FTR - Flight Test Report

Manufacturer	SKYWALK	Type testing No.	EAPR-GS-0658/17
	Skywalk GmbH & Co.KG Winderdistr. 4 D-83250 Maguertstein	serial number	proto
Model	Cumeo S	Location	Stubaital
Comment			



Rev. 2.3 - 15.09.2015 EAPR GmbH - Marktstr. 11 D-87730 Bad Grönenbach - Germany

Date of testing 11.06.2017		
Testpilot	Pascal Purin	
Harness	EAPR	
Pilot's take off weight	90 kg 85 kg - 105 kg	Ex.)

Range of take off weight

Classification B



Verification

Test-criteria			Evaluation
1. Inflation / take-off - 4.4.1			
Rising behavior		no pilot correction required	Α
<u> </u>		· ·	
Special take off technique required		No	A
2. Landing - 4.4.2		T	
Special landing technique required		No	Α
4. Control movement - 4.4.4			
Max. weight in flight up to 80kg			-
Max. weight in flight 80 to 100kg			-
Max. weight in flight greater than 100kg		Increasing >65 cm	Α
5. Pitch stability exiting accelerated flight	t - 4.4.5		
Dive forward angle on exit		Dive forward less than 30°	Α
Collapse occurs		No	Α
6. Pitch stability operating controls during	ng accelerated	flight - 4.4.6	
Collapse occurs		No	Α
7. Roll stability and damping - 4.4.7			
Oscillations		Reducing	Α
9. Behaviour exiting a fully developed sp	iral dive - 4.4.	9	
Initial response of glider (first 180°)		No immediate reaction	В
Tendency to return to straight flight		Spontaneous exit	А
Turn angle to recover normal flight		Less than 720°, spontaneous recovery	Α
10. Symmetric front collapse - 4.4.10			
Folding lines used		No	
Entry		Rocking back less than 45°	А
Recovery	trim speed ~ 30%	Spontaneous in less than 3 sec	Α
Dive forward angle on exit		0° - 30° Keeping course	Α
Cascade occurs	ż	No	Α
Entry	8	Rocking back less than 45°	A
Recovery	rim speed > 50%	Spontaneous in less than 3 sec	Α
Dive forward angle on exit		30° - 60° Keeping course	В
Cascade occurs		No Desking book loss than 45°	A
Entry	20%	Rocking back less than 45°	A
Recovery Dive forward angle on exit		Spontaneous in less than 3 sec	A
Dive forward angle on exit		30° - 60° Keeping course	В
Cascade occurs		No	A

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11. Exiting deep stall (narachutal stall) - 4.4.11					
11. Exiting deep stall (parachutal stall) - 4.4.11 Deep stall achieved	Yes				
Recovery	Spontaneous in less than 3 sec			Α	
Dive forward angle on exit	0° - 30°		Α		
Change of course		Changing course less than 45°		Α	
Cascade occurs 12. High angle of attack recovery - 4.4.12		No		Α	
		Ca antanana in	lasa than 0 ana		
Recovery		Spontaneous in less than 3 sec		A	
Cascade occurs 13. Recovery from a developed full stall - 4.4.1	3	No		Α	
Dive forward angle on exit		0° - 30°			Α
Collapse		No collapse			A
Cascade occurs (other than collapse) Rocking backward		No Less than 45°			A A
Line tension		Most lines tight			Α
14. Asymmetric collapse (trim speed) - 4.4.14 Folding lines used		No			
		INO			
Change of course until re-inflation	esd				-
Re-inflation behavior	trim speed, max 50% collapse				-
Total change of course	im sp 50%				-
Collapse on the opposite side occurs Twist occurs	max				-
Cascade occurs					-
Change of course until re-inflation	e e	90° - 180°	Dive or roll angle	15° - 45°	В
Re-inflation behavior	trim speed, max 75% collapse	Spontaneous re	-inflation		Α
Total change of course	trim speed, <75% colla	Less than 360°			A
Collapse on the opposite side occurs	triir ax 75	No			A
Twist occurs Cascade occurs	Ε	No No			A A
0.000.00		1.0			
Change of course until re-inflation	accelerated, max 50% collapse				-
Re-inflation behavior	accelerated, tx 50% collap				-
Total change of course Collapse on the opposite side occurs	accel x 50%				-
Twist occurs	ma				-
Cascade occurs					-
Change of course until re-inflation	d, apse	90° - 180°	Dive or roll angle	15° - 45°	В
Re-inflation behavior	accelerated, max 75% collapse	Spontaneous re-inflation		Α	
Total change of course Collapse on the opposite side occurs	accel x 75%	Less than 360°		A A	
Twist occurs	max	No		A	
Cascade occurs		No			Α
15. Directional control with a maintained asymmetry Able to keep course straight	metric coi	Yes			Α
Able to keep course straight Yes 180° turn away from the collapsed side possible in 10 sec Yes					
180° turn away from the collapsed side possible ir	10 sec	Yes			Α
180° turn away from the collapsed side possible in Amount of control range between turn and stall or			of the symmetric c	ontrol travel	A
			of the symmetric c	ontrol travel	
Amount of control range between turn and stall or				ontrol travel	
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18		More than 50%		ontrol travel	A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release		More than 50% Stops spinning		ontrol travel	A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs		More than 50% Stops spinning	in less than 90°	ontrol travel	A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20		More than 50% Stops spinning No	in less than 90°	ontrol travel	A A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20 Entry procedure		More than 50% Stops spinning in No	in less than 90°	ontrol travel	A A A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears		More than 50% Stops spinning in No Standard technic Stable flight	in less than 90°	ontrol travel	A A A A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery		More than 50% Stops spinning i No Standard techni Stable flight Spontaneous in	in less than 90°	ontrol travel	A A A A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit		More than 50% Stops spinning i No Standard techni Stable flight Spontaneous in	que	ontrol travel	A A A A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.4.21		More than 50% Stops spinning No Standard techni Stable flight Spontaneous in 0° - 30°	que	ontrol travel	A A A A A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.4.21 Entry procedure		More than 50% Stops spinning in No Standard technic stable flight Spontaneous in 0° - 30° Standard technic standard technic standard technic standard technic standard technic standard stand	que less than 3 sec	ontrol travel	A A A A A A A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.4.21 Entry procedure Behaviour during big ears		More than 50% Stops spinning in No Standard technic Stable flight Spontaneous in 0° - 30° Standard technic Stable flight	que less than 3 sec	ontrol travel	A A A A A A A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.4.21 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit Entry procedure Behaviour during big ears Recovery Dive forward angle on exit Behaviour immediately after releasing the accelerated flight and the accelerated flight and the formal forma	spin	More than 50% Stops spinning in No Standard technic Stable flight Spontaneous in 0° - 30° Standard technic Stable flight Spontaneous in Stable flight	que less than 3 sec	ontrol travel	A A A A A A A A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.4.21 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit	spin	More than 50% Stops spinning i No Standard techni Stable flight Spontaneous in 0° - 30° Standard techni Stable flight Spontaneous in 0° - 30°	que less than 3 sec	ontrol travel	A A A A A A A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.4.21 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.4.21 Entry procedure Behaviour in during big ears Recovery Dive forward angle on exit Behaviour immediately after releasing the accelerate maintaining big ears 23. Alternative means of directional control - 4	spin	More than 50% Stops spinning in No Standard technic Stable flight Spontaneous in 0° - 30° Standard technic Stable flight Spontaneous in 0° - 30° Stable flight	que less than 3 sec	ontrol travel	A A A A A A A A
Amount of control range between turn and stall or 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.4.21 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit Behaviour inmediately after releasing the accelerate and the accelerate maintaining big ears 23. Alternative means of directional control - 4 180° turn achievable in 20 sec	spin	More than 50% Stops spinning in No Standard technic Stable flight Spontaneous in 0° - 30° Standard technic Stable flight Spontaneous in 0° - 30° Stable flight Spontaneous in 0° - 30° Stable flight	que less than 3 sec	ontrol travel	A A A A A A A
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