Manufacturer		Type testing No.	EAPR-GS-7508/12	
		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 w	eight	Maximum take off weight		
Testpilot	Hannes Tschofen		Anselm Rauh		
Harness	EAPR Equipment		EAPR Test Equipment		
Pilot's take off weight	90 kg		110 kg	1	

Classification



Test-criteria		Minimum take off weight	Evaluation	Maximum take off weight	Evaluation
1. Inflation / take-off - 4.1.1					
Rising behavior	sing behavior		А	Smooth, easy and constant rising	А
Special take off technique required		No	Α	No	А
2. Landing - 4.1.2					
Special landing technique required		No	Α	No	Α
3. Speeds in straight flight - 4.1.3					
Trim speed more than 30km/h		Yes	Α	Yes	Α
Speed range using the controls larger than 10km/h		Yes	А	Yes	A
Minimum speed		Less than 25 km/h	Α	Less than 25 km/h	Α
4. Control movement - 4.1.4					
Max. weight in flight up to 80kg			-		-
Max. weight in flight 80 to 100kg		Increasing > 60cm	А	Increasing > 60cm	А
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°	Α	Dive forward less than 30°	Α
Collapse occurs		No	Α	No	Α
6. Pitch stability operating controls during account	elerated fl	ight - 4.1.6			
Collapse occurs		No	Α	No	Α
7. Roll stability and damping - 4.1.7					
Oscillations		Reducing	А	Reducing	А
8. Stability in gentle spirals - 4.1.8					
Tendency to return to straight flight			А	Spontaneous exit	А
9. Behaviour in a steeply banked turn - 4.1.9					
Sink rate after two turns		Up to 12m/s	А	More than 14m/s	В
10. Symmetric front collapse - 4.1.10					
Entry	7	Rocking back less than 45°	А	Rocking back less than 45°	А
Recovery	trim speed	Spontaneous in less than 3 sec	А	Spontaneous in less than 3 sec	А
Dive forward angle on exit	Έ	0° - 30° Keeping course	А	0° - 30° Keeping course	А
Cascade occurs		No	Α	No	Α
Entry	g	Rocking back less than 45°	A	Rocking back less than 45°	Α
Recovery	accelerated	Spontaneous in less than 3 sec	А	Spontaneous in less than 3 sec	А
Dive forward angle on exit	900	0° - 30° Keeping course	А	30° - 60° Keeping course	В
Cascade occurs	to	No	Α	No	Α

Flight Test-Report Stand - 08.04.2010 Seite 1

11. Exiting deep stall (parachutal stall) - 4.1.11									
Deep stall achieved		Yes			Yes				
Recovery		Spontaneous in less than 3 sec		Α	Spontaneous in less than 3 sec			Α	
Dive forward angle on exit		0° - 30°		Α	0° - 30°			Α	
Change of course		Changing course	e less than 45°		Α	Changing course	e less than 45°		Α
Cascade occurs		No			Α	No			А
12. High angle of attack recovery - 4.1.12		T			1	1			1
Recovery		Spontaneous in	less than 3 sec		Α	Spontaneous in	less than 3 sec		Α
Cascade occurs		No			А	No			Α
13. Recovery from a developed full stall - 4.1.1	3								
Dive forward angle on exit		0° - 30°			A	0° - 30°			Α
Callapse Cascade occurs (other than collapse)		No collapse		A	No collapse			Α	
Rocking backward		Less than 45°			A	Less than 45°		A	
Line tension		Most lines tight		Α	Most lines tight			Α	
14. Asymmetric collapse (trim speed) - 4.1.14	,	,		,	_				
Change of course until re-inflation	Q.	< 90°	Dive or roll angle	15° - 45°	Α	< 90°	Dive or roll angle	15° - 45°	Α
5	trim speed, max 50% collapse			l .					
Re-inflation behavior	trim speed, x 50% colla	Spontaneous re-	-inflation		Α	Spontaneous re-	-inflation		Α
Total change of course Collapse on the opposite side occurs	- iii 50%	Less than 360° No			A	Less than 360° No			A
Twist occurs	tr max	No			A	No			A
Cascade occurs	_	No			A	No			A
Change of course until re-inflation	0	< 90°	Dive or roll angle	15° - 45°	Α	90° - 180°	Dive or roll angle	15° - 45°	В
	trim speed, max 75% collapse			<u> </u>					
Re-inflation behavior	trim speed x 75% colla	Spontaneous re-	-inflation		Α	Spontaneous re-	-inflation		Α
Total change of course	im sl 75%	Less than 360°			Α	Less than 360°			Α
Collapse on the opposite side occurs Twist occurs	tr.	No No			A	No No			A
Cascade occurs	_ =	No			A	No			A
						1			
Change of course until re-inflation	bse	< 90°	Dive or roll angle	15° - 45°	Α	< 90°	Dive or roll angle	15° - 45°	Α
Re-inflation behavior	accelerated, max 50% collapse	Spontaneous re-	-inflation		Α	Spontaneous re-	-inflation		Α
Total change of course	seler %0%	Less than 360°			А	Less than 360°			Α
Collapse on the opposite side occurs	ax 5	No			A	No			A
Twist occurs Cascade occurs	٤	No No			A	No No			A A
		90° - 180°	Dive or roll angle	15° - 45°	В	90° - 180°	Dive or roll angle	15° - 45°	В
Change of course until re-inflation	ı, apse	90 - 180	Dive or roll angle	15 - 45	В	90 - 180	Dive or roll angle	15 - 45	В
Re-inflation behavior	accelerated, max 75% collapse	Spontaneous re-	-inflation		Α	Spontaneous re-	-inflation		Α
Total change of course	cele 75%	Less than 360°			Α	Less than 360°			Α
Collapse on the opposite side occurs Twist occurs	ас јах ј	No No			A	No No			A A
Cascade occurs		No			A	No			A
15. Directional control with a maintained asymmetry	metric col	llapse - 4.1.15							
Able to keep course straight		Yes			Α	Yes			Α
180° turn away from the collapsed side possible in 10 sec Yes				Α	Yes			Α	
Amount of control range between turn and stall or spin		More than 50% of the symmetric control travel			А	More than 50% of the symmetric control travel			Α
16. Trim speed spin tendency - 4.1.16									
Spin occurs		No			Α	No			А
17. Low speed spin tendency - 4.1.17									
Spin occurs		No			Α	No			Α
18. Recovery from a developed spin - 4.1.18									
Spin rotation angle after release	oin rotation angle after release Stops s		Stops spinning in less than 90°			Stops spinning in	n less than 90°		Α
Cascade occurs	ascade occurs No		No			No			Α
19. B-line-stall - 4.1.19					А				
Change of course before release		Changing course	e less than 45°		Α	Changing course	e less than 45°		Α
Behaviour before release	Behaviour before release		Remains stable with straight span			Remains stable with straight span			Α
Recovery		Spontaneous in	less than 3 sec		Α	Spontaneous in less than 3 sec			Α
		Spontaneous in less than 3 sec 0° - 30°			A	0° - 30°			A
Dive forward angle on exit		0 - 30							A
Dive forward angle on exit Cascade occurs		No - 30			А	No			
Dive forward angle on exit					A	No			
Dive forward angle on exit Cascade occurs			equired		A	Special device re	equired		А
Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20		No	equired				equired		A A
Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure		No Special device re			А	Special device re			
Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery		Special device no Stable flight			A A A	Special device re Stable flight Spontaneous in			A A
Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears		Special device no Stable flight Spontaneous in			A A	Special device re			Α
Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.1.21		Special device re Stable flight Spontaneous in 0° - 30°	less than 3 sec		A A A	Special device re Stable flight Spontaneous in 0° bis 30°	less than 3 sec		A A A
Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.1.21 Entry procedure		Special device of Stable flight Spontaneous in 0° - 30° Special device of	less than 3 sec		A A A A	Special device re Stable flight Spontaneous in 0° bis 30°	less than 3 sec		A A A
Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.1.21 Entry procedure Behaviour during big ears		Special device of Stable flight Spontaneous in 0° - 30° Special device of Stable flight	less than 3 sec		A A A A A	Special device re Stable flight Spontaneous in 0° bis 30° Special device re Stable flight	less than 3 sec		A A A A
Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.1.21 Entry procedure		Special device of Stable flight Spontaneous in 0° - 30° Special device of Stable flight Spontaneous in	less than 3 sec		A A A A	Special device re Stable flight Spontaneous in 0° bis 30° Special device re Stable flight Spontaneous in	less than 3 sec		A A A
Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.1.21 Entry procedure Behaviour during big ears		Special device of Stable flight Spontaneous in 0° - 30° Special device of Stable flight	less than 3 sec		A A A A A	Special device re Stable flight Spontaneous in 0° bis 30° Special device re Stable flight	less than 3 sec		A A A A

Flight Test-Report Stand - 08.04.2010 Seite 2

22. Behaviour exiting a steep spiral - 4.1.22				
Tendency to return to straight flight	Spontaneous exit	Α	Spontaneous exit	Α
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	Α	Less than 720°, spontaneous recovery	Α
23. Alternative means of directional control - 4.1.23	•			
180° turn achievable in 20 sec	Yes	А	Yes	Α
Stall or spin occurs	No	Α	No	Α
24. Any other flight procedure and/or configuration d	escribed in the user's manual - 4.1.24			
Procedure works as descibed		NA		NA
Procedure suitable for novice pilots		NA		NA
Cascade occurs		NA		NA
25. Remarks of testpilot:				
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Flight Test-Report Stand - 08.04.2010 Seite 3