

Flight test report

Recovery



					UL.
Manufacturer	Gin Gliders Inc.	Certification number		PG_0134.2008	
Address	586-5, Ilsan-Ri, Mohyun-Myur			20. 02. 2008	
	449-855 YongIn-City, Kyungg Do	1-			
	449-855 Korea				
Representative	None	Place of test		Villeneuve	
Glider model	BeCool 39	Classification		С	
Trimmer	yes: opened				
	yes. opened				
	•	lot Thurnheer Claude		Zoller Alain	
	Harne	ess Advance - Bi Pro 2		Advance - Bi Pro 2	
	Total weight in flight (kg) 130		195	
1. Inflation/Take-off	F	Α			
Rising behaviour		Smooth, easy and constant rising	Α	Smooth, easy and constant rising	А
Special take off tech	nique required	No	А	No	Α
2. Landing		Α			
Special landing tech		No	A	No	A
3. Speed in straight		A			
Trim speed more that		Yes	А	Yes	A
	he controls larger than 10 km/h	Yes	A	Yes	A
Minimum speed		Less than 25 km/h	Α	Less than 25 km/h	A
4. Control moveme		Α			
Max. weight in flight	, -				
Symmetric control pressure / travel		not available	0	not available	0
Max. weight in flight 80 kg to 100 kg					
Symmetric control pressure / travel		not available	0	not available	0
Max. weight in flight greater than 100 kg			•		
		Increasing / greater than 65 cm 0	A	Increasing / greater than 65 cm	A
5. Pitch stability exiting accelerated flight Dive forward angle on exit		u not available	0	not available	0
Collapse occurs	n exit	not available	0	not available	0
•	erating controls during accelerated	0	U	not available	U
flight		Ū			
Collapse occurs		not available	0	not available	0
7. Roll stability and	damping	А			
Oscillations		Reducing	А	Reducing	А
8. Stability in gentle	e spirals	А			
Tendency to return t	o straight flight	Spontaneous exit	А	Spontaneous exit	А
9. Behaviour in a st	eeply banked turn	В			
Sink rate after two tu	irns	More than 14 m/s	В	More than 14 m/s	В
10. Symmetric fron	t collapse	В			
Entry		Rocking back less than 45°	А	Rocking back less than 45°	Α
Recovery		Spontaneous in 3 s to 5 s	В	Spontaneous in 3 s to 5 s	В
Dive forward angle c	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
With accelerator					
Entry		not available	0	not available	0
_			-		-

not available

0

not available

0

Dive forward angle on exit / Change of course	not available	0	not available	0
Cascade occurs	not available	0	not available	0
11. Exiting deep stall (parachutal stall)	Α			
Deep stall achieved	Yes	A	Yes	A
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	A
Change of course	Changing course less than 45°	Α	Changing course less than 45°	A
Cascade occurs	No	A	No	A
12. High angle of attack recovery	Α			
Recovery	Spontaneous in less than 3 s	A	not available	0
Cascade occurs	No	A	not available	0
13. Recovery from a developed full stall	B	_		_
Dive forward angle on exit	Dive forward 30° to 60°	В	Dive forward 30° to 60°	В
Collapse	No collapse	A	No collapse	A
Cascade occurs (other than collapses)	No	Α	No	A
Rocking back	Less than 45°	A	Less than 45°	A
Line tension	Most lines tight	А	Most lines tight	A
14. Asymmetric collapse	c			
With 50% collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45°	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	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	180° to 360° / Dive or roll angle 15° to 45°	С	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	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0
Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
With 75% collapse and accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	not available	0	not available	0
Re-inflation behaviour	not available	0	not available	0
Total change of course	not available	0	not available	0
Collapse on the opposite side occurs	not available	0	not available	0
Twist occurs	not available	0	not available	0
Cascade occurs	not available	0	not available	0
15. Directional control with a maintained asymmetric	A			
collapse	Vaa	•	Vac	٨
Able to keep course	Yes	A	Yes	A
180° turn away from the collapsed side possible in 10 s	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			
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	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	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	В
Dive forward angle on exit	Dive forward 0° to 30°	А	Dive forward 0° to 30°	А
21. Big ears in accelerated flight	0			
Entry procedure	not available	0	not available	0
Behaviour during big ears	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Behaviour immediately after releasing the accelerator while maintaining big ears	not available	0	not available	0
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	A
Sink rate when evaluating spiral stability [m/s]	24		23	
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	More than 14 m/s the glider can stay in neutral spiral.		Impossible to manage the B-Stall line. More than 14 m/s the glider can stay in neutral spiral.	