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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



# Speed of opening, stability, descent rate

Inspection certificate number: EP\_176.2017 Test Report

Manufacturer data

Manufacturer name:

Representative:

Street:

Post code / Place:

Cozone Gliders

Russell Ogden

2, Queens Drive

LA46LN

Country: UK

Sample data

Name:Angel SQSize:140SteerableNoMaximum weight in flight (1) [kg]:140Weight (2) [kg]1.7volume packed [cm³]:3588

Serial number: PR3A140-S-22B-001

Test data (3) Test no. 1 Test no. 2 Villeneuve Place of test Villeneuve Date of test 11.08.2016 24.08.2016 **Claude Thurnheer** Claude Thurnheer Inspector: Atmosphere AGL [°C] 12.5 23 RH [%] 78 69 [hPa] 978.8 972 Wind [m/s] 0.1 0.1

Summary of both results (4)	EN	LTF	
Time of opening test [s]:	3.11	3.11	
Calculated descent rate test [m/s]:	5.39	5.39	
Stability test:	POSITIVE	POSITIVE	
Behaviour during descent test:	Stable	Stable	

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# Strength test - 40 m/s opening shock

Inspection certificate number: EP\_176.2017 Test Report

Manufacturer data

Manufacturer name: Ozone Gliders
Representative: Russell Ogden
Street: 2, Queens Drive

Post code / Place: LA46LN
Country: UK

Sample data

 Name:
 Angel SQ
 Size:
 140

 Steerable
 No
 Maximum weight [kg]:
 140

 Weight [kg]
 1.7
 volume packed [cm³]:
 3588

Serial number: PR3A140-S-22B-002

Test data <sup>(1)</sup> Test no. 1 Test no. 2

 Place of test
 Illarsaz
 Illarsaz

 Date of test
 19.01.2017
 19.01.2017

 Corrected mass [kg]
 145.49
 145.49

Inspector: Alain Zoller Alain Zoller

Atmosphere AGL

 [°C]
 -5.4
 -5.4

 RH [%]
 78
 78

 [hPa]
 972.4
 972.4

 Wind [m/s]
 0.1
 0.1

Test results Test no. 1 Test no. 2

Speed of opening (maximum 5 s) POSITIVE
Strength test (40m/s shock) POSITIVE
Aircraft speed uncertainty K=2
[m/s] (2) 1.7

POSITIVE POSITIVE

1.7

Item / type no. Validity Manufacturer S/N Weight 2020 N/A Air Turquoise SA Geos nº 11 08.05.2017 JDC elec. 22 Weak link 2020 Tost N/A

RE | Rev 00 | 20.01.2017 page 4 of 5 ISO 71.5.1.2

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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Identification number: MISC 017.2017

Ozone Gliders Angel SQ one size

#### **Result summary**

Inner container strength test. Applied minimum 700 N for at least 10 seconds and at maximum strength.

Duration at the required strength:

21.0 [s]

The maximum strength before broken: 1201.0 [N]

Place of declaration

Date of issue:

Managing director

Villeneuve

03.02.2017

Alain Zoller

Signature:

This signature approve the validity of the test report, and can be included in the inspection certificate 71.5.1

Air Turquoise SA has thoroughly tested the sample of riser/bridle mentioned above and certifies its conformity with the standards: EN 12491 | 2001 chapter 5.3.2 and LTF 91/09 chapter 6.1.8

Instrument	Validity	Manufacturer	Type no.	S/N
Load Cell (axial)	01.06.2021	Burster GmbH (DE)	8431-10000	1185483
Winch	11.01.2018	Arwin	300/600	N/A
Geos n° 11 Skywatch	08.05.2017	JDC elec.	Geos n° 11	22

<sup>(1)</sup> Inner container: container of the folded emergency parachute.

<sup>(2)</sup> Inner container (the connection between handgrip and inner container) is loaded at min 700 [N] over 10 secondes. The deployment system is loaded until breaking. Each component is tested.

<sup>(3)</sup> Calculated value include the value minus the uncertainty (on safe side) / 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%.

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Identification number:

MISC\_042.2017

Ozone Gliders Angel SQ

Result summary

Maximum strength for riser, bridle

28434.9 [N]

Place of declaration Date of issue: Managing director

Signature:



This signature approve the validity of the test report, and can be included in the inspection certificate 71.5.1

Air Turquoise SA has thoroughly tested the sample of emergency parachute mentioned above and certifies its conformity with the standards: LTF NFL II 9/09 chapter 6.1.4

Instrument	Validity	Manufacturer	Type no.	S/N
Load sensor	14.10.2017	HBM	1-S9M/50KN-1	31314652
Geos n° 11 Skywatch	08.05.2017	JDC elec.	Geos n° 11	22

<sup>(1)</sup> Riser: lowest part of the parachute system, which is connected to harness. Bridle: connection between riser and harness, can also be a strap.

<sup>(2)</sup> The connecting strap has to have a minimum load capacity of 24000 [N]. The exposed part of the connecting belt has to be protected against environmental factors.

<sup>(3)</sup> Calculated value include the value minus the uncertainty (on safe side) / 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%.