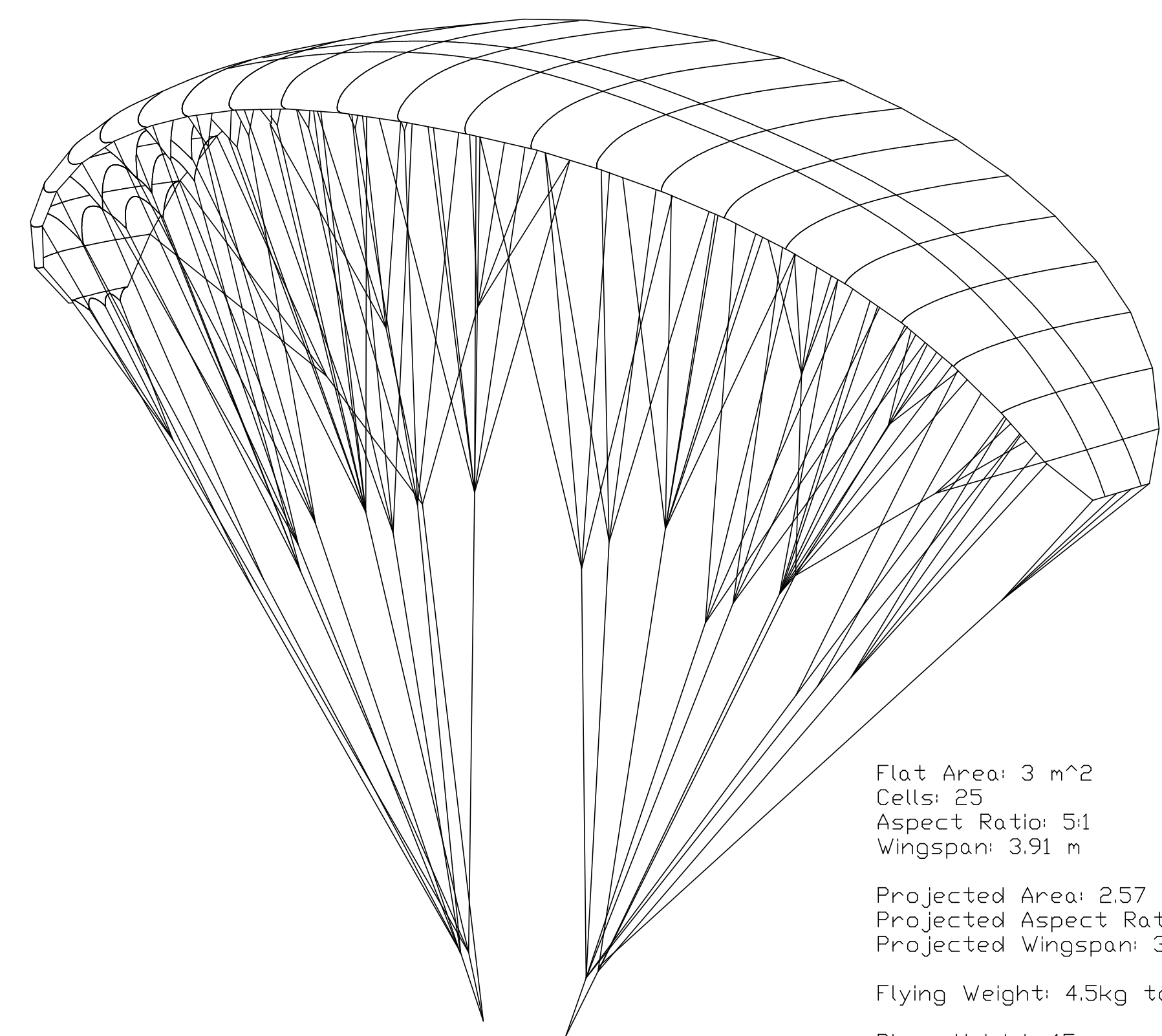


Designed by James Presnell, 2017
http://adventurenc.blogspot.com
rcairadventures@gmail.com

Using SingleSkin Paraglider Design software
https://sourceforge.net/projects/singleskin/
Plans Rev. 1, 5/25/2017

WINDALOO

Single-Skin R/C Paramotor Wing

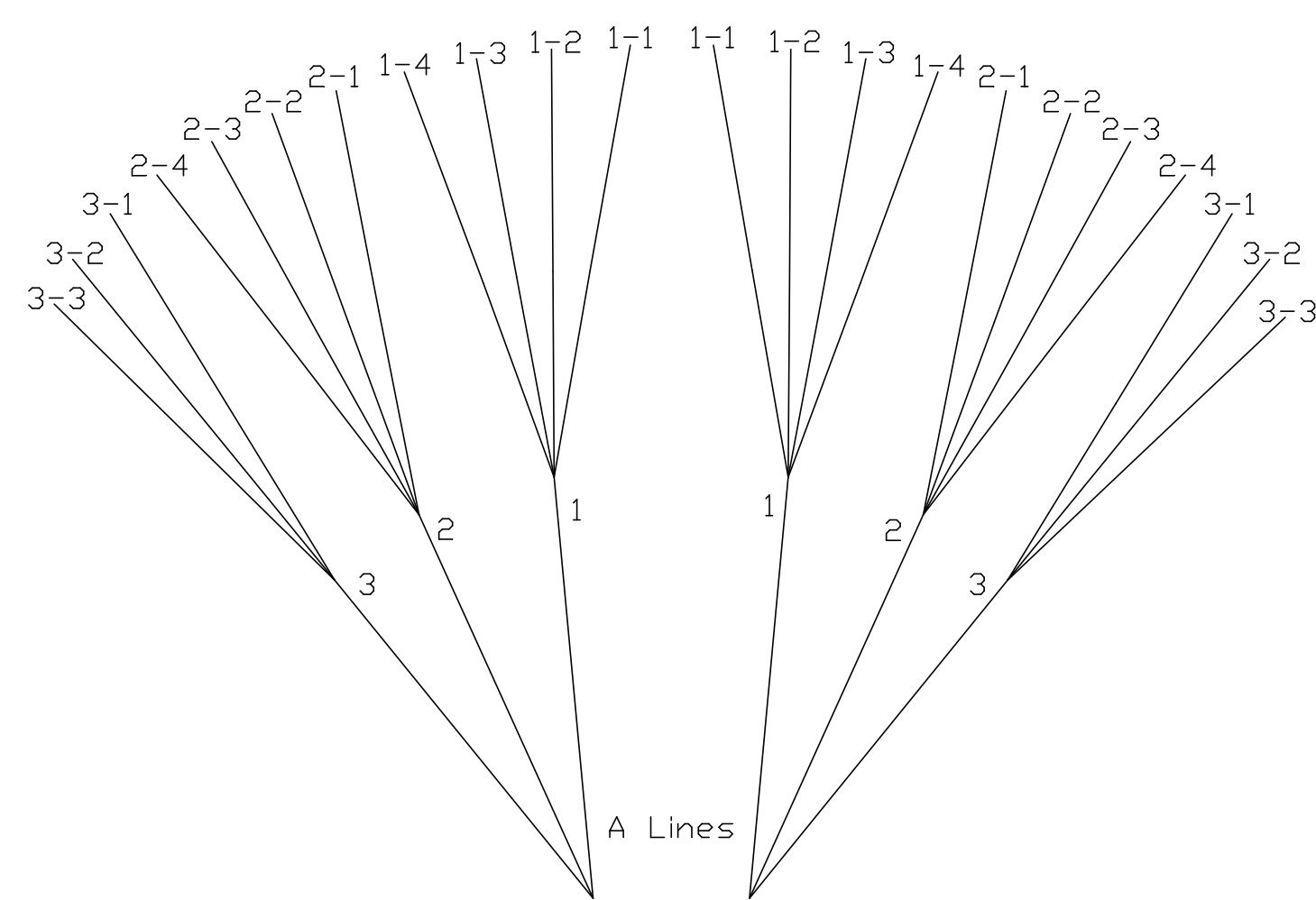


Flat Area: 3 m²
Cells: 25
Aspect Ratio: 5:1
Wingspan: 3.91 m

Projected Area: 2.57 m²
Projected Aspect Ratio: 3.78:1
Projected Wingspan: 3.12 m

Flying Weight: 4.5kg to 6kg

Riser Height: 15 cm
Riser Separation: 24-27 cm



A-Lines: No line on Rib12
All lengths are in mm

1 : 1050
1-1 : 1085
1-2 : 1062
1-3 : 1056
1-4 : 1065

2 : 1042
2-1 : 1067
2-2 : 1052
2-3 : 1050
2-4 : 1054

3 : 1011
3-1 : 1071
3-2 : 1042
3-3 : 1008

Designer's Notes (work in progress)

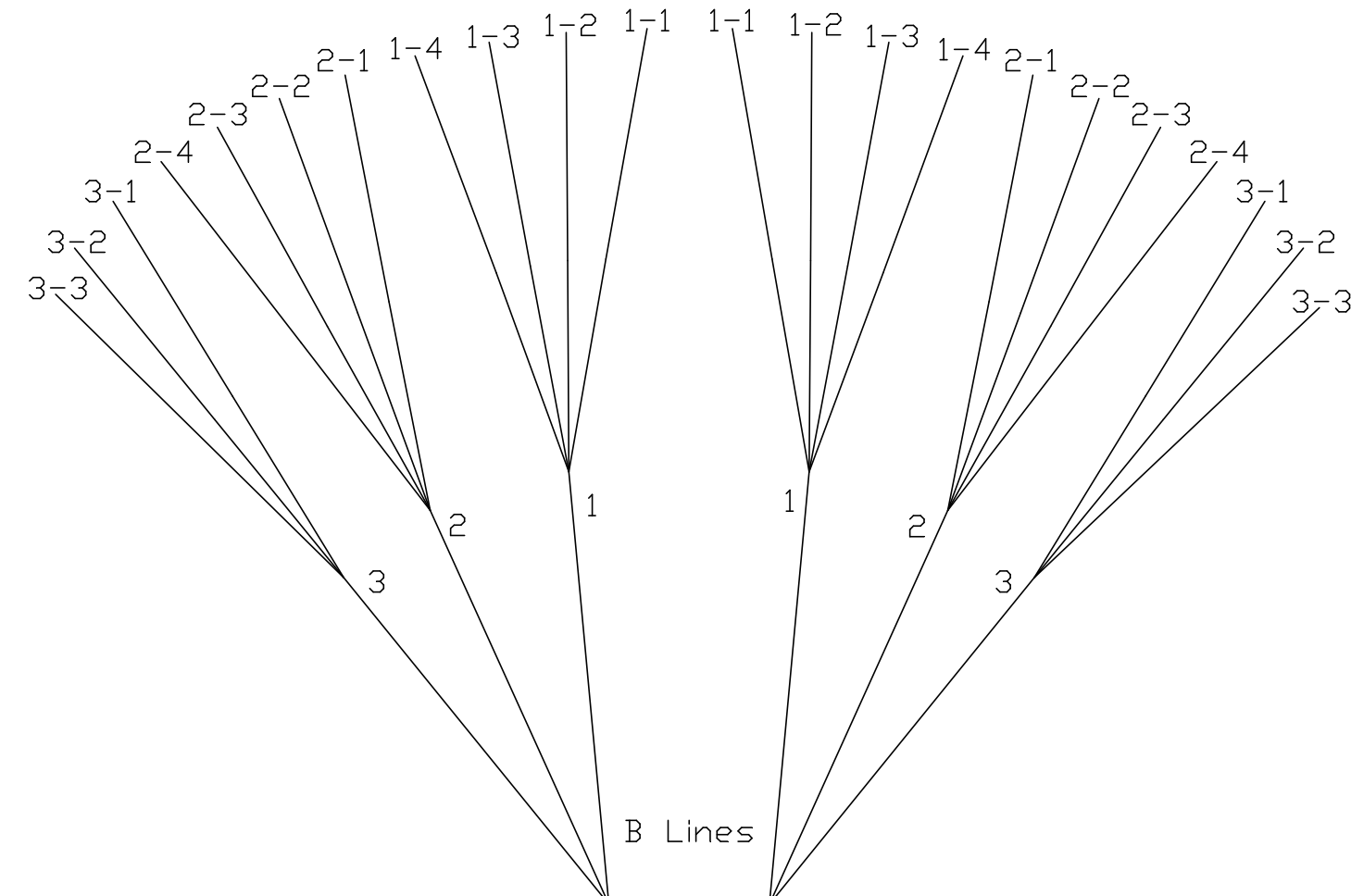
-Wing material is Icarex PC31 ripstop polyester or similar - heavier material will mildly affect flight characteristics. PC31 is available from Kites and Fun Things:
<http://www.kitesandfunthings.com>

-Lines should be as thin as possible while maintaining strength. All line material should be spectra, aramid, or equivalent. It is imperative that lines do not stretch, as this will change the shape of the wing. 50lb test lines are more than sufficient for the upper lines and 100lb for the lower lines.

-Stitching of panels and ribs is all straight-stitch at normal length. Attachment points use a fine zig-zag stitch.

-Leading edge plastic rods are made from 3mm ABS 3-D printer filament and are shaped using a special jig and heat gun. See video tutorial and RCGroups thread for jig pattern.

-<http://youtube.com/user/ksmason42>

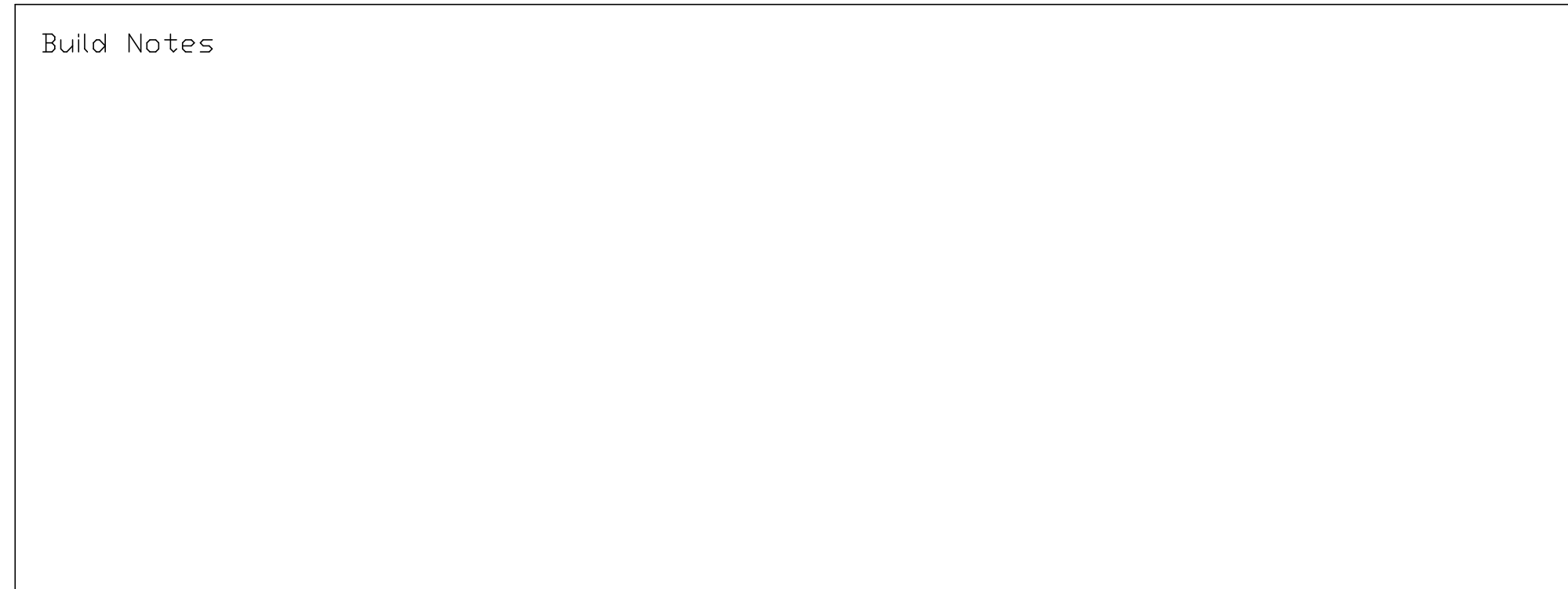


B-Lines: No line on Rib12
All lengths are in mm

1 : 1089
1-1 : 939
1-2 : 916
1-3 : 911
1-4 : 922

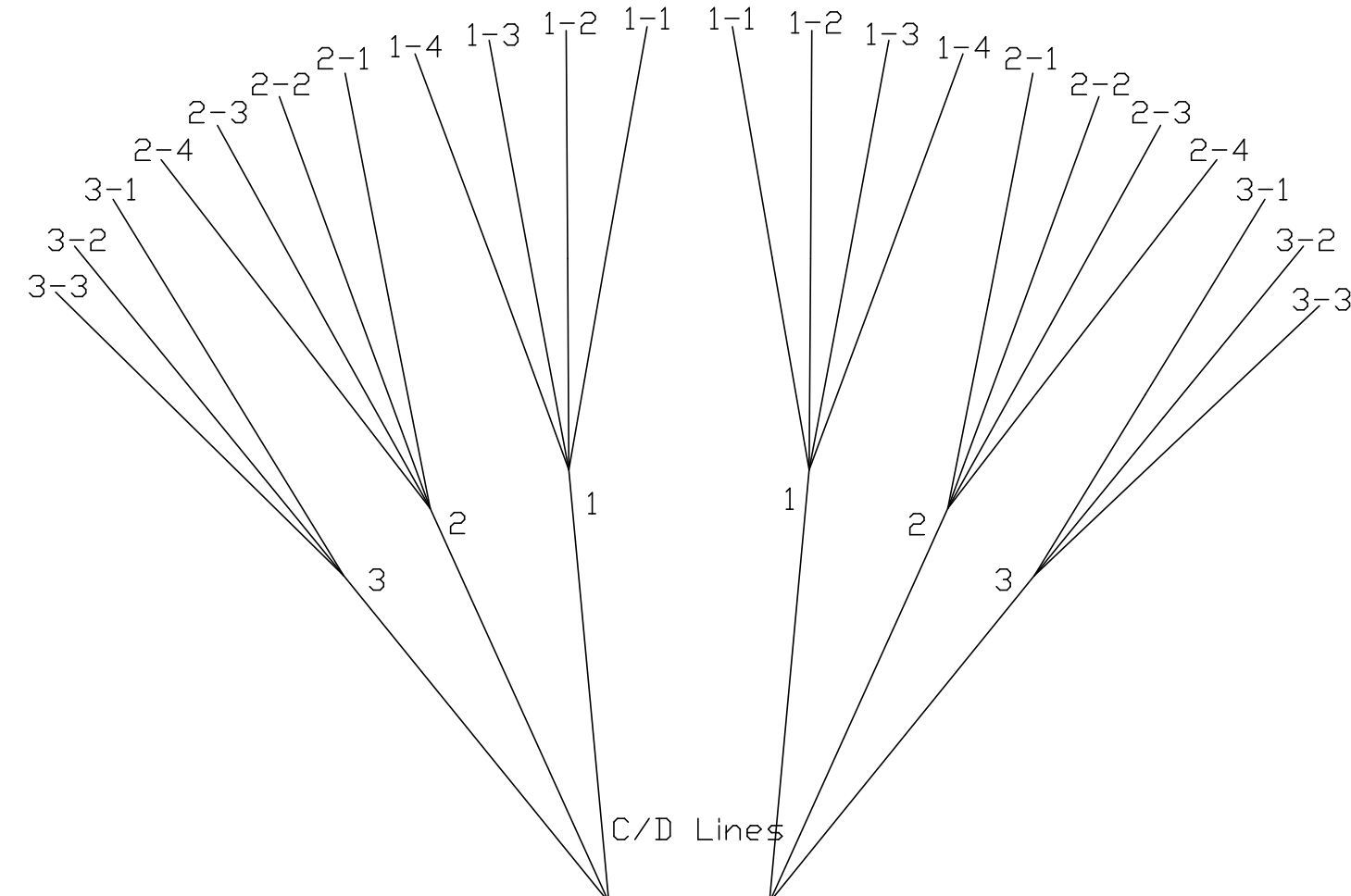
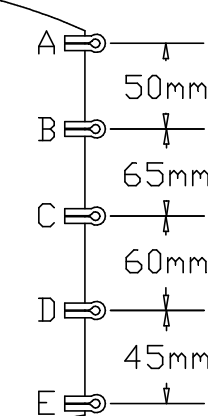
2 : 1076
2-1 : 933
2-2 : 923
2-3 : 925
2-4 : 936

3 : 1035
3-1 : 968
3-2 : 947
3-3 : 923



Wingtip Lines:

Position attachment points as shown given the measurements provided and line lengths below. Begin with the 'A' point at the leading edge of the wingtip.



C/D-Lines: No line on Rib12
All lengths are in mm

1 : 1088
C1-1 : 960
C1-2 : 937
C1-3 : 931
C1-4 : 943

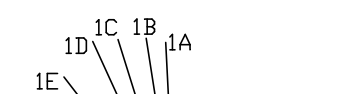
D1-1 : 984
D1-2 : 961
D1-3 : 956
D1-4 : 968

2 : 1078
C2-1 : 951
C2-2 : 942
C2-3 : 943
C2-4 : 953

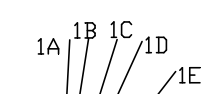
D2-1 : 974
D2-2 : 965
D2-3 : 967
D2-4 : 977

3 : 1039
C3-1 : 984
C3-2 : 963
C3-3 : 937

D3-1 : 1004
D3-2 : 982
D3-3 : 954



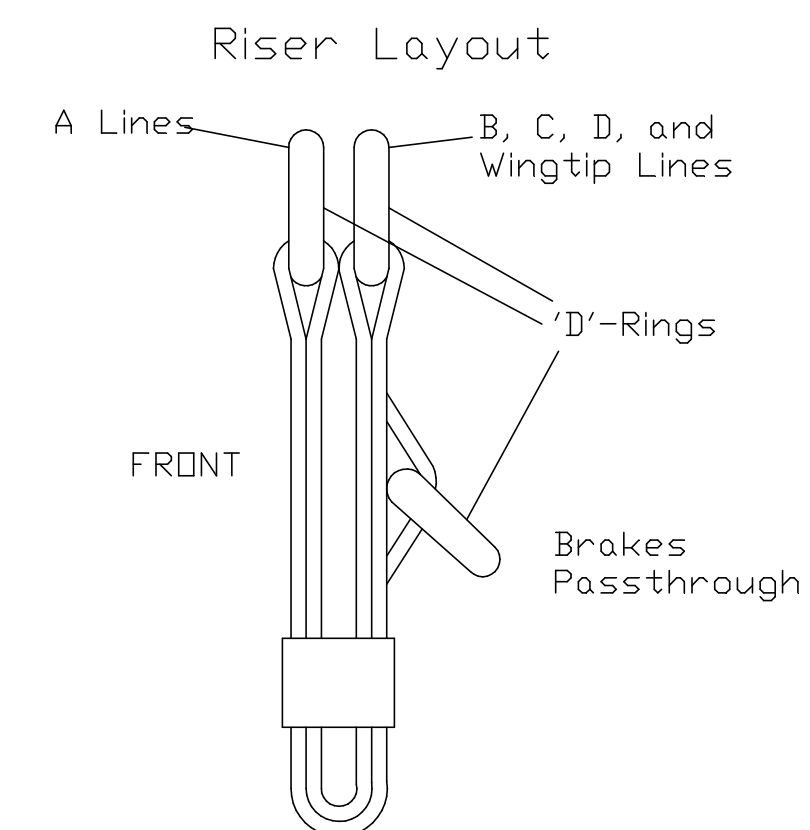
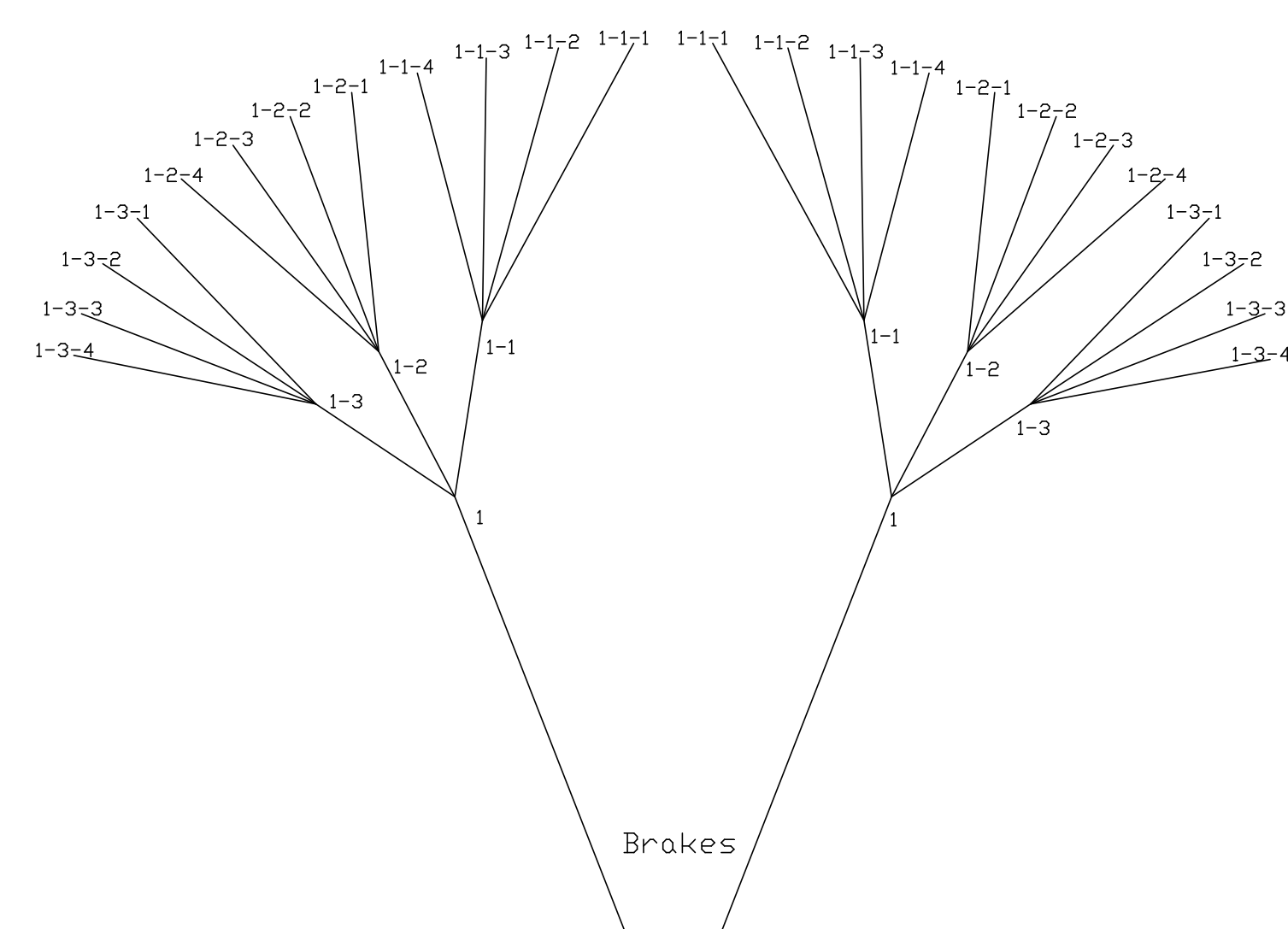
Wingtip Lines



Wingtip Lines

All lengths are in mm

1 : 1505
1A : 425
1B : 414
1C : 410
1D : 415
1E : 424



Brakes:

All lengths are in mm

1 : Mark at 1237, cut at 2000

1-1 : 476
1-1-1 : 825
1-1-2 : 748
1-1-3 : 698
1-1-4 : 678

1-2 : 435
1-2-1 : 691
1-2-2 : 665
1-2-3 : 663
1-2-4 : 680

1-3 : 435
1-3-1 : 683
1-3-2 : 675
1-3-3 : 667
1-3-4 : 654

