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

IDENTIFICATION

Boat Certificate n°	**FRA 2021-001**	*National letters & Sail N° :*	FRA 045	*WS N° :*	1 354
Hulls N° / N° coques :	SANS	*Hulls N° / N° coques :*	NACD00491021		
Brand of boat :	NACRA (F18 EVOLUTION)			*Date manufactured :*	2021

OWNER

owner / propriétaire :	MAISONNEUVE FRANÇOIS		
Address / adresse :			
Zip code / CP :		City / ville :	
Country / Pays		*E-mail*	

MEASURES & DESCRIPTION OF THE PLATEFORM

C.6.1.(b) (1) Weight boat ready to sail :		177,500 kg	180 kg minimum
C.6.2.(a) Corrector weight		2,500 kg	7 kg maximum
D.6.2.(a) Hull lenght / Longueur coque		5,51 m	5,52 m maximum
D.6.2.(b) Boat beam / Largeur plateforme		2,56 m	2,60 m maximum
C.7.1.(b) Inspection hatches / trappes	Minimum 1 per hull	2	
D.3.1.(a) Material	EPOXY		
D.5.1.(a) Trampoline material	MESH		Netting is not permited

B.1.1.(c) have valid certification mark is required : hull — *Port side hull* ☑ *starboard side* ☑

DAGGERBOARDS & RUDDERS

	Port side	*starboard side*	
C.8.2.(a)(1) Daggerboards serial n° :	NF18LDB-TH	NF18LDB-TH	
E.3.4.(a) Daggerboards weight	4,400 kg	4,400 kg	5,5 kg maximum
E.3.3.(c) Daggerboards extension below the hull	1,34	1,34	1,40m maximum
B1.1.(c) Daggerboard certification mark F18	☑	☑	
C.8.2. Rudders serial n° :	NF18RDE-TH	NF18RDE-TH	
E.4.6.(a). Rudders weight	3,700 kg	3,800 kg	Minimum 3 kg
B1.1.(c) Rudder certification mark F18	☑	☑	

RESERVED NATIONAL CLASS ASSOCIATION

Initial boat certification ☑ *Certification control carried by* Frédérique Pfeiffer *Date* 16/04/2021

Boat re-certification n° 0 *For main sail :* ☐ *jib* ☐ *Spinnaker* ☐ *Platform* ☐ *Other* ☐

Certification Authority

Complementary comments of the measurer

EQUIPEMENTS

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C.5 PORTABLE EQUIPMENT

C.5.1(a)1 One righting line	4.1	Minimum 4m. long
	08mm	Minimum Ø 10mm
C.5.1(a)2 One magnetic steering compas		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	
C.9.7(a) Running rigging shall be led outside the mast spar	YES

D.4 BEAMS

D.4.2(a) The beams shall be extruded aluminium profiles of constant section	YES
D.4.2(b) The curvature of the beams shall be limited a maximum of 15mm	

F.3 MAST

F.3.2(a) The mast shall be extruded aluminium profiles of constant section		YES	
F.3.3 Dimensions	*Mast spar circumference*	0,378 m	*0,385 m Maximum*
	Distance between upper point and front beam	9,100 m	*9,100 m Maximum*
	Shround height	6,759 m	*6,750 m Maximum*
	Spinnaker hoist height	8,180 m	*8,150 m Maximum*
	Top of the front beam to mast datum point	120	
	Extrusion total lenght	9,080 m	
B.1.1(c) Have valid certification marks as required		☑	

F.4 BOOM

F.4.1(a) The Boom, if fitted,	*Yes or no*	☑
F.4.1(a) shall be made and extruded aluminium profiles of constant section		YES

F.5 BOWSPRIT

F.5.1(a) The bowsprit shall be on the longitudinal centreline of the boat		YES
F.5.1(b) The bowsprit shall be attached to the front beam		YES
F.5.2(a) The bowsprit shall be made of aluminium of constant section		YES
F.5.5(a) The lenght of the bowsprit shall not excedeed 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 bbowsprit mesuread when vertical.		0.62
F.6.2(b) (2) The bowsprit bridles may be of rope of minimum diameter 2,5mm		YES
Dimensions :	Diameter Ø	*Length*
C.9.5(c) The bowsprit shall have an end cap that is smooth, rouded		YES

F.6 STANDING RIGGING

F.6.1(a) The standing rigging of the stanless steel	☑
F.6.2(a)(1) A forestay and bridles mini 4mm	☑
F.6.2(a)(1) Shrouds mini 4mm	☑
F.6.2(a)(3) Trapeze wires mini 2,5mm	☑

F.7 RUNNING RIGGING

F.7.2(a)(1)(2) Mainsal halyard & sheet	☑
F.7.2(a)(3)(4) Jib halyard & sheet	☑
F.7.2(a)(5)(6) Spi. halyard & sheets	☑
F.7.2(a)(7) Spi. Retraction lines	☑

Complementary comments of the measurer

Compas à ajouter
Shround height et Spinnaker hoist height sup

MEASURES AND CALCULATIONS AREA OF JIB & SPINNAKER

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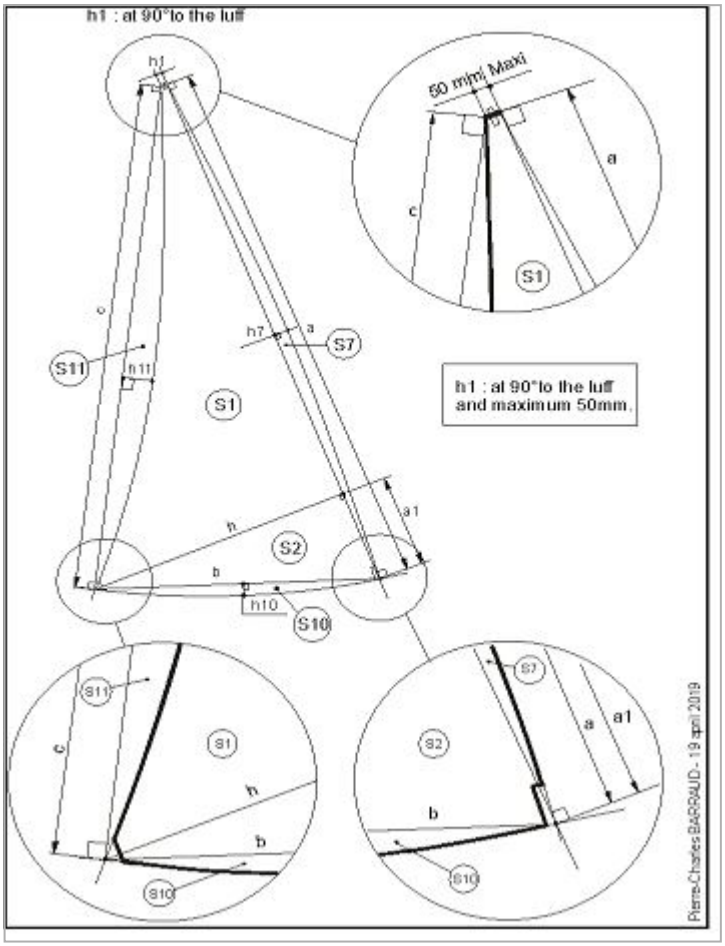


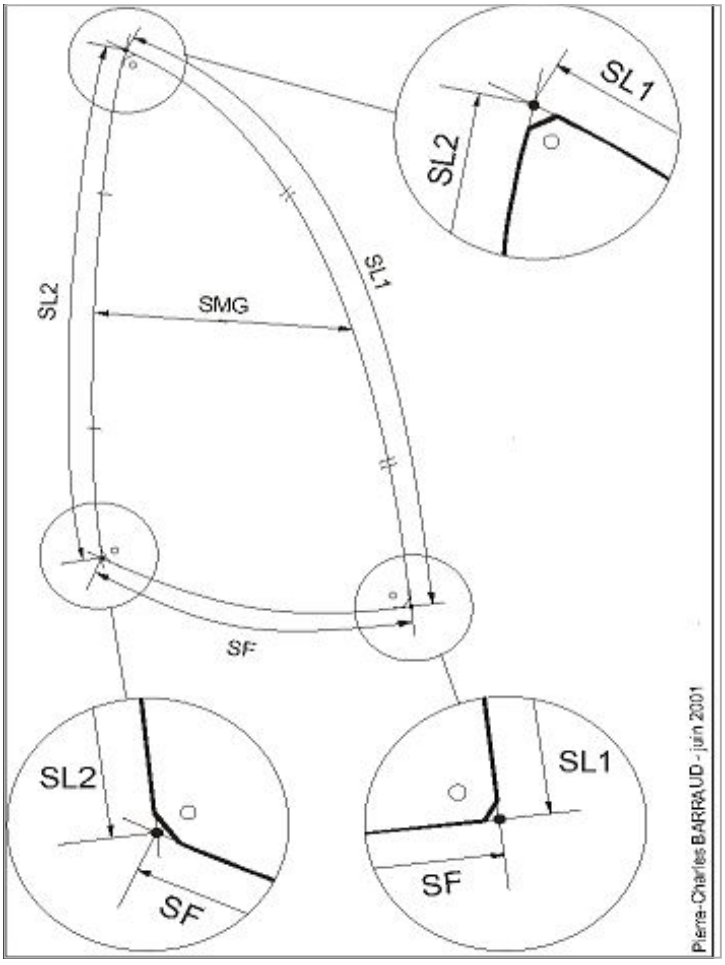
G.4 JIB

Small Jib 3,60 m2	☐	***Large Jib 4,30 m2***	☑
Sailmaker / Voilier :	PERFORMANCE SAILS		
Serial n° / N° série :	D55J		
Colour / Couleur :	WHITE		
Batten number :	3	.4.2(d)(2) maximum 3	
Material / Matériau :	APEN 06 3.0		

h1	0,042	S1=((h+h1)x(a-a1))/2	4,2554
a	5,712	S2=(hxa1)/2	0,2837
h7	0,000	S7=((axh7)/3)*2	0,0000
c	5,500	S10 : 2/3bxh10	0,0426
h11	-0,077	S11 : 2/3 cxh11	-0,2823
h	1,550		
a1	0,366	**JIB AREA**	
b	1,598	**Small Jib 3,60m2**	**4,299**
h10	0,040	**Large Jib 4,30m2**	

G.4.2 Construction & G.4.3 Dimensions

		Max
The Leech shall not be convex	YES	
Top width	42	*50mm*
Batten width	18	*40mm*
Batten pocket outside width	48	*80mm*
Window area : minimum : 0,30 m2	YES	
Dacron sticker F18 Small Jib 3,60m2	☐	
Dacron sticker F18 Large Jib 4,30 m2	☑	



G.5 SPINNAKER

Small Spinnaker 19,00m2 maximum	☐
Large Spinnaker 21,00m2 maximum	☑
Sailmaker / Voilier :	PERFORMANCE SAILS
Serial n° / N° série :	D055S
Colour / Couleur :	Red
G.5.1 Material / Matériau :	6611

SL1	8,845	% SMG / SF	75,75
SL2	7,655	**Spinnaker AREA**	**20,958**
SMG	2,865		
SF	3,782		
Dacron sticker F18 spinnaker 19,00 m2			☐
Dacron sticker F18 spinnaker 21,00 m2			☑

RESERVED NATIONAL CLASS ASSOCIATION

Certification control carried by	*Date*
Frédérique Pfeiffer	16/04/2021
	Old jib sticker : 4,15 instead of 4,30

MEASURES AND CALCULATIONS THE MAINSAIL CLASSIC OR DS

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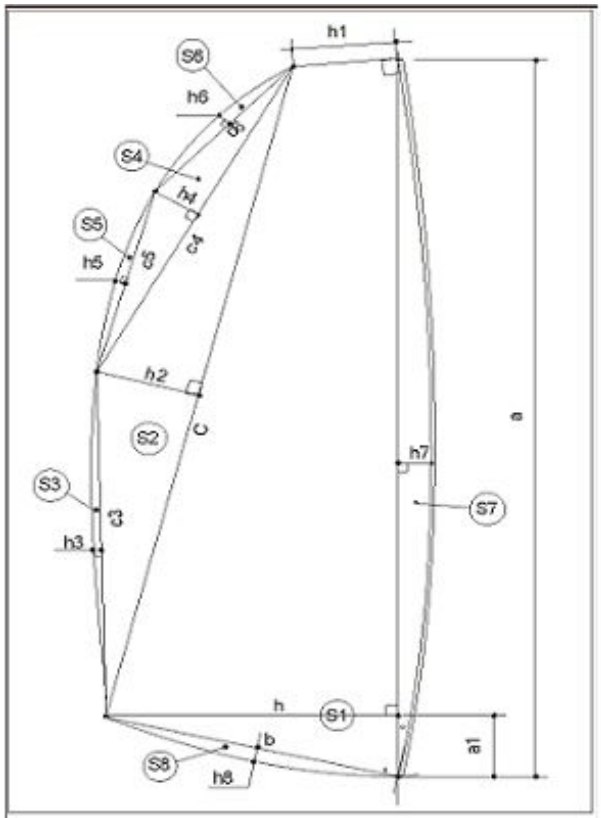

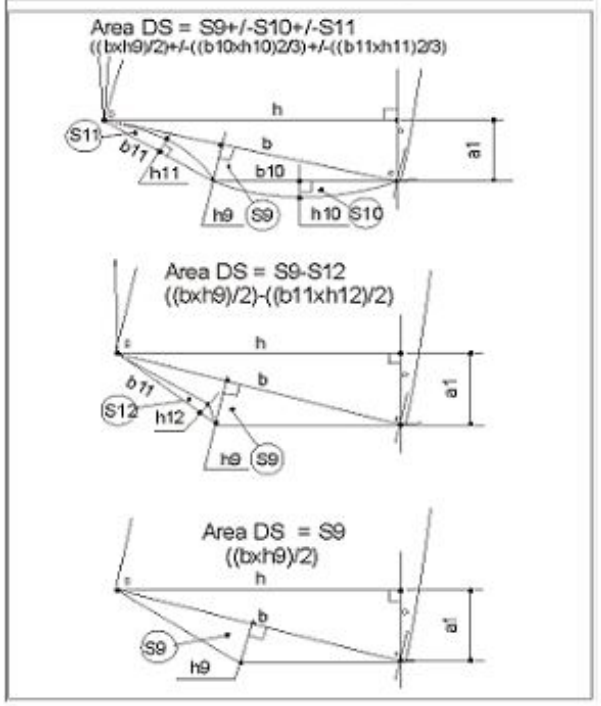

MAST AREA

Length extrusion	9,080	Perimeter	0,378

G.3 MAIN SAIL : 17 m maximum

Sailmaker / Voilier :	PERFORMANCE SAILS
Serial n° / N° série :	D051M
Colour / Couleur :	WHITE
Batten number :	3
G.3.2 Material / Matériau :	APEN 06 3.0

a	8,982	S1 : ((h+h1)(a-a1)+(a1xh))/2	13,2780
h7	0,080	S2 : (cxh2)/2	0,5524
c	8,064	S3 : 2/3 c3xh3	0,1043
h2	0,137	S4 : (c4xh4)/2	0,1220
c4	4,067	S5 : 2/3 c5xh5	0,0190
h4	0,060	S6 : 2/3 c6xh6	0,0284
c6	2,030	S7 : 2/3 axh7	0,4790
h6	0,021	S8 : 2/3 bxh8	
c5	2,037	S9 : (b*h9)/2	0,5100
h5	0,014	S10 : ((b10*h10)/3)*2	
c3	4,010	S11 : ((b11*h11)/3)*2	
h3	0,039	S12 : -(b11*h12)/2	
h	2,126	***Main Sail AREA***	**15,093**
b	2,334		
h8	0,000	Mast area / Surf. Du mât :	**1,716**
a1	1,003	**Total AREA**	**16,809**
h1	0,935		

h9	0,437
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

		Max
Top width excluding boltrope	0,93	*1,00 m*
Upper wight at upper leech point 1500mm from the head point	1,185	*1,29 m*
The angle between the luff ans the head	OK	*90°*
Tabling width	25	*115mm*
Window area : minimum : 0,30 m2	YES	

B.2 CERTIFICATION MARKS F18

Dacron sticker F18 main sail 17,00 m2	☑
Class emblem F18	☑

Certification control carried by

Frédérique Pfeiffer

Certification Authority

Date

16/04/2021

Comments of the measurer