para-test.com

Flight test report



Manufacturer Address	Dudek Paragliders S.J. ul. Centralna 2U 86-031 Osielsko	Certification number Date of flight test		PG_0164.2008 10. 06. 2008	
Denneentetive	Poland				
Representative	none	Place of test		Villeneuve	
Glider model	Synthesis LT 29	Classification		C	
Trimmer	yes: closed				
	Test nilot	Thurnheer Claude		Zoller Alain	
	•	Gin - Geni III		Sol - Slider L	
	Total weight in flight (kg)			120	
1. Inflation/Take-off		A Smooth apply and apply that riging	۸	Smooth, apply and constant rising	٨
Rising behaviour	ainua required	Smooth, easy and constant rising		Smooth, easy and constant rising	A
Special take off technique required		No A	A	No	A
2. Landing Special landing tech	nique required	A No	А	No	А
3. Speed in straight	· ·	B	A	NO	A
Trim speed more that	-	Yes	А	Yes	٨
	ne controls larger than 10 km/h	Yes	A _	Yes	A A
Minimum speed		Less than 25 km/h	A	25 km/h to 30 km/h	B
4. Control movement	at	A	~		Ъ
		~			
Max. weight in flight up to 80 kg		not available	0	not available	0
Symmetric control pressure / travel			0		0
Max. weight in flight 80 kg to 100 kg Symmetric control pressure / travel		Increasing / greater than 60 cm	А	not available	0
		increasing / greater than oo em	Λ		U
Max. weight in flight greater than 100 kg		not available	0	Increasing / greater than 65 cm	А
Symmetric control pressure / travel 5. Pitch stability exiting accelerated flight		A	U	increasing / greater than oo em	~
Dive forward angle on exit		Dive forward less than 30°	А	Dive forward less than 30°	А
Collapse occurs		No	A	No	A
6. Pitch stability operating controls during accelerated		A			
flight					
Collapse occurs		No	А	No	А
7. Roll stability and	damping	Α			
Oscillations		Reducing	А	Reducing	А
8. Stability in gentle		Α			
Tendency to return to		Spontaneous exit	А	Spontaneous exit	A
9. Behaviour in a steeply banked turn		В			
Sink rate after two turns		More than 14 m/s	В	More than 14 m/s	В
10. Symmetric from	collapse	Α			
Entry		Rocking back less than 45°	Α	Rocking back less than 45°	A
Recovery		Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit / Change of course		Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs		No	A	No	A
With accelerator					
Entry		Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery		Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A

Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	А	No	А
11. Exiting deep stall (parachutal stall)	С			
Deep stall achieved	Yes	А	Yes	А
Recovery	Spontaneous in 3 s to 5 s	С	Spontaneous in less than 3 s	А
Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 0° to 30°	А
Change of course	Changing course less than 45°	А	Changing course less than 45°	А
Cascade occurs	No	А	No	А
12. High angle of attack recovery	с			
Recovery	Spontaneous in 3 s to 5 s	С	Spontaneous in less than 3 s	А
Cascade occurs	No	А	No	А
13. Recovery from a developed full stall	В			
Dive forward angle on exit	Dive forward 30° to 60°	В	Dive forward 30° to 60°	в
Collapse	No collapse	А	No collapse	А
Cascade occurs (other than collapses)	No	A	No	Α
Rocking back	Less than 45°	A	Less than 45°	Α
Line tension	Most lines tight	A	Most lines tight	A
14. Asymmetric collapse	C			
With 50% collapse	•			
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°	A	90° to 180° / Dive or roll angle 15° to 45°	В
Re-inflation behaviour	Spontaneous re-inflation	А	Spontaneous re-inflation	А
Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	No	A	No	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
With 75% collapse				
Change of course until re-inflation / Maximum dive forward or	180° to 360° / Dive or roll angle	С	90° to 180° / Dive or roll angle 60°	С
roll angle	45° to 60°	Ũ	to 90°	Ũ
Re-inflation behaviour	Spontaneous re-inflation	А	Spontaneous re-inflation	А
Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	No	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
With 50% collapse and accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 45° to 60°	С	Less than 90° / Dive or roll angle 45° to 60°	С
Re-inflation behaviour	Spontaneous re-inflation	А	Spontaneous re-inflation	А
Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	No	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
With 75% collapse and accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 45° to 60°	С	90° to 180° / Dive or roll angle 45° to 60°	С
Re-inflation behaviour	Spontaneous re-inflation	А	Spontaneous re-inflation	А
Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	No	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
15. Directional control with a maintained asymmetric collapse	Α			
Able to keep course	Yes	А	Yes	А
180° turn away from the collapsed side possible in 10 s	Yes	А	Yes	А
Amount of control range between turn and stall or spin	More than 50 % of the symmetric control travel	A	More than 50 % of the symmetric control travel	A
16. Trim speed spin tendency	Α			
Spin occurs	No	А	No	А

17. Low speed spin tendency	Α			
Spin occurs	No	А	No	А
18. Recovery from a developed spin	Α			
Spin rotation angle after release	Stops spinning in less than 90°	А	Stops spinning in less than 90°	А
Cascade occurs	No	А	No	А
19. B-line stall	Α			
Change of course before release	Changing course less than 45°	А	Changing course less than 45°	А
Behaviour before release	Remains stable with straight span	A	Remains stable with straight span	А
Recovery	Spontaneous in less than 3 s	А	Spontaneous in less than 3 s	А
Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 30° to 60°	А
Cascade occurs	No	А	No	А
20. Big ears	Α			
Entry procedure	Dedicated controls	А	Dedicated controls	А
Behaviour during big ears	Stable flight	А	Stable flight	А
Recovery	Spontaneous in less than 3 s	А	Spontaneous in less than 3 s	А
Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 0° to 30°	А
21. Big ears in accelerated flight	Α			
Entry procedure	Dedicated controls	А	not available	0
Behaviour during big ears	Stable flight	А	not available	0
Recovery	Spontaneous in 3 s to 5 s	А	not available	0
Dive forward angle on exit	Dive forward 0° to 30°	А	not available	0
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	not available	0
22. Behaviour exiting a steep spiral	С			
Tendency to return to straight flight	Spontaneous exit	А	Spontaneous exit	А
Turn angle to recover normal flight	720° to 1080°, spontaneous recovery	С	Less than 720°, spontaneous recovery	A
Sink rate when evaluating spiral stability [m/s]	22		22	
23. Alternative means of directional control	Α			
180° turn achievable in 20 s	Yes	А	Yes	А
Stall or spin occurs	No	А	No	А
24. Any other flight procedure and/or configuration described in the user's manual	Α			
Procedure works as described	Yes	А	Yes	А
Procedure suitable for novice pilots	Yes	А	Yes	А
Cascade occurs	No	А	No	А
25. Comments of test pilot				
Comments			Impossible to do Big ears in accelerated flight	