

# 12




## INTERNATIONAL TWELVE METRE CLASS

Yacht's Name	NYALA		
National letters and Sail Number	US 12	Club	Y.C.Italiano
Designer	O.J. Stephens		
Builder	H.B.Nevin Inc (USA)	Building Year	1938
Owner	Patrizio Bertelli		
Owner's Address	Arezzo Italy		
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>21-Apr-19</u>	
Measurer	<u>N Sironi/ K McAlpine</u>	Signature <u>Nicole Chini</u>
Valid until	<u>21-Apr-21</u>	
Supersedes	<u>12-Jul-16</u>	
Is this an <b>Appendix E</b> Certificate?	Y / N	<input checked="" type="checkbox"/> Y
Was <b>Appendix F</b> used for Measurement?	Y / N	<input type="checkbox"/> N
Signature <u><i>K McAlpine</i></u>		
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)

2.848  
 3.498  
 6.346

**21.375****MEASURED LENGTH (LBG)**

Girth at Bow  
 Twice vertical Height at Bow (Subtract)  
 Girth Difference at FGS  
 Add 1.5 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/Date Correction Factor (ADCF)(see page 3)

1.595  
 1.200  
 0.395  
 0.593  
 3.440  
 1.770  
 1.670  
 0.557  
 0.000

**15.029****16.178**

0.9595

**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

1.850  
 1.822  
 0.028  
 1.850  
 1.818  
 0.032  
 0.060

**15.523****Add GIRTH 2 d****0.120**

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

Datum Sta.	Actual Sta.	Rating FB
	1.405	1.405
	1.150	1.150
	1.065	1.065
		3.620

**Subtract FREEBOARD, F**

See Notes

**1.207****Add SAIL AREAS (Square root)****13.326****TOTAL OF MEASUREMENTS****27.762**

PENALTY (Draft or Tumblehome)

0.000

**RATING****11.714**

Date and Place of Measurement

21-Apr-19

Measurer's Name(s)

N Sironi/ K McAlpine

Signature



<b>Yacht's name : NYALA</b>		<b>Date</b>	<b>21-Apr-19</b>
Range Measurement (Yes or No)	N	Date:	25-Apr-19

## PENALTIES

Overhang Forward to <b>MWL</b>	3.482	
Overhang Aft to <b>MWL</b>	4.225	
Subtract from overall length	7.707	
Difference of immersion from salt to fresh water	Meas. Density	
<b>WATERLINE LENGTH (LWL)</b>		<b>13.668</b>
Minimum Displacement for Zero Penalty [m3]	23.978	
Minimum Weight for Zero Penalty [ton] (Water of sg 1.025)	24.577	
<b>WEIGHT [tonne]</b> Actual weight		<b>Append E</b>
Equivalent LWL (for Displ. < min.)		
Difference		
DISPLACEMENT PENALTY (add to L)		<b>0.000</b>
Displacement Determination Method		
<b>DRAFT (actual)</b>	2.662	
Max. Draft for Zero Penalty	2.687	
Difference (if positive)		
DRAFT PENALTY (add to Rating)	Append E	<b>0.000</b>
<b>BEAM (Min)</b>	3.600	
Max Beam at 1/3 of Midship Freeboard	3.628	
Difference (if positive)		
BEAM PENALTY (add to L)		<b>0.000</b>
Tumblehome Max. (2 x 2% of Extr. Beam)	0.145	
Extreme Beam	3.628	
Beam at deck	3.628	
Difference (if positive)	0.000	
TUMBLEHOME PENALTY (add to Rating)		<b>0.000</b>

Date and Place of Measurement	21-Apr-19	
Measurer's Name(s)	N Sironi/ K McAlpine	Signature <i>Nicole K...</i>

Design/Age Correction Factor Calculation		
Age Date	1938	
ADCF ( Table E-2)	0.9595	
Hull Alteration Scope and Date		
Appendage Change Scope and Date		
Change/Alteration Correction ADCF		
Accommodation Deficiency Ballast	none	

Yacht's name : NYALA

Date

21-Apr-19

**SAIL PLAN**

Max Height of Sail Plan =	<input type="text" value="25.000"/>	J=	<input type="text" value="6.650"/>	I =	<input type="text" value="18.750"/>
Boom above Mast Datum =	<input type="text" value="1.250"/>	P=	<input type="text" value="23.750"/>	E=	<input type="text" value="10.720"/>
Rated Mainsail Area	<input type="text" value="127.300"/>	Spi boom=	<input type="text" value="6.650"/>	√S=	<input type="text" value="13.326"/>
J used for Rating	<input type="text" value="6.650"/>				
Rated Foretriangle Area	<input type="text" value="52.992"/>	Propeller allowance		<input type="text" value="0.985"/>	
TOTAL RATED SAIL AREA (S)	<input type="text" value="180.292"/>	Corrected sail area		<input type="text" value="177.588"/>	

**SAIL LIMITS**

Mainsail max girth:	1/2 height (68% of E)	<input type="text" value="7.290"/>	3/4 height (41% of E)	<input type="text" value="4.395"/>
Genoa:	max. foot length (J + 4.8m)	<input type="text" value="11.450"/>		
Spinnaker:	1/2 foot max breadth (125% J)	<input type="text" value="8.313"/>	max. luff length=	<input type="text" value="18.415"/>

**Spar Measurement**

MAST (material)	<input type="text" value="wood"/>	Mast Weight	<input type="text"/>	CG pos.	<input type="text"/>
Mast dimensions [mm]	Deck <input type="text" value="245x310"/>	Half-Height	<input type="text"/>	Jib-Halyard	Head <input type="text"/>
Sections area [cm <sup>2</sup> ]	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Mast CG Correction (if applicable) Wt & CG	<input type="text"/>			Mk <sup>2</sup>	<input type="text"/>

**Engine/Propeller Installation**

Engine and propeller weight	<input type="text" value="Yes"/>	Propeller diameter =	<input type="text" value="0.533"/>
Minimum boat speed with engine	<input type="text"/>	Propeller position =	<input type="text"/>
Propeller Type (folding feathering fixed pitch etc.), no of blades	<input type="text"/>		<input type="text"/>
Propeller Skew	<input type="text"/>		<input type="text"/>

**Flotation**

Internal Ballast	Amount	Loation from bow
Nil		

**Measurer's Notes**

- 1 Measured according to 1934 Rule
- 2 Age allowance take into account bermudian rig
- 3 Accommodation checked for compliance with 2018 Rule
- 4

Date and Place of Measurement

21-Apr-19

Measurer's Name(s)

N Sironi/ K McAlpine