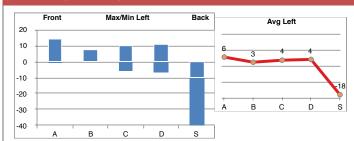
Pilot :

Mark Fowler

Glider : Advance Sigma 10



OVERALL PROFILE : BEFORE RETRIM





All lines have been measured using a laser measure and tabled against the manufacturer's specifications. The bar graphs show variation in the lines from the specified lengths. Manufacturers recommend a tolerance limit of +/-10mm. Marked in red is the variation that is beyond the tolerance. Positive values show stretching of lines and negative values show shrinkage. Small bars with lesser red areas show a glider in good trim. The red line marks the average variation of lines in that tab row, and shows the profile of the wing from front to the back. A flatter line shows a glider in good trim.

The glider is in "very good" condition and is clearly well maintained. The stretch and shrinkage is normal for the manufactured date of 5/2017. The brakes have been lengthened symmetrically +/- 250mm longer L and 7mm R, to bring them inline with manufacturers specification, this is should make the handling more responsive. The lines have been trimmed to within 5mm of trim. There was a small asymmetry in original measurements which could explain the turn L. It is now more symmetric.

LOOPS ON MAILLONS : BEFORE & AFTER RETRIN

SL

SL



LEFT

SL SL

SL SL SL SL

Α

B SL SL SL SL SL

С







3	4
SL	
SL	SL
QI.	

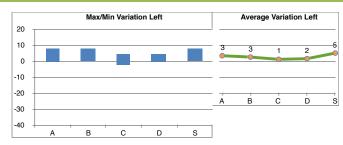
After					THATT						
	Alter	4	3	2	1	1	2	3	4		
	Α		SL	SL	DL	DL	DL	SL			
	В	SL	SL	SL	SL	SL	SL	SL	SL		
	С		SL	DL	DL	DL	DL	DL			

By changing the loops at the maillons, the main lines are lengthened or shortened, to bring the glider closer to the specified trim. Samples of the loops are show in the images.

The tables highlight any change made in the maillon loop settings, as compared to the original setting. Green boxes indicate shortening of the line and Blue boxes indicate lengthening of the line.

In exceptional cases, upper lines may be modified or replaced.

OVERALL PROFILE : AFTER RETRIM

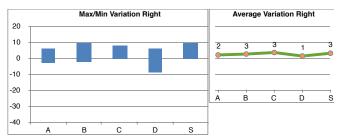


RIGHT

SL

SL SL

SL SL



We have inserted the above loop configurations onto the appropriate lines. This brings the average curve back to a flatter line, making the wing more balanced on the whole. The Left C 9,10,11 & 12 was longer and trimmed accordingly.

LINE LENGTHS & VARIATION : AFTER RETRIM

	Specified Line Lengths					Left Variation					Right Variation					
	Α	В	С	D	Brakes	Α	В	С	D	Brakes	Α	В	С	D	Brakes	
14	6319	6321				-1	3				2	4				
13	6343	6333	6407			1	0	-2			1	1	5		0	
12	6602	6578	6608		6981	3	5	3		6	-3	6	1		0	
11	6642	6611	6643		6986	3	2	4		6	-2	1	3		1	
10	6762	6721	6770		7056	2	1	2		7	1	2	2		0	
9	6839	6795	6847		7126	-1	0	0		5	2	-1	-1		2	
8	6981	6910	6967		7308	1	0	1		6	5	-1	5		5	
7	6964	6894	6953		7206	6	0	1		6	6	-2	4		5	
6	7016	6939	7000		7204	8	0	2		6	3	3	5		6	
5	7047	6968	7030		7345	7	1	2		6	4	0	8		9	
4	7135	7045	7130	7270	7504	2	5	1	4	3	0	4	4	3	0	
3	7114	7026	7108	7255	7486	5	5	2	2	1	4	4	7	5	4	
2	7166	7072	7158	7296	7746	5	8	0	1	6	3	9	2	6	5	
1	7201	7109	7198	7346	8051	6	5	-2	-1	2	1	5	0	-9	-1	