FTR - Flight Test Report Dieser Prüfbericht darf ohne schriftliche Zustlimmung der EAPR nicht, auch nic

Manufacturer	independence gliders for read-pilots	Type testing No.	EAPR-GS-0801/18	
	Fly Market GmbH & Co.KG Am Schönebach 3 D-87637 Eisenberg	serial number	2k17-Sample-097	
Model	Grasshopper L	La cardina	Montafon	
		Location	Schlick, Fulpmes, Stubai	



Rev. 2.3 - 26.11.2014 EAPR GmbH - Marktstr. 11 D-87730 Bad Grönenbach - Germany

Date of testing	08.03.2018	Minimum take 90 k	~		Maximum take off weight 110 kg			
Testpilot		Pascal Purin		Anselm Rauh				
Harness		EAPR		EAPR schwer				
Pilot's take off weig	ht	90	kg	112	kg			

Classification



Test-criteria		Minimum take off weight	Evaluation	Maximum take off weight	Evaluation	
1. Inflation / take-off - 4.4.1						
Rising behavior		no pilot correction required	Α	no pilot correction required	А	
Special 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	A	Yes	A	
Speed range using the controls larger than 10km/	h	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			-		-	
Max. weight in flight greater than 100kg		Increasing >65 cm	Α	Increasing >65 cm	А	
5. Pitch stability exiting accelerated flight - 4.	4.5			<u> </u>		
Dive forward angle on exit		Dive forward less than 30°	Α	Dive forward less than 30°	Α	
Collapse occurs		No	A	No	A	
6. Pitch stability operating controls during acc	elerated	flight - 4.4.6				
Collapse occurs		No	Α	No	Α	
7. Roll stability and damping - 4.4.7		1	- /	1		
Oscillations		Reducing	l A	Reducing	I A	
8. Stability in gentle spirals - 4.4.8		Heducing		Heddeling		
Tendency to return to straight flight		Spontaneous exit	I A	Spontaneous exit		
, ,	44		А	Spontaneous exit	Α	
9. Behaviour exiting a fully developed spiral d	ive - 4.4.					
Initial response of glider (first 180°) Tendency to return to straight flight		Immediate reduction of rate in turn Spontaneous exit	A	Immediate reduction of rate in turn Spontaneous exit	A	
Turn angle to recover normal flight		Less than 720°, spontaneous recovery	A			
* *		Less than 720 , spontaneous recovery	A	Less than 720 , spontaneous recovery	Α	
10. Symmetric front collapse - 4.4.10						
Folding lines used		No		No Assault and the Assault and		
Entry	30%	Rocking back less than 45°	Α	Rocking back less than 45°	A	
Recovery	pac .	Spontaneous in less than 3 sec	Α	Spontaneous in less than 3 sec	Α	
Dive forward angle on exit	trim speed	0° - 30° Keeping course	Α	0° - 30° Keeping course	Α	
Cascade occurs		No	A	No	A	
Entry	> 20%	Rocking back less than 45°	Α	Rocking back less than 45°	Α	
Recovery	< paeds	Spontaneous in less than 3 sec	Α	Spontaneous in less than 3 sec	Α	
Dive forward angle on exit	frim sp	0° - 30° Keeping course	Α	0° - 30° Keeping course	Α	
Cascade occurs		No	Α	No	A	
Entry Recovery	1 > 50%	Rocking back less than 45° Spontaneous in less than 3 sec	A	Rocking back less than 45° Spontaneous in less than 3 sec	A	
•	erated >	•		•		
Dive forward angle on exit Cascade occurs	coele	0° - 30° Entering a turn of less than 90°	A	0° - 30° Keeping course	A	
	e -	INU	A	INU	A	
11. Exiting deep stall (parachutal stall) - 4.4.1	1	Yes		W		
Deep stall achieved	ep stall achieved			Yes		
Recovery		Spontaneous in less than 3 sec	Α	Spontaneous in less than 3 sec		
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	Α	No	Α	

Flight Test Report - Musterprüfnummer: EAPR-GS-0801/18 Seite 1 von 2

Note Properties Propertie	12. High angle of attack recovery - 4.4.12									
The Recovery control and everlaped in stant - AL-13 The Recovery control along on an and control and any on an and control any on an any on any			Spontaneous in less than 3 sec			Α	Spontaneous in less than 3 sec			Α
1.	·									
Colleges		NO				140				
Cancel as control ment on cologies of the part of the control of the cologies of the part of the cologies of										
March Marc										
1. Agents 1. A		Rocking backward								
Many manufactor behavior Amenifactor beha			Wost lines tight				Most lines tight			
Part			No				No			
No	Change of course until re-inflation	98	< 90° Dive or	roll angle	0° - 15°	Α	< 90°	Dive or roll angle	0° - 15°	Α
No	Re-inflation behavior	ed, ollap	Spontaneous re-inflation			Α	Spontaneous re	-inflation		Α
No	Total change of course	o %c	·				1			
No		trin ax 5								
Part A		Ε								
Canage of course until re inflation 200 20	Change of course until re-inflation	Θ	< 90° Dive or	roll angle	15° - 45°	Α	< 90°	Dive or roll angle	0° - 15°	Α
Canage of course until re inflation 200 20	Do inflation hobovier	id, Ilaps	Cooptopoous re inflation			Λ	Coortonoous ro	inflation		^
Canage of course until re inflation 200 20		oo % eeds	•				· ·			
Canage of course until re inflation 200 20		trim IX 75								
Charge of course until re-inflation		ma					No			
Sportaneous re-inflation A				ı						
No.	Change of course until re-inflation	Se	< 90° Dive or	roll angle	0° - 15°	Α	< 90°	Dive or roll angle	0° - 15°	Α
No.	Re-inflation behavior	ated, collap	Spontaneous re-inflation			A	Spontaneous re	-inflation		A
No.		celer 10% c								
No.		acı nax 5								
Pacification behavior		u u								
No A No No A No No No	Change of course until re-inflation	96	< 90° Dive or	roll angle	15° - 45°	Α	< 90°	Dive or roll angle	15° - 45°	Α
No A No No A No No No	Re-inflation behavior	ed,	Spontaneous re-inflation			Δ	Spontaneous re	inflation		Δ
No A No No A No No No		elerat % co	i '							
No A No No A No No No	Collapse on the opposite side occurs	a006 ax 75	No No			Α	No			A
15. Directional control with a maintained asymmetric colleges -4.4.15 Albie to keep course straight 180° furn away from the colleged side possible in 10 sec 180° furn away from the control stored in 10 sec 180° furn away from the control stored in 10 sec 180° furn away from the control stored in 10 sec 180° furn away from the control stored in 10 sec 180° furn away from the control stored in 10 sec 180° furn away from the control stored in 10 sec 180° furn away from the control stored in 10 sec 180° furn away from the control stored in 10 sec 180° furn away		Ĕ								
180° turn away from the collapsed side possible in 10 sec. Yes		metric co					110			
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 16. Trim speed spin tendency - 4.4.16 Spin cocurs No A No No	Able to keep course straight		Yes A			Α	Yes			Α
16. Frim speed spin tendency - 4.4.16 Spin occurs No A No No	180° turn away from the collapsed side possible in	n 10 sec	Yes A			Α	Yes			Α
Spin occurs	Amount of control range between turn and stall or	spin	More than 50% of the sy	mmetric co	ontrol travel	Α	More than 50%	of the symmetric	control travel	Α
Spin occurs	16. Trim speed spin tendency - 4.4.16									
Spin cocuse No A No A No A Stope spinning in less than 90° A Stope spinning in less than 90° A Stope spinning in less than 90° A No A N			No			Α	No			Α
18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Stops spinning in less than 90° A No A N										
Spin rotation angle after release Stops spinning in less than 90° A Stops spinning in less than 90° A No A No A No A No A No A 19.8-Inne-stall -4.4.19 Thine-stall -4.4.19 Change of course before release Changing course less than 45° A Changing course less than 45° A Changing course less than 45° A Remains stable with straight span A Remains stable stan 49° -30° A Special device required A Special device requir			No			А	No			А
Cascade occurs No A No A No A 19. B-line-stall - 4.4.19 The covery Capture of course less than 45° A Changing course less than 45° A Remains stable with straight span A Remains stable stan 3 sec A Remains			Stone enigning in lose th	an 90°		Λ	Stone eninning i	n loce than 90°		Λ
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 Recovery Spontaneous in less than 3 sec A Cascade occurs No			* * -							
Behaviour before release Remains stable with straight span A Recovery Spontaneous in less than 3 sec A Spontaneous in less than 3 sec A 0° - 30° A No A N			140				INO			
Recovery Spontaneous in less than 3 sec A Stable flight A St	Change of course before release		Changing course less that	an 45°		Α	Changing cours	e less than 45°		Α
Dive forward angle on exit 0°-30° A No A N	Behaviour before release		Remains stable with straight span			Α	Remains stable with straight span			Α
Dive forward angle on exit 0°-30° A No A N	Recovery		Spontaneous in less than 3 sec		Α	Spontaneous in less than 3 sec			Α	
Cascade occurs No A No A 20. Big ears - 4.4.20 Entry procedure Special device required A Special device required A Stable flight A Stable fl										
Entry procedure Special device required A Special device required A Stable flight A Spontaneous in less than 3 sec Behaviour during big ears Stable flight A Stable f	Cascade occurs									
Behaviour during big ears Stable flight A Stable flight A Spontaneous in less than 3 sec A O° bis 30° A 21. Big Ears in accelerated flight - 4.4.21 Entry procedure Special device required A Special device required A Stable flight	-									
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Dive forward angle on exit 0° - 30° A 0° bis 30° A 21. Big Ears in accelerated flight - 4.4.21 Entry procedure Special device required A Special device required A Stable flight 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 accelarator while maintaining big ears Stable flight A Stable flight A 23. Alternative means of directional control - 4.4.22 180° turn achievable in 20 sec Yes A Yes A Stall or spin occurs No A No A 23. Any other flight procedure and/or configuration described in the user's manual - 4.4.23 Procedure works as descibed NA NA Cascade occurs NA NA NA Cascade occurs NA NA NA 24. Remarks of testpilot:										
21. Big Ears in accelerated flight - 4.4.21 Entry procedure Special device required A Special device required A Stable flight	·									
Entry procedure Special device required A Special device required A Special device required A Sehaviour during big ears Stable flight A Stable flight A Stable flight A Stable flight A Spontaneous in less than 3 sec A Stable flight			0° - 30°			Α	0° bis 30°			Α
Behaviour during big ears Stable flight A Stable flight A Stable flight A Spontaneous in less than 3 sec A O° bis 30° A Behaviour immediately after releasing the accelarator while maintaining big ears Stable flight A S			Out of the total				0	and the state of		
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Behaviour immediately after releasing the accelarator while maintaining big ears Stable flight A Stable fl	•									
maintaining big ears 23. Alternative means of directional control - 4.4.22 180° turn achievable in 20 sec Yes A Yes A Yes A Yes A Stall or spin occurs No A No A 23. Any other flight procedure and/or configuration described in the user's manual - 4.4.23 Procedure works as descibed Procedure suitable for novice pilots NA Cascade occurs NA NA NA A 24. Remarks of testpilot:	Behaviour immediately after releasing the accelarator while									
180° turn achievable in 20 sec Yes A Yes A Stall or spin occurs No A No A 23. Any other flight procedure and/or configuration described in the user's manual - 4.4.23 Procedure works as descibed NA NA NA Procedure suitable for novice pilots NA NA NA Cascade occurs NA NA NA 24. Remarks of testpilot: NA NA NA	maintaining big ears		Stable Hight			A	Stable Hight			A
Stall or spin occurs No A No A 23. Any other flight procedure and/or configuration described in the user's manual - 4.4.23 Procedure works as descibed NA NA NA Procedure suitable for novice pilots NA NA Cascade occurs NA NA NA 24. Remarks of testpilot:		4.4.22								
23. Any other flight procedure and/or configuration described in the user's manual - 4.4.23 Procedure works as descibed Procedure suitable for novice pilots NA Cascade occurs NA NA NA A 24. Remarks of testpilot:										
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Procedure suitable for novice pilots NA		ation des	cribed in the user's mant	udl - 4.4.2		NA NA				NA
24. Remarks of testpilot:	Procedure suitable for novice pilots				NA				NA	
			<u> </u>			NA				NA NA

Flight Test Report - Musterprüfnummer: EAPR-GS-0801/18 Seite 2 von 2