




FTR - Flight Test Report

Dieser Prüfbericht darf ohne schriftliche Zustimmung der EAPR nicht, auch nicht auszugsweise, vervielfältigt werden.

Manufacturer	 independence gliders for real pilots <small>www.independencegliders.de</small> Fly Market GmbH & Co. KG Am Schönebach 3 D-87637 Eisenberg	Type testing No.	EAPR-GS-0093/14
		serial number	2k13-cr-xl-112
Model	Cruiser 3 XL	Location	Kössen
			Achensee



Rev. 2.1 - 10.05.2013
EAPR GmbH - Marktstr. 11
D-87730 Bad Grönenbach - Germany

Date of testing	23.02.2014	Minimum take off weight 110 kg		Maximum take off weight 135 kg	
Testpilot		Anselm Rauh		Mike Küng	
Harness		EAPR Testequipment		EAPR-Testequipment	
Pilot's take off weight		110 kg		135 kg	

Classification	A
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Test-criteria		Minimum take off weight		Evaluation	Maximum take off weight		Evaluation
1. Inflation / take-off - 4.1.1							
Rising behavior		Smooth, easy and constant rising		A	Smooth, easy and constant rising		A
Special take off technique required		No		A	No		A
2. Landing - 4.1.2							
Special landing technique required		No		A	No		A
3. Speeds in straight flight - 4.1.3							
Trim speed more than 30km/h		Yes		A	Yes		A
Speed range using the controls larger than 10km/h		Yes		A	Yes		A
Minimum speed		Less than 25 km/h		A	Less than 25 km/h		A
4. Control movement - 4.1.4							
Max. weight in flight up to 80kg				-			-
Max. weight in flight 80 to 100kg				-			-
Max. weight in flight greater than 100kg		Increasing >65 cm		A	Increasing >65 cm		A
5. Pitch stability exiting accelerated flight - 4.1.5							
Dive forward angle on exit		Dive forward less than 30°		A	Dive forward less than 30°		A
Collapse occurs		No		A	No		A
6. Pitch stability operating controls during accelerated flight - 4.1.6							
Collapse occurs		No		A	No		A
7. Roll stability and damping - 4.1.7							
Oscillations		Reducing		A	Reducing		A
8. Stability in gentle spirals - 4.1.8							
Tendency to return to straight flight		Spontaneous exit		A	Spontaneous exit		A
9. Behaviour in a steeply banked turn - 4.1.9							
Sink rate after two turns		Up to 12m/s		A	12m/s to 14m/s		A
10. Symmetric front collapse - 4.1.10							
Entry	trim speed	Rocking back less than 45°		A	Rocking back less than 45°		A
Recovery		Spontaneous in less than 3 sec		A	Spontaneous in less than 3 sec		A
Dive forward angle on exit		0° - 30°	Keeping course	A	0° - 30°	Keeping course	A
Cascade occurs		No		A	No		A
Entry	accelerated	Rocking back less than 45°		A	Rocking back less than 45°		A
Recovery		Spontaneous in less than 3 sec		A	Spontaneous in less than 3 sec		A
Dive forward angle on exit		0° - 30°	Keeping course	A	0° - 30°	Keeping course	A
Cascade occurs		No		A	No		A
11. Exiting deep stall (parachutal stall) - 4.1.11							

Deep stall achieved	Yes			Yes					
Recovery	Spontaneous in less than 3 sec			A	Spontaneous in less than 3 sec			A	
Dive forward angle on exit	0° - 30°			A	0° - 30°			A	
Change of course	Changing course less than 45°			A	Changing course less than 45°			A	
Cascade occurs	No			A	No			A	
12. High angle of attack recovery - 4.1.12									
Recovery	Spontaneous in less than 3 sec			A	Spontaneous in less than 3 sec			A	
Cascade occurs	No			A	No			A	
13. Recovery from a developed full stall - 4.1.13									
Dive forward angle on exit	0° - 30°			A	0° - 30°			A	
Collapse	No collapse			A	No collapse			A	
Cascade occurs (other than collapse)	No			A	No			A	
Rocking backward	Less than 45°			A	Less than 45°			A	
Line tension	Most lines tight			A	Most lines tight			A	
14. Asymmetric collapse (trim speed) - 4.1.14									
Change of course until re-inflation	trim speed, max 50% collapse	< 90°	Dive or roll angle	0° - 15°	A	< 90°	Dive or roll angle	0° - 15°	A
Re-inflation behavior		Spontaneous re-inflation			A	Spontaneous re-inflation			A
Total change of course		Less than 360°			A	Less than 360°			A
Collapse on the opposite side occurs		No			A	No			A
Twist occurs		No			A	No			A
Cascade occurs	No			A	No			A	
Change of course until re-inflation	trim speed, max 75% collapse	< 90°	Dive or roll angle	15° - 45°	A	< 90°	Dive or roll angle	15° - 45°	A
Re-inflation behavior		Spontaneous re-inflation			A	Spontaneous re-inflation			A
Total change of course		Less than 360°			A	Less than 360°			A
Collapse on the opposite side occurs		No			A	No			A
Twist occurs		No			A	No			A
Cascade occurs	No			A	No			A	
Change of course until re-inflation	accelerated, max 50% collapse	< 90°	Dive or roll angle	0° - 15°	A	< 90°	Dive or roll angle	15° - 45°	A
Re-inflation behavior		Spontaneous re-inflation			A	Spontaneous re-inflation			A
Total change of course		Less than 360°			A	Less than 360°			A
Collapse on the opposite side occurs		No			A	No			A
Twist occurs		No			A	No			A
Cascade occurs	No			A	No			A	
Change of course until re-inflation	accelerated, max 75% collapse	< 90°	Dive or roll angle	15° - 45°	A	< 90°	Dive or roll angle	15° - 45°	A
Re-inflation behavior		Spontaneous re-inflation			A	Spontaneous re-inflation			A
Total change of course		Less than 360°			A	Less than 360°			A
Collapse on the opposite side occurs		No			A	No			A
Twist occurs		No			A	No			A
Cascade occurs	No			A	No			A	
15. Directional control with a maintained asymmetric collapse - 4.1.15									
Able to keep course straight	Yes			A	Yes			A	
180° turn away from the collapsed side possible in 10 sec	Yes			A	Yes			A	
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 - 4.1.16									
Spin occurs	No			A	No			A	
17. Low speed spin tendency - 4.1.17									
Spin occurs	No			A	No			A	
18. Recovery from a developed spin - 4.1.18									
Spin rotation angle after release	Stops spinning in less than 90°			A	Stops spinning in less than 90°			A	
Cascade occurs	No			A	No			A	
19. B-line-stall - 4.1.19									
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	
Recovery	Spontaneous in less than 3 sec			A	Spontaneous in less than 3 sec			A	
Dive forward angle on exit	0° - 30°			A	0° - 30°			A	
Cascade occurs	No			A	No			A	
20. Big ears - 4.1.20									
Entry procedure	Special device required			A	Special device required			A	
Behaviour during big ears	Stable flight			A	Stable flight			A	
Recovery	Spontaneous in less than 3 sec			A	Spontaneous in less than 3 sec			A	
Dive forward angle on exit	0° - 30°			A	0° bis 30°			A	
21. Big Ears in accelerated flight - 4.1.21									
Entry procedure	Special device required			A	Special device required			A	
Behaviour during big ears	Stable flight			A	Stable flight			A	
Recovery	Spontaneous in less than 3 sec			A	Spontaneous in less than 3 sec			A	
Dive forward angle on exit	0° - 30°			A	0° bis 30°			A	
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight			A	Stable flight			A	
22. Behaviour exiting a steep spiral - 4.1.22									

Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	Less than 720°, spontaneous recovery	A
23. Alternative means of directional control - 4.1.23				
180° turn achievable in 20 sec	Yes	A	Yes	A
Stall or spin occurs	No	A	No	A
24. Any other flight procedure and/or configuration described in the user's manual - 4.1.24				
Procedure works as described		NA		NA
Procedure suitable for novice pilots		NA		NA
Cascade occurs		NA		NA
25. Remarks of testpilot:				
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