

Flight test report: EN 926-2:2013 & LTF 91/09

Manufacturer	Sky Paragliders a.s.	Certification number	PG_1478.2019
Address	Okružní 39 73911 Frýdlant nad Ostravicí Czech Republic	Flight test	14.12.2015
Glider model	Apollo 2 L	Classification	B
Serial number	2058-11-1242	Representative	None
Trimmer	no	Place of test	Villeneuve
Folding lines used	no		
Test pilot		Claude Thurnheer	Alain Zoller
Harness		Sup' Air - Access M	Gin Gliders - Gingo 2 L
Harness to risers distance (cm)		43	43
Distance between risers (cm)		44	46
Total weight in flight (kg)		85	108

1. Inflation/Take-off	A			
Rising behaviour	Smooth, easy and constant rising	A	Smooth, easy and constant rising	A
Special take off technique required	No	A	No	A
2. Landing	A			
Special landing technique required	No	A	No	A
3. Speed in straight flight	A			
Trim speed more than 30 km/h	Yes	A	Yes	A
Speed range using the controls larger than 10 km/h	Yes	A	Yes	A
Minimum speed	Less than 25 km/h	A	Less than 25 km/h	A
4. Control movement	A			
Max. weight in flight up to 80 kg				
Symmetric control pressure / travel	not available	0	not available	0
Max. weight in flight 80 kg to 100 kg				
Symmetric control pressure / travel	Increasing / greater than 60 cm	A	not available	0
Max. weight in flight greater than 100 kg				
Symmetric control pressure / travel	not available	0	Increasing / greater than 65 cm	A
5. Pitch stability exiting accelerated flight	A			
Dive forward angle on exit	Dive forward less than 30°	A	Dive forward less than 30°	A
Collapse occurs	No	A	No	A
6. Pitch stability operating controls during accelerated flight	A			
Collapse occurs	No	A	No	A
7. Roll stability and damping	A			
Oscillations	Reducing	A	Reducing	A
8. Stability in gentle spirals	A			
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A
9. Behaviour exiting a fully developed spiral dive	A			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	A	Immediate reduction of rate of turn	A
Tendency to return to straight flight	Spontaneous exit (g force decreasing, rate of turn decreasing)	A	Spontaneous exit (g force decreasing, rate of turn decreasing)	A
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	Less than 720°, spontaneous recovery	A
10. Symmetric front collapse	B			
Approximately 30 % chord				
Recovery	Rocking back less than 45°	A	Rocking back less than 45°	A
	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A

Dive forward angle on exit Change of course	Dive forward 0° to 30° Keeping course	A	Dive forward 0° to 30° Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
At least 50% chord				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in 3 s to 5 s	B	Spontaneous in less than 3 s	A
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
With accelerator				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in 3 s to 5 s	B	Spontaneous in less than 3 s	A
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 30° to 60° / Keeping course	B
Cascade occurs	No	A	No	A
Folding lines used	No		No	
11. Exiting deep stall (parachutal stall)				
Deep stall achieved	Yes	A	Yes	A
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	A	No	A
12. High angle of attack recovery				
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Cascade occurs	No	A	No	A
13. Recovery from a developed full stall				
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	Most lines tight	A	Most lines tight	A
14. Asymmetric collapse				
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°	A	Less than 90° / Dive or roll angle 0° to 15°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
Large asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
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°	A	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A

Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
15. Directional control with a maintained asymmetric 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	A	More than 50 % of the symmetric control travel	A
16. Trim speed spin tendency				
Spin occurs	No	A	No	A
17. Low speed spin tendency				
Spin occurs	No	A	No	A
18. Recovery from a developed spin				
Spin rotation angle after release	Stops spinning in less than 90°	A	Stops spinning in less than 90°	A
Cascade occurs	No	A	No	A
19. B-line stall				
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	A	Remains stable with straight span	A
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
Cascade occurs	No	A	No	A
20. Big ears				
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Recovery through pilot action in less than a further 3 s	B	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
21. Big ears in accelerated flight				
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Spontaneous in 3 s to 5 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
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	A
22. Alternative means of directional control				
180° turn achievable in 20 s	Yes	A	Yes	A
Stall or spin occurs	No	A	No	A
23. Any other flight procedure and/or configuration described in the user's manual				
Procedure works as described	Yes	A	not available	0
Procedure suitable for novice pilots	Yes	A	not available	0
Cascade occurs	No	A	not available	0
24. Comments of test pilot				

Flight test report: EN 926-2:2013 & LTF 91/09

Manufacturer	Sky Paragliders a.s.	Certification number	PG_1476.2019
Address	Okružní 39 73911 Frýdlant nad Ostravicí Czech Republic	Flight test	26.02.2016
Glider model	Apollo 2 S	Classification	B
Serial number	02060-11-1414	Representative	None
Trimmer	no	Place of test	Villeneuve
Folding lines used	no		
Test pilot		Seiko Fukuoka	Claude Thurnheer
Harness		Sup' Air - Altiplume S	Sup' Air - Altiplume M
Harness to risers distance (cm)		43	43
Distance between risers (cm)		40	44
Total weight in flight (kg)		64	81

1. Inflation/Take-off	A			
Rising behaviour	Smooth, easy and constant rising	A	Smooth, easy and constant rising	A
Special take off technique required	No	A	No	A
2. Landing	A			
Special landing technique required	No	A	No	A
3. Speed in straight flight	A			
Trim speed more than 30 km/h	Yes	A	Yes	A
Speed range using the controls larger than 10 km/h	Yes	A	Yes	A
Minimum speed	Less than 25 km/h	A	Less than 25 km/h	A
4. Control movement	A			
Max. weight in flight up to 80 kg				
Symmetric control pressure / travel	Increasing / greater than 55 cm	A	not available	0
Max. weight in flight 80 kg to 100 kg				
Symmetric control pressure / travel	not available	0	Increasing / greater than 60 cm	A
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°	A	Dive forward less than 30°	A
Collapse occurs	No	A	No	A
6. Pitch stability operating controls during accelerated flight	A			
Collapse occurs	No	A	No	A
7. Roll stability and damping	A			
Oscillations	Reducing	A	Reducing	A
8. Stability in gentle spirals	A			
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A
9. Behaviour exiting a fully developed spiral dive	A			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	A	Immediate reduction of rate of turn	A
Tendency to return to straight flight	Spontaneous exit (g force decreasing, rate of turn decreasing)	A	Spontaneous exit (g force decreasing, rate of turn decreasing)	A
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	Less than 720°, spontaneous recovery	A
10. Symmetric front collapse	B			
Approximately 30 % chord				
Recovery	Rocking back less than 45°	A	Rocking back less than 45°	A
	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A

Dive forward angle on exit	Change of course	Dive forward 0° to 30° Keeping course	A	Dive forward 0° to 30° Keeping course	A
Cascade occurs		No	A	No	A
Folding lines used		No		No	
At least 50% chord					
Entry		Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery		Spontaneous in less than 3 s	A	Spontaneous in 3 s to 5 s	B
Dive forward angle on exit / Change of course		Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs		No	A	No	A
Folding lines used		No		No	
With accelerator					
Entry		Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery		Spontaneous in 3 s to 5 s	B	Spontaneous in 3 s to 5 s	B
Dive forward angle on exit / Change of course		Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs		No	A	No	A
Folding lines used		No		No	
11. Exiting deep stall (parachutal stall)					
Deep stall achieved		Yes	A	Yes	A
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	A	No	A
12. High angle of attack recovery					
Recovery		Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Cascade occurs		No	A	No	A
13. Recovery from a developed full stall					
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		Most lines tight	A	Most lines tight	A
14. Asymmetric collapse					
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°	A	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour		Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course		Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs		No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs		No	A	No	A
Cascade occurs		No	A	No	A
Folding lines used		No		No	
Large asymmetric collapse					
Change of course until re-inflation / Maximum dive forward or roll angle		Less than 90° / Dive or roll angle 15° to 45°	A	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour		Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course		Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs		No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs		No	A	No	A
Cascade occurs		No	A	No	A
Folding lines used		No		No	
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°	A	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour		Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course		Less than 360°	A	Less than 360°	A

Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
15. Directional control with a maintained asymmetric 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	A	More than 50 % of the symmetric control travel	A
16. Trim speed spin tendency				
Spin occurs	No	A	No	A
17. Low speed spin tendency				
Spin occurs	No	A	No	A
18. Recovery from a developed spin				
Spin rotation angle after release	Stops spinning in less than 90°	A	Stops spinning in less than 90°	A
Cascade occurs	No	A	No	A
19. B-line stall				
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	A	Remains stable with straight span	A
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
Cascade occurs	No	A	No	A
20. Big ears				
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
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
21. Big ears in accelerated flight				
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Recovery through pilot action in less than a further 3 s	B	Recovery through pilot action in less than a further 3 s	B
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	A
22. Alternative means of directional control				
180° turn achievable in 20 s	Yes	A	Yes	A
Stall or spin occurs	No	A	No	A
23. Any other flight procedure and/or configuration described in the user's manual				
Procedure works as described	not available	0	not available	0
Procedure suitable for novice pilots	not available	0	not available	0
Cascade occurs	not available	0	not available	0
24. Comments of test pilot				

Flight test report: EN 926-2:2013 & LTF 91/09

Manufacturer	Sky Paragliders a.s.	Certification number	PG_1480.2019
Address	Okružní 39 73911 Frýdlant nad Ostravicí Czech Republic	Flight test	07.03.2016
Glider model	Apollo 2 XS	Classification	B
Serial number	2151-11-0605	Representative	None
Trimmer	no	Place of test	Villeneuve
Folding lines used	no		
Test pilot		Light pilot under Air Turquoise supervision	Claude Thurnheer
Harness		Flugsau - XX-Lite	Flugsau - XX-Lite
Harness to risers distance (cm)		40	40
Distance between risers (cm)		40	40
Total weight in flight (kg)		55	73

1. Inflation/Take-off	A			
Rising behaviour	Smooth, easy and constant rising	A	Smooth, easy and constant rising	A
Special take off technique required	No	A	No	A
2. Landing	A			
Special landing technique required	No	A	No	A
3. Speed in straight flight	B			
Trim speed more than 30 km/h	Yes	A	Yes	A
Speed range using the controls larger than 10 km/h	Yes	A	Yes	A
Minimum speed	25 km/h to 30 km/h	B	25 km/h to 30 km/h	B
4. Control movement	A			
Max. weight in flight up to 80 kg				
Symmetric control pressure / travel	Increasing / greater than 55 cm	A	Increasing / greater than 55 cm	A
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°	A	Dive forward less than 30°	A
Collapse occurs	No	A	No	A
6. Pitch stability operating controls during accelerated flight	A			
Collapse occurs	No	A	No	A
7. Roll stability and damping	A			
Oscillations	Reducing	A	Reducing	A
8. Stability in gentle spirals	A			
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A
9. Behaviour exiting a fully developed spiral dive	A			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	A	Immediate reduction of rate of turn	A
Tendency to return to straight flight	Spontaneous exit (g force decreasing, rate of turn decreasing)	A	Spontaneous exit (g force decreasing, rate of turn decreasing)	A
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	Less than 720°, spontaneous recovery	A
10. Symmetric front collapse	B			
Approximately 30 % chord	Rocking back less than 45°	A	Rocking back less than 45°	A

Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit Change of course	Dive forward 0° to 30° Keeping course	A	Dive forward 0° to 30° Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
At least 50% chord				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in less than 3 s	A	Spontaneous in 3 s to 5 s	B
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Entering a turn of less than 90°	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
With accelerator				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in 3 s to 5 s	B	Spontaneous in 3 s to 5 s	B
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Entering a turn of less than 90°	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
11. Exiting deep stall (parachutal stall)				
Deep stall achieved	Yes	A	Yes	A
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	A	No	A
12. High angle of attack recovery				
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Cascade occurs	No	A	No	A
13. Recovery from a developed full stall				
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	Most lines tight	A	Most lines tight	A
14. Asymmetric collapse				
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°	A	Less than 90° / Dive or roll angle 0° to 15°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
Large asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°	A	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
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°	A	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A

Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
15. Directional control with a maintained asymmetric 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	A	More than 50 % of the symmetric control travel	A
16. Trim speed spin tendency				
Spin occurs	No	A	No	A
17. Low speed spin tendency				
Spin occurs	No	A	No	A
18. Recovery from a developed spin				
Spin rotation angle after release	Stops spinning in less than 90°	A	Stops spinning in less than 90°	A
Cascade occurs	No	A	No	A
19. B-line stall				
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	A	Remains stable with straight span	A
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
Cascade occurs	No	A	No	A
20. Big ears				
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Spontaneous in less than 3 s	A	Recovery through pilot action in less than a further 3 s	B
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
21. Big ears in accelerated flight				
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Recovery through pilot action in less than a further 3 s	B	Recovery through pilot action in less than a further 3 s	B
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	A
22. Alternative means of directional control				
180° turn achievable in 20 s	Yes	A	Yes	A
Stall or spin occurs	No	A	No	A
23. Any other flight procedure and/or configuration described in the user's manual				
Procedure works as described	not available	0	not available	0
Procedure suitable for novice pilots	not available	0	not available	0
Cascade occurs	not available	0	not available	0
24. Comments of test pilot				

Flight test report: EN 926-2:2013 & LTF 91/09

Manufacturer	Sky Paragliders a.s.	Certification number	PG_1479.2019
Address	Okružní 39 73911 Frýdlant nad Ostravicí Czech Republic	Flight test	11.04.2016
Glider model	Apollo 2 XL	Classification	B
Serial number	2152-11-0639	Representative	None
Trimmer	no	Place of test	Villeneuve
Folding lines used	no		
Test pilot		Claude Thurnheer	Alain Zoller
Harness		Niviuk - Hamak M	Gin Gliders - Gingo 2 L
Harness to risers distance (cm)		44	43
Distance between risers (cm)		44	46
Total weight in flight (kg)		99	125

1. Inflation/Take-off	A			
Rising behaviour	Smooth, easy and constant rising	A	Smooth, easy and constant rising	A
Special take off technique required	No	A	No	A
2. Landing	A			
Special landing technique required	No	A	No	A
3. Speed in straight flight	A			
Trim speed more than 30 km/h	Yes	A	Yes	A
Speed range using the controls larger than 10 km/h	Yes	A	Yes	A
Minimum speed	Less than 25 km/h	A	Less than 25 km/h	A
4. Control movement	A			
Max. weight in flight up to 80 kg				
Symmetric control pressure / travel	not available	0	not available	0
Max. weight in flight 80 kg to 100 kg				
Symmetric control pressure / travel	Increasing / greater than 60 cm	A	not available	0
Max. weight in flight greater than 100 kg				
Symmetric control pressure / travel	not available	0	Increasing / greater than 65 cm	A
5. Pitch stability exiting accelerated flight	A			
Dive forward angle on exit	Dive forward less than 30°	A	Dive forward less than 30°	A
Collapse occurs	No	A	No	A
6. Pitch stability operating controls during accelerated flight	A			
Collapse occurs	No	A	No	A
7. Roll stability and damping	A			
Oscillations	Reducing	A	Reducing	A
8. Stability in gentle spirals	A			
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A
9. Behaviour exiting a fully developed spiral dive	A			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	A	Immediate reduction of rate of turn	A
Tendency to return to straight flight	Spontaneous exit (g force decreasing, rate of turn decreasing)	A	Spontaneous exit (g force decreasing, rate of turn decreasing)	A
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	Less than 720°, spontaneous recovery	A
10. Symmetric front collapse	B			
Approximately 30 % chord				
Recovery	Rocking back less than 45°	A	Rocking back less than 45°	A
	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A

Dive forward angle on exit Change of course	Dive forward 0° to 30° Keeping course	A	Dive forward 0° to 30° Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
At least 50% chord				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in 3 s to 5 s	B	Spontaneous in less than 3 s	A
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
With accelerator				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 30° to 60° / Keeping course	B
Cascade occurs	No	A	No	A
Folding lines used	No		No	
11. Exiting deep stall (parachutal stall)				
Deep stall achieved	Yes	A	Yes	A
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	A	No	A
12. High angle of attack recovery				
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Cascade occurs	No	A	No	A
13. Recovery from a developed full stall				
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	Most lines tight	A	Most lines tight	A
14. Asymmetric collapse				
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°	A	Less than 90° / Dive or roll angle 0° to 15°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
Large asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
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°	A	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A

Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
15. Directional control with a maintained asymmetric 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	A	More than 50 % of the symmetric control travel	A
16. Trim speed spin tendency				
Spin occurs	No	A	No	A
17. Low speed spin tendency				
Spin occurs	No	A	No	A
18. Recovery from a developed spin				
Spin rotation angle after release	Stops spinning in 90° to 180°	B	Stops spinning in 90° to 180°	B
Cascade occurs	No	A	No	A
19. B-line stall				
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	A	Remains stable with straight span	A
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
Cascade occurs	No	A	No	A
20. Big ears				
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Spontaneous in 3 s to 5 s	B	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
21. Big ears in accelerated flight				
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Spontaneous in 3 s to 5 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
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	A
22. Alternative means of directional control				
180° turn achievable in 20 s	Yes	A	Yes	A
Stall or spin occurs	No	A	No	A
23. Any other flight procedure and/or configuration described in the user's manual				
Procedure works as described	not available	0	not available	0
Procedure suitable for novice pilots	not available	0	not available	0
Cascade occurs	not available	0	not available	0
24. Comments of test pilot				

Flight test report: EN 926-2:2013 & LTF 91/09

Manufacturer	Sky Paragliders a.s.	Certification number	PG_1477.2019
Address	Okružní 39 73911 Frýdlant nad Ostravicí Czech Republic	Flight test	13.11.2018
Glider model	Apollo 2 M	Classification	B
Serial number	2359-11-1262	Representative	None
Trimmer	no	Place of test	Villeneuve
Folding lines used	no		
Test pilot		Claude Thurnheer	Alain Zoller
Harness		Supair - Altiplume S	Flugsau - XX-Lite
Harness to risers distance (cm)		41	41
Distance between risers (cm)		40	44
Total weight in flight (kg)		74	94

1. Inflation/Take-off	A			
Rising behaviour	Smooth, easy and constant rising	A	Smooth, easy and constant rising	A
Special take off technique required	No	A	No	A
2. Landing	A			
Special landing technique required	No	A	No	A
3. Speed in straight flight	A			
Trim speed more than 30 km/h	Yes	A	Yes	A
Speed range using the controls larger than 10 km/h	Yes	A	Yes	A
Minimum speed	Less than 25 km/h	A	Less than 25 km/h	A
4. Control movement	A			
Max. weight in flight up to 80 kg				
Symmetric control pressure / travel	Increasing / greater than 55 cm	A	not available	0
Max. weight in flight 80 kg to 100 kg				
Symmetric control pressure / travel	not available	0	Increasing / greater than 60 cm	A
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°	A	Dive forward less than 30°	A
Collapse occurs	No	A	No	A
6. Pitch stability operating controls during accelerated flight	A			
Collapse occurs	No	A	No	A
7. Roll stability and damping	A			
Oscillations	Reducing	A	Reducing	A
8. Stability in gentle spirals	A			
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A
9. Behaviour exiting a fully developed spiral dive	A			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	A	Immediate reduction of rate of turn	A
Tendency to return to straight flight	Spontaneous exit (g force decreasing, rate of turn decreasing)	A	Spontaneous exit (g force decreasing, rate of turn decreasing)	A
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	Less than 720°, spontaneous recovery	A
10. Symmetric front collapse	B			
Approximately 30 % chord				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A

Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit Change of course	Dive forward 0° to 30° Keeping course	A	Dive forward 0° to 30° Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
At least 50% chord				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in 3 s to 5 s	B	Spontaneous in less than 3 s	A
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
With accelerator				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
11. Exiting deep stall (parachutal stall)				
Deep stall achieved	Yes	A	Yes	A
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	A	No	A
12. High angle of attack recovery				
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Cascade occurs	No	A	No	A
13. Recovery from a developed full stall				
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	Most lines tight	A	Most lines tight	A
14. Asymmetric collapse				
Small asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 0° to 15°	A	Less than 90° / Dive or roll angle 0° to 15°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
Large asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
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°	A	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A

Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	No		No	
15. Directional control with a maintained asymmetric 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	A	More than 50 % of the symmetric control travel	A
16. Trim speed spin tendency				
Spin occurs	No	A	No	A
17. Low speed spin tendency				
Spin occurs	No	A	No	A
18. Recovery from a developed spin				
Spin rotation angle after release	Stops spinning in less than 90°	A	Stops spinning in less than 90°	A
Cascade occurs	No	A	No	A
19. B-line stall				
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	A	Remains stable with straight span	A
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
Cascade occurs	No	A	No	A
20. Big ears				
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
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
21. Big ears in accelerated flight				
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Recovery through pilot action in less than a further 3 s	B	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	A
22. Alternative means of directional control				
180° turn achievable in 20 s	Yes	A	Yes	A
Stall or spin occurs	No	A	No	A
23. Any other flight procedure and/or configuration described in the user's manual				
Procedure works as described	not available	0	not available	0
Procedure suitable for novice pilots	not available	0	not available	0
Cascade occurs	not available	0	not available	0
24. Comments of test pilot				

Paraglider inspection certificate

Inspection certificate number: **PG_1476.2019**

Manufacturer data


Manufacturer name: **Sky Paragliders a.s.**
 Representative: **Michal Sotek**
 Street: **Okruzni 39**
 Post code / place: **73911 Frydlant n.O.**
 Country: **Czech Republic**

Sample data

Name:	Apollo 2	Size:	S
Min weight in flight [kg]:	64	Max weight in flight [kg]:	81
Weight [kg]:	4	Number of seat:	Single-seater
Sample load serial number:	n/a	Date of reception:	n/a
Sample flight serial number :	2060-11-1414	Date of reception:	26.02.2016

Test report summary	Result	Place	Date of test
71.8.3 Shock loading test:	Test done on size XL, inspection PG_1479.2019		27.09.2018
71.8.3 Sustained loading test:	Test done on size XL, inspection PG_1479.2019		27.09.2018
71.8.2 Flight test:	B	Villeneuve	26.02.2016
71.4.3 Measurement:	POSITIVE	Villeneuve	09.02.2016
71.6.3 Line bending test:	POSITIVE	Villeneuve	15.03.2019

Issue data

Place of declaration: **Villeneuve**
 Date of issue: **21.03.2019**
 Managing Director: **Alain Zoller**
 Signature: 

This signature approve the validity of the test reports 71.8.2, 71.8.3, 71.4.3 and 71.6.3 (Only if test report are applicable).

Air Turquoise SA has thoroughly tested the sample of paraglider mentioned above and certifies its conformity with the following standards : EN 926-2:2013 / EN 926-1:2015 / LTF: NFL II 91/09 / 2-60-14 / 2-251-16

This inspection certificate confirms that the above sample identified by its serial number and only this is in conforms with the standards.

The inspection certificate contain the following test and is complete with the test report number: 71.8.2, 71.8.3, 71.4.3, 71.6.3
 (If the 71.8.3 tests are not done, it has been done for another size of a sample within the definition of same model)

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Classification: **B**

In accordance with standards EN 926-2:2013, EN 926-1:2015 & LTF 91/09:

PG_1476.2019

Date of issue (DMY):

21.03.2019

Manufacturer:

Sky Paragliders a.s.

Model:

Apollo 2 S

Serial number:

02060-11-1414

Configuration during flight tests

Paraglider

Maximum weight in flight (kg)	81
Minimum weight in flight (kg)	64
Glider's weight (kg)	4
Number of risers	3
Projected area (m2)	20.19

Accessories

Range of speed system (cm)	14
Speed range using brakes (km/h)	14
Total speed range with accessories (km/h)	28
Range of trimmers (cm)	0

Harness used for testing (max weight)

Harness type	ABS
Harness brand	Sup' Air
Harness model	Altiplume M
Harness to risers distance (cm)	43
Distance between risers (cm)	44

Inspections (whichever happens first)

every 24 months or every 100 flying hours
Warning! Before use refer to user's manual
Person or company having presented the glider for testing: **sky paraglider**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
A A A A A A A A A B A A A B A A A A A B A 0

Paraglider inspection certificate

Inspection certificate number: **PG_1477.2019**

Manufacturer data


Manufacturer name: **Sky Paragliders a.s.**
Representative: **Michal Sotek**
Street: **Okruzni 39**
Post code / place: **73911 Frydlant n.O.**
Country: **Czech Republic**

Sample data

Name:	Apollo 2	Size:	M
Min weight in flight [kg]:	74	Max weight in flight [kg]:	94
Weight [kg]:	4.2	Number of seat:	Single-seater
Sample load serial number:	n/a	Date of reception:	n/a
Sample flight serial number :	2359-11-1262	Date of reception:	09.11.2018

Test report summary	Result	Place	Date of test
71.8.3 Shock loading test:	Test done on size XL, inspection PG_1479.2019		27.09.2018
71.8.3 Sustained loading test:	Test done on size XL, inspection PG_1479.2019		27.09.2018
71.8.2 Flight test:	B	Villeneuve	13.11.2018
71.4.3 Measurement:	POSITIVE	Villeneuve	01.11.2018
71.6.3 Line bending test:	POSITIVE	Villeneuve	15.03.2019

Issue data

Place of declaration: **Villeneuve**
Date of issue: **21.03.2019**
Managing Director: **Alain Zoller**
Signature: 

This signature approve the validity of the test reports 71.8.2, 71.8.3, 71.4.3 and 71.6.3 (Only if test report are applicable).

Air Turquoise SA has thoroughly tested the sample of paraglider mentioned above and certifies its conformity with the following standards : EN 926-2:2013 / EN 926-1:2015 / LTF: NFL II 91/09 / 2-60-14 / 2-251-16

This inspection certificate confirms that the above sample identified by its serial number and only this is in conforms with the standards.

The inspection certificate contain the following test and is complete with the test report number: 71.8.2, 71.8.3, 71.4.3, 71.6.3
(If the 71.8.3 tests are not done, it has been done for another size of a sample within the definition of same model)

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Classification: **B**

In accordance with standards EN 926-2:2013, EN 926-1:2015 & LTF 91/09:

PG_1477.2019

Date of issue (DMY):

21.03.2019

Manufacturer:

Sky Paragliders a.s.

Model:

Apollo 2 M

Serial number:

2359-11-1262

Configuration during flight tests

Paraglider

Maximum weight in flight (kg)	94
Minimum weight in flight (kg)	74
Glider's weight (kg)	4.2
Number of risers	3
Projected area (m2)	21.56

Accessories

Range of speed system (cm)	14
Speed range using brakes (km/h)	14
Total speed range with accessories (km/h)	28
Range of trimmers (cm)	0

Harness used for testing (max weight)

Harness type	ABS
Harness brand	Flugsau
Harness model	XX-Lite

Inspections (whichever happens first)

every 24 monthes or every 100 flying hours
Warning! Before use refer to user's manual
Person or company having presented the glider for testing: **None**

Harness to risers distance (cm) **41**

Distance between risers (cm) **44**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
A A A A A A A A A B A A A B A A A A A B A 0

Paraglider inspection certificate

Inspection certificate number: **PG_1478.2019**

Manufacturer data

Manufacturer name: **Sky Paragliders a.s.**
 Representative: **Michal Sotek**
 Street: **Okruzni 39**
 Post code / place: **73911 Frydlant n.O.**
 Country: **Czech Republic**


Sample data

Name:	Apollo 2	Size:	L
Min weight in flight [kg]:	85	Max weight in flight [kg]:	108
Weight [kg]:	4.5	Number of seat:	Single-seater
Sample load serial number:	n/a	Date of reception:	n/a
Sample flight serial number :	2058-11-1242	Date of reception:	14.12.2015

Test report summary

Test report summary	Result	Place	Date of test
71.8.3 Shock loading test:	Test done on size XL, inspection PG_1479.2019		27.09.2018
71.8.3 Sustained loading test:	Test done on size XL, inspection PG_1479.2019		27.09.2018
71.8.2 Flight test:	B	Villeneuve	14.12.2015
71.4.3 Measurement:	POSITIVE	Villeneuve	04.01.2016
71.6.3 Line bending test:	POSITIVE	Villeneuve	15.03.2019

Issue data

Place of declaration: **Villeneuve**
 Date of issue: **21.03.2019**
 Managing Director: **Alain Zoller**
 Signature: 

This signature approve the validity of the test reports 71.8.2, 71.8.3, 71.4.3 and 71.6.3 (Only if test report are applicable).

Air Turquoise SA has thoroughly tested the sample of paraglider mentioned above and certifies its conformity with the following standards : EN 926-2:2013 / EN 926-1:2015 / LTF: NFL II 91/09 / 2-60-14 / 2-251-16

This inspection certificate confirms that the above sample identified by its serial number and only this is in conforms with the standards.

The inspection certificate contain the following test and is complete with the test report number: 71.8.2, 71.8.3, 71.4.3, 71.6.3
 (If the 71.8.3 tests are not done, it has been done for another size of a sample within the definition of same model)

The declaration must not be reproduced in part without the written permission of Air Turquoise SA.



Classification: **B**

In accordance with standards EN 926-2:2013, EN 926-1:2015 & LTF 91/09:

PG_1478.2019

Date of issue (DMY):

21.03.2019

Manufacturer:

Sky Paragliders a.s.

Model:

Apollo 2 L

Serial number:

2058-11-1242

Configuration during flight tests

Paraglider

Maximum weight in flight (kg)	108
Minimum weight in flight (kg)	85
Glider's weight (kg)	4.5
Number of risers	3
Projected area (m2)	23.03

Accessories

Range of speed system (cm)	14
Speed range using brakes (km/h)	14
Total speed range with accessories (km/h)	28
Range of trimmers (cm)	0

Harness used for testing (max weight)

Harness type	ABS
Harness brand	Gin Gliders
Harness model	Gingo 2 L
Harness to risers distance (cm)	43
Distance between risers (cm)	46

Inspections (whichever happens first)

every 24 months or every 100 flying hours	
Warning! Before use refer to user's manual	
Person or company having presented the glider for testing: None	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
A A A A A A A A A B A A A B A A A A B A A A

Paraglider inspection certificate

Inspection certificate number: **PG_1479.2019**

Manufacturer data


Manufacturer name: **Sky Paragliders a.s.**
 Representative: **Michal Sotek**
 Street: **Okruzni 39**
 Post code / place: **73911 Frydlant n.O.**
 Country: **Czech Republic**

Sample data

Name:	Apollo 2	Size:	XL
Min weight in flight [kg]:	99	Max weight in flight [kg]:	125
Weight [kg]:	4.7	Number of seat:	Single-seater
Sample load serial number:	2359-11-1273	Date of reception:	27.09.2018
Sample flight serial number :	2152-11-0639	Date of reception:	01.03.2016

Test report summary	Result	Place	Date of test
71.8.3 Shock loading test:	POSITIVE	Yverdon(airport)	27.09.2018
71.8.3 Sustained loading test:	POSITIVE	Yverdon(airport)	27.09.2018
71.8.2 Flight test:	B	Villeneuve	11.04.2016
71.4.3 Measurement:	POSITIVE	Villeneuve	11.04.2016
71.6.3 Line bending test:	POSITIVE	Villeneuve	15.03.2019

Issue data

Place of declaration: **Villeneuve**
 Date of issue: **21.03.2019**
 Managing Director: **Alain Zoller**
 Signature: 

This signature approve the validity of the test reports 71.8.2, 71.8.3, 71.4.3 and 71.6.3 (Only if test report are applicable).

Air Turquoise SA has thoroughly tested the sample of paraglider mentioned above and certifies its conformity with the following standards : EN 926-2:2013 / EN 926-1:2015 / LTF: NFL II 91/09 / 2-60-14 / 2-251-16

This inspection certificate confirms that the above sample identified by its serial number and only this is in conforms with the standards.

The inspection certificate contain the following test and is complete with the test report number: 71.8.2, 71.8.3, 71.4.3, 71.6.3
 (If the 71.8.3 tests are not done, it has been done for another size of a sample within the definition of same model)

The declaration must not be reproduced in part without the written permission of Air Turquoise SA.



Classification: **B**

In accordance with standards EN 926-2:2013, EN 926-1:2015 & LTF 91/09:

PG_1479.2019

Date of issue (DMY):

21.03.2019

Manufacturer:

Sky Paragliders a.s.

Model:

Apollo 2 XL

Serial number:

2152-11-0639

Configuration during flight tests

Paraglider

Maximum weight in flight (kg)	125
Minimum weight in flight (kg)	99
Glider's weight (kg)	4.7
Number of risers	3
Projected area (m2)	24.6

Accessories

Range of speed system (cm)	16
Speed range using brakes (km/h)	14
Total speed range with accessories (km/h)	28
Range of trimmers (cm)	0

Harness used for testing (max weight)

Harness type	ABS
Harness brand	Gin Gliders
Harness model	Gingo 2 L
Harness to risers distance (cm)	43
Distance between risers (cm)	46

Inspections (whichever happens first)

every 24 months or every 100 flying hours
Warning! Before use refer to user's manual
Person or company having presented the glider for testing: None

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
A A A A A A A A A B A A A B A A A B A B A A 0

Paragliders Shock- and sustained loading test

Inspection certificat number: PG_1479.2019

Test Report

Manufacturer data

Manufacturer name: Sky Paragliders a.s.
 Representative: Michal Sotek
 Street: Okruzni 39
 Post code / place: 73911 Frydlant n.O.
 Country: Czech Republic

Sample data

Name: Apollo 2
 Size: XL
 Maximum weight in flight [kg]: 125
 Serial number: 2359-11-1273
 Date of reception: 27.09.2018

Test data

Test Atmosphere AGL

Place of test:	Yverdon (airport)	5	[°C]
Date of test:	27.09.2018	73	RH [%]
Inspector:	Alain Zoller	979.9	[hPA]
		0.1	Wind [m/s]

Shock loading test result ⁽¹⁾

Weak link used [daN]: 1000
 Visual inspection: No visible damage Results: **POSITIVE**
 Uncertainty k=2 [%] ⁽²⁾: 10

Weak link



Instruments	Validity	Manufacturer	s/n
Weak link	2020	Tost	n/a
Cable	2020	Rotex	n/a
Geos n° 11 Skywatch	08.05.2019	JDC elec.	22

Inspection certificate number: **PG_1479.2019**

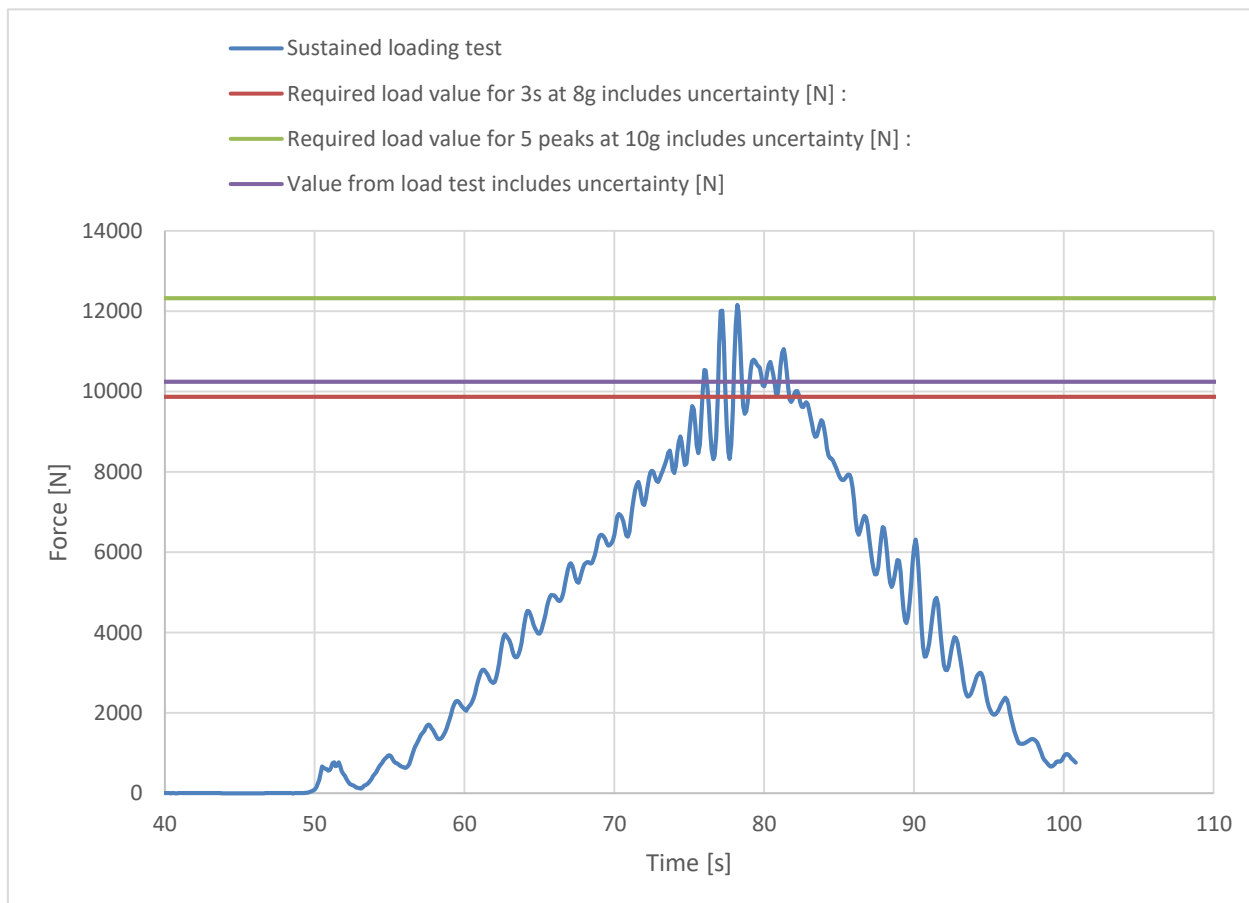
Sustained loading test results ⁽³⁾

Result : **POSITIVE**
 Calculated max load value with 3 sec or five peaks [kg] : **130.49**

Required sustained loading test results ⁽⁴⁾

Required load value for 3s at 8g [N] : **9810.00**
 Required load value for 5 peaks at 10g [N] : **12262.50**
 Required load value for 3s at 8g includes uncertainty [N] : **9869.23**
 Required load value for 5 peaks at 10g includes uncertainty [N] : **12321.73**
 Uncertainty K=2 [%] : **0.487**

Graphic sustained loading diagram





Inspection certificate number: **PG_1479.2019**

Detailed sustained loading test results

Calculated cumulative duration at max load [s] : **3.2**

Calculated max load value duration of 3 sec. [N] : **1280.10**

Calculated max load value duration of 3 sec. [kg] : **130.49**

Calculated max load value with five peaks [N] : **n/a**

Calculated max load value with five peaks [kg] : **n/a**

Calculated max load value with 3 sec or five peaks [N] : **1280.10**

Calculated max load value with 3 sec or five peaks [kg] : **130.49**

Instruments	Manufacturer	Type nr.	S/N
Load sensor	HBM	1-S9M/50KN-1	31314652
Geos n°11 Skywatch	JDC	Geos n° 11	0022

The validation of this test report is given by the signature of the test manager on inspection certificate 71.8.1

Air Turquoise SA has thoroughly tested the sample of paraglider mentioned above and certifies its conformity with the standards **EN 926-1:2015 chapter 4.4, 4.5 | LTF NFL II-91/09 chapter 3**

(1) The paraglider is subjected to a shock load . Shock load is limited using a weak link according to the weight range of glider. The weak link breaks or 5 s has elapsed since the start of the shock load. The wing is then visually inspected for damage.

(2) Weak link value include the uncertainty for weight range test values / The uncertainty state is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor $k = 2$. The value of the measurand lies within the assigned range of values with a probability of 95%.

(3) The test specimen (sample) is attached to the electronic sensors on the tow vehicle.

A controller is positioned on the tow vehicle in order to operate the paraglider control lines to stabilize the wing.

The speed of the vehicle is increased as gradually as possible, enabling the controller to obtain satisfactory stabilisation of the flight path of the paraglider.

When the paraglider has stabilized, the speed is increased gradually until either:

- a) the measured load exceeds a load factor of eight times the maximum total weight in flight recommended by the manufacturer, for a minimum cumulative duration of 3 s; or
- b) five peaks separated by at least 0,3 s are obtained above ten times the maximum total weight in flight recommended by the manufacturer, in one run.

(4) The calculated value include the value minus the uncertainty / The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor $k = 2$. The value of the measurand lies within the assigned range of values with a probability of 95%.

Paraglider inspection certificate

Inspection certificate number: **PG_1480.2019**

Manufacturer data

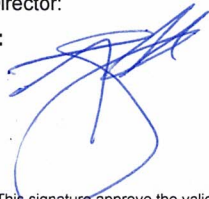
Manufacturer name: **Sky Paragliders a.s.**
 Representative: **Michal Sotek**
 Street: **Okruzni 39**
 Post code / place: **73911 Frydlant n.O.**
 Country: **Czech Republic**

Sample data

Name:	Apollo 2	Size:	XS
Min weight in flight [kg]:	55	Max weight in flight [kg]:	73
Weight [kg]:	3.9	Number of seat:	Single-seater
Sample load serial number:	n/a	Date of reception:	n/a
Sample flight serial number :	2151-11-0605	Date of reception:	06.03.2016

Test report summary	Result	Place	Date of test
71.8.3 Shock loading test:	Test done on size XL, inspection PG_1479.2019		27.09.2018
71.8.3 Sustained loading test:	Test done on size XL, inspection PG_1479.2019		27.09.2018
71.8.2 Flight test:	B	Villeneuve	07.03.2016
71.4.3 Measurement:	POSITIVE	Villeneuve	28.04.2016
71.6.3 Line bending test:	POSITIVE	Villeneuve	15.03.2019

Issue data

Place of declaration: **Villeneuve**
 Date of issue: **21.03.2019**
 Managing Director: **Alain Zoller**
 Signature: 

This signature approve the validity of the test reports 71.8.2, 71.8.3, 71.4.3 and 71.6.3 (Only if test report are applicable).

Air Turquoise SA has thoroughly tested the sample of paraglider mentioned above and certifies its conformity with the following standards : EN 926-2:2013 / EN 926-1:2015 / LTF: NFL II 91/09 / 2-80-14 / 2-251-16

This inspection certificate confirms that the above sample identified by its serial number and only this is in conforms with the standards.

The inspection certificate contain the following test and is complete with the test report number: 71.8.2, 71.8.3, 71.4.3, 71.6.3
 (If the 71.8.3 tests are not done, it has been done for another size of a sample within the definition of same model)

The declaration must not be reproduced in part without the written permission of Air Turquoise SA.



Classification: **B**

In accordance with standards EN 926-2:2013, EN 926-1:2015 & LTF 91/09:

PG_1480.2019

Date of issue (DMY):

21.03.2019

Manufacturer:

Sky Paragliders a.s.

Model:

Apollo 2 XS

Serial number:

2151-11-0605

Configuration during flight tests

Paraglider

Maximum weight in flight (kg)	73
Minimum weight in flight (kg)	55
Glider's weight (kg)	3.9
Number of risers	3
Projected area (m2)	18.9

Accessories

Range of speed system (cm)	13
Speed range using brakes (km/h)	14
Total speed range with accessories (km/h)	28
Range of trimmers (cm)	0

Harness used for testing (max weight)

Harness type	ABS
Harness brand	Flugsau
Harness model	XX-Lite

Inspections (whichever happens first)

every 24 months or every 100 flying hours
Warning! Before use refer to user's manual
Person or company having presented the glider for testing: **sky paraglider**

Harness to risers distance (cm) **40**

Distance between risers (cm) **40**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
A A B A A A A A B A A A B A A A A B B A 0