FTR - Flight Test Report

Manufacturer	SKYWALK	Type testing No.	EAPR-GS-0490/16	
	Skywalk GmbH & Co.KG Windeckstr. 4 D-83250 Maquartstein	serial number	mx24-15.0-0022-#5	
Model	Tonka 2-15	Leastion	Brauneck	
		Location	Gardasee	



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

Date of testing	12.02.2016	Minimum take 60 kg		Maximum take off weight 90 kg		
Testpilot		Sepp Bauer		Mike Küng		
Harness		EAPR Equipment		EAPR-Testequipment		
Pilot's take off weigh	nt	60	kg	90 kg		





Test-criteria	est-criteria		Evaluation	Maximum take off weight	Evaluation
1. Inflation / take-off - 4.4.1					
ising behavior		Easy rising, some pilot correction is required B Smooth, easy and constant rising, no pilot correction required		Smooth, easy and constant rising, no pilot correction required	А
Special take off technique required		No	Α	No	Α
2. Landing - 4.4.2					
Special landing technique required		l No	А	No	A
3. Speeds in straight flight - 4.4.3			, ,		7.
Trim speed more than 30km/h		Yes	A	Yes	l A
Speed range using the controls larger than 10km/h		Yes	A	Yes	A
Minimum speed		25 km/h to 30 km/h	В	25 km/h to 30 km/h	В
4. Control movement - 4.4.4					
Max. weight in flight up to 80kg			-		-
Max. weight in flight 80 to 100kg		Increasing 45cm - 60cm	С	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 than 30°	А
Collapse occurs		No	Α	No	Α
6. Pitch stability operating controls during ac	celerated t	flight - 4.4.6			
Collapse occurs		No	Α	No	Α
7. Roll stability and damping - 4.4.7		1 -			
Oscillations		Reducing	Α	Reducing	A
		Reducing	Α	Reducing	
8. Stability in gentle spirals - 4.4.8		Louis		0	
Tendency to return to straight flight		Spontaneous exit	Α	Spontaneous exit	Α
9. Behaviour exiting a fully developed spiral of	dive - 4.4.				
Initial response of glider (first 180°)		Immediate reduction of rate in turn	A	Immediate reduction of rate in turn	A
Tendency to return to straight flight		Spontaneous exit	A B	Spontaneous exit	A
Turn angle to recover normal flight		720° to 1080°, spontaneous recovery	В	720° to 1080°, spontaneous recovery	В
10. Symmetric front collapse - 4.4.10		I No			
Folding lines used	lines used			No	
Entry	- 30%	Rocking back less than 45°	A	Rocking back less than 45°	Α
Recovery	- peeds	Spontaneous in less than 3 sec	А	Spontaneous in less than 3 sec	Α
Dive forward angle on exit	.E.	0° - 30° Keeping course	A	0° - 30° Entering a turn of less than 90°	A
Cascade occurs Entry		Rocking back less than 45°	A	No Rocking back less than 45°	A
Recovery	%09 < p	Spontaneous in less than 3 sec	A	Spontaneous in less than 3 sec	A
Dive forward angle on exit	peeds	0° - 30° Keeping course	А	30° - 60° Entering a turn of less than 90°	В
Cascade occurs	fij.	No Reeping course	A	No	A
Entry	20%	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	accelerated > 50	Spontaneous in less than 3 sec	А	Spontaneous in less than 3 sec	А
Dive forward angle on exit	Selens	30° - 60° Keeping course	В	30° - 60° Entering a turn of less than 90°	В
Cascade occurs	acc	No	Α	No	Α
11. Exiting deep stall (parachutal stall) - 4.4.1	11				
Deep stall achieved		Yes		Yes	
Recovery		Spontaneous in less than 3 sec	А	Spontaneous in less than 3 sec	Α
Dive forward angle on exit		30° - 60°	В	30° - 60°	В
Change of course		Changing course less than 45°	Α	Changing course less than 45°	Α
Cascade occurs		No	А	No	Α

12. High angle of attack recovery - 4.4.12										
Recovery		Spontaneous in less than 3 sec			А	Spontaneous in less than 3 sec			А	
Cascade occurs		No			Α	No			A	
13. Recovery from a developed full stall - 4.4.13		1.15			, ,,					
Dive forward angle on exit		30° - 60°			В	30° - 60°			В	
Collapse Cascade occurs (other than collapse)		No collapse No			A A	No collapse No			A	
Rocking backward		Less than 45°			Α	Less than 45°			Α	
Line tension		Most lines tight			Α	Most lines tight			Α	
14. Asymmetric collapse (trim speed) - 4.4.14 Folding lines used	,	No				No				
Change of course until re-inflation		< 90°	Dive or roll angle	15° - 45°	Α	< 90°	Dive or roll angle	15° - 45°	А	
Change of course until re-initiation	bse	< 90	Dive or roll arigle	15 - 45	A	< 90	Dive or roll angle	15 - 45	A	
Re-inflation behavior	trim speed, max 50% collapse	Spontaneous re-inflation			Α	Spontaneous re	e-inflation		Α	
Total change of course	im sp 50%	Less than 360°		A	Less than 360°			A		
Collapse on the opposite side occurs Twist occurs	max tr	No No			A	No No			A	
Cascade occurs		No	1	ſ	Α	No	1		Α	
Change of course until re-inflation	Se	90° - 180°	Dive or roll angle	45° - 60°	С	90° - 180°	Dive or roll angle	45° - 60°	С	
Re-inflation behavior	trim speed, max 75% collapse	Spontaneous re	-inflation		А	Spontaneous re	e-inflation		А	
Total change of course	trim speed x 75% colla	Less than 360°	•		A	Less than 360°			A	
Collapse on the opposite side occurs	ax 7.	No			Α	No			Α	
Twist occurs Cascade occurs	٤	No No		A	No No			A		
		1	I	l			1			
Change of course until re-inflation	Se	90° - 180°	Dive or roll angle	45° - 60°	С	90° - 180°	Dive or roll angle	15° - 45°	В	
Re-inflation behavior	ated	Spontaneous re	-inflation		Α	Spontaneous re	e-inflation		А	
Total change of course	accelerated, max 50% collapse	Less than 360°			Α	Less than 360°			А	
Collapse on the opposite side occurs Twist occurs	ac nax 5	No No			A A	No No			A	
Cascade occurs		No			A	No			A	
Change of course until re-inflation		90° - 180°	Dive or roll angle	45° - 60°	С	90° - 180°	Dive or roll angle	45° - 60°	С	
De la final de la lactica	accelerated, max 75% collapse	0	1.0.0		•	0	1.0.0			
Re-inflation behavior	accelerated, ix 75% collap	Spontaneous re	-inilation		A	Spontaneous re	e-inilation		A	
Total change of course Collapse on the opposite side occurs	acce x 75%	Less than 360° No No		A A	Less than 360°			A		
Twist occurs	ma			Α	No			Α		
Cascade occurs		No.			Α	No			Α	
15. Directional control with a maintained asyn Able to keep course straight	imetric co	Yes			А	Yes			А	
180° turn away from the collapsed side possible	in 10 sec	Yes			A	Yes			A	
100 tulii away iioiii tile collapsed side possible iii 10 sec									С	
Amount of control range between turn and stall or spin		25% to 50% of the symmetric control travel			С	C 25% to 50% of the symmetric control travel				
16. Trim speed spin tendency - 4.4.16						Lv				
Spin occurs 17. Low speed spin tendency - 4.4.17		No			А	No			А	
Spin occurs		No			Α	A No				
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			А	No			Α	
19. B-line-stall - 4.4.19										
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		Α	Remains stable with straight span			Α		
Recovery	Recovery		Spontaneous in less than 3 sec			Spontaneous in less than 3 sec			А	
Dive forward angle on exit		30° - 60°			Α	30° - 60°	A			
Cascade occurs 20. Big ears - 4.4.20		No			А	A No				
		Standard technique				Chande	·			
Entry procedure		Standard technique		A	Standard technique			A		
Behaviour during big ears		Stable flight			A	Stable flight			A	
Recovery Dive forward angle on exit		Spontaneous in less than 3 sec			A	Spontaneous ir	A			
Dive forward angle on exit 21. Big Ears in accelerated flight - 4.4.21		0° - 30°			Α	0° bis 30°			А	
Entry procedure		Standard technique			А	A Standard technique				
Entry procedure Behaviour during big ears		Standard technique Stable flight			Standard technique			A		
		Spontaneous in less than 3 sec		A	Stable flight			A		
	•		0° - 30°		A	Spontaneous in less than 3 sec			A	
Recovery					0° bis 30° Stable flight			A		
Recovery Dive forward angle on exit Behaviour immediately after releasing the accela	rator while									
Recovery Dive forward angle on exit Behaviour immediately after releasing the accela maintaining big ears		Stable flight			А					
Recovery Dive forward angle on exit Behaviour immediately after releasing the accela maintaining big ears 23. Alternative means of directional control		Stable flight								
Recovery Dive forward angle on exit Behaviour immediately after releasing the accela maintaining big ears 23. Alternative means of directional control - 180° turn achievable in 20 sec		Stable flight Yes			A	Yes			А	
Recovery Dive forward angle on exit Behaviour immediately after releasing the accela maintaining big ears 23. Alternative means of directional control - 180° turn achievable in 20 sec Stall or spin occurs	4.4.22	Stable flight Yes No	rle manual 4.4	22					A	
Recovery Dive forward angle on exit Behaviour immediately after releasing the accela 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 configu	4.4.22	Stable flight Yes No	r's manual - 4.4.	23	A A	Yes			A	
Recovery Dive forward angle on exit Behaviour immediately after releasing the accela 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 configue Procedure works as descibed Procedure suitable for novice pilots	4.4.22	Stable flight Yes No	r's manual - 4.4.	23	A A NA NA	Yes			A NA NA	
Recovery Dive forward angle on exit Behaviour immediately after releasing the accela 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 configu Procedure works as descibed	4.4.22	Stable flight Yes No	r's manual - 4.4.	23	A A	Yes			A NA	

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