



12

INTERNATIONAL TWELVE METRE CLASS

Yacht's Name Nefertiti

National letters and Sail Number US 19 Club New York Yacht Club

Designer Frederick E Hood

Builder James E Graves Inc. Building Year 1962

Owner J. Sears Wullschleger

Owner's Address 4713 Elder Berry Drive Sarasota, FL 34241 USA

Lloyds R class certificate (Number or Date) _____

APPENDIX E 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 July 7, 2017

Measurer A Williams

Signature Ander

Valid until July 7, 2019

Supersedes July 7, 2015

[Signature]

Signature _____
ITMA Technical Director



Stamp of Authority of the
International Twelve Metre Association

RATING CALCULATION**OVERALL LENGTH**

Overhang Forward to L1

2.465

Overhang Aft to L1

3.270

Total Overhang (Subtract)

5.735

21.075

MEASURED LENGTH (L1 L1)

Girth at Bow

1.537

Twice vertical Height at Bow (Subtract)

1.200

O at Bow

0.337

Add 1 1/2 O at Bow (min 0.540 m)

0.540

Girth at Stern

4.150

Twice vertical Height at Stern (Subtract)

1.822

O at Stern

2.328

Add 1/3 O at Stern (min 0.400 m)

0.776

Add any penalty (Beam)

0.000

Sum of Length and Girth Corrections

16.656

Age Date and Allowance

1962

Allowance

0.967

CORRECT LENGTH L

16.106

Skin d to d1 Port

2.201

Chain d to d1 Port

2.148

d Port

0.053

Skin d to d1 Starboard

2.229

Chain d to d1 Starboard

2.165

d Starboard

0.064

Add d

0.117

Add GIRTH 2 d

0.234

Mean Freeboard Bow O

Actual

1.530

1.530

Mean Freeboard Midship d

Actual

1.149

1.149

Mean Freeboard Stern O

Actual

1.091

1.091

Sum of Freeboards

3.770

Subtract FREEBOARD, F

See Notes

1.210

Add SAIL AREAS (Square root)

13.176

TOTAL OF MEASUREMENTS

28.306

PENALTY (Draught)

0.000

RATING

11.944

Date and place of Measurement

July 7, 2017

Measurer's Name(s)

A Williams

Signature



PENALTIES

Overhang Forward to L	2.872
Overhang Aft to L	3.992
Subtract from overall length	6.864
Difference of imersion from salt to fresh water	0.000

WATERLINE LENGTH

Minimum Displacement for Zero Penalty [m3]	26.790	14.211
Minimum Weight for Zero Penalty [tonnes] (Water of sg 1.025)	27.460	

ACTUAL WEIGHT [tonnes]

Equivalent LWL (for Displ. < min.)	14.828	31.000
Difference		
DISPLACEMENT PENALTY (add to L)		0.000

DRAUGHT (actual)

Max. Draught for Zero Penalty	2.774	
Difference (if positive)	2.774	
DRAUGHT PENALTY (add to Rating)		0.000

BEAM (Min)

Max Beam at 1/3 of Midship Freeboard	3.780	
Difference (if positive)	3.600	
BEAM PENALTY (add to L)	0.180	0.000
Tumblehome Max. (2 x 2% of Extr. Beam)	0.000	
Extreme Beam		
Beam at deck		
Difference (if positive)	0.000	
TUMBLEHOME PENALTY (add to Rating)		0.000

Date and place of Measurement

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SAIL PLAN

Max Height of Sail Plan =	<input type="text" value="25.000"/>	J=	<input type="text" value="8.100"/>	I =	<input type="text" value="18.742"/>
Boom Height =	<input type="text" value="1.380"/>	A=	<input type="text" value="23.620"/>	B=	<input type="text" value="9.434"/>
Rated Mainsail Area	<input type="text" value="111.416"/>	Spi boom=	<input type="text" value="8.140"/>	√S=	<input type="text" value="13.176"/>
Rated Foretriangle Area	<input type="text" value="64.838"/>	Propeller allowance	<input type="text" value="0.985"/>		
TOTAL RATED SAIL AREA	<input type="text" value="176.253"/>	Corrected sail area	<input type="text" value="173.610"/>		

SAIL LIMITS

Mainsail max girth:	1/2 height (68%)	<input type="text" value="6.415"/>	3/4 height (41%)	<input type="text" value="3.868"/>
Genoa:	max. foot length (J + 4.8m)	<input type="text" value="12.940"/>		
Spinnaker:	1/2 foot max breadth (125% J)	<input type="text" value="10.175"/>	max. luff length=	<input type="text" value="18.847"/>

Spar Measurement

MAST (material)	<input type="text" value="Aluminium"/>	Mast Weight	<input type="text" value="455"/>	CG pos.	<input type="text" value="9.520"/>
	Deck	Half-Height	Jib-Halyard	Head	
Mast dimensions [mm]	<input type="text" value="351x246"/>	<input type="text" value="350x246"/>	<input type="text" value="282x204"/>	<input type="text" value="168x126"/>	
Sections area [cm ²]	<input type="text" value="678"/>	<input type="text" value="676"/>	<input type="text" value="452"/>	<input type="text" value="166"/>	

Engine/Propeller Installation

Engine and propeller weight	<input type="text" value="Yes"/>	Propeller diameter =	<input type="text" value="0.487"/>
Minimum boat speed with engine	<input type="text" value="Yes"/>	Propeller position =	<input type="text" value="Not Skewed"/>
Engine model and power	<input type="text" value="Yes"/>		

Flotation

Internal Ballast

Nil

Measurer's Notes

- 1 Freeboard in Rating as per 1933-1970 Rule (Sum/3,Max 1.21)
- 2 New Mast 2003

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