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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



# Speed of opening, stability, descent rate

EP\_328.2021 **Test Report** Inspection certificate number:

Manufacturer data

**Supair SAS** Manufacturer name:

Representative: **Laurent Chiabaut** 

Street: Parc Altais / 34, rue Adrastée

74650 Chavanod Post code / Place:

France Country:

Sample data

Fluid Light Evo Name:

Steerable (1): No Weight (3) [kg]: 2.44

Tandem Size:

Maximum weight in flight (2) [kg]: volume packed [cm3]: 8400

Serial number: SA-FLE-TD-P10-0921

Test data (4) Test no. 1 Test no. 2

Villeneuve Place of test: Villeneuve Date of test: 20.08.2020 23.11.2021

Claude Thurnheer Claude Thurnheer Inspector:

Atmosphere AGL

[°C] 24.2 7.8 RH [%] 68 68 [hPa] 969 978 Wind [m/s] 0.3 0.1

Summary of both results (5) ΕN NfL

Time of opening test [s]: 3.98 3.98 Calculated descent rate test [m/s]: 4.61

Stability test: Behaviour during descent test: Stable Stable Glider ratio: **POSITIVE** 

N/A

If steerable:

Any flight procedure and/or configuration described in the user's manual

4.61

**POSITIVE POSITIVE** 

N/A

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**Tandem** 220

8400

# Strength test - 40 m/s opening shock

**Test Report** Inspection certificate number: EP 328.2021

Size:

Test no. 2

Maximum weight [kg]:

volume packed [cm<sup>3</sup>]:

Manufacturer data

Manufacturer name: **Supair SAS** 

Representative: **Laurent Chiabaut** 

Parc Altais / 34, rue Adrastée Street:

Post code / Place: 74650 Chavanod

Country: **France** 

Sample data

Test data (1)

Name: Fluid Light Evo

Steerable No Weight [kg] 2.44

Serial number: SA-FLE-TD-P9-0121

Place of test St-Cierge St-Cierge 05.11.2021 05.11.2021 Date of test Corrected mass [kg] 206.71 206.71

Test no. 1

Nicolas Jacquod Nicolas Jacquod Inspector:

Atmosphere AGL

[°C] 5 5 RH [%] 72 72 [hPa] 915 915 Wind [m/s] 0.2 0.2

**Test results** Test no. 2 Test no. 1

**POSITIVE** 

Strength test (40m/s shock) Aircraft speed uncertainty K=2

[m/s] (2) 2.9 **POSITIVE** 

2.9

| Item / type no. | Validity              | Manufacturer     | S/N    |
|-----------------|-----------------------|------------------|--------|
| Weight          | check every 12 months | Air Turquoise SA | N/A    |
| Geos n° 11      | 18.06.2025            | JDC elec.        | Unit11 |
| Weak link       | continously           | Tost             | N/A    |

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Identification number:

MISC\_089.2018

Supair Sàrl Fluid light tandem 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:

14.4 [s]

The maximum strength before broken:

802.0 [N]

Place of declaration Date of issue: Villeneuve 14.08.2018

Managing director

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: 2015 chapter 5.3.2 and LTF NfL 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               | check every 12 month | 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 seconds. 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 measured lies within the assigned range of values with a probability of 95%.

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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Identification number: MISC 121.2019

Supair Sàrl Tandem 6mm

#### **Result summary**

Maximum strength for riser, bridle

**29264.6** [N]

Place of declaration Villeneuve
Date of issue: 10.05.2019
Managing director 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 emergency parachute mentioned above and certifies its conformity with the standards: LTF NfL II 91/09 chapter 6.1.4

| Instrument          | Validity |            | Manufacturer | Type no.     | S/N      |
|---------------------|----------|------------|--------------|--------------|----------|
| Load sensor         |          | 04.09.2023 | HBM          | 1-S9M/50KN-1 | 31314652 |
| Geos n° 11 Skywatch |          | 08.05.2020 | 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.

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<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 measured lies within the assigned range of values with a probability of 95%.