Summary of line measure results

Job number	B19275
Checked by	James Summe
Date	31/03/2021

Manufacturer	Airdesign
Glider	UFO
Size	21
Serial	UFO213P180210A

Your glider

Your wing is flying within the manufactures specification, therefore no adjustments have been made to the suspension lines.

The left brake has been shortened slightly back into the specification and to match the right brake length.

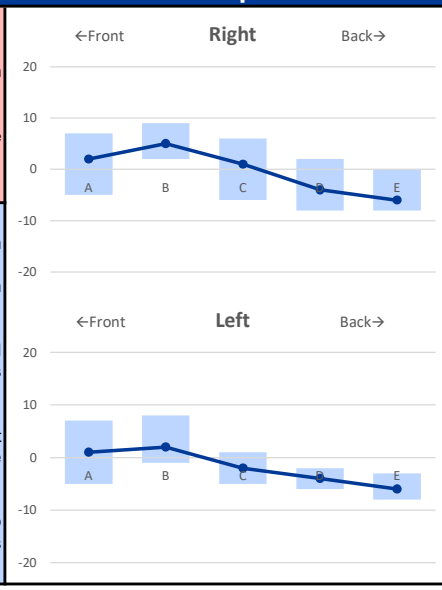
Explanation of the graphs
The bars on the graphs summarise the range of variances from specification. The top of the bar corresponds to the maximum, and the bottom to the minimum. The scale shows from 20mm long to -20mm short. Shorter bars are better.

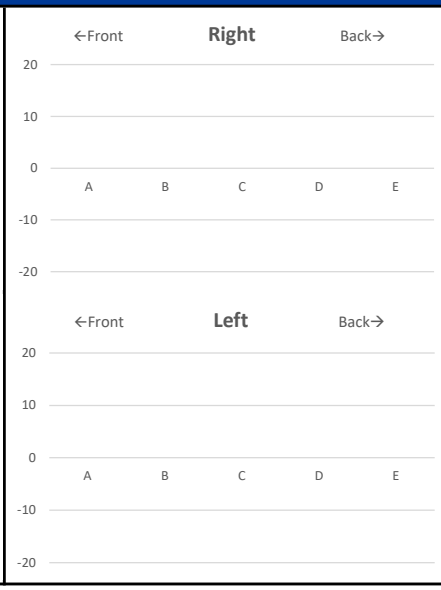
Manufacturers stipulate a tolerance of ±10mm against specified lengths. Any variance in excess of this is shown in red in the bars on the right.

In each graph, the leftmost bar relates to the first line tab row at the front of the wing, and the last relates to the one closest to the trailing edge.

The solid line shows the average variance of all lines in that tab row, and shows how the profile of the wing from front to back has been affected by the variances. A flatter line is better.

Overall profile





Summary of loops on maillons

All lines have been measured using a laser measure and compared to the manufacturer's line length specification. Any anomalies outside tolerance (±10mm) are normally addressed by changing the loops at the maillons. Exceptionally loops in the upper cascade can be changed or lines replaced, either of which would be noted in the report above. The tables below show the maillon loops before and after retrimming, and any required trim changes made are highlighted. The pictures below the tables show the different types of loop used.

Before	Left				Right			
	4	3	2	1	1	2	3	4
A			SL	SL	SL	SL		
B			SL	SL	SL	SL		
C			SL	SL	SL	SL		
D								
E								
S				SL	SL			

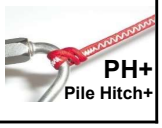
After	Left				Right			
	4	3	2	1	1	2	3	4
A			SL	SL	SL	SL		
B			SL	SL	SL	SL		
C			SL	SL	SL	SL		
D								
E								
S				SL	SL			

SL
Single Loop

DL
Double Loop

LF
Larks Foot

PH
Pile Hitch



PH+
Pile Hitch+

Specification and summary of variances

Lineset overall vs specification	-21mm	Brakes overall vs lineset	Left	Right	Adjusted?
			12mm	0mm	Yes

	Specified line lengths						Left variances						Right variances					
	A	B	C	D	E	Brakes	A	B	C	D	E	Brakes	A	B	C	D	E	Brakes
1	5720	5680	5610	5615	5670	6360	2	3	-2	-3	-6	2	2	4	5	-5	-8	1
2	5505	5475	5460	5490	5550	6235	4	6	1	-2	-5	0	4	6	5	-2	-7	2
3	5595	5560	5495	5505	5560	6185	5	8	1	-2	-4	1	7	5	6	-2	-5	2
4	5565	5520	5465	5475	5530	6075	3	3	-2	-4	-5	2	1	2	3	-8	-7	4
5	5425	5400	5395	5425	5475	5930	3	2	-1	-5	-5	2	4	2	4	-3	-8	3
6	5580	5555	5495	5505	5545	5895	7	4	1	-6	-7	1	5	7	6	-2	-6	2
7	5565	5515	5455	5455	5500	5770	-2	0	-2	-3	-7	1	1	8	-4	-6	-7	1
8	5340	5310	5300	5320	5360	5790	1	-1	-4	-3	-7	-7	5	7	-5	-3	-5	-7
9	5385	5355	5295	5295	5330	5845	0	4	-5	-5	-6	2	5	9	-6	-5	-6	0
10	5315	5290	5240	5230	5245	5855	0	-1	0	-6	-8	1	2	3	-1	-8	-5	1
11	5200	5195	5150	5145	5155	5745	0	2	-1	-5	-8	3	1	6	-2	-6	-8	4
12	5145	5160	5120	5105	5110	5700	0	0	-5	-6	-6	4	0	5	-4	-5	-5	3
13	5145	5160	5105	5090	5085	5675	2	0	-1	-4	-8	6	1	4	1	-6	-2	3
14	4840		4810	4815	4880		-5		-5	-4	-3		-5		1	2	0	
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