

# 12



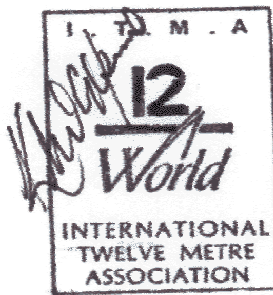
## INTERNATIONAL TWELVE METRE CLASS

Yacht's Name	<i>American Eagle</i>	
National letters and Sail Number	US 21	Club NYYC
Designer	A E Luders	
Builder		Building Year 1964
Owner	Alexander Valcic	
Owner's Address	PO. Box 305 Newport, RI 02840 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:	<u>31-Jul-23</u>	
Measurer	<u>A Williams K McAlpine</u>	Signature <u><i>Ander</i> <i>K McAlpine</i></u>
Valid until	<u>31-Jul-25</u>	
Supersedes	<u>03-Aug-21</u>	
7	Y / N <input checked="" type="checkbox"/>	
Was <b>Appendix F</b> used for Measurement?	Y / N <input checked="" type="checkbox"/>	
Hull Scanned	<input checked="" type="checkbox"/>	
Signature <u><i>K McAlpine</i></u>		
ITMA Technical Director		
		Stamp of Authority of the International Twelve Metre Association



**RATING CALCULATION**

<b>OVERALL LENGTH</b>				<b>20.612</b>
Overhang Forward to FGS		2.360		
Overhang Aft to AGS		2.386		
Total Overhang (Subtract)		4.746		
<b>MEASURED LENGTH (LBG)</b>				<b>15.866</b>
Girth at Bow		1.553		
Twice vertical Height at Bow (Subtract)		1.200		
Girth Difference at FGS		0.353		
Add 1.5 x Girth Difference at FGS (min 0.540 m)		0.540		
Girth at Stern		3.373		
Twice vertical Height at Stern (Subtract)		1.580		
Girth Difference at AGS		1.793		
Add 1/3 Girth Difference at AGS (min 0.400 m)		0.598		
Add any penalty (Beam or Displacement)				
Sum of Length and Girth Corrections				<b>17.004</b>
Age/Design Correction Factor (ADCF)(see page 3)	0.9682			
<b>LENGTH (L)</b>				<b>16.463</b>
Skin IM to d1 Port		2.178		
Chain IM to d1 Port		2.164		
d Port		0.014		
Skin IM to d1 Starboard		2.188		
Chain IM to d1 Starboard		2.172		
d Starboard		0.016		
Add d		0.030		
<b>Add GIRTH 2 d</b>				<b>0.060</b>
	Datum Sta.	Actual Sta.	Rating FB	
Mean Freeboard Bow		1.436	1.436	
Mean Freeboard Midship		1.123	1.123	
Mean Freeboard Stern		0.970	0.970	
Sum of Freeboards			3.529	
<b>Subtract FREEBOARD, F</b>				<b>1.176</b>
<b>Add SAIL AREAS (Square root)</b>				<b>13.093</b>
<b>TOTAL OF MEASUREMENTS</b>				<b>28.440</b>
PENALTY (Draft or Tumblehome)			0.000	0
<b>RATING</b>				<b>12.000</b>

Date and Place of Measurement

31-Jul-23

Measurer's Name(s)

A Williams K McAlpine

Signature



<b>Yacht's name : American Eagle</b>		<b>Date</b>	<b>31-Jul-23</b>
Range Measurement (Yes or No)	no	Date:	

## PENALTIES

Overhang Forward to <b>MWL</b>		2.864	
Overhang Aft to <b>MWL</b>		3.121	
Subtract from overall length		5.985	
1 Difference of immersion from salt to fresh water	Meas. Density		1.024
<b>WATERLINE LENGTH (LWL)</b>			<b>14.627</b>
Minimum Displacement for Zero Penalty [m3]		29.087	
Minimum Weight for Zero Penalty [ton] (Water of sg 1.025)		29.815	
<b>WEIGHT [tonne]</b> Actual weight		Appendix E	<b>29.900</b>
Equivalent LWL (for Displ. < min.)		14.642	
Difference			
DISPLACEMENT PENALTY (add to L)			<b>0.000</b>
Displacement Determination Method			
<b>DRAFT (actual)</b>		2.814	
Max. Draft for Zero Penalty		2.840	
Difference (if positive)			
DRAFT PENALTY (add to Rating)		Appendix E	<b>0.000</b>
<b>BEAM (Min)</b>		3.720	
Max Beam at 1/3 of Midship Freeboard		0.000	
Difference (if positive)		0.000	
BEAM PENALTY (add to L)			<b>0.000</b>
Tumblehome Max. (2 x 2% of Extr. Beam)		0.000	
Extreme Beam		3.720	
Beam at deck			
Difference (if positive)			
TUMBLEHOME PENALTY (add to Rating)			<b>0.000</b>

Date and Place of Measurement	31-Jul-23	
Measurer's Name(s)	A Williams K McAlpine	Signature <i>Ander</i>

Design/Age Correction Factor Calculation		
Age Date	1964	
ADCF ( Table E-2)	0.9682	
Hull Alteration Scope and Date		
Appendage Change Scope and Date		
Change/Alteration Correction ADCF		
Accommodation Deficiency Ballast		

Yacht's name : American Eagle

Date

31-Jul-23

**SAIL PLAN**

Max Height of Sail Plan =	<input type="text" value="25.000"/>	J=	<input type="text" value="7.510"/>	I =	<input type="text" value="18.750"/>
Boom above Mast Datum =	<input type="text" value="1.380"/>	P=	<input type="text" value="23.620"/>	E=	<input type="text" value="9.750"/>
Rated Mainsail Area	<input type="text" value="115.148"/>	Spi boom=	<input type="text" value="7.615"/>	√S=	<input type="text" value="13.093"/>
J used for Rating			<input type="text" value="7.615"/>		
Rated Foretriangle Area	<input type="text" value="60.682"/>	Propeller allowance		<input type="text" value="0.975"/>	
TOTAL RATED SAIL AREA (S)	<input type="text" value="175.830"/>	Corrected sail area		<input type="text" value="171.434"/>	

**SAIL LIMITS**

Mainsail max girth:	1/2 height (68% of E)	<input type="text" value="6.630"/>	3/4 height (41% of E)	<input type="text" value="3.998"/>
Genoa:	max. foot length (J + 4.8m)	<input type="text" value="12.310"/>		
Spinnaker:	1/2 foot max breadth (125% J)	<input type="text" value="9.519"/>	max. luff length=	<input type="text" value="18.690"/>

**Spar Measurement**

MAST (material)	<input type="text" value="Aluminium"/>	Mast Weight	<input type="text" value="479"/>	CG pos.	<input type="text" value="9.954"/>
	Deck	Half-Height	Jib-Halyard	Head	
Mast dimensions [mm]	<input type="text" value="360 x 252"/>	<input type="text" value="360 x 250"/>	<input type="text" value="290 x 204"/>	<input type="text" value="175 x 135"/>	
Sections area [cm <sup>2</sup> ]	<input type="text" value="712"/>	<input type="text" value="676"/>	<input type="text" value="452"/>	<input type="text" value="166"/>	
Mast CG Correction (if applicable) Wt & CG	<input type="text" value=""/>	@	<input type="text" value=""/>	Mk <sup>2</sup>	<input type="text" value=""/>

**Engine/Propeller Installation**

Engine and propeller weight	<input type="text" value="yes"/>	Propeller diameter =	<input type="text" value="0.512"/>
Minimum boat speed with engine	<input type="text" value="yes"/>	Propeller position =	<input type="text" value="Port"/>
Propeller Type (folding feathering fixed pitch etc.), no of blades		<input type="text" value="Feathering"/>	<input type="text" value="3.000"/>
Propeller Skew			<input type="text" value="Skewed"/>

**Flotation**

Internal Ballast	Amount	Location aft of bow

**Measurer's Notes**

- 1 Freeboards, 1933-1970(sum/3,Max 1.12)
- 2 Boat not weighed, Appendix E
- 3 Hull re-measured 2011

Date and Place of Measurement

31-Jul-23

Measurer's Name(s)

A Williams K McAlpine

Signature

