AIR TURQUOISE SA | PARA-TEST.COM

Route du Pré-au-Comte 8 • CH-1844 Villeneuve • •41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Flight test report: EN 926-2:2013 & LTF 91/09

Manufacturer	Dudek Paragliders S.J.	Certification number	PG_1267.2017
Address	ul. Centralna 2U	Date of flight test	07. 11. 2017

86-031 Osielsko Poland

Glider model Colt 2 light 21 Classification C
Serial number P-159641 Representative None

Trimmer no Place of test Villeneuve Folding lines used no

Test pilotDupont PhilippeThurnheer ClaudeHarnessSupair - Altiplume SNiviuk - Hamak M

Harness to risers distance (cm) 41 44

Distance between risers (cm) 40 44

Total weight in flight (kg) 60 85

	_			
1. Inflation/Take-off	С			
Rising behaviour	Overshoots, shall be slowed down to avoid a front collapse	С	Overshoots, shall be slowed down to avoid a front collapse	С
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	В			
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	25 km/h to 30 km/h	В
4. Control movement	С			
Max. weight in flight up to 80 kg				
Symmetric control pressure / travel	Increasing / 40 cm to 55 cm	С	not available	0
Max. weight in flight 80 kg to 100 kg				
Symmetric control pressure / travel	not available	0	Increasing / 45 cm to 60 cm	С
Max. weight in flight greater than 100 kg				
Symmetric control pressure / travel	not available	0	not available	0
5. Pitch stability exiting accelerated flight	Α			
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	A			
Tendency to return to straight flight	Spontaneous exit	Α	Spontaneous exit	Α
9. Behaviour exiting a fully developed spiral dive	В			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	Α	No immediate reaction	В
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	720° to 1 080°, spontaneous recovery	В
10. Symmetric front collapse	В			
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	Α	Dive forward 0° to 30° Keeping	A
Dive loward angle on exit change of course	course	^	course	^
Cascade occurs	No	Α	No	Α
Folding lines used	No		No	
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 3 s to 5 s	В
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping	Α	Dive forward 30° to 60° / Keeping	В
	course		course	
Cascade occurs	No	Α	No	Α
Folding lines used	No		No	
With accelerator				
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	Spontaneous in 3 s to 5 s	В	Spontaneous in 3 s to 5 s	В
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping	Α	Dive forward 30° to 60° / Keeping	В
Casada assura	course	۸	course	
Cascade occurs	No No	Α	No No	Α
Folding lines used 11. Exiting deep stall (parachutal stall)	В		NO .	
Deep stall achieved	Yes	Α	Yes	Α
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 30° to 60°	В	Dive forward 0° to 30°	A
Change of course	Changing course less than 45°	A	Changing course less than 45°	A
Cascade occurs	No	Α	No	Α
12. High angle of attack recovery	C	, ,		, ,
Recovery	Spontaneous in 3 s to 5 s	С	Spontaneous in less than 3 s	Α
Cascade occurs	No	Α	No	Α
13. Recovery from a developed full stall	A			
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
Collapse	No collapse	Α	No collapse	Α
Cascade occurs (other than collapses)	No	Α	No	Α
Rocking back	Less than 45°	Α	Less than 45°	Α
Line tension	Most lines tight	Α	Most lines tight	Α
14. Asymmetric collapse	С			
Small asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 0° to 15°	Α	Less than 90° / Dive or roll angle 0° to 15°	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	Α	No (or only a small number of	Α
	collapsed cells with a spontaneous reinflation)		collapsed cells with a spontaneous reinflation)	
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
Folding lines used	No		No	
Large asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or	Less than 90° / Dive or roll angle	Α	90° to 180° / Dive or roll angle 15°	В
roll angle	15° to 45°	_	to 45°	_
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	С	Inflates in less than 3 s from start of pilot action	С

Total change of course	Loop than 260°	۸	Laga than 260°	۸
Total change of course	Less than 360°	A	Less than 360°	A
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		No	
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		No	
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	180° to 360° / Dive or roll angle 0° to 15°	Α	90° to 180° / Dive or roll angle 45° to 60°	С
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	С	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		No	
Folding lines used 15. Directional control with a maintained asymmetric collapse	A A		NO	
15. Directional control with a maintained asymmetric		A	Yes	Α
15. Directional control with a maintained asymmetric collapse	Α	A A		A A
15. Directional control with a maintained asymmetric collapse Able to keep course	A Yes		Yes	
15. Directional control with a maintained asymmetric collapse Able to keep course 180° turn away from the collapsed side possible in 10 s	Yes Yes More than 50 % of the	Α	Yes Yes More than 50 % of the symmetric	Α
15. Directional control with a maintained asymmetric collapse Able to keep course 180° turn away from the collapsed side possible in 10 s Amount of control range between turn and stall or spin	Yes Yes More than 50 % of the symmetric control travel	Α	Yes Yes More than 50 % of the symmetric	Α
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A	A A	Yes Yes More than 50 % of the symmetric control travel	A A
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No	A A	Yes Yes More than 50 % of the symmetric control travel	A A
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A	A A A	Yes Yes More than 50 % of the symmetric control travel	A A
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No	A A A	Yes Yes More than 50 % of the symmetric control travel	A A
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B	A A A	Yes Yes More than 50 % of the symmetric control travel No	A A A
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B Stops spinning in less than 90°	A A A	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180°	A A A
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B Stops spinning in less than 90° No	A A A	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180°	A A A
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B Stops spinning in less than 90° No A	A A A A	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180° No	A A A B A
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight	A A A A A	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180° No Changing course less than 45°	A A A B A
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span	A A A A A A	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180° No Changing course less than 45° Remains stable with straight span	A A A B A A
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B 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 A	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s	A A A B A A A
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B 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 A A A A A A	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180° 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
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B 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	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180° 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
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B 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 B	A A A A A A A A A A A A A A A A A A A	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180° 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
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B 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 B Dedicated controls Stable flight Spontaneous in 3 s to 5 s	A A A A A A A A	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180° 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
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B 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 B Dedicated controls Stable flight	A A A A A A A A A A A A A A A A A A A	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180° 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
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B 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 B Dedicated controls Stable flight Spontaneous in 3 s to 5 s Dive forward 0° to 30° B	A A A A A A A B	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180° 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 3 s to 5 s Dive forward 0° to 30°	A A A A A A A B
15. Directional control with a maintained asymmetric collapse Able to keep course 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	Yes Yes More than 50 % of the symmetric control travel A No A No B 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 B Dedicated controls Stable flight Spontaneous in 3 s to 5 s Dive forward 0° to 30°	A A A A A A A B	Yes Yes More than 50 % of the symmetric control travel No No Stops spinning in 90° to 180° 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 3 s to 5 s	A A A A A A A B

Recovery	Recovery through pilot action in less than a further 3 s	В	Recovery through pilot action in less than a further 3 s	В
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	Α	Stable flight	Α
22. Alternative means of directional control	Α			
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