



Air Turquoise SA Rte du Pré-au-Comte 8 | CH-1844 Villeneuve tel. +41 21 965 65 65 | mobile +41 79 202 52 30 info@para-test.com

## Flight test report: EN 926-2:2013

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Manufacturer	Niviuk Gliders / Air Games S.L.	Certification number		PG_0892.2014	
Address	C. Del Ter, 6 – Nave D 17165 La Cellera de Ter Girona Spain	Date of flight test		08. 09. 2014	
Glider model	Artik 4 23	Classification		С	
Representative	None	Place of test		Villeneuve	
Trimmer	no	Tidde of tool		Villeticave	
Test pilot		Dupont Philippe		Thurnheer Claude	
Harness		Supair - Altiplume S		Sup' Air - Altiplume S	
Harness to risers dis	stance (cm)	41		44	
Distance between ris	• •	42		44	
	• •				
Total weight in flight	i (kg)	60		80	
1. Inflation/Take-off		A			
Rising behaviour		Smooth, easy and constant rising	Α	Smooth, easy and constant rising	Α
Special take off technique r	required	No	Α	· · · · · · · · · · · · · · · · · · ·	Α
2. Landing		Α			
Special landing technique required		No	Α	No	Α
3. Speed in straight flight		A			
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		С			
Max. weight in flight up to 80 kg					
Symmetric control pressure / travel		Increasing / 40 cm to 55 cm	С	not available	0
Max. weight in flight 80 kg	g to 100 kg				
Symmetric control pressure / travel		not available	0	Increasing / 45 cm to 60 cm	С
Max. weight in flight grea	ter than 100 kg				
Symmetric control pressure	e / travel	not available	0	not available	0
5. Pitch stability exiting a	ccelerated flight	A			
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 flight	g controls during accelerated	A			
Collapse occurs		No	Α	No	Α
7. Roll stability and damp	ing	<b>A</b>			
Oscillations		Reducing	Α	Reducing	Α
8. Stability in gentle spirals		A Countaine and a suit	^	Constant and a with	^
Tendency to return to straight flight		Spontaneous exit	Α	Spontaneous exit	Α
9. Behaviour exiting a fully developed spiral dive Initial response of glider (first 180°)		A Immediate reduction of rate of	٨	Immediate reduction of rate of turn	Λ
		turn	Α		Α
Tendency to return to straig	ght flight	Spontaneous exit (g force decreasing, rate of turn decreasing)	Α	Spontaneous exit (g force decreasing, rate of turn decreasing)	Α

Recovery recovery  Approximately 30 % chord  Entry Rocking back less than 45° A Spontaneous in 3 s to 5 s B Dive forward angle on exit Change of course  Cascade occurs No A No A No A No A Rocking back less than 45° A Rocking back less than 45° A No A No A Rocking back less than 45° A Rocking back less tha
Entry Rocking back less than 45° A Rocking back less than 45° A Rocking back less than 45° A Recovery Spontaneous in less than 3 S A Spontaneous in 3 s to 5 S B Dive forward angle on exit Change of course Course Course Rocking back less than 45° A
Recovery Spontaneous in less than 3 s A Spontaneous in 3 s to 5 s B Dive forward angle on exit Change of course No A No
Recovery Spontaneous in less than 3 s A Spontaneous in 3 s to 5 s B Dive forward angle on exit Change of course No A No
Dive forward angle on exit Change of course course course course Cascade occurs No No A No A No A No A No A No A Recliding lines used  Cascade occurs  Entry Rocking back less than 45° Spontaneous in less than 3 s Dive forward 0° to 30° / Keeping course  Course  Course  Course  A Recovery Spontaneous in less than 3 s Dive forward angle on exit / Change of course Course  Cascade occurs No No A
Folding lines used  No A least 50% chord  Entry Recovery Spontaneous in less than 45° A Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course  No No A No A Recking back less than 45° A Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course  No No A
At least 50% chord  Entry Rocking back less than 45° A Rocking back less than 45° A Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 0° to 30° / Keeping course  Cascade occurs No A No A No A Rocking back less than 45° A Rocking lines used  With accelerator  Entry Rocking back less than 45° A Rocking back less than 45° A Rocking back less than 45° A Recovery  Entry Rocking back less than 45° A Rocking back less
Entry Rocking back less than 45° A Rocking back less than 45° A Recovery Spontaneous in less than 3 s A Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 0° to 30° / Keeping course Cascade occurs No A No A No A No A Rocking back less than 45° A Recovery Rocking back less than 45° A Rocking back less than 45° A Recovery Spontaneous in 3 s to 5 s B Spontaneous in 4 s to 5 s Spontaneous in 4 s Spontan
Entry Rocking back less than 45° A Rocking back less than 45° A Recovery Spontaneous in less than 3 s A Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 0° to 30° / Keeping course Cascade occurs No A No A No A No A Rocking back less than 45° A Recovery Rocking back less than 45° A Rocking back less than 45° A Recovery Spontaneous in 3 s to 5 s B Spontaneous in 4 s to 5 s Spontaneous in 4 s Spontan
Recovery Spontaneous in less than 3 s Dive forward angle on exit / Change of course Dive forward 0° to 30° / Keeping course Cascade occurs No No A No A No A No A No A No A With accelerator Entry Entry Spontaneous in 3 s to 5 s B Dive forward 0° to 30° / Keeping course  Entry Entry Recking back less than 45° Spontaneous in 3 s to 5 s B Dive forward on the strain and the stra
Dive forward angle on exit / Change of course  Dive forward 0° to 30° / Keeping course  No A No
Cascade occurs  No  No  A  No  A  No  A  No  A  No  A  With accelerator  Entry  Recovery  Spontaneous in 3 s to 5 s  Dive forward angle on exit / Change of course  Cascade occurs  No  No  A  No  Recovery  Dive forward 30° to 60° / Keeping course  Cascade occurs  No  A  No  A  No  A  No  A  No  A  No  A  T1. Exiting deep stall (parachutal stall)  Deep stall achieved  Recovery  Spontaneous in less than 3 s  Dive forward angle on exit  Change of course  Change of course  Changing course less than 45°  A  Change of course  Changing course less than 45°  A  Spontaneous in less than 3 s  A  Cascade occurs  No  A  Changing course less than 45°  A  Changing course less than 45°  A  Changing course less than 45°  A  Changing course less than 3 s  A  Spontaneous in less than 3 s  A  Cascade occurs  No  A  No  A  No  A  T1. High angle of attack recovery  Spontaneous in less than 3 s  A  Cascade occurs  A  T1. High angle of attack recovery  Spontaneous in less than 3 s  A  Cascade occurs  A  T1. High angle of attack recovery  Spontaneous in less than 3 s  A  Cascade occurs  A  T1. Recovery from a developed full stall
Folding lines used  With accelerator  Entry Recovery Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course Cascade occurs No No A No A No A No A 11. Exiting deep stall (parachutal stall) Deep stall achieved Yes Spontaneous in less than 3 s Pive forward 0° to 30° A Change of course Changing course less than 45° A Change of course Changing course less than 45° A Cascade occurs No A Cascade occurs A Recovery Spontaneous in less than 3 s A Spontaneous in less than 45° A Changing course less than 45° A No
With accelerator  Entry Rocking back less than 45° A Rocking back less than 45° A Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course Cascade occurs No A No
Entry Rocking back less than 45° A Rocking back less than 45° A Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course Cascade occurs No A No
Entry Rocking back less than 45° A Rocking back less than 45° A Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course Cascade occurs No A No
Recovery  Spontaneous in 3 s to 5 s  B Spontaneous in 3 s to 5 s  B Dive forward angle on exit / Change of course  Dive forward 30° to 60° / Keeping course  Cascade occurs  No  No  A No  A No  A Folding lines used  No  A  11. Exiting deep stall (parachutal stall)  Deep stall achieved  Yes  A Recovery  Spontaneous in less than 3 s A Dive forward 0° to 30°  A Dive forward angle on exit  Dive forward 0° to 30°  A Change of course  Changing course less than 45°  Cascade occurs  No  A  Spontaneous in less than 45°  A Changing course less than 45°
Dive forward angle on exit / Change of course  Dive forward 30° to 60° / Keeping course  No A No
Cascade occurs  No A No
Folding lines used  A  11. Exiting deep stall (parachutal stall)  Deep stall achieved  Yes  A  Recovery  Spontaneous in less than 3 s  Dive forward angle on exit  Dive forward 0° to 30°  Change of course  Changing course less than 45°  Cascade occurs  No  A  Cascade occurs  A  Recovery  Spontaneous in less than 3 s  A  Changing course less than 45°  A  Changing course less than 45°  A  No  A  12. High angle of attack recovery  A  Recovery  Spontaneous in less than 3 s  A  No  A  13. Recovery from a developed full stall
11. Exiting deep stall (parachutal stall)  Deep stall achieved  Yes  A Yes  A Yes  A Recovery  Spontaneous in less than 3 s  Dive forward on to 30 on the stall of the stall o
Deep stall achieved Yes A Yes A Spontaneous in less than 3 s A Spontaneous in less than 3 s A Dive forward angle on exit Dive forward 0° to 30° A Dive forward 0° to 30° A Dive forward 0° to 30° A Change of course Changing course less than 45° A No A No A No A Spontaneous in less than 3 s A Cascade occurs No A
Recovery Spontaneous in less than 3 s Dive forward angle on exit Dive forward 0° to 30° A Dive forward 0° to 30° A Change of course Changing course less than 45° A Cascade occurs No A No A Cascade occurs Spontaneous in less than 3 s A Spontaneous in less than 45° A Changing course less than 45° A No A No A 12. High angle of attack recovery Spontaneous in less than 3 s A Cascade occurs No A No A No A No A 13. Recovery from a developed full stall A
Dive forward angle on exit  Dive forward 0° to 30°  Change of course  Changing course less than 45°  A No  A  12. High angle of attack recovery  Recovery  Spontaneous in less than 3 s  A Spontaneous in less than 3 s  A No  A  13. Recovery from a developed full stall  A
Change of course  Changing course less than 45° A Changing course less than 45° A  Cascade occurs  No A No A  12. High angle of attack recovery  Recovery  Spontaneous in less than 3 s A  Cascade occurs  No A No A  13. Recovery from a developed full stall  A  Changing course less than 45° A  No A  No A
Cascade occurs  No A No A No A No A 12. High angle of attack recovery  Recovery Spontaneous in less than 3 s Cascade occurs No A No A No A No A No A No A
12. High angle of attack recovery  Recovery  Spontaneous in less than 3 s A Spontaneous in less than 3 s A Cascade occurs  No A No A  13. Recovery from a developed full stall A
Recovery Spontaneous in less than 3 s A Spontaneous in less than 3 s A Cascade occurs No A No A  13. Recovery from a developed full stall A
Cascade occurs No A No A  13. Recovery from a developed full stall A
Collapse A No collapse A
Cascade occurs (other than collapses)  No  A  No  A
Rocking back Less than 45° A Less than 45° A
Line tension Most lines tight A Most lines tight A
14. Asymmetric collapse C
Small asymmetric collapse
Change of course until re-inflation / Maximum dive forward or roll angle A control angle A con
Re-inflation behaviour Spontaneous re-inflation A Spontaneous re-inflation A
Total change of course Less than 360° A Less than 360° A
Collapse on the opposite side occurs  No (or only a small number of collapsed cells with a spontaneous reinflation)  No (or only a small number of A collapsed cells with a spontaneous reinflation)
Twist occurs No A No A
Cascade occurs No A No A
Folding lines used No A No A
Large asymmetric collapse
Change of course until re-inflation / Maximum dive forward or roll angle B 90° to 180° / Dive or roll angle B 90° to 180° / Dive or roll angle 15° B to 45°
Re-inflation behaviour Spontaneous re-inflation A Spontaneous re-inflation A
Total change of course Less than 360° A Less than 360° A

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	Α	No	Α
•				
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°	Α	Less than 90° / Dive or roll angle 15° to 45°	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 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	Α	No	Α
Large asymmetric collapse with fully activated accelerator	00° to 400° / Diversion and service	_	000 to 4000 / Divergence II availa 450	0
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	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	Yes, no turn reversal	С
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
Folding lines used	No	Α	No	Α
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	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
16. Trim speed spin tendency	A			
Spin occurs	No	Α	No	Α
17. Low speed spin tendency	A			
Spin occurs	No	Α	No	Α
18. Recovery from a developed spin	Α			
Spin rotation angle after release	Stops spinning in less than 90°	Α	Stops spinning in less than 90°	Α
Cascade occurs	No	Α	No	Α
19. B-line stall	<b>A</b>			
Change of course before release	Changing course less than 45°	Α.	Changing course less than 45°	Α
Behaviour before release	Remains stable with straight span	Α	Remains stable with straight span	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
Cascade occurs	No	Α	No	Α
20. Big ears	Α			
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	Α .
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
21. Big ears in accelerated flight	B Dedicated centrals	^	Dedicated acress	^
Entry procedure	Dedicated controls	Α	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	В	Spontaneous in 3 s to 5 s	Α
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α

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