



**INTERNATIONAL FORMULA 18 CLASS
MEASUREMENT FORM
MEASUREMENT CERTIFICATE
I F18CA-2019 (version PCB2019/06)**



IDENTIFICATION

Boat Certificate n° National letters & Sail N° : WS N° :
Hulls N° / N° coques : Hulls N° / N° coques :
Brand of boat : Date manufactured :

OWNER

owner / propriétaire :
Address / adresse :

Zip code / CP : City / ville :
Country / Pays : E-mail :

MEASURES & DESCRIPTION OF THE PLATFORM

C.6.1.(b) (1) Weight boat ready to sail : 180 kg minimum
C.6.2.(a) Corrector weight 7 kg maximum
D.6.2.(a) Hull length / Longueur coque 5,52 m maximum
D.6.2.(b) Boat beam / Largeur plateforme 2,60 m maximum
C.7.1.(b) Inspection hatches / trappes Minimum 1 per hull
D.3.1.(a) Material
D.5.1.(a) Trampoline material Netting is not permitted
B.1.1.(c) have valid certification mark is required : Port side hull starboard side

DAGGERBOARDS & RUDDERS

	Port side	starboard side	
C.8.2.(a)(1) Daggerboards serial n° :	<input type="text" value="NF18LDB-TH"/>	<input type="text" value="NF18LDB-TH"/>	
E.3.4.(a) Daggerboards weight	<input type="text" value="4,500 kg"/>	<input type="text" value="4,500 kg"/>	5,5 kg maximum
E.3.3.(c) Daggerboards extension below the hull	<input type="text" value="1,34"/>	<input type="text" value="1,34"/>	1,40m maximum
B1.1.(c) Daggerboard certification mark F18	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
C.8.2. Rudders serial n° :	<input type="text" value="NF18RDE-TH"/>	<input type="text" value="NF18RDE-TH"/>	
E.4.6.(a). Rudders weight	<input type="text" value="3,900 kg"/>	<input type="text" value="3,900 kg"/>	Minimum 3 kg
B1.1.(c) Rudder certification mark F18	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

RESERVED NATIONAL CLASS ASSOCIATION

Initial boat certification Certification control carried by Date
Boat re-certification n° For main sail : jib Spinnaker Platform Other
Certification Authority Complementary comments of the measurer

BATEAU JAUGÉ SOUS LA PLUIE !

EQUIPEMENTS

Boat Certificate n°	FRA 2021-002	National letters & Sail N°:	FRA 2051	WS N°:	1 318
Owner :	LEVIONNOIS VINCENT	Brand of boat :	NACRA EVOLUTION		

C.5 PORTABLE EQUIPMENT

C.5.1(a)1 One righting line	<input type="text" value="4,00"/>	Minimum 4m. long
	<input type="text" value="10mm"/>	Minimum Ø 10mm
C.5.1(a)2 One magnetic steering compas	<input type="text" value="1"/>	Minimum One

C.9 RIG

C.9.2(a) Mast datum point shall not be more than 120mm above the top of the front bear	<input type="text" value="0,75"/>
C.9.7(a) Running rigging shall be led outside the mast spar	<input type="text" value="OK"/>

D.4 BEAMS

D.4.2(a) The beams shall be extruded aluminium profiles of constant section	<input type="text" value="OK"/>
D.4.2(b) The curvature of the beams shall be limited a maximum of 15mm	<input type="text" value="OK"/>

F.3 MAST

F.3.2(a) The mast shall be extruded aluminium profiles of constant section	<input type="text" value="OK"/>		
F.3.3 Dimensions	Mast spar circumference	<input type="text" value="0,380 m"/>	0,385 m Maximum
	Distance between upper point and front beam	<input type="text" value="9,085 m"/>	9,100 m Maximum
	Shroud height	<input type="text" value="6,760 m"/>	6,750 m Maximum
	Spinnaker hoist height	<input type="text" value="8,158 m"/>	8,150 m Maximum
	Top of the front beam to mast datum point	<input type="text" value="0.045"/>	
	Extrusion total lenght	<input type="text" value="9,100 m"/>	
	B.1.1(c) Have valid certification marks as required	<input checked="" type="checkbox"/>	

F.4 BOOM

F.4.1(a) The Boom, if fitted, Yes or no	<input checked="" type="checkbox"/>
F.4.1(a) shall be made and extruded aluminium profiles of constant section	<input type="text" value="OK"/>

F.5 BOWSPRIT

F.5.1(a) The bowsprit shall be on the longitudinal centreline of the boat	<input type="text" value="OK"/>
F.5.1(b) The bowsprit shall be attached to the front beam	<input type="text" value="OK"/>
F.5.2(a) The bowsprit shall be made of aluminium of constant section	<input type="text" value="OK"/>
F.5.5(a) The lenght of the bowsprit shall not exceeded the distance from the centre of the front beam to a vertical line touching the most forward part of the hull plus 800 mm, with the bowsprit mesured when vertical.	<input type="text" value="0,69"/>
F.6.2(b) (2) The bowsprit bridles may be of rope of minimum diameter 2,5mm	<input type="text" value="OK"/>
Dimensions : Diameter Ø <input type="text" value=""/>	Length <input type="text" value=""/>
C.9.5(c) The bowsprit shall have an end cap that is smooth, rounded	<input type="text" value="OK"/>

F.6 STANDING RIGGING

F.6.1(a) The standing rigging of the stanless steel	<input checked="" type="checkbox"/>
F.6.2(a)(1) A forestay and bridles mini 4mm	<input checked="" type="checkbox"/>
F.6.2(a)(1) Shrouds mini 4mm	<input checked="" type="checkbox"/>
F.6.2(a)(3) Trapeze wires mini 2,5mm	<input checked="" type="checkbox"/>

F.7 RUNNING RIGGING

F.7.2(a)(1)(2) Mainsal halyard & sheet	<input checked="" type="checkbox"/>
F.7.2(a)(3)(4) Jib halyard & sheet	<input checked="" type="checkbox"/>
F.7.2(a)(5)(6) Spi. halyard & sheets	<input checked="" type="checkbox"/>
F.7.2(a)(7) Spi. Retraction lines	<input checked="" type="checkbox"/>

Complementary comments of the measurer
Shroud height et Spinnaker hoist height sont >>

MEASURES AND CALCULATIONS AREA OF JIB & SPINNAKER

Boat Certificate n°

FRA 2021-002

National letters & Sail N°:

FRA 2051

WS N°:

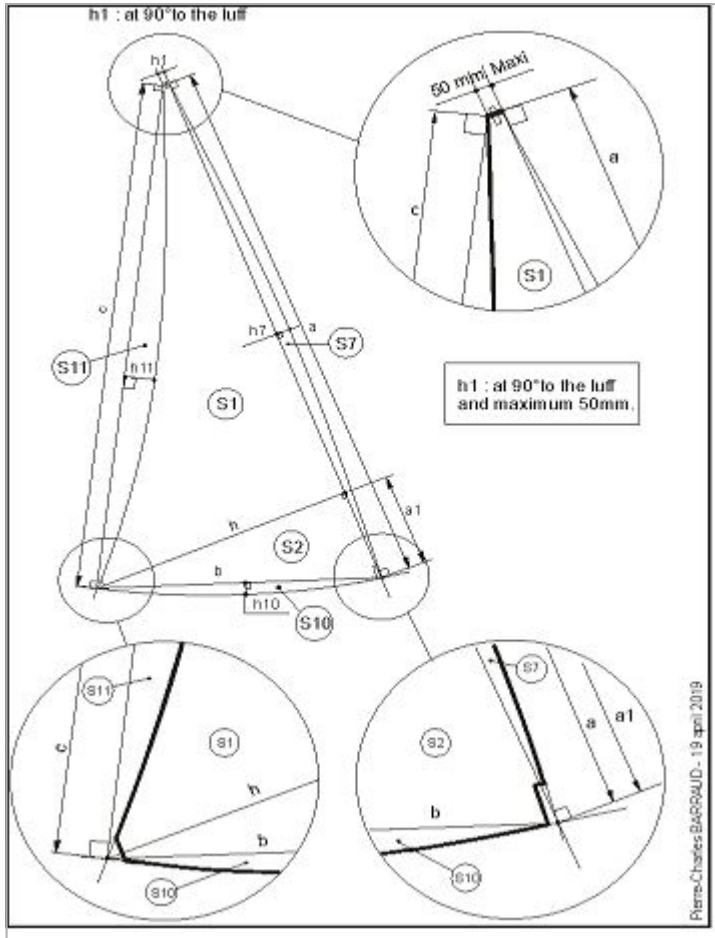
1 318

Owner :

LEVIONNOIS VINCENT

Brand of boat :

NACRA EVOLUTION



G.4 JIB

Small Jib 3,60 m2

Large Jib 4,30 m2

Sailmaker / Voilier :

PERFORMANCE SAILS

Serial n° / N° série :

D050J

Colour / Couleur :

WHITE

Batten number :

3 3.4.(d)(2) maximum 3

Material / Matériau :

APEN 06

h1	0,056	$S1=((h+h1)x(a-a1))/2$	4,2963
a	5,710	$S2=(hxa1)/2$	0,2815
h7	0,000	$S7=((axh7)/3)*2$	0,0000
c	6,502	$S10 : 2/3bxh10$	0,0405
h11	-0,076	$S11 : 2/3 cxh11$	-0,3294
h	1,551	JIB AREA Small Jib 3,60m2 Large Jib 4,30m2 4,289	
a1	0,363		
b	1,600		
h10	0,038		

G.4.2 Construction & G.4.3 Dimensions

The Leech shall not be convex	<input type="checkbox"/> OK	Max
Top width	<input type="checkbox"/> 47	50mm
Batten width	<input type="checkbox"/> 12	40mm
Batten pocket outside width	<input type="checkbox"/> 58	80mm
Window area : minimum : 0,30 m2	<input type="checkbox"/> OK	
Dacron sticker F18 Small Jib 3,60m2	<input type="checkbox"/>	
Dacron sticker F18 Large Jib 4,30 m2	<input checked="" type="checkbox"/>	

G.5 SPINNAKER

Small Spinnaker 19,00m2 maximum

Large Spinnaker 21,00m2 maximum

Sailmaker / Voilier :

PERFORMANCE SAILS

Serial n° / N° série :

D0445

Colour / Couleur :

BLUE

G.5.1 Material / Matériau :

SK80

SL1	8,859	% SMG / SF	76,09
SL2	7,606	Spinnaker AREA 21,000	
SMG	2,880		
SF	3,785		
Dacron sticker F18 spinnaker 19,00 m2			
Dacron sticker F18 spinnaker 21,00 m2		<input checked="" type="checkbox"/>	

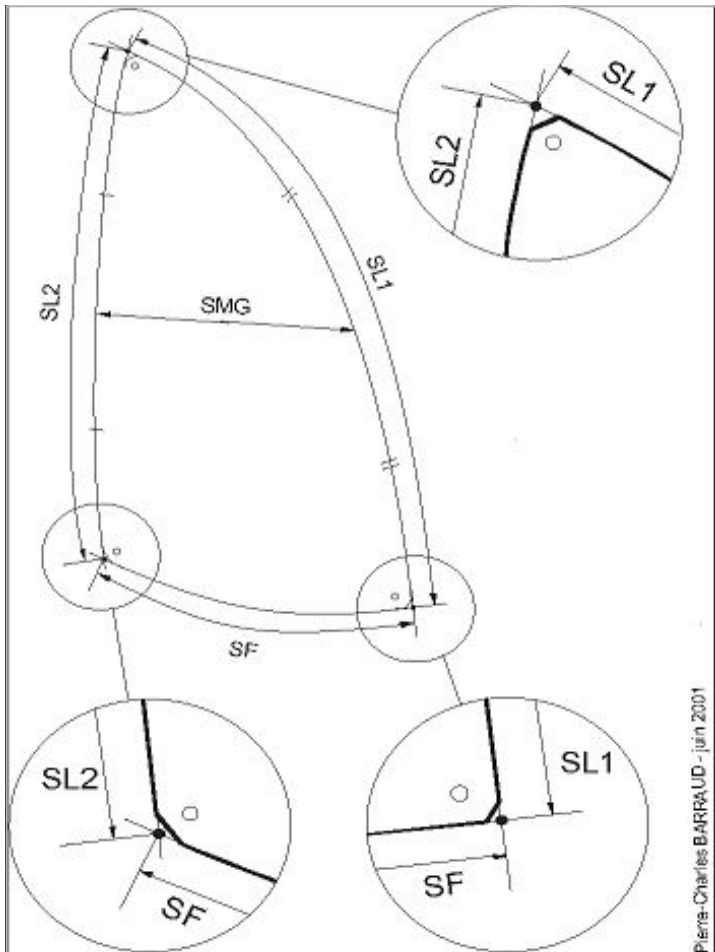
RESERVED NATIONAL CLASS ASSOCIATION

Certification control carried by

Date

Frédérique Pfeiffer

18/06/2021



MEASURES AND CALCULATIONS THE MAINSAIL CLASSIC OR DS

Boat Certificate n°

FRA 2021-002

National letters & Sail N° :

FRA 2051

WS N° :

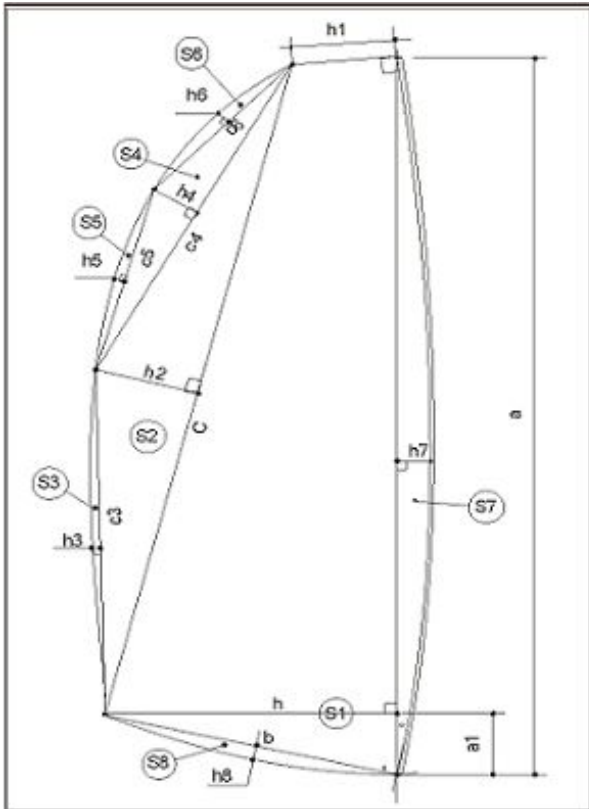
1 318

Owner :

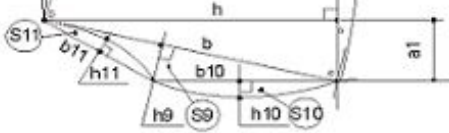
LEVIONNOIS VINCENT

Brand of boat :

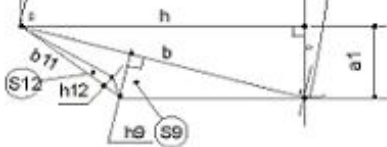
NACRA EVOLUTION



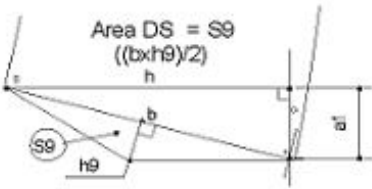
Area DS = S9+/-S10+/-S11
 $((b \times h_9)/2) + ((b_{10} \times h_{10})/2) + ((b_{11} \times h_{11})/2)$



Area DS = S9-S12
 $((b \times h_9)/2) - ((b_{11} \times h_{12})/2)$



Area DS = S9
 $((b \times h_9)/2)$



Certification control carried by

Date

Frédérique Pfeiffer

18/06/2021

Certification Authority

Comments of the measurer

MAST AREA

Length extrusion 9,100 Perimeter 0,380

G.3 MAIN SAIL : 17 m maximum

Sailmaker / Voilier : PERFORMANCE SAILS

Serial n° / N° série : D037M

Colour / Couleur : WHITE

Batten number : 3

G.3.2 Material / Matériau : APEN 06

a	9,038	S1 : $((h+h1)(a-a1)+(a1 \times h))/2$	13,1852
h7	0,140	S2 : $(c \times h_7)/2$	0,4037
c	8,073	S3 : $2/3 \times c \times h_3$	0,0742
h2	0,100	S4 : $(c_4 \times h_4)/2$	0,0916
c4	4,362	S5 : $2/3 \times c_5 \times h_5$	0,0160
h4	0,042	S6 : $2/3 \times c_6 \times h_6$	0,0146
c6	2,192	S7 : $2/3 \times a \times h_7$	0,8435
h6	0,010	S8 : $2/3 \times b \times h_8$	
c5	2,182	S9 : $(b \times h_9)/2$	0,5145
h5	0,011	S10 : $((b_{10} \times h_{10})/3)^2$	
c3	3,710	S11 : $((b_{11} \times h_{11})/3)^2$	
h3	0,030	S12 : $-(b_{11} \times h_{12})/2$	
h	2,085	Main Sail AREA	15,143
b	2,323		
h8	0,000	Mast area / Surf. Du mât :	1,729
a1	0,980	Total AREA	16,872
h1	0,934		

h9	0,443
b10	0,000
h10	0,000
b11	0,000
h11	0,000
h12	0,000

h1 and h being parallel and perpendicular to the main luff, the main area is a trapezium and a right-angled triangle.
 h2 and h4 are perpendicular to the middle point between c and c4.
 h3, h5, h6, h7 and h8 are respectively the cambers of the cords c3, c5, c6, a and b.
 h10, h11 can be positive, negative or equal to zero.

G.3.5 DIMENSIONS

Top width excluding boltrope	0,934	Max 1,00 m
Upper wight at upper leech point 1500mm from the head point	1,18	1,29 m
The angle between the luff ans the head	OK	90°
Tabling width	30	115mm
Window area : minimum : 0,30 m2	OK	

B.2 CERTIFICATION MARKS F18

Dacron sticker F18 main sail 17,00 m2

Class emblem F18