


FTR - Flight Test Report

Dieser Prüfbericht darf ohne schriftliche Zustimmung der EAPR nicht, auch nicht auszugsweise, vervielfältigt werden.

Manufacturer	 UP International Kreuzeckbahnstraße 7 D-82462 Garmisch-Partenkirchen	Type testing No.	EAPR-GS-0797/18
		serial number	XD89-02-1-181-7575
Model	Meru SM	Location	Gardasee Rofan, Achensee



Rev. 2.3 - 26.11.2014
 EAPR GmbH - Marktstr. 11
 D-87730 Bad Grönenbach - Germany

Date of testing	06.04.2018	Minimum take off weight 90 kg	Maximum take off weight 105 kg
Testpilot	Mike Küng		Anselm Rauh
Harness	Eapr-Testequipment		EAPR light
Pilot's take off weight	90 kg		107 kg

Classification	D
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Test-criteria	Minimum take off weight	Evaluation	Maximum take off weight	Evaluation
1. Inflation / take-off - 4.4.1				
Rising behavior	Easy rising, some pilot correction is required	B	Easy rising, some pilot correction is required	B
Special take off technique required	No	A	No	A
2. Landing - 4.4.2				
Special landing technique required	No	A	No	A
3. Speeds in straight flight - 4.4.3				
Trim speed more than 30km/h	Yes	A	Yes	A
Speed range using the controls larger than 10km/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 - 4.4.4				
Max. weight in flight up to 80kg		-		-
Max. weight in flight 80 to 100kg		-		-
Max. weight in flight greater than 100kg	Increasing 35cm - 50cm	D	Increasing 35cm - 50cm	D
5. Pitch stability exiting accelerated flight - 4.4.5				
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 - 4.4.6				
Collapse occurs	No	A	No	A
7. Roll stability and damping - 4.4.7				
Oscillations	Reducing	A	Reducing	A
8. Stability in gentle spirals - 4.4.8				
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A
9. Behaviour exiting a fully developed spiral dive - 4.4.9				
Initial response of glider (first 180°)	No immediate reaction	B	No immediate reaction	B
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A
Turn angle to recover normal flight	720° to 1080°, spontaneous recovery	B	1080° to 1440°, spontaneous recovery	C
10. Symmetric front collapse - 4.4.10				
Folding lines used	Yes	D	Yes	D
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in less than 3 sec	A	Spontaneous in less than 3 sec	A
Dive forward angle on exit	30° - 60° Entering a turn of less than 90°	B	0° - 30° Keeping course	A
Cascade occurs	No	A	No	A
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in 3 to 5 sec	B	Spontaneous in 3 to 5 sec	B
Dive forward angle on exit	30° - 60° Entering a turn of less than 90°	B	30° - 60° Entering a turn of less than 90°	B
Cascade occurs	No	A	No	A
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Spontaneous in 3 to 5 sec	B	Spontaneous in 3 to 5 sec	B
Dive forward angle on exit	30° - 60° Entering a turn of 90° to 180°	C	30° - 60° Entering a turn of 90° to 180°	C
Cascade occurs	No	A	No	A
11. Exiting deep stall (parachutal stall) - 4.4.11				
Deep stall achieved	Yes		Yes	
Recovery	Recovery through pilot action in less than a further 5 sec	D	Recovery through pilot action in less than a further 5 sec	D
Dive forward angle on exit	0° - 30°	A	0° - 30°	A
Change of course	Changing course 45° or more	C	Changing course 45° or more	C
Cascade occurs	No	A	No	A

12. High angle of attack recovery - 4.4.12											
Recovery	Recovery through pilot action in less than a further 5 sec				D	Recovery through pilot action in less than a further 5 sec				D	
Cascade occurs	No				A	No				A	
13. Recovery from a developed full stall - 4.4.13											
Dive forward angle on exit	30° - 60°				B	30° - 60°				B	
Collapse	No collapse				A	No collapse				A	
Cascade occurs (other than collapse)	No				A	No				A	
Rocking backward	Less than 45°				A	Less than 45°				A	
Line tension	Most lines tight				A	Most lines tight				A	
14. Asymmetric collapse (trim speed) - 4.4.14											
Folding lines used	Yes				D	Yes				D	
Change of course until re-inflation	trim speed, max 50% collapse	< 90°	Dive or roll angle	15° - 45°	A	< 90°	Dive or roll angle	15° - 45°	A		
		Spontaneous re-inflation				A	Spontaneous re-inflation				A
Re-inflation behavior	trim speed, max 50% collapse	Less than 360°				A	Less than 360°				A
Total change of course		No				A	No				A
Collapse on the opposite side occurs		No				A	No				A
Twist occurs		No				A	No				A
Cascade occurs		No				A	No				A
Change of course until re-inflation	trim speed, max 75% collapse	90° - 180°	Dive or roll angle	15° - 45°	B	90° - 180°	Dive or roll angle	15° - 45°	B		
		Spontaneous re-inflation				A	Spontaneous re-inflation				A
Re-inflation behavior	trim speed, max 75% collapse	Less than 360°				A	Less than 360°				A
Total change of course		No				A	No				A
Collapse on the opposite side occurs		No				A	No				A
Twist occurs		No				A	No				A
Cascade occurs		No				A	No				A
Change of course until re-inflation	accelerated, max 50% collapse	90° - 180°	Dive or roll angle	15° - 45°	B	< 90°	Dive or roll angle	15° - 45°	A		
		Spontaneous re-inflation				A	Inflates in less than 3 sec from start of pilot action				C
Re-inflation behavior	accelerated, max 50% collapse	Less than 360°				A	Less than 360°				A
Total change of course		No				A	No				A
Collapse on the opposite side occurs		No				A	No				A
Twist occurs		No				A	No				A
Cascade occurs		No				A	No				A
Change of course until re-inflation	accelerated, max 75% collapse	90° - 180°	Dive or roll angle	45° - 60°	C	90° - 180°	Dive or roll angle	60° - 90°	D		
		Spontaneous re-inflation				A	Spontaneous re-inflation				A
Re-inflation behavior	accelerated, max 75% collapse	Less than 360°				A	Less than 360°				A
Total change of course		No				A	No				A
Collapse on the opposite side occurs		No				A	No				A
Twist occurs		No				A	No				A
Cascade occurs		No				A	No				A
15. Directional control with a maintained asymmetric collapse - 4.4.15											
Able to keep course straight	Yes				A	Yes				A	
180° turn away from the collapsed side possible in 10 sec	Yes				A	Yes				A	
Amount of control range between turn and stall or spin	25% to 50% of the symmetric control travel				C	More than 50% of the symmetric control travel				A	
16. Trim speed spin tendency - 4.4.16											
Spin occurs	No				A	No				A	
17. Low speed spin tendency - 4.4.17											
Spin occurs	No				A	No				A	
18. Recovery from a developed spin - 4.4.18											
Spin rotation angle after release	Stops spinning in 90° to 180°				C	Stops spinning in 90° to 180°				C	
Cascade occurs	No				A	No				A	
19. B-line-stall - 4.4.19											
Change of course before release					NA					NA	
Behaviour before release					NA					NA	
Recovery					NA					NA	
Dive forward angle on exit					NA					NA	
Cascade occurs					NA					NA	
20. Big ears - 4.4.20											
Entry procedure	Standard technique				A	Special device required				A	
Behaviour during big ears	Stable flight				A	Stable flight				A	
Recovery	Spontaneous in 3 to 5 sec				B	Spontaneous in less than 3 sec				A	
Dive forward angle on exit	0° - 30°				A	0° bis 30°				A	
21. Big Ears in accelerated flight - 4.4.21											
Entry procedure	Standard technique				A	Special device required				A	
Behaviour during big ears	Stable flight				A	Stable flight				A	
Recovery	Spontaneous in 3 to 5 sec				A	Spontaneous in 3 to 5 sec				A	
Dive forward angle on exit	0° - 30°				A	0° bis 30°				A	
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight				A	Stable flight				A	
23. Alternative means of directional control - 4.4.22											
180° turn achievable in 20 sec	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 - 4.4.23											
Procedure works as described					NA					NA	
Procedure suitable for novice pilots					NA					NA	
Cascade occurs					NA					NA	
24. Remarks of testpilot:											