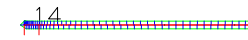
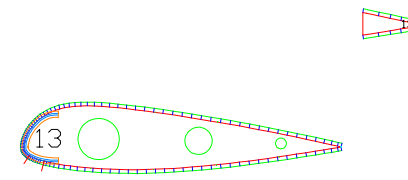
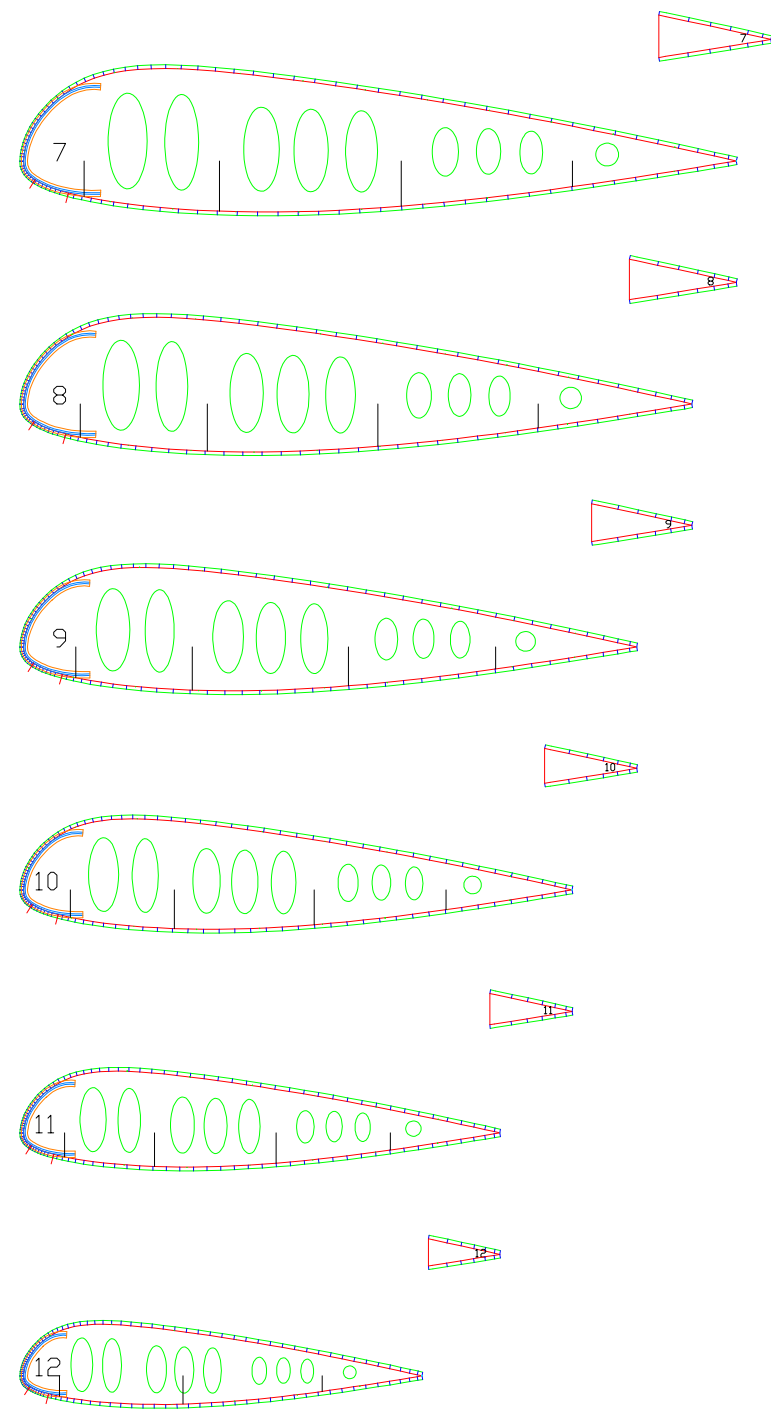
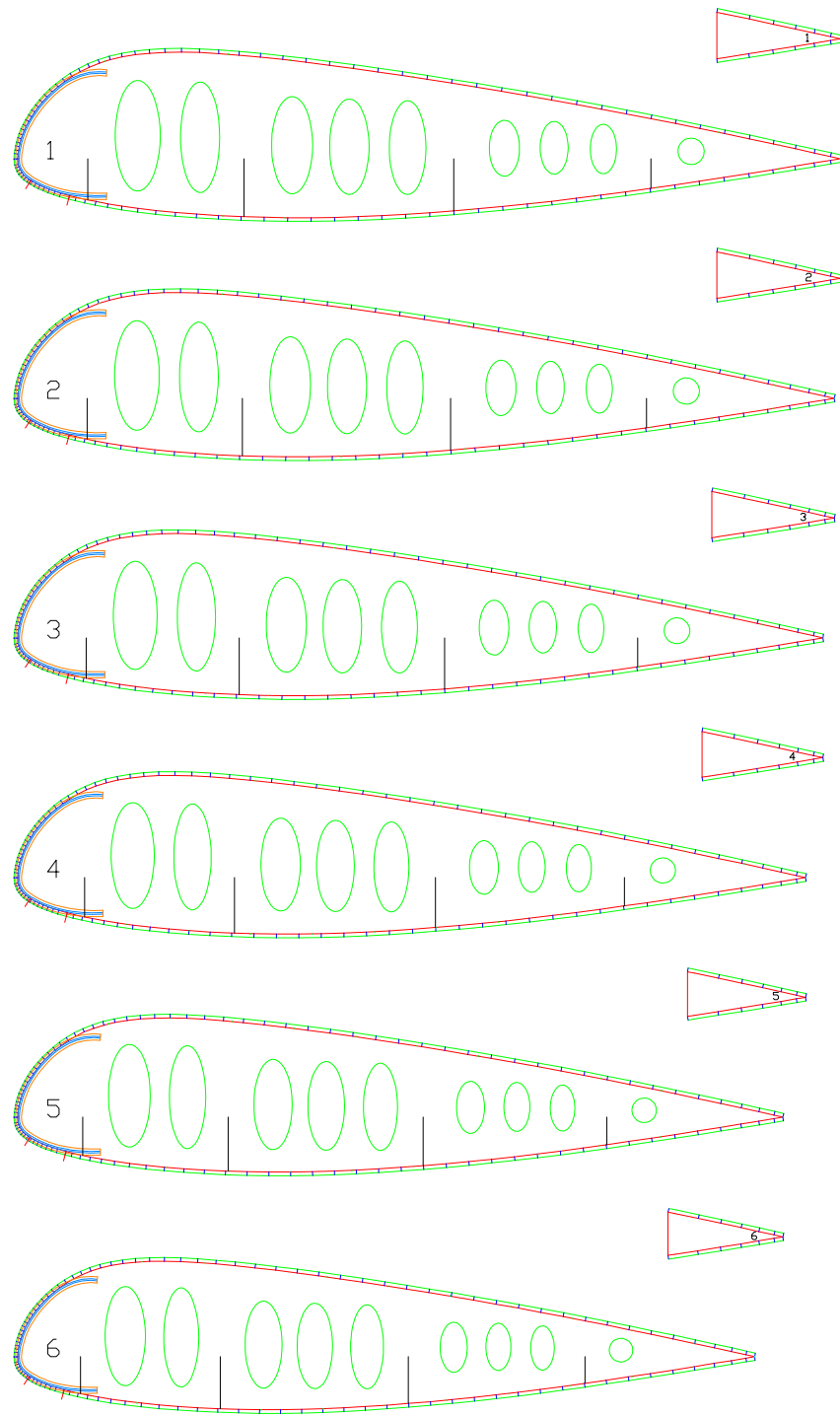
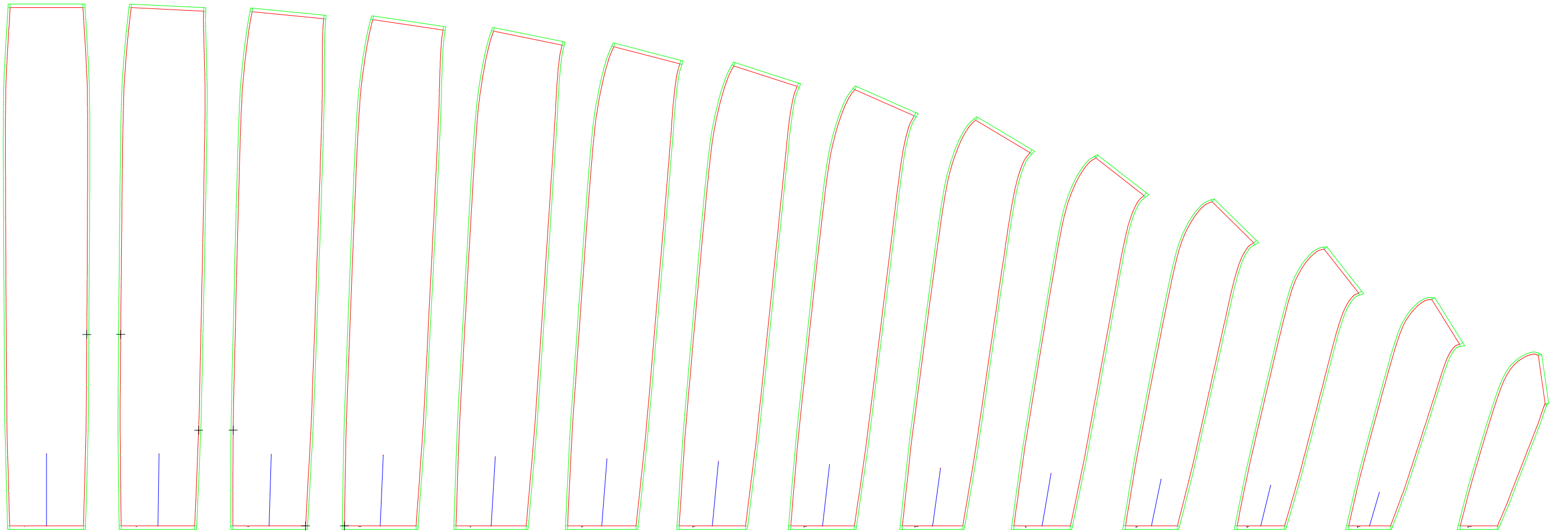


LABORATORI D'ENVOL gnuA4-31
 Flat area (m²) : 31.00
 Flat span (m) : 11.55
 Flat aspect ratio : 4.30
 Cells number : 27

1-1 PLANFORM AND VAULT

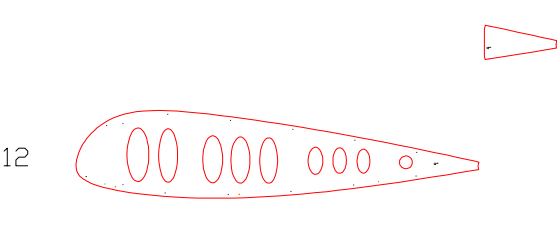
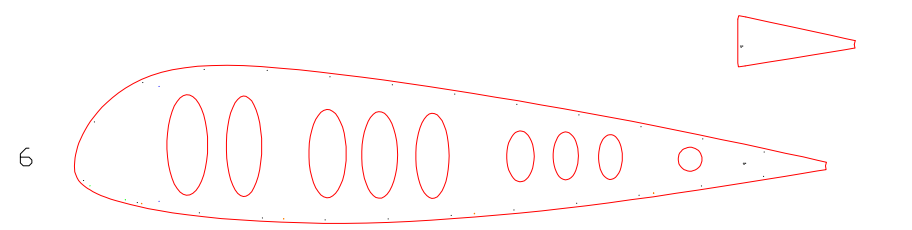
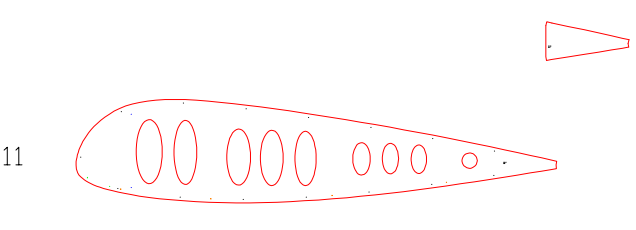
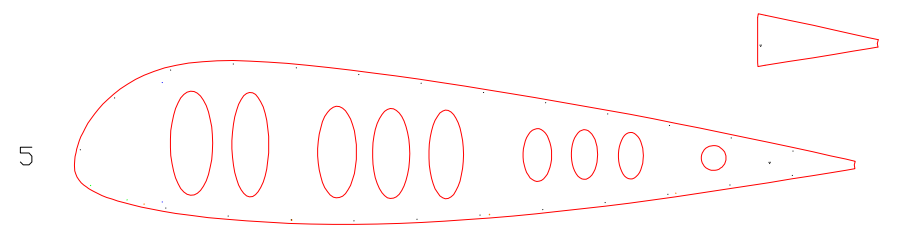
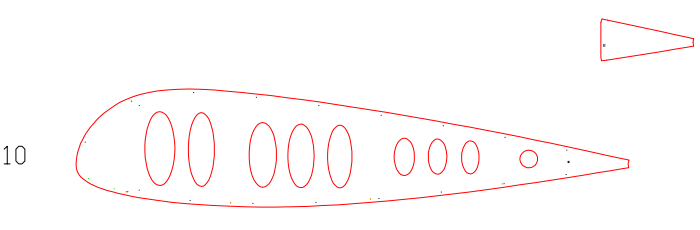
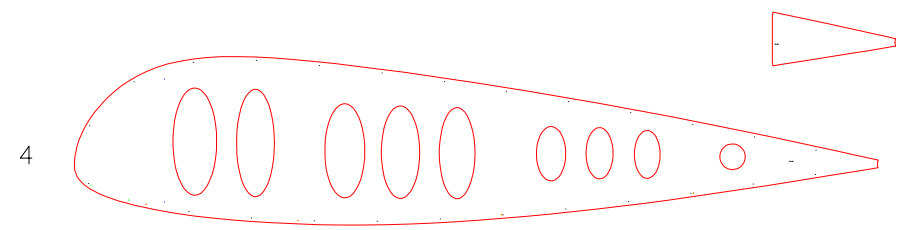
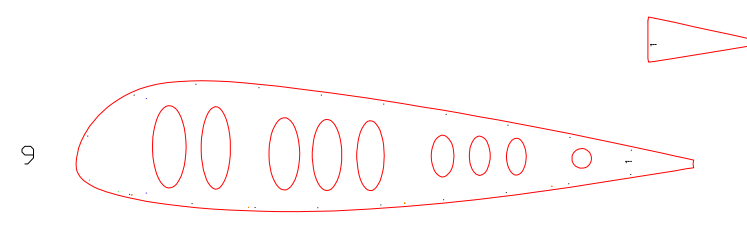
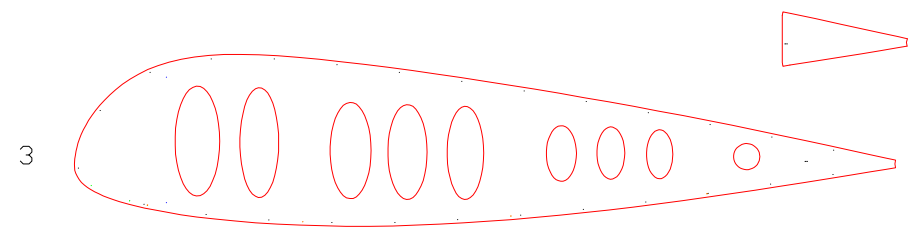
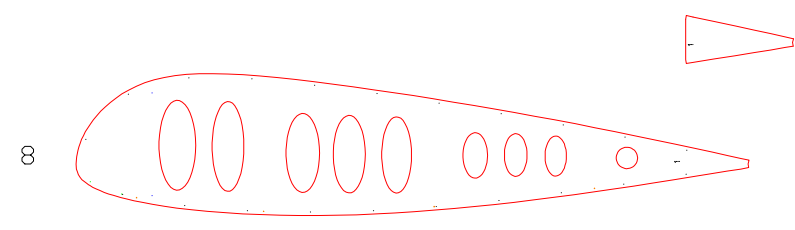
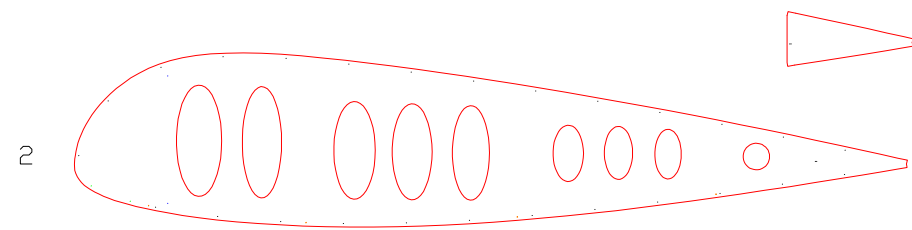
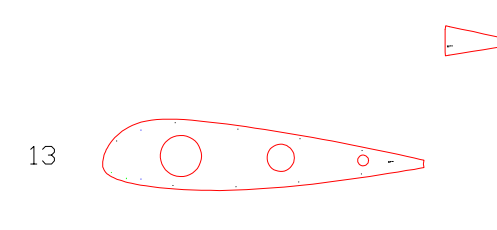
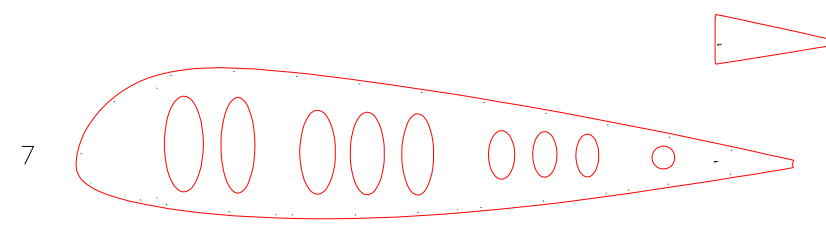
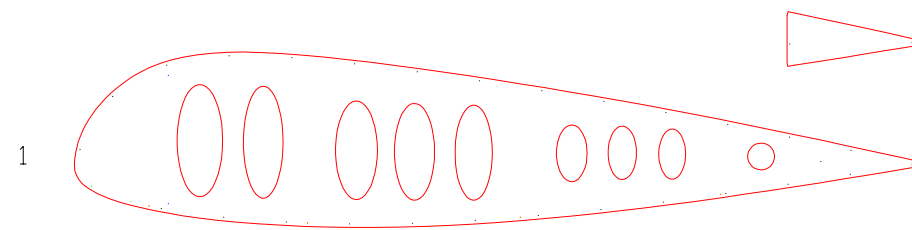


Leading edge



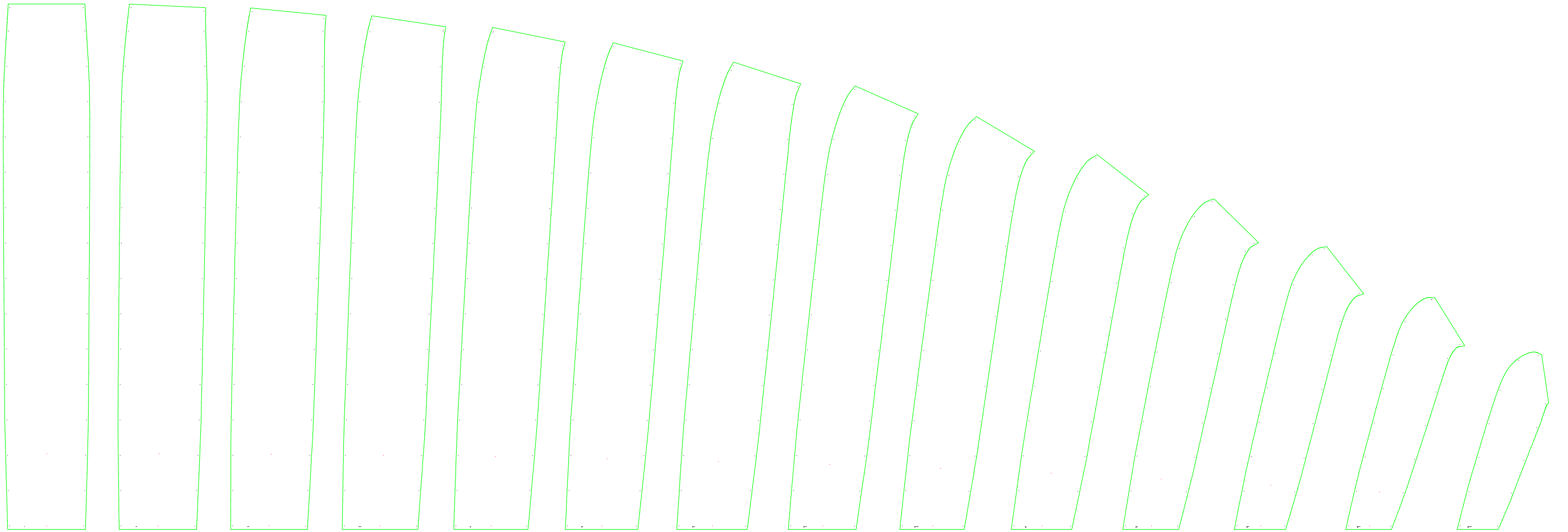
Trailing edge

1-3 EXTRADOS PANELS



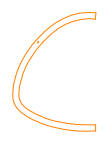
1-4 RIBS (FOR CUTTING TABLE)

Leading edge



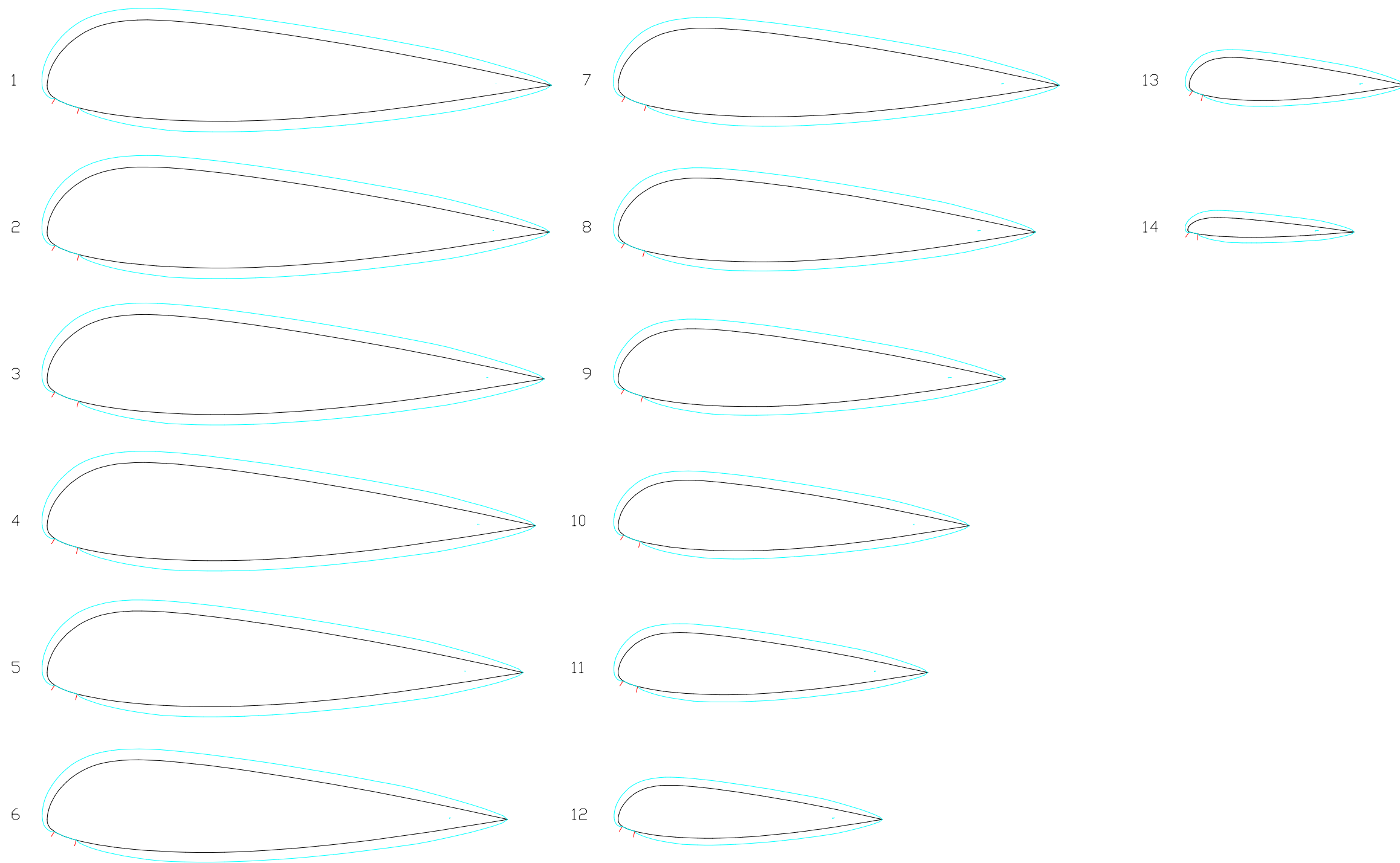
Trailing edge

1-5 EXTRADOS PANELS (FOR CUTTING TABLE)

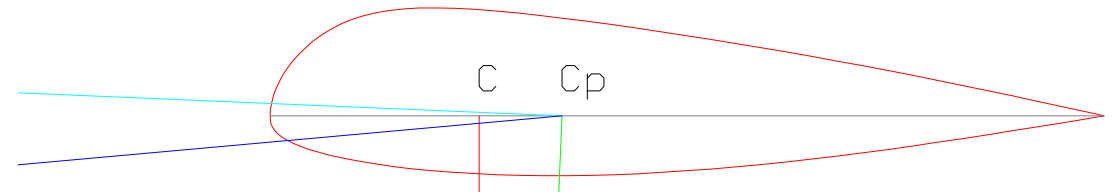


List of nylon rods (bloc 1)

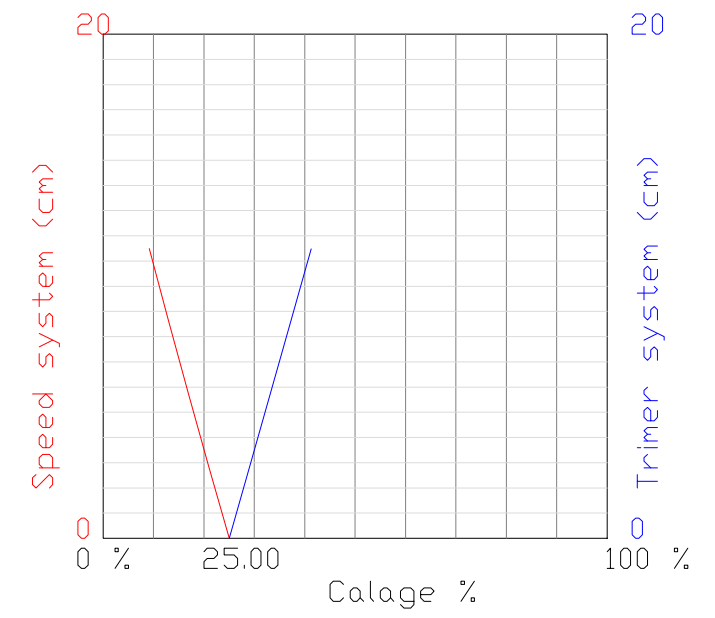
Group 1		
Jonc 1		97.5
Jonc 2		96.8
Jonc 3		95.4
Jonc 4		93.4
Jonc 5		90.7
Jonc 6		87.3
Jonc 7		83.3
Jonc 8		78.1
Jonc 9		71.7
Jonc 10		64.1
Group 2		
Jonc 11		55.6
Jonc 12		46.5
Jonc 13		37.0



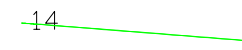
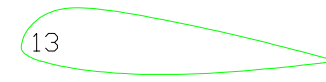
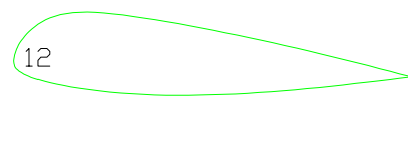
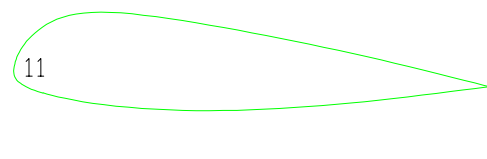
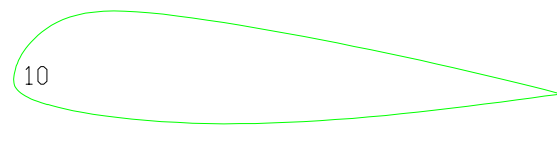
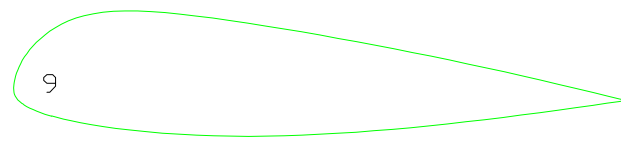
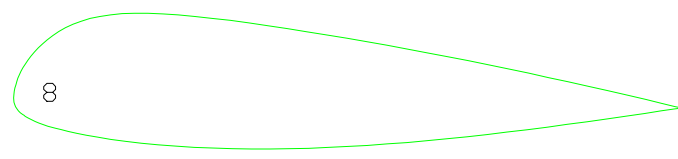
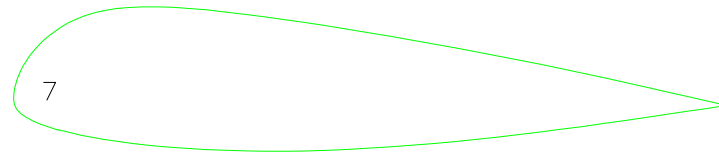
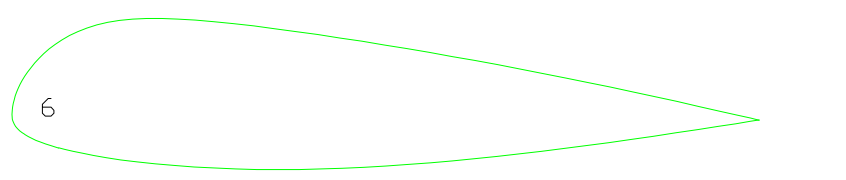
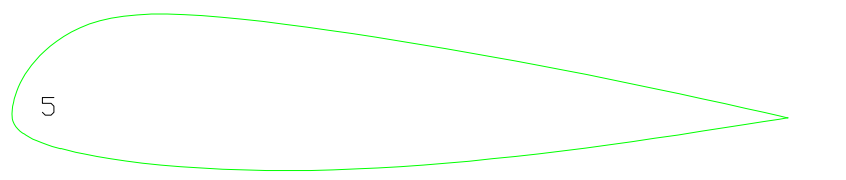
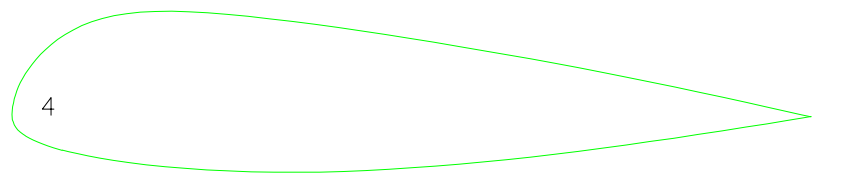
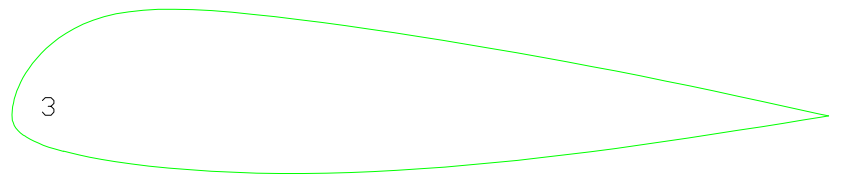
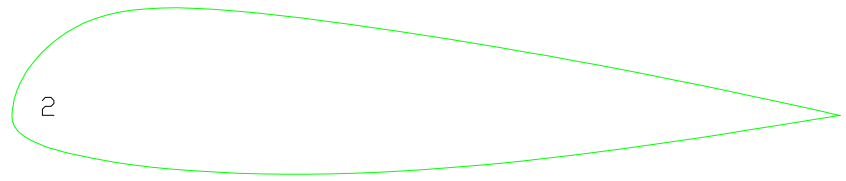
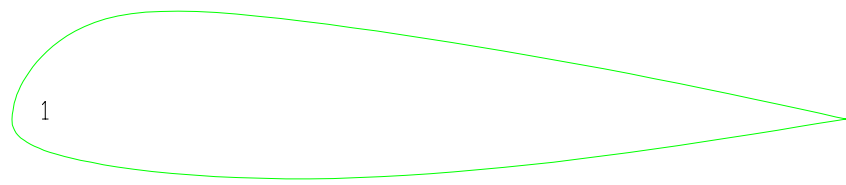
1-8 MIDDLE AND MIDDLE OVALIZED AIRFOILS



calage= 25.00
 center pressure= 35.00
 glide ratio= 7.50
 glide angle= 7.59
 angle of attack= 5.15
 assiette= 2.45

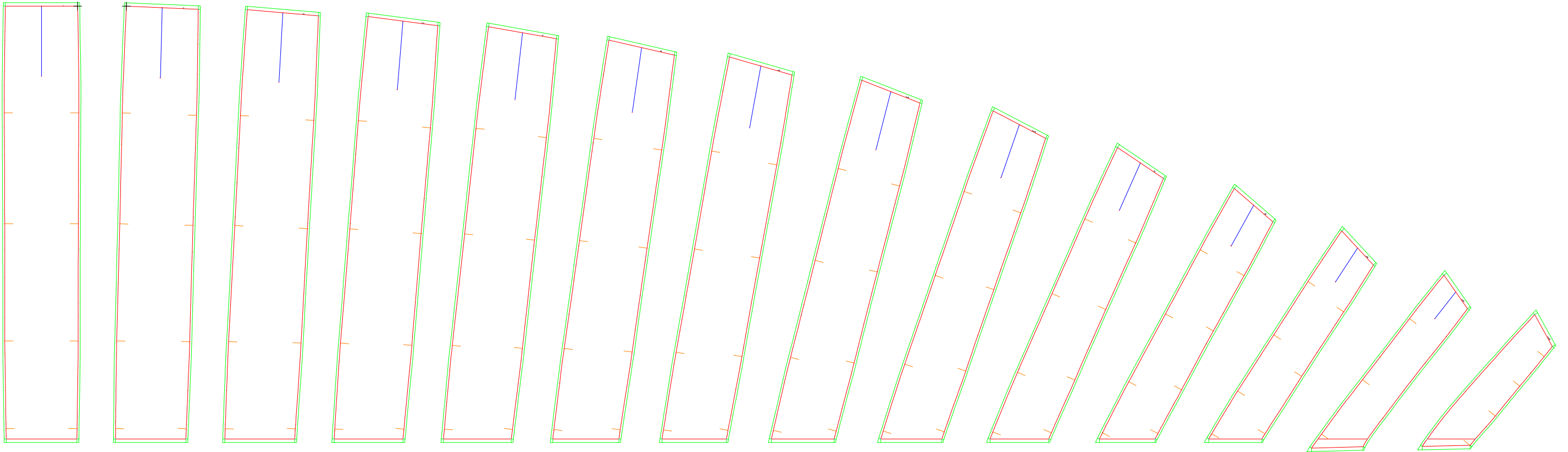


pilot
 2-1 CALAGE ESTIMATION



2-2 RIBS WASHIN ANGLE

Trailing edge



Leading edge

2-3 INTRADOS PANELS

0 1
[]

4 5
[]

8 9
[]

0 1
[]

4 5
[]

8 9
[]

0 1
[]

4 5
[]

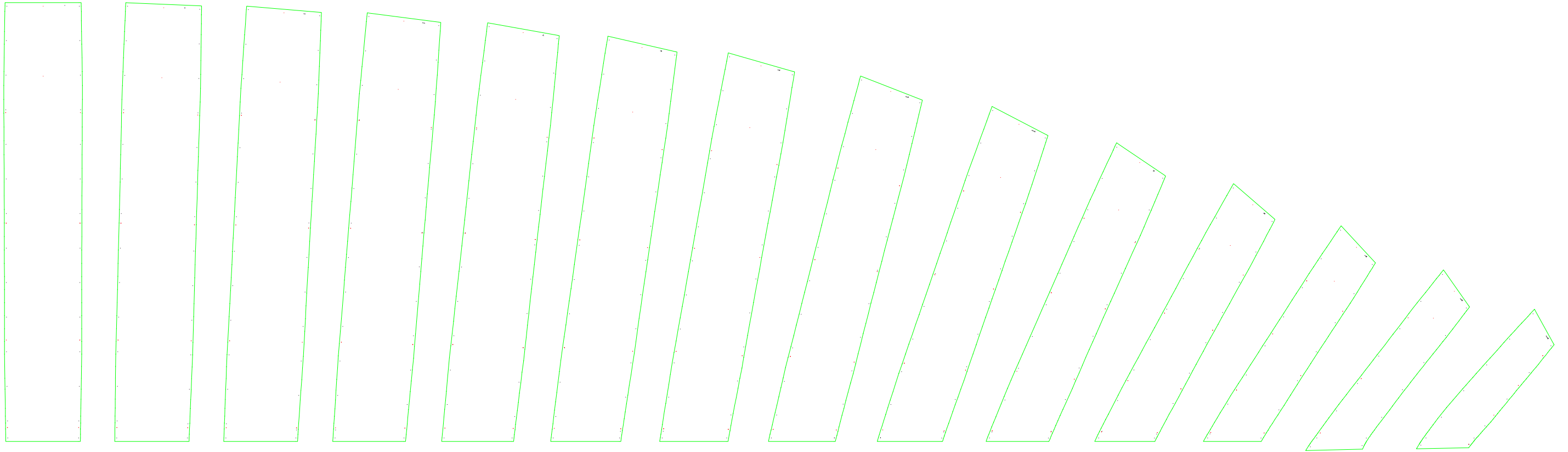
8 9
[]

0 1
[]

4 5
[]

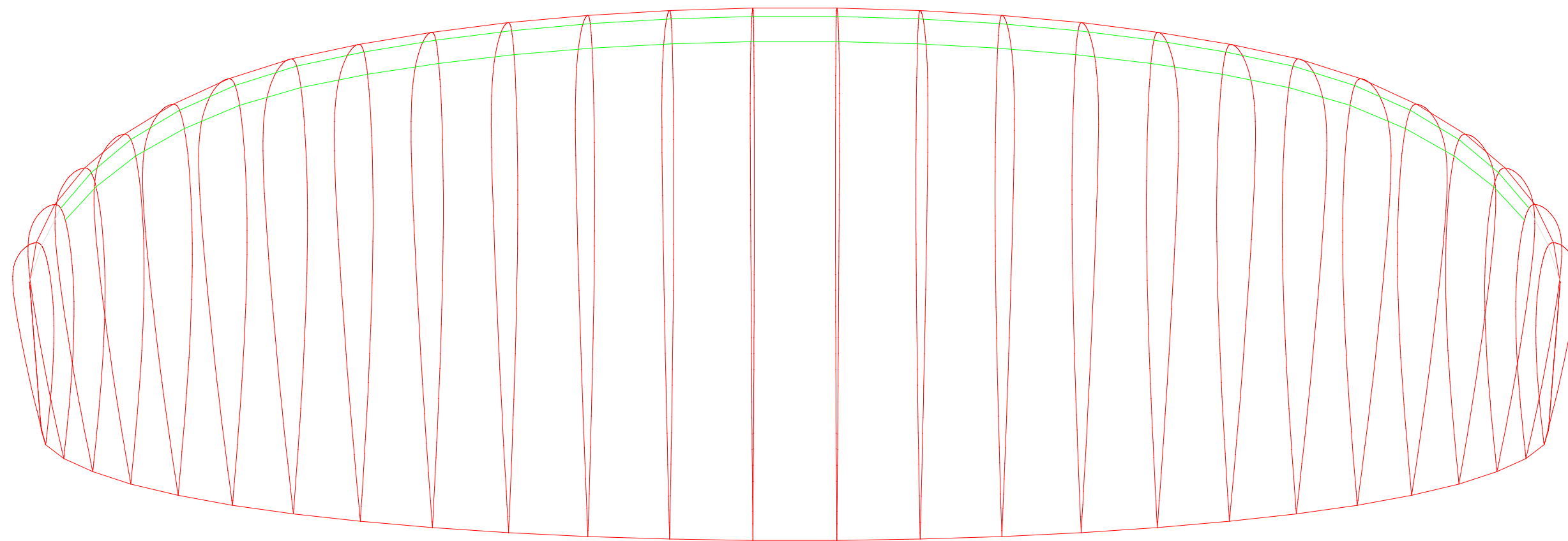
8 9
[]

Trailing edge



Leading edge

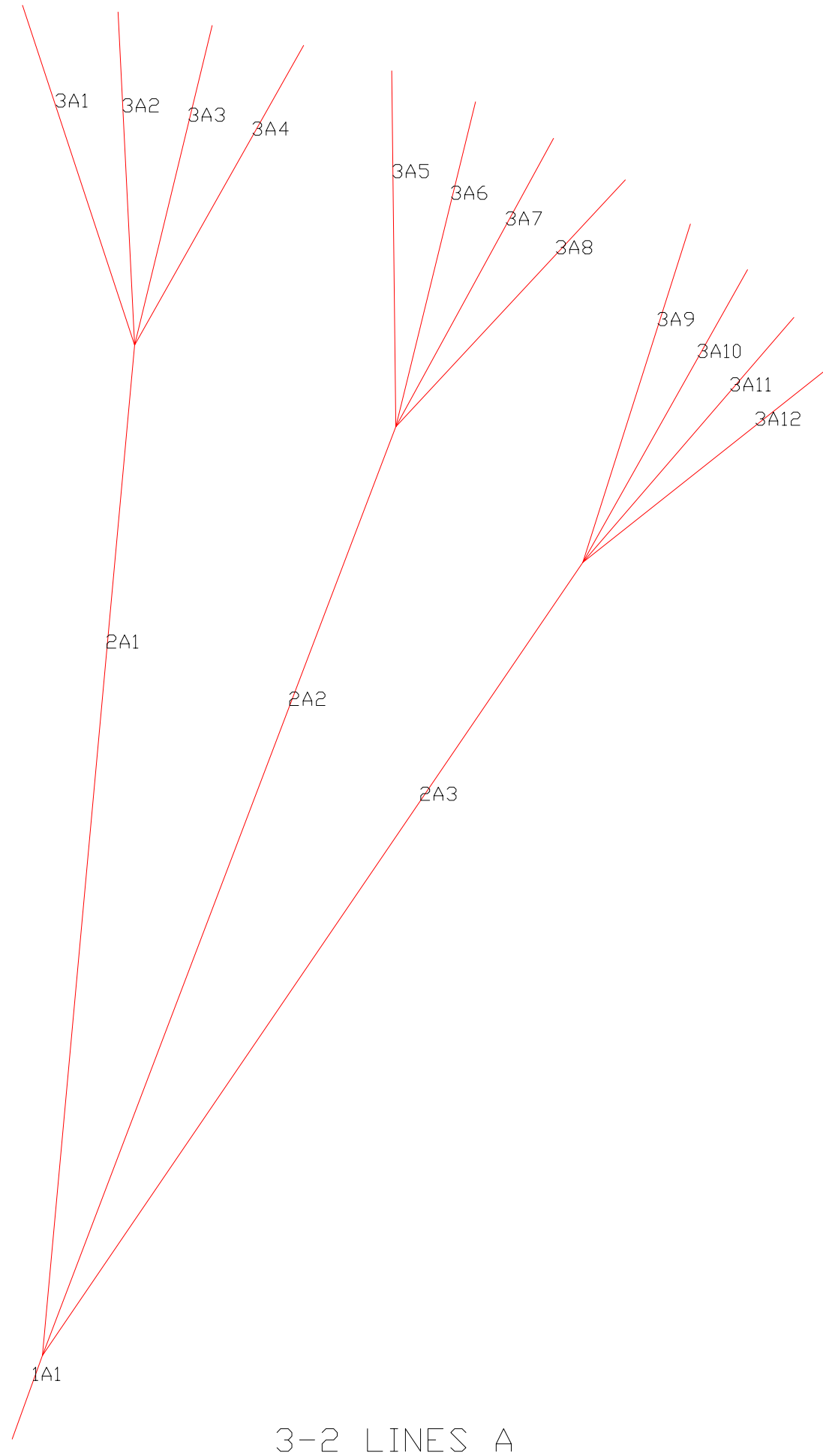
2-5 INTRADOS PANELS (FOR CUTTING TABLE)



3-1 UPPER VIEW

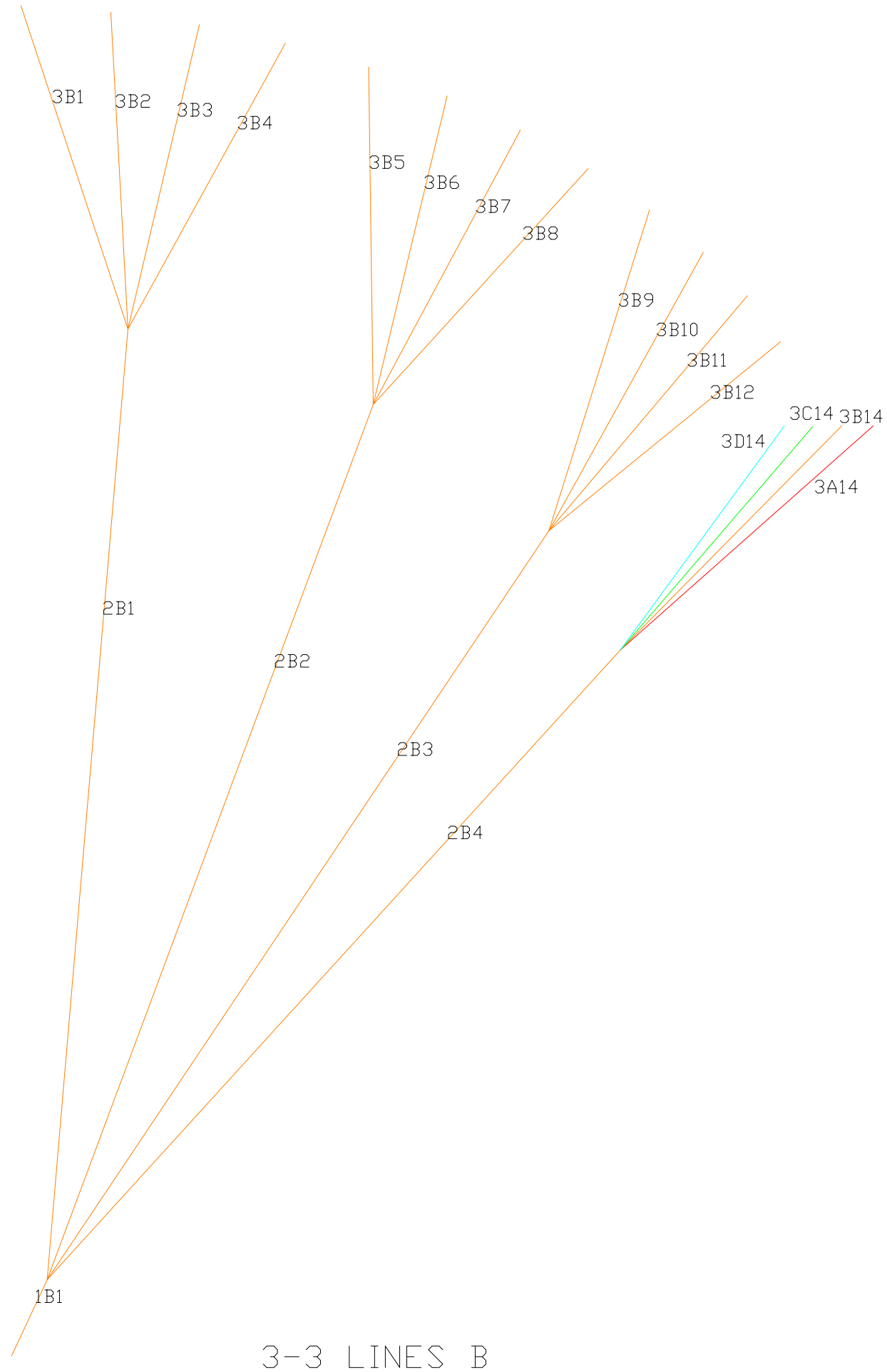
Line - Label - Length

1	1A1	47.0
2	2A1	537.7
3	2A2	525.8
4	2A3	507.8
5	3A1	189.8
6	3A2	176.8
7	3A3	174.2
8	3A4	182.0
9	3A5	189.1
10	3A6	177.3
11	3A7	173.8
12	3A8	178.4
13	3A9	188.7
14	3A10	177.5
15	3A11	171.6
16	3A12	170.4



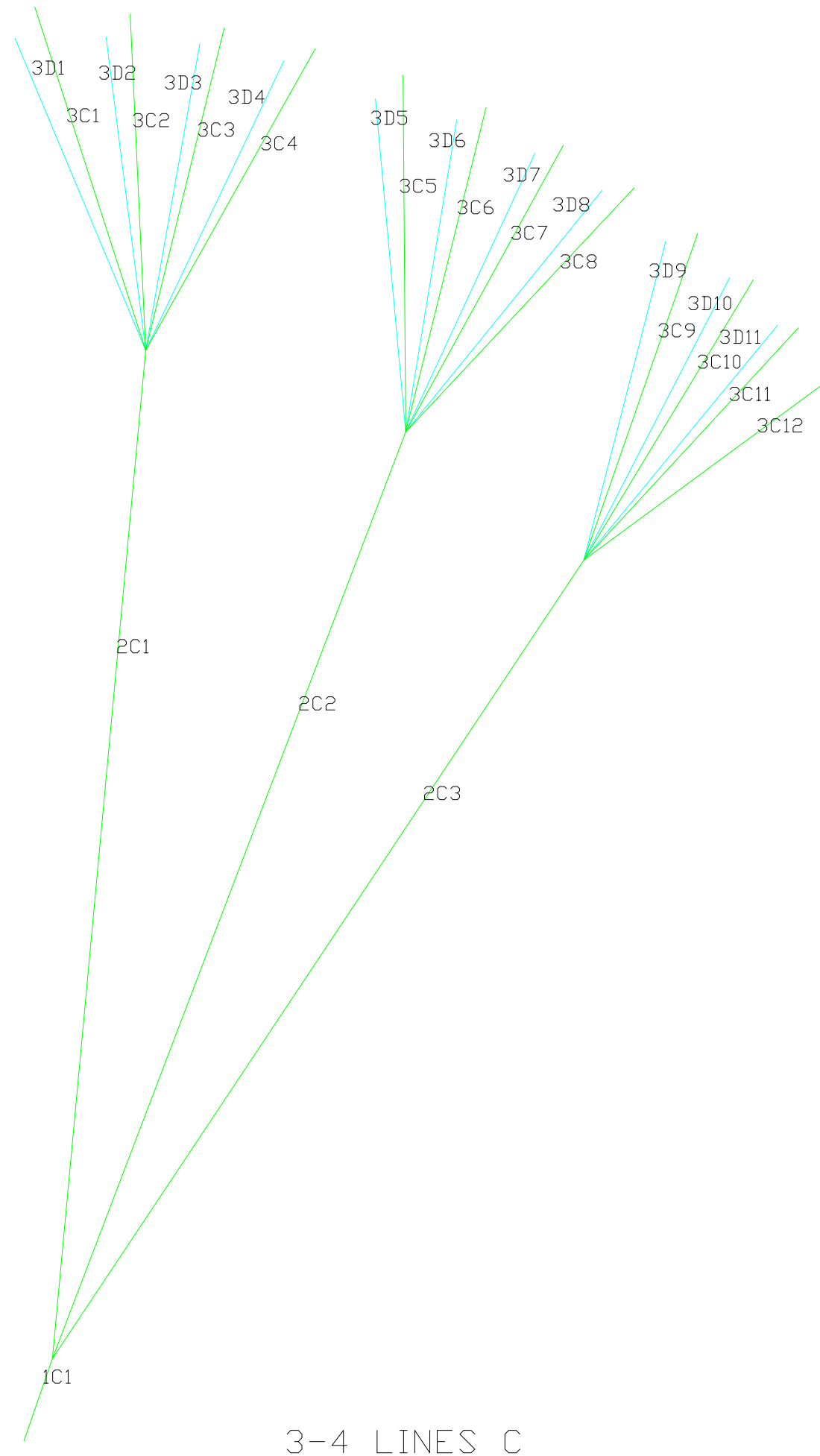
Line - Label - Length

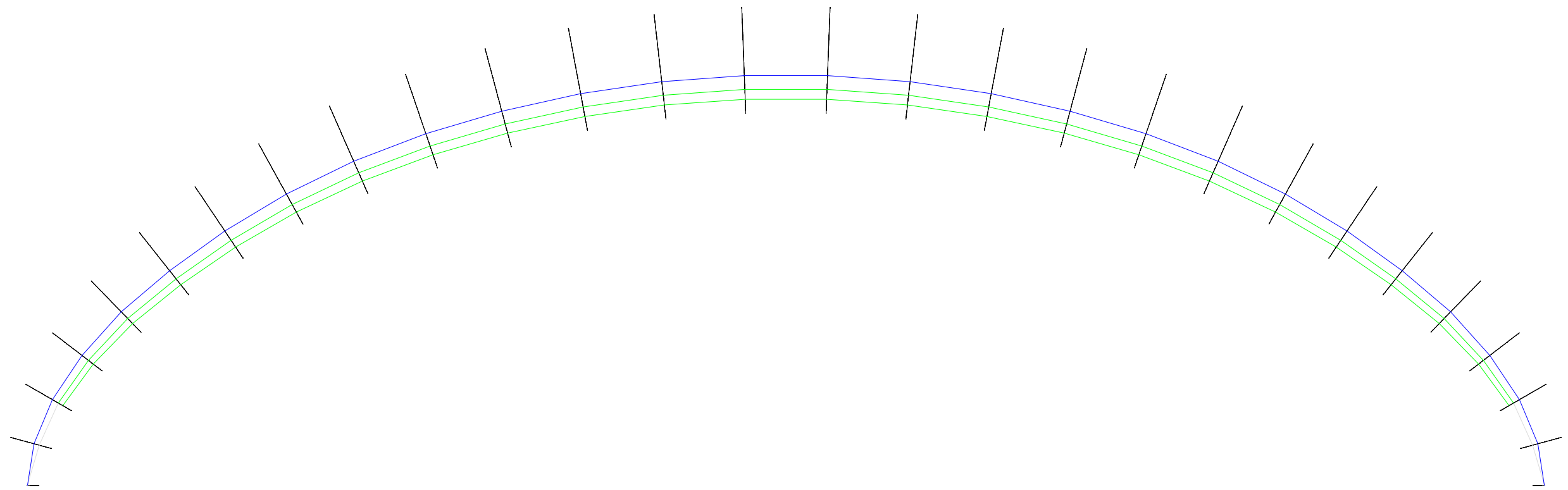
17	1B1	47.0
18	2B1	530.7
19	2B2	519.8
20	2B3	503.8
21	2B4	482.9
22	3B1	189.6
23	3B2	176.7
24	3B3	174.0
25	3B4	181.6
26	3B5	187.8
27	3B6	176.6
28	3B7	173.4
29	3B8	178.2
30	3B9	187.2
31	3B10	177.3
32	3B11	172.0
33	3B12	174.2
34	3A14	171.1
35	3B14	170.4
36	3C14	174.3
37	3D14	182.3



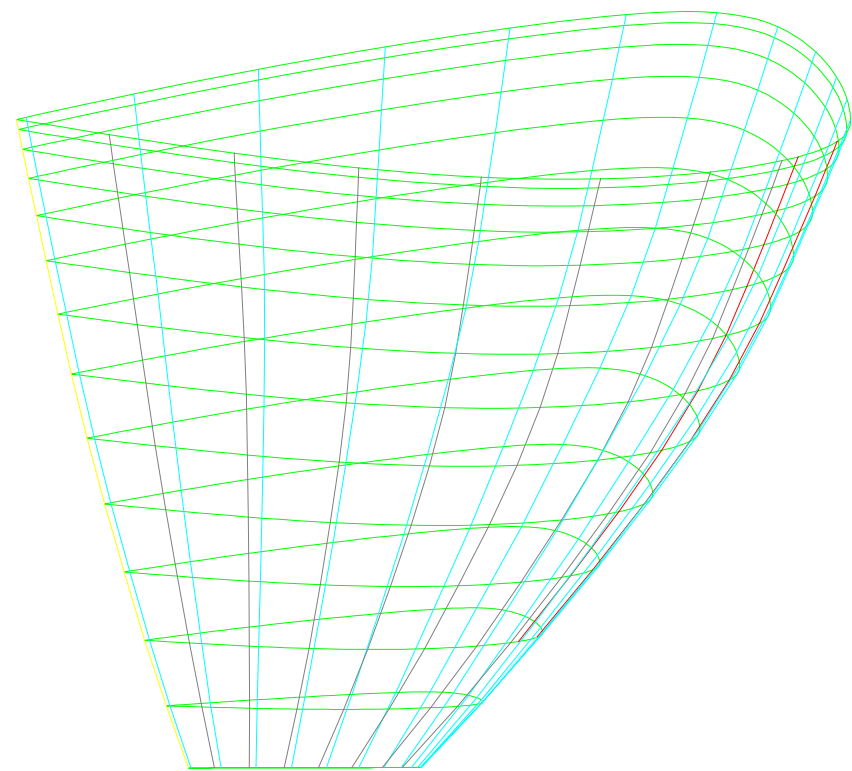
Line - Label - Length

38	1C1	47.0
39	2C1	546.8
40	2C2	535.8
41	2C3	519.9
42	3C1	183.8
43	3C2	170.5
44	3C3	167.9
45	3C4	176.2
46	3D1	204.2
47	3D2	192.0
48	3D3	189.3
49	3D4	196.2
50	3C5	182.4
51	3C6	170.7
52	3C7	167.3
53	3C8	171.9
54	3D5	201.3
55	3D6	189.7
56	3D7	185.6
57	3D8	188.8
58	3C9	179.0
59	3C10	169.8
60	3C11	164.8
61	3C12	171.9
62	3D9	192.7
63	3D10	182.9
64	3D11	176.8





4-1 VAULT VIEW



4-2 LATERAL VIEW

BRAKE_DISTRIBUTION
CENTER

0.00

0.00

0.00

0.00

WING_TIP

0.00

0.00

25.00

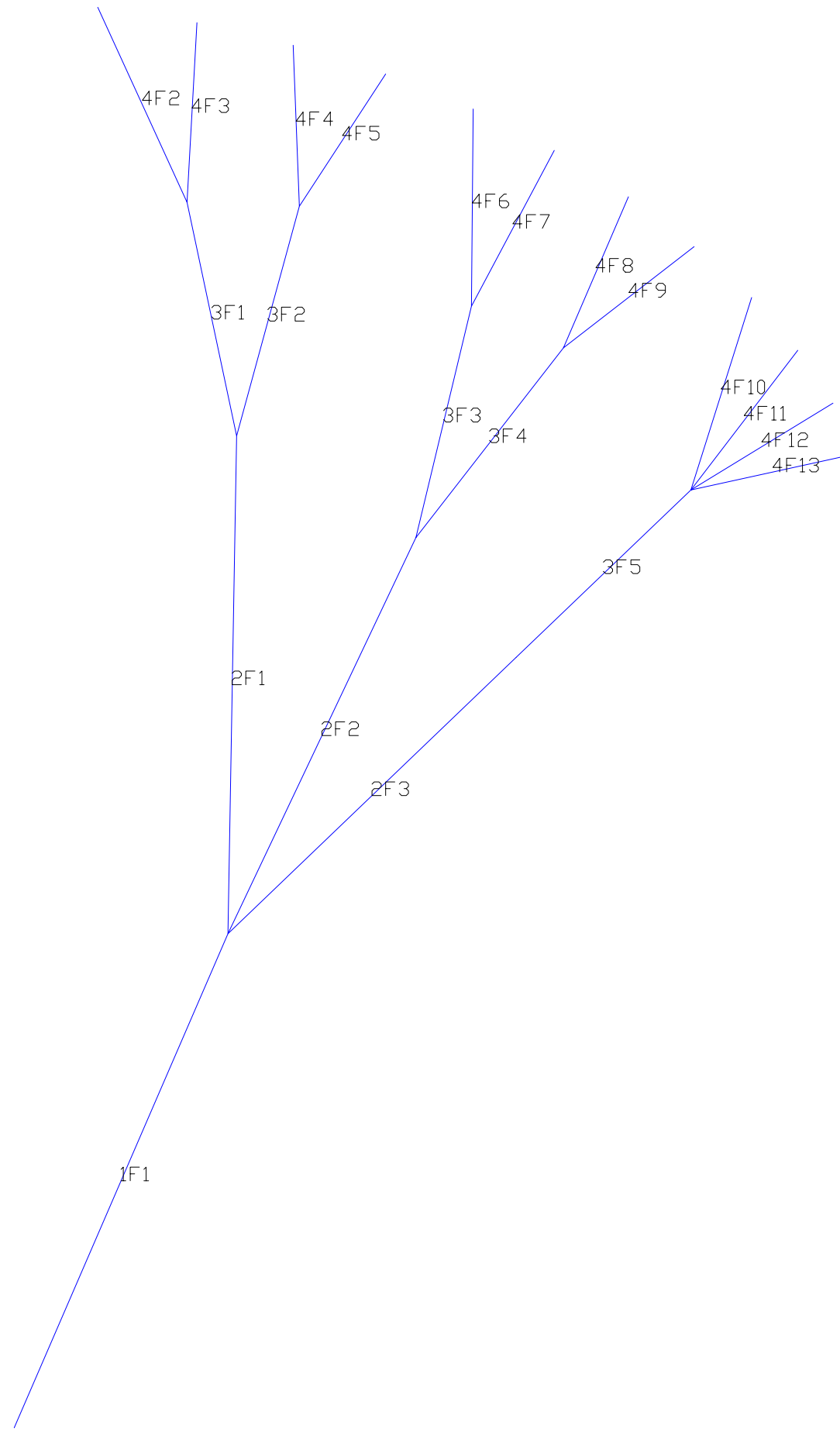
55.00

70.00

100.00

Line - Label - Length

65	1F1	289.0
66	2F1	268.0
67	2F2	235.0
68	2F3	211.0
69	3F1	128.0
70	3F2	128.0
71	3F3	128.0
72	3F4	128.0
73	3F5	128.0
74	4F2	114.1
75	4F3	96.7
76	4F4	86.6
77	4F5	84.0
78	4F6	105.9
79	4F7	94.5
80	4F8	88.1
81	4F9	87.1
82	4F10	108.6
83	4F11	93.7
84	4F12	87.1
85	4F13	86.5



4-5 BRAKES

PLANS GENERAL NOTES

- 1-1: Planform and vault view (informative)
- 1-2: Ribs for plotter, one side
- 1-3: Extradados panels for plotter, one side
- 1-4: Ribs for laser cutting, one side. Units cm
- 1-5: Extradados for laser cutting, one side. Units cm
- 1-6: Middle unloaded ribs for laser cutting, one side Units cm
- 1-7: Rods pockets and nylons lengths, mylars
- 1-8: Intermediate and ovalized airfoils

- 2-1: Calage estimation, speed and trim systems
- 2-2: Ribs printed with washin angle (informative)
- 2-3: Intrados panels for plotter, one side
- 2-4: Mini-ribs horizontal and diagonal
- 2-5: Intrados for laser cutting, one side
- 2-6: Full diagonal ribs laser, one side
- 2-7: Free

- 3-1: Upper view 3D (informative)
- 3-2: Lines A
- 3-3: Lines B
- 3-4: Lines C
- 3-5: Lines D
- 3-6: V-rib type-6
- 3-7: Free

- 4-1: Vault view (informative)
- 4-2: Lateral view (informative)
- 4-3: Brake distribution (informative)
- 4-4: Free
- 4-5: Brake lines
- 4-6: Free
- 4-7: General notes

UNITS

Main units are centimeters. Scale x10 to use in mm

WIDTHS FOR SEWING AND OFFSETS

- Lateral width in extradados (mm): 15.00
- Width in leading edge ex (mm): 25.00
- Width in trailing edge ex (mm): 25.00
- Lateral width in intrados (mm): 15.00
- Width in leading edge in (mm): 25.00
- Width in trailing edge in (mm): 25.00
- Lateral width in ribs (mm): 15.00
- Lateral width in V-ribs (mm): 15.00
- General offset lateral points (mm): 1.20

- Distance between equidistant points (cm): 25.00

"ROMAN" NUMBERS CODIFICATION

Numbering panels, ribs, mini-ribs, V-ribs

- Number 1 =
- Number 2 =
- Number 3 =
- Number 4 =
- Number 5 =
- Number 6 =
- Number 7 =
- Number 8 =
- Number 9 =
- Number 10 =
- Number 11 =
- Number 12 =
- Number 13 =
- Number 14 =