Manufacturer		Type testing No.	EAPR-GS-7673/13	
	MAGPARA	Location	Monaco	XEAPR
Model	Eden 5.24	Bad Grönenbach:	15.01.13	Musterprüfstelle

EAPR GmbH - Marktstr. 11 - D-87730 Bad Grönenbach - Germany

	Minimum take off w	eight	Maximum take off weight		
Date of testing	23.12.12		10.01.13		
Testpilot	Mike Küng		Hannes Tschofen	1	
Harness	EAPR-Testequipment	E	Academy Test Equipment		
Pilot's take off weight	67 kg		85 kg		

Classification

В



Test-criteria		Minimum take off weight	Evaluation	Maximum take off weight	Evaluation
1. Inflation / take-off - 4.1.1					
ising behavior		Smooth, easy and constant rising	А	Smooth, easy and constant rising	А
Special take off technique required		No	A	No	A
2. Landing - 4.1.2		•			
Special landing technique required		No	A	No	А
3. Speeds in straight flight - 4.1.3					
Trim speed more than 30km/h		Yes		Yes	А
Speed range using the controls larger than 10km/h		Yes	А	Yes	А
Minimum speed		Less than 25 km/h	A	Less than 25 km/h	А
4. Control movement - 4.1.4					
Max. weight in flight up to 80kg		Increasing > 55cm	А		-
Max. weight in flight 80 to 100kg			-	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°	А	Dive forward less than 30°	А
Collapse occurs		No A No		No	А
6. Pitch stability operating controls during acc	elerated fl	light - 4.1.6			
Collapse occurs		No	А	No	А
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		Spontaneous exit	А	Spontaneous exit	А
9. Behaviour in a steeply banked turn - 4.1.9					
Sink rate after two turns		12m/s to 14m/s	А	More than 14m/s	В
10. Symmetric front collapse - 4.1.10					
Entry		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	Ē	0° - 30° Keeping course	A	0° - 30° Entering a turn of less than 90°	A
Cascade occurs	t	No	А	No	А
Entry	p	Rocking back less than 45°	A	Rocking back less than 45°	А
Recovery	accelerated	Spontaneous in less than 3 sec	A	Spontaneous in less than 3 sec	А
Dive forward angle on exit	lcce	30° - 60° Keeping course	В	0° - 30° Entering a turn of less than 90°	А
Cascade occurs	ŋ	No	A	No	А
11. Exiting deep stall (parachutal stall) - 4.1.11					

Deep stall achieved		Yes				Yes			
Recovery		Spontaneous in less than 3 sec		А	Spontaneous in less than 3 sec		A		
Dive forward angle on exit	•		Spontaneous in less than 3 sec		A	0° - 30°			A
Change of course		Changing course	less than 45°		A	Changing course	e less than 45°		A
Cascade occurs		No			А	No			А
12. High angle of attack recovery - 4.1.12									
Recovery		Spontaneous in le	ess than 3 sec		A	Spontaneous in	less than 3 sec		А
Cascade occurs		No	No		А	No			А
13. Recovery from a developed full stall - 4.1.1	13	000 000				30° - 60°			
Dive forward angle on exit Collapse		30° - 60° No collapse			B A	No collapse			B A
Cascade occurs (other than collapse)		No			A	No			А
Rocking backward Line tension		Less than 45° Most lines tight			A	Less than 45° Most lines tight			<u>A</u>
14. Asymmetric collapse (trim speed) - 4.1.14		Wost lines tight			A	Most lines tight			A
Change of course until re-inflation		< 90°	Dive or roll angle	0° - 15°	А	< 90°	Dive or roll angle	0° - 15°	А
	trim speed, max 50% collapse	< 30	Dive of foil angle	0 - 13	~	< 30	Dive of foil aligie	0 - 15	~
Re-inflation behavior	colls	Spontaneous re-in	nflation		A	Spontaneous re-	inflation		А
Total change of course	m sp 20%	Less than 360°			A	Less than 360°			А
Collapse on the opposite side occurs Twist occurs	tri nax (No No			A	No No			A
Cascade occurs		No No		A	No No			A	
Change of course until re-inflation	D	90° - 180°	Dive or roll angle	15° - 45°	В	90° - 180°	Dive or roll angle	15° - 45°	В
	trim speed, max 75% collapse	Granitation	flation			Creative	inflatia :		
Re-inflation behavior	speed, % colla	Spontaneous re-in	ntiation		A	Spontaneous re-	Inflation		A
Total change of course Collapse on the opposite side occurs	trim s x 75%	Less than 360° No			A	Less than 360° No			A
Twist occurs	t max	No			A	No			A
Cascade occurs		No			А	No			А
Change of course until re-inflation	se	< 90°	Dive or roll angle	15° - 45°	А	< 90°	Dive or roll angle	15° - 45°	А
Re-inflation behavior	accelerated, max 50% collapse	Spontaneous re-ir	nflation		А	Spontaneous re-inflation			А
Total change of course	celer 50%	Less than 360°			А	Less than 360°			А
Collapse on the opposite side occurs Twist occurs	ac Jax {	No No			A	No No			A
Cascade occurs		No			A	No			A
Change of course until re-inflation	se	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-ir	nflation		А	Spontaneous re-	inflation		А
Total change of course	accelerated, x 75% collap	Less than 360°			A	Less than 360°			А
Collapse on the opposite side occurs Twist occurs	aci lax 7	No		A	No No		A		
Cascade occurs			A	No			A		
15. Directional control with a maintained asym	metric co	llapse - 4.1.15							
Able to keep course straight		Yes			A	Yes			А
180° turn away from the collapsed side possible in	n 10 sec	Yes			A	Yes			А
Amount of control range between turn and stall o	een turn and stall or spin More than 50% of the symmetric control travel								
		More than 50% of	the symmetric c	ontrol travel	А	More than 50% of	of the symmetric c	control travel	А
16. Trim speed spin tendency - 4.1.16		More than 50% of	the symmetric c	ontrol travel	A	More than 50% o	of the symmetric c	control travel	A
Spin occurs		More than 50% of	the symmetric c	ontrol travel	A	More than 50% o	of the symmetric c	control travel	A
Spin occurs 17. Low speed spin tendency - 4.1.17	·	No	the symmetric c	ontrol travel	A	No	of the symmetric c	control travel	A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs	·		the symmetric c	ontrol travel			of the symmetric c	control travel	
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18		No		ontrol travel	A	No		iontrol travel	A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release		No No Stops spinning in		ontrol travel	A A A	No No Stops spinning i		iontrol travel	A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs		No		ontrol travel	A	No		iontrol travel	A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release		No No Stops spinning in	less than 90°	ontrol travel	A A A	No No Stops spinning i	n less than 90°	iontrol travel	A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release		No Stops spinning in No Changing course	less than 90° less than 45°		A A A A A	No Stops spinning i No Changing course	n less than 90° e less than 45°		A A A A A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release		No No Stops spinning in No Changing course Remains stable w	less than 90° less than 45° ith straight span		A A A A A A	No No Stops spinning i No Changing course Remains stable	n less than 90° e less than 45° with straight span		A A A A A A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release		No Stops spinning in No Changing course	less than 90° less than 45° ith straight span		A A A A A	No Stops spinning i No Changing course	n less than 90° e less than 45° with straight span		A A A A A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs		No No Stops spinning in No Changing course Remains stable w Spontaneous in le	less than 90° less than 45° ith straight span		A A A A A A	No Stops spinning i No Changing course Remains stable Spontaneous in	n less than 90° e less than 45° with straight span		A A A A A A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery Dive forward angle on exit		No No Stops spinning in No Changing course Remains stable w Spontaneous in le 0° - 30°	less than 90° less than 45° ith straight span		A A A A A A A A	No Stops spinning i No Changing course Remains stable Spontaneous in 0° - 30°	n less than 90° e less than 45° with straight span		A A A A A A A A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs		No No Stops spinning in No Changing course Remains stable w Spontaneous in le 0° - 30°	less than 90° less than 45° ith straight span ess than 3 sec		A A A A A A A A	No Stops spinning i No Changing course Remains stable Spontaneous in 0° - 30°	n less than 90° e less than 45° with straight span less than 3 sec		A A A A A A A A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20		No No Stops spinning in No Changing course Remains stable w Spontaneous in le 0° - 30° No	less than 90° less than 45° ith straight span ess than 3 sec		A A A A A A A A A	No Stops spinning i No Changing course Remains stable Spontaneous in 0° - 30° No Special device re Stable flight	n less than 90° e less than 45° with straight span less than 3 sec equired		A A A A A A A A A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure		No Stops spinning in No Changing course Remains stable w Spontaneous in le 0° - 30° No Special device rec	less than 90° less than 45° ith straight span ass than 3 sec quired		A A A A A A A A A	No No Stops spinning i No Changing course Remains stable Spontaneous in 0° - 30° No Special device re Stable flight Recovery throug	n less than 90° e less than 45° with straight span less than 3 sec		A A A A A A A A A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery 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		No No Stops spinning in No Changing course Remains stable w Spontaneous in le 0° - 30° No Special device req Stable flight	less than 90° less than 45° ith straight span ass than 3 sec quired		A A A A A A A A A A A	No Stops spinning i No Changing course Remains stable Spontaneous in 0° - 30° No Special device re Stable flight	n less than 90° e less than 45° with straight span less than 3 sec equired		A A A A A A A A A A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery		No No Stops spinning in No Changing course Remains stable w Spontaneous in le 0° - 30° No Special device rec Stable flight Spontaneous in le	less than 90° less than 45° ith straight span ass than 3 sec quired		A A A A A A A A A A A A	No No Stops spinning i No Changing course Remains stable Spontaneous in 0° - 30° No Special device re Stable flight Recovery throug 3 sec	n less than 90° e less than 45° with straight span less than 3 sec equired		A A A A A A A A A A A B
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery 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		No No Stops spinning in No Changing course Remains stable w Spontaneous in le 0° - 30° No Special device rec Stable flight Spontaneous in le	less than 90° less than 45° ith straight span ess than 3 sec quired		A A A A A A A A A A A A	No No Stops spinning i No Changing course Remains stable Spontaneous in 0° - 30° No Special device re Stable flight Recovery throug 3 sec	n less than 90° e less than 45° with straight span less than 3 sec equired h pilot action in le		A A A A A A A A A A A B
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery 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		No No Stops spinning in No Changing course Remains stable w Spontaneous in le 0° - 30° No Stable flight Spontaneous in le 0° - 30°	less than 90° less than 45° ith straight span ess than 3 sec quired		A A A A A A A A A A A A A A A	No No Stops spinning i No Changing course Remains stable Spontaneous in 0° - 30° No Special device re Stable flight Recovery throug 3 sec 0° bis 30° Special device re Stable flight	n less than 90° e less than 45° with straight span less than 3 sec equired h pilot action in le	ess than a further	A A A A A A A A A B A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery 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		No No Stops spinning in No Changing course Remains stable w Spontaneous in le 0° - 30° No Stable flight Spontaneous in le 0° - 30° Stable flight Spontaneous in le 0° - 30° Special device rec	less than 90° less than 45° ith straight span ass than 3 sec quired		A A A A A A A A A A A A A A	No No Stops spinning i No Changing course Remains stable Spontaneous in 0° - 30° No Stable flight Recovery throug 3 sec 0° bis 30° Special device re Stable flight Recovery throug	n less than 90° e less than 45° with straight span less than 3 sec equired h pilot action in le	ess than a further	A A A A A A A A A B A A A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery 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		No No Stops spinning in No Changing course Remains stable with stable	less than 90° less than 45° ith straight span ass than 3 sec quired		A A A A A A A A A A A A A A A A A A	No No Stops spinning i No Changing course Remains stable Spontaneous in 0° - 30° No Special device re Stable flight Recovery throug 3 sec 0° bis 30° Special device re Stable flight	n less than 90° e less than 45° with straight span less than 3 sec equired h pilot action in le	ess than a further	A A A A A A A A A A B A A A A
Spin occurs 17. Low speed spin tendency - 4.1.17 Spin occurs 18. Recovery from a developed spin - 4.1.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.1.19 Change of course before release Behaviour before release Recovery 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 Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.1.21 Entry procedure Behaviour during big ears Recovery		No No Stops spinning in No Changing course Remains stable w Spontaneous in le 0° - 30° No Special device rec Stable flight Spontaneous in le 0° - 30° Special device rec Stable flight Spontaneous in 3	less than 90° less than 45° ith straight span ass than 3 sec quired		A A A A A A A A A A A A A A A A A A A	No No Stops spinning i No Changing course Remains stable Spontaneous in 0° - 30° No Special device re Stable flight Recovery throug 3 sec Stable flight Recovery throug 3 sec	n less than 90° e less than 45° with straight span less than 3 sec equired h pilot action in le	ess than a further	A A A A A A A A A A B A A A A B A A B

Tendency to return to straight flight	Spontaneous exit	А	Spontaneous exit	A
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	А	Less than 720°, spontaneous recovery	А
23. Alternative means of directional control -	4.1.23			
180° turn achievable in 20 sec	Yes	А	Yes	А
Stall or spin occurs	No	А	No	А
24. Any other flight procedure and/or configu	ration described 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:				
Copyright Ralf Antz 2012	This Fligh	nt Test Report	was generated automatically and is valid wi	thout signature