

En application de la directive n°89/686/CEE du 21 décembre 1989 concernant le rapprochement des législations des Etats Membres relatives aux équipements de protection individuelle l'échantillon essayé est déclaré conforme aux exigences essentielles de santé et de sécurité du décret n°2007-1133 du 24 juillet 2007 portant transposition de cette directive en droit français,

In application of the directive n°89/686/EEC dated 21/12/89 on the approximation of the laws of the Member States relating to personal protective equipment and the decree n°2007-1133 of July 24th 2007 transposing this Directive into French law,

Le C.R.I.T.T. SPORT-LOISIRS, habilité par le ministère de l'économie, de l'industrie et de l'emploi, pour effectuer l'examen CE de type prévu par l'article R.322-35 du code du sport et identifié sous le numéro **0501** (publié au JORF du 23/06/2015) attribue The C.R.I.T.T. SPORT-LOISIRS, authorized by order of the Ministry in charge of economy, industry and labour, for the EC type examination with the number 0501 (notified in JORF on June 23, 2015) grants

l'ATTESTATION D'EXAMEN CE DE TYPE

the EC type Examination Certificate

N° 0501/2580/162/12/16/1878

au modèle d'équipement de protection individuelle suivant : to the following designated personal protective equipment:

- Protection pour Sellette de parapente Protection for Paraglider harness................(dénomination)(product)
 VIP LITE.......................(marque commerciale)(trademark)
- Unique one size.....(taille)(size)
- SUPAIR, 34 rue Adrastée 74650 CHAVANOD- FRANCE..(fabricant et demandeur) (manufacturer and applicant)
- Protocole Protocol CRITT SL SP-001 02/2016.....(référentiel technique)(standard)



Fait à Châtellerault, le 24/07/2017 Châtellerault, the 07/24/2017

Franck LEPLANQUAIS
Directeur (Manager)

Nota: toute modification apportée au matériel neuf objet de la présente attestation d'examen CE de type doit être portée à la connaissance de l'organisme habilité, en application de l'article R 322-35 du Code du sport. Any modification carried out on the material being the subject of the present EC type Examination Certificate must be brough to the authorised body in application of Article R 322-35 of the sport Code.

Cette attestation comporte 1 page. This is a one page document.

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Test Report

This test report describes the test results of the below mentioned paragliding harness.

All the tests were carried out by:

Air Turquoise SA, official test laboratory of Switzerland.



Standards

Tests were carried out in conformity with the following standards:

- 2. DV LuftGerPV §1, Nr. 7 C (*note: in what follows this will be abbreviated by "LTF")
- European Standard EN1651 September 1999 (*note in what follows this will be abbreviated by "EN")
- European Standard EN12491 September 2001 (*note in what follows this will be abbreviated by "EN12491")

Harness details

Manufacturer: SUPAIR -

Harness model: VIP Lite

Size: Medium

Harness Weight: 1490 gr

Maximum certified pilot 120 kg

Impact protection type: Air Bag
Harness type: ABS

Test responsible:

Test place:

Villeneuve

Test date: December 27, 2013

Test room temp & humidity: 22,6° C; 31 %rel

Certification number EN: PH 095.2013
Certification number LTF: GZ 095.2013

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Test summary

A. STRUCTURAL STRENGHT TESTS

A test plan was set up in order to execute the different tests in an efficient order. The table below summarizes this test plan together with the applicable standards and results.

		Standard Ref.		٥	Anchoring		Forces		Min.	
Test ID	TESTED?	EN	LTF	TEST setup	Attach - ment points	Dummy	Req. Load in g	Min. force [N]	Test durat ion [sec]	Result
1 2	> >	5.3.2.1 5.3.2.2	4.2.1.a	Default flying position	2 main attachment points	Hip fixated	6g 9g 15g	6000 9000 15000	10 5	OK OK
3	✓	5.3.2.7	4.2.1.b	Default, landing position	2 main att. points	Hip fixated, landing conf.	6g	6000 15000	10 5	OK OK
5 6 7	,	5.3.2.4	4.2.1.a rescue 4.2.1.b	Rescue Rescue,	2 rescue att. Pnts.	Hip fixated	9g 15g 6g	9000 15000 6000	10 5 10	n/a n/a n/a
8	✓	5.3.2.3	rescue	landing One riser	ONE main att.	landing conf. 1 central hip fixation	6g	6000	10	OK
9	==	5.3.2.5	4.2.1.d	Towing Default,	2 main att. + 2 tow att.	None	3g 5g	3000 5000	10	n/a
10 11	✓	5.3.2.6	4.2.1.c	Negatif Upside down	One main att. 2 main att. downw.	Head fix.	4.5g 	4500 6000	10 10	OK OK
12	! !		4.2.1.c rescue	Upside down rescue	2 rescue att. downw.	Head fix.	6g	6000	10	n/a

B. HARNESS PROTECTION SHOCK TEST

Most paraglider harnesses are equipped with a protection device that damps the shock on the pilot's spine during a hard landing.

Shock impact tests have to be executed on these harnesses in order to prove the damping characteristics of it.

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est ID	ESTED?	Standa rd Ref.: LTF	EST setup	Ancl Attach- ment points	horing Xuun	Max. tolerated peak impact in g	Max Peak impact 3	mpact duration of .38 g (if any) ecorded:	mpact duration of -20 g (if any) ecorded:	Result
PRO			Default		is attached to		2 5	<u> </u>	<u> </u>	-
TECT 1	✓	5.1.1	flying position	the harness	s like a pilot in ight.		25.38	i I na I	018	ОК

C. RESCUE DEPLOYMENT RESISTANCE TEST

The deployment of the rescue system has to be ensured in all circumstances of flight. This test is to verify whether the force needed to deploy is in between reasonable limits.

Test ID	TESTED?	Standa rd Ref. LTF		Anchoring Attach- ment points Attach- E		Force for sir Min. force [N]	ngle har i iviax. force [N]	d deployment Resistance measured IdaN1	Result
					ponisble is	!	!		
Resc		6.1.5	Default		o the harness ot in flight.	20 N	70 N	n/t	n/a
depl			flying position	•	ny required)]

D. RESCUE DEPLOYMENT STRAP STRENGHT TEST

The connection between handgrip and inner container has to have sufficient load capacity/structural strength in any situation that may arise during normal use. During this test is verified, whether this connection fulfill the requirements.

Test ID	TESTED?	Standard Ref. EN LTF 12491		TEST setup	Minimum force [N]	Min. Test durati on [s]	Breaking resistance measured	Result
Resc strap		6.1.8	5.3.2	Connection strap in tensile testing machine	700N	1 10	n/t	n/a

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After careful examination as explained in above mentioned test reports (from page 2 to page 18), the undersigned persons declare that the harness:

SUPAIR - VLD VIP Lite Medium

Complied with:

• European Standard EN 1651 September 1999

And / or (if tested)

European Standard EN 12491 March 2001

And / or (if tested)

• 2. DV LuftGerPV §1, Nr. 7 c

Villeneuve, December 27, 2013

Place, Date

Test responsible

Alain Zolle

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Annex: detailed test reports

Harness Test Test ID 1

I tem: VIP Lite

Manufacturer SUPAIR - VLD

Test place & date: Villeneuve December 27, 2013

Test responsible:

Temp. [°C] & Humidity:

Maximum certified pilot weight [kg]:

Alain Zoller

22,6° C; 31 %rel

kg

Standard EN 1651 & 2. DV LuftGerPV §1, Nr. 7 c

Test standard §: 5.3.2.1 (EN) & 4.2.1 a (LTF DV)

Test setup: Default flying position

Anchoring: Attachment points: Both main riser attachments (3, 4)

Dummy: Default, hip fixed (7, 8)

Required load in g: 9g (EN: 6g)

Minimum load [N]: 9000 N (EN: 6000 N)

Required test load in kg: 1080 kg

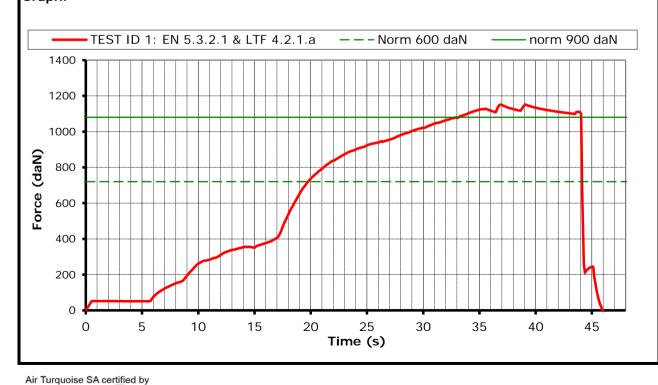
Min. duration [s]: 10 s

Results

Duration of maintained min. load [s]: 10.3 s

Any signs of structural failure after this test: No visible failure

Test result: Passed





I tem:VIP LiteManufacturerSUPAIR - VLD

Test place & date: Villeneuve December 27, 2013

Test responsible:

Temp. [°C] & Humidity:

Maximum certified pilot weight [kg]:

Alain Zoller

22,6° C; 31 %rel

Standard EN 1651
Test standard §: 5.3.2.2

Test setup: Default flying position

Anchoring: Attachment points: Both main riser attachments (3, 4)

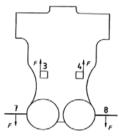
Dummy: Default, hip fixed (7, 8)

Required load in g: 15 g

Min load [N]: 15 000 N

Required test load in kg: 1800 kg

Min. duration [s]: 5s

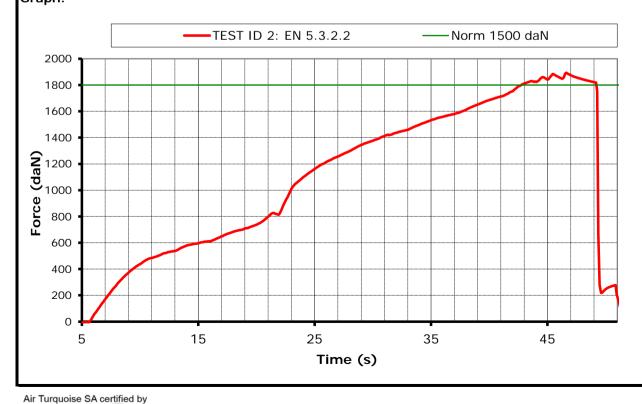


Results

Duration of maintained min. load [s]: 6.1 s

Any signs of structural failure after this test: No visible failure

Test result: Passed





I tem: VIP Lite

Manufacturer SUPAIR - VLD

Test place & date: Villeneuve December 27, 2013

Test responsible:

Temp. [°C] & Humidity:

Maximum certified pilot weight [kg]:

120

Standard 2. DV LuftGerPV §1, Nr. 7 c

Test standard §: 4.2.1.b

Test setup: Flying position before landing: seat

board (11) in landing position, leg

kg

straps (10) closed.

Anchoring: Attachment points: Both of the main riser attachments

attached (3 and 4);

Dummy: Default, hip fixed (7, 8)

Required load in g: 6

Min load [N]: 6000 N

Required test load in kg: 720 kg

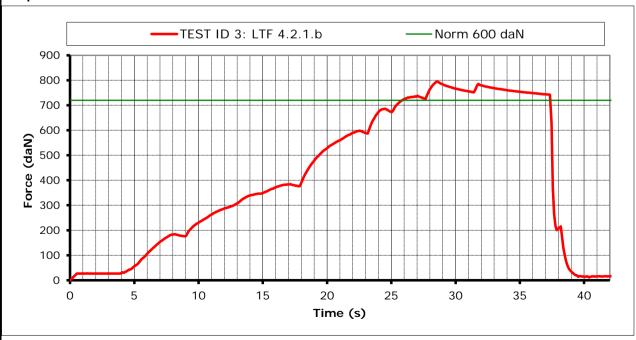
Min. duration [s]:



Duration of maintained min. load [s]: 11.1 s

Any signs of structural failure after this test: No visible failure

Test result: Passed





Item: VIP Lite

Manufacturer SUPAIR - VLD

Test place & date: Villeneuve December 27, 2013

Test responsible:
Alain Zoller
Temp. [°C] & Humidity:

Maximum certified pilot weight [kg]:
Alain Zoller
22,6°C; 31 %rel

Standard EN 1651

Test standard §: EN 5.3.2.7

Test setup: Flying position before landing: seat

board (11) in landing position, leg

straps (10) closed.

Anchoring: Attachment points: Both of the main riser attachments

attached (3 and 4);

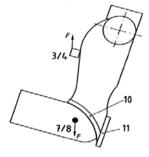
Dummy: Default, hip fixed (7, 8)

Required load in g: 15 g

Min load [N]: 15 000 N

Required test load in kg: 1800 kg

Min. duration [s]: 5 s



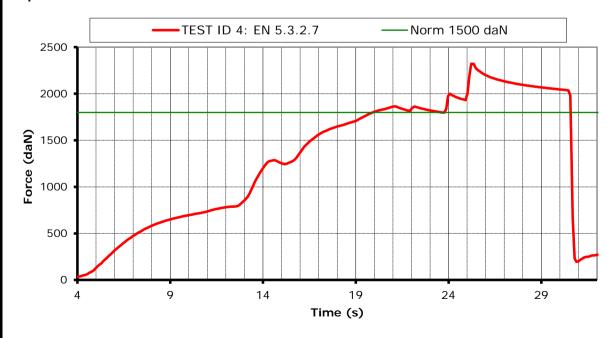
Results

Duration of maintained min. load [s]: 6.5 s

Any signs of structural failure after this test:

No visible failure

Test result: Passed









I tem: VIP Lite

Manufacturer SUPAIR - VLD

Test place & date: Villeneuve December 27, 2013

Test responsible:

Temp. [°C] & Humidity:

Maximum certified pilot weight [kg]:

Alain Zoller

22,6°C; 31 %rel

120 kg

Standard EN 1651
Test standard §: 5.3.2.3

Test setup: Only one riser attached

Anchoring: Attachment points: One main riser attachments (3)

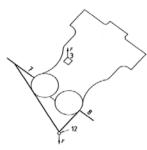
Dummy: Hip fixed (7, 8 -> 12)

Required load in g: 6 g

Min load [N]: 6 000 N

Required test load in kg: 720 kg

Min. duration [s]:

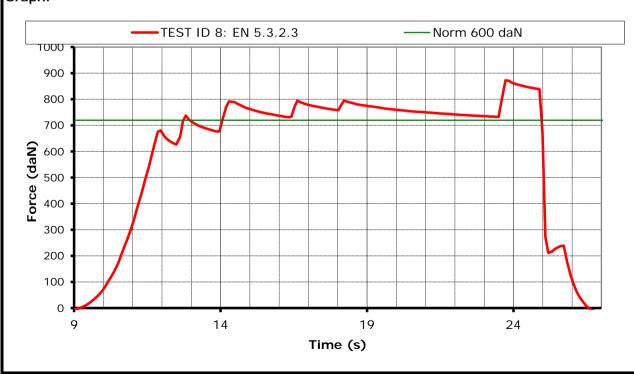


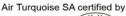
Results

Duration of maintained min. load [s]: 11.0 s

Any signs of structural failure after this test: No visible failure

Test result: Passed









I tem:VIP LiteManufacturerSUPAIR - VLD

Test place & date: Villeneuve December 27, 2013

Test responsible:

Temp. [°C] & Humidity:

Maximum certified pilot weight [kg]:

Alain Zoller

22,6° C; 31 %rel

Standard EN 1651
Test standard §: 5.3.2.6

Test setup: Normal flying position in NEGATIF

Anchoring: Attachment points: ONE of the main riser attachments

attached downwards(3 or 4);

Dummy: Dummy anchored at the head position

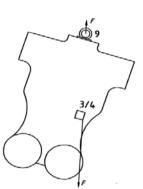
(9)

Required load in g: 4.5 g

Min load [N]: 4500 N

Required test load in kg: 540 kg

Min. duration [s]:



Results

Duration of maintained min. load [s]: 11.3 s

Any signs of structural failure after this test:

No visible failure

Test result: Passed





I tem:VIP LiteManufacturerSUPAIR - VLD

Test place & date: Villeneuve December 27, 2013

Test responsible:

Temp. [°C] & Humidity:

Maximum certified pilot weight [kg]:

Alain Zoller

22,6° C; 31 %rel

120 kg

Standard 2. DV LuftGerPV §1, Nr. 7 c

Test standard §: 4.2.1.c

Test setup: Pilot upside down flying position

Anchoring: Attachment points: Both of the main riser attachments

attached downwards (3 and 4);

Dummy: Dummy anchored at the head position

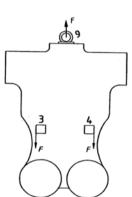
(9)

Required load in g: 6

Min load [N]: 6 000 N

Required test load in kg: 720 kg

Min. duration [s]:



Results

Duration of maintained min. load [s]: 10.8 s

Any signs of structural failure after this test: No visible failure

Test result: Passed







Test ID Protect Protector shock test I tem: VIP Lite Manufacturer SUPAIR - VLD Test place & date: Villeneuve December 27, 2013 Test responsible: Alain Zoller Temp. [°C] & Humidity: 22.6° C: 31 %rel Maximum certified pilot weight [kg]: kg Standard 2. DV LuftGerPV §1, Nr. 7 c Test standard §: 5.1.1 Harness attached to protector test dummy, in a similar way like a Test setup: real pilot in flight. Impact will be simulated by dropping the dummy from a certain height (with and without reserve). To simulate the "in-flight" conditions, the airbag is inflated with pressurized air equalling an airspeed of 7m/s. Inflation has to be stopped at least 5 sec before impact. Impact will be measured by an accelerometer mounted on the dummy. (Impact measured in g's) 1.65 m (between lowest point test dummy and impact surface) Requirements: Minimun height: **Impact** +50g as absolute maximum; requirements: +38g during less than 7 msec; +20g during less than 25 msec. Repetitions: The test will be performed 2 times, minimum 1 hour and

Results

more than 20%

maximum 2 hours after the first impact (with airbag protectors this pause is not necessary). The 2 Max-values should not differ

 $\Delta < 20 \%$?

Shock test 1:

Impact at a height of 1.65m: 25.38

Impact duration of + 38 g (if any): na

Impact duration of +20 g (if any): 018

impact duration of 120 g (ii dily).

Shock test 2:

Impact at a height of 1.65m: 26.396

Impact duration of + 38 g (if any): na

Impact duration of +20 g (if any): 01802

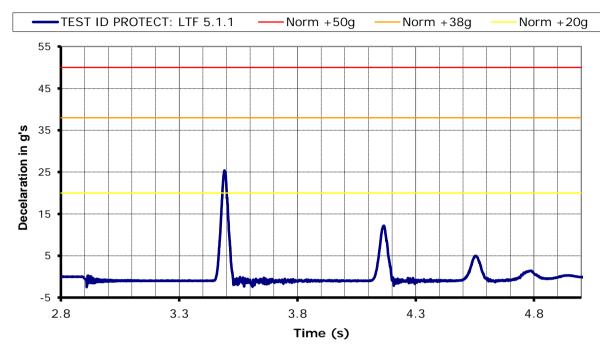
Test Result: Passed











Graph 2:

