

## Flight test report: EN 926-2:2013+A1:2021 and NfL 2024-2-785

|                    |                                                          |                      |              |
|--------------------|----------------------------------------------------------|----------------------|--------------|
| Manufacturer       | Ozone Gliders LTD                                        | Certification number | PG_2632.2025 |
| Address            | 16 Barnes Green<br>EH54 8PP Livingston<br>United Kingdom | Flight test          | 29.04.2025   |
| Glider model       | Alpina 5 MS                                              | Classification       | C            |
| Serial number      | PR2-A-11B-065                                            | Representative       | None         |
| Trimmer            | no                                                       | Place of test        | Villeneuve   |
| Folding lines used | yes                                                      |                      |              |

|                                                                        |                                                            |                                                                |
|------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------|
| <b>Test pilot</b>                                                      | Victor Chinen Cirilli                                      | Claude Thurnheer                                               |
| <b>Harness</b>                                                         | Advance Thun AG Success 4 M                                | Advance Thun AG Success 4 M                                    |
| <b>Harness to risers distance [cm]</b>                                 | 43                                                         | 43                                                             |
| <b>Distance between risers [cm]</b>                                    | 40                                                         | 44                                                             |
| <b>Total weight in flight [kg]</b>                                     | 75                                                         | 95                                                             |
| <b>1. Inflation/Take-off</b>                                           | <b>C</b>                                                   |                                                                |
| Rising behaviour                                                       | Overshoots, shall be slowed down to avoid a front collapse | C Overshoots, shall be slowed down to avoid a front collapse C |
| 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                                    | Increasing / greater than 55 cm                            | A not available 0                                              |
| <b>Max. weight in flight 80 kg to 100 kg</b>                           |                                                            |                                                                |
| Symmetric control pressure / travel                                    | not available                                              | 0 Increasing / greater than 60 cm A                            |
| <b>Max. weight in flight greater than 100 kg</b>                       |                                                            |                                                                |
| Symmetric control pressure / travel                                    | not available                                              | 0 not available 0                                              |
| <b>5. Pitch stability exiting accelerated flight</b>                   | <b>A</b>                                                   |                                                                |
| Dive forward angle on exit                                             | Dive forward less than 30°                                 | A Dive forward less than 30° A                                 |
| Collapse occurs                                                        | No                                                         | A No A                                                         |
| <b>6. Pitch stability operating controls during accelerated flight</b> | <b>A</b>                                                   |                                                                |
| Collapse occurs                                                        | No                                                         | A No A                                                         |
| <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                                           |

|                                                           |                                                                |                                                                  |   |
|-----------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------|---|
| <b>9. Behaviour exiting a fully developed spiral dive</b> |                                                                |                                                                  |   |
| Initial response of glider (first 180°)                   | <b>B</b><br>Immediate reduction of rate of turn                | A No immediate reaction                                          | B |
| 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>Approximately 30 % chord</b>                           |                                                                |                                                                  |   |
| Entry                                                     | Rocking back less than 45°                                     | A Rocking back less than 45°                                     | A |
| Recovery                                                  | Spontaneous in less than 3 s                                   | A Spontaneous in less than 3 s                                   | A |
| 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                                        | Yes                                                            | C Yes                                                            | C |
| <b>At least 50% chord</b>                                 |                                                                |                                                                  |   |
| Entry                                                     | Rocking back less than 45°                                     | A Rocking back less than 45°                                     | A |
| Recovery                                                  | Spontaneous in less than 3 s                                   | A Spontaneous in less than 3 s                                   | A |
| 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                                        | Yes                                                            | C Yes                                                            | C |
| <b>With accelerator</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 less than 3 s                                   | A |
| 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                                        | Yes                                                            | C Yes                                                            | C |
| <b>11. Exiting deep stall (parachutal stall)</b>          |                                                                |                                                                  |   |
| Deep stall achieved                                       | <b>A</b><br>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 0° to 30°                                         | A |
| 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>                  |                                                                |                                                                  |   |
| Recovery                                                  | <b>A</b><br>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>           |                                                                |                                                                  |   |
| Dive forward angle on exit                                | <b>C</b><br>Dive forward 0° to 30°                             | A Dive forward 0° to 30°                                         | A |
| Collapse                                                  | No collapse                                                    | A No collapse                                                    | A |
| Cascade occurs (other than collapses)                     | No                                                             | A No                                                             | A |

|                                                                          |                                                                                |          |                                                                                |   |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------|--------------------------------------------------------------------------------|---|
| Rocking back                                                             | Greater than 45°                                                               | C        | Greater than 45°                                                               | C |
| Line tension                                                             | Most lines tight                                                               | A        | Most lines tight                                                               | A |
| <b>14. Asymmetric collapse</b>                                           |                                                                                | <b>C</b> |                                                                                |   |
| <b>Small asymmetric collapse</b>                                         |                                                                                |          |                                                                                |   |
| Change of course until re-inflation / Maximum dive forward or roll angle | Less than 90° / Dive or roll angle 0° to 15°                                   | A        | Less than 90° / Dive or roll angle 15° to 45°                                  | A |
| 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                                                       | Yes                                                                            | C        | Yes                                                                            | C |
| <b>Large asymmetric collapse</b>                                         |                                                                                |          |                                                                                |   |
| 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        | Inflates in less than 3 s from start of pilot action                           | C |
| 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                                                       | Yes                                                                            | C        | Yes                                                                            | C |
| <b>Small asymmetric collapse with fully activated accelerator</b>        |                                                                                |          |                                                                                |   |
| Change of course until re-inflation / Maximum dive forward or roll angle | Less than 90° / Dive or roll angle 15° to 45°                                  | A        | Less than 90° / Dive or roll angle 15° to 45°                                  | A |
| Re-inflation behaviour                                                   | Spontaneous re-inflation                                                       | A        | Inflates in less than 3 s from start of pilot action                           | C |
| 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                                                       | Yes                                                                            | C        | Yes                                                                            | C |
| <b>Large asymmetric collapse with fully activated accelerator</b>        |                                                                                |          |                                                                                |   |
| 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                                                                        | Yes                                            | C | Yes                                            | C |
| <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>B</b>                                       |   |                                                |   |
| Spin rotation angle after release                                                         | Stops spinning in 90° to 180°                  | B | Stops spinning in 90° to 180°                  | B |
| Cascade occurs                                                                            | No                                             | A | No                                             | A |
| <b>19. B-line stall</b>                                                                   | <b>0</b>                                       |   |                                                |   |
| Change of course before release                                                           | not available                                  | 0 | not available                                  | 0 |
| Behaviour before release                                                                  | not available                                  | 0 | not available                                  | 0 |
| Recovery                                                                                  | not available                                  | 0 | not available                                  | 0 |
| Dive forward angle on exit                                                                | not available                                  | 0 | not available                                  | 0 |
| Cascade occurs                                                                            | not available                                  | 0 | not available                                  | 0 |
| <b>20. Big ears</b>                                                                       | <b>A</b>                                       |   |                                                |   |
| Entry procedure                                                                           | Dedicated controls                             | A | Dedicated controls                             | A |
| Behaviour during big ears                                                                 | Stable flight                                  | A | Stable flight                                  | 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 0° to 30°                         | A |
| <b>21. Big ears in accelerated flight</b>                                                 | <b>A</b>                                       |   |                                                |   |
| Entry procedure                                                                           | Dedicated controls                             | A | Dedicated controls                             | A |
| Behaviour during big ears                                                                 | Stable flight                                  | A | Stable flight                                  | 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 0° to 30°                         | A |
| Behaviour immediately after releasing the accelerator while maintaining big ears          | Stable flight                                  | A | Stable flight                                  | A |
| <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>0</b>                                       |   |                                                |   |
| Procedure works as described                                                              | not available                                  | 0 | not available                                  | 0 |
| Procedure suitable for novice pilots                                                      | not available                                  | 0 | not available                                  | 0 |
| Cascade occurs                                                                            | not available                                  | 0 | not available                                  | 0 |

