

Flight test report



| | | | | | 1828 |
|-----------------------|---------------------------------|----------------------------------|---|----------------------------------|------|
| Manufacturer | Sky Country | Certification number | | PG_0166.2008 | |
| Address | Kharkov Ukraine | Date of flight test | | 02. 07. 2008 | |
| Representative | None | Place of test | | Villeneuve | |
| Glider model | Scorpion-3 26 | Classification | | С | |
| Trimmer | no | | | | |
| | Test pilo | t Thurnheer Claude | | Zoller Alain | |
| | Harness | Advance - Progress light | | Sup'Air - Evo XC L | |
| | Total weight in flight (kg |) 80 | | 100 | |
| 1. Inflation/Take-off | | Α | | | |
| Rising behaviour | | Smooth, easy and constant rising | А | Smooth, easy and constant rising | А |
| Special take off tech | nique required | No | А | No | А |
| 2. Landing | | Α | | | |
| Special landing tech | nique required | No | А | No | А |
| 3. Speed in straight | t flight | В | | | |
| Trim speed more that | an 30 km/h | Yes | А | Yes | А |
| Speed range using t | he controls larger than 10 km/h | Yes | А | Yes | А |
| Minimum speed | | Less than 25 km/h | А | 25 km/h to 30 km/h | В |
| 4. Control moveme | nt | А | | | |
| Max. weight in flight | up to 80 kg | | | | |
| Symmetric control pr | essure / travel | Increasing / greater than 55 cm | А | not available | 0 |
| Max. weight in flight | 80 kg to 100 kg | | | | |
| Symmetric control pr | essure / travel | not available | 0 | Increasing / greater than 60 cm | Α |
| Max. weight in flight | greater than 100 kg | | | | |
| Symmetric control p | essure / travel | not available | 0 | not available | 0 |
| 5. Pitch stability ex | iting accelerated flight | Α | | | |

| | Symmetric control pressure / travel | not available | 0 | not available | 0 |
|------------------------------|--|---|---|---|---|
| | 5. Pitch stability exiting accelerated flight | Α | | | |
| | Dive forward angle on exit | Dive forward less than 30° | А | Dive forward less than 30° | А |
| | Collapse occurs | No | А | No | А |
| | 6. Pitch stability operating controls during accelerated flight | Α | | | |
| | Collapse occurs | No | А | No | А |
| | 7. Roll stability and damping | Α | | | |
| | Oscillations | Reducing | А | Reducing | А |
| | 8. Stability in gentle spirals | Α | | | |
| | Tendency to return to straight flight | Spontaneous exit | А | Spontaneous exit | А |
| | 9. Behaviour in a steeply banked turn | В | | | |
| | Sink rate after two turns | More than 14 m/s | В | More than 14 m/s | В |
| 10. Symmetric front collapse | | Α | | | |
| | 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 | A | Dive forward 0° to 30° / Keeping course | А |
| | Cascade occurs | No | А | No | А |
| | With accelerator | | | | |
| | Entry | | ~ | and evelleble | ~ |
| | | not available | 0 | not available | 0 |
| | Recovery | not available 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 |
| 11. Exiting deep stall (parachutal stall) | Α | | | |
| 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 0° to 30° | А | Dive forward 0° to 30° | A |
| Change of course | Changing course less than 45° | A | Changing course less than 45° | A |
| Cascade occurs | No | А | No | A |
| 12. High angle of attack recovery | Α | | | |
| Recovery | Spontaneous in less than 3 s | А | Spontaneous in less than 3 s | А |
| Cascade occurs | No | А | No | A |
| 13. Recovery from a developed full stall | Α | | | |
| Dive forward angle on exit | Dive forward 0° to 30° | А | Dive forward 0° to 30° | А |
| 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° | А |
| Line tension | Most lines tight | А | Most lines tight | А |
| 14. Asymmetric collapse | С | | | |
| With 50% 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 | А | Spontaneous re-inflation | А |
| Total change of course | Less than 360° | А | Less than 360° | А |
| Collapse on the opposite side occurs | No | А | No | А |
| Twist occurs | No | А | No | А |
| Cascade occurs | No | А | No | А |
| With 75% collapse | | | | |
| Change of course until re-inflation / Maximum dive forward or roll angle | 90° to 180° / Dive or roll angle 15° to 45° | В | 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 | А | No | А |
| Twist occurs | No | А | No | А |
| Cascade occurs | No | А | No | А |
| With 50% collapse and accelerator | | | | |
| Change of course until re-inflation / Maximum dive forward or roll angle | Less than 90° / Dive or roll angle 45° to 60° | С | 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 | А | No | А |
| Twist occurs | No | А | No | А |
| Cascade occurs | No | А | No | А |
| With 75% collapse and accelerator | | | | |
| Change of course until re-inflation / Maximum dive forward or roll angle | 90° to 180° / Dive or roll angle 45° to 60° | С | 180° to 360° / Dive or roll angle 15° to 45° | 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 | А | No | А |
| Twist occurs | No | A | No | A |
| Cascade occurs | No | А | No | А |
| 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 | A |
| 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 | A | | | |
| 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 | 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 | Α | | | |
| Entry procedure | Dedicated controls | А | Dedicated controls | А |
| Behaviour during big ears | Stable flight | А | Stable flight | 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 |
| 21. Big ears in accelerated flight | Α | | | |
| Entry procedure | Dedicated controls | А | Dedicated controls | А |
| Behaviour during big ears | Stable flight | А | Stable flight | 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 |
| Behaviour immediately after releasing the accelerator while maintaining big ears | Stable flight | А | Stable flight | А |
| 22. Behaviour exiting a steep spiral | С | | | |
| Tendency to return to straight flight | Spontaneous exit | А | Spontaneous exit | А |
| Turn angle to recover normal flight | Less than 720°, spontaneous recovery | A | 720° to 1080°, spontaneous recovery | С |
| Sink rate when evaluating spiral stability [m/s] | 18 | | 24 | |
| 23. Alternative means of directional control | Α | | | |
| 180° turn achievable in 20 s | Yes | А | Yes | А |
| Stall or spin occurs | No | А | No | А |
| 24. 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 |
| 25. Comments of test pilot | | | | |
| Comments | Front collapse full speed is not possible to make propely. The centre of the leading edge stay every time open! | | Front collapse full speed is not possible to make propely. The centre of the leading edge stay every time open. | |