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Flight test report: EN 926-2:2013

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Manufacturer	Niviuk Gliders / Air Games S.L.	Certification number		PG_0927.2015	
Address	C. Del Ter, 6 – Nave D 17165 La Cellera de Ter Girona Spain	Date of flight test		30. 10. 2014	
Glider model	Artik P 21	Classification		С	
Serial number	Artik4 9-21 light	Representative		None	
Trimmer	no	Place of test		Villeneuve	
minici	110	i lace of lest		VIIICHEUVE	
Test pilot		Dupont Philippe		Thurnheer Claude	
Harness		Flugsau - XX-Lite		Flugsau - XX-Lite	
Harness to risers distance (cm)		40		40	
Distance between risers (cm)		40		40	
Total weight in flight		60		73	
Total Worgint III Ingili	. (1.9)				
1. Inflation/Take-off		Α			
Rising behaviour		Smooth, easy and constant rising		Smooth, easy and constant rising	Α
Special take off technique r	required	No	Α	No	Α
2. Landing		A			
Special landing technique r		No	A	No	Α
3. Speed in straight flight		B	^	Vaa	^
Trim speed more than 30 k		Yes Yes	A	Yes Yes	A
Speed range using the controls larger than 10 km/h Minimum speed		Less than 25 km/h	A	25 km/h to 30 km/h	A B
4. Control movement		C	А	25 KII/II 10 50 KII/II	Б
Max. weight in flight up to					
Symmetric control pressure / travel		Increasing / 40 cm to 55 cm	С	Increasing / 40 cm to 55 cm	С
Max. weight in flight 80 kg	g to 100 kg				
Symmetric control pressure / travel		not available	0	not available	0
May waight in flight avec	tor than 100 km				
Max. weight in flight greater than 100 kg Symmetric control pressure / travel		not available	0	not available	0
5. Pitch stability exiting a		A	U	not available	U
Dive forward angle on exit	ccelerated mgm	Dive forward less than 30°	Α	Dive forward less than 30°	Α
Collapse occurs		No	Α	No	Α
•	g controls during accelerated	A			
Collapse occurs		No	Α	No	Α
7. Roll stability and damp	ing	A			
Oscillations		Reducing	Α	Reducing	Α
8. Stability in gentle spira	ls	A			
Tendency to return to straight flight		Spontaneous exit	Α	Spontaneous exit	Α
9. Behaviour exiting a fully developed spiral dive		A			
Initial response of glider (fir	,	Immediate reduction of rate of turn	Α	Immediate reduction of rate of turn	Α
Tendency to return to straic	pht flight	Spontaneous exit (g force decreasing, rate of turn decreasing)	Α	Spontaneous exit (g force decreasing, rate of turn decreasing)	Α

Turn angle to recover normal flight	Less than 720°, spontaneous recovery	Α	Less than 720°, spontaneous recovery	Α
10. Symmetric front collapse	В			
Approximately 30 % chord				
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
_			•	A
Recovery Dive forward angle on exit Change of course	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s Dive forward 0° to 30° Keeping	
Dive forward angle on exit Change of course	Dive forward 0° to 30° Entering a turn of less than 90°	A	course	A
Cascade occurs	No	A	No	A
Folding lines used	No	Α	No	Α
At least 50% chord				
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in 3 s to 5 s	В
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping	Α	Dive forward 0° to 30° / Keeping	A
	course		course	
Cascade occurs	No	Α	No	Α
Folding lines used	No	Α	No	Α
Midb accelerator				
With accelerator	Dooking hook less the 450	٨	Dooking hook less than 45°	^
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
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 course	Α	Dive forward 0° to 30° / Keeping course	Α
Cascade occurs	No	Α	No	Α
Folding lines used	No	Α	No	Α
11. Exiting deep stall (parachutal stall)	Α			
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	Α			
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	Α			
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	С			
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°	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 (or only a small number of	Α	No (or only a small number of	Α
Collapse of the opposite side occurs	collapsed cells with a spontaneous reinflation)	^	collapsed cells with a spontaneous reinflation)	^
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
Folding lines used	No	Α	No	Α
Large asymmetric collapse				
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	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
		Α	No	A
Folding lines used	No	А	NO	А
Small 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 15° to 45°	В	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		_		_
Change of course until re-inflation / Maximum dive forward or roll angle	180° to 360° / 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	Α			
collapse				
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 EO 0/ of the	Α	More than 50 % of the symmetric	Α
	More than 50 % of the			$\overline{}$
	symmetric control travel	,,	control travel	^
16. Trim speed spin tendency		Α,	control travel	^
	symmetric control travel	A	control travel No	A
16. Trim speed spin tendency	symmetric control travel			
16. Trim speed spin tendency Spin occurs	symmetric control travel A No			
16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency	symmetric control travel A No A	Α	No	A
16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs	symmetric control travel A No A No	Α	No	A
16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin	symmetric control travel A No A No A	A	No No	A
16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin Spin rotation angle after release	symmetric control travel A No A No Stops spinning in less than 90°	A A	No Stops spinning in less than 90°	A A
16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin Spin rotation angle after release Cascade occurs	symmetric control travel A No A No Stops spinning in less than 90° No	A A	No Stops spinning in less than 90°	A A
16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin Spin rotation angle after release Cascade occurs 19. B-line stall	symmetric control travel A No A No A Stops spinning in less than 90° No A	A A A	No No Stops spinning in less than 90° No	A A A
16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin Spin rotation angle after release Cascade occurs 19. B-line stall Change of course before release Behaviour before release	symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span	A A A A	No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span	A A A A
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16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin Spin rotation angle after release Cascade occurs 19. B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit	symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°	A A A A A A	No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°	A A A A A A A
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16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin Spin rotation angle after release Cascade occurs 19. B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears	symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No B	A A A A A A	No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No	A A A A A A
16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin Spin rotation angle after release Cascade occurs 19. B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears Entry procedure	symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No B Dedicated controls	A A A A A A A	No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No Dedicated controls	A A A A A A A A
16. Trim speed spin tendency Spin occurs 17. Low speed spin tendency Spin occurs 18. Recovery from a developed spin Spin rotation angle after release Cascade occurs 19. B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears Entry procedure Behaviour during big ears	symmetric control travel A No A No A Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No B Dedicated controls Stable flight	A A A A A A A A A A A A A A A A A A A	No Stops spinning in less than 90° No Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No Dedicated controls Stable flight	A A A A A A A A A
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Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	А	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