



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

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|--------------------|---|-----------------------|--------------|
| Manufacturer | Advance Thun AG | Certification number | PG_2359.2024 |
| Address | Uttigenstrasse 87 3600 Thun Switzerland | Flight test | 25.01.2024 |
| Glider model | THETA ULS 29 | Classification | B |
| Serial number | 102977 | Representative | None |
| Trimmer | no | Place of test | Villeneuve |
| Folding lines used | no | | |

Test pilot Alexandre Jofresa Anselm Rauh

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|--|-----------------------------|----------------|
| Harness | Advance Thun AG Success 4 M | Niviuk Makan L |
| Harness to risers distance [cm] | 43 | 41 |
| Distance between risers [cm] | 48 | 48 |
| Total weight in flight [kg] | 102 | 125 |

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

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|---|--|--|---|
| 9. Behaviour exiting a fully developed spiral dive | | | |
| Initial response of glider (first 180°) | B No immediate reaction | B 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 720° to 1 080°, spontaneous recovery | B |
| 10. Symmetric front collapse | | | |
| Approximately 30 % chord | | | |
| 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 |
| At least 50% chord | | | |
| 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 |
| With accelerator | | | |
| 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 |
| 11. Exiting deep stall (parachutal stall) | | | |
| Deep stall achieved | A 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 |
| 12. High angle of attack recovery | | | |
| Recovery | A Spontaneous in less than 3 s | A Spontaneous in less than 3 s | A |
| Cascade occurs | No | A No | A |
| 13. Recovery from a developed full stall | | | |
| Dive forward angle on exit | A 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 | Less than 45° | A | Less than 45° | A |
| Line tension | Most lines tight | A | Most lines tight | A |

14. Asymmetric collapse

A

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 0° to 15° | 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 | No | A | No | A |

Large asymmetric collapse

| | | | | |
|--|--|---|--|---|
| 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 | 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 | 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 | 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 | 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 | 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 |
| 15. Directional control with a maintained asymmetric collapse | A | | | |
| 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 |
| 16. Trim speed spin tendency | A | | | |
| Spin occurs | No | A | No | A |
| 17. Low speed spin tendency | A | | | |
| Spin occurs | No | A | No | A |
| 18. Recovery from a developed spin | A | | | |
| 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 |
| 19. B-line stall | A | | | |
| 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 |
| 20. Big ears | A | | | |
| 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 |
| 21. Big ears in accelerated flight | A | | | |
| 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 |
| 22. Alternative means of directional control | A | | | |
| 180° turn achievable in 20 s | Yes | A | Yes | A |
| Stall or spin occurs | No | A | No | A |
| 23. Any other flight procedure and/or configuration described in the user's manual | 0 | | | |
| 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 |