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Villeneuve

AIR TURQUOISE SA certified by

Flight test report: EN

Certification number PG_0667.2013 Manufacturer **Trekking-Parapentes** Address 36, le Grand Claus 15.01.2013 Date of flight test 34270 St. Mathieu de **Treviers**

France None Place of test Representative

Senso L

Classification В

Trimmer no

Glider model

Test pilot Thurnheer Claude Zoller Alain

Harness	Niviuk Gliders - Hamak 2 M		Gin Gliders - Gingo 2 L	
Total weight in flight (kg)	100		125	
1. Inflation/Take-off	Α			
Rising behaviour	Smooth, easy and constant rising	Α	Smooth, easy and constant rising	Α
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	Α			
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	Less than 25 km/h	Α
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	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	Α			
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 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 front collapse	Α			
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° / Entering a turn of less than 90°	Α	Dive forward 0° to 30° / Keeping course	Α
Cascade occurs	No	Α	No	Α
With accelerator				
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
11. Exiting deep stall (parachutal stall)	A			
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	A			
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	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	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°	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	Α	No	Α
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
With 75% collapse				
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 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	Α	No	Α
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
With 50% collapse and accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / 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	Α	No	Α
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
With 75% collapse and accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°	Α	90° to 180° / Dive or roll angle 15° to 45°	В
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	Α	No	Α
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
15. Directional control with a maintained asymmetric collapse	Α			
Able to keep course	Yes	Α	Yes	Α
180° turn away from the collapsed side possible in 10 s	Yes	Α	Yes	Α
Amount of control range between turn and stall or spin	More than 50 % of the symmetric control travel	Α	More than 50 % of the symmetric control travel	Α

Spin occurs	16. Trim speed spin tendency	Α			
Spin occurs No	Spin occurs	No	Α	No	Α
19. Recovery from a developed spin A Spin rotation angle after release Stops spinning in less than 90° A No A N	17. Low speed spin tendency	Α			
Spin rotation angle after release Noo A Noo A Noo A No A No A No A No A	Spin occurs	No	Α	No	Α
Cascade occurs No No No No No No No N	18. Recovery from a developed spin	Α			
19. B-line stall Change of course before release Changing course less than 45° A Changing course less than 3 × A Changing course course than 40° to 30° A Dive forward 0° to 30° A Changing place and a Changing big ears	Spin rotation angle after release	Stops spinning in less than 90°	Α	Stops spinning in less than 90°	Α
Change of course before release Behaviour before release Remains stable with straight span span span span span span span span span	Cascade occurs	No	Α	No	Α
Remains stable with straight spain Recovery Spontaneous in less than 3 s A Dive forward 0° to 30° A No A No A No A No A No A No A Stable gight Behaviour during big ears Behaviour during big ears City procedure Behaviour during big ears Bilive forward angle on exit Dive forward 0° to 30° A Dedicated controls Behaviour during big ears Stable flight Recovery through pilot action in less than 3 s A Dive forward 0° to 30° A Dive forward 0° to 30° A Stable flight Bilive forward angle on exit Dive forward o° to 30° A Dive forward 0° to 30°	19. B-line stall	Α			
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Dive forward angle on exit Cascade occurs No No A	Behaviour before release	S S S S S S S S S S S S S S S S S S S	Α	Remains stable with straight span	Α
Cascade occurs No	Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
20. Big ears B Entry procedure Dedicated controls A Dedicated controls A Stable flight A Dedicated controls A Stable flight A Dive forward uning big ears A Dive forward or to 30° A Dive forward or to 30	Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
Entry procedure Dedicated controls A Dedicated controls A Stable flight A Dive forward on the strain and any stable flight B Standard technique B Standard technique A Dedicated controls A Dedicated controls A Dedicated controls A Dive forward on the strain and stable flight B Standard technique A Dedicated controls A Stable flight	Cascade occurs	No	Α	No	Α
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Dive forward angle on exit Dive forward 0° to 30° A Deficated controls A Debaviour during big ears Stable flight Recovery Recovery through pilot action in less than a further 3 s Dive forward angle on exit Dive forward 0° to 30° Recovery through pilot action in less than a further 3 s Dive forward angle on exit Dive forward 0° to 30° A Dive f	Behaviour during big ears	Stable flight	Α	Stable flight	Α
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Behaviour during big ears Recovery Recovery through pilot action in less than a further 3 s Dive forward angle on exit Dive forward 0° to 30° Dive forward 0° t	21. Big ears in accelerated flight	В			
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25. Comments of test pilot	Procedure suitable for novice pilots	not available	0	not available	0
	Cascade occurs	not available	0	not available	0
Comments	25. Comments of test pilot				
	Comments				