



European Academy of Parachute Rigging e.V - Luitpoldstr. 30 - D87700 Memmingen - Germany Under approval of EPTA European Paraglider Testlaboratory Alicane

	Minimum take off weight	Maximum take off weight		
Testpilot	Johannes Tschofen	Chris Geist		
Harness	Independence Fusion	Sol Slider Sol Slider		
Pilot's take off weight	80 kg	100 kg		

Classification	В
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Test-criteria		Minimum take off weight	Evaluation	Maximum take off weight	Evaluation
1. Inflation / take-off - 4.4.1					
Rising behavior		Smooth, easy and constant rising A Smooth, easy and con		Smooth, easy and constant rising	А
pecial take off technique required		No	Α	No	Α
2. Landing - 4.4.2					
Special landing technique required		No	Α	No	Α
3. Speeds in straight flight - 4.4.3					
Trim speed more than 30km/h		Yes	А	Yes	Α
Speed range using the controls larger than 10km/l	Speed range using the controls larger than 10km/h		А	Yes	Α
Minimum speed		Less than 25 km/h	Α	Less than 25 km/h	Α
4. Control movement - 4.4.4					
Max. weight in flight up to 80kg			-		-
Max. weight in flight 80 to 100kg		Increasing > 60cm	А	Increasing > 60cm	Α
Max. weight in flight greater than 100kg			-		-
5. Pitch stability exiting accelerated flight - 4.4	.5				
Dive forward angle on exit		Dive forward less than 30°	Α	Dive forward less than 30°	Α
Collapse occurs		No	Α	No	Α
6. Pitch stability operating controls during acc	elerated fl	ight - 4.4.6			
Collapse occurs		No	А	No	А
7. Roll stability and damping - 4.4.7					
Oscillations		Reducing	А	Reducing	А
8. Stability in gentle spirals - 4.4.8					
Tendency to return to straight flight		Spontaneous exit	Α	Spontaneous exit	Α
9. Behaviour in a steeply banked turn - 4.4.9					
Sink rate after two turns		12m/s to 14m/s	А	More than 14m/s	В
10. Symmetric front collapse - 4.4.10					
Entry		Rocking back less than 45°	Α	Rocking back less than 45°	А
Recovery	trim speed	Spontaneous in less than 3 sec	A	Spontaneous in less than 3 sec	A
Dive forward angle on exit	.Ę	0° - 30° Keeping course	А	0° - 30° Keeping course	А
Cascade occurs	_ +	No	Α	No	Α
Entry	р	Rocking back less than 45°	Α	Rocking back less than 45°	А
Recovery	rate	Spontaneous in 3 to 5 sec	В	Spontaneous in 3 to 5 sec	В
Dive forward angle on exit	accelerated	0° - 30° Keeping course	A	30° - 60° Keeping course	В
Cascade occurs	ñ	No	Α	No	Α

44 Exiting doop stall (parachutal stall) 4.4.44									
11. Exiting deep stall (parachutal stall) - 4.4.11		Vec				Vas			
Deep stall achieved		Yes			Yes				
Recovery		Spontaneous in	less than 3 sec		Α	Spontaneous in	less than 3 sec		Α
Dive forward angle on exit		0° - 30°			Α	0° - 30°			Α
ange of course		Changing course	e less than 45°		Α	Changing course	e less than 45°		Α
Cascade occurs		No		Α	No			А	
12. High angle of attack recovery - 4.4.12		1				1			1
Recovery		Spontaneous in less than 3 sec		Α	Spontaneous in less than 3 sec		Α		
Cascade occurs		No		Α	No			Α	
13. Recovery from a developed full stall - 4.4.1	3	1				110			
Dive forward angle on exit	<u> </u>	0° - 30°			А	30° - 60°			В
Collapse		No collapse			A	No collapse			A
Cascade occurs (other than collapse)		No			Α	No Less than 45° Most lines tight		Α	
Rocking backward Line tension		Less than 45°		A	A				
		Most lines tight		А	Most lines tight		А		
14. Asymmetric collapse (trim speed) - 4.4.14	1	ı		_			1		
Change of course until re-inflation	92	90° - 180°	Dive or roll angle	15° - 45°	В	< 90°	Dive or roll angle	15° - 45°	Α
De teffeite de la lace	g,	0	i. a	1		0	. n		
Re-inflation behavior	trim speed, max 50% collapse	Spontaneous re-	Inflation		Α	Spontaneous re-	Inflation		А
Total change of course		Less than 360°		A	Less than 360°		A		
Collapse on the opposite side occurs Twist occurs		No No			A	No No			A A
Cascade occurs		No	-		A	No			A
			Discount	450 450			Discount and	450 450	
Change of course until re-inflation	Se	90° - 180°	Dive or roll angle	15° - 45°	В	< 90°	Dive or roll angle	15° - 45°	Α
Re-inflation behavior	trim speed, max 75% collapse	Spontaneous re-	-inflation		Α	Spontaneous re-	-inflation		Α
Total change of course	spe % α	Less than 360°			A	Less than 360°			
Collapse on the opposite side occurs	rim 75	No			A	No			A
Twist occurs	may 1	No			A	No			A
Cascade occurs	Ε	No	-		Α	No			Α
Observed access with a definite		000 4000		450 450		000 4000		450 450	
Change of course until re-inflation	se	90° - 180°	Dive or roll angle	15° - 45°	В	90° - 180°	Dive or roll angle	15° - 45°	В
Re-inflation behavior	accelerated, max 50% collapse	Spontaneous re-	-inflation		Α	Spontaneous re-	inflation		Α
	accelerated, x 50% collap	·				·			
Total change of course Collapse on the opposite side occurs	CCe	Less than 360° No			A	Less than 360° No			A
Twist occurs	nax a	No			A	No			A
Cascade occurs	_	No			A	No			A
Change of course until re-inflation		90° - 180°	Dive or roll angle	15° - 45°	В	90° - 180°	Dive or roll angle	15° - 45°	В
g	accelerated, max 75% collapse								
Re-inflation behavior	accelerated, ıx 75% collap	Spontaneous re-	-inflation		Α	Spontaneous re-	inflation		Α
Total change of course	eler 5%	Less than 360°			А	Less than 360°			Α
Collapse on the opposite side occurs	acc 1x 7:	No			Α	No			Α
Twist occurs	Ĕ	No			A	No			A
Cascade occurs		No			А	No			А
15. Directional control with a maintained asymm	metric col					Lyss			
Able to keep course straight		Yes			Α	Yes			А
180° turn away from the collapsed side possible in	10 sec	Yes		Α	Yes			Α	
Amount of control range between turn and stall or	cnin	Many there 500% of the automatric analysis and		Α	More than 50%	of the symmetric of	ontrol troval	Α	
Amount of control range between turn and stall of	spiri	More than 50% of the symmetric control travel				Wille than 50 %	or the symmetric c		
16. Trim speed spin tendency - 4.4.16					,,			ontroi traver	A
Spin occurs								ontrol travel	A
47 1		No			A	No		onitoi travei	A
17. Low speed spin tendency - 4.4.17						No		onto traver	
Spin occurs		No No				No No		Ontrol travel	
					A			Ontrol travel	A
Spin occurs			n less than 90°		A		n less than 90°	Olitoi travei	A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release		No Stops spinning in	n less than 90°		A	No Stops spinning in	n less than 90°	Ullion travel	A A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs		No	n less than 90°		A	No	n less than 90°	Ullion travel	A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19		No Stops spinning is			A A A	No Stops spinning it		Ullion travel	A A A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19 Change of course before release		No Stops spinning in No Changing course	e less than 45°		A A A	No Stops spinning in No Changing course	e less than 45°	Ullion travel	A A A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19		No Stops spinning in No Changing course			A A A	No Stops spinning in No Changing course		Ullion travel	A A A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19 Change of course before release		No Stops spinning in No Changing course	e less than 45° with straight span		A A A	No Stops spinning in No Changing course	e less than 45° with straight span	Ullion travel	A A A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19 Change of course before release Behaviour before release Recovery		No Stops spinning in No Changing course Remains stable Spontaneous in	e less than 45° with straight span		A A A A A	No Stops spinning in No Changing course Remains stable Spontaneous in	e less than 45° with straight span	Ullion travel	A A A A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19 Change of course before release Behaviour before release		No Stops spinning in No Changing course Remains stable	e less than 45° with straight span		A A A A A A	No Stops spinning ii No Changing course Remains stable	e less than 45° with straight span	OIIIOI II avei	A A A A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19 Change of course before release Behaviour before release Recovery Dive forward angle on exit		No Stops spinning is No Changing course Remains stable Spontaneous in 0° - 30°	e less than 45° with straight span		A A A A A	No Stops spinning ii No Changing course Remains stable Spontaneous in 0° - 30°	e less than 45° with straight span	Olliottavei	A A A A A A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19 Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.4.20		No Stops spinning in No Changing course Remains stable Spontaneous in 0° - 30° No	e less than 45° with straight span less than 3 sec		A A A A A A	No Stops spinning in No Changing course Remains stable Spontaneous in 0° - 30° No	e less than 45° with straight span less than 3 sec	OIIIOI II avei	A A A A A A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19 Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.4.20 Entry procedure		No Stops spinning in No Changing course Remains stable Spontaneous in 0° - 30° No Special device re	e less than 45° with straight span less than 3 sec		A A A A A A	No Stops spinning in No Changing course Remains stable Spontaneous in 0° - 30° No Special device in	e less than 45° with straight span less than 3 sec	Ollion Ravel	A A A A A A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19 Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.4.20		No Stops spinning in No Changing course Remains stable Spontaneous in 0° - 30° No	e less than 45° with straight span less than 3 sec		A A A A A A	No Stops spinning in No Changing course Remains stable Spontaneous in 0° - 30° No	e less than 45° with straight span less than 3 sec	OIIIOI II avei	A A A A A A
Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19 Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.4.20 Entry procedure		No Stops spinning in No Changing course Remains stable Spontaneous in 0° - 30° No Special device re	e less than 45° with straight span less than 3 sec		A A A A A A	No Stops spinning in No Changing course Remains stable Spontaneous in 0° - 30° No Special device in	e less than 45° with straight span less than 3 sec	OIIIOI II avei	A A A A A A
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22. Behaviour exiting a steep spiral - 4.4.22				
Tendency to return to straight flight	Spontaneous exit	А	Spontaneous exit	Α
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	Α	Less than 720°, spontaneous recovery	Α
23. Alternative means of directional control - 4	.4.23			
180° turn achievable in 20 sec	Yes	А	Yes	Α
Stall or spin occurs	No	Α	No	Α
24. Any other flight procedure and/or configura	ation described in the user's manual - 4.4.24			
Procedure works as descibed		NA		NA
Procedure suitable for novice pilots		NA		NA
Cascade occurs		NA		NA
25. Remarks of testpilot:				
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