FTR - Flight Test Report Dieser Prüfbericht darf ohne schriftliche Zustimmung der EAPR nicht, auch nich

Manufacturer	AIRDESIGN	Type testing No.	EAPR-GS-0626/17	
	AIRDESIGN GmbH Rhombergstraße 9 A-6967 Absam	serial number	XD23SIPP170102	
Model	Hero S	I At - ii	Achensee	
Comment		Location	Maurach	



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

Date of testing	28.03.2017	Minimum take o 70 kg	off weight	Maximum take off weight 85 kg			
Testpilot				Mike Küng			
Harness		EAPR- Testequipment		EAPR Equipment			
Pilot's take off weigh	nt	70	kg /	85	kg 🎉		





est-criteria		Minimum take off weight	Evaluation	Maximum take off weight	Evaluatio		
1. Inflation / take-off - 4.4.1		•					
sing behavior		Easy rising, some pilot correction is required	В	Easy rising, some pilot correction is required	В		
Special take off technique required		No	Α	No	Α		
2. Landing - 4.4.2		1 -					
Special landing technique required		No	А	No	A		
3. Speeds in straight flight - 4.4.3		110		110			
		Yes		V			
Trim speed more than 30km/h			Α	Yes	Α		
Speed range using the controls larger than 10km/h	1	Yes	Α	Yes	A B		
Minimum speed		25 km/h to 30 km/h	В	25 km/h to 30 km/h			
4. Control movement - 4.4.4							
Max. weight in flight up to 80kg		Increasing 40cm - 55cm	С		-		
Max. weight in flight 80 to 100kg			-	Increasing 45cm - 60cm	С		
Max. weight in flight greater than 100kg			-		-		
5. Pitch stability exiting accelerated flight - 4.4	.5	•					
Dive forward angle on exit		Dive forward less than 30°	А	Dive forward 30° to 60°	С		
Collapse occurs		No	Α	No	A		
6. Pitch stability operating controls during account	elerated	flight - 4.4.6					
Collapse occurs		No A No		No	Α		
7. Roll stability and damping - 4.4.7							
Oscillations		Reducing	Α	Reducing	A		
8. Stability in gentle spirals - 4.4.8					, ,,		
Tendency to return to straight flight		Spontaneous exit	А	Spontaneous exit	A		
9. Behaviour exiting a fully developed spiral di	uo 11			Sportaneous exit			
9 7	ve - 4.4.	No immediate reaction		No immediate reaction			
itial response of glider (first 180°)		Spontaneous exit	B A	Spontaneous exit	B		
Tendency to return to straight flight Turn angle to recover normal flight		Less than 720°, spontaneous recovery	Less than 720°, spontaneous recovery	A			
		Less than 720; spontaneous recovery	Α	Less than 720 , spontaneous recovery	A		
10. Symmetric front collapse - 4.4.10				I			
Folding lines used		Yes 450	D	Yes	D		
Entry	~ 30%	Rocking back less than 45°	Α	Rocking back less than 45°	А		
Recovery		Spontaneous in less than 3 sec	Α	Spontaneous in less than 3 sec	Α		
Dive forward angle on exit	trim speed	0° - 30° Keeping course	Α	30° - 60° Entering a turn of less than 90°	В		
Cascade occurs		No	Α	No	Α		
Entry	> 20%	Rocking back less than 45°	Α	Rocking back less than 45°	Α		
Recovery	g < paeds	Spontaneous in less than 3 sec	Α	Spontaneous in 3 to 5 sec	В		
Dive forward angle on exit		30° - 60° Entering a turn of less than	90° B	30° - 60° Entering a turn of less than 90°	В		
Cascade occurs	wid.	No	Α	No	Α		
Entry	%0	Rocking back less than 45°	Α	Rocking back less than 45°	Α		
Recovery	accelerated > 50%	Spontaneous in less than 3 sec	Α	Spontaneous in 3 to 5 sec	В		
Dive forward angle on exit	celera	30° - 60° Entering a turn of less than	90° B	30° - 60° Entering a turn of less than 90°	В		
Cascade occurs	ao	No	Α	No	Α		
11. Exiting deep stall (parachutal stall) - 4.4.11							
Deep stall achieved		Yes		Yes			
Recovery		Spontaneous in less than 3 sec	А	Spontaneous in less than 3 sec			
Dive forward angle on exit		30° - 60°	В	30° - 60°			
Change of course		Changing course less than 45°	A	Changing course less than 45°			
Cascade occurs		No	A	No A			

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12. High angle of attack recovery - 4.4.12									
Recovery		Spontaneous in less than 3 sec			Α	Spontaneous in less than 3 sec			А
Cascade occurs		No			Α	No			Α
13. Recovery from a developed full stall - 4.4.13		1.0				- 12			
Dive forward angle on exit		30° - 60°			В	60° - 90°			С
Cascade occurs (other than collapse)		No collapse No			A	Symmetric colla No	pse		C A
Rocking backward		Less than 45°			A	Less than 45°			A
Line tension		Most lines tight			Α	Most lines tight			А
14. Asymmetric collapse (trim speed) - 4.4.14		l V				Lyas			D
Folding lines used		Yes < 90°		150 450	D	Yes 90° - 180°	Dive or roll angle	450.000	D C
Change of course until re-inflation	bse	< 90"	Dive or roll angle	15° - 45°	Α	90" - 180"	Dive or roll angle	45° - 60°	C
Re-inflation behavior	colla	Spontaneous re-inflation Less than 360°			Α	Spontaneous re	Α		
Total change of course	trim speed, max 50% collapse				Α	Less than 360°			A
Collapse on the opposite side occurs Twist occurs	max rt	No No		A	No No			A	
Cascade occurs		No			A	No	_		A
Change of course until re-inflation	ø.	90° - 180°	Dive or roll angle	15° - 45°	В	90° - 180°	Dive or roll angle	45° - 60°	С
Re-inflation behavior	trim speed, max 75% collapse	Spontaneous re-in	oflation	l	Α	Spontaneous re	-inflation	l	Α
Total change of course	trim speed x 75% colls	Spontaneous re-inflation			A	Less than 360°			A
Collapse on the opposite side occurs	trim IX 75	Less than 360° No			A	No			A
Twist occurs	E E	No No		Α	No			A	
Cascade occurs		No			Α	No			Α
Change of course until re-inflation	Φ.	90° - 180°	Dive or roll angle	15° - 45°	В	90° - 180°	Dive or roll angle	45° - 60°	С
Re-inflation behavior	accelerated, max 50% collapse	Spontaneous re-in	oflation	1	Α	Spontaneous re	Linflation	1	Α
Total change of course	accelerated, x 50% colla	Less than 360°	mation			Less than 360°	milation		A
Collapse on the opposite side occurs	acce × 50°	No			A	No			A
Twist occurs	ma	No			Α	No			Α
Cascade occurs	esc	No			A	No	1		A
Change of course until re-inflation		90° - 180°	Dive or roll angle	45° - 60°	С	180° - 360°	Dive or roll angle	60° - 90°	D
Re-inflation behavior	accelerated, max 75% collapse	Spontaneous re-in	nflation		Α	Spontaneous re	-inflation		Α
Total change of course	accelerated x 75% colla	Less than 360°		Α	Less than 360° No			Α	
Collapse on the opposite side occurs	aco	No No No						A	A
Twist occurs Cascade occurs	=				A	No No	A		
15. Directional control with a maintained asym	metric co								
Able to keep course straight		Yes			Α	Yes			Α
180° turn away from the collapsed side possible is	n 10 sec	Yes			Α	Yes			Α
Amount of control range between turn and stall or spin		25% to 50% of the symmetric control travel			С	25% to 50% of	the symmetric cor	ntrol travel	С
-		1	,		Ů	1			ŭ
16. Trim speed spin tendency - 4.4.16 Spin occurs		No			A	No			A
17. Low speed spin tendency - 4.4.17		THO .			, ,,				
Spin occurs		No			Α	No			Α
18. Recovery from a developed spin - 4.4.18									
Spin rotation angle after release		Stops spinning in less than 90°			Α	Stops spinning in less than 90°			Α
Cascade occurs		No			Α	No	Α		
19. B-line-stall - 4.4.19									
Change of course before release		Changing course less than 45°			Α	Changing course less than 45°			Α
Behaviour before release		Remains stable with straight span		Α	Remains stable without straight span			С	
Recovery		Spontaneous in less than 3 sec		Α	Spontaneous in less than 3 sec			Α	
Dive forward angle on exit		30° - 60°			Α	30° - 60°			Α
Cascade occurs		No			A	No			A
20. Big ears - 4.4.20		1							
Entry procedure		Standard technique			Α	Standard technique			Α
Behaviour during big ears		Stable flight			Α	Stable flight			Α
Recovery		Spontaneous in 3 to 5 sec			В	Spontaneous in 3 to 5 sec			В
Dive forward angle on exit		0° - 30°			Α	0° bis 30°			Α
21. Big Ears in accelerated flight - 4.4.21									
Entry procedure		Standard technique		Α	Standard technique			Α	
Behaviour during big ears		Unstable flight		С	Unstable flight			С	
Recovery		Spontaneous in 3 to 5 sec			Α	Spontaneous in 3 to 5 sec			Α
Recovery	Dive forward angle on exit		0° - 30°		Α	0° bis 30°			Α
Dive forward angle on exit		. —	Stable flight		Α	Unstable flight			С
Dive forward angle on exit Behaviour immediately after releasing the accelar	ator while	Stable flight							
Dive forward angle on exit Behaviour immediately after releasing the accelar maintaining big ears		Stable flight							
Dive forward angle on exit Behaviour immediately after releasing the accelar maintaining big ears 23. Alternative means of directional control -						l v			
Dive forward angle on exit Behaviour immediately after releasing the accelar maintaining big ears 23. Alternative means of directional control - 180° turn achievable in 20 sec		Yes			A	Yes			А
Dive forward angle on exit Behaviour immediately after releasing the accelar maintaining big ears 23. Alternative means of directional control - 180° turn achievable in 20 sec Stall or spin occurs	4.4.22	Yes	manuel 4 f	22	A A	Yes No			A A
Dive forward angle on exit Behaviour immediately after releasing the accelar maintaining big ears 23. Alternative means of directional control 180° turn achievable in 20 sec Stall or spin occurs 23. Any other flight procedure and/or configur	4.4.22	Yes	s manual - 4.4.	23	А				A
Dive forward angle on exit Behaviour immediately after releasing the accelar maintaining big ears 23. Afternative means of directional control 180° turn achievable in 20 sec Stall or spin occurs 23. Any other flight procedure and/or configur Procedure works as descibed Procedure suitable for novice pilots	4.4.22	Yes	s manual - 4.4.	23	A NA NA				A NA NA
Dive forward angle on exit Behaviour immediately after releasing the accelar maintaining big ears 23. Alternative means of directional control - 180° turn achievable in 20 sec Stall or spin occurs 23. Any other flight procedure and/or configur Procedure works as descibed	4.4.22	Yes	s manual - 4.4.	23	A				A NA