

## Flight test report



Manufacturer Gin Gliders Inc. Certification number PG\_0204.2009 Address Date of flight test 09.01.2009 586-5, Ilsan-Ri, Mohyun-Myun,

449-855 YongIn-City, Kyunggi-

Korea

Representative None Place of test Villeneuve

Glider model **Boost L** Classification Α

Trimmer no

> Test pilot Thurnheer Claude Zoller Alain

Harness Gin Gliders - Genie III M Gin Gliders - Gingo ML

| Total weight in flight (kg)                                     | 90                                      |   | 120                                     |   |
|---|---|---|---|---|
| 1. Inflation/Take-off   | A                                       |   |   |   |
| Rising behaviour  | Smooth, easy and constant rising        | Α | Smooth, easy and constant rising        | Α |
| Special take off technique required                             | No                                      | Α | No                                      | Α |
| 2. Landing  | Α                                       |   |   |   |
| Special landing technique required                              | No                                      | Α | No                                      | Α |
| 3. Speed in straight flight                                     | Α                                       |   |   |   |
| Trim speed more than 30 km/h                                    | Yes                                     | Α | Yes                                     | Α |
| Speed range using the controls larger than 10 km/h              | Yes                                     | Α | Yes                                     | Α |
| Minimum speed   | Less than 25 km/h                       | Α | Less than 25 km/h                       | Α |
| 4. Control movement   | Α                                       |   |   |   |
| 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                             | Increasing / greater than 60 cm         | Α | not available                           | 0 |
| Max. weight in flight greater than 100 kg                       |   |   |   |   |
| Symmetric control pressure / travel                             | not available                           | 0 | Increasing / greater than 65 cm         | Α |
| 5. Pitch stability exiting accelerated flight                   | A                                       |   |   |   |
| Dive forward angle on exit                                      | Dive forward less than 30°              | Α | Dive forward less than 30°              | Α |
| Collapse occurs   | No                                      | Α | No                                      | Α |
| 6. Pitch stability operating controls during accelerated flight | Α                                       |   |   |   |
| Collapse occurs   | No                                      | Α | No                                      | Α |
| 7. Roll stability and damping                                   | Α                                       |   |   |   |
| Oscillations  | Reducing                                | Α | Reducing                                | Α |
| 8. Stability in gentle spirals                                  | Α                                       |   |   |   |
| Tendency to return to straight flight                           | Spontaneous exit                        | Α | Spontaneous exit                        | Α |
| 9. Behaviour in a steeply banked turn                           | Α                                       |   |   |   |
| Sink rate after two turns                                       | 12 m/s to 14 m/s                        | Α | 12 m/s to 14 m/s                        | Α |
| 10. Symmetric front collapse                                    | Α                                       |   |   |   |
| Entry   | Rocking back less than 45°              | Α | Rocking back less than 45°              | Α |
| Recovery  | Spontaneous in less than 3 s            | Α | Spontaneous in less than 3 s            | Α |
| Dive forward angle on exit / Change of course                   | Dive forward 0° to 30° / Keeping course | Α | Dive forward 0° to 30° / Keeping course | Α |
| Cascade occurs  | No                                      | Α | No                                      | Α |
| With accelerator  |   |   |   |   |
| Entry   | Rocking back less than 45°              | Α | Rocking back less than 45°              | Α |
| Recovery  | Spontaneous in less than 3 s            | Α | Spontaneous in less than 3 s            | Α |

| Dive forward angle on exit / Change of course                            | Dive forward 0° to 30° / Keeping course        | Α | Dive forward 0° to 30° / Keeping course        | Α |
|--|--|---|--|---|
| Cascade occurs   | No   | Α | No   | Α |
| 11. Exiting deep stall (parachutal stall)                                | Α  |   |  |   |
| Deep stall achieved  | Yes  | Α | Yes  | Α |
| Recovery   | Spontaneous in less than 3 s                   | Α | Spontaneous in less than 3 s                   | Α |
| Dive forward angle on exit   | Dive forward 0° to 30°                         | Α | Dive forward 0° to 30°                         | Α |
| Change of course   | Changing course less than 45°                  | Α | Changing course less than 45°                  | Α |
| Cascade occurs   | No   | Α | No   | Α |
| 12. High angle of attack recovery  | Α  |   |  |   |
| Recovery   | Spontaneous in less than 3 s                   | Α | Spontaneous in less than 3 s                   | Α |
| Cascade occurs   | No   | Α | No   | Α |
| 13. Recovery from a developed full stall                                 | A  |   |  |   |
| Dive forward angle on exit   | Dive forward 0° to 30°                         | Α | Dive forward 0° to 30°                         | Α |
| Collapse   | No collapse                                    | Α | No collapse                                    | Α |
| Cascade occurs (other than collapses)                                    | No   | Α | No   | Α |
| Rocking back   | Less than 45°                                  | Α | Less than 45°                                  | Α |
| Line tension   | Most lines tight                               | Α | Most lines tight                               | Α |
| 14. Asymmetric collapse  | Α  |   |  |   |
| With 50% collapse  |  |   |  |   |
| Change of course until re-inflation / Maximum dive forward or roll angle | Less than 90° / Dive or roll angle 0° to 15°   | Α | Less than 90° / Dive or roll angle 0° to 15°   | Α |
| Re-inflation behaviour   | Spontaneous re-inflation                       | Α | Spontaneous re-inflation                       | Α |
| Total change of course   | Less than 360°                                 | Α | Less than 360°                                 | Α |
| Collapse on the opposite side occurs                                     | No   | Α | No   | Α |
| Twist occurs   | No   | Α | No   | Α |
| Cascade occurs   | No   | Α | No   | Α |
| With 75% collapse  |  |   |  |   |
| Change of course until re-inflation / Maximum dive forward or roll angle | Less than 90° / Dive or roll angle 15° to 45°  | Α | Less than 90° / Dive or roll angle 15° to 45°  | Α |
| Re-inflation behaviour   | Spontaneous re-inflation                       | Α | Spontaneous re-inflation                       | Α |
| Total change of course   | Less than 360°                                 | Α | Less than 360°                                 | Α |
| Collapse on the opposite side occurs                                     | No   | Α | No   | Α |
| Twist occurs   | No   | Α | No   | Α |
| Cascade occurs   | No   | Α | No   | Α |
| With 50% collapse and accelerator  |  |   |  |   |
| Change of course until re-inflation / Maximum dive forward or roll angle | Less than 90° / Dive or roll angle 0° to 15°   | Α | Less than 90° / Dive or roll angle 15° to 45°  | Α |
| Re-inflation behaviour   | Spontaneous re-inflation                       | Α | Spontaneous re-inflation                       | Α |
| Total change of course   | Less than 360°                                 | Α | Less than 360°                                 | Α |
| Collapse on the opposite side occurs                                     | No   | Α | No   | Α |
| Twist occurs   | No   | Α | No   | Α |
| Cascade occurs   | No   | Α | No   | Α |
| With 75% collapse and accelerator  |  |   |  |   |
| Change of course until re-inflation / Maximum dive forward or roll angle | Less than 90° / Dive or roll angle 15° to 45°  | Α | Less than 90° / Dive or roll angle 15° to 45°  | Α |
| Re-inflation behaviour   | Spontaneous re-inflation                       | Α | Spontaneous re-inflation                       | Α |
| Total change of course   | Less than 360°                                 | Α | Less than 360°                                 | Α |
| Collapse on the opposite side occurs                                     | No   | Α | No   | Α |
| Twist occurs   | No   | Α | No   | Α |
| Cascade occurs   | No   | Α | No   | Α |
| 15. Directional control with a maintained asymmetric collapse            | A  |   |  |   |
| Able to keep course  | Yes  | Α | Yes  | Α |
| 180° turn away from the collapsed side possible in 10 s                  | Yes  | Α | Yes  | Α |
| Amount of control range between turn and stall or spin                   | More than 50 % of the symmetric control travel | Α | More than 50 % of the symmetric control travel | Α |
| 16. Trim speed spin tendency   | A  |   |  |   |
| Spin occurs  | No   | Α | No   | Α |
|  |  |   |  |   |

| 17. Low speed spin tendency  | A                                    |   |                                      |   |
|--|--------------------------------------|---|--------------------------------------|---|
| Spin occurs  | No                                   | Α | No                                   | Α |
| 18. Recovery from a developed spin   | A                                    |   |                                      |   |
| Spin rotation angle after release  | Stops spinning in less than 90°      | Α | Stops spinning in less than 90°      | Α |
| Cascade occurs   | No                                   | Α | No                                   | Α |
| 19. B-line stall   | A                                    |   |                                      |   |
| Change of course before release  | Changing course less than 45°        | Α | Changing course less than 45°        | Α |
| Behaviour before release   | Remains stable with straight span    | Α | Remains stable with straight span    | Α |
| Recovery   | Spontaneous in less than 3 s         | Α | Spontaneous in less than 3 s         | Α |
| Dive forward angle on exit   | Dive forward 0° to 30°               | Α | Dive forward 0° to 30°               | Α |
| Cascade occurs   | No                                   | Α | No                                   | Α |
| 20. Big ears   | A                                    |   |                                      |   |
| Entry procedure  | Dedicated controls                   | Α | Dedicated controls                   | Α |
| Behaviour during big ears  | Stable flight                        | Α | Stable flight                        | Α |
| Recovery   | Spontaneous in less than 3 s         | Α | Spontaneous in less than 3 s         | Α |
| Dive forward angle on exit   | Dive forward 0° to 30°               | Α | Dive forward 0° to 30°               | Α |
| 21. Big ears in accelerated flight   | Α                                    |   |                                      |   |
| Entry procedure  | Dedicated controls                   | Α | Dedicated controls                   | Α |
| Behaviour during big ears  | Stable flight                        | Α | Stable flight                        | Α |
| Recovery   | Spontaneous in less than 3 s         | Α | Spontaneous in less than 3 s         | Α |
| Dive forward angle on exit   | Dive forward 0° to 30°               | Α | Dive forward 0° to 30°               | Α |
| Behaviour immediately after releasing the accelerator while maintaining big ears   | Stable flight                        | Α | Stable flight                        | Α |
| 22. Behaviour exiting a steep spiral   | Α                                    |   |                                      |   |
| Tendency to return to straight flight  | Spontaneous exit                     | Α | Spontaneous exit                     | Α |
| Turn angle to recover normal flight  | Less than 720°, spontaneous recovery | Α | Less than 720°, spontaneous recovery | Α |
| Sink rate when evaluating spiral stability [m/s]                                   | 19                                   |   | 16                                   |   |
| 23. Alternative means of directional control                                       | Α                                    |   |                                      |   |
| 180° turn achievable in 20 s   | Yes                                  | Α | Yes                                  | Α |
| Stall or spin occurs   | No                                   | Α | No                                   | Α |
| 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   |                                      |   |                                      |   |