## AIR TURQUOISE SA | PARA-TEST.COM

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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



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

Manufacturer	Axis Paragliding	Certification number	F	PG_1505.2019			
	• •			—			
Address Nove Sady 39 602 00 Brno Czech Republic		Flight test		01.05.2019			
Glider model	Pluto 4 M	Classification	A				
Serial number	15900403M	Representative	F	Radek			
Trimmer	no	Place of test		/illeneuve			
Folding lines used	no		·				
Test pilot		Claude Thurnheer	A	lain Zoller			
Harness		Supair - Altiplume M	C	Gin Gliders - Gingo 2 L			
Harness to risers distance (cm)		43		43			
Distance between risers (cm)		40					
				46			
Total weight in fligh	nt (kg)	75	1	00			
1. Inflation/Take-off		Α					
Rising behaviour		Smooth, easy and constant rising	А	Smooth, easy and constant rising	А		
Special take off technique required		No	А	No	А		
2. Landing		Α					
Special landing technique required		No	А	No	А		
3. Speed in straight fligh	nt	Α					
Trim speed more than 30		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		Α					
Max. weight in flight up							
Symmetric control pressure / travel		Increasing / greater than 55 cm	A	not available	0		
Max. weight in flight 80	• •						
Symmetric control pressu		not available	0	Increasing / greater than 60 cm	A		
Max. weight in flight greater than 100 kg			•		•		
Symmetric control pressu		not available	0	not available	0		
5. Pitch stability exiting accelerated flight		A Dive featured loss than 20%	^	Dive ferward less than 20°	•		
Dive forward angle on exit		Dive forward less than 30°		Dive forward less than 30°	A		
Collapse occurs 6 Pitch stability operati	ng controls during accelerated	No A	A	No	A		
flight	ng controls during accelerated	2					
Collapse occurs		No	А	No	А		
7. Roll stability and damping		Α					
Oscillations		Reducing	A	Reducing	A		
8. Stability in gentle spirals		Α					
Tendency to return to straight flight		Spontaneous exit	A	Spontaneous exit	A		
9. Behaviour exiting a fully developed spiral dive		<b>A</b>					
Initial response of glider (first 180°) Tendency to return to straight flight		Immediate reduction of rate of turn Spontaneous exit (g force decreasing, rate of turn decreasing)	A A	Immediate reduction of rate of turn Spontaneous exit (g force decreasing, rate of turn decreasing)	A A		
Turn angle to recover normal flight		Less than 720°, spontaneous recovery	A	Less than 720°, spontaneous recovery	A		
10. Symmetric front coll Approximately 30 % cho	•	A					
Entry		Rocking back less than 45°	А	Rocking back less than 45°	А		
Recovery		Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A		
					~		

At least 50% chord Entry	Rocking back less than 45°	А	Rocking back less than 45°	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	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	А	No	А
Folding lines used	No		No	
With accelerator				
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
Folding lines used	No		No	
11. Exiting deep stall (parachutal stall)	Α			
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	А	No	A
12. High angle of attack recovery Recovery	A Spontaneous in less than 3 s	А	Spontaneous in less than 3 s	А
Cascade occurs	No	A	No	A
13. Recovery from a developed full stall	A	,,		
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
Deal/ing heal/	Less than 45°	А	Less than 45°	А
Rocking back				
Rocking back Line tension	Most lines tight	А	Most lines tight	А
0		A	Most lines tight	A
Line tension	Most lines tight	A	Most lines tight	A
Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle	Most lines tight A Less than 90° / Dive or roll angle 0° to 15°		Most lines tight Less than 90° / Dive or roll angle 0° to 15°	A
Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour	Most lines tight A Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation	A	Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation	A A
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Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
Folding lines used	No		No	
Large 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 $15^\circ$ 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 (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
Folding lines used	No		No	
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
16. Trim speed spin tendency	Α			
Spin occurs	No	А	No	А
17. Low speed spin tendency	Α			
Spin occurs	No	А	No	А
18. Recovery from a developed spin	Α			
Spin rotation angle after release	Stops spinning in less than $90^\circ$	А	Stops spinning in less than 90°	А
Cascade occurs	No	А	No	А
19. B-line stall	Α			
Change of course before release	Changing course less than 45°	А	Changing course less than 45°	А
Behaviour before release	Remains stable with straight span	А	Remains stable with straight span	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
Cascade occurs	No	А	No	А
20. Big ears	Α			
Entry procedure	Dedicated controls	А	Dedicated controls	А
Behaviour during big ears	Stable flight	А	Stable flight	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
21. Big ears in accelerated flight	Α			
Entry procedure	Dedicated controls	А	Dedicated controls	А
Behaviour during big ears	Stable flight	А	Stable flight	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
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	A
22. Alternative means of directional control	Α			
180° turn achievable in 20 s	Yes	А	Yes	А
Stall or spin occurs	No	А	No	А
23. 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 works as described	not available			
Procedure suitable for novice pilots	not available	0	not available	0

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