AIR TURQUOISE SA | PARA-TEST.COM

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BGD GmbH

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes

Manufacturer

Recovery



PG 1621.2019

Flight test report: EN 926-2:2013 & LTF 91/09

| Manufacturer | BGD GmbH | Certification number | F | G_1621.2019 | |
|--|--------------------------------|--|---|--|---|
| Address | Am Gewerbepark 11 | Flight test | 2 | 6.11.2019 | |
| | 9413 St-Gertraud Austria | | | | |
| Glider model | Dual2 40 | Classification | E | 3 | |
| Serial number | BG0739072A | Representative | | lone | |
| Trimmer | | Place of test | - | /illeneuve | |
| | yes: opened | Place of test | Ň | liierieuve | |
| Folding lines used | no | | | | |
| Test pilot | | Alexandre Jofresa | C | Claude Thurnheer | |
| Harness | | Advance - Bi pro 2 | A | Advance - Bi pro 2 | |
| Harness to risers distance (cm) | | 55 | 5 | 5 | |
| Distance between risers (cm) | | 50 | 5 | 55 | |
| Total weight in flight (kg) | | 110 | | 210 | |
| | | 110 | 2 | .10 | |
| 1. Inflation/Take-off | | Α | | | |
| Rising behaviour | | Smooth, easy and constant rising | А | Smooth, easy and constant rising | А |
| Special take off technique | e required | No | А | No | А |
| 2. Landing | | Α | | | |
| Special landing technique | | 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 | | Less than 25 km/h | A | 25 km/h to 30 km/h | В |
| 4. Control movement | to 90 kg | Α | | | |
| Max. weight in flight up to 80 kg | | not available | 0 | not available | 0 |
| Symmetric control pressure / travel Max. weight in flight 80 kg to 100 kg | | not available | 0 | not available | 0 |
| Symmetric control pressure / travel | | not available | 0 | not available | 0 |
| Max. weight in flight gre | | | Ū | | Ū |
| Symmetric control pressure / travel | | Increasing / greater than 65 cm | А | Increasing / greater than 65 cm | А |
| 5. Pitch stability exiting | | 0 | | 0 0 | |
| Dive forward angle on exit | | not available | 0 | not available | 0 |
| Collapse occurs | | not available | 0 | not available | 0 |
| 6. Pitch stability operati flight | ng controls during accelerated | 0 | | | |
| Collapse occurs | | not available | 0 | not available | 0 |
| 7. Roll stability and dam | nping | A | | | |
| Oscillations | | Reducing | А | Reducing | А |
| 8. Stability in gentle spi | rals | А | | | |
| Tendency to return to stra | aight flight | Spontaneous exit | А | Spontaneous exit | А |
| 9. Behaviour exiting a fu | ully developed spiral dive | Α | | | |
| Initial response of glider (first 180°) | | Immediate reduction of rate of turn | А | Immediate reduction of rate of turn | Α |
| Tendency to return to stra | aight 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 nor | mal flight | Less than 720°, spontaneous recovery | Α | Less than 720°, spontaneous recovery | A |
| 10. Symmetric front col | lapse | A | | | |
| Approximately 30 % cho | ord | | | | |
| Entry | | Rocking back less than 45° | А | Rocking back less than 45° | А |
| Pecovery | | Spontanoous in loss than 3 s | ۸ | Spontaneous in loss than 3 s | ۸ |

Certification number

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A Spontaneous in less than 3 s

А

Spontaneous in less than 3 s

| Dive forward angle on exit Change of course | Dive forward 0° to 30° Keeping course | A | Dive forward 0° to 30° Keeping course | А |
|--|---|---|---|---|
| Cascade occurs | No | А | No | А |
| Folding lines used | No | | No | |
| At least 50% chord | | | | |
| Entry | Rocking back less than 45° | А | Rocking back less than 45° | А |
| Recovery | Spontaneous in less than 3 s | А | Spontaneous in less than 3 s | А |
| Dive forward angle on exit / Change of course | Dive forward 0° to 30° / Keeping course | Α | Dive forward 0° to 30° / Keeping course | А |
| Cascade occurs | No | А | No | А |
| Folding lines used | No | | No | |
| With accelerator | | | | |
| 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 | | Not available | |
| 11. Exiting deep stall (parachutal stall) | Α | | | |
| Deep stall achieved | Yes | А | Yes | А |
| Recovery | Spontaneous in less than 3 s | А | Spontaneous in less than 3 s | А |
| 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 | A | | | |
| Recovery | Spontaneous in less than 3 s | А | Spontaneous in less than 3 s | А |
| Cascade occurs | No | A | • | A |
| 13. Recovery from a developed full stall | A | Λ | | Λ |
| Dive forward angle on exit | Dive forward 0° to 30° | А | Dive forward 0° to 30° | А |
| 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 |
| | | | | A |
| 14. Asymmetric collapse | Most lines tight B | A | Most lines tight | A |
| Small asymmetric collapse | В | | | |
| Change of course until re-inflation / Maximum dive forward or | Less than 90° / Dive or roll angle | А | Less than 90° / Dive or roll angle | А |
| roll angle Re-inflation behaviour | 0° to 15° Spontaneous re-inflation | А | 15° to 45° Spontaneous re-inflation | А |
| 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 | A | No (or only a small number of | A |
| | collapsed cells with a spontaneous reinflation) | ~ | collapsed cells with a spontaneous reinflation) | ~ |
| Twist occurs | No | А | No | А |
| Cascade occurs | No | А | No | А |
| Folding lines used | No | | No | |
| 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 | 90° to 180° / Dive or roll angle 15° to 45° | В |
| Re-inflation behaviour | Spontaneous re-inflation | А | Spontaneous re-inflation | А |
| Total change of course | Less than 360° | А | Less than 360° | А |
| Collapse on the opposite side occurs | No (or only a small number of collapsed cells with a spontaneous reinflation) | A | No (or only a small number of collapsed cells with a spontaneous reinflation) | A |
| Twist occurs | No | А | No | А |
| Cascade occurs | No | А | No | А |
| Folding lines used | No | | No | |
| 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 | | Not available | |
| 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 | | Not available | |
| 15. Directional control with a maintained asymmetric | Α | | | |
| collapse | | | | |
| Able to keep course | Yes | А | Yes | А |
| 180° turn away from the collapsed side possible in 10 s | Yes | А | Yes | А |
| 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 | А |
| 16. Trim speed spin tendency | Α | | | |
| Spin occurs | No | А | No | А |
| 17. Low speed spin tendency | Α | | | |
| Spin occurs | No | А | No | А |
| 18. Recovery from a developed spin | Α | | | |
| Spin rotation angle after release | Stops spinning in less than 90° | А | Stops spinning in less than 90° | А |
| Cascade occurs | No | А | No | А |
| 19. B-line stall | Α | | | |
| Change of course before release | Changing course less than 45° | А | Changing course less than 45° | А |
| Behaviour before release | Remains stable with straight span | А | Remains stable with straight span | А |
| Recovery | Spontaneous in less than 3 s | А | Spontaneous in less than 3 s | А |
| Dive forward angle on exit | Dive forward 0° to 30° | А | Dive forward 0° to 30° | А |
| Cascade occurs | No | А | No | А |
| 20. Big ears | В | | | |
| Entry procedure | Dedicated controls | А | Dedicated controls | А |
| Behaviour during big ears | Stable flight | А | Stable flight | А |
| Recovery | Spontaneous in 3 s to 5 s | В | Recovery through pilot action in less than a further 3 s | В |
| Dive forward angle on exit | Dive forward 0° to 30° | А | Dive forward 0° to 30° | А |
| 21. Big ears in accelerated flight | Α | | | |
| 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 | Stable flight | А |
| 22. Alternative means of directional control | Α | | | |
| 180° turn achievable in 20 s | Yes | А | Yes | А |
| Stall or spin occurs | No | А | No | А |
| 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 |
| 24. Comments of test pilot | | | | |

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