Route du Pré-au-Comte 8 • CH-1844 Villeneuve • •41 (0)2) 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes





Classification: **B**

In accordance with standards EN 926-1:2015, EN 926-2:2013 and LTF NFL II-

91/09:

Date of issue (DMY):

Manufacturer:

Model:

Serial number:

PG_1709.2020

23.06.2020

Sky Paragliders a.s.

Metis 4 40

2552-11-0688

Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	210	Range of speed system (cm)	0
Minimum weight in flight (kg)	110	Speed range using brakes (km/h)	14
Glider's weight (kg)	7.1	Total speed range with accessories (km/h)	20
Number of risers	4	Range of trimmers (cm)	8
Projected area (m2)	39.5		
Harness used for testing (max weight)		Inspections (whichever happens first)	
Harness type	ABS	every 12 months or every 100 flying hours	
Harness brand	Advance	Warning! Before use refer to user's manual	
Harness model	Bi pro 2	Person or company having presented the glider for testing: Alexandre Paux	
Harness to risers distance (cm)	55		
Distance between risers (cm)	55		

Route du Pré-au-Comte 8 * CH-1844 Villeneuve * +41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Paraglider inspection certificate

Inspection certificate number:

PG 1709.2020

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: Min weight in flight [kg]: Metis 4

2552-11-0688

Size:

40

Weight [kg]:

110 7.1

Max weight in flight [kg]:

210 Two-seater

Number of seat:

n/a

Sample load serial number: Sample flight serial number : n/a

Date of reception: Date of reception:

29.05.2020

Test report summary

Result

Place

Test done on size 42, inspection PG 1686.2020

Date of test 24.04.2020

91.23 | Shock loading test:

91.23 | Sustained loading test:

91.27 | Suspension line calculation:

Test done on size 42, inspection PG_1686.2020 Villeneuve

24.04.2020 11.06.2020

91.22 | Flight test: 91.24 | Measurement:

POSITIVE POSITIVE Villeneuve Villeneuve

15.06.2020 05.06.2020

Issue data

Place of declaration:

Villeneuve

Date of issue:

Managing Director:

23.06.2020 Alain Zoller

Signature:

This signature approve the validity of the test reports 91.22, 91.23, 91.24 and 91.27 (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

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: 91.22, 91.23, 91.24, 91.27 (If the 91.23 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

ISO 91.28 BR | Rev 18 | 21.11.2019

Route du Pré-au-Comte 8 • CH-1844 Villeneuve • •41 (0)2) 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes





Classification: **B**

In accordance with standards EN 926-1:2015, EN 926-2:2013 and LTF NFL II-

91/09:

Date of issue (DMY):

Manufacturer:

Model:

Serial number:

PG_1686.2020

23.06.2020

Sky Paragliders a.s.

Metis 4 42

2461-11-1378

Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	220	Range of speed system (cm)	0
Minimum weight in flight (kg)	120	Speed range using brakes (km/h)	14
Glider's weight (kg)	7.5	Total speed range with accessories (km/h)	20
Number of risers	4	Range of trimmers (cm)	8
Projected area (m2)	42.38		
Harness used for testing (max weight)		Inspections (whichever happens first)	
Harness type	ABS	every 12 months or every 100 flying hours	
Harness brand	Advance	Warning! Before use refer to user's manual	
Harness model	Bi pro 2	Person or company having presented the glider for testing: None	
Harness to risers distance (cm)	55		
Distance between risers (cm)	55		

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

Route du Pré-au-Comte 8 * CH-1844 Villeneuve * +41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Paraglider inspection certificate

Inspection certificate number:

PG 1686.2020

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: Min weight in flight [kg]: Metis 4

Size:

42

Weight [kg]:

120

Max weight in flight [kg]:

220 Two-seater

Number of seat: Date of reception:

11.03.2020

Sample load serial number: Sample flight serial number : 2553-11-0708 2461-11-1378

Date of reception:

12.03.2020

Test report summary

Result

Place

Date of test

91.23 | Shock loading test:

POSITIVE POSITIVE Yverdon(airport) Yverdon(airport) 24.04.2020 24.04.2020

91.23 | Sustained loading test: 91.22 | Flight test:

Villeneuve

25.05.2020

91.24 | Measurement: 91.27 | Suspension line calculation:

POSITIVE POSITIVE

Villeneuve Villeneuve

15.06.2020 05.06.2020

Issue data

Place of declaration:

Villeneuve

Date of issue:

Managing Director:

Signature:

23.06.2020 Alain Zoller

This signature approve the validity of the test reports 91.22, 91.23, 91.24 and 91.27 (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

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: 91.22, 91.23, 91.24, 91.27 (If the 91.23 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

ISO 91.20 BR | Rev 18 | 21.11.2019

Route du Pré-au-Comte 8 🔺 CH-1844 Villeneuve 🔺 +41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Paragliders Shock- and sustained loading test

Inspection certificat number: PG_1686.2020 Test Report

Manufacturer data

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

Post code / place: 73911 Frydlant n.O.
Country: Czech Republic

Sample data

Name: Metis 4
Size: 42
Maximum weight in flight [kg]: 220

 Serial number:
 2553-11-0708

 Date of reception:
 11.03.2020

Test data Test Atmosphere AGL

 Place of test:
 Yverdon (airport)
 3.5
 [°C]

 Date of test:
 24.04.2020
 63
 RH [%]

 Inspector:
 Alain Zoller
 965.5
 [hPA]

 0.1
 Wind [m/s]

Shock loading test result (1)

Weak link used [daN]: 1200

Visual inspection: No visible damage Results: POSITIVE

Weak link



Instruments	Validity	Manufacturer	s/n
Weak link	2020	Tost	n/a
Ultrawire DSK99	29.10.2023	Gottifredi	n/a
Geos n° 11 Skywatch	08.05.2020	JDC elec.	22

Route du Pré-au-Comte 8 🔺 CH-1844 Villeneuve 🔺 +41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Inspection certificate number: PG_1686.2020

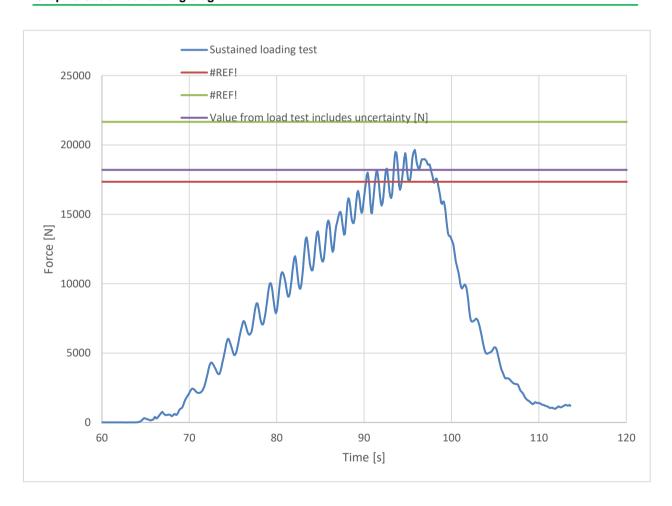
Detailed sustained loading test results

Cumulative duration at max load [s]: 3.4

Max calculated load value with 3 sec or five peaks [N]: 2275.50

Max calcultaed load value with 3 sec or five peaks [kg]: 231.96

Graphic sustained loading diagram



Sustained loading test results (3)

Result: POSITIVE

Calculated max load value with 3 sec or five peaks [kg]: 231.96

Route du Pré-au-Comte 8 🔺 CH-1844 Villeneuve 🔺 +41 (0)2) 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Inspection certificate number: PG_1686.2020

Instruments	Manufacturer	Type nr.	S/N
Load sensor	НВМ	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 91.20

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

- (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%.

Route du Pré-au-Comte 8 🔺 CH-1844 Villeneuve 🔺 +41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



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

Manufacturar	Cky Daraglidara a a	Certification number	_	20 1700 2020	
Manufacturer	Sky Paragliders a.s.			PG_1709.2020	
Address	Okruzní 39 73911 Frýdlant nad Ostravicí Czech Republic	Flight test	1	1.06.2020	
Glider model	Metis 4 40	Classification	E	3	
Serial number	2552-11-0688	Representative		Nexandre Paux	
		·			
Trimmer	yes: opened	Place of test	\	/illeneuve	
Folding lines used	no				
Test pilot		Alain Zoller	C	Claude Thurnheer	
Harness		Advance - Bi pro 2	A	dvance - Bi pro 2	
Harness to risers d	listance (cm)	55	5	55	
Distance between i	, ,	55		55	
	` '				
Total weight in flig	nt (kg)	110	_	110	
1. Inflation/Take-off		A			
Rising behaviour		Smooth, easy and constant rising	Α	Smooth, easy and constant rising	Α
Special take off technique	e required	No	Α	No	Α
2. Landing		Α			
Special landing technique	e required	No	Α	No	Α
3. Speed in straight flig		В			
Trim speed more than 30		Yes	Α	Yes	Α
	ontrols 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		A			
Max. weight in flight up					
Symmetric control pressu		not available	0	not available	0
Max. weight in flight 80	= =				
Symmetric control pressu		not available	0	not available	0
Max. weight in flight gre	=				
Symmetric control pressu		Increasing / greater than 65 cm	Α	Increasing / greater than 65 cm	Α
5. Pitch stability exiting		0			
Dive forward angle on ex	it	not available		not available	0
Collapse occurs		not available	0	not available	0
6. Pitch stability operatiflight	ing controls during accelerated	0			
Collapse occurs		not available	0	not available	0
7. Roll stability and dam	nping	Α			
Oscillations		Reducing	Α	Reducing	Α
8. Stability in gentle spi	rals	Α			
Tendency to return to stra	aight flight	Spontaneous exit	Α	Spontaneous exit	Α
9. Behaviour exiting a for	ully developed spiral dive	В			
Initial response of glider (Immediate reduction of rate of turn	Α	No immediate reaction	В
Tendency to return to stra	aight 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 nor	mal flight	Less than 720°, spontaneous recovery	Α	720° to 1 080°, spontaneous recovery	В
10. Symmetric front col	lapse	A			
Approximately 30 % che					
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 change of course	course	^	course	^
Cascade occurs	No	Α	No	Α
Folding lines used	No		No	
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 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	Α
	course		course	
Cascade occurs	No	Α	No	Α
Folding lines used	No		No	
With accelerator				
Entry	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit / Change of course	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
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	A
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
the state of the s				
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			
Recovery	Spontaneous in less than 3 s	Α.	Spontaneous in less than 3 s	Α .
Cascade occurs	No	Α	No	Α
13. Recovery from a developed full stall	В			
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 30° to 60°	В
Collapse	No collapse	Α	No collapse	Α
Cascade occurs (other than collapses)	No	Α	No	Α
Rocking back	Less than 45°	Α	Less than 45°	Α
Line tension	Most lines tight	Α	Most lines tight	Α
14. Asymmetric collapse	В			
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°	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		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°	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		No	
Small asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0

Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
Large asymmetric collapse with fully activated accelerator	•			
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0
Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
15. Directional control with a maintained asymmetric	Α			
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	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	0			
Change of course before release	not available	0	not available	0
Behaviour before release	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Cascade occurs	not available	0	not available	0
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	0			
Entry procedure	not available	0	not available	0
Behaviour during big ears	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Behaviour immediately after releasing the accelerator while maintaining big ears	not available	0	not available	0
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

Route du Pré-au-Comte 8 🔺 CH-1844 Villeneuve 🔺 +41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



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

Manufacturer	Sky Paragliders a.s.	Certification number	F	PG_1709.2020	
Address	Okruzní 39 73911 Frýdlant nad Ostravicí Czech Republic	Flight test	1	1.06.2020	
Glider model	Metis 4 40	Classification	E	3	
Serial number	2552-11-0688	Representative		Alexandre Paux	
		•			
Trimmer	yes: closed	Place of test	٧	/illeneuve	
Folding lines used	no				
Test pilot		Alain Zoller	C	Claude Thurnheer	
Harness		Advance - Bi pro 2	A	Advance - Bi pro 2	
Harness to risers d	istance (cm)	55	5	55	
Distance between r	, ,	55	5	55	
Total weight in flight	` '	110		210	
Total weight in high	it (kg)	110		.10	
1. Inflation/Take-off		Α			
Rising behaviour		Smooth, easy and constant rising	Α	Smooth, easy and constant rising	Α
Special take off technique	e required	No	Α	No	Α
2. Landing		Α			
Special landing technique	required	No	Α	No	Α
3. Speed in straight flight		В			
Trim speed more than 30		Yes	Α	Yes	Α
	ontrols larger than 10 km/h	Yes	Α	Yes	Α
Minimum speed		Less than 25 km/h	Α	25 km/h to 30 km/h	В
4. Control movement		Α			
Max. weight in flight up			_		_
Symmetric control pressu		not available	0	not available	0
Max. weight in flight 80		and averthele	•		•
Symmetric control pressu		not available	0	not available	0
Max. weight in flight gre		Increasing / greater than GE am	۸	Increasing / greater than GE am	^
Symmetric control pressu		Increasing / greater than 65 cm	А	Increasing / greater than 65 cm	Α
5. Pitch stability exiting			0	not available	0
Dive forward angle on exi Collapse occurs	ι	not available not available	0	not available not available	0
	ng controls during accelerated	0	U	not available	U
Collapse occurs		not available	0	not available	0
7. Roll stability and dam	ping	Α			
Oscillations	. •	Reducing	Α	Reducing	Α
8. Stability in gentle spir	rals	A			
Tendency to return to stra	night flight	Spontaneous exit	Α	Spontaneous exit	Α
9. Behaviour exiting a fu	ılly developed spiral dive	В			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	Α	No immediate reaction	В
Tendency to return to stra	aight 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 nor	mal flight	Less than 720°, spontaneous recovery	Α	720° to 1 080°, spontaneous recovery	В
10. Symmetric front coll	apse	A			
Approximately 30 % cho	ord				
Entry		Rocking back less than 45°	Α	Rocking back less than 45°	Α

B	0 1 1 1 0		0 1 1 1 0	
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		No	
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 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	A
Cascade occurs	No	Α	No	Α
	No	^	No	^
Folding lines used With accelerator	NO		NO	
	net evelleble	^		0
Entry	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit / Change of course	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
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	Α	Spontaneous in less than 3 s	Α
Cascade occurs	No	Α	No	Α
13. Recovery from a developed full stall	A	, ,		, ,
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
Collapse	No collapse		No collapse	Α
	No	A	No Collapse No	
Cascade occurs (other than collapses)		A		A
Rocking back	Less than 45°	A	Less than 45°	A
Line tension	Most lines tight	Α	Most lines tight	Α
14. Asymmetric collapse	В			
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°	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		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°	Α	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		No	
Small asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0

Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0
Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
15. Directional control with a maintained asymmetric collapse	Α			
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	not available	0	Changing course less than 45°	Α
Behaviour before release	not available	0	Remains stable with straight span	Α
Recovery	not available	0	Spontaneous in less than 3 s	Α
Dive forward angle on exit	not available	0	Dive forward 0° to 30°	Α
Cascade occurs	not available	0	No	Α
20. Big ears	A			
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	A	- ' '		, ,
Entry procedure	Dedicated controls	Α	not available	0
Behaviour during big ears	Stable flight	Α	not available	0
Recovery	Spontaneous in less than 3 s	Α	not available	0
Dive forward angle on exit	Dive forward 0° to 30°	Α	not available	0
Behaviour immediately after releasing the accelerator while	Stable flight	Α	not available	0
maintaining big ears				
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	A			
Procedure works as described	not available	0	Yes	Α
Procedure suitable for novice pilots	not available	0	Yes	Α
Cascade occurs	not available	0	No	Α

Route du Pré-au-Comte 8 🔺 CH-1844 Villeneuve 🔺 +41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes

Entry



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

Manufacturer	Sky Paragliders a.s.	Certification number	F	PG_1686.2020	
Address	Okruzní 39 73911 Frýdlant nad Ostravicí Czech Republic	Flight test	2	25.05.2020	
Glider model	Metis 4 42	Classification	E	3	
Serial number	2461-11-1378	Representative	Ν	lone	
Trimmer	yes: opened	Place of test	V	/illeneuve	
Folding lines used	no		-		
Test pilot		Anselm Rauh	C	Claude Thurnheer	
Harness		Supair - Evo XC 3 L	Α	Advance - Bi pro 2	
Harness to risers d	istance (cm)	44	5	55	
Distance between r	• •	55		55	
Total weight in fligh	• •	120		220	
	·· (··9)			.= 0	
1. Inflation/Take-off		A Smooth easy and constant riging	۸	Smooth apply and constant rising	Λ
Rising behaviour	roquired	Smooth, easy and constant rising	A A	Smooth, easy and constant rising No	A A
Special take off technique 2. Landing	required	No A	А	NO	А
Special landing technique	required	No	Α	No	Α
3. Speed in straight fligh		В			
Trim speed more than 30		Yes	Α	Yes	Α
	ntrols larger than 10 km/h	Yes	Α	Yes	Α
Minimum speed	C	Less than 25 km/h	Α	25 km/h to 30 km/h	В
4. Control movement		A			
Max. weight in flight up	to 80 kg				
Symmetric control pressur	re / travel	not available	0	not available	0
Max. weight in flight 80	kg to 100 kg				
Symmetric control pressu	re / travel	not available	0	not available	0
Max. weight in flight gre	ater than 100 kg				
Symmetric control pressu	re / travel	Increasing / greater than 65 cm	Α	Increasing / greater than 65 cm	Α
5. Pitch stability exiting		0			
Dive forward angle on exi	t	not available	0	not available	0
Collapse occurs		not available	0	not available	0
flight	ng controls during accelerated	0			
Collapse occurs	-	not available	0	not available	0
7. Roll stability and dam	ping	A			
Oscillations		Reducing	Α	Reducing	Α
8. Stability in gentle spir		A Spontaneous svit	٨	Sportonocuo ovit	۸
Tendency to return to stra		Spontaneous exit	Α	Spontaneous exit	Α
Initial response of glider (f	Illy developed spiral dive	B Immediate reduction of rate of turn	Α	Immediate reduction of rate of turn	Α
Tendency to return to stra		Spontaneous exit (g force decreasing, rate of turn decreasing)	Α	Spontaneous exit (g force decreasing, rate of turn decreasing)	Α
Turn angle to recover nor	mal flight	Less than 720°, spontaneous recovery	Α	720° to 1 080°, spontaneous recovery	В
10. Symmetric front coll	apse	В			
Approximately 30 % cho	ord				
Factoria		B 1: 1 11 # 450		5	

A Rocking back less than 45°

Rocking back less than 45°

B	0 1 1 1 0			
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		No	
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	A	Dive forward 0° to 30° / Keeping course	Α
Cascade occurs	No	Α	No	Α
Folding lines used	No	,,	No	, ,
With accelerator	110		140	
Entry	not available	0	not available	0
	not available	0	not available	0
Recovery	not available			
Dive forward angle on exit / Change of course		0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
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	Α	Spontaneous in less than 3 s	Α
Cascade occurs	No	Α	No	Α
13. Recovery from a developed full stall	В			
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 30° to 60°	В
Collapse	No collapse	Α	No collapse	Α
Cascade occurs (other than collapses)	No	Α	No	Α
Rocking back	Less than 45°	Α	Less than 45°	Α
Line tension	Most lines tight		Most lines tight	Α
14. Asymmetric collapse	B		Moot imoo tigint	, ,
Small asymmetric collapse	5			
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	0° to 15°		15° to 45°	
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 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		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°	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		No	
Small asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0

Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
Large asymmetric collapse with fully activated accelerator	•			
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0
Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
15. Directional control with a maintained asymmetric	Α			
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	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	0			
Change of course before release	not available	0	not available	0
Behaviour before release	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Cascade occurs	not available	0	not available	0
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	0			
Entry procedure	not available	0	not available	0
Behaviour during big ears	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Behaviour immediately after releasing the accelerator while	not available	0	not available	0
maintaining big ears				
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	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
04 Comments of took wilet				

B-Stall excluded from User's Manual

Route du Pré-au-Comte 8 🔺 CH-1844 Villeneuve 🔺 +41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



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

g toot .op		G. 211 G.1766				
Manufacturer	Sky Paragliders a.s.	Certification number	F	PG_1686.2020		
Address	Okruzní 39 73911 Frýdlant nad Ostravicí Czech Republic	Flight test	2	5.05.2020		
Glider model	Metis 4 42	Classification	Е	3		
Serial number	2461-11-1378	Representative		lone		
Trimmer		Place of test		/illeneuve		
-	yes: closed	Place of test	٧	illerieuve		
Folding lines used	no					
Test pilot		Anselm Rauh	C	Claude Thurnheer		
Harness		Supair - Evo XC 3 L	Α	dvance - Bi pro 2		
Harness to risers d	listance (cm)	44	5			
Distance between r	• •	55	5			
	` ,					
Total weight in fligi	iit (kg)	120	220			
1. Inflation/Take-off		A				
Rising behaviour		Smooth, easy and constant rising	Α	Smooth, easy and constant rising	Α	
Special take off technique	e required	No	Α	No	Α	
2. Landing		Α				
Special landing technique	•	No	Α	No	Α	
3. Speed in straight flight		В				
Trim speed more than 30		Yes	A	Yes	A	
	ontrols larger than 10 km/h	Yes	A	Yes	A	
Minimum speed		Less than 25 km/h	Α	25 km/h to 30 km/h	В	
4. Control movement	40 90 km	Α				
Max. weight in flight up		not available	0	not available	0	
Symmetric control pressu Max. weight in flight 80		Hot available	U	not available	U	
Symmetric control pressu		not available	0	not available	0	
Max. weight in flight gre		not available	U	not available	U	
Symmetric control pressu	=	Increasing / greater than 65 cm	Α	Increasing / greater than 65 cm	Α	
5. Pitch stability exiting		0		moreasing / greater than 60 om	, ·	
Dive forward angle on exi	and the second of the second o	not available	0	not available	0	
Collapse occurs	•	not available	0	not available	0	
•	ng controls during accelerated	0				
Collapse occurs		not available	0	not available	0	
7. Roll stability and dam	nping	Α				
Oscillations		Reducing	Α	Reducing	Α	
8. Stability in gentle spir	rals	Α				
Tendency to return to stra	aight flight	Spontaneous exit	Α	Spontaneous exit	Α	
9. Behaviour exiting a fu	ully developed spiral dive	В				
Initial response of glider (first 180°)	Immediate reduction of rate of turn	Α	No immediate reaction	В	
Tendency to return to stra	aight 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 nor	mal flight	Less than 720°, spontaneous recovery	Α	720° to 1 080°, spontaneous recovery	В	
10. Symmetric front coll	lapse	Α				
Approximately 30 % cho	ord					
Entry		Rocking back less than 45°	Α	Rocking back less than 45°	Α	

Description	0		0	
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		No	
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 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		No	
With accelerator				
Entry	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit / Change of course	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available	U	Not available	U
11. Exiting deep stall (parachutal stall)	A		Not available	
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°	Α
Cascade occurs	No	Α	No	Α
12. High angle of attack recovery	A			
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Cascade occurs	No	Α	No	Α
13. Recovery from a developed full stall	A			
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	Less than 45°	Α	Less than 45°	Α
Line tension	Most lines tight	Α	Most lines tight	Α
14. Asymmetric collapse	В			
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°	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		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°	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		No	
Small asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0

Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0
Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
15. Directional control with a maintained asymmetric collapse	Α			
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	В			
Spin rotation angle after release	Stops spinning in 90° to 180°	В	Stops spinning in less than 90°	Α
Cascade occurs	No	Α	No	Α
19. B-line stall	0			
Change of course before release	not available	0	not available	0
Behaviour before release	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Cascade occurs	not available	0	not available	0
20. Big ears	A			
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	0			
Entry procedure	not available	0	not available	0
Behaviour during big ears	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Behaviour immediately after releasing the accelerator while maintaining big ears	not available	0	not available	0
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

B-Stall excluded from User's Manual High angle of attack recovery with C riser