



Air Turquoise SA Rte du Pré-au-Comte 8 | CH-1844 Villeneuve tel. +41 21 965 65 65 | mobile +41 79 202 52 30 info@para-test.com

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

Manufacturer Sky Paragliders a.s. Certification number PG\_0997.2015
Address Okružní 39 Date of flight test 09. 11. 2015
73911 Frýdlant nad

Ostravicí Czech Republic

| Glider model                    | Apollo M      | Classification       | В                 |
|---------------------------------|---------------|----------------------|-------------------|
| Serial number                   | 2057-11-1175  | Representative       | None              |
| Trimmer                         | no            | Place of test        | Villeneuve        |
| <b>-</b>                        |               | T                    | <b>7</b> II Al :  |
| Test pilot                      |               | Thurnheer Claude     | Zoller Alain      |
| Harness                         |               | Supair - Altiplume S | Flugsau - XX-Lite |
| Harness to risers distance (cm) |               | 41                   | 41                |
| Distance between                | n risers (cm) | 40                   | 44                |
| Total weight in fli             | ight (kg)     | 74                   | 94                |
|                                 |               |                      |                   |

| Total weight in flight (kg)                                     | 74   |   | 94   |   |
|---|--|---|--|---|
| 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                                     | A  |   |  |   |
| 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                             | Increasing / greater than 55 cm                                | Α | not available  | 0 |
| Max. weight in flight 80 kg to 100 kg                           |  |   |  |   |
| Symmetric control pressure / travel                             | not available  | 0 | Increasing / greater than 60 cm                                | Α |
| Max. weight in flight greater than 100 kg                       |  |   |  |   |
| Symmetric control pressure / travel                             | not available  | 0 | not available  | 0 |
| 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                                   | A  |   |  |   |
| 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 exiting a fully developed spiral dive              | A  |   |  |   |
| Initial response of glider (first 180°)                         | Immediate reduction of rate of turn                            | Α | Immediate reduction of rate of turn                            | Α |
| Tendency to return to straight flight                           | Spontaneous exit (g force decreasing, rate of turn decreasing) | Α | Spontaneous exit (g force decreasing, rate of turn decreasing) | Α |
| Turn angle to recover normal flight                             | Less than 720°, spontaneous recovery                           | Α | Less than 720°, spontaneous recovery                           | Α |
|   |  |   |  |   |

| Approximately 30 % chord   |  |                                       |  |                  |
|--|--|---------------------------------------|--|------------------|
| 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                |
| Folding lines used   | No   | Α                                     | No   | Α                |
|  |  |                                       |  |                  |
| At least 50% chord   |  |                                       |  |                  |
| Entry  | Rocking back less than 45°   | Α                                     | Rocking back less than 45°   | Α                |
| Recovery   | Spontaneous in 3 s to 5 s  | В                                     | 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.               |
| Folding lines used   | 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                |
| Folding lines used   | No   | Α                                     | No   | Α                |
| 11. Exiting deep stall (parachutal stall)  | <b>A</b>   |                                       |  |                  |
| 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  | A  |                                       |  |                  |
|  |  | Α                                     | Spontaneous in less than 3 s   | Α                |
| Recovery   | Spontaneous in less than 3 s   |                                       | NI-  |                  |
| Cascade occurs   | No   | Α                                     | No   | Α                |
| Cascade occurs  13. Recovery from a developed full stall   | No<br>A  | A                                     |  |                  |
| Cascade occurs  13. Recovery from a developed full stall  Dive forward angle on exit   | No  A  Dive forward 0° to 30°  | A                                     | Dive forward 0° to 30°   | Α                |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse   | No  A  Dive forward 0° to 30°  No collapse   | A<br>A<br>A                           | Dive forward 0° to 30°<br>No collapse  | A<br>A           |
| Cascade occurs  13. Recovery from a developed full stall  Dive forward angle on exit  Collapse  Cascade occurs (other than collapses)  | No  A  Dive forward 0° to 30°  No collapse  No   | A<br>A<br>A                           | Dive forward 0° to 30°<br>No collapse<br>No  | A<br>A<br>A      |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back  | No A Dive forward 0° to 30° No collapse No Less than 45°   | A<br>A<br>A<br>A                      | Dive forward 0° to 30°<br>No collapse<br>No<br>Less than 45°   | A<br>A<br>A      |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension   | No A Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  | A<br>A<br>A                           | Dive forward 0° to 30°<br>No collapse<br>No  | A<br>A<br>A      |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension  14. Asymmetric collapse  | No A Dive forward 0° to 30° No collapse No Less than 45°   | A<br>A<br>A<br>A                      | Dive forward 0° to 30°<br>No collapse<br>No<br>Less than 45°   | A<br>A<br>A      |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension  14. Asymmetric collapse  Small asymmetric collapse   | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B   | A<br>A<br>A<br>A                      | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight   | A<br>A<br>A      |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse  Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle   | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°   | A<br>A<br>A<br>A                      | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15°   | A<br>A<br>A      |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour   | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°  Spontaneous re-inflation   | A<br>A<br>A<br>A                      | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation  | A<br>A<br>A<br>A |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension  14. Asymmetric collapse  Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course  | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°  Spontaneous re-inflation  Less than 360°   | A A A A A                             | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360°   | A A A A A A      |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour   | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°  Spontaneous re-inflation   | A A A A A A A                         | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation  | A A A A A        |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension  14. Asymmetric collapse  Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course  | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a   | A A A A A A A A A A A A A A A A A A A | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous  | A A A A A A      |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension  14. Asymmetric collapse  Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs   | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  | A A A A A A A A                       | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation)   | A A A A A A A A  |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse  Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs  | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No  | A A A A A A A A A                     | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No  | A A A A A A A A  |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension  14. Asymmetric collapse  Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs  Twist occurs Cascade occurs Folding lines used   | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  | A A A A A A A A A A A A A A A A A A A | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No   | A A A A A A A A  |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension 14. Asymmetric collapse  Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs  Twist occurs Cascade occurs Folding lines used  Large asymmetric collapse   | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  | A A A A A A A A A A A A A A A A A A A | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No   | A A A A A A A A  |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension  14. Asymmetric collapse  Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs  Twist occurs Cascade occurs Folding lines used   | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  | A A A A A A A A A A A A A A A A A A A | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No   | A A A A A A A A  |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension  14. Asymmetric collapse  Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs  Twist occurs Cascade occurs Folding lines used  Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or            | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  No  90° to 180° / Dive or roll angle        | A A A A A A A A A A A A A A A A A A A | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No No No 90° to 180° / Dive or roll angle 15°     | A A A A A A A A  |
| Cascade occurs  13. Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension  14. Asymmetric collapse  Small asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs  Twist occurs Cascade occurs Folding lines used  Large asymmetric collapse Change of course until re-inflation / Maximum dive forward or roll angle | No  A  Dive forward 0° to 30°  No collapse  No  Less than 45°  Most lines tight  B  Less than 90° / Dive or roll angle 0° to 15°  Spontaneous re-inflation  Less than 360°  No (or only a small number of collapsed cells with a spontaneous reinflation)  No  No  No  90° to 180° / Dive or roll angle 15° to 45° | A A A A A A A B B                     | Dive forward 0° to 30° No collapse No Less than 45° Most lines tight  Less than 90° / Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous reinflation) No No No No 90° to 180° / Dive or roll angle 15° to 45° | A A A A A A A B  |

В

10. Symmetric front collapse

| Collapse on the opposite side occurs  | No (or only a small number of collapsed cells with a spontaneous reinflation)  | Α                                     | No (or only a small number of collapsed cells with a spontaneous reinflation)   | Α                                     |
|---|--|---------------------------------------|---|---------------------------------------|
| Twist occurs  | No   | Α                                     | No  | Α                                     |
| Cascade occurs  | No   | Α                                     | No  | Α                                     |
| Folding lines used  | No   | Α                                     | No  | Α                                     |
| rodding inica daed  | 140  | ^                                     | 140   | ^                                     |
| 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°  | 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 (or only a small number of collapsed cells with a spontaneous reinflation)  | Α                                     | No (or only a small number of collapsed cells with a spontaneous reinflation)   | Α                                     |
| Twist occurs  | No   | Α                                     | No  | Α                                     |
| Cascade occurs  | No   | Α                                     | No  | Α                                     |
| Folding lines used  | No   | Α                                     | No  | Α                                     |
|   |  |                                       |   |                                       |
| Large asymmetric collapse with fully activated accelerator  |  | _                                     | 0001 1000 (B)   | _                                     |
| Change of course until re-inflation / Maximum dive forward or roll angle  | 90° to 180° / Dive or roll angle<br>15° to 45°   | В                                     | 90° to 180° / Dive or roll angle 15° to 45°   | В                                     |
| 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 (or only a small number of collapsed cells with a spontaneous reinflation)  | Α                                     | No (or only a small number of collapsed cells with a spontaneous reinflation)   | Α                                     |
| Twist occurs  | No   | Α                                     | No  | Α                                     |
| Cascade occurs  | No   | Α                                     | No  | Α                                     |
| Folding lines used  | No   | Α                                     | No  | Α                                     |
| 15. Directional control with a maintained asymmetric  | A  |                                       |   |                                       |
| collapse  |  |                                       |   |                                       |
| Able to keep course   | Yes  | Α                                     | Yes   | Α                                     |
|   |  |                                       |   |                                       |
| 180° turn away from the collapsed side possible in 10 s   | Yes  | Α                                     | Yes   | Α                                     |
|   | Yes<br>More than 50 % of the<br>symmetric control travel   | A<br>A                                | Yes<br>More than 50 % of the symmetric<br>control travel  | A<br>A                                |
| 180° turn away from the collapsed side possible in 10 s   | More than 50 % of the  |                                       | More than 50 % of the symmetric   |                                       |
| 180° turn away from the collapsed side possible in 10 s<br>Amount of control range between turn and stall or spin   | More than 50 % of the symmetric control travel   |                                       | More than 50 % of the symmetric control travel  |                                       |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency  | More than 50 % of the symmetric control travel   | Α                                     | More than 50 % of the symmetric control travel  | Α                                     |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  | More than 50 % of the symmetric control travel  A  No  | Α                                     | More than 50 % of the symmetric control travel  | Α                                     |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency   | More than 50 % of the symmetric control travel  A  No  A   | A                                     | More than 50 % of the symmetric control travel  | A                                     |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs   | More than 50 % of the symmetric control travel  A  No  A  No   | A                                     | More than 50 % of the symmetric control travel  | A                                     |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin   | More than 50 % of the symmetric control travel  A  No  A  No   | A<br>A                                | More than 50 % of the symmetric control travel  No  | A<br>A                                |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release   | More than 50 % of the symmetric control travel  A  No  A  No  A  Stops spinning in less than 90°   | A<br>A<br>A                           | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90°   | A<br>A<br>A                           |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  | More than 50 % of the symmetric control travel  A  No  A  No  A  Stops spinning in less than 90°  No   | A<br>A<br>A                           | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90°   | A<br>A<br>A                           |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall  | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A   | A<br>A<br>A<br>A                      | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90°  No   | A<br>A<br>A<br>A                      |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release  | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight  | A<br>A<br>A<br>A                      | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90°  No  Changing course less than 45°  | A A A A                               |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release Behaviour before release   | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span   | A<br>A<br>A<br>A<br>A                 | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90°  No  Changing course less than 45°  Remains stable with straight span   | A A A A A                             |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release Behaviour before release Recovery  | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s  | A A A A A                             | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90°  No  Changing course less than 45°  Remains stable with straight span  Spontaneous in less than 3 s   | A A A A A A                           |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit   | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°   | A<br>A<br>A<br>A<br>A                 | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90° No  Changing course less than 45° Remains stable with straight span  Spontaneous in less than 3 s Dive forward 0° to 30°  | A A A A A A A                         |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs  | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No  | A<br>A<br>A<br>A<br>A                 | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90° No  Changing course less than 45° Remains stable with straight span  Spontaneous in less than 3 s Dive forward 0° to 30°  | A A A A A A A                         |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release Behaviour before release  Recovery Dive forward angle on exit Cascade occurs  20. Big ears   | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A  | A A A A A A A                         | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90°  No  Changing course less than 45°  Remains stable with straight span  Spontaneous in less than 3 s  Dive forward 0° to 30°  No   | A A A A A A A A                       |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs  20. Big ears Entry procedure  | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls   | A A A A A A A                         | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90° No  Changing course less than 45° Remains stable with straight span  Spontaneous in less than 3 s  Dive forward 0° to 30° No  Dedicated controls  | A A A A A A A A                       |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release Behaviour before release  Recovery Dive forward angle on exit Cascade occurs  20. Big ears Entry procedure Behaviour during big ears   | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight   | A A A A A A A A A A A A A A A A A A A | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90° No  Changing course less than 45° Remains stable with straight span  Spontaneous in less than 3 s Dive forward 0° to 30° No  Dedicated controls Stable flight   | A A A A A A A A A A A A A A A A A A A |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs  20. Big ears Entry procedure Behaviour during big ears Recovery   | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight Spontaneous in less than 3 s  | A A A A A A A A A                     | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90° No  Changing course less than 45° Remains stable with straight span  Spontaneous in less than 3 s Dive forward 0° to 30° No  Dedicated controls Stable flight Spontaneous in less than 3 s  | A A A A A A A A A A A A A A A A A A A |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs  20. Big ears Entry procedure Behaviour during big ears Recovery Dive forward angle on exit  | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight Spontaneous in less than 3 s Dive forward 0° to 30°   | A A A A A A A A A                     | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90° No  Changing course less than 45° Remains stable with straight span  Spontaneous in less than 3 s Dive forward 0° to 30° No  Dedicated controls Stable flight Spontaneous in less than 3 s  | A A A A A A A A A A A A A A A A A A A |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release Behaviour before release  Recovery Dive forward angle on exit Cascade occurs  20. Big ears Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big ears in accelerated flight                  | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight Spontaneous in less than 3 s Dive forward 0° to 30° Stable flight Spontaneous in less than 3 s Dive forward 0° to 30° | A A A A A A A A A A A A A A A A A A A | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90° No  Changing course less than 45° Remains stable with straight span  Spontaneous in less than 3 s Dive forward 0° to 30° No  Dedicated controls Stable flight Spontaneous in less than 3 s Dive forward 0° to 30°                     | A A A A A A A A A A A A A A A A A A A |
| 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin  16. Trim speed spin tendency Spin occurs  17. Low speed spin tendency Spin occurs  18. Recovery from a developed spin Spin rotation angle after release Cascade occurs  19. B-line stall Change of course before release Behaviour before release  Recovery Dive forward angle on exit Cascade occurs  20. Big ears Entry procedure Behaviour during big ears Recovery Dive forward angle on exit  21. Big ears in accelerated flight Entry procedure | More than 50 % of the symmetric control travel  A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight Spontaneous in less than 3 s Dive forward 0° to 30° B Dedicated controls  | A A A A A A A A A A A A A A A A A A A | More than 50 % of the symmetric control travel  No  No  Stops spinning in less than 90° No  Changing course less than 45° Remains stable with straight span  Spontaneous in less than 3 s Dive forward 0° to 30° No  Dedicated controls Stable flight Spontaneous in less than 3 s Dive forward 0° to 30°  Dedicated controls | A A A A A A A A A A A A A A A A A A A |

| Behaviour immediately after releasing the accelerator while maintaining big ears   | Stable flight | Α | Stable flight | Α |
|--|---------------|---|---------------|---|
| 22. Alternative means of directional control                                       | A             |   |               |   |
| 180° turn achievable in 20 s   | Yes           | Α | Yes           | Α |
| Stall or spin occurs   | No            | Α | No            | Α |
| 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

Comments