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

Manufacturer	- Site	Type testing No.	EAPR-GS-0568/16	Fct=
	Hochriess traße 1 D-83128 Fints bach	serial number		Messen Prüfen Bewerten Rev. 2.3 - 26.11.2014
Model	Gravis XS	Leastion	Monte Baldo	EAPR GmbH - Marktstr. 11 D-87730 Bad Grönenbach - Germany
Comment		Location	Mt. Baldo	

eise, vervielfältigt werden

Date of testing	29.11.2016	Minimum take o 60 kg	off weight	Maximum take off 75 kg	weight
Testpilot			12mg	Mike Küng	
Harness		EAPR Lightequipment	t PEC	EAPR-Testequipment	
Pilot's take off weigh	ht	60	kg	75 kg	

Classification B



Test-criteria		Minimum take off weight	Evaluation	Maximum take off weight	Evaluatio
1. Inflation / take-off - 4.4.1					
Rising behavior		no pilot correction required	А	no pilot correction required	А
Special take off technique required		No	A	No	A
2. Landing - 4.4.2					
Special landing technique required		No	А	No	A
3. Speeds in straight flight - 4.4.3					
Trim speed more than 30km/h		Yes	А	Yes	A
Speed range using the controls larger than 10km	/h	Yes	A	Yes	
Minimum speed		Less than 25 km/h A Less than 25 km/h		Less than 25 km/h	A
4. Control movement - 4.4.4			~		
Max. weight in flight up to 80kg		Increasing > 55cm	А	Increasing > 55cm	А
Max. weight in flight 80 to 100kg			-		-
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	A	No	A
6. Pitch stability operating controls during ac	celerated	flight - 4.4.6		•	
Collapse occurs		No	A	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		Spontaneous exit	А	Spontaneous exit	А
9. Behaviour exiting a fully developed spiral of	dive - 4.4.			opernaneous ovin	
Initial response of glider (first 180°)		No immediate reaction	В	No immediate reaction	В
Tendency to return to straight flight		Spontaneous exit	A	Spontaneous exit	
Turn angle to recover normal flight				Less than 720°, spontaneous recovery	A
10. Symmetric front collapse - 4.4.10		-		•	
Folding lines used		No		No	1
Entry	%	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	speed ~ 30%	Spontaneous in less than 3 sec	А	Spontaneous in less than 3 sec	А
Dive forward angle on exit	trim spe	0° - 30° Keeping course	А	0° - 30° Entering a turn of less than 90°	A
Cascade occurs		No	A	No	A
Entry	> 50%	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	>< paeds	Spontaneous in less than 3 sec	A	Spontaneous in less than 3 sec	А
Dive forward angle on exit	rin sp	30° - 60° Keeping course	В	30° - 60° Entering a turn of less than 90°	В
Cascade occurs	-	No	A	No Decline heat less than 45%	A
Entry	Merated > 50%	Rocking back less than 45° Spontaneous in less than 3 sec	A	Rocking back less than 45° Spontaneous in less than 3 sec	A
Recovery	atec			•	
	14		В	30° - 60° Entering a turn of less than 90°	В
Dive forward angle on exit	accelera	30° - 60° Entering a turn of less than 90°		No	A .
Dive forward angle on exit Cascade occurs	acce	No	A	No	A
Dive forward angle on exit Cascade occurs 11. Exiting deep stall (parachutal stall) - 4.4.1	acce	No			A
Recovery Dive forward angle on exit Cascade occurs 11. Exiting deep stall (parachutal stall) - 4.4.1 Deep stall achieved	acce		A	No Yes	A
Dive forward angle on exit Cascade occurs 11. Exiting deep stall (parachutal stall) - 4.4.1 Deep stall achieved Recovery	acce	No Yes Spontaneous in less than 3 sec	A	Yes Spontaneous in less than 3 sec	A
Dive forward angle on exit Cascade occurs 11. Exiting deep stall (parachutal stall) - 4.4.1	acce	No Yes	A	Yes	

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	Spontaneous in less than 3 sec			A	No			A	
13. Recovery from a developed full stall - 4.4.	13	110			A	140			A
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°			A	No Less than 45°			A
Line tension		Most lines tight		A	Most lines tight			A	
14. Asymmetric collapse (trim speed) - 4.4.14									
Folding lines used	1	No		1		No			
Change of course until re-inflation	Se	< 90°	Dive or roll angle	15° - 45°	A	< 90°	Dive or roll angle	15° - 45°	A
Re-inflation behavior	ed, ollap	Spontaneous re	-inflation		А	Spontaneous re-	inflation		А
Total change of course	trim speed, max 50% collapse	Less than 360°		A	Less than 360° No		A		
Collapse on the opposite side occurs	ax 5(No		A				A	
Twist occurs Cascade occurs	Ë	No No			A	No No			A
		90° - 180°	Dive or roll angle	15° - 45°	В	90° - 180°	Dive or roll angle	15° - 45°	В
Change of course until re-inflation	esd	90 - 180	Dive or roll angle	15 - 45	В	90 - 180	Dive or foil angle	15 - 45	D
Re-inflation behavior	speed, % colla	Spontaneous re	-inflation		А	Spontaneous re-	inflation		A
Total change of course	trim speed, max 75% collapse	Less than 360° No		А	Less than 360°			A	
Collapse on the opposite side occurs	trim nax 75				A	No			A
Twist occurs Cascade occurs	-	No No			A	No No			A
				450 150				450	
Change of course until re-inflation	bse	90° - 180°	Dive or roll angle	15° - 45°	В	90° - 180°	Dive or roll angle	15° - 45°	В
Re-inflation behavior	accelerated, max 50% collapse	Spontaneous re	-inflation		А	Spontaneous re-	inflation		А
Total change of course	celera 0% c	Less than 360°			A	Less than 360°			А
Collapse on the opposite side occurs	acc ax 5	No			А	No			А
Twist occurs Cascade occurs	E	No No			A	No No			A
Change of course until re-inflation		90° - 180°	Dive or roll angle	15° - 45°	В	90° - 180°	Dive or roll angle	15° - 45°	В
	bse '	90 - 180	Dive or roll angle	15 - 45	В	90 - 180	Dive or foil angle	15 - 45	D
Re-inflation behavior	accelerated, max 75% collapse	Spontaneous re	-inflation		A	Spontaneous re-	inflation		A
Total change of course	cele 75%	Less than 360°			А	Less than 360°			А
Collapse on the opposite side occurs Twist occurs	ac	No No			A	No			A
Cascade occurs	-	No			A	No No			A
15. Directional control with a maintained asymptotic	metric co	llapse - 4.4.15				•			
Able to keep course straight		Yes			A	Yes			A
180° turn away from the collapsed side possible in	n 10 sec	Yes A Yes					A		
Amount of control range between turn and stall or	enin	More than 50%	of the symmetric of	control travel	А	More than 50% of the symmetric control travel			А
-	opin	More than 50%	or the symmetrie t		~	Nore than 50%	or the symmetric t		~
16. Trim speed spin tendency - 4.4.16 Spin occurs		No			A	No			А
17. Low speed spin tendency - 4.4.17		140			A	NO			A
Spin occurs		No			A	No			A
18. Recovery from a developed spin - 4.4.18						•			
Spin rotation angle after release		Stops spinning i	n less than 90°		А	Stops spinning in	less than 90°		А
Cascade occurs		No							
19. B-line-stall - 4.4.19		110			Δ	No			Δ
					A	No			A
Change of course before release		Changing course	e less than 45°		A	No Changing course	e less than 45°		A
Change of course before release Behaviour before release			e less than 45° with straight span			Changing course	e less than 45° with straight span		
Behaviour before release		Remains stable	with straight span		A	Changing course Remains stable	with straight span		A A
Behaviour before release Recovery		Remains stable Spontaneous in	with straight span		A A A	Changing course Remains stable Spontaneous in	with straight span		A A A
Behaviour before release Recovery Dive forward angle on exit		Remains stable Spontaneous in 0° - 30°	with straight span		A A A A	Changing course Remains stable Spontaneous in 30° - 60°	with straight span		A A A A
Behaviour before release Recovery Dive forward angle on exit Cascade occurs		Remains stable Spontaneous in	with straight span		A A A	Changing course Remains stable Spontaneous in	with straight span		A A A
Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.4.20		Remains stable Spontaneous in 0° - 30° No	with straight span less than 3 sec		A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No	with straight span less than 3 sec		A A A A A
Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.4.20 Entry procedure		Remains stable Spontaneous in 0° - 30° No Standard techni	with straight span less than 3 sec		A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic	with straight span less than 3 sec		A A A A A A
Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears		Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight	with straight span less than 3 sec que		A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic Stable flight	with straight span less than 3 sec		A A A A A A
Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery		Remains stable Spontaneous in 0° - 30° No Standard techni	with straight span less than 3 sec que		A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic	with straight span less than 3 sec		A A A A A A
Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit		Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight	with straight span less than 3 sec que		A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic Stable flight	with straight span less than 3 sec		A A A A A A
Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery		Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in	with straight span less than 3 sec que		A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic Stable flight Spontaneous in	with straight span less than 3 sec		A A A A A A A A
Behaviour before release Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.4.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit		Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in	with straight span less than 3 sec que less than 3 sec		A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic Stable flight Spontaneous in	with straight span less than 3 sec que less than 3 sec		A A A A A A A A
Behaviour before release Recovery Dive forward angle on exit 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		Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in 0° - 30°	with straight span less than 3 sec que less than 3 sec		A A A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic Stable flight Spontaneous in 0° bis 30°	with straight span less than 3 sec que less than 3 sec		A A A A A A A A A
Behaviour before release Recovery Dive forward angle on exit 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		Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in 0° - 30° Standard techni	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic Stable flight Spontaneous in 0° bis 30° Standard technic	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A
Behaviour before release Recovery Dive forward angle on exit 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		Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in 0° - 30° Standard techni Stable flight	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic Stable flight Spontaneous in 0° bis 30° Standard technic Stable flight	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A
Behaviour before release Recovery Dive forward angle on exit 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 during big ears Recovery Dive forward angle on exit Behaviour immediately after releasing the accelar	ator while	Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in 0° - 30° Standard techni Stable flight Spontaneous in	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic Stable flight Spontaneous in 0° bis 30° Standard technic Stable flight Spontaneous in	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A A
Behaviour before release Recovery Dive forward angle on exit 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 during big ears Recovery Dive forward angle on exit Behaviour immediately after releasing the accelaring maintaining big ears		Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in 0° - 30° Standard techni Stable flight Spontaneous in 0° - 30°	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic Stable flight Spontaneous in 0° bis 30° Standard technic Stable flight Spontaneous in 0° bis 30°	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A A A A
Behaviour before release Recovery Dive forward angle on exit 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 during big ears Recovery Dive forward angle on exit Behaviour during big ears Recovery Dive forward angle on exit Behaviour immediately after releasing the accelarmaintaining big ears 23. Alternative means of directional control - 4		Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in 0° - 30° Standard techni Stable flight Spontaneous in 0° - 30° Stable flight	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic Stable flight Spontaneous in 0° bis 30° Standard technic Stable flight Spontaneous in 0° bis 30° Stable flight	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A A
Behaviour before release Recovery Dive forward angle on exit 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 immediately after releasing the accelar maintaining big ears 23. Alternative means of directional control - 4 180° turn achievable in 20 sec		Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in 0° - 30° Standard techni Stable flight Spontaneous in 0° - 30°	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technid Stable flight Spontaneous in 0° bis 30° Standard technid Stable flight Spontaneous in 0° bis 30° Stable flight Spontaneous in 0° bis 30° Stable flight	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A A A A
Behaviour before release Recovery Dive forward angle on exit 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 during big ears Recovery Dive forward angle on exit Behaviour immediately after releasing the accelar maintaining big ears 23. Alternative means of directional control - 4 180° turn achievable in 20 sec Stall or spin occurs	1.4.22	Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in 0° - 30° Standard techni Stable flight Spontaneous in 0° - 30° Stable flight Spontaneous in 0° - 30° Stable flight	with straight span less than 3 sec que less than 3 sec que less than 3 sec		A A A A A A A A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technic Stable flight Spontaneous in 0° bis 30° Standard technic Stable flight Spontaneous in 0° bis 30° Stable flight	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A A
Behaviour before release Recovery Dive forward angle on exit 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 immediately after releasing the accelar maintaining big ears 23. Alternative means of directional control - 4 180° turn achievable in 20 sec Stall or spin occurs 23. Any other flight procedure and/or configure	1.4.22	Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in 0° - 30° Standard techni Stable flight Spontaneous in 0° - 30° Stable flight Spontaneous in 0° - 30° Stable flight	with straight span less than 3 sec que less than 3 sec que less than 3 sec		A A A A A A A A A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technid Stable flight Spontaneous in 0° bis 30° Standard technid Stable flight Spontaneous in 0° bis 30° Stable flight Spontaneous in 0° bis 30° Stable flight	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A A A A A A
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Behaviour before release Recovery Dive forward angle on exit 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 immediately after releasing the accelar, maintaining big ears 23. Alternative means of directional control - 4 180° turn achievable in 20 sec Stall or spin occurs 23. Any other flight procedure and/or configure Procedure works as descibed Procedure suitable for novice pilots Cascade occurs	1.4.22	Remains stable Spontaneous in 0° - 30° No Standard techni Stable flight Spontaneous in 0° - 30° Standard techni Stable flight Spontaneous in 0° - 30° Stable flight Spontaneous in 0° - 30° Stable flight	with straight span less than 3 sec que less than 3 sec que less than 3 sec		A A A A A A A A A A A A A A A A A A A	Changing course Remains stable Spontaneous in 30° - 60° No Standard technid Stable flight Spontaneous in 0° bis 30° Standard technid Stable flight Spontaneous in 0° bis 30° Stable flight Spontaneous in 0° bis 30° Stable flight	with straight span less than 3 sec que less than 3 sec que		A A A A A A A A A A A A A A A A A A A
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