Manufacturer	Mac Para	Type testing No.	EAPR-GS-7162/09
Address	756 61 Roznov pod Radhostem, CZ	Date of testing	18./19.02.2009
Model	Eden 4-28	Location	Madeira



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	Mario Eder		
Harness	Acvademy	Academy		
Pilot's take off weight	85 kg	105 kg		

Classification	В
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		Minimum take off weight			
Test-criteria	criteria		Evaluation	Maximum take off weight	Evaluation
1. Inflation / take-off - 4.4.1					
Rising behavior		Smooth, easy and constant rising	Α	Smooth, easy and constant rising	Α
Special take off technique required		No	Α	No	А
2. Landing - 4.4.2					
Special landing technique required		No	А	No	А
3. Speeds in straight flight - 4.4.3		•			
Trim speed more than 30km/h		Yes	Α	Yes	Α
Speed range using the controls larger than 10km/l	ı	Yes	Α	Yes	А
Minimum speed		Less than 25 km/h	А	Less than 25 km/h	А
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	А
Max. weight in flight greater than 100kg	lax. 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°	A
Collapse occurs		No	Α	No	А
6. Pitch stability operating controls during acc	elerated f	light - 4.4.6			
Collapse occurs		No	Α	No	А
7. Roll stability and damping - 4.4.7					
Oscillations		Reducing	Α	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		More than 14m/s	В	More than 14m/s	В
10. Symmetric front collapse - 4.4.10					
Entry		Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	trim speed	Spontaneous in less than 3 sec	Α	Spontaneous in less than 3 sec	А
Dive forward angle on exit	Ē	0° - 30° Keeping course	А	0° - 30° Keeping course	А
Cascade occurs		No	Α	No	Α
Entry	О	Rocking back less than 45°	Α	Rocking back less than 45°	А
Recovery	rate	Spontaneous in less than 3 sec	Α	Spontaneous in less than 3 sec	A
Dive forward angle on exit	accelerated	0° - 30° Entering a turn of less than 90°	• A	0° - 30° Keeping course	A
Cascade occurs	ğ	No	Α	No	Α

10.0   10.0	11 Eviting deep stell (parachutal stell) 4 4 44									
Security	11. Exiting deep stall (parachutal stall) - 4.4.11  Deep stall achieved Yes				Yes					
Description and Control of Challegory scene law for level 2	·					Δ.				^
Company concess   Company co	•		'	less than 3 sec			· ·	iless than 3 sec		
Table parties of table in each service or - 4.12   Table parties of table in each service or - 4.12   Table parties of table in each service or - 4.12   Table parties of table in each service or - 4.12   Table parties of table in each service or - 4.12   Table parties or - 4.	-			a less than 45°				e less than 45°		
Separation   Sep				E 1633 triair 43				e 1633 triair 43		
A	12. High angle of attack recovery - 4.4.12									
A	Recovery		Spontaneous in	less than 3 sec		Α	Spontaneous in	less than 3 sec		Α
13. Necessary from a developed final recitable control page   10	·		· ·				· ·			
Doct Incomes   201		3	140			A	110			A
Callegate or Callegate (Carlot Print collegate)  No collegate (Carlot Print Collegate)  No colle		-	30° - 60°			В	30° - 60°			В
Recording placement of the property of the p	·					Α				
Line motions   Motion to sight   Motion to sight			1							
Change of course until ne-inflation										
Re-inflation behavior  Total charactery of courses  Colleges on the reported end courses  Total charactery of courses  Colleges on the reported end courses  Total charactery of courses  Colleges on the reported end courses  Total charactery of courses  Colleges on the reported end courses  Total charactery of courses  Colleges on the reported end courses  Total charactery of courses  Total charactery of courses  Colleges on the reported end courses  Total courses and end courses  Total charactery of courses and end courses  Total courses  Colleges on the reported end courses  Total courses on the reported end courses  Total courses  Colleges on the reported end courses  Total courses on the reported end courses  Total courses on the reported end courses  Total courses  Colleges on the reported end courses  Total courses  Total courses  Colleges on the reported end courses  Total courses  To	14. Asymmetric collapse (trim speed) - 4.4.14									
Re-inflation behavior  Total charactery of courses  Colleges on the reported end courses  Total charactery of courses  Colleges on the reported end courses  Total charactery of courses  Colleges on the reported end courses  Total charactery of courses  Colleges on the reported end courses  Total charactery of courses  Colleges on the reported end courses  Total charactery of courses  Total charactery of courses  Colleges on the reported end courses  Total courses and end courses  Total charactery of courses and end courses  Total courses  Colleges on the reported end courses  Total courses on the reported end courses  Total courses  Colleges on the reported end courses  Total courses on the reported end courses  Total courses on the reported end courses  Total courses  Colleges on the reported end courses  Total courses  Total courses  Colleges on the reported end courses  Total courses  To	Change of course until re-inflation	4)	< 90°	Dive or roll angle	15° - 45°	Α	90° - 180°	Dive or roll angle	15° - 45°	В
No.		apse				, ,		1		
No.	Re-inflation behavior	beed 100	Spontaneous re-	-inflation		Α	Spontaneous re	e-inflation		Α
No.		im sl 50%								
No.		tr					-			
Re-inflation behavior Total charge of Course Collapse on the reporting electrons of Collapse on the regions indice occurs  That occurs Collapse on the reporting electrons of Collapse on the regions indice occurs  No. A.		_								
Re-inflation behavior	Change of course until re-inflation	0	90° - 180°	Dive or roll angle	15° - 45°	В	< 90°	Dive or roll angle	15° - 45°	Α
Cancade cocurse until re-inflation		J, apse							L	
Cancade cocurse until re-inflation	Re-inflation behavior	beed loo	Spontaneous re-	-inflation		Α	Spontaneous re	e-inflation		Α
Cancade cocurse until re-inflation	•	im s 75%								
Cancade cocurse until re-inflation		tri Tax								
Re-inflation behavior  Total charge of course Callages on the aposite aide occurs  No										
Re-inflation behavior  Total charge of course Callages on the aposite aide occurs  No							l			
Caccade occurs    No	Change of course until re-inflation	bse	< 90°	Dive or roll angle	15° - 45°	Α	90° - 180°	Dive or roll angle	15° - 45°	В
Caccade occurs    No	Re-inflation behavior	ated	Spontaneous re-	-inflation		Α	Spontaneous re	e-inflation		Α
Caccade occurs    No	Total change of course	elera	Less than 360°			Α	Less than 360°			A
Caccade occurs    No		acc ax 5				Α				Α
Change of course until re-inflation  Re-inflation behavior  Total change of course  Collapse on the opposite side occurs  Total change of course  Collapse on the opposite side occurs  Total change of course  Collapse on the opposite side occurs  Total change of course  Collapse on the opposite side occurs  Total change of course  Collapse on the opposite side occurs  Total change of course  No. A No		Ĕ								
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Cascade occurs No A Yes A Yes A A 180° turn away from the collapsed side possible in 10 sec Annount of control with a maintained asymmetric collapse - 4.4.15  Albe to keep course straight Yes A Yes A Yes A A 180° turn away from the collapsed side possible in 10 sec Yes A Yes A Yes A A Amount of control trange between turn and stall or spin More than 50% of the symmetric control travel A No A N	Re-inflation behavior	ated	Spontaneous re-	-inflation		Α	Spontaneous re	e-inflation		Α
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15. Directional control with a maintained asymmetric collapse - 4.4.15  Able to keep course straight Yes A Yes A Yes A Yes A Yes A A Yes A A North the collapsed side possible in 10 sec Yes A Yes A Yes A Yes A A Yes A A North the collapsed side possible in 10 sec Yes A Yes A Yes A Yes A A North the collapsed side possible in 10 sec Yes A A Yes A North the collapsed side possible in 10 sec Yes A A Yes A North the collapsed side possible in 10 sec Yes A A Yes A North than 50% of the symmetric control travel A A More than 50% of the symmetric control travel A A North than 50% of the symmetric control travel A A North than 50% of the symmetric control travel A North than		٤								
180° turn away from the collapsed side possible in 10 sec  Yes	15. Directional control with a maintained asymm	metric col	lapse - 4.4.15							
Amount of control range between turn and stall or spin More than 50% of the symmetric control travel A More than 50% of the symmetric control travel A 16. Trim speed spin tendency - 4.4.16  Spin occurs No A No A No A 17. Low speed spin tendency - 4.4.17  A 18. Recovery from a developed spin - 4.4.18  Spin rotation angle after release Stops spinning in less than 90° A No A N	Able to keep course straight		Yes			Α	Yes			Α
16. Trim speed spin tendency - 4.4.16  Spin occurs  No A No A No A No A 17. Low speed spin tendency - 4.4.17  Spin occurs No A 18. Recovery from a developed spin - 4.4.18  Spin rotation angle after release Stops spinning in less than 90° A Stops spinning in less than 90° A Stops spinning in less than 90° A Cascade occurs No A No A 19. B-line-stall - 4.4.19  Totalion angle after release Changing course less than 45° A Behaviour before release Remains stable with straight span A Recovery Spontaneous in less than 3 sec A Dive forward angle on exit O°-30° A Spontaneous in less than 3 sec A Cascade occurs No A Cascade occurs No A Spontaneous in less than 3 sec B Stable flight A Sta	180° turn away from the collapsed side possible in 10 sec		Yes			Α	Yes			Α
16. Trim speed spin tendency - 4.4.16  Spin occurs  No A No A No A No A 17. Low speed spin tendency - 4.4.17  Spin occurs No A 18. Recovery from a developed spin - 4.4.18  Spin rotation angle after release Stops spinning in less than 90° A Stops spinning in less than 90° A Stops spinning in less than 90° A Cascade occurs No A No A 19. B-line-stall - 4.4.19  Totalion angle after release Changing course less than 45° A Behaviour before release Remains stable with straight span A Recovery Spontaneous in less than 3 sec A Dive forward angle on exit O°-30° A Spontaneous in less than 3 sec A Cascade occurs No A Cascade occurs No A Spontaneous in less than 3 sec B Stable flight A Sta	Amount of control range between turn and stall or spin		More than 50% of the symmetric control travel			Δ	More than 50% of the symmetric control travel			Δ
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17. Low speed spin tendency - 4.4.17  Spin occurs No A No A No A  18. Recovery from a developed spin - 4.4.18  Spin rotation angle after release Stops spinning in less than 90° A Stops spinning in less than 90° A  19. B-line-stall - 4.4.19  Change of course before release Changing course less than 45° A Changing course less than 45° A  Behaviour before release Remains stable with straight span A Remains stable with straight span A Remains stable with straight span A Recovery  Spontaneous in less than 3 sec A Spontaneous in less than 3 sec A Spontaneous in less than 3 sec A No A N			I No			۸	I No			Λ .
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18. Recovery from a developed spin - 4.4.18  Spin rotation angle after release  Stops spinning in less than 90°  A Stops spinning in less than 90°  A 19. B-line-stall - 4.4.19  Change of course before release  Changing course less than 45°  A Changing course less than 45°  A Remains stable with straight span  A Remains stable with straight span  A Remains stable with straight span  A Spontaneous in less than 3 sec  A Spontaneous in less than 3 sec  A Spontaneous in less than 3 sec  A No  A No  A No  A No  A 10° - 30°  A No  A No  A No  A 10° - 30°  A 20. Big ears - 4.4.20  Entry procedure  Standard technique  Stable flight  A Stable flight  A Stable flight  A Spontaneous in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec overy through pilot action in less than a further a sec over through pilot action in less than a further a sec over through pilot action in less than a further a sec over through pilot action in less than a further a sec over through pilot action in less than a further a sec over through pilot action in less than a further a se			No			Α	No			Α
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Dive forward angle on exit  O°-30°  No  A  O°-30°  A  No  A  O°-30°  A  No  A  20. Big ears - 4.4.20  Entry procedure  Standard technique  Stable flight  A  Special device required  A  Special device required  A  Secovery through pilot action in less than a further 3 sec  Dive forward angle on exit  O°-30°  A  O° bis 30°  A  Special device required  A  Secovery through pilot action in less than a further 3 sec  Dive forward angle on exit  Standard technique  Standard technique  A  Special device required  A  Special device requi	•									
Dive forward angle on exit  O°-30°  No  A  O°-30°  A  No  A  O°-30°  A  No  A  20. Big ears - 4.4.20  Entry procedure  Standard technique  Stable flight  A  Special device required  A  Special device required  A  Secovery through pilot action in less than a further 3 sec  Dive forward angle on exit  O°-30°  A  O° bis 30°  A  Special device required  A  Secovery through pilot action in less than a further 3 sec  Dive forward angle on exit  Standard technique  Standard technique  A  Special device required  A  Special device requi			-				· ·			^
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20. Big ears - 4.4.20  Entry procedure Standard technique A Special device required A Stable flight A Stable flight A Recovery through pilot action in less than a further 3 sec 3 sec 5 sec 21. Big Ears in accelerated flight - 4.4.21  Entry procedure Standard technique A Special device required B Recovery through pilot action in less than a further 3 sec 7 sec 9 se										
Behaviour during big ears  Stable flight  Recovery  Recovery through pilot action in less than a further 3 sec  Dive forward angle on exit  Dive forward angle on exit  Entry procedure  Standard technique  Stable flight  A Stable flight  A Special device required  A Special device required  A Stable flight  B Recovery through pilot action in less than a further 3 sec  Dive forward angle on exit  O°-30°  A O° bis 30°  A O° bis 30°  A Stable flight	20. Big ears - 4.4.20						•			
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Dive forward angle on exit  21. Big Ears in accelerated flight - 4.4.21  Entry procedure  Standard technique  Stable flight  A Special device required  A Special device required  A Stable flight  A Stable flight  A Stable flight  B Recovery  Recovery through pilot action in less than a further 3 sec  Dive forward angle on exit  0°-30°  A 0° bis 30°  A Stable flight  A Stable flight  A Stable flight  B Recovery through pilot action in less than a further 3 sec  Dive forward angle on exit  0°-30°  A 0° bis 30°  A Stable flight	Recovery		Recovery through pilot action in less than a further		В				В	
21. Big Ears in accelerated flight - 4.4.21  Entry procedure Standard technique A Special device required A Special device required A Stable flight A Stable flight A Stable flight A Recovery through pilot action in less than a further 3 sec Bive forward angle on exit 0°-30° A 0° bis 30° A Stable flight A Stable flight A Stable flight B Recovery through pilot action in less than a further 3 sec A Stable flight A Stable flight B Recovery through pilot action in less than a further 3 sec A Stable flight A St	•									
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Behaviour during big ears  Stable flight  Recovery  Recovery  B Recovery through pilot action in less than a further 3 sec  Dive forward angle on exit  O°-30°  A O° bis 30°  A Stable flight			Standard technic	que		Α	Special device	required		Α
Recovery through pilot action in less than a further 3 sec  Dive forward angle on exit  O° - 30°  A  Behaviour immediately after releasing the accelarator while  Stable flight  A  Stable flight				·	•					
Dive forward angle on exit  0° - 30°  A  0° bis 30°  A  Stable flight  A  Stable flight	• •		<u> </u>					ah nilat action in le	ee than a further	
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	Recovery		3 sec	gh pilot action in le	ess than a further		3 sec	gri pilot action in le	33 than a futurer	
	Recovery Dive forward angle on exit	ator while	3 sec 0° - 30°	gh pilot action in le	ess than a further	Α	3 sec 0° bis 30°	gri pilot action in le	33 than a further	A

22. Behaviour exiting a steep spiral - 4.4.22				
Tendency to return to straight flight	Spontaneous exit	А	Spontaneous exit	А
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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