



## Flight test report: EN 926-2:2013+A1:2021\* and NfL 2-565-20

|                    |  |                       |              |
|--------------------|--|-----------------------|--------------|
| Manufacturer       | <b>Ozone Gliders LTD</b>                                 | Certification number  | PG_2417.2024 |
| Address            | 16 Barnes Green<br>EH54 8PP Livingston<br>United Kingdom | Flight test           | 30.04.2024   |
| Glider model       | <b>MagMax 3 38</b>                                       | <b>Classification</b> | <b>B</b>     |
| Serial number      | PRTAN-Y-50D-011  | Representative        | Honorin      |
| Trimmer            | Opened   | Place of test         | Villeneuve   |
| Folding lines used | no   |                       |              |

**Test pilot** Alexandre Jofresa Claude Thurnheer

|  |                             |                            |
|--|-----------------------------|----------------------------|
| <b>Harness</b>                         | Advance Thun AG Success 4 M | Advance Thun AG Bi-pro 3 M |
| <b>Harness to risers distance [cm]</b> | 43                          | 42                         |
| <b>Distance between risers [cm]</b>    | 55                          | 55                         |
| <b>Length of rigid spreaders [cm]</b>  | 0                           | 31                         |
| <b>Total weight in flight [kg]</b>     | 110                         | 190                        |

|  |                                  |   |  |   |
|--|----------------------------------|---|--|---|
| <b>1. Inflation/Take-off</b>   | <b>B</b>                         |   |  |   |
| Rising behaviour   | Smooth, easy and constant rising | A | Easy rising, some pilot correction is required | B |
| Special take off technique required                                    | No                               | A | No   | A |
| <b>2. Landing</b>  | <b>A</b>                         |   |  |   |
| Special landing technique required                                     | No                               | A | No   | A |
| <b>3. Speed in straight flight</b>                                     | <b>B</b>                         |   |  |   |
| Trim speed more than 30 km/h   | Yes                              | A | Yes  | A |
| Speed range using the controls larger than 10 km/h                     | Yes                              | A | Yes  | A |
| Minimum speed  | Less than 25 km/h                | A | 25 km/h to 30 km/h                             | B |
| <b>4. Control movement</b>   | <b>A</b>                         |   |  |   |
| <b>Max. weight in flight up to 80 kg</b>                               |                                  |   |  |   |
| Symmetric control pressure / travel                                    | not available                    | 0 | not available                                  | 0 |
| <b>Max. weight in flight 80 kg to 100 kg</b>                           |                                  |   |  |   |
| Symmetric control pressure / travel                                    | not available                    | 0 | not available                                  | 0 |
| <b>Max. weight in flight greater than 100 kg</b>                       |                                  |   |  |   |
| Symmetric control pressure / travel                                    | Increasing / greater than 65 cm  | A | Increasing / greater than 65 cm                | A |
| <b>5. Pitch stability exiting accelerated flight</b>                   | <b>0</b>                         |   |  |   |
| Dive forward angle on exit   | not available                    | 0 | not available                                  | 0 |
| Collapse occurs  | not available                    | 0 | not available                                  | 0 |
| <b>6. Pitch stability operating controls during accelerated flight</b> | <b>0</b>                         |   |  |   |
| Collapse occurs  | not available                    | 0 | not available                                  | 0 |
| <b>7. Roll stability and damping</b>                                   | <b>A</b>                         |   |  |   |
| Oscillations   | Reducing                         | A | Reducing                                       | A |
| <b>8. Stability in gentle spirals</b>                                  | <b>A</b>                         |   |  |   |
| Tendency to return to straight flight                                  | Spontaneous exit                 | A | Spontaneous exit                               | A |

\*This standard is NOT covered by accreditation D-IS-19457-01

|   |  |          |  |   |
|---|--|----------|--|---|
| <b>9. Behaviour exiting a fully developed spiral dive</b> |  | <b>A</b> |  |   |
| Initial response of glider (first 180°)                   | Immediate reduction of rate of turn                            | A        | Immediate reduction of rate of turn                            | A |
| Tendency to return to straight flight                     | Spontaneous exit (g force decreasing, rate of turn decreasing) | A        | Spontaneous exit (g force decreasing, rate of turn decreasing) | A |
| Turn angle to recover normal flight                       | Less than 720°, spontaneous recovery                           | A        | Less than 720°, spontaneous recovery                           | A |
| <b>10. Symmetric front collapse</b>                       |  | <b>B</b> |  |   |
| <b>Approximately 30 % chord</b>                           |  |          |  |   |
| Entry   | Rocking back less than 45°                                     | A        | Rocking back less than 45°                                     | A |
| Recovery  | Spontaneous in 3 s to 5 s                                      | B        | Spontaneous in 3 s to 5 s                                      | B |
| Dive forward angle on exit Change of course               | Dive forward 0° to 30° / Keeping course                        | A        | Dive forward 0° to 30° / Keeping course                        | A |
| Cascade occurs  | No   | A        | No   | A |
| Folding lines used  | No   | A        | No   | A |
| <b>At least 50% chord</b>                                 |  |          |  |   |
| Entry   | Rocking back less than 45°                                     | A        | Rocking back less than 45°                                     | A |
| Recovery  | Spontaneous in 3 s to 5 s                                      | B        | Spontaneous in 3 s to 5 s                                      | B |
| Dive forward angle on exit / Change of course             | Dive forward 0° to 30° / Keeping course                        | A        | Dive forward 0° to 30° / Keeping course                        | A |
| Cascade occurs  | No   | A        | No   | A |
| Folding lines used  | No   | A        | No   | A |
| <b>With accelerator</b>                                   |  |          |  |   |
| Entry   | not available  | 0        | not available  | 0 |
| Recovery  | not available  | 0        | not available  | 0 |
| Dive forward angle on exit / Change of course             | not available  | 0        | not available  | 0 |
| Cascade occurs  | not available  | 0        | not available  | 0 |
| Folding lines used  | Not available  | 0        | Not available  | 0 |
| <b>11. Exiting deep stall (parachutal stall)</b>          |  | <b>B</b> |  |   |
| Deep stall achieved                                       | Yes  | A        | Yes  | A |
| Recovery  | Spontaneous in less than 3 s                                   | A        | Spontaneous in less than 3 s                                   | A |
| Dive forward angle on exit                                | Dive forward 0° to 30°   | A        | Dive forward 30° to 60°  | B |
| Change of course  | Changing course less than 45°                                  | A        | Changing course less than 45°                                  | A |
| Cascade occurs  | No   | A        | No   | A |
| <b>12. High angle of attack recovery</b>                  |  | <b>A</b> |  |   |
| Recovery  | Spontaneous in less than 3 s                                   | A        | Spontaneous in less than 3 s                                   | A |
| Cascade occurs  | No   | A        | No   | A |
| <b>13. Recovery from a developed full stall</b>           |  | <b>B</b> |  |   |
| Dive forward angle on exit                                | Dive forward 0° to 30°   | A        | Dive forward 30° to 60°  | B |
| Collapse  | No collapse  | A        | No collapse  | A |
| Cascade occurs (other than collapses)                     | No   | A        | No   | A |

|              |                  |   |                  |   |
|--------------|------------------|---|------------------|---|
| Rocking back | Less than 45°    | A | Less than 45°    | A |
| Line tension | Most lines tight | A | Most lines tight | A |

#### 14. Asymmetric collapse

#### B

##### Small asymmetric collapse

|  |  |   |  |   |
|--|--|---|--|---|
| Change of course until re-inflation / Maximum dive forward or roll angle | Less than 90° / Dive or roll angle 0° to 15°                                   | A | 90° to 180° / Dive or roll angle 15° to 45°                                    | B |
| Re-inflation behaviour   | Spontaneous re-inflation   | A | Spontaneous re-inflation   | A |
| Total change of course   | Less than 360°   | A | Less than 360°   | A |
| Collapse on the opposite side occurs                                     | No (or only a small number of collapsed cells with a spontaneous re-inflation) | A | No (or only a small number of collapsed cells with a spontaneous re-inflation) | A |
| Twist occurs   | No   | A | No   | A |
| Cascade occurs   | No   | A | No   | A |
| Folding lines used   | No   | A | No   | A |

##### Large asymmetric collapse

|  |  |   |  |   |
|--|--|---|--|---|
| Change of course until re-inflation / Maximum dive forward or roll angle | 90° to 180° / Dive or roll angle 15° to 45°                                    | B | 90° to 180° / Dive or roll angle 15° to 45°                                    | B |
| Re-inflation behaviour   | Spontaneous re-inflation   | A | Spontaneous re-inflation   | A |
| Total change of course   | Less than 360°   | A | Less than 360°   | A |
| Collapse on the opposite side occurs                                     | No (or only a small number of collapsed cells with a spontaneous re-inflation) | A | No (or only a small number of collapsed cells with a spontaneous re-inflation) | A |
| Twist occurs   | No   | A | No   | A |
| Cascade occurs   | No   | A | No   | A |
| Folding lines used   | No   | A | No   | A |

##### Small asymmetric collapse with fully activated accelerator

|  |               |   |               |   |
|--|---------------|---|---------------|---|
| Change of course until re-inflation / Maximum dive forward or roll angle | not available | 0 | not available | 0 |
| Re-inflation behaviour   | not available | 0 | not available | 0 |
| Total change of course   | not available | 0 | not available | 0 |
| Collapse on the opposite side occurs                                     | not available | 0 | not available | 0 |
| Twist occurs   | not available | 0 | not available | 0 |
| Cascade occurs   | not available | 0 | not available | 0 |
| Folding lines used   | Not available | 0 | Not available | 0 |

##### Large asymmetric collapse with fully activated accelerator

|  |               |   |               |   |
|--|---------------|---|---------------|---|
| Change of course until re-inflation / Maximum dive forward or roll angle | not available | 0 | not available | 0 |
| Re-inflation behaviour   | not available | 0 | not available | 0 |
| Total change of course   | not available | 0 | not available | 0 |
| Collapse on the opposite side occurs                                     | not available | 0 | not available | 0 |
| Twist occurs   | not available | 0 | not available | 0 |
| Cascade occurs   | not available | 0 | not available | 0 |

|   |  |   |  |   |
|---|--|---|--|---|
| Folding lines used  | Not available                                  | 0 | Not available                                  | 0 |
| <b>15. Directional control with a maintained asymmetric collapse</b>                      | <b>A</b>                                       |   |  |   |
| Able to keep course   | Yes  | A | Yes  | A |
| 180° turn away from the collapsed side possible in 10 s                                   | Yes  | A | Yes  | A |
| Amount of control range between turn and stall or spin                                    | More than 50 % of the symmetric control travel | A | More than 50 % of the symmetric control travel | A |
| <b>16. Trim speed spin tendency</b>   | <b>A</b>                                       |   |  |   |
| Spin occurs   | No   | A | No   | A |
| <b>17. Low speed spin tendency</b>  | <b>A</b>                                       |   |  |   |
| Spin occurs   | No   | A | No   | A |
| <b>18. Recovery from a developed spin</b>   | <b>A</b>                                       |   |  |   |
| Spin rotation angle after release   | Stops spinning in less than 90°                | A | Stops spinning in less than 90°                | A |
| Cascade occurs  | No   | A | No   | A |
| <b>19. B-line stall</b>   | <b>A</b>                                       |   |  |   |
| Change of course before release   | Changing course less than 45°                  | A | not available                                  | 0 |
| Behaviour before release  | Remains stable with straight span              | A | not available                                  | 0 |
| Recovery  | Spontaneous in less than 3 s                   | A | not available                                  | 0 |
| Dive forward angle on exit  | Dive forward 0° to 30°                         | A | not available                                  | 0 |
| Cascade occurs  | No   | A | not available                                  | 0 |
| <b>20. Big ears</b>   | <b>B</b>                                       |   |  |   |
| Entry procedure   | Dedicated controls                             | A | Dedicated controls                             | A |
| Behaviour during big ears   | Stable flight                                  | A | Stable flight                                  | A |
| Recovery  | Spontaneous in 3 s to 5 s                      | B | Spontaneous in 3 s to 5 s                      | B |
| Dive forward angle on exit  | Dive forward 0° to 30°                         | A | Dive forward 0° to 30°                         | A |
| <b>21. Big ears in accelerated flight</b>   | <b>0</b>                                       |   |  |   |
| Entry procedure   | not available                                  | 0 | not available                                  | 0 |
| Behaviour during big ears   | not available                                  | 0 | not available                                  | 0 |
| Recovery  | not available                                  | 0 | not available                                  | 0 |
| Dive forward angle on exit  | not available                                  | 0 | not available                                  | 0 |
| Behaviour immediately after releasing the accelerator while maintaining big ears          | not available                                  | 0 | not available                                  | 0 |
| <b>22. Alternative means of directional control</b>                                       | <b>A</b>                                       |   |  |   |
| 180° turn achievable in 20 s  | Yes  | A | Yes  | A |
| Stall or spin occurs  | No   | A | No   | A |
| <b>23. Any other flight procedure and/or configuration described in the user's manual</b> | <b>A</b>                                       |   |  |   |
| Procedure works as described  | Yes  | A | Yes  | A |
| Procedure suitable for novice pilots  | Yes  | A | Yes  | A |
| Cascade occurs  | No   | A | No   | A |

**24. Comments of test pilot**

23 : tips steering

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