



**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="No"/>	<input type="text" value="No"/>	
E.3.4.(a) Daggerboards weight	<input type="text" value="4,600 kg"/>	<input type="text" value="4,700 kg"/>	5,5 kg maximum
E.3.3.(c) Daggerboards extension below the hull	<input type="text" value="1,39"/>	<input type="text" value="1,39"/>	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="No"/>	<input type="text" value="No"/>	
E.4.6.(a). Rudders weight	<input type="text" value="3,000 kg"/>	<input type="text" value="3,000 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

EQUIPEMENTS

Boat Certificate n°	FRA 2019-006	National letters & Sail N°:	FRA	WS N°:	1 201
Owner :	BAECKLER James	Brand of boat :	SCORPION		

C.5 PORTABLE EQUIPMENT

C.5.1(a)1 One righting line	<input type="text" value="OK"/>	Minimum 4m. long
	<input type="text" value="Ok"/>	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="Ok"/>
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="Yes"/>
D.4.2(b) The curvature of the beams shall be limited a maximum of 15mm	<input type="text" value="Yes"/>

F.3 MAST

F.3.2(a) The mast shall be extruded aluminium profiles of constant section	<input type="text" value="Yes"/>		
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="9,100 m"/>	9,100 m Maximum
	Shroud height	<input type="text" value="6,750 m"/>	6,750 m Maximum
	Spinnaker hoist height	<input type="text" value="8,150 m"/>	8,150 m Maximum
	Top of the front beam to mast datum point	<input type="text" value="92"/>	
	Extrusion total length	<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="Yes"/>

F.5 BOWSPRIT

F.5.1(a) The bowsprit shall be on the longitudinal centreline of the boat	<input type="text" value="Yes"/>	
F.5.1(b) The bowsprit shall be attached to the front beam	<input type="text" value="Yes"/>	
F.5.2(a) The bowsprit shall be made of aluminium of constant section	<input type="text" value="Yes"/>	
F.5.5(a) The length 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 measured when vertical.	<input type="text" value="Yes"/>	
F.6.2(b) (2) The bowsprit bridles may be of rope of minimum diameter 2,5mm	<input type="text" value="Yes"/>	
Dimensions :	Diameter Ø <input type="text" value="40,000 m/m"/>	Length <input type="text" value="3,720 m"/>
C.9.5(c) The bowsprit shall have an end cap that is smooth, rounded	<input type="text" value="Yes"/>	

F.6 STANDING RIGGING

F.6.1(a) The standing rigging of the stainless 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

MEASURES AND CALCULATIONS AREA OF JIB & SPINNAKER

Boat Certificate n°

FRA 2019-006

National letters & Sail N° :

FRA

WS N° :

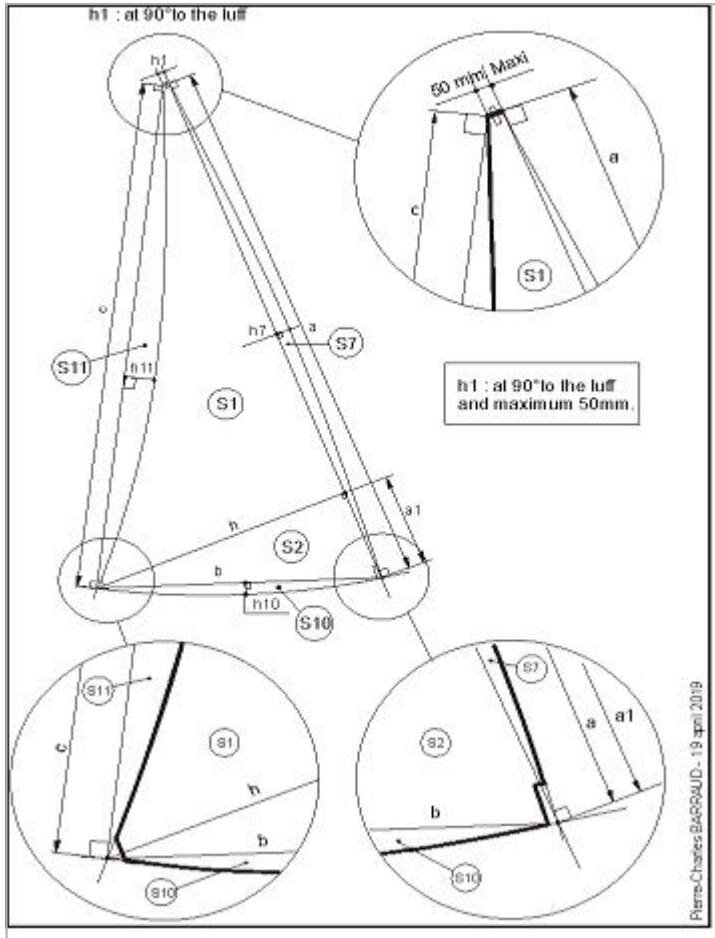
1 201

Owner :

BAECKLER James

Brand of boat :

SCORPION



Pierre-Charles BARRAUD - 19 avril 2019

G.4 JIB

Small Jib 3,60 m2

Large Jib 4,30 m2

Sailmaker / Voilier :	1D sails
Serial n° / N° série :	220729
Colour / Couleur :	Blanc
Batten number :	3 3.4.(d)(2) maximum 3
Material / Matériau :	Contender APEN 06 3

h1	0,050	$S1 = ((h+h1) \times (a-a1)) / 2$	4,2319
a	5,900	$S2 = (h \times a1) / 2$	0,2581
h7	0,020	$S7 = ((a \times h7) / 3) \times 2$	0,0787
c	5,715	$S10 = 2 / 3 \times b \times h10$	0,0274
h11	-0,096	$S11 = 2 / 3 \times c \times h11$	-0,3658
h	1,475	JIB AREA Small Jib 3,60m2 Large Jib 4,30m2 4,230	
a1	0,350		
b	1,520		
h10	0,027		

G.4.2 Construction & G.4.3 Dimensions

The Leech shall not be convex	<input checked="" type="checkbox"/>	Yes	Max
Top width	<input type="checkbox"/>	50	50mm
Batten width	<input type="checkbox"/>	20	40mm
Batten pocket outside width	<input type="checkbox"/>	40	80mm
Window area : minimum : 0,30 m2	<input checked="" type="checkbox"/>	Yes	
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

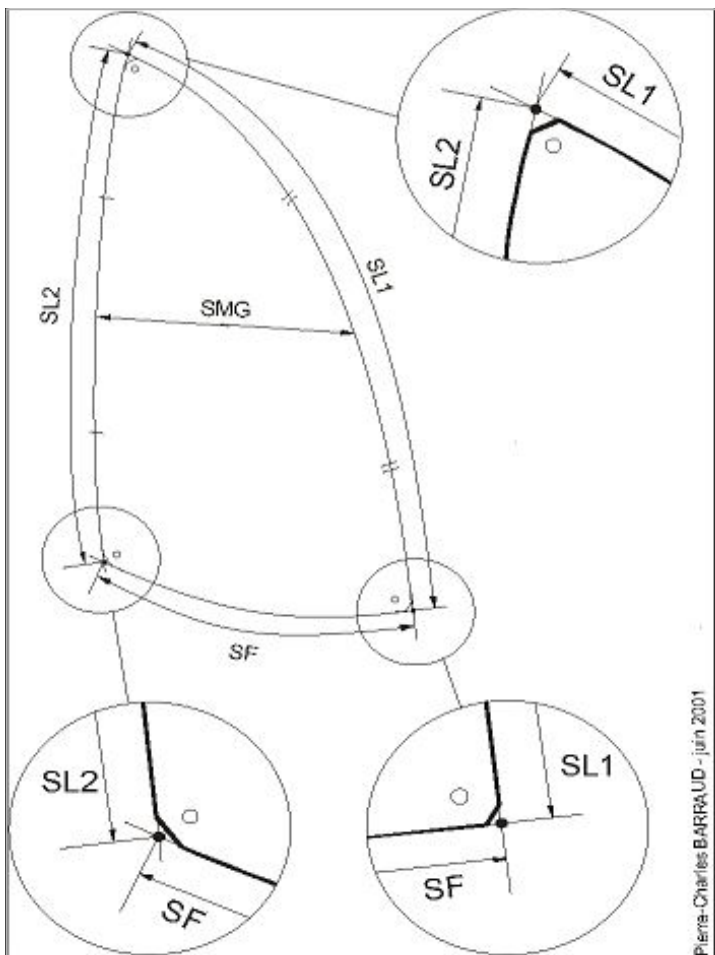
Sailmaker / Voilier :	Sail Innovation
Serial n° / N° série :	F1818595
Colour / Couleur :	Blanc
G.5.1 Material / Matériau :	DP 6611

SL1	8,950	% SMG / SF	75,27
SL2	7,735	Spinnaker AREA 20,856	
SMG	2,815		
SF	3,740		
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

Certification Authority



Pierre-Charles BARRAUD - juin 2001

Boat Certificate n°

FRA 2019-006

National letters & Sail N° :

FRA

WS N° :

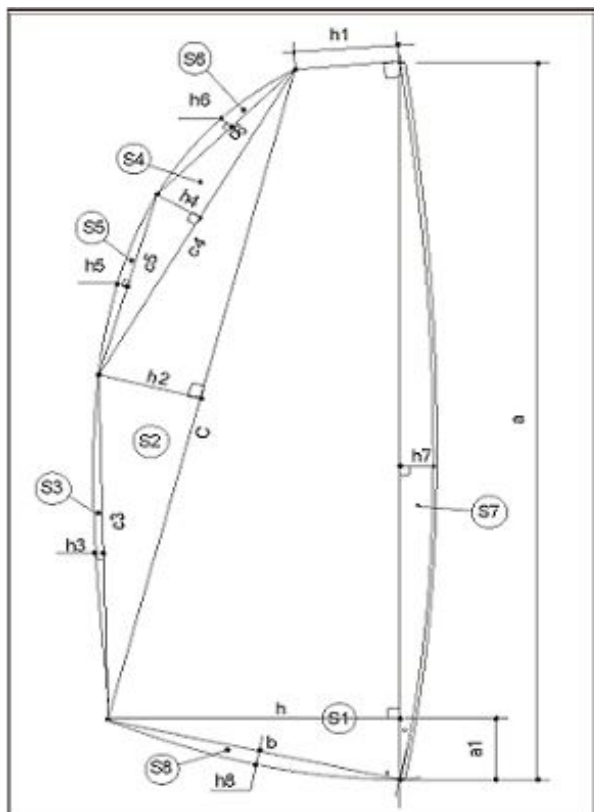
1 201

Owner :

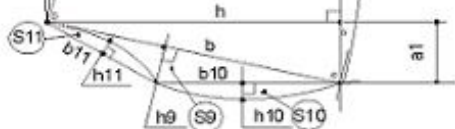
BAECKLER James

Brand of boat :

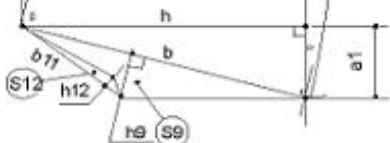
SCORPION



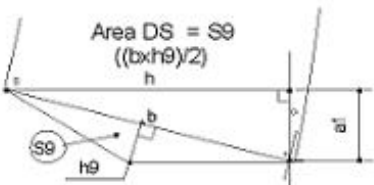
Area DS = S9+/-S10+/-S11
 $((bxh9)/2)+/-((b10xh10)/2)+/-((b11xh11)/2)$



Area DS = S9-S12
 $((bxh9)/2)-((b11xh12)/2)$



Area DS = S9
 $((bxh9)/2)$



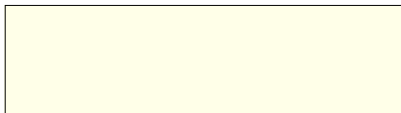
Certification control carried by

Date

Alain Bujeaud

17/09/2019

Certification Authority



MAST AREA

Length extrusion 9,100 Perimeter 0,380

G.3 MAIN SAIL : 17 m maximum

Sailmaker / Voilier :	1D sails
Serial n° / N° série :	220129
Colour / Couleur :	blanche
Batten number :	3
G.3.2 Material / Matériau :	Contender APEN 06 3

a	9,060	S1 : $((h+h1)(a-a1)+(a1xh))/2$	12,8335
h7	0,135	S2 : $(cxh2)/2$	0,7480
c	8,000	S3 : $2/3 c3xh3$	0,1415
h2	0,187	S4 : $(c4xh4)/2$	0,0601
c4	4,005	S5 : $2/3 c5xh5$	0,0134
h4	0,030	S6 : $2/3 c6xh6$	0,0174
c6	2,002	S7 : $2/3 axh7$	0,8154
h6	0,013	S8 : $2/3 bxh8$	
c5	2,005	S9 : $(b^*h9)/2$	0,5700
h5	0,010	S10 : $((b10^*h10)/3)^2$	
c3	4,005	S11 : $((b11^*h11)/3)^2$	
h3	0,053	S12 : $-(b11^*h12)/2$	
h	2,110	Main Sail AREA	15,199
b	2,375		
h8	0,000	Mast area / Surf. Du mât :	1,729
a1	1,120	Total AREA	16,928
h1	0,825		

h9	0,480
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	0,825	Max 1,00 m
Upper wight at upper leech point 1500mm from the head point	1,13	1,29 m
The angle between the luff ans the head	89	90°
Tabling width	40	115mm
Window area : minimum : 0,30 m2	1,23	

B.2 CERTIFICATION MARKS F18

Dacron sticker F18 main sail 17,00 m2	<input checked="" type="checkbox"/>
Class emblem F18	<input checked="" type="checkbox"/>