

## Flight test report: EN 926-2:2013

| · ···g·····op                                      |  |  |   |  |   |
|--|--|--|---|--|---|
| Manufacturer                                       | Gradient s.r.o.                            | Certification number   |   | PG_0950.2015   |   |
| Address  | Plzenska 221/130<br>150 00 Praha 5 - Motol | Date of flight test  |   | 22. 06. 2015   |   |
|  | Czech Republic                             |  |   |  |   |
| Glider model                                       | Avax XC5 26                                | Classification   |   | D  |   |
| Serial number                                      | G44261506009                               | Representative   |   | None   |   |
|  |  | •  |   |  |   |
| Trimmer  | no   | Place of test  |   | Villeneuve   |   |
| Test pilot   |  | Thurnheer Claude   |   | Zoller Alain   |   |
| Harness  |  | Niviuk - Hamak M   |   | Supair - Access M  |   |
| Harness to risers distance (cm)                    |  | 43   |   | 41   |   |
| Distance between r                                 | . ,  | 44   |   | 44   |   |
| Total weight in fligh                              | · · ·                                      | 82   |   | 97   |   |
| rotal weight in high                               | n (rg)                                     | 02   |   | 91   |   |
| 1. Inflation/Take-off                              |  | C  |   |  |   |
| Rising behaviour                                   |  | Overshoots, shall be slowed down to avoid a front collapse           | С | Overshoots, shall be slowed down to avoid a front collapse     | С |
| Special take off technique                         | required                                   | No   | А | No   | А |
| 2. Landing   |  | Α  |   |  |   |
| Special landing technique                          | •  | No   | A | No   | А |
| 3. Speed in straight flight                        |  | В  |   |  |   |
| Trim speed more than 30                            |  | Yes  | Α | 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                                |  | С  |   |  |   |
| 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                |  | Approximately constant / 45 cm<br>to 60 cm                           | С | Increasing / 45 cm to 60 cm                                    | С |
| Max. weight in flight gre                          | ater than 100 kg                           |  |   |  |   |
| Symmetric control pressu                           | re / travel                                | not available  | 0 | not available  | 0 |
| 5. Pitch stability exiting                         | accelerated flight                         | Α  |   |  |   |
| Dive forward angle on exi                          | t  | Dive forward less than $30^{\circ}$                                  | А | Dive forward less than 30°                                     | А |
| Collapse occurs                                    |  | No   | А | No   | А |
| 6. Pitch stability operati<br>flight               | ng controls during accelerated             | Α  |   |  |   |
| Collapse occurs                                    |  | No   | A | No   | А |
| 7. Roll stability and dam                          | iping                                      | Α  |   |  |   |
| Oscillations                                       |  | Reducing   | A | Reducing   | A |
| 8. Stability in gentle spin                        |  | Α  |   | <b>a</b>   |   |
| Tendency to return to stra                         |  | Spontaneous exit   | A | Spontaneous exit   | A |
| -  | Illy developed spiral dive                 | A<br>Immediate reduction of rate of                                  | ٨ | Immediate reduction of rate of turn                            | ٨ |
| Initial response of glider (first 180°)            |  | Immediate reduction of rate of turn                                  | A | Immediate reduction of rate of turn                            | A |
| Tendency to return to stra                         | iight Tiight                               | Spontaneous exit (g force<br>decreasing, rate of turn<br>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  | А      |
|--|---|---|---|--------|
| 10. Symmetric front collapse   | D   |   |   |        |
| Approximately 20% about  |   |   |   |        |
| Approximately 30 % chord<br>Entry  | Rocking back less than 45°  | А | Rocking back less than 45°  | А      |
| 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  | A | Dive forward 0° to 30° Keeping  | A      |
|  | course  |   | course  |        |
| Cascade occurs   | No  | А | No  | А      |
| Folding lines used   | No  | Α | Yes   | D      |
| At least 50% chord   |   |   |   |        |
| Entry  | Rocking back less than 45°  | А | Rocking back greater than 45°   | С      |
| Recovery   | Spontaneous in 3 s to 5 s   | В | Spontaneous in 3 s to 5 s   | В      |
| Dive forward angle on exit / Change of course                            | Dive forward 0° to 30° / Keeping  | A | Dive forward 0° to 30° / Keeping  | A      |
| с с<br>с   | course  |   | course  |        |
| Cascade occurs   | No  | А | No  | А      |
| Folding lines used   | No  | А | Yes   | D      |
| With accelerator   |   |   |   |        |
| Entry  | Rocking back less than 45°  | А | Rocking back greater than 45°   | С      |
| Recovery   | Recovery through pilot action in  | D | Spontaneous in less than 3 s  | A      |
|  | less than a further 3 s   |   |   |        |
| Dive forward angle on exit / Change of course                            | Dive forward 0° to 30° / Keeping  | А | Dive forward 0° to 30° / Keeping  | А      |
| Cascade occurs   | course<br>No  | А | course<br>No  | ^      |
| Folding lines used   | Yes   | D | Yes   | A<br>D |
| 11. Exiting deep stall (parachutal stall)                                | A   | D | 165   | D      |
| Deep stall achieved  | Yes   | А | Yes   | А      |
| 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°  | Α | Dive forward 0° to 30°  | A      |
| Change of course   | Changing course less than 45°   | Α | Changing course less than 45°   | A      |
| Cascade occurs   | No  | А | No  | А      |
| 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  | А | No  | А      |
| 13. Recovery from a developed full stall                                 | В   |   |   |        |
| Dive forward angle on exit   | Dive forward 0° to 30°  | А | Dive forward 30° to 60°   | В      |
| Collapse   | No collapse   | А | No collapse   | А      |
| Cascade occurs (other than collapses)                                    | No  | А | No  | А      |
| Rocking back   | Less than 45°   | А | Less than 45°   | A      |
| Line tension   | Most lines tight  | А | 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 15° to 45° $$                                    | A | Less than 90° / Dive or roll angle 0° to 15° $$                                     | А      |
| 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<br>collapsed cells with a<br>spontaneous reinflation) | A | No (or only a small number of<br>collapsed cells with a spontaneous<br>reinflation) | A      |
| Twist occurs   | No  | А | No  | А      |
| 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<br>45° to 60°                                      | С | 90° to 180° / Dive or roll angle 45° to 60°   | С      |
| Re-inflation behaviour   | Spontaneous re-inflation  | A | Spontaneous re-inflation  | A      |

| Total change of course   | Less than 360°  | Α      | Less than 360°  | Α      |
|--|---|--------|---|--------|
| Collapse on the opposite side occurs                                     | No (or only a small number of<br>collapsed cells with a<br>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   | Yes   | D      | Yes   | D      |
| 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 $15^{\circ}$ to $45^{\circ}$                     | A      | Less than 90° / Dive or roll angle<br>15° to 45°                              | A      |
| 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<br>collapsed cells with a<br>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   | Yes   | D      | No  | А      |
| Large asymmetric collapse with fully activated accelerator               |   |        |   |        |
| Change of course until re-inflation / Maximum dive forward or roll angle | 180° to 360° / Dive or roll angle<br>45° to 60°                                     | С      | 90° to 180° / Dive or roll angle 45° to 60°                                   | С      |
| 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<br>collapsed cells with a<br>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   | Yes   | D      | Yes   | D      |
| 15. Directional control with a maintained asymmetric<br>collapse         | Α   |        |   |        |
| 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   | А      | More than 50 % of the symmetric   | А      |
|  | symmetric control travel  |        | control travel  |        |
| 16. Trim speed spin tendency   | Α   |        |   |        |
| Spin occurs  | No  | A      | No  | A      |
| 17. Low speed spin tendency  | A   | ۸      | No  | ^      |
| Spin occurs  | No  | А      | No  | A      |
| 18. Recovery from a developed spin                                       | A<br>Stops spinning in less than 90°  | ۸      | Stops spinning in less than 90°   | ^      |
| Spin rotation angle after release<br>Cascade occurs                      | No  | A<br>A | No  | A<br>A |
| 19. B-line stall   | A   | ~      |   | ~      |
| 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   | A      | Remains stable with straight span   | A      |
| 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  | Standard technique  | А      | Standard technique  | А      |
| Behaviour during big ears  | Stable flight   | А      | Stable flight   | А      |
| Recovery   | Recovery through pilot action in less than a further 3 s                            | В      | Recovery through pilot action in less than a further 3 s                      | В      |
| Dive forward angle on exit   | Dive forward 0° to 30°  | A      | Dive forward 0° to 30°  | A      |
| 21. Big ears in accelerated flight                                       | B<br>Other dead to sharing a  |        |   |        |
| Entry procedure  | Standard technique  | A      | Standard technique  | A      |
| Behaviour during big ears  | Stable flight   | A      | Stable flight   | A      |

| Recovery   | Recovery through pilot action in less than a further 3 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 |
| Behaviour immediately after releasing the accelerator while maintaining big ears   | Stable flight  | A | 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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