



# REPORT FLIGHT AND STRUCTURE TEST RESCUE

EN 12491 | 2001 | NfL II 91/09

**Manufacturer** VITAL PARACHUTE INC.  
**Address** 4th floor, Samjin bldg.  
 596 Cheonho-daero, Gwnagjin  
 Seoul 143-848 / Korea Republic

**Certification number:**  
**Type/model:**  
**Total weight in flight:**  
**Serial number STRENGTH**  
**Serial number FLIGHT**

<b>EP 114.2014</b>
Octagon 38L (L)
120 kg
VPR-OTG140221
VPR-OTG140220

## Measurement of Flight test rescue (5kg Tension)

Center Line   mm	641
Main Line 1   mm	607
Main Line 2   mm	
Number of cell:	16
Tolerance   mm	25 mm
Weight   grame	1690 gr

TESTS	place:	date:	result:
<b>1. Deployment system strength test</b> A load of 700 N between each components	Villeneuve	17.02.2015	OK
<b>2. Speed of opening test - ref. A (2 times)</b> Time from the instant of free drop until a load of 200 N is sustained Opening time Opening time	Villeneuve	29.08.2014 08.09.2014	3.92 sec 3.65 sec
<b>3. Descent rate and stability test - ref. A and B (2 times)</b> The paraglider is released as the parachute begins to open, minimum 100 m descent. Stability 1 Sink rate 1 Stability 2 Sink rate 2	Villeneuve	29.08.2014 29.08.2014 08.09.2014 08.09.2014	Stable 4.9 m/sec Stable 5.05 m/sec
<b>4. Strength test 40 m/s opening shock (2 times)</b> The drop test device is accelerated to a straight line velocity of 40 m/s. Speed of opening is less than 5 seconds and shock not exceeded 15g Test 1 Test 2 Test 3	Illarsaz	12.09.2014 12.09.2014 12.12.2014	OK OK OK
<b>5. Interaction and stability test (piloted) - ref. C</b> a the emergency parachute is deployed from a paraglider in normal straight flight. b the pilot shall take no action while the behaviour of the parachute and paraglider are observed 200 metres. c the pilot take action while the behaviour of the parachute and paraglider are observed 200 metres.			not available  not available  not available
<b>6. Connecting strap</b> Mininum load capacity of 2400 daN			

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Weather data, ref. 3 and B

Date / place	hPa	wind	temp	humidity
Villeneuve, August 29, 2014	966	1	18°	62.0%
	Corrected mass: <b>113.03 kg</b>			
Villeneuve, September 08, 2014	965	1	18°	71.0%
	Corrected mass: <b>113.11 kg</b>			

## Reference

A. At horizontal airspeed 8 m/s and vertical speed 1.5 m/s

B. Formula to be used for correcting the test mass ofr differences from ICAO standard atmosphere

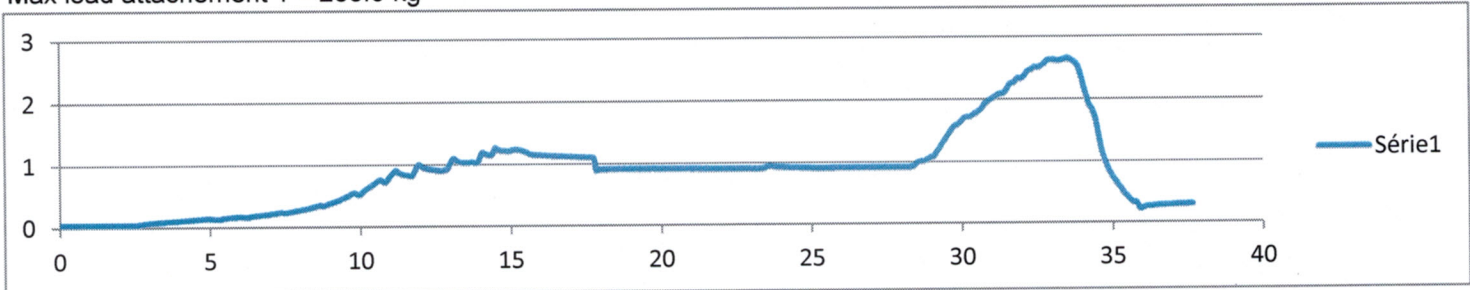
$$m_{corr} := m_{dec} \cdot \frac{p \cdot T_0}{p_0 \cdot T}$$

- Ground level atmospheric pressure at the test location: (p)
- ICAO standard atmospheric pressure at MSL: (p<sub>0</sub>)
- Ground level température at the test location: (T)
- ICAO standard temperature at MSL: (T<sub>0</sub>)
- Total weight in flight: (m<sub>dec</sub>)
- Corrected mass: (m<sub>corr</sub>)

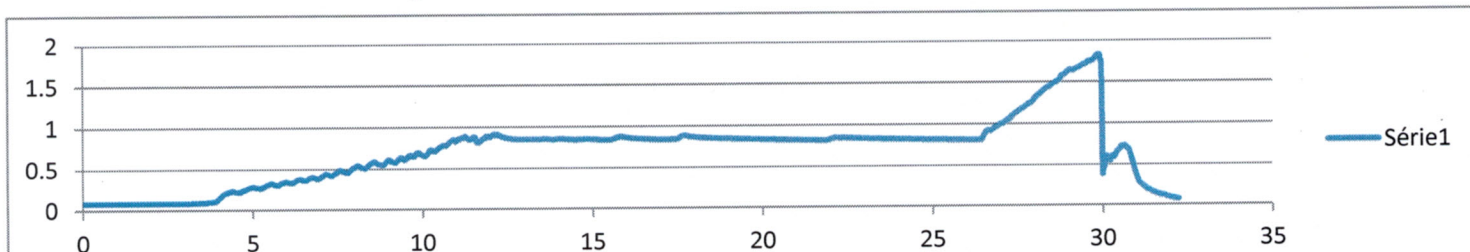
C. Only parachute with controls for steering and landing flare

GRAPHIQUE concerning Nfl II 91/09 "§ 6.1.8 inner container"

Max load attachement 1 = 263.9 kg



Max load attachement 2 = 182.4 kg





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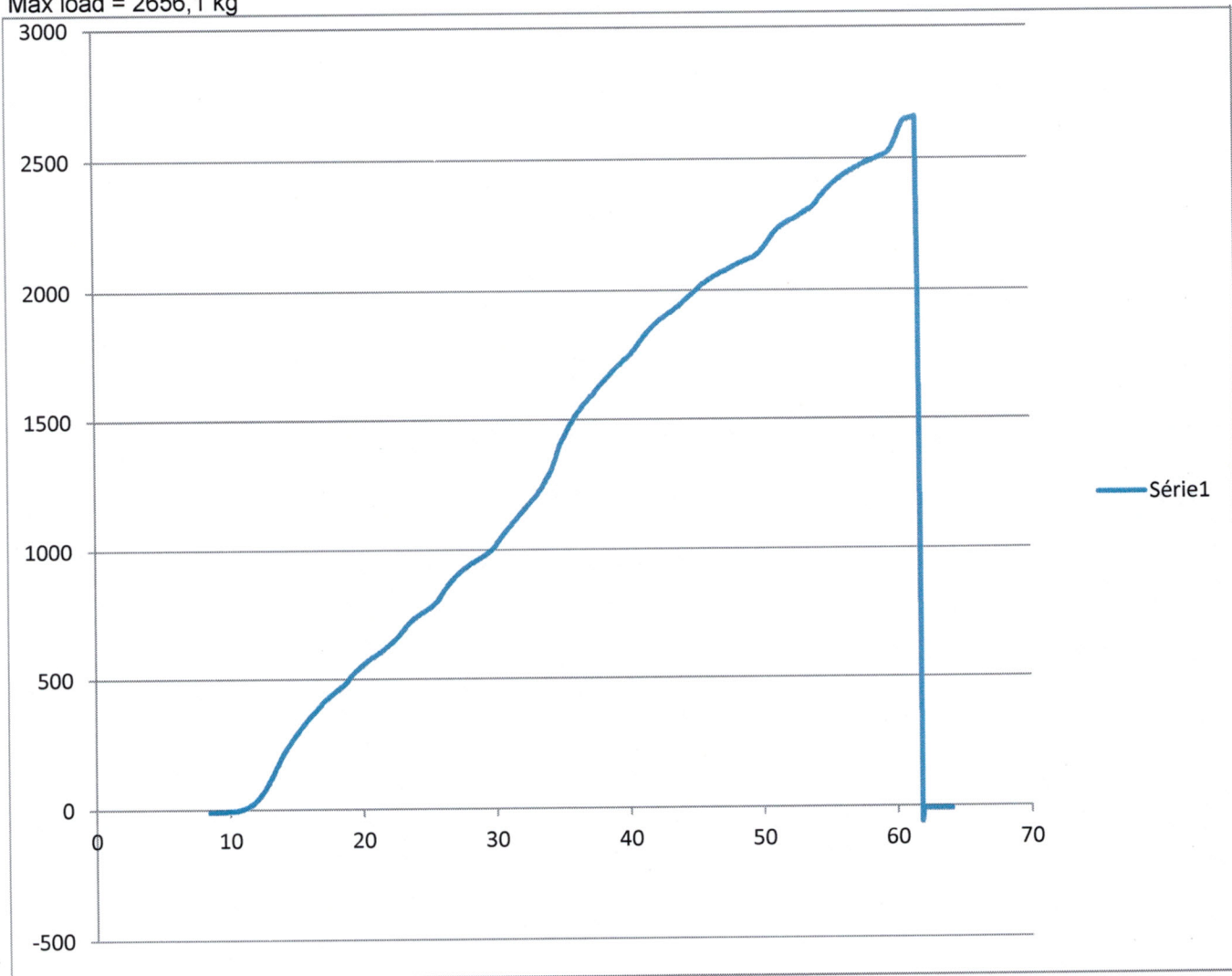
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GRAPHIQUE concerning Nfl II 91/09 "§ 6.1.4 connecting strap"  
Max load = 2656,1 kg



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For Air Turquoise SA

Alain Zoller

Villeneuve, 17.02.2015