


Manufacturer		Type testing No.	EAPR-GS-7509/12
		Date of testing	16.11.2011
Model	Ion 2 M	Location	Schruns



EAPR e.V - Marktstr. 11 - D-87730 Bad Grönenbach - Germany

	Minimum take off weight		Maximum take off weight	
Testpilot	Hannes Tschofen		Anselm Rauh	
Harness	EAPR Equipment		EAPR Test Equipment	
Pilot's take off weight	100 kg		130 kg	

Classification	B
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Test-criteria	Minimum take off weight	Evaluation	Maximum take off weight	Evaluation	
1. Inflation / take-off - 4.1.1					
Rising behavior	Smooth, easy and constant rising	A	Smooth, easy and constant rising	A	
Special take off technique required	No	A	No	A	
2. Landing - 4.1.2					
Special landing technique required	No	A	No	A	
3. Speeds in straight flight - 4.1.3					
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	Less than 25 km/h	A	Less than 25 km/h	A	
4. Control movement - 4.1.4					
Max. weight in flight up to 80kg		-		-	
Max. weight in flight 80 to 100kg	Increasing > 60cm	A	Increasing > 60cm	A	
Max. weight in flight greater than 100kg		-		-	
5. Pitch stability exiting accelerated flight - 4.1.5					
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 - 4.1.6					
Collapse occurs	No	A	No	A	
7. Roll stability and damping - 4.1.7					
Oscillations	Reducing	A	Reducing	A	
8. Stability in gentle spirals - 4.1.8					
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A	
9. Behaviour in a steeply banked turn - 4.1.9					
Sink rate after two turns	Up to 12m/s	A	More than 14m/s	B	
10. Symmetric front collapse - 4.1.10					
Entry	trim speed	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		0° - 30° Keeping course	A	0° - 30° Keeping course	A
Cascade occurs		No	A	No	A
Entry	accelerated	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		0° - 30° Keeping course	A	30° - 60° Keeping course	B
Cascade occurs		No	A	No	A

11. Exiting deep stall (parachutal stall) - 4.1.11									
Deep stall achieved	Yes			Yes					
Recovery	Spontaneous in less than 3 sec	A		Spontaneous in less than 3 sec	A				
Dive forward angle on exit	0° - 30°	A		0° - 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 - 4.1.12									
Recovery	Spontaneous in less than 3 sec	A		Spontaneous in less than 3 sec	A				
Cascade occurs	No	A		No	A				
13. Recovery from a developed full stall - 4.1.13									
Dive forward angle on exit	0° - 30°	A		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) - 4.1.14									
Change of course until re-inflation	trim speed, max 50% collapse	< 90°	Dive or roll angle	0° - 15°	A	< 90°	Dive or roll angle	15° - 45°	A
Re-inflation behavior		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		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°	Dive or roll angle	15° - 45°	A	90° - 180°	Dive or roll angle	15° - 45°	B
Re-inflation behavior		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		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°	Dive or roll angle	0° - 15°	A	< 90°	Dive or roll angle	15° - 45°	A
Re-inflation behavior		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		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°	Dive or roll angle	15° - 45°	A	90° - 180°	Dive or roll angle	15° - 45°	B
Re-inflation behavior		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		A	No		A		
Twist occurs		No		A	No		A		
Cascade occurs	No		A	No		A			
15. Directional control with a maintained asymmetric collapse - 4.1.15									
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	More than 50% of the symmetric control travel	A		More than 50% of the symmetric control travel	A				
16. Trim speed spin tendency - 4.1.16									
Spin occurs	No	A		No	A				
17. Low speed spin tendency - 4.1.17									
Spin occurs	No	A		No	A				
18. Recovery from a developed spin - 4.1.18									
Spin rotation angle after release	Stops spinning in less than 90°	A		Stops spinning in less than 90°	A				
Cascade occurs	No	A		No	A				
19. B-line-stall - 4.1.19									
Change of course before release	Changing course less than 45°	A		Changing course less than 45°	A				
Behaviour before release	Remains stable with straight span	A		Remains stable with straight span	A				
Recovery	Spontaneous in less than 3 sec	A		Spontaneous in less than 3 sec	A				
Dive forward angle on exit	0° - 30°	A		0° - 30°	A				
Cascade occurs	No	A		No	A				
20. Big ears - 4.1.20									
Entry procedure	Special device required	A		Special device required	A				
Behaviour during big ears	Stable flight	A		Stable flight	A				
Recovery	Spontaneous in less than 3 sec	A		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 - 4.1.21									
Entry procedure	Special device required	A		Special device required	A				
Behaviour during big ears	Stable flight	A		Stable flight	A				
Recovery	Spontaneous in less than 3 sec	A		Spontaneous in less than 3 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				

22. Behaviour exiting a steep spiral - 4.1.22				
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	A
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	Less than 720°, spontaneous recovery	A
23. Alternative means of directional control - 4.1.23				
180° turn achievable in 20 sec	Yes	A	Yes	A
Stall or spin occurs	No	A	No	A
24. Any other flight procedure and/or configuration described in the user's manual - 4.1.24				
Procedure works as described		NA		NA
Procedure suitable for novice pilots		NA		NA
Cascade occurs		NA		NA
25. Remarks of testpilot:				
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