## para-test.com V 🔊 paragliding by air turquoise

## AIR TURQUOISE SA certified by



Flia	ht	test	rer	oort:	EN

Address   Francisco Rodríguez, 7 / PO Box 269 33280 33201 GIJON - Asturias Spain   Date of flight test   15. 03. 2012     Representative   None   Place of test   Villeneuve     Glider model   Zenith Evolution S   Classification   B     Trimmer   no   Thurnheer Claude   Thurnheer Claude     Interst pilot   Fukuoka Seiko   Thurnheer Claude     Harness   Sup'Air - Altiplume S   Niviuk - Hamak     Total weight in flight (kg)   70   90     1. Inflation/Take-off     A     Rising behaviour   A   Smooth, easy and constant rising   A   No   A     Special take off technique required   No   A   No   A     Special landing technique required   No   A   No   A     Special landing technique required   No   A   No   A     Special landing technique required   No   A   No   A     Special take off technique required   No   A   No   A     Special take off technique req	Manufacturer	Windtech Paragliders	Certification number		PG_0552.2012	<u> </u>
And TrimmerZenith Evolution S noClassificationBTimmernoFukuoka Seiko Niviuk - HamakFukuoka Seiko Niviuk - HamakFukuoka Seiko Niviuk - HamakTotal weight in flight (b) Total weight in flight (b)Fukuoka Seiko Niviuk - HamakNiviuk - HamakTotal weight in flight (b) Total weight in flight (b)70901. Inflation/Take-offARising behaviourASmooth, easy and constant rising NoANoASpecial take off technique requiredNoANoAA2. LandingANoANoASpecial landing technique requiredNoANoA3. Speed in straight flightVesAYesASpecial range using the controls larger than 10 km/hYesAYesA4. Control movementLess than 25 km/hAYesAMax. weight in flight ty to KorIncreasing / greater than 55 cmANot available0Max. weight in flight ty to KorIncreasing / greater than 55 cmANot availableASymmetric control pressure / travelIncreasing / greater than 55 cmANot availableASymmetric control pressure / travelIncreasing / greater than 55 cmAAAMax. weight in flight ty cot KorInterviewInterviewAASymmetric control pressure / travelInterviewAAAMax. weight in flight t	Address	Box 269 33280 33201 GIJON - Asturias	Date of flight test		15. 03. 2012	
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Test pilot   Fukuoka Seiko   Thurnheer Claude     Harness   Sup'Air - Altiplume S   Niviuk - Hamak     Total weight in flight (ke)   70   90     1. Inflation/Take-off   A   Smooth, easy and constant rising   A     Rising behaviour   Smooth, easy and constant rising   A   Smooth, easy and constant rising   A     Special take off technique required   No   A   No   A     2. Landing   A   No   A   A     Special landing technique required   No   A   No   A     3. Speed in straight flight   A   No   A   A     Speed range using the controls larger than 10 km/h   Yes   A   Yes   A     Speed range using the controls larger than 10 km/h   Yes   A   Less than 25 km/h   A     Minimum speed   Less than 25 km/h   A   Less than 25 km/h   A     4. Control movement   A   Isses than 25 km/h   A   Seeder ange using the fold by 50 km/h   A     Symmetric control pressure / travel   Increasing / greater than 55 cm   A   Isses than 25 km/h   B     Max. w	Glider model	Zenith Evolution S	Classification		В	
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Special landing technique requiredNoANoA3. Speed in straight flightA	Special take off techniqu	le required	No	А	No	А
3. Speed in straight flight   A     Trim speed more than 30 km/h   Yes   A   Yes   A     Speed range using the controls larger than 10 km/h   Yes   A   Yes   A     Minimum speed   Less than 25 km/h   A   Less than 25 km/h   A     4. Control movement   A   Less than 25 km/h   A   Less than 25 km/h   A     Max. weight in flight up to 80 kg   Increasing / greater than 55 cm   A   not available   0     Symmetric control pressure / travel   Increasing / greater than 55 cm   A   not available   0     Symmetric control pressure / travel   not available   0   Increasing / greater than 60 cm   A     Max. weight in flight greater than 100 kg   Not available   0   Increasing / greater than 60 cm   A	2. Landing		Α			
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Max. weight in flight 80 kg to 100 kg     Symmetric control pressure / travel     not available   0     Max. weight in flight greater than 100 kg						
Symmetric control pressure / travel not available 0 Increasing / greater than 60 cm A   Max. weight in flight greater than 100 kg			Increasing / greater than 55 cm	A	not available	0
Max. weight in flight greater than 100 kg						
			not available	0	Increasing / greater than 60 cm	A
Symmetric control pressure / travel not available 0 not available 0				0		0
				U		U
Dive forward angle on exit Dive forward less than 30° A Dive forward less than 30° A				٨	Dive forward less than 20°	^
Collapse occurs No A No A						
6. Pitch stability operating controls during accelerated A	•	ting controls during accelerated				~

Collapse occurs 6. Pitch stability operating controls during accelerated flight		No	А	No	А
		Α			
	Collapse occurs	No	А	No	А
	7. Roll stability and damping	Α			
	Oscillations	Reducing	А	Reducing	А
	8. Stability in gentle spirals	Α			
	Tendency to return to straight flight	Spontaneous exit	А	Spontaneous exit	А
	9. Behaviour in a steeply banked turn	Α			
	Sink rate after two turns	Up to 12 m/s	А	12 m/s to 14 m/s	А
	10. Symmetric front collapse	В			
	Entry	Rocking back less than 45°	А	Rocking back less than 45°	А
	Recovery	Spontaneous in 3 s to 5 s	В	Spontaneous in less than 3 s	А
	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
	With accelerator				
	Entry	Rocking back less than 45°	А	Rocking back less than 45°	А

		_		
Recovery	Spontaneous in 3 s to 5 s	В	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	Α	No	A
11. Exiting deep stall (parachutal stall)	Α			
Deep stall achieved	Yes	A	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	А	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 0° to 30°	А	Dive forward 30° to 60°	В
Collapse	No collapse	А	No collapse	А
Cascade occurs (other than collapses)	No	А	No	А
Rocking back	Less than 45°	А	Less than 45°	А
Line tension	Most lines tight	А	Most lines tight	А
14. Asymmetric collapse	В			
With 50% 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	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
With 75% collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	В	$90^\circ$ to $180^\circ$ / Dive or roll angle $15^\circ$ to $45^\circ$	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	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 $15^{\circ}$ to $45^{\circ}$	A	Less than 90° / Dive or roll angle 15° to 45°	А
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 15° to 45°	В	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°	A	Less than 360°	A
Collapse on the opposite side occurs	No	A	No	A
Twist occurs	No	А	No	А
Cascade occurs	No	A	No	A
15. Directional control with a maintained asymmetric collapse	A			
Able to keep course	Yes	А	Yes	А
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	A	More than 50 % of the symmetric	A
	symmetric control travel		control travel	

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 0° to 30°	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	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
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	А
22. Behaviour exiting a steep spiral	Α			
Tendency to return to straight flight	Spontaneous exit	А	Spontaneous exit	А
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	Less than 720°, spontaneous recovery	А
Sink rate when evaluating spiral stability [m/s]	12		14	
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	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
25. Comments of test pilot				
Comments				