



Flight test report: EN

Manufacturer	Dudek Paragliders S.J.	Certification number	PG_0438.2011
Address	ul. Centralna 2U 86-031 Osielsko Poland	Date of flight test	28. 04. 2011
Representative	None	Place of test	Villeneuve
Glider model	Nucleon Cabrio 42	Classification	
Trimmer	yes: closed		

Test pilot Thurnheer Claude

Harness Advance - Bi-pro II -

Total weight in flight (kg) 175

1. Inflation/Take-off

Rising behaviour	Smooth, easy and constant rising	A
Special take off technique required	No	A

2. Landing

Special landing technique required	No	A
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3. Speed in straight flight

Trim speed more than 30 km/h	Yes	A
Speed range using the controls larger than 10 km/h	Yes	A
Minimum speed	Less than 25 km/h	A

4. Control movement

<i>Max. weight in flight up to 80 kg</i>		
Symmetric control pressure / travel	not available	0
<i>Max. weight in flight 80 kg to 100 kg</i>		
Symmetric control pressure / travel	not available	0
<i>Max. weight in flight greater than 100 kg</i>		
Symmetric control pressure / travel	Increasing / greater than 65 cm	A

5. Pitch stability exiting accelerated flight

Dive forward angle on exit	not available	0
Collapse occurs	not available	0

6. Pitch stability operating controls during accelerated flight

Collapse occurs	not available	0
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7. Roll stability and damping

Oscillations	Reducing	A
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8. Stability in gentle spirals

Tendency to return to straight flight	Spontaneous exit	A
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9. Behaviour in a steeply banked turn

Sink rate after two turns	More than 14 m/s	B
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10. Symmetric front collapse

Entry	Rocking back less than 45°	A
Recovery	Spontaneous in 3 s to 5 s	B
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	A
<i>With accelerator</i>		
Entry	not available	0
Recovery	not available	0

Dive forward angle on exit / Change of course	not available	0
Cascade occurs	not available	0
11. Exiting deep stall (parachutal stall)		
Deep stall achieved	Yes	A
Recovery	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	A
Change of course	Changing course less than 45°	A
Cascade occurs	No	A
12. High angle of attack recovery		
Recovery	not available	0
Cascade occurs	not available	0
13. Recovery from a developed full stall		
Dive forward angle on exit	Dive forward 30° to 60°	B
Collapse	No collapse	A
Cascade occurs (other than collapses)	No	A
Rocking back	Less than 45°	A
Line tension	Most lines tight	A
14. Asymmetric collapse		
<i>With 50% collapse</i>		
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A
Total change of course	Less than 360°	A
Collapse on the opposite side occurs	No	A
Twist occurs	No	A
Cascade occurs	No	A
<i>With 75% collapse</i>		
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 60° to 90°	C
Re-inflation behaviour	Spontaneous re-inflation	A
Total change of course	Less than 360°	A
Collapse on the opposite side occurs	No	A
Twist occurs	No	A
Cascade occurs	No	A
<i>With 50% collapse and accelerator</i>		
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0
Re-inflation behaviour	not available	0
Total change of course	not available	0
Collapse on the opposite side occurs	not available	0
Twist occurs	not available	0
Cascade occurs	not available	0
<i>With 75% collapse and accelerator</i>		
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0
Re-inflation behaviour	not available	0
Total change of course	not available	0
Collapse on the opposite side occurs	not available	0
Twist occurs	not available	0
Cascade occurs	not available	0
15. Directional control with a maintained asymmetric collapse		
Able to keep course	Yes	A
180° turn away from the collapsed side possible in 10 s	Yes	A
Amount of control range between turn and stall or spin	More than 50 % of the symmetric control travel	A

16. Trim speed spin tendency

Spin occurs No A

17. Low speed spin tendency

Spin occurs No A

18. Recovery from a developed spin

Spin rotation angle after release Stops spinning in less than 90° A

Cascade occurs No A

19. B-line stall

Change of course before release not available 0

Behaviour before release not available 0

Recovery not available 0

Dive forward angle on exit not available 0

Cascade occurs not available 0

20. Big ears

Entry procedure Dedicated controls A

Behaviour during big ears Stable flight A

Recovery Spontaneous in less than 3 s A

Dive forward angle on exit Dive forward 0° to 30° A

21. Big ears in accelerated flight

Entry procedure not available 0

Behaviour during big ears not available 0

Recovery not available 0

Dive forward angle on exit not available 0

Behaviour immediately after releasing the accelerator while maintaining big ears not available 0

22. Behaviour exiting a steep spiral

Tendency to return to straight flight Spontaneous exit A

Turn angle to recover normal flight Less than 720°, spontaneous recovery A

Sink rate when evaluating spiral stability [m/s] 18

23. Alternative means of directional control

180° turn achievable in 20 s Yes A

Stall or spin occurs No A

24. Any other flight procedure and/or configuration described in the user's manual

Procedure works as described Yes A

Procedure suitable for novice pilots Yes A

Cascade occurs No A

25. Comments of test pilot

Comments Not physical possible to perform B-line stall