AIR TURQUOISE SA | PARA-TEST.COM

Route du Pré-au-Comte 8 🔺 CH-1844 Villeneuve 🔺 +41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



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

Manufacturer ParAAvis Co. Address 17A/2 st.lskry 129344 Moscow Russia		Certification number	F	PG_1297.2018			
		Flight test		31.01.2018			
Glider model	Joy 3 M	Classification	A	1			
Serial number	J-5110	Representative	None				
Trimmer	no	Place of test		/illeneuve			
Folding lines used	no	riace or test	v	meneuve			
I olding lines used	110						
Test pilot		Claude Thurnheer	A	lain Zoller			
Harness		Niviuk - Hamak M	C	Gin Gliders - Gingo 2 L			
Harness to risers distance (cm)		44		43			
Distance between risers (cm)		44		46			
							Total weight in fligh
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		Α					
Special landing technique required		No	Α	No	Α		
3. Speed in straight fligh	nt	Α					
Trim speed more than 30 km/h		Yes	Α	Yes	Α		
Speed range using the co	ntrols 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		Α					
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 pressu	re / travel	Increasing / greater than 60 cm	Α	not available	0		
Max. weight in flight gre	ater than 100 kg						
Symmetric control pressu	re / travel	not available	0	Increasing / greater than 65 cm	Α		
5. Pitch stability exiting	accelerated flight	Α					
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 operation flight	ng controls during accelerated	Α					
Collapse occurs		No	Α	No	Α		
7. Roll stability and dam	ping	Α					
Oscillations		Reducing	Α	Reducing	Α		
8. Stability in gentle spirals		Α					
Tendency to return to straight flight		Spontaneous exit	Α	Spontaneous exit	Α		
	Illy developed spiral dive	A					
Initial response of glider (1		Immediate reduction of rate of turn	A	Immediate reduction of rate of turn	A		
Tendency to return to straight flight		Spontaneous exit (g force decreasing, rate of turn decreasing)	Α	Spontaneous exit (g force decreasing, rate of turn decreasing)	Α		
Turn angle to recover nor	mal flight	Less than 720°, spontaneous recovery	Α	Less than 720°, spontaneous recovery	Α		
10. Symmetric front coll	apse	Α					
Approximately 30 % chord		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
Folding lines used	No		No	
At least 50% chord				
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
Folding lines used	No		No	
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
Cascade occurs	No	Α	No	Α
Folding lines used	No		No	
11. Exiting deep stall (parachutal stall)	A			
Deep stall achieved	Yes	Α	Yes	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
Change of course	Changing course less than 45°	Α	Changing course less than 45°	Α
Cascade occurs	No	Α	No	Α
12. High angle of attack recovery	A			
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Cascade occurs	No	Α	No	Α
13. Recovery from a developed full stall	A			
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
Collapse	No collapse	Α	No collapse	Α
Cascade occurs (other than collapses)	No	Α	No	Α
Rocking back	Less than 45°	Α	Less than 45°	Α
Line tension	Most lines tight	Α	Most lines tight	Α
14. Asymmetric collapse	A		-	
Small asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°	Α	Less than 90° / Dive or roll angle 0° to 15°	Α
Re-inflation behaviour	Spontaneous re-inflation	Α	Spontaneous re-inflation	Α
Total change of course	Less than 360°	Α	Less than 360°	Α
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	Α	No (or only a small number of collapsed cells with a spontaneous reinflation)	Α
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
Folding lines used	No		No	
Large asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°	Α	Less than 90° / Dive or roll angle 15° to 45°	Α
Re-inflation behaviour	Spontaneous re-inflation	Α	Spontaneous re-inflation	Α
Total change of course	Less than 360°	Α	Less than 360°	Α
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	Α	No (or only a small number of collapsed cells with a spontaneous reinflation)	Α
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
Folding lines used	No		No	
Small asymmetric collapse with fully activated accelerator				
		_	000 / D:	Λ.
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°	Α	Less than 90° / Dive or roll angle 0° to 15°	Α
		A		A

Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	Α	No (or only a small number of collapsed cells with a spontaneous reinflation)	Α
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
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° to 45°	Α	Less than 90° / Dive or roll angle 15° to 45°	Α
Re-inflation behaviour	Spontaneous re-inflation	Α	Spontaneous re-inflation	Α
Total change of course	Less than 360°	Α	Less than 360°	Α
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	Α	No (or only a small number of collapsed cells with a spontaneous reinflation)	Α
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
Folding lines used	No		No	
15. Directional control with a maintained asymmetric collapse	Α			
Able to keep course	Yes	Α	Yes	Α
180° turn away from the collapsed side possible in 10 s	Yes	Α	Yes	Α
Amount of control range between turn and stall or spin	More than 50 % of the symmetric control travel	Α	More than 50 % of the symmetric control travel	Α
16. Trim speed spin tendency	Α			
Spin occurs	No	Α	No	Α
17. Low speed spin tendency	Α			
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	Α			
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	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
21. Big ears in accelerated flight	A	- / \	Bive lorward of to co	,,
Entry procedure	Dedicated controls	Α	Dedicated controls	Α
Behaviour during big ears	Stable flight	Α	Stable flight	A
			Spontaneous in less than 3 s	
Recovery Dive forward angle on evit	Spontaneous in less than 3 s Dive forward 0° to 30°	Α	Dive forward 0° to 30°	A
Dive forward angle on exit Behaviour immediately after releasing the accelerator while	Stable flight	Α	Stable flight	A
maintaining big ears	, and the second	Α	Stable liight	Α
22. Alternative means of directional control	A		Vaa	
180° turn achievable in 20 s	Yes	A	Yes	A
Stall or spin occurs	No	Α	No	Α
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 suitable for novice pilots	not available	0	not available	0
Cascade occurs	not available	0	not available	0

24. Comments of test pilot