Air Turquoise SA Rte du Pré-au-Comte 8 | CH-1844 Villeneuve tel. +41 21 965 65 65 | mobile +41 79 202 52 30 info@para-test.com

Villeneuve

AIR TURQUOISE SA certified by

Flight test report: EN

Fred Pierri



Manufacturer Ozone Gliders Certification number PG_0763.2013
Address 2, Queens Drive Date of flight test 27. 09. 2013
LA46LN .
UK

Place of test

Glider model BuzzPWR XL Classification B

Trimmer no

Representative

Test pilot	Thurnheer Claude		Zoller Alain	
Harness	Gin Gliders - Gingo 2 L		Gin Gliders - Gingo 2 L	
Total weight in flight (kg)	110		130	
1. Inflation/Take-off	A			
Rising behaviour	Smooth, easy and constant rising	Α	Smooth, easy and constant rising	Α
Special take off technique required	No	Α	No	Α
2. Landing	A			
Special landing technique required	No	Α	No	Α
3. Speed in straight flight	A			
Trim speed more than 30 km/h	Yes	Α	Yes	Α
Speed range using the controls larger than 10 km/h	Yes	Α	Yes	Α
Minimum speed	Less than 25 km/h	Α	Less than 25 km/h	Α
4. Control movement	A			
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	Α	Increasing / greater than 65 cm	Α
5. Pitch stability exiting accelerated flight	A			
Dive forward angle on exit	Dive forward less than 30°	Α	Dive forward less than 30°	Α
Collapse occurs	No	Α	No	Α
6. Pitch stability operating controls during accelerated flight	Α			
Collapse occurs	No	Α	No	Α
7. Roll stability and damping	A			
Oscillations	Reducing	Α	Reducing	Α
8. Stability in gentle spirals	A			
Tendency to return to straight flight	Spontaneous exit	Α	Spontaneous exit	Α
9. Behaviour in a steeply banked turn	A			
Sink rate after two turns	12 m/s to 14 m/s	Α	12 m/s to 14 m/s	Α
10. Symmetric front collapse	A			
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	Α	Dive forward 0° to 30° / Keeping course	Α
Cascade occurs	No	Α	No	Α
With accelerator				
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α

	Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	Α	Dive forward 0° to 30° / Keeping course	Α
Deep stall achieved	Cascade occurs	No	Α	No	Α
Recovery Dive forward 0" to 30" A Dive forward 0" to 30" Dive forward 0" to 30" A Dive forward 0" to 30" Dive forward 0" to 10" Dive forward 0" to 10" Dive forward 0" to 10" Dive forward 0	11. Exiting deep stall (parachutal stall)	A			
Dive forward of 19 a001	Deep stall achieved	Yes	Α	Yes	Α
Dive forward of 19 a001	Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Changing course (course) Changing course less than 45" A base (ascade occurs) A base (ascade	Dive forward angle on exit		Α		Α
Cascade occurs No A No A 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 2. 1. 2. 1. 2. 1. 2. 1. 1. 2. 1. 1. 2. 1. 2. 1. 1. 2. 1. 2. 1. 1. 3. 1. 3. 1.		Changing course less than 45°	Α	Changing course less than 45°	Α
Name					
Recovery Spontaneous in less than 3 s A Spontaneous in less than 3 s A Cascade occurs No A No A 21. Recovery from a developed full stall A Dive forward angle on exit Dive forward 0°t to 30° A No Collapse A No A No A Recovering during of the stant of the					
Casacade occurs No A No A 13. Recovery from a developed full stall A 10. bive forward only one and eveloped full stall A Collapse No collapse A No collapse A Collapse No No A No collapse A Rocking back Less than 45" A Less than 45" A Line tension Most lines tight A Less than 45" A La Asymmetric collapse B With 50% collapse B Change of course until re-inflation / Maximum dive forward of or largie Less than 90" / Dive or roll angle of 01 to 15" A Less than 90" / Dive or roll angle of 10 to 15" A Re-inflation behaviour Less than 300" A No A No A Calcacade occurs No A No A No A Callage on the opposite side occurs No A No A Less than 90" / Dive or roll angle of 15" to 45" A Less than 90" / Dive or roll angle of 15" to 45" A Less than 90" / Dive or roll an			Α	Spontaneous in less than 3 s	Α
10 Necessary from a developed full stall Dive forward on the 30° A Dive forward on 10° 10° 30° A Dive forward on 10° 10° 30° A Dive forward on 10° 10° 30° A Caccade occurs (other than collapses) No No A No No A No A No A Dive forward on 10° 30° A Dive forward on 10° 30° 30° A Dive forward on 10° 30° A Dive forward on 10° 30° 30° A Dive forward on 10° 30° 30° A Dive forward on 10° 30° 30° 30° A Dive forward on 10° 30° 30° 30° 30° 30° 30° 30° 30° 30° 3	•	·		•	
Dive forward angle on exit			- `		,,
Collapse Course (other than collapses) No collapses A No collapses A No collapses A Cascade occurs (other than collapses) No Cascade occurs (other than collapses) No Cascade occurs (other than collapses) A Less than 45° A Less than 45° A Last than 45° </td <td></td> <td></td> <td>Δ</td> <td>Dive forward 0° to 30°</td> <td>Δ</td>			Δ	Dive forward 0° to 30°	Δ
Cascade occurs (other than collapses) No Less than 45° A Less than 45° A Less than 45° A A Rocking back Less than 45° A Less than 45° A Less than 50° A 14. Asymmetric collapse B With 50% collapse Change of course until re-inflation / Maximum dive forward or roll angle of ourse Less than 360° A Less than 360° / Dive or roll angle of 15° A Less than 360° / Dive or roll angle of 200 / Dive or ro	The state of the s				
Rocking back					
Line tension Most lines tight A. Asymmetric collapse A. Asymmetric collapse A. Asymmetric collapse Change of course until re-inflation / Maximum dive forward or langle of langle Ches than 90° / Dive or roll angle of to 15° or 15°					
Asymmetric collapse B With 50% collapse Cleas than 90° / Dive or roll angle of 15°					
With 50% collapse Auth 50% collapse Class than 90° / Dive or roll angle of course until re-inflation / Maximum dive forward or lot 16° Less than 90° / Dive or roll angle of 16° A Less than 360° Less than 360° A Spontaneous re-inflation A Spontaneous re-inflation A Spontaneous re-inflation A Rocal or Course A Rocal or Course or Rocal or Course A Rocal or		•	А	Most lines tight	А
Change of course until re-inflation / Maximum dive forward or for langle of course (Re-inflation behaviour) Less than 90° / Dive or roll angle of 50° 15° 15° A both of 50° 15° Less than 90° / Dive or roll angle of 50° 15° A both of 50° 15°<		В			
roll angle 0° to 15° to 15° to 15° Re-inflation behaviour Spontaneous re-inflation A Spontaneous re-inflation A Total change of course Less than 360° A No A Collapse on the opposite side occurs No A No A Cascade occurs No A No A With 75% collapse V V No A Less than 90° / Dive or roll angle 15° to 45° A Less than 90° / Dive or roll angle 15° to 45° A Less than 90° / Dive or roll angle 15° to 45° A Less than 360° A No A A No A No A A No A Less than 360° A	•	Lasa than 200 / Division and I ample		Lasa da ara 000 / Dissa annall annala 00	
Re-inflation behaviour Total change of course Less than 360° No			А		А
Total change of course	<u> </u>		Α		Α
Collapse on the opposite side occurs No		•		•	
Twist occurs No A No A Cascade occurs No A No A 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 Less than 90° / Dive or roll angle 15° to 45° A Less than 90° / Dive or roll angle 15° to 45° A Less than 360° A Less than 360° A Less than 360° A Less than 360° A No A Vo Cascade occurs A No A Vo Cascade occurs A No A Less than 360° A No A No A No	-				
Cascade occurs No A No A With 75% collapse With 75% collapse Change of course until re-inflation / Maximum dive forward or langle of langle of course until re-inflation / Maximum dive forward or langle and langle of course 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 A Spontaneous re-inflation A Spontaneous re-inflation A Collapse on the opposite side occurs No A No No A Cascade occurs No A No A Cascade occurs No A No A Change of course until re-inflation / Maximum dive forward or orll angle 15° to 45° A Less than 90° / Dive or roll angle 15° to 45° A Re-inflation behaviour Spontaneous re-inflation A Less than 90° / Dive or roll angle 15° to 45° A Collapse on the opposite side occurs No A No No A Vibit 57% collapse and accelerator Less than 360° A No No A Change of course					
With 75% collapse Less than 90° / Dive or roll angle of course until re-inflation / Maximum dive forward or langle of 15° to 45° Less than 90° / Dive or roll angle for 45° to 45° A Less than 90° / Dive or roll angle for 45° to 45° A Less than 360° / Dive or roll angle for 45° to 45° A Spontaneous re-inflation A Spontaneous re-inflation A Spontaneous re-inflation A Less than 360°					
Change of course until re-inflation / Maximum dive forward or roll angle not roll angle 15" to 45" 15" to 45". A Less than 90" / Dive or roll angle 15" to 45" 15" to 45" 15" to 45". A Spontaneous re-inflation A No A No<		140	^	140	^
roll angle 15° to 45° 15° to 45° 15° to 45° Re-inflation behaviour Spontaneous re-inflation A Spontaneous re-inflation A Total change of course Less than 360° A No A Collapse on the opposite side occurs No A No A Twist occurs No A No A Cascade occurs No A No A Cascade occurs No A No A With 50% collapse and accelerator Less than 90° / Dive or roll angle of course until re-inflation / Maximum dive forward or labely of the spontaneous re-inflation A Less than 90° / Dive or roll angle 0° A Re-inflation behaviour Spontaneous re-inflation A No A Less than 360° A Collapse on the opposite side occurs No A No A No A Cascade occurs No A No A No A Cascade occurs No A No A No A	•	Loop than 00° / Divo or roll angle	٨	Loop than 00° / Divo or roll angle	۸
Total change of course Less than 360° A Less than 360° A No Collapse on the opposite side occurs No No No A No A No Cascade occurs No No No A No A No A No A No Cascade occurs Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° Re-inflation behaviour Change of course No Cascade occurs No No A Less than 90° / Dive or roll angle 15° to 45° Re-inflation behaviour Change of course No Collapse and accelerator Change of course No No A No A No Cascade occurs No No No A No Cascade occurs Change of course until re-inflation / Maximum dive forward or poll angle 15° to 45° Re-inflation behaviour Change of course until re-inflation / Maximum dive forward or poll angle 15° to 45° Collapse on the opposite side occurs No No Cascade occurs No No Cascade occurs No No Cascade occurs No No Cascade occurs No No A No Cascade occurs No No A No Cascade occurs No No A No A No Cascade occurs No No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No Cascade occurs No No A No A No A No A No Cascade occurs No No A N			А	15° to 45°	А
Collapse on the opposite side occurs No	Re-inflation behaviour	•	Α	Spontaneous re-inflation	Α
Twist occurs No No A No Mith 50% collapse and accelerator Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° A Less than 90° / Dive or roll angle 15° to 45° A Less than 90° / Dive or roll angle 15° to 45° A Less than 90° / Dive or roll angle 15° to 45° A Less than 90° / Dive or roll angle 15° to 45° A Less than 90° / Dive or roll angle 15° to 45° A Less than 90° / Dive or roll angle 15° to 45° A Less than 360° A No A N	-	Less than 360°	Α	Less than 360°	Α
Cascade occurs No A No A With 50% collapse and accelerator 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 Spontaneous re-inflation A Less than 360° A Less than 360° A Collapse on the opposite side occurs No A No A Cascade occurs No A No A With 75% collapse and accelerator Less than 90° / Dive or roll angle 15° to 45° B Re-inflation behaviour Less than 90° / Dive or roll angle 15° to 45° B Re-inflation behaviour Spontaneous re-inflation A Spontaneous re-inflation A Collapse on the opposite side occurs Less than 360° A Less than 360° B Total change of course Less than 360° 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 Collapse on the opposite side occurs No A No A Cascade occurs No A No A Cascade occurs No A No A	Collapse on the opposite side occurs	No	Α	No	Α
With 50% collapse and accelerator Change of course until re-inflation / Maximum dive forward or roll angle angle Less than 90° / Dive or roll angle 15° to 45° A Less than 90° / Dive or roll angle 0° to 15° A Less than 90° / Dive or roll angle 0° to 15° A Less than 90° / Dive or roll angle 0° to 15° A Spontaneous re-inflation A Spontaneous re-inflation A Less than 360° A Less than 360° A Less than 360° A Less than 360° A No A	Twist occurs	No	Α	No	Α
Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° / Dive or roll angle 0° to 15° / Spontaneous re-inflation 25° to 45° / Spontaneous re-inflation 25° to 45° / Spontaneous re-inflation 25° to 15° / Spontaneous re-inflation 25° / Spontaneous re-in	Cascade occurs	No	Α	No	Α
roll angle 15° to 45° to 45° to 15° Re-inflation behaviour Spontaneous re-inflation A No A	With 50% collapse and accelerator				
Total change of course Less than 360° A Less than 360° A Collapse on the opposite side occurs No No A Twist occurs No No A Cascade occurs No No A With 75% collapse and accelerator Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation A Collapse on the opposite side occurs No Cascade occurs No A Collapse A Collapse A Collapse A Collapse A Collapse A No A No A No A No A A No A A No A A A A	•		Α		Α
Collapse on the opposite side occurs No No A No A No No A No A No Cascade occurs No No A	Re-inflation behaviour	Spontaneous re-inflation	Α	Spontaneous re-inflation	Α
Twist occurs No No A No No A No A No A No A Cascade occurs No With 75% collapse and accelerator Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° Re-inflation behaviour Total change of course Less than 90° / Dive or roll angle 15° to 45° Re-inflation behaviour Total change of course Less than 360° A Less than 360° A Less than 360° A Less than 360° A Collapse on the opposite side occurs No No A No A Twist occurs No No A Total change of course No A Total change of course No A Twist occurs No A Twist occurs No A Twist occurs No A Twist occurs No A Total change of course No A Twist occurs No A No A No A Twist occurs A No A No A Twist occurs A No A Twist occurs A No A No A No A Twist occurs A No A Twist occurs A No A No A No A Twist occurs A No Twist occurs A No A Twist occurs A No A No A Twist occurs A No A No A Twist occurs A No A No A No A Twist occurs A No A No A Twist occurs A No A No A No A Twist occurs A No A Twist occurs A No A No A No A Twist occurs A Twist occurs A No A No A Twist occurs A No A No A Twist occurs A Twist occurs A Twist occurs A No A Twist occurs A T	Total change of course	Less than 360°	Α	Less than 360°	Α
Cascade occurs With 75% collapse and accelerator Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation A Spontaneous re-inflation A Spontaneous re-inflation A Spontaneous re-inflation A Collapse on the opposite side occurs No No A No Cascade occurs No No A No 15. Directional control with a maintained asymmetric collapse Able to keep course Yes A Yes A More than 50 % of the symmetric	Collapse on the opposite side occurs	No	Α	No	Α
With 75% collapse and accelerator Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation A Spontaneous re-inflation A Spontaneous re-inflation A Collapse on the opposite side occurs No No A No Cascade occurs No A No A No A No A Scacede occurs A No Total change of course Collapse on the opposite side occurs No A No	Twist occurs	No	Α	No	Α
Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Spontaneous re-inflation A Spontaneous re-inflation A Spontaneous re-inflation A Spontaneous re-inflation A Collapse on the opposite side occurs No No No A No Cascade occurs No No A No	Cascade occurs	No	Α	No	Α
roll angle 15° to 45° to 45° to 45° Re-inflation behaviour Spontaneous re-inflation A Spontaneous re-inflation A Collapse on the opposite side occurs No A No A No A Cascade occurs No A No A No A Cascade occurs No A No	With 75% collapse and accelerator				
Re-inflation behaviour Spontaneous re-inflation A Spontaneous re-inflation A Less than 360° A Less than 360° A Less than 360° A Collapse on the opposite side occurs No A			Α		В
Total change of course Less than 360° A Less than 360° A No A No A No A No Cascade occurs No No A No A No A No A No A No A Scade occurs No A No	-		Α	Spontaneous re-inflation	Α
Collapse on the opposite side occurs No A No A No A No A No A No A Cascade occurs No A No A No A No A Twist occurs No A No		•		•	
Twist occurs No A No	-				
Cascade occurs No A 15. Directional control with a maintained asymmetric collapse Able to keep course Yes A 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin No A No A Yes A Yes A More than 50 % of the symmetric A					
15. Directional control with a maintained asymmetric collapse A Able to keep course Yes A A Yes A 180° turn away from the collapsed side possible in 10 s Yes A Amount of control range between turn and stall or spin More than 50 % of the A More than 50 % of the symmetric A					
collapseAble to keep courseYesAYesA180° turn away from the collapsed side possible in 10 sYesAYesAAmount of control range between turn and stall or spinMore than 50 % of theAMore than 50 % of the symmetricA			^	INO	^
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 A More than 50 % of the symmetric A					
180° turn away from the collapsed side possible in 10 s Yes A Yes A More than 50 % of the symmetric A	Able to keep course	Yes	Α	Yes	Α
Amount of control range between turn and stall or spin More than 50 % of the A More than 50 % of the symmetric A	180° turn away from the collapsed side possible in 10 s	Yes	Α	Yes	Α
		More than 50 % of the	Α	More than 50 % of the symmetric	Α
		symmetric control travel		control travel	

16. Trim speed spin tendency	A			
Spin occurs	No	Α	No	Α
17. Low speed spin tendency	A			
Spin occurs	No	Α	No	Α
18. Recovery from a developed spin	Α			
Spin rotation angle after release	Stops spinning in less than 90°	Α	Stops spinning in less than 90°	Α
Cascade occurs	No	Α	No	Α
19. B-line stall	A			
Change of course before release	Changing course less than 45°	Α	Changing course less than 45°	Α
Behaviour before release	Remains stable with straight span	Α	Remains stable with straight span	Α
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
Cascade occurs	No	Α	No	Α
20. Big ears	Α			
Entry procedure	Dedicated controls	Α	Dedicated controls	Α
Behaviour during big ears	Stable flight	Α	Stable flight	Α
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
21. Big ears in accelerated flight	A			
Entry procedure	Dedicated controls	Α	Dedicated controls	Α
Behaviour during big ears	Stable flight	Α	Stable flight	Α
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	Α	Stable flight	Α
22. Behaviour exiting a steep spiral	A			
Tendency to return to straight flight	Spontaneous exit	Α	Spontaneous exit	Α
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	Α	Less than 720°, spontaneous recovery	Α
Sink rate when evaluating spiral stability [m/s]	18		14	
23. Alternative means of directional control	A			
180° turn achievable in 20 s	Yes	Α	Yes	Α
Stall or spin occurs	No	Α	No	Α
24. Any other flight procedure and/or configuration described in the user's manual	0			
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				