

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

|                                                                 |                                                |                                |                                                |
|-----------------------------------------------------------------|------------------------------------------------|--------------------------------|------------------------------------------------|
| Manufacturer                                                    | Advance Thun AG                                | Certification number           | PG_2622.2025                                   |
| Address                                                         | Uttigenstrasse 87<br>3600 Thun<br>Switzerland  | Flight test                    | 10.11.2025                                     |
| Glider model                                                    | Pi 4 16                                        | Classification                 | C                                              |
| Serial number                                                   | 112159                                         | Representative                 | None                                           |
| Trimmer                                                         | no                                             | Place of test                  | Villeneuve                                     |
| Folding lines used                                              | no                                             |                                |                                                |
| Test pilot                                                      | Light pilot under Air Turquoise supervision    | Alexandre Jofresa              |                                                |
| Harness                                                         | Supair s.a.s. Altiplume S                      | Supair s.a.s. ALTIRANDO Lite 2 |                                                |
| Harness to risers distance [cm]                                 | 41                                             | 40                             |                                                |
| Distance between risers [cm]                                    | 40                                             | 44                             |                                                |
| Total weight in flight [kg]                                     | 50                                             | 90                             |                                                |
| 1. Inflation/Take-off                                           | B                                              |                                |                                                |
| Rising behaviour                                                | Easy rising, some pilot correction is required | B                              | Easy rising, some pilot correction is required |
| Special take off technique required                             | No                                             | A                              | No                                             |
| 2. Landing                                                      | A                                              |                                |                                                |
| Special landing technique required                              | No                                             | A                              | No                                             |
| 3. Speed in straight flight                                     | B                                              |                                |                                                |
| Trim speed more than 30 km/h                                    | Yes                                            | A                              | Yes                                            |
| Speed range using the controls larger than 10 km/h              | Yes                                            | A                              | Yes                                            |
| Minimum speed                                                   | 25 km/h to 30 km/h                             | B                              | 25 km/h to 30 km/h                             |
| 4. Control movement                                             | C                                              |                                |                                                |
| Max. weight in flight up to 80 kg                               |                                                |                                |                                                |
| Symmetric control pressure / travel                             | Increasing / greater than 55 cm                | A                              | not available                                  |
| Max. weight in flight 80 kg to 100 kg                           |                                                |                                |                                                |
| Symmetric control pressure / travel                             | not available                                  | 0                              | Increasing / 45 cm to 60 cm                    |
| Max. weight in flight greater than 100 kg                       |                                                |                                |                                                |
| Symmetric control pressure / travel                             | not available                                  | 0                              | not available                                  |
| 5. Pitch stability exiting accelerated flight                   | A                                              |                                |                                                |
| Dive forward angle on exit                                      | Dive forward less than 30°                     | A                              | Dive forward less than 30°                     |
| Collapse occurs                                                 | No                                             | A                              | No                                             |
| 6. Pitch stability operating controls during accelerated flight | A                                              |                                |                                                |
| Collapse occurs                                                 | No                                             | A                              | No                                             |
| 7. Roll stability and damping                                   | A                                              |                                |                                                |
| Oscillations                                                    | Reducing                                       | A                              | Reducing                                       |
| 8. Stability in gentle spirals                                  | A                                              |                                |                                                |
| Tendency to return to straight flight                           | Spontaneous exit                               | A                              | Spontaneous exit                               |

|                                                           |                                                                |          |                                                                |   |
|-----------------------------------------------------------|----------------------------------------------------------------|----------|----------------------------------------------------------------|---|
| <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>A</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                                        | 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 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                                        | No                                                             | A        | No                                                             | A |
| <b>With accelerator</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                                        | No                                                             | A        | No                                                             | A |
| <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 30° to 60°                                        | B        | 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 30° to 60°                                        | B        | 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

C

##### 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 | Less than 90° / Dive or roll angle 45° to 60° | C |
| 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 45° to 60° | C |
| 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 | 90° to 180° / Dive or roll angle 15° to 45° | B | Less than 90° / Dive or roll angle 45° to 60° | C |
| 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 with fully activated accelerator

|                                                                          |                                             |   |                                             |   |
|--------------------------------------------------------------------------|---------------------------------------------|---|---------------------------------------------|---|
| 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 45° to 60° | C |
| 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 |
| <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 | Changing course less than 45°                  | A |
| Behaviour before release                                                                  | Remains stable with straight span              | A | Remains stable with straight span              | 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 |
| Cascade occurs                                                                            | No                                             | A | No                                             | A |
| <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 |