Flight test report: EN 926-2:2013+A1:2021*

Manufacturer	**Flow Paragliders**	Certification number	PG_2352.2024
Address	26 kalmia Court 4221 QLD Elanora Australia	Flight test	29.01.2024

Glider model	**MYSTIC S**	**Classification**	**C**
Serial number	STS231002	Representative	None
Trimmer	no	Place of test	Villeneuve
Folding lines used	yes		

Test pilot	Claude Thurnheer	Alexandre Jofresa
Harness	Advance Thun AG Success 4 M	Advance Thun AG Success 4 M
Harness to risers distance [cm]	43	43
Distance between risers [cm]	44	44
Total weight in flight [kg]	80	95

1. Inflation/Take-off	**C**			
Rising behaviour	Overshoots, shall be slowed down to avoid a front collapse	C	Overshoots, shall be slowed down to avoid a front collapse	C
Special take off technique required	No	A	No	A

2. Landing	**A**			
Special landing technique required	No	A	No	A

3. Speed in straight flight	**B**			
Trim speed more than 30 km/h	Yes	A	Yes	A
Speed range using the controls larger than 10 km/h	Yes	A	Yes	A
Minimum speed	25 km/h to 30 km/h	B	25 km/h to 30 km/h	B

4. Control movement	**C**			
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	C	Increasing / 45 cm to 60 cm	C
Max. weight in flight greater than 100 kg				
Symmetric control pressure / travel	not available	0	not available	0

5. Pitch stability exiting accelerated flight	**A**			
Dive forward angle on exit	Dive forward less than 30°	A	Dive forward less than 30°	A
Collapse occurs	No	A	No	A

6. Pitch stability operating controls during accelerated flight	**A**			
Collapse occurs	No	A	No	A

7. Roll stability and damping	**A**			
Oscillations	Reducing	A	Reducing	A

8. Stability in gentle spirals	**A**			
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A

*This standard is NOT covered by accreditation D-IS-19457-01

The validation of this test report is given by the signature of the test manager on inspection certificate 91.20 Rev 07 | 04.03.2022 // ISO | 91.22 // Page 1 of 5

9. Behaviour exiting a fully developed spiral dive	**C**				
Initial response of glider (first 180°)	No immediate reaction	B	No immediate reaction	B	
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	
Turn angle to recover normal flight	720° to 1 080°, spontaneous recovery	B	1080° to 1440°, spontaneous recovery	C	

10. Symmetric front collapse **Approximately 30 % chord**	**C**				
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	A	No	A	
Folding lines used	Yes	C	Yes	C	
At least 50% chord					
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A	
Recovery	Spontaneous in 3 s to 5 s	B	Spontaneous in 3 s to 5 s	B	
Dive forward angle on exit / Change of course	Dive forward 30° to 60° / Keeping course	B	Dive forward 0° to 30° / Keeping course	A	
Cascade occurs	No	A	No	A	
Folding lines used	Yes	C	Yes	C	
With accelerator					
Entry	Rocking back greater than 45°	C	Rocking back greater than 45°	C	
Recovery	Spontaneous in 3 s to 5 s	B	Spontaneous in 3 s to 5 s	B	
Dive forward angle on exit / Change of course	Dive forward 30° to 60° / Keeping course	B	Dive forward 30° to 60° / Keeping course	B	
Cascade occurs	No	A	No	A	
Folding lines used	Yes	C	Yes	C	

11. Exiting deep stall (parachutal stall)	**A**				
Deep stall achieved	Yes	A	Yes	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	
Change of course	Changing course less than 45°	A	Changing course less than 45°	A	
Cascade occurs	No	A	No	A	

12. High angle of attack recovery	**C**				
Recovery	Spontaneous in 3 s to 5 s	C	Spontaneous in less than 3 s	A	
Cascade occurs	No	A	No	A	

13. Recovery from a developed full stall	**C**				
Dive forward angle on exit	Dive forward 60° to 90°	C	Dive forward 60° to 90°	C	
Collapse	No collapse	A	No collapse	A	
Cascade occurs (other than collapses)	No	A	No	A	

Rocking back	Greater than 45°	C	Greater than 45°	C
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 15° to 45°	A	Less than 90° / Dive or roll angle 0° to 15°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
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	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	Yes	C	Yes	C

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°	B	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
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	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	Yes	C	Yes	C

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	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	C	Spontaneous re-inflation	A
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	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	Yes	C	Yes	C

Large 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 45° to 60°	C	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Inflates in less than 3 s from start of pilot action	C
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	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A

Folding lines used	Yes	C	Yes	C
15. Directional control with a maintained asymmetric collapse	**A**			
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	A	No	A
17. Low speed spin tendency	**A**			
Spin occurs	No	A	No	A
18. Recovery from a developed spin	**B**			
Spin rotation angle after release	Stops spinning in 90° to 180°	B	Stops spinning in 90° to 180°	B
Cascade occurs	No	A	No	A
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	**A**			
Entry procedure	Dedicated controls	A	Dedicated controls	A
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	Dedicated controls	A	Dedicated controls	A
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
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	A
22. Alternative means of directional control	**A**			
180° turn achievable in 20 s	Yes	A	Yes	A
Stall or spin occurs	No	A	No	A
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   Big ears by B3   Big ears done by B3