



Flight test report: EN 926-2:2013

Manufacturer	Sky Paragliders a.s.	Certification number	PG_1026.2016
Address	Okružní 39 73911 Frýdlant nad	Date of flight test	07. 03. 2016

Ostravicí Czech Republic

Glider model Serial number Trimmer	Apollo XS 2151–11–0605 no	Classification Representative Place of test	B None Villeneuve
Test pilot		Light pilot under Air Turquoise supervision	Thurnheer Claude
Harness		Flugsau - XX-Lite	Flugsau - XX-Lite

Harness to risers distance (cm)4040Distance between risers (cm)4040Total weight in flight (kg)5573

1. Inflation/Take-off	Α			
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	A			
Special landing technique required	No	Α	No	Α
3. Speed in straight flight	В			
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	25 km/h to 30 km/h	В	25 km/h to 30 km/h	В
4. Control movement	Α			
Max. weight in flight up to 80 kg				
Symmetric control pressure / travel	Increasing / greater than 55 cm	Α	Increasing / greater than 55 cm	Α
Max. weight in flight 80 kg to 100 kg				
Symmetric control pressure / travel	not available	0	not available	0
Max. weight in flight greater than 100 kg				
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	A			
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 exiting a fully developed spiral dive	A			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	Α	Immediate reduction of rate of turn	Α
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 normal flight	Less than 720°, spontaneous recovery	Α	Less than 720°, spontaneous recovery	Α
10. Symmetric front collapse	В			
Approximately 30 % 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	Α	Dive forward 0° to 30° Keeping	A
Dive forward angle on exit onlinge of course	course	^	course	^
Cascade occurs	No	Α	No	Α
Folding lines used	No	Α	No	Α
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 3 s to 5 s	В
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Entering	A	Dive forward 0° to 30° / Keeping	A
Dive lotward angle off exit? Change of course	a turn of less than 90°	A	course	A
Cascade occurs	No	Α	No	Α
Folding lines used	No	Α	No	Α
Mish accelerator				
With accelerator	Pocking back loss than 45°	٨	Packing back loss than 45°	۸
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in 3 s to 5 s	В	Spontaneous in 3 s to 5 s	В
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Entering a turn of less than 90°	Α	Dive forward 0° to 30° / Keeping course	Α
Cascade occurs	No	Α	No	Α
Folding lines used	No	Α	No	Α
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	A	Spontaneous in less than 3 s	A
Cascade occurs	No	Α	No	Α
13. Recovery from a developed full stall	A		Diver for marged 00 to 000	•
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
Collapse	No collapse	A	No collapse	A
Cascade occurs (other than collapses)	No	A	No	A
Rocking back	Less than 45°	A	Less than 45°	A
Line tension 14. Asymmetric collapse	Most lines tight B	Α	Most lines tight	Α
14. Asymmetric conapse	ь			
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	Α	No	Α
-		- •		
Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or	Less than 90° / Dive or roll angle	Α	90° to 180° / Dive or roll angle 15°	В
roll angle	15° to 45°		to 45°	
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	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	Α	No (or only a small number of	Α
Conapse on the opposite side occurs	collapsed cells with a spontaneous reinflation)	٨	collapsed cells with a spontaneous reinflation)	^
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
Folding lines used	No	Α	No	Α
Small asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or	Less than 90° / Dive or roll angle	Α	Less than 90° / Dive or roll angle	Α
roll angle	15° to 45°		15° to 45°	
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	Α	No	Α
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or	90° to 180° / Dive or roll angle	В	90° to 180° / Dive or roll angle 15°	В
roll angle	15° to 45°	Ь	to 45°	Ь
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	Α	No	Α
15. Directional control with a maintained asymmetric	A			
collapse				
Able to keep course	Yes	A	Yes	A
180° turn away from the collapsed side possible in 10 s	Yes	A	Yes	A
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	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	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		01 : 1 1 150	
Change of course before release	Changing course less than 45°	A	Changing course less than 45°	A
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	В			
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	Recovery through pilot action in	В
Directory and another are "	Div. fam 1001 - 000		less than a further 3 s	
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
21. Big ears in accelerated flight	B Dedicated controls	^	Dedicated as attack	^
Entry procedure Behaviour during big ears	CIEDUCATEC CONTINIS	Α	Dedicated controls	Α
Denaviour during blu 6015		Λ	Stable flight	Λ
	Stable flight	A B	Stable flight	A B
Recovery		A B	Stable flight Recovery through pilot action in less than a further 3 s	A B

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	А
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





Class: B

In accordance with EN standards 926-2:2013 & 926-1:2006:

Date of issue (DMY):

PG_0997.2015

04. 02. 2016

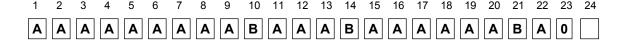
Manufacturer: Sky Paragliders a.s.

Model: Apollo M

Serial number: 2057-11-1175

Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	94	Range of speed system (cm)	14
Minimum weight in flight (kg)	74	Speed range using brakes (km/h)	14
Glider's weight (kg)	4.7	Range of trimmers (cm)	0
Number of risers	3	Total speed range with accessories (km/h)	28
Projected area (m2)	21.56		
Harness used for testing (max weight)		Inspections (whichever happens first)	
Harness type	ABS	every 24 monthes or every 100 flying hours	
Harness brand	Flugsau	Warning! Before use refer to user's manual	
Harness model	XX-Lite	Person or company having presented the glider for testing: None	
Harness to risers distance (cm)	41		
` ,			
Distance between risers (cm)	44		







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Manufacturer Sky Paragliders a.s. Certification number PG_0997.2015
Address Okružní 39 Date of flight test 09. 11. 2015
73911 Frýdlant nad

Ostravicí Czech Republic

Glider model	Apollo M	Classification Representative Place of test	B
Serial number	2057-11-1175		None
Trimmer	no		Villeneuve
Test pilot Harness Harness to risers di Distance between ri Total weight in fligh	sers (cm)	Thurnheer Claude Supair - Altiplume S 41 40 74	Zoller Alain Flugsau - XX-Lite 41 44 94

Total weight in flight (kg)	74		94	
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 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	Α			
Max. weight in flight up to 80 kg				
Symmetric control pressure / travel	Increasing / greater than 55 cm	Α	not available	0
Max. weight in flight 80 kg to 100 kg				
Symmetric control pressure / travel	not available	0	Increasing / greater than 60 cm	Α
Max. weight in flight greater than 100 kg				
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 exiting a fully developed spiral dive	A			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	Α	Immediate reduction of rate of turn	Α
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 normal flight	Less than 720°, spontaneous recovery	Α	Less than 720°, spontaneous recovery	Α

,				
Approximately 30 % 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	Α	No	Α
At least 50% chord				
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	Spontaneous in 3 s to 5 s	В	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	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
Cascade occurs	No	Α	No	Α
Folding lines used	No	Α	No	Α
11. Exiting deep stall (parachutal stall)	A			
Deep stall achieved	Yes	Α	Yes	Α
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
Change of course	Changing course less than 45°	A	Changing course less than 45°	A
Cascade occurs	No	Α	No	Α
12. High angle of attack recovery	A Sportonoous in loss than 2 s	۸	Chantanagua in losa than 2 a	۸
Recovery Cascade occurs	Spontaneous in less than 3 s No	A A	Spontaneous in less than 3 s No	A A
13. Recovery from a developed full stall	A	^	140	^
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				Α
		Δ		
Line tension	Less than 45° Most lines tight	Α Δ	Less than 45° Most lines tight	
Line tension 14 Asymmetric collapse	Most lines tight	A	Most lines tight	Α
Line tension 14. Asymmetric collapse				
	Most lines tight			
14. Asymmetric collapse	Most lines tight	Α		
14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or	Most lines tight B Less than 90° / Dive or roll angle	Α	Most lines tight $\label{eq:lines} \text{Less than } 90^\circ / \text{Dive or roll angle } 0^\circ$	A
14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course	Most lines tight B Less than 90° / Dive or roll angle 0° to 15°	A	Most lines tight Less than 90° / Dive or roll angle 0° to 15°	A
14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour	Most lines tight B Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation	A A A	Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation	A A A
14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course	Most lines tight B Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a	A A A	Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous	A A A
14. Asymmetric collapse Small 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	Most lines tight B Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation)	A A A	Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation)	A A A A
14. Asymmetric collapse Small 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	Most lines tight B Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No	A A A A	Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No	A A A A
14. Asymmetric collapse Small 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	Most lines tight B Less than 90° / Dive or roll angle 0° to 15° 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	Most lines tight Less than 90° / Dive or roll angle 0° to 15° 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
Small 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 Large asymmetric collapse	Most lines tight B Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No	A A A A A A A	Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No	A A A A A
14. Asymmetric collapse Small 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	Most lines tight B Less than 90° / Dive or roll angle 0° to 15° 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	Most lines tight Less than 90° / Dive or roll angle 0° to 15° 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
14. Asymmetric collapse Small 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 Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or	Most lines tight B Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No 90° to 180° / Dive or roll angle	A A A A A A A	Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No No 90° to 180° / Dive or roll angle 15°	A A A A A
Small 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 Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle	Most lines tight B Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° 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 A A A B	Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No No Oo No	A A A A A B

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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	Α	No	Α
rodding inica daed	140	^	140	^
Small 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	Α	No	Α
Large asymmetric collapse with fully activated accelerator		_	0001 1000 (B)	_
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	Α	No	Α
15. Directional control with a maintained asymmetric	A			
collapse				
Able to keep course	Yes	Α	Yes	Α
A library and the second and the sec				
180° turn away from the collapsed side possible in 10 s	Yes	Α	Yes	Α
	Yes More than 50 % of the symmetric control travel	A A	Yes More than 50 % of the symmetric control travel	A A
180° turn away from the collapsed side possible in 10 s	More than 50 % of the		More than 50 % of the symmetric	
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 symmetric control travel		More than 50 % of the symmetric control travel	
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency	More than 50 % of the symmetric control travel A	Α	More than 50 % of the symmetric control travel	Α
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency Spin occurs	More than 50 % of the symmetric control travel A No	Α	More than 50 % of the symmetric control travel	Α
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency	More than 50 % of the symmetric control travel A No A	A	More than 50 % of the symmetric control travel	A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs	More than 50 % of the symmetric control travel A No A No	A	More than 50 % of the symmetric control travel	A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin	More than 50 % of the symmetric control travel A No A No	A A	More than 50 % of the symmetric control travel No	A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin Spin rotation angle after release	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90°	A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90°	A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin Spin rotation angle after release Cascade occurs	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No	A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90°	A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A	A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No	A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight	A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45°	A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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 Behaviour before release	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span	A A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span	A A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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 Behaviour before release Recovery	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s	A A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s	A A A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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 Behaviour before release Recovery Dive forward angle on exit	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°	A A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°	A A A A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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 Behaviour before release Recovery Dive forward angle on exit Cascade occurs	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No	A A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°	A A A A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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 Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A	A A A A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No	A A A A A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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 Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears Entry procedure	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls	A A A A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No Dedicated controls	A A A A A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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 Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears Entry procedure Behaviour during big ears	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight	A A A A A A A A A A A A A A A A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No Dedicated controls Stable flight	A A A A A A A A A A A A A A A A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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 Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears Entry procedure Behaviour during big ears Recovery	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight Spontaneous in less than 3 s	A A A A A A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No Dedicated controls Stable flight Spontaneous in less than 3 s	A A A A A A A A A A A A A A A A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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 Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears Entry procedure Behaviour during big ears Recovery Dive forward angle on exit	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight Spontaneous in less than 3 s Dive forward 0° to 30°	A A A A A A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No Dedicated controls Stable flight Spontaneous in less than 3 s	A A A A A A A A A A A A A A A A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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 Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big ears in accelerated flight	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight Spontaneous in less than 3 s Dive forward 0° to 30° Stable flight Spontaneous in less than 3 s Dive forward 0° to 30°	A A A A A A A A A A A A A A A A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No Dedicated controls Stable flight Spontaneous in less than 3 s Dive forward 0° to 30°	A A A A A A A A A A A A A A A A A A A
180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin 16. Trim speed spin tendency 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 Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big ears in accelerated flight Entry procedure	More than 50 % of the symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight Spontaneous in less than 3 s Dive forward 0° to 30° B Dedicated controls	A A A A A A A A A A A A A A A A A A A	More than 50 % of the symmetric control travel No No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No Dedicated controls Stable flight Spontaneous in less than 3 s Dive forward 0° to 30° Dedicated controls	A A A A A A A A A A A A A A A A A A A

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





Class: B

In accordance with EN standards 926-2:2013 & 926-1:2006:

Date of issue (DMY):

PG_1017.2016

04. 02. 2016

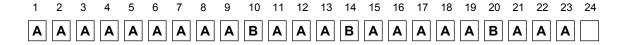
Manufacturer: Sky Paragliders a.s.

Model: Apollo L

Serial number: 2058-11-1242

Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	108	Range of speed system (cm)	13.5
Minimum weight in flight (kg)	85	Speed range using brakes (km/h)	14
Glider's weight (kg)	4.8	Range of trimmers (cm)	0
Number of risers	3	Total speed range with accessories (km/h)	28
Projected area (m2)	23.03		
Harness used for testing (max weight)		Inspections (whichever happens first)	
Harness type	ABS	every 24 months or every 100 flying hours	
Harness brand	Gin Gliders	Warning! Before use refer to user's manual	
Harness model	Gingo 2 L	Person or company having presented the glider for testing: None	
Harness to risers distance (cm)	43		
Distance between risers (cm)	46		







Flight test report: EN 926-2:2013

Manufacturer Sky Paragliders a.s. Certification number PG_1017.2016
Address Okružní 39 Date of flight test 14. 12. 2015

73911 Frýdlant nad Ostravicí Czech Republic

Glider model	Apollo L	Classification	В
Serial number	2058-11-1242	Representative	None
Trimmer	no	Place of test	Villeneuve
Test pilot		Thurnheer Claude	Zoller Alain
Harness		Sup' Air - Access M	Gin Gliders - Gingo 2 L
Harness to risers	distance (cm)	43	43
Distance betwee	n risers (cm)	44	46
Total weight in fl	iaht (ka)	85	108

Diotarios Both con Ticoro (ciri,			10	
Total weight in flight (kg)	85		108	
1. Inflation/Take-off	Α			
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	Α			
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	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 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	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 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 exiting a fully developed spiral dive	A			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	Α	Immediate reduction of rate of turn	Α
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 normal flight	Less than 720°, spontaneous recovery	Α	Less than 720°, spontaneous recovery	Α

Approximately 30 % 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	Α	No	Α
At least 50% chord				
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	Spontaneous in 3 s to 5 s	В	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	Α	No	Α
With accelerator				
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	Spontaneous in 3 s to 5 s	В	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 30° to 60° / Keeping course	В
Cascade occurs	No	Α	No	Α
Folding lines used	No	Α	No	Α
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	Α			
12. High angle of attack recovery Recovery	A Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
12. High angle of attack recovery Recovery Cascade occurs	A Spontaneous in less than 3 s No			
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall	A Spontaneous in less than 3 s No A	A A	Spontaneous in less than 3 s No	A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit	A Spontaneous in less than 3 s No A Dive forward 0° to 30°	A A	Spontaneous in less than 3 s No Dive forward 0° to 30°	A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse	A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse	A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses)	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No	A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No	A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45°	A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45°	A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight	A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No	A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45°	A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45°	A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B	A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight	A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B Less than 90° / Dive or roll angle 15° to 45°	A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15°	A A A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B Less than 90° / Dive or roll angle 15° to 45° Spontaneous re-inflation	A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation	A A A A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B Less than 90° / Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360°	A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360°	A A A A A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B Less than 90° / Dive or roll angle 15° to 45° Spontaneous re-inflation	A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation	A A A A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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	A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous	A A A A A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation)	A A A A A A A A A A A A A A A A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 A A A A A A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° 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 A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 A A A A A A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° 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 A A A A A A A A A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 No No 90° to 180° / Dive or roll angle	A A A A A A A A A A A A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No No 90° to 180° / Dive or roll angle 15°	A A A A A A A A A A A A A A A A A A A
12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle	A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 No 90° to 180° / Dive or roll angle 15° to 45°	A A A A A A A A B .	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No No 90° to 180° / Dive or roll angle 15° to 45°	A A A A A A A A B
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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	A
Folding lines used	No	Α	No	A
Folding lines used	NO	A	NO	A
Small 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	Α	No	Α
Large asymmetric collapse with fully activated accelerator	000 to 4000 / Diversion and second	_	00% to 400% / Diversor call construction	_
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	Α	No	Α
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	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	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	В	•		
Entry procedure	Dedicated controls	Α	Dedicated controls	Α
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Recovery through pilot action in	В	Spontaneous in less than 3 s	A
	less than a further 3 s	ט	oponiunoodo in 1000 tilati o o	~
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
21. Big ears in accelerated flight	Α			
Entry procedure	Dedicated controls	Α	Dedicated controls	Α
Behaviour during big ears	Stable flight	Α	Stable flight	Α
Recovery	Spontaneous in 3 s to 5 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
Dive lot ward arigie on exit	2.10.10.114.40 10.00			

Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	Α	Stable flight	Α
22. Alternative means of directional control	A			
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	Α			
Procedure works as described	Yes	Α	not available	0
Procedure suitable for novice pilots	Yes	Α	not available	0
Cascade occurs	No	Α	not available	0





Class:

In accordance with EN standards 926-2:2013 & 926-1:2006:

Date of issue (DMY):

PG_1016.2016

24. 03. 2016

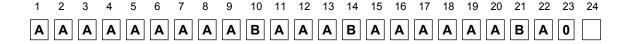
Manufacturer: Sky Paragliders a.s.

Apollo S Model:

Serial number: **02060-11-1414**

Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	81	Range of speed system (cm)	14.3
Minimum weight in flight (kg)	64	Speed range using brakes (km/h)	14
Glider's weight (kg)	4.4	Range of trimmers (cm)	0
Number of risers	3	Total speed range with accessories (km/h)	28
Projected area (m2)	20.19		
Harness used for testing (max weight)		Inspections (whichever happens first)	
Harness type	ABS	every 24 months or every 100 flying hours	
Harness brand	Sup' Air	Warning! Before use refer to user's manual	
Harness model	Altiplume M	Person or company having presented the glider for testing: None	
Harness to risers distance (cm)	43		
Distance between risers (cm)	44		





Flight test report: EN 926-2:2013

Manufacturer	Sky Paragliders a.s.	Certification number	PG_1016.2016
Address	Okružní 39 73911 Frýdlant nad	Date of flight test	26. 02. 2016

Ostravicí Czech Republic

Glider model	Apollo S	Classification	В
Serial number	02060-11-1414	Representative	None
Trimmer	no	Place of test	Villeneuve
Test pilot		Fukuoka Seiko	Thurnheer Claude
Harness		Sup' Air - Altiplume S	Sup' Air - Altiplume M
Harness to risers	distance (cm)	43	43
Distance between	n risers (cm)	40	44
Total weight in fli	ght (kg)	64	81
A lucionization (Tales acc		•	

Total weight in hight (kg)	04		01	
1. Inflation/Take-off	Α			
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	Α			
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	Α			
Max. weight in flight up to 80 kg				
Symmetric control pressure / travel	Increasing / greater than 55 cm	Α	not available	0
Max. weight in flight 80 kg to 100 kg				
Symmetric control pressure / travel	not available	0	Increasing / greater than 60 cm	Α
Max. weight in flight greater than 100 kg				
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 exiting a fully developed spiral dive	A			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	Α	Immediate reduction of rate of turn	Α
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 normal flight	Less than 720°, spontaneous	Α	Less than 720°, spontaneous	Α

recovery

recovery

,				
Approximately 30 % 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	Α	No	Α
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 3 s to 5 s	В
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	Α	No	Α
With accelerator				
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	Spontaneous in 3 s to 5 s	В	Spontaneous in 3 s to 5 s	В
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	Α	No	Α
11. Exiting deep stall (parachutal stall)	A			
Deep stall achieved	Yes	Α	Yes	Α
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	Α.
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	Α.
Change of course	Changing course less than 45°	Λ		Α
Change of course	Changing course less than 45°	Α	Changing course less than 45°	
Cascade occurs	No	A	No	Α
Cascade occurs 12. High angle of attack recovery	No A	A	No	Α
Cascade occurs 12. High angle of attack recovery Recovery	No A Spontaneous in less than 3 s	A A	No Spontaneous in less than 3 s	A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs	No A Spontaneous in less than 3 s No	A	No	Α
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall	No A Spontaneous in less than 3 s No A	A A A	No Spontaneous in less than 3 s No	A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit	No A Spontaneous in less than 3 s No A Dive forward 0° to 30°	A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30°	A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse	A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse	A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses)	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No	A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No	A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45°	A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45°	A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight	A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No	A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45°	A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45°	A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight	A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45°	A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B	A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45°	A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B Less than 90° / Dive or roll angle	A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle	A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B Less than 90° / Dive or roll angle 15° to 45°	A A A A A A A A A A A A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 15° to 45°	A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B Less than 90° / Dive or roll angle 15° to 45° Spontaneous re-inflation	A A A A A A A A A A A A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 15° to 45° Spontaneous re-inflation	A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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	A A A A A A A A A A A A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight 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 A A A A A A A A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 A A A A A A A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight 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 A A A A A A A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. 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 A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 A A A A A A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight 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 A A A A A A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 A A A A A A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight 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 re-inflation) No No	A A A A A A A A A A A A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 Large asymmetric collapse	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 No	A A A A A A A A A A A A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight 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 A A A A A A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 A A A A A A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight 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 No Less than 90° / Dive or roll angle	A A A A A A A A A A A A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 No Less than 90° / Dive or roll angle 15° to 45°	A A A A A A A A A A A A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight 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 No Less than 90° / Dive or roll angle 15° to 45°	A A A A A A A A A A A A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 No Less than 90° / Dive or roll angle	A A A A A A A A A A A A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight 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 No Less than 90° / Dive or roll angle	A A A A A A A A A A A A A A A A A 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	Α	No	Α
1 olding inted does	110	, ,	140	,,
Small 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	Α	No	Α
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	Α	No	Α
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	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	Α			
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	В			
Entry procedure	Dedicated controls	Α	Dedicated controls	Α
Behaviour during big ears	Stable flight	Α	Stable flight	Α
Recovery	Recovery through pilot action in less than a further 3 s	В	Recovery through pilot action in less than a further 3 s	В
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	А	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





Flight test report: EN 926-2:2013

Manufacturer Sky Paragliders a.s. Certification number PG_1021.2016
Address Okružní 39 Date of flight test 11. 04. 2016
73911 Frýdlant nad

Ostravicí Czech Republic

Glider model	Apollo XL	Classification	В
Serial number	2152-11-0639	Representative	None
Trimmer	no	Place of test	Villeneuve
Test pilot		Thurnheer Claude	Zoller Alain
Harness		Niviuk - Hamak M	Gin Gliders - Gingo 2 L
Harness to risers	distance (cm)	44	43
Distance between	n risers (cm)	44	46
Total weight in fl	iaht (ka)	99	125

Total weight in flight (kg)	99		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	A			
Special landing technique required	No	Α	No	Α
3. Speed in straight flight	Α			
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	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 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	Α			
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 exiting a fully developed spiral dive	A			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	Α	Immediate reduction of rate of turn	Α
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 normal flight	Less than 720°, spontaneous recovery	Α	Less than 720°, spontaneous recovery	Α

······				
Approximately 30 % 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	Α	No	Α
At least 50% chord				
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	Spontaneous in 3 s to 5 s	В	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	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 30° to 60° / Keeping course	В
Cascade occurs	No	Α	No	Α
Folding lines used	No	Α	No	Α
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
Change of course				
Cascade occurs	No	Α	No	Α
Cascade occurs 12. High angle of attack recovery	No A	A	No	
Cascade occurs 12. High angle of attack recovery Recovery	No A Spontaneous in less than 3 s	A A	No Spontaneous in less than 3 s	Α
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs	No A Spontaneous in less than 3 s No	A	No	
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall	No A Spontaneous in less than 3 s No A	A A A	No Spontaneous in less than 3 s No	A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit	No A Spontaneous in less than 3 s No A Dive forward 0° to 30°	A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30°	A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse	A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse	A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses)	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No	A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No	A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45°	A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45°	A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight	A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No	A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45°	A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45°	A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight	A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45°	A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight	A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45°	A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B Less than 90° / Dive or roll angle	A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0°	A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B Less than 90° / Dive or roll angle 15° to 45°	A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15°	A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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	A A A A A A A A A A A A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous	A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B Less than 90° / Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° No (or only a small number of	A A A A A A A A A A A A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of	A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 A A A A A A A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation)	A A A A A A A A A A A A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. 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 A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 A A A A A A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° 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 A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 A A A A A A A A A A A A A	No Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re-inflation) No No	A A A A A A A A A A A A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 Large asymmetric collapse	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 No	A A A A A A A A A A A A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No	A A A A A A A A A A A A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 No No No	A A A A A A A A A A A A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No No 90° to 180° / Dive or roll angle 15°	A A A A A A A A A A A A A A A A A A A
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 No No 90° to 180° / Dive or roll angle 15° to 45°	A A A A A A A A B .	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No No 90° to 180° / Dive or roll angle 15° to 45°	A A A A A A A B B
Cascade occurs 12. High angle of attack recovery Recovery Cascade occurs 13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small 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 Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or	No A Spontaneous in less than 3 s No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight B 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 No No No	A A A A A A A A A A A A A A A A A A A	Spontaneous in less than 3 s No Dive forward 0° to 30° No collapse No Less than 45° Most lines tight Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No No 90° to 180° / Dive or roll angle 15°	A A A A A A A A A A A A A A A A A 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	Α	No	Α
. Graining interest and a				
Small 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	Α	No	Α
Large asymmetric collapse with fully activated accelerator		_	00° to 400° / Diverse and the 45°	_
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	Α	No	Α
15. Directional control with a maintained asymmetric	A			
Collapse	Yes	Α	Yes	Λ
Able to keep course	Yes	A	Yes	A A
180° turn away from the collapsed side possible in 10 s	More than 50 % of the	A		A
Amount of control range between turn and stall or spin	symmetric control travel	A	More than 50 % of the symmetric control travel	A
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	В			
Spin rotation angle after release	Stops spinning in 90° to 180°	В	Stops spinning in 90° to 180°	В
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	В			
Entry procedure	Dedicated controls	Α	Dedicated controls	Α
Behaviour during big ears	Stable flight	Α	Stable flight	Α
Recovery	Spontaneous in 3 s to 5 s	В	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 3 s to 5 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	А	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