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AIR TURQUOISE SA certified by

Flight test report: EN

ISO 9001
BUREAU VERITAS
Certification

Manufacturer Sky Paragliders a.s. Certification number PG_0820.2013
Address Okružní 39 Date of flight test 18. 11. 2013

73911 Frýdlant nad Ostravicí

Czech Republic

Representative None Place of test Villeneuve

Glider model Argos L Classification C

Trimmer no

	Test pilot	Thurnheer Claude	Berruex Gilles
	Harness	Niviuk - Hamak M	Sup'Air - Access M
	Total weight in flight (kg)	90	110
1. Inflation/Take-off		A	
Rising behaviour		Smooth, easy and constant rising A	Smooth, easy and constar

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 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	not available	0
Max. weight in flight greater than 100 kg				
Symmetric control pressure / travel	not available	0	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	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
Cascade occurs With accelerator	No	Α	No	Α
	No Rocking back less than 45°	A A	No Rocking back less than 45°	A A
With accelerator				

Cascade cocurs No No No No No No No N	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 Yes A Yes A Sopntaneous in less than 3 s A Spontaneous in less than 4 s² v A Changing course less than 4 s² v A No Changing course less than 4s² v A No A	Cascade occurs	No	Α	No	Α
Recovery Spontaneous in less than 3 s A Spontaneous in less than 3 s A Change of course Changing course less than 45" A Change of course Changing course less than 45" A No A	11. Exiting deep stall (parachutal stall)	A			
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No		Changing course less than 45°	Α	Changing course less than 45°	Α
12. High angle of attack recovery					
Recovery Rec					
Cascade occurs No A No A 13. Recovery from a developed full stall A Dive forward on angle on exit Dive forward 0° to 30° A Dive forward 0° to 30° A Collapse No No collapse A No collapse A Coscolago accurs (other than collapses) No No A No collapse A Concision accurs Less than 45° A Less than 45° A Less than 45° A Line tension Most lines tight A Less than 45° A Less than 55° CUIT With 50% collapse C C With 50% collapse A Less than 90° / Dive or roll angle of to 15° A Less than 90° / Dive or roll angle of 15° to 15° A No A No A A No A No </td <td></td> <td></td> <td>Α</td> <td>Spontaneous in less than 3 s</td> <td>Α</td>			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 16° A Dive forward 0° to 16° A Dive forward 0° to 16° Dive 0°	•	·		•	
Dive forward on gole on exit Dive forward 0" to 30" A Dive forward 0" to 30" A Collapse A No collaps			- ' '		,,
Collapse No collapse A No collapse A Cascade occurs (other than collapses) No Leas than 45° A No A Rocking back Leas than 45° A Leas than 45° A Line tension Most lines tight A Less than 45° A Vith 50% collapse C Value of 15° A Less than 90° / Dive or roll angle of 16° to 15° A Less than 90° / Dive or roll angle of 15° A Less than 90° / Dive or roll angle of 15° A Less than 90° / Dive or roll angle of 15° A Less than 90° / Dive or roll angle of 15° A No A <t< td=""><td></td><td></td><td>Δ</td><td>Dive forward 0° to 30°</td><td>Δ</td></t<>			Δ	Dive forward 0° to 30°	Δ
Cascade occurs (other than collapses) No A No A Rocking back Less than 45° A Less than 45° A Less than 45° A 14. Asymmetric collapse C C C Cass than 90° / Dive or roll angle of 15° or 15° or 10° angle or 15° or 15° or 10° angle or 15° or 15					
Rocking back					
Line tension Most lines tight A Most lines tight A 14. Asymmetric collapse C Change of course until re-inflation / Maximum dive forward or langle of one of langle of course until re-inflation / Maximum dive forward or langle of to 15° to 15° to 15° Less than 90° / Dive or roll angle of to 15° to 15° A Less than 360° Dive or roll angle of to 15° A Spontaneous re-inflation A Spontaneous re-inflation A Spontaneous re-inflation A No A					
14. Asymmetric collapse C With 50% collapse Less than 90° / Dive or roll angle 0° to 15° of					
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Collapse on the opposite side occurs	Re-inflation behaviour	Spontaneous re-inflation	Α	Spontaneous re-inflation	Α
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Twist occurs No A No A No A No A No A Mith 50% collapse and accelerator Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° Spontaneous re-inflation behaviour A Less than 90° / Dive or roll angle 15° to 45° Total change of course Less than 360° Less than 360° A Less than 90° / Dive or roll angle 15° to 45° Spontaneous re-inflation A Less than 360° A No A N	-	No	Α	No	Α
Cascade occurs No A No A		No	Α	No	Α
With 50% collapse and accelerator Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° Re-inflation behaviour Collapse and accelerator Change of course No No No A Collapse on the opposite side occurs No Re-inflation behaviour Change of course Re-inflation behaviour Change of course Re-inflation behaviour Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° Re-inflation behaviour Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° Re-inflation behaviour Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° Re-inflation behaviour Change of course until re-inflation / Maximum dive forward or roll angle 15° to 45° Re-inflation behaviour Re-inflation behaviour No No A Collapse on the opposite side occurs No No A Collapse on the opposite side occurs No A Collapse on the opposite side occurs No A Collapse on the opposite side occurs No A Cascade occurs No A No A No Cascade occurs			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 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	Yes, no turn reversal	С
15. Directional control with a maintained asymmetric collapse Able to keep course Yes A Yes A Yes A Yes A A A A A A A A A A A A A	Twist occurs	No	Α	No	Α
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	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
	Amount of control range between turn and stall or spin		Α		Α
symmetric control travel control travel		symmetric control travel		control travel	

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	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]	17		21	
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				