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test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



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

Flight test re	port: EN 926-2:20	013+A1:20)21°			
Manufacturer Address	Drift Paragliders Krizikova 2989/68a 61200 Brno Czech Republic		Certification number Flight test	er	PG_2149.2023 09.08.2023	
Glider model	Merlin L		Classification		С	
Serial number	302-MERL-10-202		Representative		None	
Trimmer	no		Place of test		Villeneuve	
Folding lines used	yes					
Test pilot		Alexandre J	Alexandre Jofresa		Anselm Rauh	
Harness		Advance Thun AG Success 4 M		Niviuk Hamak L		
Harness to risers distance (cm)		43		47		
Distance between	Distance between risers (cm)		48		48	
Total weight in fl	Total weight in flight (kg)				117	
1. Inflation/Take-off Rising behaviour		B Easy rising, some pilot correction is Erequired		В	Easy rising, some pilot correction is required	В
Special take off technic	Special take off technique required			Α	No	Α
2. Landing Special landing technique required		A No		Α	No	Α
3. Speed in straight fl	3. Speed in straight flight					
Trim speed more than 30 km/h		Yes		Α	Yes	Α
Speed range using the controls larger than 10 km/h		Yes	Yes A		Yes	Α
Minimum speed	Minimum speed		25 km/h to 30 km/h		25 km/h to 30 km/h	В
4. Control movement		A				
Max. weight in flight up to 80 kg Symmetric control pressure / travel		not available	not available 0		not available	0
Max. weight in flight 80 kg to 100 kg Symmetric control pressure / travel		not available 0		0	not available	0
Max. weight in flight greater than 100 kg Symmetric control pressure / travel		Increasing / gre	eater than 65 cm	Α	Increasing / greater than 65 cm	Α
5. Pitch stability exiting accelerated flight Dive forward angle on exit		A Dive forward le	ss than 30°	Α	Dive forward less than 30°	Α
Collapse occurs		No		Α	No	Α
6. Pitch stability operating controls during		A				
accelerated flight Collapse occurs		No		Α	No	Α
7. Roll stability and damping		A				
Oscillations		Reducing		Α	Reducing	Α
8. Stability in gentle spirals		A Spontaneous e	xit	Α	Spontaneous exit	Α
Tendency to return to straight flight		opomaneous e	AIL	٨	Oportianeous exit	^

9. Behaviour exiting a fully developed spiral dive Initial response of glider (first 180°)	C Immediate reduction of rate of turn	Α	No immediate reaction	В
Tendency to return to straight flight	Spontaneous exit (g force decreasing,	Α	Spontaneous exit (g force decreasing,	Α
Turn angle to recover normal flight	rate of turn decreasing) Less than 720°, spontaneous recovery	Α	rate of turn decreasing) 1080° to 1440°, spontaneous recovery	С
10. Symmetric front collapse Approximately 30 % chord	С			
Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Dive forward angle on exit Change of course	Dive forward 0° to 30° / Keeping course	Α	Dive forward 0° to 30° / Keeping course	Α
Cascade occurs	No	Α	No	Α
Folding lines used	Yes	С	Yes	С
At least 50% chord Entry	Rocking back less than 45°	Α	Rocking back less than 45°	Α
Recovery	Spontaneous in 3 s to 5 s	В	Spontaneous in less than 3 s	Α
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	Α	Dive forward 0° to 30° / Keeping course	Α
Cascade occurs	No	Α	No	Α
Folding lines used	Yes	С	Yes	С
With accelerator				
Entry	Rocking back less than 45°	Α	Rocking back greater than 45°	С
Recovery	Spontaneous in 3 s to 5 s	В	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 0° to 30° / Entering a turn of 90° to 180°	С
Cascade occurs	No	Α	No	Α
Folding lines used	Yes	С	Yes	С
11. Exiting deep stall (parachutal stall) Deep stall achieved	A No	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	A			
Recovery	Spontaneous in less than 3 s	Α	Spontaneous in less than 3 s	Α
Cascade occurs	No	Α	No	Α
13. Recovery from a developed full stall Dive forward angle on exit	B Dive forward 0° to 30°	Α	Dive forward 30° to 60°	В
Collapse	No collapse	Α	No collapse	Α
Cascade occurs (other than collapses)	No	Α	No	Α

Rocking back	Less than 45°	Α	Less than 45°	Α
Line tension	Most lines tight	Α	Most lines tight	Α
14. Asymmetric collapse	С			
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°	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 (or only a small number of collapsed cells with a spontaneous reinflation)	Α	No (or only a small number of collapsed cells with a spontaneous reinflation)	Α
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
Folding lines used	Yes	С	Yes	С
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 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 (or only a small number of collapsed cells with a spontaneous reinflation)	Α	Yes, no turn reversal	С
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
Folding lines used	Yes	С	Yes	С
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°	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 (or only a small number of collapsed cells with a spontaneous reinflation)	Α	No (or only a small number of collapsed cells with a spontaneous reinflation)	Α
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α
Folding lines used	Yes	С	Yes	С
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	В	180° to 360° / 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	Α
Total change of course	Less than 360°	Α	Less than 360°	Α
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	Α	Yes, no turn reversal	С
Twist occurs	No	Α	No	Α
Cascade occurs	No	Α	No	Α

Folding lines used	Yes	С	Yes	С
15. Directional control with a maintained	A			
asymmetric collapse	Yes	Α	Yes	Α
Able to keep course				
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	A	^	N	^
Spin occurs	No	Α	No	Α
17. Low speed spin tendency	A			
Spin occurs	No	Α	No	Α
18. Recovery from a developed spin	В			
Spin rotation angle after release	Stops spinning in 90° to 180°	В	Stops spinning in 90° to 180°	В
Cd	No	Α	No	Α
Cascade occurs				
19. B-line stall	onot available	0	not available	0
Change of course before release	not available	U	not available	U
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 Pin com	В			
20. Big ears Entry procedure	Dedicated controls	Α	Dedicated controls	Α
Liny procedure	Stable flight	Α	Stable flight	Α
Behaviour during big ears	Stable light	^	Stable light	^
Recovery	Spontaneous in less than 3 s	Α	Recovery through pilot action in less than a further 3 s	В
B: 6 1 1 1	Dive forward 0° to 30°	Α	Dive forward 0° to 30°	Α
Dive forward angle on exit				
21. Big ears in accelerated flight	B Dedicated controls	Α	Dedicated controls	Λ
Entry procedure	Dedicated controls	A	Dedicated controls	Α
Behaviour during big ears	Stable flight	Α	Stable flight	Α
Recovery	Spontaneous in less than 3 s	Α	Recovery through pilot action in less than a further 3 s	В
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. Alternative means of directional control	A			
180° turn achievable in 20 s	Yes	Α	Yes	Α
Stall or spin occurs	No	Α	No	Α
23. Any other flight procedure and/or	0			
configuration described in the user's manual	not available	0	not available	0
Procedure works as described				
Procedure suitable for novice pilots	not available	0	not available	0
Cascade occurs	not available	0	not available	0

24. Comments of test pilot
Alexandre Jofresa
Big ears pull B3 line.

Anselm Rauh None