Manufacturer		Type testing No.	EAPR-GS-7327/10	
		Date of testing	29.07.2009 - 05.03.2010	
Model	Sportster S	Location	Achensee	



European Academy of Parachute Rigging e.V - Luitpoldstr. 30 - D87700 Memmingen - Germany Under approval of EPTA European Paraglider Testlaboratory Alicane

	Minimum take off w	eiaht	Maximum take off w	reight
Testpilot	Wibke Becker		Mike Küng	(8)
Harness	Academy Leichtgurtzeug		Academy Gurtzeug	
Pilot's take off weight	60 kg	Mingate Company	85 kg	UNAVER STATES

Classification





Test-criteria		Minimum take off weight	Evaluation	Maximum take off weight		Evaluation
1. Inflation / take-off - 4.4.1						
Rising behavior		Smooth, easy and constant rising	А	Smooth, easy and constant rising		А
Special take off technique required		No	А	No		А
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	ו	Yes	А	Yes	А	
Minimum speed		Less than 25 km/h	А	Less than 25 km/h	า	А
4. Control movement - 4.4.4						
Max. weight in flight up to 80kg		Increasing > 55cm	А			-
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 less	А	
Collapse occurs		No	А	No		А
6. Pitch stability operating controls during acc	elerated f	light - 4.4.6				
Collapse occurs		No	А	No		A
7. Roll stability and damping - 4.4.7						
Oscillations		Reducing	А	Reducing		А
8. Stability in gentle spirals - 4.4.8						
Tendency to return to straight flight Spontan		Spontaneous exit	А	Spontaneous exit		А
9. Behaviour in a steeply banked turn - 4.4.9						
Sink rate after two turns		12m/s to 14m/s	A	More than 14m/s		В
10. Symmetric front collapse - 4.4.10						
Entry		Rocking back less than 45°	А	Rocking back less	s than 45°	А
Recovery	speed	Spontaneous in less than 3 sec	А	Spontaneous in less than 3 sec		А
Dive forward angle on exit	tri	0° - 30° Keeping course	A	30° - 60°	Keeping course	В
Cascade occurs	÷	No	А	No		А
Entry	p	Rocking back less than 45°	A	Rocking back less	s than 45°	A
Recovery	rate	Spontaneous in less than 3 sec	A	Spontaneous in le	ess than 3 sec	A
Dive forward angle on exit	accelerated	0° - 30° Keeping course	A	30° - 60° I	Keeping course	В
Cascade occurs	b D	No	A	No		А

11. Exiting deep stall (parachutal stall) - 4.4.11									
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		30° - 60°			B	30° - 60°			B
Change of course Cascade occurs		Changing course No	e less than 45°		A	Changing course less than 45° No			A
12. High angle of attack recovery - 4.4.12		110			<u> </u>	110			~
						0			•
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 - 4.4.1	3	L							
Dive forward angle on exit Collapse		30° - 60° No collapse			B A	30° - 60° No collapse			B 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			А	Most lines tight			А
14. Asymmetric collapse (trim speed) - 4.4.14	1	r	.	T		-	T	T	
Change of course until re-inflation	Q	< 90°	Dive or roll angle	0° - 15°	А	90° - 180°	Dive or roll angle	15° - 45°	В
5	trim speed, max 50% collapse								
Re-inflation behavior	bee	Spontaneous re-inflation			A	Spontaneous re-	-inflation		A
Total change of course	im s 50%	Less than 360°			А	Less than 360°			А
Collapse on the opposite side occurs Twist occurs	tr nax	No No			A	No No			A
Cascade occurs	<u>ء</u>	No			A	No			A
Change of course until re-inflation	l, apse	90° - 180°	Dive or roll angle	15° - 45°	В	90° - 180°	Dive or roll angle	45° - 60°	С
			or row alligie	10 - 40	U	00 100	s or row alligie		U U
Re-inflation behavior	speed, % colla	Spontaneous re-	-inflation		А	Spontaneous re-	-inflation		А
Total change of course	trim speed, max 75% collapse	Less than 360°			A	Less than 360°			A
Collapse on the opposite side occurs	trin ax 75	No			А	No			А
Twist occurs	Ĕ	No			A	No			A
Cascade occurs		No			A	No			A
Change of course until re-inflation	Ð	90° - 180°	Dive or roll angle	15° - 45°	В	90° - 180°	Dive or roll angle	15° - 45°	В
	accelerated, max 50% collapse								
Re-inflation behavior	coll	Spontaneous re-	-inflation		A	Spontaneous re-	-inflation		A
Total change of course	cele 50%	Less than 360°			А	Less than 360°			А
Collapse on the opposite side occurs	ac ax f	No			A	No No			A
Twist occurs Cascade occurs	E	No No			A	No			A A
	accelerated, max 75% collapse	90° - 180°	Discours	150 450		90° - 180°	Dise see ll se de	45% 60%	С
Change of course until re-inflation		90* - 180*	Dive or roll angle	15° - 45°	В	90" - 180"	Dive or roll angle	45° - 60°	C
Re-inflation behavior		Spontaneous re-	-inflation		А	Spontaneous re-inflation			А
Total change of course	elera 5% (Less than 360°			А	A Less than 360° A Yes, no turn reversal A No A No			A
Collapse on the opposite side occurs	acc ax 7;	No							С
Twist occurs	Ĕ	No No							A
Cascade occurs	motrio col				A	INO			A
15. Directional control with a maintained asymptotic asymptotic descent and the straight and the straight as t		Yes			А	Yes			A
	10 000								
80° 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			А	More than 50% of the symmetric control travel			А
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			А	No			А
18. Recovery from a developed spin - 4.4.18									
Spin rotation angle after release		Stops spinning in	n less than 90°		А	Stops spinning in	n less than 90°		А
Cascade occurs 19. B-line-stall - 4.4.19		No			A	No			A
19. B-line-stall - 4.4.19 Change of course before release		Changing course	e less than 45°		А	Changing course	e less than 45°		۸
									A
Behaviour before release		Remains stable	with straight span		A	Remains stable	with straight span		A
Recovery		Spontaneous in	less than 3 sec		А	Spontaneous in	less than 3 sec		А
Dive forward angle on exit		0° - 30°			Α	30° - 60°			A
Cascade occurs		No			A	No			A
20. Big ears - 4.4.20									
Entry procedure		Special device re	equired		А	Special device re	equired		А
		· ·							
Behaviour during big ears		Stable flight Recovery throug	h pilot action in le	ss than a further	A	Stable flight			A
Recovery		3 sec	,	, and a farmer	В	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									
		Special device re	equired		А	Special device re	equired		А
Entry procedure Special device required							A		
		Stable flight		Behaviour during big ears Stable flight Recovery through pilot action in less than a further Recovery through pilot action in less than a further		Stable flight			A
Behaviour during big ears		-	h pilot action in le	ess than a further	A		lass that is 0		
Behaviour during big ears Recovery		Recovery throug 3 sec	gh pilot action in le	ess than a further	В	Spontaneous in	less than 3 sec		А
Behaviour during big ears		Recovery throug	gh pilot action in le	ess than a further			less than 3 sec		A A
Behaviour during big ears Recovery		Recovery throug 3 sec	gh pilot action in le	ess than a further	В	Spontaneous in	less than 3 sec		

22. Behaviour exiting a steep spiral - 4.4.22				
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	
23. Alternative means of directional control	4.4.23			
180° turn achievable in 20 sec	Yes	А	Yes	А
Stall or spin occurs	No	A	No	A
24. Any other flight procedure and/or configur	ation described in the user's manual - 4.4.24			
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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