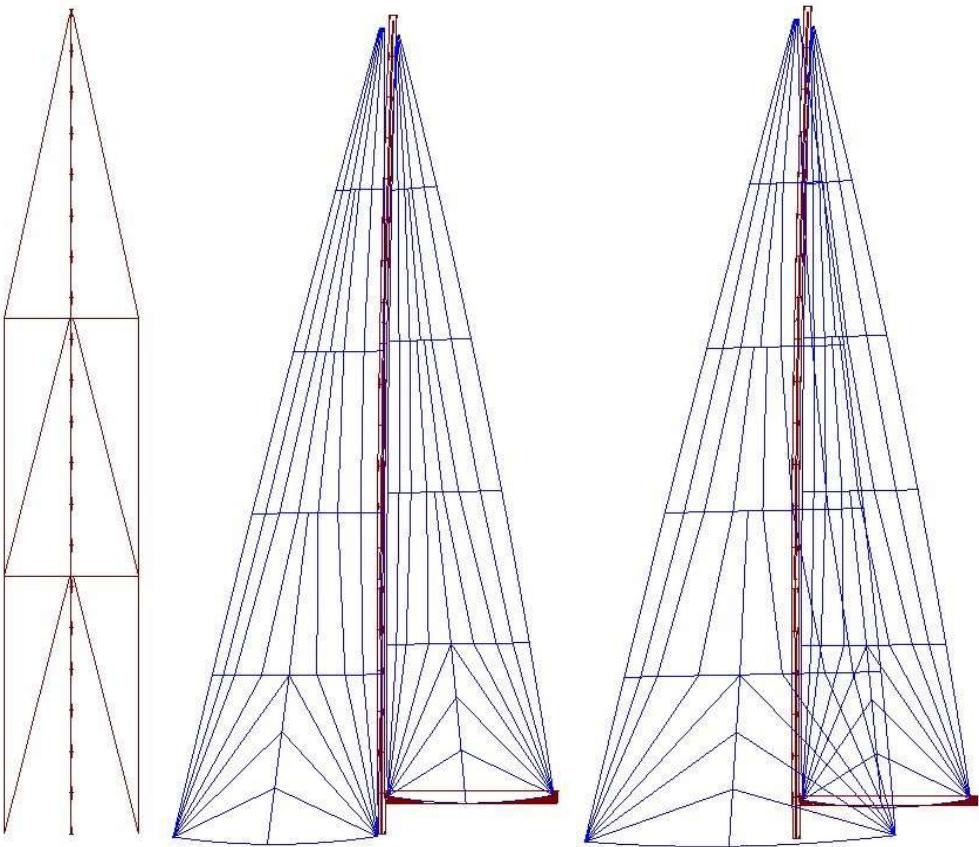
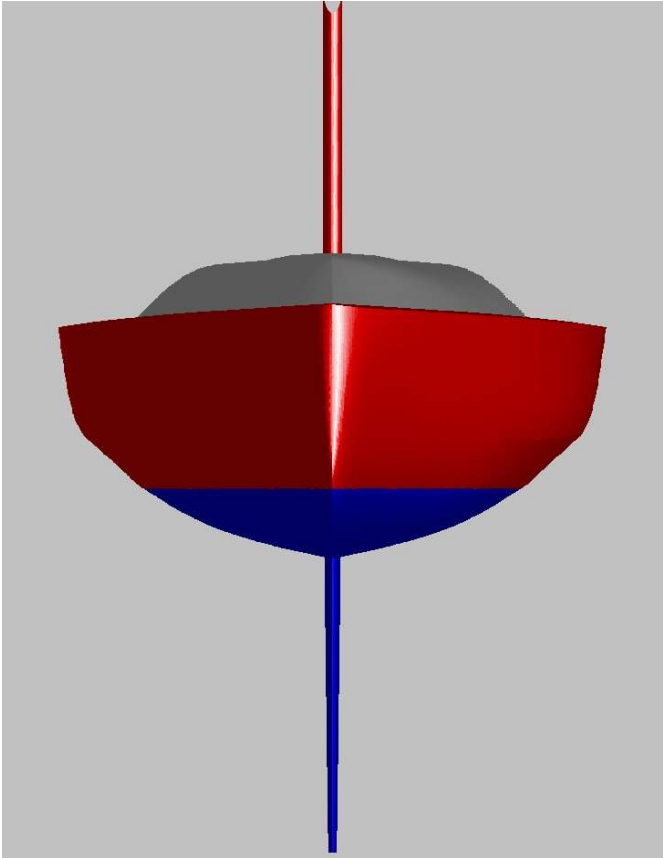
The following layer properties are calculated for both sides of the ship:

Layer	Area m <sup>2</sup>	Thickness mm	Weight tonnes	COG X m	COG Y m	COG Z m
hull	45.431	20.000	0.909	4.066	0.000	2.492
Trapezoidal keel NACA63	2.641		1.156	4.595	0.000	0.956
Trapezoidal rudder NACA	0.612		0.005	0.270	0.000	1.712
cockpit	15.380	15.000	0.131	3.388	0.000	2.881
<b>Total</b>	<b>69.330</b>		<b>2.201</b>	<b>4.066</b>	<b>0.000</b>	<b>2.492</b>

NOTE 1: Draft (and all other vertical heights) is measured above the lowest point of the hull! (Z= 0.000)

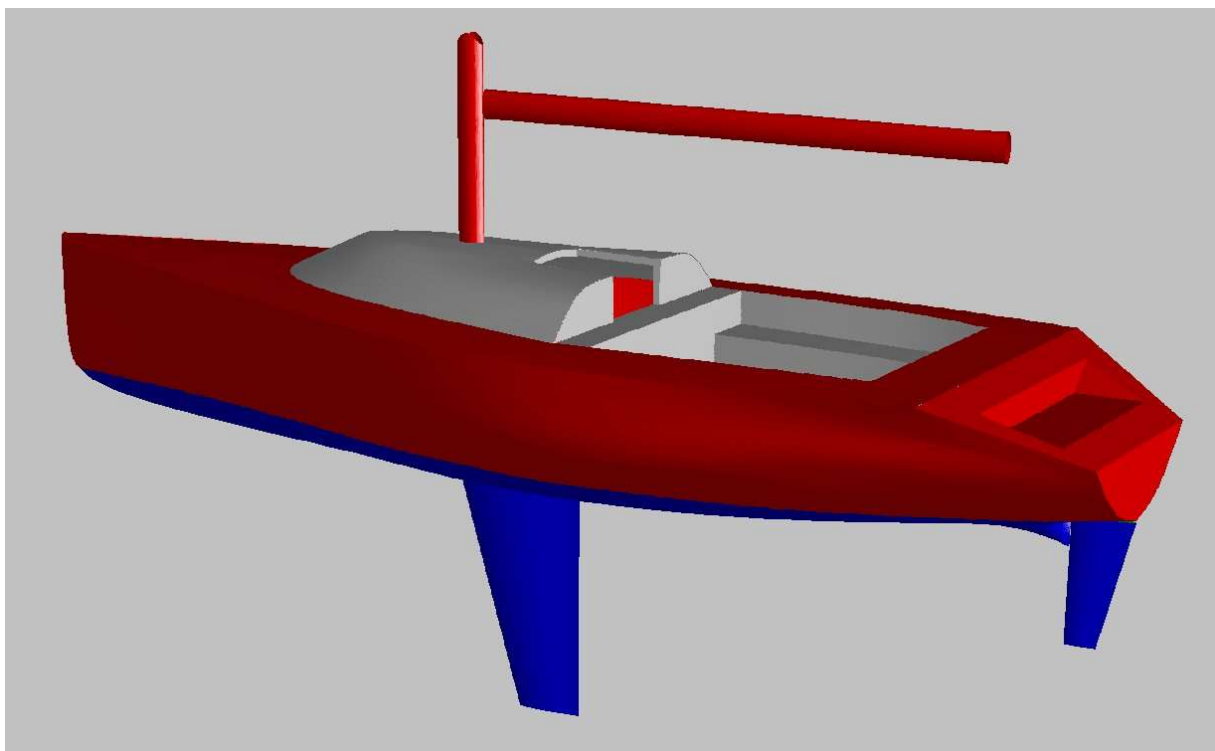
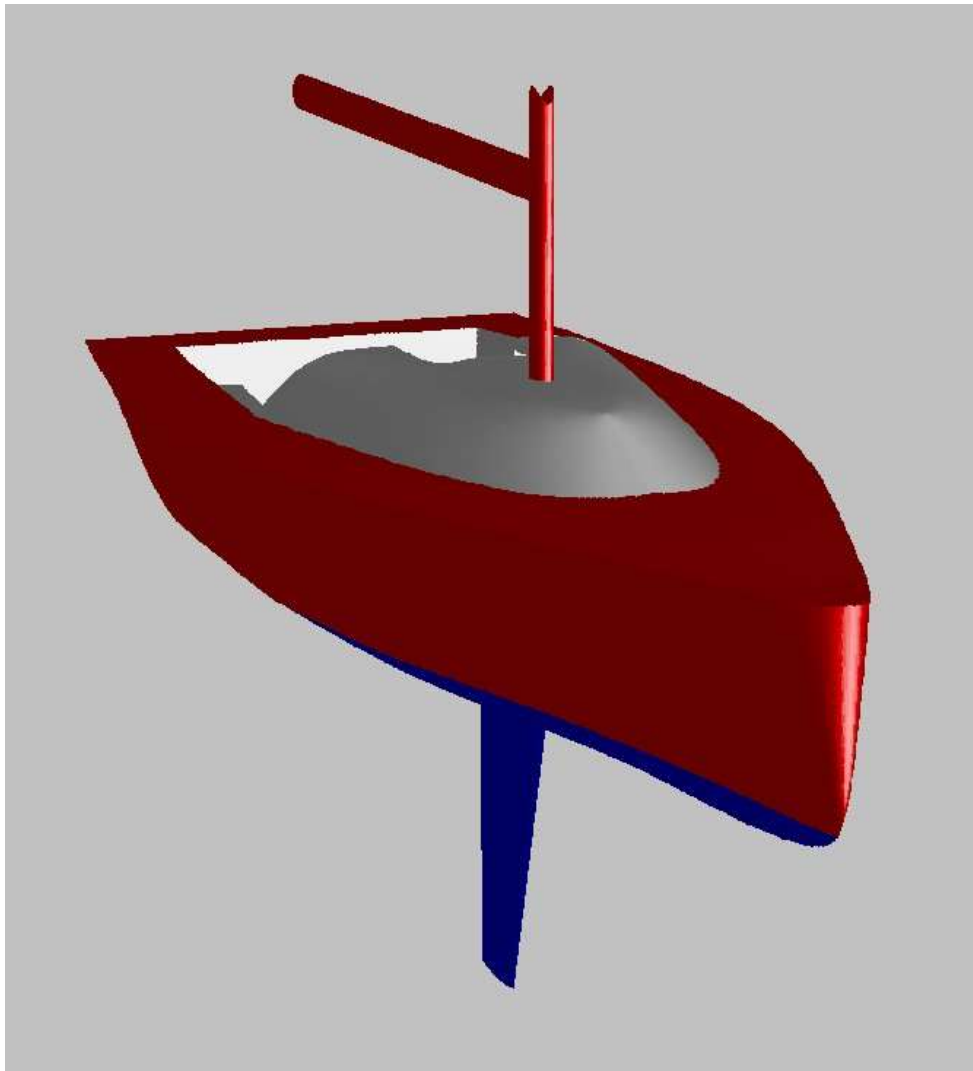
NOTE 2: All calculated coefficients based on actual dimensions of submerged body.

I.O.R. Halftonner Flat out Racer #04 (development of #03)



Main 28m<sup>2</sup> High Aspect 35m<sup>2</sup> Genua 52m<sup>2</sup>

I.O.R. Halftonner Flat out Racer #04 (development of #03)



I.O.R. Halftonner Flat out Racer #04 (development of #03)

