

Flight test report: EN 926-2:2013

Flight test re	port. EN 920-2.2015				
Manufacturer	Niviuk Gliders / Air Games S.L.	Certification number		PG_0947.2015	
Address	C. Del Ter, 6 – Nave D 17165 La Cellera de Ter Girona Spain	Date of flight test		18. 06. 2015	
Glider model	Peak 4 25	Classification		D	
Serial number	Peak 4 1-24	Representative		Olivier Nef	
Trimmer	no	Place of test		Villeneuve	
Test pilot		Thurnheer Claude		Zoller Alain	
Harness		Niviuk - Hamak M		Niviuk - Hamak L	
Harness to risers distance (cm)		43		43	
Distance between risers (cm)		44		46	
		95		115	
Total weight in flig	Jur (vð)	90		но	
1. Inflation/Take-off		C			
Rising behaviour		Overshoots, shall be slowed down to avoid a front collapse	С	Overshoots, shall be slowed down to avoid a front collapse	С
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		25 km/h to 30 km/h	В	25 km/h to 30 km/h	В
4. Control movement		С			
Max. weight in flight up	-				
Symmetric control pressure / travel		not available	0	not available	0
Max. weight in flight 80	0 kg to 100 kg				
Symmetric control pressure / travel		Increasing / greater than 60 cm	A	not available	0
Max. weight in flight gi	reater than 100 kg				
Symmetric control pressure / travel		not available	0	Increasing / 50 cm to 65 cm	С
5. Pitch stability exiting		Α			
Dive forward angle on ex	xit	Dive forward less than 30°	Α	Dive forward less than 30°	Α
Collapse occurs 6. Pitch stability operation	ting controls during accelerated	No A	A	No	A
flight	5 5				
Collapse occurs		No	A	No	А
7. Roll stability and dat	mping	A			
Oscillations		Reducing	A	Reducing	А
8. Stability in gentle spirals		Α			
Tendency to return to straight flight		Spontaneous exit	A	Spontaneous exit	A
9. Behaviour exiting a fully developed spiral dive		D Immediate reduction of rate of		No immediate recetier	P
Initial response of glider		Immediate reduction of rate of turn	A	No immediate reaction	В
Tendency to return to st	raight flight	Spontaneous exit (g force decreasing, rate of turn decreasing)	A	Turn remains constant (g force constant, rate of turn constant)	D

Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	With pilot action	D
10. Symmetric front collapse	D			
Approximately 30 % chord				
Entry	Rocking back less than 45°	А	Rocking back less than 45°	А
Recovery	Recovery through pilot action in	D	Spontaneous in less than 3 s	A
Recovery	less than a further 3 s	D	opontarieous in less than 5 s	~
Dive forward angle on exit Change of course	Dive forward 30° to 60° Keeping course	В	Dive forward 30° to 60° Entering a turn of 90° to 180°	С
Cascade occurs	No	А	No	А
Folding lines used	Yes	D	Yes	D
At least 50% chord				
Entry	Rocking back less than 45°	А	Rocking back less than 45°	А
Recovery	Recovery through pilot action in less than a further 3 s	D	Spontaneous in 3 s to 5 s	В
Dive forward angle on exit / Change of course	Dive forward 30° to 60° / Keeping course	В	Dive forward 30° to 60° / Entering a turn of 90° to 180°	С
Cascade occurs	No	А	No	А
Folding lines used	Yes	D	Yes	D
	103	D	103	U
With accelerator				
Entry	Rocking back greater than 45°	С	Rocking back less than 45°	А
Recovery	Recovery through pilot action in less than a further 3 s	D	Recovery through pilot action in less than a further 3 s	D
Dive forward angle on exit / Change of course	Dive forward 30° to 60° / Keeping course	В	Dive forward 30° to 60° / Entering a turn of 90° to 180°	С
Cascade occurs	No	А	No	А
Folding lines used	Yes	D	Yes	D
11. Exiting deep stall (parachutal stall)	Α			
Deep stall achieved	Yes	А	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	Α	No	A
12. High angle of attack recovery	A			
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	C			
Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 30° to 60°	в
Collapse	No collapse	A	No collapse	A
Cascade occurs (other than collapses)	No	A	No	A
Rocking back	Less than 45°	A	Greater than 45°	С
Line tension	Most lines tight	A	Most lines tight	A
14. Asymmetric collapse	D	~	Woot moo ugnt	~
	-			
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°	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 (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
Folding lines used	Yes	D	Yes	D
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Large asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 60° to 90°	D	90° to 180° / Dive or roll angle 60° to 90°	D

Re-inflation behaviour	Inflates in less than 3 s from	С	Spontaneous re-inflation	А
	start of pilot action			
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)	A	Yes, no turn reversal	С
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
Folding lines used	Yes	D	Yes	D
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°	A	90° to 180° / Dive or roll angle 15° to 45°	В
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	С	Spontaneous re-inflation	А
Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
Folding lines used	Yes	D	Yes	D
Large 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 60° to 90°	D	90° to 180° / Dive or roll angle 60° to 90°	D
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 (or only a small number of	А	Yes, no turn reversal	С
	collapsed cells with a spontaneous reinflation)			
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
Folding lines used	Yes	D	Yes	D
15. Directional control with a maintained asymmetric collapse	Α			
Able to keep course	Yes	Α	Yes	А
180° turn away from the collapsed side possible in 10 s	Yes	А	Yes	A
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
16. Trim speed spin tendency	Α			
Spin occurs	No	А	No	A
17. Low speed spin tendency	Α			
Spin occurs	No	Α	No	A
18. Recovery from a developed spin		-		
Spin rotation angle after release	Stops spinning in 180° to 360°	D	Stops spinning in less than 90°	A
Cascade occurs 19. B-line stall	No 0	A	No	A
	not available	0	not available	0
Change of course before release Behaviour before release	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Cascade occurs	not available	0	not available	0
20. Big ears	A	U		U
Entry procedure	Standard technique	А	Standard technique	А
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	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
21. Big ears in accelerated flight	A			
Entry procedure	Standard technique	А	Standard technique	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°	Α	Dive forward 0° to 30°	A
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	А
22. Alternative means of directional control	Α			
180° turn achievable in 20 s	Yes	Α	Yes	Α
Stall or spin occurs	No	А	No	А
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