



## Flight test report: EN 926-2:2013 & LTF 91/09

Manufacturer	<b>Ozone Gliders</b>	Certification number	PG_1110.2016
Address	2, Queens Drive LA46LN . UK	Date of flight test	27. 10. 2016
Glider model	<b>Zeno L</b>	<b>Classification</b>	<b>D</b>
Serial number	PR23-R-31A-006	Representative	Pierré Fred
Trimmer	no	Place of test	Villeneuve
Folding lines used	yes		
<b>Test pilot</b>		Thurnheer Claude	Zoller Alain
<b>Harness</b>		Niviuk - Hamak M	Gin Gliders - Gingo 2 L
<b>Harness to risers distance (cm)</b>		44	43
<b>Distance between risers (cm)</b>		46	46
<b>Total weight in flight (kg)</b>		105	125

<b>1. Inflation/Take-off</b>	<b>C</b>			
Rising behaviour	Overshoots, shall be slowed down to avoid a front collapse	C	Overshoots, shall be slowed down to avoid a front collapse	C
Special take off technique required	No	A	No	A
<b>2. Landing</b>	<b>A</b>			
Special landing technique required	No	A	No	A
<b>3. Speed in straight flight</b>	<b>B</b>			
Trim speed more than 30 km/h	Yes	A	Yes	A
Speed range using the controls larger than 10 km/h	Yes	A	Yes	A
Minimum speed	25 km/h to 30 km/h	B	25 km/h to 30 km/h	B
<b>4. Control movement</b>	<b>A</b>			
<b>Max. weight in flight up to 80 kg</b>				
Symmetric control pressure / travel	not available	0	not available	0
<b>Max. weight in flight 80 kg to 100 kg</b>				
Symmetric control pressure / travel	not available	0	not available	0
<b>Max. weight in flight greater than 100 kg</b>				
Symmetric control pressure / travel	Increasing / greater than 65 cm	A	Increasing / greater than 65 cm	A
<b>5. Pitch stability exiting accelerated flight</b>	<b>A</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</b>	<b>A</b>			
Collapse occurs	No	A	No	A
<b>7. Roll stability and damping</b>	<b>A</b>			
Oscillations	Reducing	A	Reducing	A
<b>8. Stability in gentle spirals</b>	<b>A</b>			
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A
<b>9. Behaviour exiting a fully developed spiral dive</b>	<b>C</b>			
Initial response of glider (first 180°)	Immediate increase in rate of turn	C	No immediate reaction	B
Tendency to return to straight flight	Spontaneous exit (g force decreasing, rate of turn decreasing)	A	Spontaneous exit (g force decreasing, rate of turn decreasing)	A

Turn angle to recover normal flight	1080° to 1440°, spontaneous recovery	C	1080° to 1440°, spontaneous recovery	C
<b>10. Symmetric front collapse</b>	<b>D</b>			
<b>Approximately 30 % chord</b>				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in less than 3 s	A	Recovery through pilot action in less than a further 3 s	D
Dive forward angle on exit Change of course	Dive forward 0° to 30° Keeping course	A	Dive forward 0° to 30° Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	Yes		Yes	
<b>At least 50% chord</b>				
Entry	Rocking back less than 45°	A	Rocking back greater than 45°	C
Recovery	Recovery through pilot action in less than a further 3 s	D	Recovery through pilot action in less than a further 3 s	D
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	Yes		Yes	
<b>With accelerator</b>				
Entry	Rocking back greater than 45°	C	Rocking back greater than 45°	C
Recovery	Recovery through pilot action in less than a further 3 s	D	Recovery through pilot action in less than a further 3 s	D
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	Yes		Yes	
<b>11. Exiting deep stall (parachutal stall)</b>	<b>A</b>			
Deep stall achieved	Yes	A	Yes	A
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 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</b>	<b>A</b>			
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Cascade occurs	No	A	No	A
<b>13. Recovery from a developed full stall</b>	<b>B</b>			
Dive forward angle on exit	Dive forward 30° to 60°	B	Dive forward 30° to 60°	B
Collapse	No collapse	A	No collapse	A
Cascade occurs (other than collapses)	No	A	No	A
Rocking back	Less than 45°	A	Less than 45°	A
Line tension	Most lines tight	A	Most lines tight	A
<b>14. Asymmetric collapse</b>	<b>C</b>			
<b>Small asymmetric collapse</b>				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°	A	Less than 90° / Dive or roll angle 0° to 15°	A
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	C	Inflates in less than 3 s from start of pilot action	C
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	Yes		Yes	
<b>Large asymmetric collapse</b>				

Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B	90° to 180° / Dive or roll angle 45° to 60°	C
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	C	Inflates in less than 3 s from start of pilot action	C
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	Yes		Yes	

**Small asymmetric collapse with fully activated accelerator**

Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°	A	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	C	Inflates in less than 3 s from start of pilot action	C
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	Yes		Yes	

**Large asymmetric collapse with fully activated accelerator**

Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 45° to 60°	C	90° to 180° / Dive or roll angle 45° to 60°	C
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	C	Inflates in less than 3 s from start of pilot action	C
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	Yes		Yes	

**15. Directional control with a maintained asymmetric collapse**

Able to keep course	Yes	A	Yes	A
180° turn away from the collapsed side possible in 10 s	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**

Spin occurs	No	A	No	A
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**17. Low speed spin tendency**

Spin occurs	No	A	No	A
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**18. Recovery from a developed spin**

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**

Change of course before release	not available	0	not available	0
Behaviour before release	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Cascade occurs	not available	0	not available	0

**20. Big ears**

Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Spontaneous in 3 s to 5 s	B	Spontaneous in 3 s to 5 s	B
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A

<b>21. Big ears in accelerated flight</b>	<b>C</b>			
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Unstable flight	C	Stable flight	A
Recovery	Spontaneous in 3 s to 5 s	A	Recovery through pilot action in less than a further 3 s	B
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	A
<b>22. Alternative means of directional control</b>	<b>A</b>			
180° turn achievable in 20 s	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</b>	<b>0</b>			
Procedure works as described	not available	0	not available	0
Procedure suitable for novice pilots	not available	0	not available	0
Cascade occurs	not available	0	not available	0
<b>24. Comments of test pilot</b>	<input type="checkbox"/>			
Comments				