Flight test report

Manufacturer Sky Paragliders

Address Okružní 39

73911 Frýdlant nad Ostravicí

Czech Republic

Representive None
Type of glider Antea XL
Trimmer not available

Certification number PG 057.2007
Date of flight test 22.02.2007
Place of test Villeneuve



Classification C

Test Pilot Claude Thurnheer Alain Zoller
Harness Gin Genie III M Sol - Slider L
Total weight in flight 105 kg 130 kg

		Min weight	Max weight	
1. Inflation/Ta		wiii weigiit	max weight	
	Rising behaviour	Smooth, easy and constant rising A	Smooth, easy and constant rising	Α
	Special take off technique required	No A	No	Α
2. Landing	Special landing technique required	No A	No	Α
3. Speed in st		NO A	NO	_
	Trim speed more than 30 km/h	Yes	Yes	Α
	Speed range using the controls larger than 10 km/h	Yes A	Yes	Α
	Minimum speed	Less than 25 km/h	Less than 25 km/h	Α
4. Control mo	vement Max. weight in flight up to 80 kg			
	Symmetric control pressure/travel	not available (not available	0
	Max. weight in flight 80 kg to 100 kg			
	Symmetric control pressure/travel	not available (not available	0
	Max. weight in flight greater than 100 kg Symmetric control pressure/travel	Increasing Creates than CF and	la casacina. FO casa to CF casa	_
5 Pitch stabil	ity exiting accelerated flight	Increasing, Greater than 65 cm A	Increasing, 50 cm to 65 cm	С
o. i itoli otabii	Dive forward angle on exit	Dive forward less than 30° A	Dive forward less than 30°	Α
	Collapse occurs	No A	No	Α
6. Pitch stabil	ity operating controls during accelerated flight			
7 Poll otobilit	Collapse occurs	No A	No	Α
r. Kuli Stabilit	y and damping Oscillations	Reducing A	Reducing	Α
8. Stability in		, , , , , , , , , , , , , , , , , , ,		
	Tendency to return to straight flight	Spontaneous exit A	Spontaneous exit	Α
9. Behaviour i	n a steeply banked turn	Mara than 4.4 m/a	Mara than 4.4 m/s	_
10 Symmetric	Sink rate after two turns	More than 14 m/s	More than 14 m/s	В
To. Symmetric	Entry	Rocking back less than 45° A	Rocking back less than 45°	Α
	Recovery	Spontaneous in less than 3 s	· · · · · · · · · · · · · · · · · · ·	Α
	Dive forward angle on exit	Dive foward 0°to 30°, Keeping course A		Α
	Cascade occurs	No A	No	Α
	With accelerator Entry	Rocking back less than 45° A	Rocking back less than 45°	Α
	Recovery	Spontaneous in less than 3 s	3	A
	Dive forward angle on exit	Dive foward 0°to 30°, Keeping course A		Α
	Cascade occurs	No A	No	Α
11. Exiting de	ep stall (parachutal stall)	V	Vee	^
	Deep stall achieved Recovery	Yes A Spontaneous in less than 3 s A		A A
	Dive forward angle on exit	Dive forward 0°to 30° A	1 ·	Α
	Change of course	Changing course less than 45° A	Changing course less than 45°	Α
	Cascade occurs	No A	No	Α
12. High angle	e of attack recovery Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s	Α
	Cascade occurs	No A	· ·	A
13. Recovery	from a developed full stall			
	Dive forward angle on exit	Dive forward 30°to 60°		В
	Collapse	No collapse A	No collapse	A
	Cascade occurs (other than collapse) Rocking back	No A Less than 45° A		A A
	Line tension	Most line tight A		A
14. Asymmetr	ic collapse		, and the second	
	With 50% collapse-Maximum dive forward or roll angle			
	Change of course until re-inflation Re-inflation behaviour	Less than 90°, Dive or roll angle 15° to 45° Spontaneous re-inflation A		A A
	Total change of course	Spontaneous re-inflation A Less than 360° A	· ·	A
	Collapse on the opposite side occurs	No A		A
	Twist occurs	No A	No No	Α
	Cascade occurs	No A	No	Α
	With 75% collapse-Maximum dive forward or roll angle Change of course until re-inflation	90° to 180°, Dive or roll angle 15° to 45°	Less than 90°, Dive or roll angle 15° to 45°	Α
	Re-inflation behaviour	Spontaneous re-inflation A	Spontaneous re-inflation	A
	Total change of course	Less than 360° A	Less than 360°	Α
	Collapse on the opposite side occurs	No A	. No	Α
	Twist occurs	No A		Α
	Cascade occurs	No A	. No	Α
	With 50% collapse and accelerator-Maximum dive forward or Change of course until re-inflation	roll angle Less than 90°, Dive or roll angle 15° to 45° A	90° to 180°, Dive or roll angle 15° to 45°	В
	Re-inflation behaviour	Spontaneous re-inflation A		А
	Total change of course	Less than 360° A	The state of the s	Α
	Collapse on the opposite side occurs	No A	No	Α

Cascade occurs With 75% collapse and accelerator-Maximum dive forward or roll angle Change of course until re-inflation Possible occurse Re-inflation behaviour Total change of course Re-inflation behaviour Total change of course No Cascade occurs No Cascade occurs No A Twist occurs Able to keep course Able to keep course Amount of control range between turn and stall or spin Anount of control range between turn and stall or spin Total spin occurs No Cascade occurs No A Total spin occurs Able to keep course Spin occurs No Cascade occurs No Cascade occurs No A Total spin occurs No Cascade occurs No A A No A A A A No A A A A No A A A A A A A A A A A A A					I vi	
With T5% collapse and accelerator-Maximum dive forward or roll angle C hange of course until re-inflation Re-inflation behaviour Spontaneous re-inflation A Less than 360° A Collapse on the opposite side occurs No Cascade occurs No No A N		Twist occurs	No			A
Change of course until re-initiation				А	NO NO	А
Re-inflation behaviour				_	000 to 4000 Dive or rell angle 450 to 600	_
Total change of course						
Collapse on the opposite side occurs No A Twist occurs No Cascade occurs No A						
Twist occurs Cascade occurs No Cascade occurs Able to keep course		•				
Cascade occurs 15. Directional control with amaintained asymmetric collapse Able to keep course Amount of control range between turn and stall or spin 16. Trim speed spin tendency Spin occurs No 17. Low speed spin tendency Spin occurs No 18. Recovery from a developed spin Cascade occurs No 19. B-line stall Change of course before release Remains stable with straight span Recovery Behaviour during big ears Entry procedure Behaviour during big ears Recovery Behaviour during big ears Recovery Spin occurs No 21. Big ears in accelerated flight Entry procedure Behaviour during big ears Recovery Recovery from a developed spin Stable lilight Recovery Spin occurs Sportaneous in less than 3 s Stable lilight Agontaneous in less than 3 s Ag						
15. Directional control with a maintained asymmetric collapse Able to keep course Able				2.2		
Able to keep course 180° turn wavy from the collapsed side possible in 10 s 18. Recovery from a developed spin 21. Behaviour before release 22. Behaviour during big ears 23. Alternative made stall or spin 24. Alternative made stall or spin 25. Behaviour before release 26. Behaviour during big ears 27. Low good and and a celerated light 27. Low good and angle on exit 27. Low good and angle on exit 28. Behaviour during big ears 28. Behaviour during big ears 29. Behaviour before releasing the accelerator while 29. Behaviour before release 30. Stops spinning in less than 90° 30. A No 30. A N			No	Α	No	Α
180° turn away from the collapsed side possible in 10 s	15. Directiona					
Amount of control range between turn and stall or spin More than 50 % of the symmetric control travel A 16. Trim speed spin tendency Spin occurs No Spin occurs No Spin occurs No Spin occurs No Spin rotation angle after release Spin rotation angle and rotation angle spin angle and rotation angle angl						
16. Trim speed spin tendency Spin occurs Spin cocurs No						
Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin Spin rotation angle after release Cascade occurs 19. B-line stall Change of course before release Change of course less than 45° A Remains stable with straight span A Recovery A Remains stable with straight span A Dive forward of to 30° A Dive forward of to 30° A No A No A No A No A No A No A Dive forward of to 30° A Stable flight A No			More than 50 % of the symmetric control travel	Α	More than 50 % of the symmetric control travel	Α
17. Low speed spin tendency Spin occurs No Spin occurs	16. Trim spee					
Spin occurs Spin oractes Spin rotation angle after release Stops spinning in less than 90° Spin rotation angle after release Cascade occurs No No Spin rotation angle after release Cascade occurs Change of course less than 45° Behaviour before release Remains stable with straight span Recovery Spontaneous in less than 3 s Recovery Spontaneous in less than 3 s Recovery No Cascade occurs No No A Remains stable with straight span A Remains stable with straight s			No	Α	No	Α
18. Recovery from a developed spin Spin rotation angle after release Stops spinning in less than 90° A No A N	17. Low spee					
Spin rotation angle after release			No	Α	No	Α
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19. B-line stall Change of course before release						
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Recovery Dive forward angle on exit Cascade occurs No No A Dive forward 0° to 30° A No A No A Recovery Entry procedure Behaviour during big ears Stable flight A Recovery Spontaneous in less than 3 s A Dive forward 0° to 30° A No A Dive forward 0° to 30° A No A N				Α		
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Cascade occurs No A No A		Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
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Dive forward angle on exit Dive forward 0° to 30° A 21. Big ears in accelerated flight Entry procedure Behaviour during big ears Stable flight Recovery Recovery through pilot action in less than a futher Behaviour immediately after releasing the accelerator while 22. Behaviour exiting a steep spiral Tendency to return to straight flight Spontaneous exit Turn angle to recover normal flight Sink rate when evaluating spiral stability [m/s] 23. Alternative means of directional control 180° turn achievable in 20 s Stall or spin occurs No No A Dive forward 0° to 30° A Stable flight		Behaviour during big ears	Stable flight	Α	Stable flight	Α
21. Big ears in accelerated flight Entry procedure Behaviour during big ears Recovery Recovery through pilot action in less than a futher Dive forward angle on exit Behaviour immediately after releasing the accelerator while Stable flight A Stable flight A Stable flight A Spontaneous in less than 3 s A Dive forward 0° to 30° A Stable flight A Stabl		Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Entry procedure Behaviour during big ears Stable flight Recovery Recovery through pilot action in less than a futher Dive forward angle on exit Dive forward 0° to 30° Behaviour immediately after releasing the accelerator while Stable flight A 22. Behaviour exiting a steep spiral Tendency to return to straight flight Turn angle to recover normal flight Sink rate when evaluating spiral stability [m/s] 18 m/s 23. Alternative means of directional control 180° turn achievable in 20 s Stall or spin occurs No A 24. Any other flight procedure and/or configuration described in the user's manual Procedure works as described Procedure suitable for novice pilots Cascade occurs O Comments of test pilot Stable flight A Spontaneous in less than 3 s A b Dive forward 0° to 30° A Dive forward 0° to 30° A Stable flight A Spontaneous in less than 3 s A Spontaneous in less than 3 s A Spontaneous in less than 3 s A Stable flight A Spontaneous in less than 3 s A Dive forward 0° to 30° A Stable flight A Stable		Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
Behaviour during big ears Recovery Recovery through pilot action in less than a futher Dive forward angle on exit Behaviour immediately after releasing the accelerator while Stable flight A Behaviour immediately after releasing the accelerator while Stable flight A Stable flight A Dive forward 0° to 30° A Dive forward 0° to 30° A Stable flight A Dive forward 0° to 30° A Dive forward 0° to 30° A Stable flight A Stable flight A Stable flight A Stable flight A Dive forward 0° to 30° A Dive forward 0° to 3	21. Big ears i	n accelerated flight				
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Tendency to return to straight flight Spontaneous exit A Turn angle to recover normal flight Less than 720°, spontaneous recovery A Les		Behaviour immediately after releasing the accelerator while	Stable flight	Α	Stable flight	Α
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24. Any other flight procedure and/or configuration described in the user's manual Procedure works as described not available 0 on to available 0 not available 0 on to available 0 not availa		Stall or spin occurs	No	Α	No	Α
Procedure works as described not available 0 n	24. Any other		er's manual			
Procedure suitable for novice pilots not available 0 Comments of test pilot	,			0	not available	0
Cascade occurs not available 0 not available 0 Comments of test pilot				0		
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·	Comments of					
	2 3	•	no		no	



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