

## AIR TURQUOISE SA certified by



Turn angle to recover normal flight



					1828
Manufacturer	Gradient s.r.o.	Certification number		PG_0869.2014	
Address	Plzenska 221/130 150 00 Praha 5 - Motol Czech Republic	Date of flight test		30. 05. 2014	
Representative	Ondrej Dupal	Place of test		Villeneuve	
Glider model	Aspen5 28	Classification		C	
Trimmer	no	elacomouton		Ū	
	Test pilo	ot Zoller Alain		Berruex Gilles	
	· · · · · ·	s Flugsau - Lightsau		Niviuk - Hamak L	
	Total weight in flight (kg	• •		118	
1. Inflation/Take-off	Total weight in hight (K	B		118	
Rising behaviour		Easy rising, some pilot	В	Easy rising, some pilot correction is	В
		correction is required	U	required	D
Special take off technique	ue required	No	А	No	А
2. Landing		Α			
Special landing technique	le required	No	Α	No	А
3. Speed in straight flig	ght	А			
Trim speed more than 3	0 km/h	Yes	А	Yes	А
Speed range using the o	controls larger than 10 km/h	Yes	А	Yes	А
Minimum speed		Less than 25 km/h	Α	Less than 25 km/h	А
4. Control movement		C			
Max. weight in flight u	n to 80 kg				
Symmetric control press		not available	0	not available	0
- j			-		-
Max. weight in flight 8	0 kg to 100 kg				
Symmetric control press	sure / travel	Increasing / 45 cm to 60 cm	С	not available	0
Max. weight in flight g	reator than 100 kg				
Symmetric control press	-	not available	0	Increasing / 50 cm to 65 cm	С
5. Pitch stability exitin		A	U		Ū
Dive forward angle on e		Dive forward less than 30°	А	Dive forward less than 30°	А
Collapse occurs		No	A	No	A
6. Pitch stability opera flight	ting controls during accelerated	Α			
Collapse occurs		No	А	No	А
7. Roll stability and da	mping	Α			
Oscillations		Reducing	А	Reducing	А
8. Stability in gentle sp	birals	А			
Tendency to return to straight flight		Spontaneous exit	А	Spontaneous exit	А
9. Behaviour exiting a fully developed spiral dive		Α			
Initial response of glider (first 180°)		Immediate reduction of rate of turn	A	Immediate reduction of rate of turn	A
Tendency to return to straight flight		Spontaneous exit (g force decreasing, rate of turn decreasing)	A	Spontaneous exit (g force decreasing, rate of turn decreasing)	A

decreasing)

recovery

Less than 720°, spontaneous

А

Less than 720°, spontaneous recovery

Α

10. Symmetric front collapse

## С

Approximately 30 % chord				
Entry	Rocking back less than 45°	А	Rocking back less than 45°	А
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit Change of course	Dive forward 0° to 30° Keeping	A	Dive forward 0° to 30° Keeping	A
Dive forward angle of exit change of course	course	~	course	~
Cascade occurs	No	А	No	А
Folding lines used	No	А	No	А
At least 50% chord				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in less than 3 s	A	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	А	No	А
Folding lines used	No	А	No	А
With accelerator		~		
Entry	Rocking back greater than 45°	C	Rocking back less than 45°	A
Recovery	Spontaneous in 3 s to 5 s	В	Spontaneous in 3 s to 5 s	B
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	А	No	А
Folding lines used	No	А	No	A
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	А	No	А
12. High angle of attack recovery	Α			
Recovery	Spontaneous in less than 3 s	А	Spontaneous in less than 3 s	A
Cascade occurs	No	A	No	A
13. Recovery from a developed full stall	В	_		_
Dive forward angle on exit	Dive forward 30° to 60°	В	Dive forward 30° to 60°	В
Collapse	No collapse	Α	No collapse	A
Cascade occurs (other than collapses)	No	Α	No	A
Rocking back	Less than 45°	Α	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	Less than 90° / Dive or roll angle 0° to 15°	Α	Less than 90° / Dive or roll angle 0° to $15^{\circ}$	А
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	A	No (or only a small number of	A
	collapsed cells with a spontaneous reinflation)	Λ	collapsed cells with a spontaneous reinflation)	Λ
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
Folding lines used	No	Α	No	А
Large asymmetric 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° to 180° / Dive or roll angle 45° to 60°	С
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	С	Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A

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15. Directional control with a maintained asymmetric collapse A   Able to keep course Yes A Yes A   Able to keep course Yes A 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 A A No A No A   Spin occurs No A No A No A   Spin occurs No A No A No A   Spin occurs A No A No A A   Spin occurs A Stops spinning in less than 90° A Stops spinning in less than 90° A   18. Recovery from a developed spin A A No A No A   Clascade occurs No A No A No A   Gascade occurs No A No A Remains stable with straight span A   Recovery Spontaneous in less than 3 s A	Cascade occurs	No	А	No	А
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21. Big ears in accelerated flightAEntry procedureStandard techniqueABehaviour during big earsStable flightARecoverySpontaneous in less than 3 sASpontaneous in less than 3 sA	Recovery	Spontaneous in less than 3 s	А	Spontaneous in less than 3 s	Α
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Recovery Spontaneous in less than 3 s A Spontaneous in less than 3 s 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 exitDive forward 0° to 30°ADive forward 0° to 30°A	Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 0° to 30°	А

Stable flight	A	Stable flight	А
Α			
Yes	А	Yes	А
No	А	No	А
0			
not available	0	not available	0
not available	0	not available	0
not available	0	not available	0
	A Yes No 0 not available not available	A Yes A No A 0 not available 0 not available 0	AYesAYesANoAOInot available0not available0Inot available0

24. Comments of test pilot

Comments