FTR - Flight Test Report

Manufacturer		Type testing No.	EAPR-GS-0378/15	FCT=
	UP International Kreuzeckbahnstraße 7 D-82462 Garmisch-Partenkirchen	serial number	4g57l-03-1-14c-4807	Messen Prüfen Bewerten Rev. 2.3 - 26.11.2014
Model	Trango XC3 SM	Location	Gardasee	EAPR GmbH - Marktstr. 11 D-87730 Bad Grönenbach - Germany
		Location	Schruns	

sweise, vervielfältigt werden.

Date of testing	10. & 11.02.2015	Minimum take o 78 kg	ff weight	Maximum take off v 100 kg	veight
Testpilot		Mike Küng		Hannes Tschofen	
Harness		EAPR Testequipment		Academy Test Equipment	
Pilot's take off weig	ght	78	kg	100 kg	

Classification C



Test-criteria		Minimum take off weight	Evaluation	Maximum take off weight	Evaluatio
1. Inflation / take-off - 4.4.1					
Rising behavior		Easy rising, some pilot correction is required	В	Easy rising, some pilot correction is required	В
Special take off technique required		No	A	No	A
2. Landing - 4.4.2		•		•	
Special landing technique required		No	А	No	А
3. Speeds in straight flight - 4.4.3		10		10	
Trim speed more than 30km/h		Yes	A	Yes	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	4.5	.			
Dive forward angle on exit		Dive forward less than 30°	A	Dive forward less than 30°	А
Collapse occurs		No	A	No	A
6. Pitch stability operating controls during acc	elerated	flight - 4.4.6			
Collapse occurs		No	А	No	A
7. Roll stability and damping - 4.4.7		NO		10	
		Deducing		Deducies	٨
Oscillations		Reducing	A	Reducing	A
8. Stability in gentle spirals - 4.4.8		1.2			
Tendency to return to straight flight		Spontaneous exit	A	Spontaneous exit	A
9. Behaviour exiting a fully developed spiral d	ive - 4.4.	9			
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	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					
Folding lines used		No		No	
Entry	%0	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	speed ~ 30%	Spontaneous in 3 to 5 sec	В	Spontaneous in 3 to 5 sec	В
Dive forward angle on exit		0° - 30° Entering a turn of less than	n 90° A	0° - 30° Keeping course	A
Cascade occurs	trim	No	A	No	A
Entry	> 50%	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	s < pe	Spontaneous in 3 to 5 sec	В	Spontaneous in 3 to 5 sec	В
Dive forward angle on exit	peed u	30° - 60° Entering a turn of less than	n 90° B	0° - 30° Entering a turn of less than 90°	A
Cascade occurs	trim	No	А	No	A
Entry	50%	Rocking back less than 45°	A	Rocking back greater than 45°	С
Recovery	ated > 5	Spontaneous in 3 to 5 sec	В	Spontaneous in 3 to 5 sec	В
Dive forward angle on exit	celer	30° - 60° Entering a turn of 90° to 18	30° C	0° - 30° Entering a turn of less than 90°	А
Cascade occurs	ac	No	А	No	A
11. Exiting deep stall (parachutal stall) - 4.4.1	1				
Deep stall achieved		Yes		Yes	
Recovery		Spontaneous in less than 3 sec	А	Spontaneous in less than 3 sec	А
Dive forward angle on exit		30° - 60°	В	30° - 60°	В
Change of course		Changing course less than 45°	Ā	Changing course less than 45°	Ā

Recovery		Spontaneous in	3 to 5 sec		С	Spontaneous in	less than 3 sec		А
Cascade occurs		No			A	No			A
13. Recovery from a developed full stall - 4.4.	13								
Dive forward angle on exit		30° - 60°			В	30° - 60°			В
Collapse		No collapse			A	No collapse			A
Cascade occurs (other than collapse) Rocking backward		No Less than 45°	No		A	No Less than 45°			<u>A</u>
Line tension		Most lines tight			A	Most lines tight			<u>A</u>
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°	A	< 90°	Dive or roll angle	0° - 15°	А
g	trim speed, max 50% collapse		-						
Re-inflation behavior	colla	Spontaneous re	Spontaneous re-inflation		A	Spontaneous re-	-inflation		А
Total change of course	n sp 80%	Less than 360°		А	Less than 360° No No No		А		
Collapse on the opposite side occurs	ax 5	No		A			A A A		
Twist occurs Cascade occurs	5	No No		A					
Change of course until re-inflation		90° - 180°	Dive or roll angle	45° - 60°	С	< 90°	Dive or roll angle	45° - 60°	С
change of course until te initiation	apse			40 00	•	< 50		40 00	0
Re-inflation behavior	eed, colla	Inflates in less t	han 3 sec from st	art of pilot action	С	Spontaneous re-	-inflation		А
Total change of course	n sp	Less than 360°			A	Less than 360°			А
Collapse on the opposite side occurs	trim speed, max 75% collapse	No			A	No			A
Twist occurs Cascade occurs	ε	No No			A	No No			A
			T	1	A	140	1		A
Change of course until re-inflation	Φ	90° - 180°	Dive or roll angle	15° - 45°	В	< 90°	Dive or roll angle	15° - 45°	А
Re-inflation behavior	accelerated, max 50% collapse	Spontaneous re	-inflation	•	A	Spontaneous re-	-inflation	·	A
	lerat % co						maadii		
Total change of course Collapse on the opposite side occurs	50%	Less than 360° No			A	Less than 360° No			A A A
Twist occurs	amax	No			A	No			
Cascade occurs		No	n a constant	1	A	No			A
Change of course until re-inflation	Q	90° - 180°	Dive or roll angle	45° - 60°	С	< 90°	Dive or roll angle	45° - 60°	С
Re-inflation behavior	accelerated, max 75% collapse	Inflaton in loop t	han 3 sec from st	art of pilot action	С	Spontaneous re-	inflation	1	A
	erati 6 co		nan 5 sec nom si	art or priot action			Innation		
Total change of course Collapse on the opposite side occurs	iccel	Less than 360° No			A	Less than 360° No			A
Twist occurs	a may	No			A	No			A
Cascade occurs	-	No			A	No			А
15. Directional control with a maintained asym	metric co								
Able to keep course straight		Yes			A	Yes			A
180° turn away from the collapsed side possible i	n 10 sec	Yes			A	Yes			А
180° turn away from the collapsed side possible in 10 sec		25% to 50% of the symmetric control travel							
Amount of control range between turn and stall or	enin	25% to 50% of	the symmetric co	ntrol travel		25% to 50% of t	he symmetric con	trol travel	
Amount of control range between turn and stall or	spin	25% to 50% of	the symmetric co	ntrol travel	С	25% to 50% of t	he symmetric con	trol travel	C
16. Trim speed spin tendency - 4.4.16	spin		the symmetric co	ntrol travel	С		he symmetric con	itrol travel	С
16. Trim speed spin tendency - 4.4.16 Spin occurs	spin	25% to 50% of	the symmetric co	ntrol travel		25% to 50% of t	he symmetric con	atrol travel	
16. Trim speed spin tendency - 4.4.16 Spin occurs 17. Low speed spin tendency - 4.4.17	spin	No	the symmetric co	ntrol travel	C	No	he symmetric con	itrol travel	C
16. Trim speed spin tendency - 4.4.16 Spin occurs 17. Low speed spin tendency - 4.4.17 Spin occurs	spin		the symmetric col	ntrol travel	С		he symmetric con	trol travel	С
16. Trim speed spin tendency - 4.4.16 Spin occurs 17. Low speed spin tendency - 4.4.17 Spin occurs 18. Recovery from a developed spin - 4.4.18	spin	No		ntrol travel	C A A	No		itrol travel	C A A
16. Trim speed spin tendency - 4.4.16 Spin occurs 17. Low speed spin tendency - 4.4.17 Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release	spin	No No Stops spinning i		ntrol travel	C A A	No No Stops spinning in		itrol travel	C A A C
16. Trim speed spin tendency - 4.4.16 Spin occurs 17. Low speed spin tendency - 4.4.17 Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs	spin	No		ntrol travel	C A A	No		itrol travel	C A A
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16. Trim speed spin tendency - 4.4.16 Spin occurs 17. Low speed spin tendency - 4.4.17 Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19 Change of course before release	spin	No Stops spinning i No Changing course	n less than 90° e 45° or more		C A A A A C	No No Stops spinning in No Changing course	n 90° to 180° 9 less than 45°		C A A C A A
16. Trim speed spin tendency - 4.4.16 Spin occurs 17. Low speed spin tendency - 4.4.17 Spin occurs 18. Recovery from a developed spin - 4.4.18 Spin rotation angle after release Cascade occurs 19. B-line-stall - 4.4.19	spin	No Stops spinning i No Changing course	n less than 90°		C A A A	No No Stops spinning in No Changing course	n 90° to 180°		C A A C A
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