

# Miscellaneous Impact Pad Report

Inspection certificate number: **MISC\_268.2023**

## Manufacturer data:

Manufacturer name: **Niviuk Gliders**  
 Representative: **Dominique Cizeau**  
 Street: **C. Del Ter, 6-Nave D**  
 Post code place: **17165 La Cellera de Ter Girona**  
 Country: **Spain**

Harness model: **Sherlock**

## Sample data:

Name impact pad: **SHEFO**  
 Emergency parachute integrated: **Yes**  
 Impact pad type: **Hybrid**  
 Weight of sample [kg]: **0.32**  
 Serial number: **SHEFOV9**  
 Date of test: **28.09.2023**

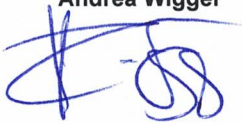
## Atmosphere AGL:

|              |             |
|--------------|-------------|
| Temp. [C°]   | <b>23</b>   |
| R.H. [%]     | <b>52</b>   |
| Press. [hPa] | <b>1008</b> |

## Summary of Impact pad test <sup>(1)</sup>

| Test id | - | Test configuration <sup>(2)</sup>   | Max Peak of Impact [g] <sup>(3)</sup> | Duration at 38 [g] in [ms] <sup>(4)</sup> | Duration at 20 [g] in [ms] <sup>(5)</sup> | Diff. of test 1 and 2 [%] <sup>(6)</sup> | Result          |
|---------|---|---|---------------------------------------|---|---|--|-----------------|
| P       | ✓ | Test sample attached to dummy in flying position, without emergency parachute   | <b>30.91</b>                          | <b>0.00</b>                               | <b>14.17</b>                              | <b>-2.33</b>                             | <b>POSITIVE</b> |
| PR      | ✓ | Test sample attached to dummy in flying position, Including emergency parachute | <b>32.67</b>                          | <b>0.00</b>                               | <b>16.67</b>                              | <b>7.17</b>                              | <b>POSITIVE</b> |

## Issue data

Place of declaration: **Villeneuve**  
 Date of issue: **10.01.2024**  
 Managing director: **Andrea Wigger**  
 Signature: 

| Manufacturer | 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 n°11 | Unit11  | 18.06.2025           |

This signature approves the validity of the test report

Air Turquoise SA has thoroughly tested the sample of emergency parachute container mentioned above and certifies its conformity with the following standards:  
**EN 1651:2018+A1:2020<sup>(7)</sup>, NFL 2-565-20**

<sup>(1)</sup> 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%.

<sup>(2)</sup> 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.

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

<sup>(7)</sup> This standards is NOT covered by accreditation D-IS-19457-01

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Name impact pad: **SHEFO**

**Test results of Impact pad test**

|                                    | without emergency parachute |              | including emergency parachute |               |
|------------------------------------|-----------------------------|--------------|-------------------------------|---------------|
|                                    | P1                          | P2           | PR1                           | PR2           |
| Maximum Peak of impact [g]         | <b>30.91</b>                | <b>30.19</b> | <b>30.48</b>                  | <b>32.67</b>  |
| Impact duration at +38 [g] in [ms] | <b>0.00</b>                 | <b>0.00</b>  | <b>0.00</b>                   | <b>0.00</b>   |
| Impact duration at +20 [g] in [ms] | <b>14.17</b>                | <b>13.33</b> | <b>15.00</b>                  | <b>16.67</b>  |
| Uncertainty k=2[g]                 | <b>1.78</b>                 | <b>1.74</b>  | <b>1.75</b>                   | <b>1.88</b>   |
| Diff. between test 1 and 2 [%]     | <b>100.00</b>               | <b>97.67</b> | <b>100.00</b>                 | <b>107.17</b> |

