


# FTR - Flight Test Report

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

Manufacturer	 Fly Market GmbH & Co.KG Am Schönebach 3 D-87637 Eisenberg	Type testing No.	EAPR-GS-0802/18
		serial number	2k17-Sample-084
Model	Grasshopper M	Location	Achensee
Comment	glider was tested with a crossline		Stubaital



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

Date of testing	05.02.2018	Minimum take off weight 80 kg		Maximum take off weight 100 kg	
Testpilot		Mike Küng		Pascal Purin	
Harness		EAPR-Testequipment		EAPR-schwer	
Pilot's take off weight		80 kg		100 kg	

Classification	A
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Test-criteria	Minimum take off weight	Evaluation	Maximum take off weight	Evaluation
<b>1. Inflation / take-off - 4.4.1</b>				
Rising behavior	Smooth, easy and constant rising, no pilot correction required	A	Smooth, easy and constant rising, no pilot correction required	A
Special take off technique required	No	A	No	A
<b>2. Landing - 4.4.2</b>				
Special landing technique required	No	A	No	A
<b>3. Speeds in straight flight - 4.4.3</b>				
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
<b>4. Control movement - 4.4.4</b>				
Max. weight in flight up to 80kg		-		-
Max. weight in flight 80 to 100kg	Increasing > 60cm	A	Increasing > 60cm	A
Max. weight in flight greater than 100kg		-		-
<b>5. Pitch stability exiting accelerated flight - 4.4.5</b>				
Dive forward angle on exit	Dive forward less than 30°	A	Dive forward less than 30°	A
Collapse occurs	No	A	No	A
<b>6. Pitch stability operating controls during accelerated flight - 4.4.6</b>				
Collapse occurs	No	A	No	A
<b>7. Roll stability and damping - 4.4.7</b>				
Oscillations	Reducing	A	Reducing	A
<b>8. Stability in gentle spirals - 4.4.8</b>				
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A
<b>9. Behaviour exiting a fully developed spiral dive - 4.4.9</b>				
Initial response of glider (first 180°)	Immediate reduction of rate in turn	A	Immediate reduction of rate in turn	A
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
<b>10. Symmetric front collapse - 4.4.10</b>				
Folding lines used	No		No	
Entry	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	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	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
<b>11. Exiting deep stall (parachutal stall) - 4.4.11</b>				
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

<b>12. High angle of attack recovery - 4.4.12</b>											
Recovery		Spontaneous in less than 3 sec			A		Spontaneous in less than 3 sec		A		
Cascade occurs		No			A		No		A		
<b>13. Recovery from a developed full stall - 4.4.13</b>											
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		
<b>14. Asymmetric collapse (trim speed) - 4.4.14</b>											
Folding lines used		No					No				
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	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		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	
<b>15. Directional control with a maintained asymmetric collapse - 4.4.15</b>											
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		
<b>16. Trim speed spin tendency - 4.4.16</b>											
Spin occurs		No			A		No		A		
<b>17. Low speed spin tendency - 4.4.17</b>											
Spin occurs		No			A		No		A		
<b>18. Recovery from a developed spin - 4.4.18</b>											
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		
<b>19. B-line-stall - 4.4.19</b>											
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		30° - 60°			A		0° - 30°		A		
Cascade occurs		No			A		No		A		
<b>20. Big ears - 4.4.20</b>											
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		
<b>21. Big Ears in accelerated flight - 4.4.21</b>											
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		
<b>23. Alternative means of directional control - 4.4.22</b>											
180° turn achievable in 20 sec		Yes			A		Yes		A		
Stall or spin occurs		No			A		No		A		
<b>23. Any other flight procedure and/or configuration described in the user's manual - 4.4.23</b>											
Procedure works as described					NA				NA		
Procedure suitable for novice pilots					NA				NA		
Cascade occurs					NA				NA		
<b>24. Remarks of testpilot:</b>											