| Manufacturer | your airline | Type testing No. | EAPR-GS-7574/12 | | | | |
|--------------|---------------|------------------|--------------------|--|--|--|--|
| | | Location | Schruns + Achensee | | | | |
| Model | Blacklight SM | Bad Grönenbach: | 16.04.12 | LBA Musterprüfstelle Gleitschirm - Motorschirm - Fallschirn | | | |

EAPR e.V - Marktstr. 11 - D-87730 Bad Grönenbach - Germany

| | Minimum take off w | eight | Maximum take off weight | | |
|-------------------------|--------------------|-------|-------------------------|--|--|
| Date of testing | 28.03.12 | | 25.03.12 | | |
| Testpilot | Mike Küng | | Tschofen Johannes | | |
| Harness | Academy-Equipment | E | Academy Test Equipment | | |
| Pilot's take off weight | 75 kg | | 100 kg | | |

Classification

Test-criteria

В

40996



Evaluation

| 1. Inflation / take-off - 4.1.1 | | | | | |
|---|-------------|--------------------------------|----------------------------------|--------------------------------|---|
| Rising behavior Smooth, easy and constant rising | | А | Smooth, easy and constant rising | А | |
| pecial take off technique required | | No | Α | No | А |
| 2. Landing - 4.1.2 | | • | | | |
| Special landing technique required No | | | | No | А |
| 3. Speeds in straight flight - 4.1.3 | | | A | | |
| Trim speed more than 30km/h | | Yes | А | Yes | А |
| Speed range using the controls larger than 10km/h | | Yes | A | Yes | A |
| Minimum speed | | Less than 25 km/h | Α | Less than 25 km/h | А |
| 4. Control movement - 4.1.4 | | · | | | |
| Max. weight in flight up to 80kg | | Increasing > 55cm | А | | - |
| Max. weight in flight 80 to 100kg | | | - | Increasing > 60cm | А |
| Max. weight in flight greater than 100kg | | | - | | - |
| 5. Pitch stability exiting accelerated flight - 4.1 | .5 | | | | |
| Dive forward angle on exit | | Dive forward less than 30° | A | Dive forward less than 30° | A |
| Collapse occurs | | No | Α | No | А |
| 6. Pitch stability operating controls during acc | elerated f | light - 4.1.6 | | | |
| Collapse occurs | | No | Α | No | A |
| 7. Roll stability and damping - 4.1.7 | | | | | |
| Oscillations | | Reducing | A | Reducing | A |
| 8. Stability in gentle spirals - 4.1.8 | | | | • | |
| Tendency to return to straight flight | | Spontaneous exit | А | Spontaneous exit | A |
| 9. Behaviour in a steeply banked turn - 4.1.9 | | | | • | |
| Sink rate after two turns | | More than 14m/s | В | More than 14m/s | В |
| 10. Symmetric front collapse - 4.1.10 | | | • | • | |
| Entry | | Rocking back less than 45° | А | Rocking back less than 45° | А |
| Recovery | trim speed | Spontaneous in less than 3 sec | А | Spontaneous in less than 3 sec | А |
| Dive forward angle on exit | in . | 0°- 30° Keeping course | A | 0°- 30° Keeping course | A |
| Cascade occurs | t | No | А | No | А |
| Entry | q | Rocking back less than 45° | A | Rocking back less than 45° | A |
| Recovery | accelerated | Spontaneous in less than 3 sec | А | Spontaneous in less than 3 sec | А |
| Dive forward angle on exit | cce | 30° - 60° Keeping course | В | 30° - 60° Keeping course | В |
| Cascade occurs | Ø | No | A | No | A |
| 11. Exiting deep stall (parachutal stall) - 4.1.11 | | | | | |

Evaluation 40993

| Deep stall achieved | | Yes | | | | Yes | | | |
|---|---|---|--------------------------------|-----------------------------|-----------------|-----------------------------------|--------------------|---------------|--------|
| Recovery | | Spontaneous in less than 3 sec | | | ۸ | A Spontaneous in less than 3 sec | | | A |
| • | | | | | 30° - 60° | | | | |
| Dive forward angle on exit Change of course | | 0° - 30° Changing course less than 45° | | A | Changing course | less than 45° | | B A | |
| Cascade occurs | | No | | A | No | | | A | |
| 12. High angle of attack recovery - 4.1.12 | | | | | | | | | |
| Recovery | | Spontaneous in less | than 3 sec | | А | Spontaneous in | ess than 3 sec | | А |
| Cascade occurs | | No | | | A | No | | | A |
| 13. Recovery from a developed full stall - 4.1.13 | 3 | - | | | | - | | | |
| Dive forward angle on exit | | 0°- 30° | | | А | 30°- 60° | | | В |
| Collapse | | No collapse No | | | A | No collapse No | | | A |
| Cascade occurs (other than collapse) Rocking backward | | Less than 45° | | | A | Less than 45° | | | A A |
| Line tension | | Most lines tight | | | A | Most lines tight | | | A |
| 14. Asymmetric collapse (trim speed) - 4.1.14 | | | | | | | | | |
| Change of course until re-inflation | Se | < 90° Di | ive or roll angle | 0°- 15° | А | < 90° | Dive or roll angle | 0°- 15° | А |
| Re-inflation behavior | trim speed, max 50% collapse | Spontaneous re-inflat | tion | | А | A Spontaneous re-inflation | | | А |
| Total change of course |) %0 ds u | Less than 360° | Less than 360° | | A | Less than 360° | | | A |
| Collapse on the opposite side occurs | trir ax 5 | No | | | A | No | | | Α |
| Twist occurs Cascade occurs | E | No No | | | A | No No | | | A |
| | | | to a constitución de | 150 150 | | 90° - 180° | Dia and a da | 150 150 | |
| Change of course until re-inflation | trim speed, max 75% collapse | | ive or roll angle | 15°- 45° | В | | Dive or roll angle | 15° - 45° | B |
| Re-inflation behavior | trim speed, < 75% colla | Spontaneous re-inflat | tion | | A | Spontaneous re- | Inflation | | A |
| Total change of course | im s 75% | Less than 360° | | | A | Less than 360° | | | A |
| Collapse on the opposite side occurs Twist occurs | tr nax | No No | | | A | No No | | | A |
| Cascade occurs | u | No | | | A | No | | | A |
| Change of course until re-inflation | 0 | < 90° Di | ive or roll angle | 15° - 45° | А | < 90° | Dive or roll angle | 15° - 45° | А |
| Re-inflation behavior | accelerated, max 50% collapse | D Spontaneous re-inflation | | | A | Spontaneous re- | inflation | | Α |
| Total change of course | lerat % cc | Less than 360° | | | | Less than 360° | | | |
| Collapse on the opposite side occurs | acce < 50' | No | | | A | No | | | A A |
| Twist occurs | , max | No | | | А | No | | | А |
| Cascade occurs | | No | | 450 450 | A | No | | 450 450 | A |
| Change of course until re-inflation | accelerated, max 75% collapse | | ive or roll angle | 15°- 45° | В | 90°- 180° | Dive or roll angle | 15° - 45° | В |
| Re-inflation behavior | accelerated, x 75% colla | Spontaneous re-inflat | tion | | A | Spontaneous re- | inflation | | A |
| Total change of course | cele 75% | Less than 360° | | | A | Less than 360° No | | | A |
| Collapse on the opposite side occurs Twist occurs | ac nax | No No | | | A | No | | | A A |
| Cascade occurs | - | No | | | A | No | | | A |
| 15. Directional control with a maintained asymmetry | netric col | | | | | | | | |
| Able to keep course straight | | Yes | | | A | Yes | | | A |
| 180° turn away from the collapsed side possible in | the collapsed side possible in 10 sec Yes | | IS | | A | Yes | | | A |
| Amount of control range between turn and stall or | spin | More than 50% of the | e symmetric c | ontrol travel | А | More than 50% of | f the symmetric c | ontrol travel | А |
| 16. Trim speed spin tendency - 4.1.16 | | 1 | | | | | | | |
| Spin occurs | | No | | | A | No | | | A |
| 17. Low speed spin tendency - 4.1.17 Spin occurs | | No | | А | No | | | A | |
| 18. Recovery from a developed spin - 4.1.18 | | | | | ~ | | | | |
| Spin rotation angle after release | | Stops spinning in less | s than 90° | | А | Stops spinning in | less than 90° | | А |
| Cascade occurs | | No | | A | No | | | A | |
| 19. B-line-stall - 4.1.19 | | 1.10 | | | A | | | | A |
| Change of course before release | | Changing course less | s than 45° | | A | Changing course | e less than 45° | | A |
| Behaviour before release | | Remains stable with straight span | | | A | Remains stable with straight span | | | A |
| Recovery | | Spontaneous in less than 3 sec | | | A | Spontaneous in less than 3 sec | | | A |
| Dive forward angle on exit | | 0°- 30° | | | A | 0°- 30° | | | A |
| Cascade occurs 20. Big ears - 4.1.20 | | No | | | A | No | | | A |
| Entry procedure | | Special device require | ed | | А | Special device re | quired | | А |
| Behaviour during big ears | | Stable flight | | A | Stable flight | | Α | | |
| Recovery Recovery through pilot action in less than a further | | В | Spontaneous in less than 3 sec | | | A | | | |
| Recovery 3 sec Dive forward angle on exit 0°- 30° | | A | 0°bis 30° | 555 man 5 566 | | | | | |
| 21. Big Ears in accelerated flight - 4.1.21 | | 3 00 | | | A | 0.0000 | | | A |
| Entry procedure | | Special device require | ed | | А | Special device re | quired | | А |
| Behaviour during big ears | | Stable flight | | | A | Stable flight | | | A |
| | | Stable flight Recovery through pilot action in less than a further | | В | | 3 to 5 sec | | A | |
| Recovery 3 sec | | | | B Spontaneous in 3 to 5 sec | | | | | |
| Behaviour immediately after releasing the accelerator while | | 0° - 30° | | A | | | | A | |
| maintaining big ears | - | Stable flight | | | A | Stable flight | | | A |
| 22. Behaviour exiting a steep spiral - 4.1.22 | | | | | | | | | |

| Tendency to return to straight flight | Spontaneous exit | A | Spontaneous exit | А |
|---|--|----------------|---|-----------------|
| Turn angle to recover normal flight | Less than 720°, spontaneous recovery | А | Less than 720°, spontaneous recovery | А |
| 23. Alternative means of directional control - | 4.1.23 | | • | |
| 180° turn achievable in 20 sec | Yes | А | Yes | А |
| Stall or spin occurs | No | А | No | А |
| 24. Any other flight procedure and/or configure | ration described in the user's manual - 4.1.24 | | | |
| Procedure works as descibed | | NA | | NA |
| Procedure suitable for novice pilots | | NA | | NA |
| Cascade occurs | | NA | | NA |
| 25. Remarks of testpilot: | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
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