

12

INTERNATIONAL TWELVE METRE CLASS

Yacht's Name Easterner

National letters and Sail Number USA 18 Club Severn Sailing Association

Designer C Ray Hunt

Builder James Graves Building Year 1958

Owner Dr. Scott A. Bernard


Owner's Address 1609 Depriest Drive
Shady Side, MD 20764 USA

Lloyds R class certificate (Number or Date) _____

RATING CERTIFICATE

This yacht has been measured by measurer(s) appointed by the International Twelve Metre Association and has been found to rate not more than 12.000 metres.

This certificate is dated: May 12, 2023

Measurer A Williams Signature 

Valid until May 12, 2025

Supersedes June 1, 2009

Is this an **Appendix E** Certificate? Y / N Y

Was **Appendix F** used for Measurement? Y / N N

Signature _____ ITMA Technical Director

Stamp of Authority of the International Twelve Metre Association

RATING CALCULATION

OVERALL LENGTH

Overhang Forward to FGS
 Overhang Aft to AGS
 Total Overhang (Subtract)

2.160
1.941
4.101

20.011

MEASURED LENGTH (L_BG)

Girth at Bow
 Twice vertical Height at Bow (Subtract)
 Girth Difference at FGS
 Add 1.5 x Girth Difference at FGS (min 0.540 m)
 Girth at Stern
 Twice vertical Height at Stern (Subtract)
 Girth Difference at AGS
 Add 1/3 Girth Difference at AGS (min 0.400 m)
 Add any penalty (Beam or Displacement)
 Sum of Length and Girth Corrections
 Age/Design Correction Factor (ADCF)(see page 3)

1.396
1.2
0.196
0.540
2.931
1.702
1.229
0.410
0.000

15.910

16.860

0.9647

16.265

LENGTH (L)

Skin IM to d1 Port
 Chain IM to d1 Port
 d Port
 Skin IM to d1 Starboard
 Chain IM to d1 Starboard
 d Starboard
 Add d

2.126
2.121
0.005
2.099
2.094
0.005
0.010

Add GIRTH 2 d

0.020

Mean Freeboard Bow
 Mean Freeboard Midship
 Mean Freeboard Stern
 Sum of Freeboards

Datum Sta.	Actual Sta.	Rating FB
	1.368	1.368
	1.017	1.017
	1.031	1.031
		3.416

Subtract FREEBOARD, F

1.108

Add SAIL AREAS (Square root)

13.240

TOTAL OF MEASUREMENTS

28.416

PENALTY (Draft or Tumblehome)

0.000

0

RATING

11.990

Date and Place of Measurement	12-May-23	
Measurer's Name(s)	A Williams	Signature

Yacht's name : <i>Easterner</i>		Date	12-May-23
Range Measurement (Yes or No)	no	Date:	

PENALTIES

Overhang Forward to MWL		2.693	
Overhang Aft to MWL		2.506	
Subtract from overall length		5.199	
Difference of immersion from salt to fresh water	Meas. Density		0.000
WATERLINE LENGTH (LWL)			14.812
Minimum Displacement for Zero Penalty [m3]		30.150	
Minimum Weight for Zero Penalty [ton] (Water of sg 1.025)		30.904	
WEIGHT [tonne]	Actual weight		30.200
	Hull Scanned		
Equivalent LWL (for Displ. < min.)		14.693	
Difference			
DISPLACEMENT PENALTY (add to L)			0.000
Displacement Determination Method		Hull Scan	
DRAFT (actual)		2.863	
Max. Draft for Zero Penalty		2.870	
Difference (if positive)			
DRAFT PENALTY (add to Rating)			0.000
BEAM (Min)		3.602	
Max Beam at 1/3 of Midship Freeboard		0.000	
Difference (if positive)		0.000	
BEAM PENALTY (add to L)			0.000
Tumblehome Max. (2 x 2% of Extr. Beam)		0.145	
Extreme Beam		3.631	
Beam at deck		3.590	
Difference (if positive)		-0.104	
TUMBLEHOME PENALTY (add to Rating)			0.000

Date and Place of Measurement	12-May-23	
Measurer's Name(s)	A Williams	Signature

Design/Age Correction Factor Calculation			
Age Date	1958		
ADCF (Table E-2)	0.9647		
Hull Alteration Scope and Date			
Appendage Change Scope and Date			0.9647
Change/Alteration Correction ADCF			
Accommodation Deficiency Ballast			

Yacht's name : Easterner	Date 12-May-23
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SAIL PLAN

Max Height of Sail Plan =	25.000	J=	7.165	I =	18.750
Boom above Mast Datum =	1.540	P=	23.460	E=	10.300
Rated Mainsail Area J used for Rating	120.819	Spi boom=	7.400	√S=	13.240
			7.400		
Rated Foretriangle Area	58.969	Propeller allowance		0.975	
TOTAL RATED SAIL AREA (S)	179.788	Corrected sail area		175.293	

SAIL LIMITS

Mainsail max girth:	1/2 height (68% of E)	7.004	3/4 height (41% of E)	4.223
Genoa:	max. foot length (J + 4.8m)	11.965		
Spinnaker:	1/2 foot max breadth (125% J)	9.250	max. luff length=	18.626

Spar Measurement

MAST (material)	Aluminium	Mast Weight	455	CG pos.	9.505
Mast dimensions [mm]	Deck 307 x 246	Half-Height 337 x 246	Jib-Halyard 337x 246	Head 194 x 155	
Sections area [cm ²]	583	583	583	180	
Mast CG Correction (if applicable) Wt & CG	@		Mk ²		

Engine/Propeller Installation

Engine and propeller weight	yes	Propeller diameter =	0.620
Minimum boat speed with engine	yes	Propeller position =	Skewed
Propeller Type (folding feathering fixed pitch etc.), no of blades		3	Feathering
Propeller Skew			0.975

Flotation

Internal Ballast	Amount	Location aft of bow

Measurer's Notes

1 New deck	2021
2 Boat not weighed	
3	
4	

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