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AIR TURQUOISE SA certified by

## Flight test report: EN

ISO 9001
BUREAU VERITAS
Certification

Manufacturer	Niviuk Gliders / Air Games S.L.	Certification number		PG_0772.2013
Address	C. Del Ter, 6 – Nave D 17165 La Cellera de Ter Girona Spain	Date of flight test		01. 11. 2013
Representative	Olivier Nef	Place of test		Villeneuve
Glider model	Icepeak 7 23	Classification		D
Trimmer	no			
	Test pilot	Thurnheer Claude		Berruex Gilles
	Harness	Niviuk Gliders - Hamak M		Sup'Air - Access M
	Total weight in flight (kg)	85		105
1. Inflation/Take-off		С		
Rising behaviour		Overshoots, shall be slowed down to avoid a front collapse	С	Overshoots, shall be slowed down to avoid a front collapse
Special take off technique required		No	Α	No
2. Landing		A		

Kising behaviour	down to avoid a front collapse	C	to avoid a front collapse	C
Special take off technique required	No	Α	No	Α
2. Landing	Α			
Special landing technique required	No	Α	No	Α
3. Speed in straight flight	В			
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	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	Increasing / 45 cm to 60 cm	С	not available	0
Max. weight in flight greater than 100 kg				
Symmetric control pressure / travel	not available	0	Increasing / 50 cm to 65 cm	С
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	D			
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
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 0° to 30° / Keeping course	Α	Dive forward 30° to 60° / Entering a turn of less than 90°	В
Cascade occurs	No	Α	No	Α

With accelerator				
Entry	Rocking back greater than 45°	С	Rocking back greater than 45°	С
Recovery	Spontaneous in 3 s to 5 s	В	Recovery through pilot action in less than a further 3 s	D
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	Α	Dive forward 30° to 60° / Entering a turn of less than 90°	В
Cascade occurs	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	C			
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in 3 s to 5 s	С
Cascade occurs	No	Α	No	A
13. Recovery from a developed full stall	В	,,		,,
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 30° to 60°	В
Collapse	No collapse	A	No collapse	A
Cascade occurs (other than collapses)		A	No Collapse No	
	No			A
Rocking back	Less than 45°	A	Less than 45°	A
Line tension	Most lines tight	Α	Most lines tight	Α
14. Asymmetric collapse	D			
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 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	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	90° to 180° / Dive or roll angle 45° to 60°	С	$180^{\circ}$ to $360^{\circ}$ / Dive or roll angle $45^{\circ}$ to $60^{\circ}$	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	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 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
With 75% collapse and accelerator				-
Change of course until re-inflation / Maximum dive forward or roll angle	180° to 360° / Dive or roll angle 60° to 90°	D	180° to 360° / Dive or roll angle 60° to 90°	D
Re-inflation behaviour	Spontaneous re-inflation	Α	Spontaneous re-inflation	Α
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No	A	Yes, no turn reversal	C
Twist occurs			No	
	No No	Α		Α
Cascade occurs	No A	Α	No	Α
15. Directional control with a maintained asymmetric collapse		٨	Van	^
Able to keep course	Yes	A	Yes	A
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	Α			
Spin occurs	No	Α	No	Α
17. Low speed spin tendency	D			
Spin occurs	Yes	D	Yes	D
18. Recovery from a developed spin	D			
Spin rotation angle after release	Stops spinning in 180° to 360°	D	Stops spinning in 90° to 180°	С
Cascade occurs	No	Α	No	Α
19. B-line stall	0			
Change of course before release	not available	0	not available	0
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	Α			
Entry procedure	Dedicated controls	Α	Dedicated controls	Α
Behaviour during big ears	Stable flight	Α	Stable flight	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
21. Big ears in accelerated flight	Α			
Entry procedure	Dedicated controls	Α	Dedicated controls	Α
Behaviour during big ears	Stable flight	Α	Stable flight	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
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	Α	Stable flight	Α
22. Behaviour exiting a steep spiral	Α			
Tendency to return to straight flight	Spontaneous exit	Α	Spontaneous exit	Α
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	Α	Less than 720°, spontaneous recovery	Α
Sink rate when evaluating spiral stability [m/s]	22		20	
23. Alternative means of directional control	Α			
180° turn achievable in 20 s	Yes	Α	Yes	Α
Stall or spin occurs	No	Α	No	Α
24. 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
25. Comments of test pilot				
Comments	Dieser Gleitschirm erfüllt die Mindestanforderungen von EN/LTF D. □ Nach Auskunft des Herstellers und bestätigt durch unsere Testflüge richtet sich dieser Schirm ausschließlich an sehr erfahrene Wettkampf-Piloten (PWC-Niveau) und ersetzt nicht das Klasse D Standard-Gleitschirmmodell des selben Herstellers.		This glider meets the minimum requirements of EN/LTF class D. ☐ According to the manufacturer and confirmed by our own testing this glider addresses highly experienced comp-pilots (PWC level) exclusively and is no replacement for the standard Dclass-glider of the same manufacturer.	