

AIR TURQUOISE SA certified by



Flight test report: EN

8. Stability in gentle spirals

Tendency to return to straight flight

					1828
Manufacturer	Gin Gliders Inc.	Certification number		PG_0426.2011	
Address	285-1 Galdam-Ri, Mohyun- Myun, 449-855 YongIn-City, Kyunggi-Do Korea	Date of flight test		01. 04. 2011	
Representative	None	Place of test		Villeneuve	
Glider model	Sprint Evo XS	Classification		В	
Trimmer	no				
	•	Dupont Philippe		Thurnheer Claude	
	Harness	Sup'Air - Access S		Sup' Air - Access M	
	Total weight in flight (kg)	68		87	
1. Inflation/Take-off		Α			
Rising behaviour		Smooth, easy and constant rising	А	Smooth, easy and constant rising	А
Special take off techniq	jue required	No	А	No	А
2. Landing	2. Landing				
	Special landing technique required		A	No	A
3. Speed in straight fli	3. Speed in straight flight				
Trim speed more than 30 km/h		Yes	A	Yes	А
Speed range using the controls larger than 10 km/h		Yes	A	Yes	A
Minimum speed		Less than 25 km/h	A	Less than 25 km/h	А
4. Control movement		Α			
Max. weight in flight up	•				
Symmetric control pres		Increasing / greater than 55 cm	A	not available	0
Max. weight in flight 80					
Symmetric control pres		not available	0	Increasing / greater than 60 cm	A
Max. weight in flight greater than 100 kg		not available			
	Symmetric control pressure / travel		0	not available	0
5. Pitch stability exitin	• •	A			
Dive forward angle on exit		Dive forward less than 30°	A	Dive forward less than 30°	A
Collapse occurs	ating controls during cooplarated	No A	A	No	А
flight	ating controls during accelerated				
Collapse occurs		No	A	No	A
7. Roll stability and damping		A		Deducies	
Oscillations		Reducing	А	Reducing	Α

Α

Spontaneous exit

9. Behaviour in a steeply banked turn	В			
Sink rate after two turns	12 m/s to 14 m/s	А	More than 14 m/s	В
10. Symmetric front collapse	В			
Entry	Rocking back less than 45°	А	Rocking back less than 45°	А
Recovery	Spontaneous in less than 3 s	А	Spontaneous in less than 3 s	А
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	А
Cascade occurs	No	А	No	А
With accelerator				

A Spontaneous exit

А

Entry	Rocking back less than 45°	А	Rocking back less than 45°	А
Recovery	Spontaneous in 3 s to 5 s	В	Spontaneous in less than 3 s	А
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
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	А
Cascade occurs	No	А	No	А
13. Recovery from a developed full stall	В			
Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 30° to 60°	В
Collapse	No collapse	А	No collapse	А
Cascade occurs (other than collapses)	No	А	No	А
Rocking back	Less than 45°	А	Less than 45°	А
Line tension	Most lines tight	А	Most lines tight	А
14. Asymmetric collapse	В			
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° $$	A	Less than 90° / Dive or roll angle 0° to 15°	A
Re-inflation behaviour	Spontaneous re-inflation	А	Spontaneous re-inflation	А
Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	No	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
With 75% collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°	A	90° to 180° / Dive or roll angle 15° to 45°	В
Re-inflation behaviour	Spontaneous re-inflation	А	Spontaneous re-inflation	А
Total change of course	Less than 360°	А	Less than 360°	А
Collapse on the opposite side occurs	No	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
With 50% collapse and accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 0° to 15° $$	A	Less than 90° / Dive or roll angle 0° to 15°	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	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
With 75% 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°	A	90° to 180° / Dive or roll angle 15° to 45°	В
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	А	No	А
Twist occurs	No	А	No	А
Cascade occurs	No	А	No	А
15. Directional control with a maintained asymmetric collapse	Α			
Able to keep course	Yes	А	Yes	А
180° turn away from the collapsed side possible in 10 s	Yes	А	Yes	А
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	А
17. Low speed spin tendency	Α			
Spin occurs	No	А	No	А
18. Recovery from a developed spin	Α			
Spin rotation angle after release	Stops spinning in less than 90°	А	Stops spinning in less than 90°	А
Cascade occurs	No	А	No	А
19. B-line stall	Α			
Change of course before release	Changing course less than 45°	А	Changing course less than 45°	А
Behaviour before release	Remains stable with straight span	А	Remains stable with straight span	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
Cascade occurs	No	А	No	А
20. Big ears	В			
Entry procedure	Dedicated controls	А	Dedicated controls	А
Behaviour during big ears	Stable flight	А	Stable flight	А
Recovery	Spontaneous in 3 s to 5 s	В	Spontaneous in 3 s to 5 s	В
Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 0° to 30°	А
21. Big ears in accelerated flight	В			
Entry procedure	Dedicated controls	А	Dedicated controls	А
Behaviour during big ears	Stable flight	А	Stable flight	А
Recovery	Recovery through pilot action in less than a further 3 s	В	Spontaneous in 3 s to 5 s	А
Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 0° to 30°	А
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	А	Stable flight	А
22. Behaviour exiting a steep spiral	Α			
Tendency to return to straight flight	Spontaneous exit	А	Spontaneous exit	А
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	Less than 720°, spontaneous recovery	А
Sink rate when evaluating spiral stability [m/s]	16		16	
23. Alternative means of directional control	Α			
180° turn achievable in 20 s	Yes	А	Yes	А
Stall or spin occurs	No	А	No	А
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				