## AIR TURQUOISE SA | PARA-TEST.COM

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Test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



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

Manufacturer **Davinci Products Inc.** Certification number PG\_1204.2017 Address 63 Shinchon Gil Okcheon Date of flight test 13. 07. 2017

> Myeon / Yangpyeong Gun 12505 Gyeongi do Republic of Korea

Glider model Duet 41 Classification B
Serial number TDT-41170601B Representative None
Trimmer yes: closed Place of test Villeneuve

Folding lines used no

**Test pilot** Thurnheer Claude Zoller Alain

Harness Advance - Bi pro 2 Advance - Bi pro 2

Harness to risers distance (cm) 44.5

Distance between risers (cm) 55 55

Total weight in flight (kg) 120 212

1. Inflation/Take-off	В			
Rising behaviour	Smooth, easy and constant rising	Α	Easy rising, some pilot correction is required	В
Special take off technique required	No	Α	No	Α
2. Landing	A			
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	Α			
Max. weight in flight up to 80 kg				
Symmetric control pressure / travel	not available	0	not available	0
Max. weight in flight 80 kg to 100 kg				
Symmetric control pressure / travel	not available	0	not available	0
Max. weight in flight greater than 100 kg				
Symmetric control pressure / travel	Increasing / greater than 65 cm	Α	Increasing / greater than 65 cm	Α
5. Pitch stability exiting accelerated flight	0			
Dive forward angle on exit	not available	0	not available	0
Collapse occurs	not available	0	not available	0
6. Pitch stability operating controls during accelerated flight	0			
Collapse occurs	not available	0	not available	0
7. Roll stability and damping	A			
Oscillations	Reducing	Α	Reducing	Α
8. Stability in gentle spirals	Α			
Tendency to return to straight flight	Spontaneous exit	Α	Spontaneous exit	Α
9. Behaviour exiting a fully developed spiral dive	A			
Initial response of glider (first 180°)	Immediate reduction of rate of turn	Α	Immediate reduction of rate of turn	Α

Tendency to return to straight flight	Spontaneous exit (g force decreasing, rate of turn	Α	Spontaneous exit (g force decreasing, rate of turn decreasing)	Α
	decreasing)		,	
Turn angle to recover normal flight	Less than 720°, spontaneous	Α	the state of the s	Α
10. Symmetric front collapse	recovery A		recovery	
io. Symmetric from conapse	A			
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	Α
	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 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	Α
and the second country	course		course	
Cascade occurs	No	Α	No	Α
Folding lines used	No		No	
With accolorator				
With accelerator	not available	0	not available	0
Entry	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit / Change of course	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
11. Exiting deep stall (parachutal stall)	Α			
Deep stall achieved	Yes	Α	Yes	Α
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
Change of course	Changing course less than 45°	Α	Changing course less than 45°	Α
Cascade occurs	No	Α	No	Α
12. High angle of attack recovery	Α			
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Cascade occurs	No	Α	No	Α
13. Recovery from a developed full stall	В			
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 30° to 60°	В
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	В			
Small asymmetric colleges				
Small asymmetric collapse  Change of source until re-inflation / Maximum dive feaverd or	Loop than 00° / Dive as sell as also	^	Long than 00° / Divo or rell are 1- 0°	٨
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°	А	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 roll angle	90° to 180° / Dive or roll angle 15° to 45°	В	90° to 180° / Dive or roll angle 15° to 45°	В
ion anglo	10 10 10			

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	
Small asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0
Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0
Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
Folding lines used	Not available		Not available	
15. Directional control with a maintained asymmetric collapse	A			
Able to keep course	Yes	Α	Yes	Α
180° turn away from the collapsed side possible in 10 s	Yes	Α	Yes	A
Amount of control range between turn and stall or spin	More than 50 % of the	Α	More than 50 % of the symmetric	A
Autount of control range between tarn and stail of spin	symmetric control travel	, ,	control travel	, (
16. Trim speed spin tendency	<b>A</b>			
Spin occurs	No	Α	No	Α
17. Low speed spin tendency	<b>A</b>			
Spin occurs	No	Α	No	Α
18. Recovery from a developed spin	A		04	
Spin rotation angle after release	Stops spinning in less than 90°	A	Stops spinning in less than 90°	A
Cascade occurs  19. B-line stall	No	Α	No	Α
	0	0	not ovojloblo	0
Change of course before release  Behaviour before release	not available not available	0	not available not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Cascade occurs	not available	0	not available	0
20. Big ears	A	U	not available	U
Entry procedure	Dedicated controls	Α	Dedicated controls	Α
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	A
21. Big ears in accelerated flight	0		Dive lorward of to 50	
Entry procedure	not available	0	not available	0
Behaviour during big ears	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Behaviour immediately after releasing the accelerator while	not available	0	not available	0
maintaining big ears		•		

22. Alternative means of directional control	Α		
180° turn achievable in 20 s	Yes	A Yes	Α
Stall or spin occurs	No	A 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 B-Line stall test not possible