

### LTF flight test report

**Manufacturer** ADVANCE Thun AG  
**Address** Seestrasse 14  
 3602 Thun  
 Switzerland  
**Representive** Ripplinger Thomas  
**Type of glider** Epsilon 6 26  
**Trimmer** not available

**Date of flight test:** 20/10/2008  
**Place of test:** Villeneuve

**LTF 1-2**

**Test Pilot** Philippe Dupont  
**Harness** Sup'Air - Altiplume M  
**Total weight in flight** 70 kg

**Claude Thurnheer**  
 Gin - Genie III M  
 95 kg

|  |  | Min weight   |  | Max weight  |  |     |
|--|--|--|--|---|--|-----|
| <b>1. Take-off</b>   | Inflation Behaviour  | evenly, immediately  | 1  | evenly, immediately   | 1  |     |
|  | Rising behaviour   | immediately comes over pilot   | 1  | immediately comes over pilot  | 1  |     |
|  | Take off speed   | stallspeed < 30 km/h   | pos  | stallspeed < 30 km/h  | pos  |     |
|  | Take off handling  | easy   | 1  | easy  | 1  |     |
| <b>2. Straight Flight</b>  | Trim speed at minimum take off weight  | > 30 km/h  | pos  | > 30 km/h   | pos  |     |
|  | Speed range  | > 10 km/h  | pos  | > 10 km/h   | pos  |     |
|  | Roll Damping   | high   | 1  | high  | 1  |     |
|  | Pitching   | not available  | 0  | not available   | 0  |     |
|  | Yaw stability  | not available  | 0  | not available   | 0  |     |
|  | <b>3. Turn handling</b>  | Control travel   | high   | pos   | high   | pos |
| Agility  |  | not available  | 0  | not available   | 0  |     |
| Control pressure increase  |  | high increase  | 1  | high increase   | 1  |     |
| Spin tendency  |  | not available  | 1  | not available   | 1  |     |
| Control without brakes   |  | yes  | pos  | yes   | pos  |     |
| <b>4. Symmetrical Stall using Brakes</b>   |  | Deep stall limit   | > 70 cm  | 1   | > 75 cm  | 1   |
|  | Exit of deep Stall   | spontaneous, quickly   | 1  | spontaneous, quickly  | 1  |     |
|  | Standard exit  | yes  | pos  | yes   | pos  |     |
|  | Full stall limit   | > 75 cm  | 1  | > 80 cm   | 1  |     |
|  | Full stall with full steering way  | soft stall   | pos  | soft stall  | pos  |     |
|  | Increase in steering power   | high   | 1  | high  | 1  |     |
| <b>5. Front collapse</b>   | A-Riser Travel until collapse  | high > 10 cm   | pos  | high > 10 cm  | pos  |     |
|  | Pre-Acceleration   | not available  | 0  | not available   | 0  |     |
|  | Opening behaviour  | spontaneous, quickly = <1,5 s  | 1  | spontaneous, quickly = <1,5 s   | 1  |     |
|  | <i>Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |  |   |  |     |
|  | <b>With accelerator</b>  |  |  |   |  |     |
|  | A-Riser Travel until collapse  | high > 10 cm   | pos  | high > 10 cm  | pos  |     |
|  | Pre-Acceleration   | not available  | 0  | not available   | 0  |     |
|  | Opening behaviour  | spontaneous, delayed = 1,5 s - 4 s   | 1  | spontaneous, delayed = 1,5 s - 4 s  | 1  |     |
|  | <i>Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |  |   |  |     |
|  | <b>6. Asymmetric Collapse</b>  | <b>With 50% collapse</b>   |  |   |  |     |
|  |  | Maximum recovery behaviour   | <90°- <360°- average - <45°- average - spontaneous - spontaneous | 1   | <90°- <360°- average - <45°- average - spontaneous - spontaneous | 1   |
|  |  | <i>Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |   |  |     |
| <b>With 75% collapse</b>   |  |  |  |   |  |     |
| Maximum recovery behaviour   |  | <180°- <360°- average with clear slowing down between 90°and 180°- <45°- high - spontaneous -                                  | 1-2  | <180°- <360°- average with clear slowing down between 90°and 180°- <45°- high - spontaneous - | 1-2  |     |
| <i>Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |  |  |   |  |     |
| <b>With 50% collapse and accelerator</b>   |  |  |  |   |  |     |
| Maximum recovery behaviour   |  | <90°- <360°- average - <45°- average - spontaneous - spontaneous   | 1  | <90°- <360°- average - <45°- average - spontaneous - spontaneous                              | 1  |     |
| <i>Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |  |  |   |  |     |
| <b>With 75% collapse and accelerator</b>   |  |  |  |   |  |     |
| Maximum recovery behaviour   |  | <180°- <360°- average with clear slowing down between 90°and 180°- <45°- high - spontaneous -                                  | 1-2  | <180°- <360°- average with clear slowing down between 90°and 180°- <45°- high - spontaneous - | 1-2  |     |
| <i>Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |  |  |   |  |     |
| <b>7. Countersteering an asymmetric collapse</b>   | Stabilisation  | spontaneous, countersteering easy  | 1  | spontaneous, countersteering easy   | 1  |     |
|  | Turn in opposite direction   | easy, no tendency to stall   | 1  | easy, no tendency to stall  | 1  |     |
|  | Control pressure increase  | high increase  | 1  | high increase   | 1  |     |
|  | Control travel   | high   | pos  | high  | pos  |     |
|  | <b>8.Full Stall Symmetrical Exit</b>   | Behaviour after entry  | stable   | pos   | stable   | pos |
| Reaction   |  | slight shoot forward <30°  | pos  | slight shoot forward <30°   | pos  |     |
| Reaction if asymmetric collapse  |  | not available  | 0  | not available   | 0  |     |
| <i>Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |  |  |   |  |     |

|                                      |  |  |     |  |     |
|--------------------------------------|--|--|-----|--|-----|
|                                      | Reaction if symmetric collapse   | not available                                    | 0   | not available                                    | 0   |
|                                      | <i>Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |     |  |     |
| <b>9. Big ears</b>                   | Entry  | easy   | pos | easy   | pos |
|                                      | Exit   | spontaneous, quickly                             | 1   | spontaneous, quickly                             | 1   |
|                                      | If not spontaneously exit; asymm. collapse   | not available                                    | 0   | not available                                    | 0   |
|                                      | <i>Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i>               |  |     |  |     |
|                                      | If not spontaneously exit; symm. collapse  | not available                                    | 0   | not available                                    | 0   |
|                                      | <i>Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |     |  |     |
|                                      | <b>With accelerator</b>  |  |     |  |     |
|                                      | Entry  | easy   | pos | easy   | pos |
|                                      | Exit   | spontaneous, quickly                             | 1   | spontaneous, quickly                             | 1   |
|                                      | If not spontaneously exit; asymm. collapse   | not available                                    | 0   | not available                                    | 0   |
|                                      | <i>Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i>               |  |     |  |     |
|                                      | If not spontaneously exit; symm. collapse  | not available                                    | 0   | not available                                    | 0   |
|                                      | <i>Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |     |  |     |
| <b>10. Spin from straight flight</b> | Exit   | spontaneous                                      | 1   | spontaneous                                      | 1   |
|                                      | Reaction   | not available                                    | 0   | not available                                    | 0   |
|                                      | Reaction, if asymmetric collapse   | not available                                    | 0   | not available                                    | 0   |
|                                      | <i>Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i>               |  |     |  |     |
|                                      | Reaction, if symmetric collapse  | not available                                    | 0   | not available                                    | 0   |
|                                      | <i>Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |     |  |     |
| <b>11. Spin from Turn</b>            | Reaction   | slight shoot forward <30°                        | pos | slight shoot forward <30°                        | pos |
|                                      | Reaction if asymmetric collapse  | not available                                    | 0   | not available                                    | 0   |
|                                      | <i>Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i>               |  |     |  |     |
|                                      | Reaction if symmetric collapse   | not available                                    | 0   | not available                                    | 0   |
|                                      | <i>Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |     |  |     |
| <b>12. Spiral dive</b>               | Spin tendency  | slight   | 1   | slight   | 1   |
|                                      | Entry  | easy   | 1   | easy   | 1   |
|                                      | Exit   | spontaneous, turn continues < 180°               | 1   | spontaneous, turn continues < 180°               | 1   |
|                                      | Exit if stable steep spiral > 14 m/s   | no acceleration, easy controllable sink rate and | 1   | no acceleration, easy controllable sink rate and | 1   |
|                                      | Sink rate after 720° [m/s]   | 15 m/s   |     | 17 m/s   |     |
| <b>13. B Line stall</b>              | Entry  | easy   | 1   | easy   | 1   |
|                                      | Exit   | spontaneous                                      | 1   | spontaneous                                      | 1   |
|                                      | If not spontaneously with asym. collapse   | not available                                    | 0   | not available                                    | 0   |
|                                      | <i>Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i>               |  |     |  |     |
|                                      | If not spontaneously with symm. collapse   | not available                                    | 0   | not available                                    | 0   |
|                                      | <i>Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviour</i> |  |     |  |     |
| <b>14. Landing</b>                   | Entry  | average  | 1   | average  | 1   |
|                                      | Landing speed  | not available                                    | 0   | not available                                    | 0   |
|                                      | Landing behaviour  | easy   | 1   | easy   | 1   |
| <b>Comments of test pilot</b>        | Comments   | no   |     | no   |     |



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ISO 9001  
BUREAU VERITAS  
Certification



ISO 9001:2000

pos = positive  
neg = negative  
x = relevant if extreme  
na = not available