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## Flight test report: EN



Manufacturer Address	<b>Ozone Gliders</b> 2, Queens Drive LA46LN . UK	Certification number Date of flight test	PG_0245.2009 22. 04. 2009
Representative Glider model Trimmer	Russell Ogden <b>Mojo 3 XL</b> no	Place of test Classification	Villeneuve <b>B</b>

-	Thurnheer Claude Niviuk Gliders - Hamak M 110		Zoller Alain Gin Gliders - Gingo 2 L 135	
1. Inflation/Take-off	A			
Rising behaviour	Smooth, easy and constant rising	А	Smooth, easy and constant rising	А
Special take off technique required	No	Α	No	A
2. Landing	A			
Special landing technique required	No	А	No	А
3. Speed in straight flight	Α			
Trim speed more than 30 km/h	Yes	А	Yes	А
Speed range using the controls larger than 10 km/h	Yes	А	Yes	А
Minimum speed	Less than 25 km/h	А	Less than 25 km/h	А
4. Control movement	А			
Max. weight in flight up to 80 kg				
Symmetric control pressure / travel	not available	0	not available	0
Max. weight in flight 80 kg to 100 kg				
Symmetric control pressure / travel	not available	0	not available	0
Max. weight in flight greater than 100 kg				
Symmetric control pressure / travel	Increasing / greater than 65 cm	А	Increasing / greater than 65 cm	А
5. Pitch stability exiting accelerated flight	Α			
Dive forward angle on exit	Dive forward less than 30°	А	Dive forward less than 30°	А
Collapse occurs	No	А	No	А
6. Pitch stability operating controls during accelerated flight	Α			
Collapse occurs	No	А	No	А
7. Roll stability and damping	Α			
Oscillations	Reducing	А	Reducing	А
8. Stability in gentle spirals	Α			
Tendency to return to straight flight	Spontaneous exit	А	Spontaneous exit	А
9. Behaviour in a steeply banked turn	В			
Sink rate after two turns	More than 14 m/s	В	More than 14 m/s	В
10. Symmetric front collapse	Α			
Entry	Rocking back less than $45^{\circ}$	А	Rocking back less than 45°	А
Recovery	Spontaneous in less than 3 s	А	Spontaneous in less than 3 s	А
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	А	No	А
With accelerator				
Entry	Rocking back less than 45°	А	Rocking back less than $45^{\circ}$	А
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A

Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	А	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	А	No	А
11. Exiting deep stall (parachutal stall)	Α			
Deep stall achieved	Yes	А	Yes	А
Recovery	Spontaneous in less than 3 s	А	Spontaneous in less than 3 s	А
Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 0° to 30°	А
Change of course	Changing course less than $45^{\circ}$	А	Changing course less than 45°	А
Cascade occurs	No	А	No	А
12. High angle of attack recovery	Α			
Recovery	Spontaneous in less than 3 s	А	Spontaneous in less than 3 s	А
Cascade occurs	No	А	No	А
13. Recovery from a developed full stall	Α			
Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 0° to 30°	А
Collapse	No collapse	А	No collapse	А
Cascade occurs (other than collapses)	No	А	No	А
Rocking back	Less than 45°	А	Less than 45°	А
Line tension	Most lines tight	А	Most lines tight	А
14. Asymmetric collapse	Α			
With 50% collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 0° to $15^{\circ}$	A	Less than 90° / Dive or roll angle 0° to 15° $$	A
Re-inflation behaviour	Spontaneous re-inflation	А	Spontaneous re-inflation	А
Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	No	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
With 75% collapse				
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	Spontaneous re-inflation	А	Spontaneous re-inflation	А
Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	No	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
With 50% collapse and accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle $15^{\circ}$ to $45^{\circ}$	A	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Spontaneous re-inflation	А	Spontaneous re-inflation	А
Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	No	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
With 75% collapse and accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle $15^{\circ}$ to $45^{\circ}$	A	Less than 90° / Dive or roll angle $15^{\circ}$ to $45^{\circ}$	A
Re-inflation behaviour	Spontaneous re-inflation	А	Spontaneous re-inflation	А
Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	No	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
15. Directional control with a maintained asymmetric collapse	Α			
Able to keep course	Yes	А	Yes	А
180° turn away from the collapsed side possible in 10 s	Yes	А	Yes	А
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

Spin occurs No A No A
17. Low speed spin tendency A
Spin occurs No A No A
18. Recovery from a developed spin A
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 A
Change of course before release Changing course less than 45° A Changing course less than 45° A
Behaviour before release     Remains stable with straight     A     Remains stable with straight span     A       span     span     A     Remains stable with straight span     A
Recovery Spontaneous in less than 3 s A Spontaneous in less than 3 s A
Dive forward angle on exitDive forward 0° to 30°ADive forward 0° to 30°A
Cascade occurs No A No A
20. Big ears A
Entry procedure Dedicated controls A Dedicated controls A
Behaviour during big ears   Stable flight   A   Stable flight   A
Recovery Spontaneous in less than 3 s A Spontaneous in less than 3 s A
Dive forward angle on exitDive forward 0° to 30°ADive forward 0° to 30°A
21. Big ears in accelerated flight A
Entry procedure Dedicated controls A Dedicated controls A
Behaviour during big ears Stable flight A Stable flight A
Recovery Spontaneous in less than 3 s A Spontaneous in less than 3 s A
Dive forward angle on exitDive forward 0° to 30°ADive forward 0° to 30°A
Behaviour immediately after releasing the accelerator while Stable flight A Stable flight A maintaining big ears
22. Behaviour exiting a steep spiral A
Tendency to return to straight flight   Spontaneous exit   A   Spontaneous exit   A
Turn angle to recover normal flightLess than 720°, spontaneous recoveryALess than 720°, spontaneous recoveryA
Sink rate when evaluating spiral stability [m/s] 15 20
23. Alternative means of directional control A
180° turn achievable in 20 sYesAYesA
Stall or spin occurs No A No A
24. Any other flight procedure and/or configuration 0 described in the user's manual
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
25. Comments of test pilot
Comments