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## AIR TURQUOISE SA certified by

## Flight test report: EN



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Manufacturer	Bruce Goldsmith Design GmbH	Certification number	PG_0679.2013	
Address	Hügelweg, 12 9400 Wolfsberg Austria	Date of flight test	18. 02. 2013	
Representative	None	Place of test	Villeneuve	
Glider model	Tala L	Classification	С	
Trimmer	no			

· · · · · ·	Thurnheer Claude Niviuk Gliders - Hamak 2 M 105		Zoller Alain Gin Gliders - Gingo 2 L 125	
1. Inflation/Take-off	Α			
Rising behaviour	Smooth, easy and constant rising	А	Smooth, easy and constant rising	А
Special take off technique required	No	А	No	А
2. Landing	Α			
Special landing technique required	No	А	No	А
3. Speed in straight flight	В			
Trim speed more than 30 km/h	Yes	А	Yes	А
Speed range using the controls larger than 10 km/h	Yes	А	Yes	А
Minimum speed	Less than 25 km/h	А	25 km/h to 30 km/h	В
4. Control movement	С			
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 / 50 cm to 65 cm	С	Increasing / 50 cm to 65 cm	С
5. Pitch stability exiting accelerated flight	Α			
Dive forward angle on exit	Dive forward less than 30°	А	Dive forward less than 30°	А
Collapse occurs	No	А	No	А
6. Pitch stability operating controls during accelerated flight	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	В			
Sink rate after two turns	More than 14 m/s	В	More than 14 m/s	В
10. Symmetric front collapse	С			
Entry	Rocking back less than $45^{\circ}$	А	Rocking back less than 45°	Α
Recovery	Spontaneous in less than 3 s	А	Spontaneous in less than 3 s	Α
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	А
Cascade occurs	No	А	No	А
With accelerator				
Entry	Rocking back less than 45°	A	Rocking back greater than 45°	С

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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	A	No	A
11. Exiting deep stall (parachutal stall)	Α			
Deep stall achieved	Yes	Α	Yes	A
Recovery	Spontaneous in less than 3 s	A	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	Α	No	A
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	С			
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	Yes, no turn reversal	С	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° to 45°	A	Less than 90° / Dive or roll angle 15° to 45°	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 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 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	No	Α	No	А
Twist occurs	No	Α	No	А
Cascade occurs	No	А	No	A
15. Directional control with a maintained asymmetric collapse	Α			
Able to keep course	Yes	А	Yes	А
$180^\circ$ turn away from the collapsed side possible in 10 s	Yes	А	Yes	А
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

Spin occursNoANoA17. Low speed spin tendencyASpin occursNoANoA18. Recovery from a developed spinAStops spinning in less than 90°AStops spinning in less than 90°A18. Recovery from a developed spinAStops spinning in less than 90°ANoASpin rotation angle after releaseNoANoAA19. B-line stallAChanging course less than 45°AChanging course before releaseAABehaviour before releaseRemains stable with straight span spanASpontaneous in less than 3 sASpontaneous in less than 3 sADive forward angle on exitDive forward 0° to 30°ADive forward 0° to 30°ANoA20. Big earsBEEEEEEntry procedureDedicated controlsADedicated controlsBBehaviour during big earsStable flightAStable flightBDive forward angle on exitDive forward 0° to 30°ADeciorated or trolsBBehaviour during big earsStable flightAStable flightACharge on exitDive forward 0° to 30°ADive forward 0° to 30°ADive forward angle on exitDive forward 0° to 30°ADive forward 0° to 30°ABehaviour during big earsBecovery through pilot action in less than a further 3 sBDive forward 0° to 30°ADiv
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21. Big ears in accelerated flight       B         Entry procedure       Dedicated controls       A       Dedicated controls       A         Behaviour during big ears       Stable flight       A       Stable flight       A         Recovery       Recovery through pilot action in less than a further 3 s       B       Spontaneous in less than 3 s       A
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less than a further 3 s
Dive forward angle on exit     Dive forward 0° to 30°     A     Dive forward 0° to 30°     A
Behaviour immediately after releasing the accelerator while Stable flight A Stable flight A maintaining big ears
22. Behaviour exiting a steep spiral A
Tendency to return to straight flight Spontaneous exit A Spontaneous exit A
Turn angle to recover normal flight       Less than 720°, spontaneous       A       Less than 720°, spontaneous       A         recovery       recovery       recovery       R
Sink rate when evaluating spiral stability [m/s] 21 19
23. Alternative means of directional control A
180° turn achievable in 20 s Yes A Yes A
Stall or spin occurs No A No A
24. Any other flight procedure and/or configuration 0 described in the user's manual
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