## 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	Gradient s.r.o.	Certification number		PG_1208.2017	
Address	Plzenska 221/130 150 00 Praha 5 - Motol Czech Republic	Date of flight test		07. 08. 2017	
Glider model	Aspen 6 light 24	Classification		С	
Serial number G47241706100L		Representative		None	
Trimmer	no	Place of test		Villeneuve	
Folding lines used	no				
Test pilot		Fukuoka Seiko		Zoller Alain	
Harness		Supair - Access S		Advance - Success 4 L	
Harness to risers d	listance (cm)	43		44	
Distance between r	risers (cm)	40		44	
Total weight in flight (kg)		70		90	
1. Inflation/Take-off		В			
Rising behaviour		Easy rising, some pilot correction is required	В	Easy rising, some pilot correction is required	В
Special take off technique	e required	No	А	No	А
2. Landing		Α			
Special landing technique	•	No	A	No	А
3. Speed in straight flight		B	•	No	•
Trim speed more than 30 km/h		Yes	A	Yes	A
Speed range using the controls larger than 10 km/h		Yes Less than 25 km/h	A A	Yes 25 km/h to 30 km/h	A B
Minimum speed 4. Control movement		C	~		Б
Max woight in flight up	to 90 kg				
<i>Max. weight in flight up to 80 kg</i> 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 gre	•				
Symmetric control pressu		not available	0	not available	0
5. Pitch stability exiting	•	A		<b>D</b> , <b>(</b> ), <b></b>	
Dive forward angle on exi	it	Dive forward less than 30°	A	Dive forward less than 30°	A
Collapse occurs 6. Pitch stability operati flight	ng controls during accelerated	No A	A	No	A
Collapse occurs		No	А	No	А
7. Roll stability and dam	noing	A	~		~
Oscillations		Reducing	А	Reducing	А
8. Stability in gentle spi	rals	A			
Tendency to return to straight flight		Spontaneous exit	А	Spontaneous exit	А
9. Behaviour exiting a fully developed spiral dive		Α			
Initial response of glider (first 180°)		Immediate reduction of rate of turn	A	Immediate reduction of rate of turn	A
Tendency to return to straight flight		Spontaneous exit (g force decreasing, rate of turn decreasing)	A	Spontaneous exit (g force decreasing, rate of turn decreasing)	A

Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	Less than 720°, spontaneous recovery	А
10. Symmetric front collapse	C			
Approvimatoly 20 % chord				
Approximately 30 % chord Entry	Rocking back less than 45°	А	Rocking back less than 45°	А
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	A	Dive forward 0° to 30° Keeping	A
	course	~	course	~
Cascade occurs	No	А	No	А
Folding lines used	No		No	
At least 50% chord				
Entry	Rocking back less than 45°	А	Rocking back greater than 45°	С
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	A	Dive forward 30° to 60° / Keeping	В
Dive forward angle on exit? onlange of course	course	~	course	U
Cascade occurs	No	А	No	А
Folding lines used	No		No	
<i>With accelerator</i> Entry	Rocking back greater than 45°	С	Rocking back greater than 45°	С
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	A	Dive forward 0° to 30° / Keeping	A
Dive forward angle on exit? onlange of course	course	~	course	~
Cascade occurs	No	А	No	А
Folding lines used	No		No	
11. Exiting deep stall (parachutal stall)	Α			
Deep stall achieved	Yes	А	Yes	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
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	Α			
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Cascade occurs	No	Α	No	A
13. Recovery from a developed full stall				
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
Collapse	No collapse	A	No collapse No	A
Cascade occurs (other than collapses)	No Less than 45°	A	Less than 45°	A
Rocking back Line tension	Most lines tight	A A	Most lines tight	A A
14. Asymmetric collapse	C	A	Most mes ugnt	A
14. Asymmetric conapse	0			
Small asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 0° to 15° $$	A	Less than 90° / Dive or roll angle 0° to 15° $$	A
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 (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
Folding lines used	No		No	
Large asymmetric collapse	00° to 190° / Divo or roll and-	Р	00° to 100° / Divo or roll and 15°	Б
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
Re-inflation behaviour	Spontaneous re-inflation	A	Inflates in less than 3 s from start of pilot action	С

Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	Yes, no turn reversal	С	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
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°	A	Less than 90° / Dive or roll angle $15^{\circ}$ to $45^{\circ}$	A
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 (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
Folding lines used	No		No	
Large asymmetric collapse with fully activated 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	Yes, no turn reversal	С	Yes, no turn reversal	С
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
Folding lines used	No		No	
15. Directional control with a maintained asymmetric	Α			
collapse				
Able to keep course	Yes	A	Yes	A
180° turn away from the collapsed side possible in 10 s	Yes	A	Yes	A
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	A			
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	A
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
Cascade occurs	No	А	No	А
20. Big ears	В			
Entry procedure	Standard technique	А	Standard technique	А
Behaviour during big ears	Stable flight	А	Stable flight	А
Recovery	Spontaneous in 3 s to 5 s	В	Spontaneous in 3 s to 5 s	В
Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 0° to 30°	А
21. Big ears in accelerated flight	В			
Entry procedure	Standard technique	А	Standard technique	А
Behaviour during big ears	Stable flight	А	Stable flight	А
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°	А	Dive forward 0° to 30°	А

Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	А
22. Alternative means of directional control	Α			
180° turn achievable in 20 s	Yes	А	Yes	А
Stall or spin occurs	No	А	No	А
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