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

AIR TURQUOISE SA certified by

Flight test report: EN

ISO 9001
BUREAU VERITAS
Certification

Manufacturer **Sky Paragliders a.s.** Certification number PG_0846.2013 Address Okružní 39 Date of flight test 19. 11. 2013

73911 Frýdlant nad Ostravicí

Czech Républic

Representative None Place of test Villeneuve

Glider model Argos M-L Classification C

Trimmer no

Test pilot	Thurnheer Claude		Zoller Alain	
•	Sky Paragliders - Skywish		Sup'Air - Altiplume M	
Total weight in flight (kg)			100	
1. Inflation/Take-off	A		100	
Rising behaviour	Smooth, easy and constant rising	Δ	Smooth, easy and constant rising	Α
Special take off technique required	No	Α		Α
2. Landing	A	,,	110	, ,
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	Increasing / greater than 60 cm	Α	Increasing / greater than 60 cm	Α
Max. weight in flight greater than 100 kg	5 5		0 0	
Symmetric control pressure / travel	not available	0	not available	0
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	Α			
Tendency to return to straight flight	Spontaneous exit	Α	Spontaneous exit	Α
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	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	11. Exiting deep stall (parachutal stall)	A			
Dive forward only en exist Dive forward 0° to 30° A Change of course Change of course A Change of course A No A A A No A A A A No A A A A A A A A A	Deep stall achieved	Yes	Α	Yes	Α
Dive forward only en exist Dive forward 0° to 30° A Change of course Change of course A Change of course A No A A A No A A A A No A A A A A A A A A	Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
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Casende occurs No A No No A 12. High angle of attack recovery Spontaneous in less than 3 s A No No A Recovery Spontaneous in less than 3 s A No No A 13. Recovery from a developed full stall Dive forward o"to 30" A No No A 13. Recovery from a developed full stall Dive forward o"to 30" A No No A No collapse A Collapse No No A No		Changing course less than 45°	Α	Changing course less than 45°	Α
12 High angle of attack recovery Spontaneous in less than 3 s A Spontaneous in less than 3 s A No No					
Recovery Spontaneous in less than 3 s A Spontaneous in less than 3 s A Cascade occurs A No A A					
Cascade occurs No A No A 13. Recovery from a developed full stall A Dive forward on to ago on exit Dive forward 0" to 30" A No collapse A AC Collapse No collapse A No collapse A Cascade occurs (other than collapses) No A Less than 45" A Less than 50" A Less than 50" (Dive or roll angle or course until re-inflation / Maximum dive forward or langle or fourse until re-inflation / Maximum dive forward or langle or course Less than 30" (Dive or roll angle or course until re-inflation / Maximum dive forward or langle or langle or course No A Less than 90" (Dive or roll angle or langle or la			Α	Spontaneous in less than 3 s	Α
13. Recovery from a developed full stall Dive forward 0° to 30° A Dive forward 0° to 30° A Dive forward 0° to 30° A Cascade occurs (other than collapses) No No A No No A No A Rocking back Less than 45° A	•	·		•	
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Collapse			Δ	Dive forward 0° to 30°	Δ
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Line tension Most lines tight A Most lines tight A Most lines tight A 14. Asymmetric collapse C C V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V					
14. Asymmetric collapse C With 50% collapse C Change of course until re-inflation / Maximum dive forward or roll angle of course until re-inflation / Maximum dive forward or roll angle of course until re-inflation / Maximum dive forward or roll angle of course occurs Less than 90° / Dive or roll angle of course occurs No					
With 50% collapse Authon 50% collapse Change of course until re-inflation / Maximum dive forward or lot 16° Less than 90° / Dive or roll angle to 16° A Less than 90° / Dive or roll angle to 16° A collapse on the opposite side occurs A collapse on the opposite side occurs A collapse on the opposite side occurs No A No A Cascade occurs Change of course until re-inflation of Maximum dive forward or roll angle of course until re-inflation / Maximum dive forward or roll angle 90° to 180° / Dive or roll angle 15° to 45° B 90° to 180° / Dive or roll angle 15° to 45° Re-inflation behaviour A Spontaneous re-inflation A No A Collapse on the opposite side occurs A No A Spontaneous re-inflation A No A Collapse on the opposite side occurs A No A No A Spontaneous re-inflation A No		<u> </u>	А	Most lines tight	А
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With 75% collapse With 75% collapse B 90° to 180° / Dive or roll angle 15° to 45° to 45° to 45° to 45° B Re-inflation behaviour Spontaneous re-inflation 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 Twist occurs No A No A 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 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 No A No A No A No A No A	Twist occurs	No	Α	No	Α
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Total change of course Less than 360° A Less than 360° A No		90° to 180° / Dive or roll angle 15° to 45°	В		В
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Collapse on the opposite side occurs No No A No A No No A No A No A No A N	Total change of course	Less than 360°	Α	Less than 360°	Α
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Twist occurs No A No	Total change of course	Less than 360°	Α	Less than 360°	Α
Cascade occurs No A No A No A No A No A 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 More than 50 % of the A More than 50 % of the symmetric A	Collapse on the opposite side occurs	No	Α	No	Α
A Superscription of the collapsed side possible in 10 s A Superscription of control range between turn and stall or spin A A A A A A A A A A A A A A A A A A A	Twist occurs	No	Α	No	Α
collapse Able to keep course Yes A Yes A 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin More than 50 % of the A More than 50 % of the symmetric A	Cascade occurs	No	Α	No	Α
180° turn away from the collapsed side possible in 10 s Yes A Yes A More than 50 % of the symmetric A More than 50 % of the symmetric		Α			
Amount of control range between turn and stall or spin More than 50 % of the A More than 50 % of the symmetric A	Able to keep course	Yes	Α	Yes	Α
	180° turn away from the collapsed side possible in 10 s	Yes	Α	Yes	Α
symmetric control travel control travel	Amount of control range between turn and stall or spin		Α		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	Standard technique	Α	Standard technique	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	Standard technique	Α	Standard technique	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	Α			
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]	19		17	
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				