## 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	Sky Paragliders a.s.	Certification number	F	PG_1289.2018	
Address	Okruzní 39 73911 Frýdlant nad Ostravicí Czech Republic	Flight test	1	9.04.2018	
Glider model	Kudos XL	Classification	Е	•	
Serial number	2261-11-1510	Representative		lone	
Trimmer	no	Place of test	V	'illeneuve	
Folding lines used	no				
Test pilot		Alain Zoller	A	nselm Rauh	
Harness		Gin Gliders - Gingo 2 L	Α	va Sport - Acro 1 L	
Harness to risers di	istance (cm)	43	4	3	
	` '	44			
Distance between risers (cm)				48	
Total weight in fligh	it (Kg)	99	1	125	
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	t	A			
3. Speed in straight flight 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 t	to 80 kg				
Symmetric control pressure / travel		not available	0	not available	0
Max. weight in flight 80 kg to 100 kg					
Symmetric control pressur	re / travel	Increasing / greater than 60 cm	Α	not available	0
Max. weight in flight grea	ater than 100 kg				
Symmetric control pressure / travel		not available	0	Increasing / greater than 65 cm	Α
5. Pitch stability exiting a	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 operatir 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 spir	als	A			
Tendency to return to strain	ight flight	Spontaneous exit	Α	Spontaneous exit	Α
9. Behaviour exiting a fu	lly developed spiral dive	A			
Initial response of glider (f	irst 180°)	Immediate reduction of rate of turn	Α	Immediate reduction of rate of turn	Α
Tendency to return to strain	ight 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 norr	nal flight	Less than 720°, spontaneous recovery	Α	Less than 720°, spontaneous recovery	Α
10. Symmetric front colla	apse	A			
Approximately 30 % cho					
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	
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	, ,
	A			
11. Exiting deep stall (parachutal stall)		٨	Voc	^
Deep stall achieved	Yes	A	Yes	A
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	Α			
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	В			
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 30° to 60°	В
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	B	, ,	Woot most agric	7.
·	В			
Small asymmetric collapse	Land the are OO's / Discourage II are also		400° to 000° / Diverson well aware	
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°		180° to 360° / Dive or roll angle 0° to 15°	Α
Re-inflation behaviour	Spontaneous re-inflation	Α	Spontaneous re-inflation	
				A
Total change of course	Less than 360°	Α	Less than 360°	Α
Collapse on the opposite side occurs	Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation)	A A	Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation)	
	No (or only a small number of collapsed cells with a spontaneous		No (or only a small number of collapsed cells with a spontaneous	Α
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 A
Collapse on the opposite side occurs  Twist 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 A
Collapse on the opposite side occurs  Twist occurs  Cascade occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No	A	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No	A A
Collapse on the opposite side occurs  Twist occurs  Cascade occurs  Folding lines used	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No	A A A	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No	A A
Collapse on the opposite side occurs  Twist occurs  Cascade occurs  Folding lines used  Large asymmetric collapse  Change of course until re-inflation / Maximum dive forward or	No (or only a small number of collapsed cells with a spontaneous reinflation) No No No Less than 90° / Dive or roll angle	A A A	No (or only a small number of collapsed cells with a spontaneous reinflation) No No No No 90° to 180° / Dive or roll angle	A A A
Collapse on the opposite side occurs  Twist occurs Cascade occurs Folding lines used Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  Less than 90° / Dive or roll angle 15° to 45°	A A A	No (or only a small number of collapsed cells with a spontaneous reinflation) No No No 90° to 180° / Dive or roll angle 15° to 45°	A A A B
Collapse on the opposite side occurs  Twist occurs  Cascade occurs  Folding lines used  Large asymmetric collapse  Change of course until re-inflation / Maximum dive forward or roll angle  Re-inflation behaviour  Total change of course	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  Less than 90° / Dive or roll angle 15° to 45°  Spontaneous re-inflation Less than 360°	A A A A	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  90° to 180° / Dive or roll angle 15° to 45°  Spontaneous re-inflation Less than 360°	A A A B A
Collapse on the opposite side occurs  Twist occurs Cascade occurs Folding lines used Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  Less than 90° / Dive or roll angle 15° to 45°  Spontaneous re-inflation	A A A	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  90° to 180° / Dive or roll angle 15° to 45°  Spontaneous re-inflation	A A A B
Collapse on the opposite side occurs  Twist occurs  Cascade occurs  Folding lines used  Large asymmetric collapse  Change of course until re-inflation / Maximum dive forward or roll angle  Re-inflation behaviour  Total change of course	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  Less than 90° / Dive or roll angle 15° to 45°  Spontaneous re-inflation Less than 360°  No (or only a small number of collapsed cells with a spontaneous	A A A A	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  90° to 180° / Dive or roll angle 15° to 45°  Spontaneous re-inflation Less than 360°  No (or only a small number of collapsed cells with a spontaneous	A A A B A
Collapse on the opposite side occurs  Twist occurs  Cascade occurs  Folding lines used  Large asymmetric collapse  Change of course until re-inflation / Maximum dive forward or roll angle  Re-inflation behaviour  Total change of course  Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  Less than 90° / Dive or roll angle 15° to 45°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)	A A A A A	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  90° to 180° / Dive or roll angle 15° to 45°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)	A A A B A A
Collapse on the opposite side occurs  Twist occurs Cascade occurs Folding lines used Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs  Twist occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  Less than 90° / Dive or roll angle 15° to 45°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No	A A A A A A	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  90° to 180° / Dive or roll angle 15° to 45°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No	A A A B A A A
Collapse on the opposite side occurs  Twist occurs Cascade occurs Folding lines used Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs  Twist occurs Cascade occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  Less than 90° / Dive or roll angle 15° to 45°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No	A A A A A A	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  90° to 180° / Dive or roll angle 15° to 45°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No	A A A B A A A
Collapse on the opposite side occurs  Twist occurs Cascade occurs Folding lines used Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs  Twist occurs Cascade occurs Folding lines used	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  Less than 90° / Dive or roll angle 15° to 45°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No	A A A A A A	No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  90° to 180° / Dive or roll angle 15° to 45°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No	A A A A A A A

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 with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	В	90° to 180° / Dive or roll angle 15° to 45°	В
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	A			
collapse				
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	A			
Spin occurs	No	Α	No	Α
18. Recovery from a developed spin	A			
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	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			
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. Alternative means of directional control	Α			
180° turn achievable in 20 s	Yes	Α	Yes	Α
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