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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Harness inspection certificate

Inspection certificate number:

PH 275.2019

Impact pad number:

Name Impact pad: (1)

Impact pad type:

Serial number: (1)

Date of reception:

Impact pad integrated: (1)

Weight of Sample [kg]: (1)

PH_275.2019

Manufacturer data

Manufacturer name: Representative:

Supair Sàrl **Laurent Chiabaut** 34. rue Adrastée

Post code / place:

74650 Chavanod

Country:

Street:

France

Sample data:

Harness

Impact pad

n/a

Yes

n/a

n/a

Airbag

29.05.2019

Name:

Type: Size:

Serial number:

Pixair 2 **ABS** M

3.6

PXA2_M_V1 120

Clip-in weight [kg]: Integrated container for

Test report summary

Weight of Sample [kg]:

rescue system: Volume container [cm³]: Yes

7500 max

3500 min

Date of reception:

29.05.2019

Impact pad test

Result Place Date

POSITIVE Villeneuve

29.05.2019

Structual test

POSITIVE Villeneuve 29.05.2019

Issue data

Place of declaration: Date of issue:

Managing Director:

Signature:

Villeneuve 17.06.2019

Alain Zoller

This signature approve the validity of the test reports if available; no. 94.21 (test id R0,R2,R6,R8,R9,R10,RRDT,RRST) and no. 94.22 (test id: P1,P2,PR1,PR2) Air Turquoise SA, having thoroughly assessed the sample mentioned above, declare it was found conform with all requirements defined by the following norms:

European Standard EN1651 :1999, and EN12491:2015 chapter 5.3.2 - Airworthiness Requirements LTF NfL II 91/09 chapter 4.2.1, 5, 6.1.5 and 6.1.8

Present declaration's scope only extends to the conformity of a given sample, on a given date and in a given place – as mentioned here above. This inspection certificate contain the following test and is complet with the test, if available, report: 94.21 and 94.22

⁽¹⁾ If Impact pad is NOT integrated in the harness, it will have independently Inspection number, and serial number. Definition of integrated impact pad is impact pad which can not be dismounted from the harness, e.g. airbag.

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Harness Impact Pad Report

Inspection certificate number: PH_275.2019

Manufacturer data: Sample data:

Supair Sàrl Manufacturer name: Name impact pad: n/a Laurent Chiabaut Representative: Impact pad intgrated: Yes 34, rue Adrastée Impact pad type: Airbag Street: 74650 Chavanod Post code place: Serial number: n/a **France** Weight of sample [kg]: n/a Country:

Date of test: 29.05.2019

Harness model: Not related to specific model

Atmosphere AGL:

[C°]	22.1
RH [%]	49
[hPa]	974.3

Summary of Impact pad test (1)

Test id	-	Test configuration (2)	Max Peak of Impact [g] ⁽³⁾	Duration at 38 [g] in [ms] (4)	Duration at 20 [g] in [ms] (5)	Diff. of test 1 and 2 [%] (6)	Result
Р	٧	Test sample attached to dummy in flying position, without emergency parachute	24.34	0.00	11.67	-16.74	POSITIVE
PR	٧	Test sample attached to dummy in flying position, Include emergency parachute	24.02	0.00	6.67	1.53	POSITIVE

Manufacture	Instrument	Type no	S/N	Validity Calibration
Burster/MTS	Accelerometer 100 g	89010-100	1263567	23.01.2024
JDC elec	Geos n°11 Skywatch	Geos nº11	22	08.05.2020

The validation of this test report is given by the signature of the test manager on the Inspection Certificate no 94.20

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⁽¹⁾ Calculated value in tests reports 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%.

⁽²⁾ The dummy is lifted minimum up to 1.65 m, and impact pad is mounted on. Where the impact occurs, measure distance from bottom of impact pad to ground.

⁽³⁾ Maximum peak of impact should be less or equal to 50 [g], (4) If any, the maximum duration in at 38 [g] should be less or equal to 7 [ms], (5) If any, the maximum duration in at 20 [g] should be less or equal to 25 [ms]. (6) The test should be done twice, and the 2nd test the maximum peak should not differe more than 20% from the first test, maximum peak.

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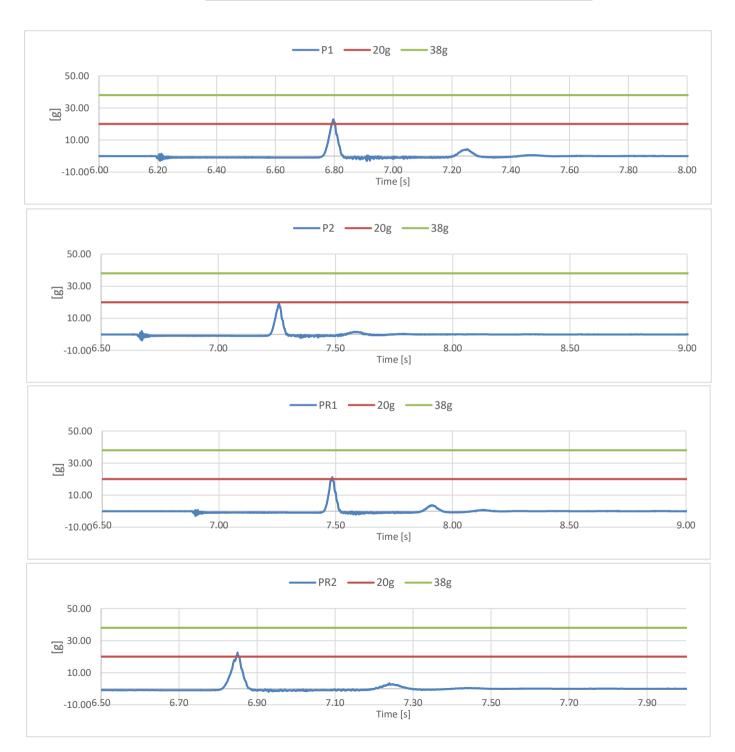
Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Inspection certificate number: PH_275.2019 Name impact pad: n/a

Test results of Impact pad test

	without emergency parachute		include emergency parachute	
	P1	P2	PR1	PR2
Maximum Peak of impact [g]	24.34	20.27	22.49	24.02
Impact duration at +38 [g] in [ms]	0.00	0.00	0.00	0.00
Impact duration at +20 [g] in [ms]	11.67	0.00	5.00	6.67
Uncertainty k=2[g]	1.40	1.17	1.29	1.38
Difference of test 1 and 2 [%]	100.00	83.26	100.00	106.79



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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes

Paragliding Harness

Inspection number :	PH_275.2019		
Manufacturer:	Supair Sàrl		
Model and size :	Pixair 2 M		
Maximum pilot weight [kg]:	120		
Integrated container for rescue system:	Yes		
If Yes. Volume of the container [cm ³]:	3500 min	7500 max	
Serial number:			
Production date (year / month) :			
Harness protector (impact pad)			
Impact pad type:	Airbag		
Impact pad integrated:	Yes		
Impact pad number:	PH_275.2019		
If not integrated : Manufacturer	Serial number:		
Production date (year / month):			

Warning : Read the operating manual before using this equipment!

A sample has been tested and certifies its conformity with the following standard: EN1651:1999, EN12491:2015 and LTF NfL II 91/09 chapter 4 and 6. This model corresponds with the tested sample and its airworthiness.

RE | rev 01 | 09.03.2018 | ISO 94.20

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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Harness Structural test Report

Inspection certificate number: PH_275.2019

Manufacturer data: Sample data:

Manufacturer name:Supair SàrlName:Pixair 2Representative:Laurent ChiabautType:ABSStreet:34, rue AdrastéeSize:M

Post code place: **74650 Chavanod** Serial number: **PXA2_M_V1**Country: Impact pad type: (1) **Airbag**

Clip-in weight [kg]: 120

Date of test: 29.05.2019

Atmosphere AGL:

[C°]	22.1
RH [%]	49
[hPa]	974.3

Summary of Structural test

Test id	-	EN 1651	Setup	Req. Load [g]	Req. Load [N]	Min. duration [s]	Result
R0	٧	5.3.2.1	Default flying position	6	7200	10	POSITIVE
R2	٧	5.3.2.2	Default flying position	15	18000	5	POSITIVE
R4	٧	5.3.2.7	Flying position before landing	15	18000	5	POSITIVE
R6	٧	5.3.2.4	Rescue attachments	15	18000	5	POSITIVE
R8	٧	5.3.2.3	Asymmetric, one riser	6	7200	10	POSITIVE
R9		5.3.2.5	Towing	5	6000	10	n/a
R10	٧	5.3.2.6	Asymmetric, negative	4.5	5400	10	POSITIVE

Rescue deployment test

Test id - NfL II 91/09	Setup	Min load [N]	Max. load [N]	Measured [N]	Result
RRDT V 6.1.5	Default flying position	20	70	34.70	POSITIVE

Rescue Deployment Handle strength test

7	Test id	-	EN 12491	Setup	Req. Load [N]	Min. duration [s]	Breaking strength [N]	Result
	RRST	٧	5.3.2	Two end points of handle	700	10	942.75	POSITIVE

Manufacture	Instrument	Type no	S/N	Validity Calibration
НВМ	Load Sensor GE01	1-S9M/50KN-1	31314643	04.09.2023
Burster	Sensor Burster	8431-10000	1185483	04.09.2023
JDC elec	Geos n°11 Skywatch	Geos n°11	22	08.05.2020

The validation of this test report is given by the signature of the test manager on the Inspection Certificate no 94.20

Calculated value in tests reports 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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 $^{^{\}left(1\right)}$ If Impact pad available, see test report no. 94.22 and inspection certificate no. 94.20

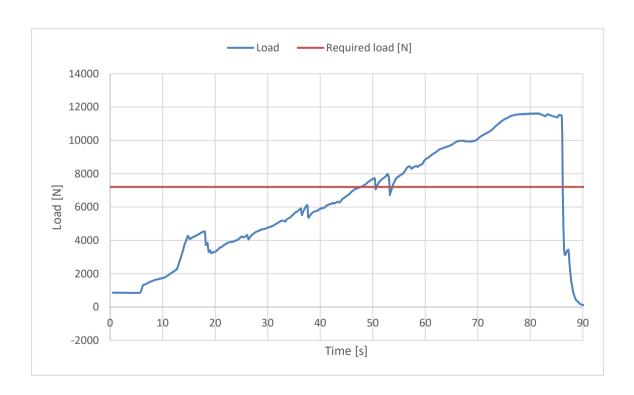
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Inspection certificate number: PH 275.2019 model: Pixair 2 M

Harness Structural test		Test ID R0
Standard	EN 1651:1999	
Reference in standard	5.3.2.1	
Test setup	Default flying position	
Attachment points	Both main riser attachment (3,4)	
Anchor points	Dummy (B1, B2)	
Required load [g]	6	
Required load [N]	7200	
Minimum test duration [s]	10	
Result		
Test duration [s]	35.7	F/2 A F/2
Any signs of structural failure	No	$\langle \bot \bot \rangle$
Test results	POSITIVE	\3 4/
) (
		B1 B2
		F/2 V V F/2



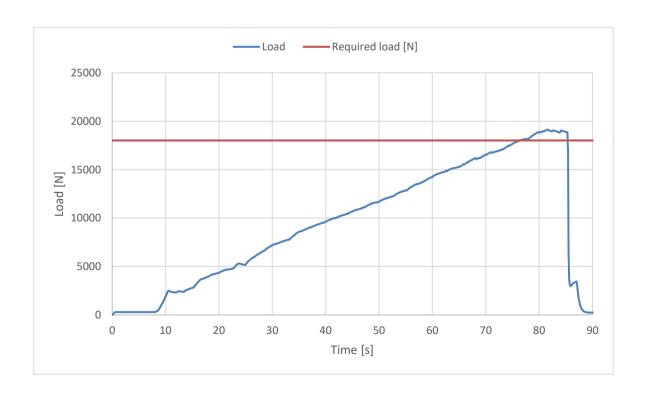
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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes

Inspection certificate number: PH_275.2019 model: Pixair 2 M

Harness Structural test		Test ID R2
Standard	EN 1651:1999	
Reference in standard	5.3.2.2	
Test setup	Default flying position	
Attachment points	Both main riser attachment (3,4)	
Anchor points	Dummy (B1, B2)	
Required load [g]	15	
Required load [N]	18000	
Minimum test duration [s]	5	i i
Result		
Test duration [s]	8.5	F/2 A F/2
Any signs of structural failure	No	$\langle \bot \mid \bot \rangle$
Test results	POSITIVE	\3 4/
) (
		B1 B2
		F/2 V F/2



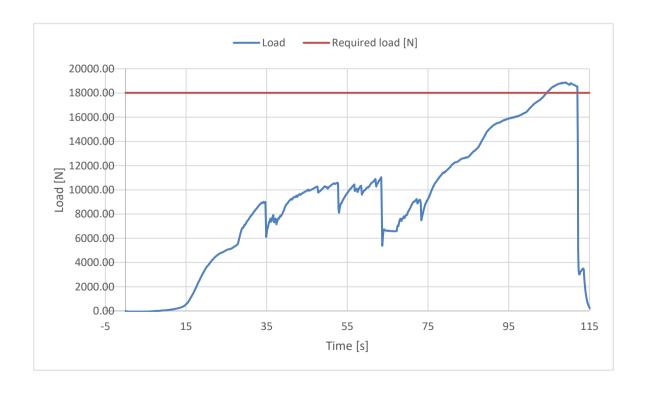
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Inspection certificate number: PH 275.2019 model: Pixair 2 M

Harness Structural test		Test ID R4
Standard	EN 1651:1999	
Reference in standard	5.3.2.7	
Test setup	Flying position before landing	
Attachment points	Both main riser attachment (3,4)	
Anchor points	Dummy (7,8)	
Required load [g]	15	
Required load [N]	18000	
Minimum test duration [s]	5	
Result		
Test duration [s]	7.2	- H
Any signs of structural failure	No	3/4
Test results	POSITIVE	1 /
		/ / / / / / / / / / / / / / / / / / / /
		/
		7/8
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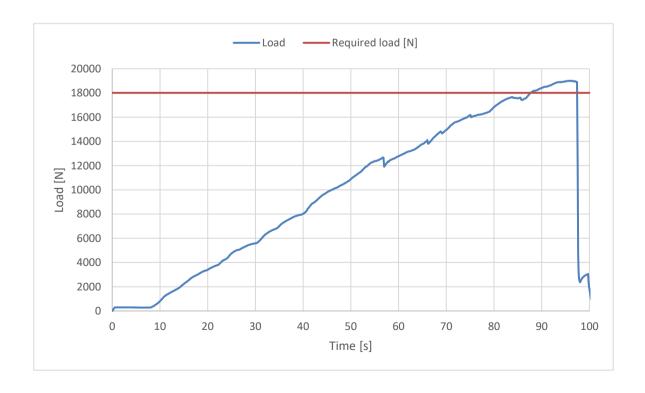
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Inspection certificate number: PH 275.2019 model: Pixair 2 M

Harness Structural test		Test ID R6
Standard	EN 1651:1999	
Reference in standard	5.3.2.4	
Test setup	Rescue attachments	
Attachment points	Rescue riser attachment (1,2)	
Anchor points	Dummy (B1,B2)	
Required load [g]	15	F/2 ↓ ↓ F/2
Required load [N]	18000	
Minimum test duration [s]	5	
Result		
Test duration [s]	9.3	
Any signs of structural failure	No	
Test results	POSITIVE	
		B1 B2
		F/2 V V F/2
·		



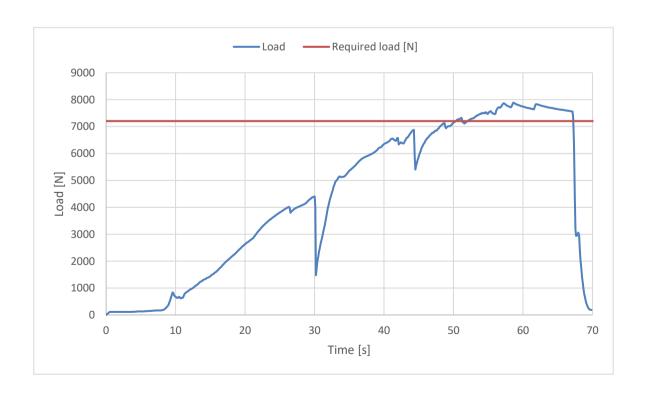
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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Inspection certificate number: PH_275.2019 model: Pixair 2 M

Harness Structural test		Test ID R8
Standard	EN 1651:1999	
Reference in standard	5.3.2.3	
Test setup	Asymmetric, one riser	
Attachment points	One main riser attachment (3)	
Anchor points	Dummy (B1,B2)	
Required load [g]	6	
Required load [N]	7200	
Minimum test duration [s]	10	5
Result		∫ F /
Test duration [s]	15.4	B1 3
Any signs of structural failure	No	
Test results	POSITIVE	B2
		C F



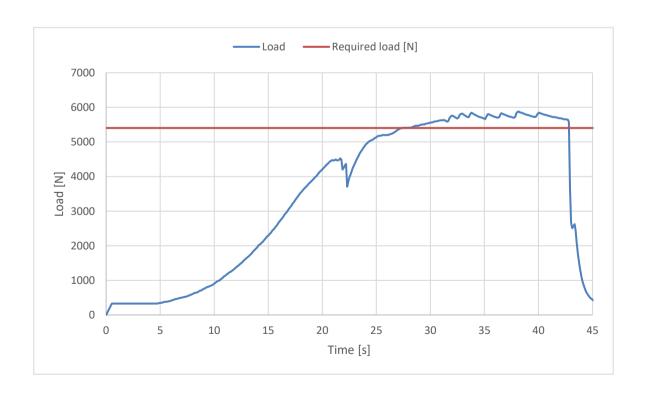
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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes

Inspection certificate number: PH_275.2019 model: Pixair 2 M

Harness Structural test		Test ID R10
Standard	EN 1651:1999	
Reference in standard	5.3.2.6	
Test setup	Asymmetric, negative	
Attachment points	One main riser attachment (3 or 4) downwards	
Anchor points	Dummy (9)	
Required load [g]	4.5	↓ ^F
Required load [N]	5400	9
Minimum test duration [s]	10	
Result) /
Test duration [s]	14.6	
Any signs of structural failure	No	3/4
Test results	POSITIVE	
		4
		1,5



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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes

Inspection certificate number: PH 275.2019 model: Pixair 2 M

Rescue Deployment Test Test ID RRDT

Standard LTF NfL II 91/09

Reference in standard 6.1.5

Test setup Default flying position

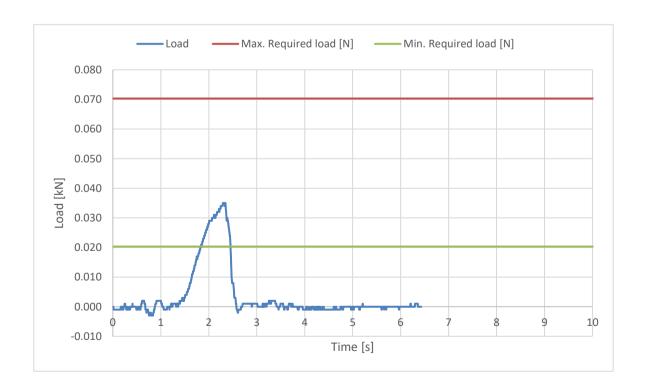
Attachment points Sensor connect to handle, and pull in opening direction

The test is to simulate the load required to open the emergency parachute(1st action).

Min. Required load [N] 20
Max. Required load [N] 70

Result

Load for first action [N] 34.70
Test results POSITIVE



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Inspection certificate number: PH 275.2019 model: Pixair 2 M

Rescue Deployment Handle strength test

Test ID RRST

Standard **EN12491:2015**

Reference in standard 5.3.2

Test setup Two end points of handle

Attachment points Sensor connect to end of handle, pull on the other side

The handle must support min 700 N for 10 s, after measure breaking strength

Min. Required load [N] 700
Minimum test duration [s] 10

Result

Test duration [s]: 12.4
Breaking strength [N] 942.75
Test results POSITIVE

