Manufacturer	\sim	Type testing No.	EAPR-GS-7385/11	
		Date of testing	02.02-13.02.2011	XEAPR
Model	BION 36	Location	Schruns /Walensee	LBA Musterprüfstelle Gleitschirm - Motorschirm - Fallschirm

EAPR e.V - Marktstr. 11 - D-87730 Bad Grönenbach - Germany

	Minimum take off we	ight	Maximum take off weight		
Testpilot	Tschofen Johannes	-	Anselm Rauh		
Harness	Academy TestEquipment		EAPR Testequipment	Anselm Rauh	
Pilot's take off weight	115 kg		230 kg		

Classification

В



Test-criteria	-criteria		Evaluation	Maximum take off weight	Evaluation
1. Inflation / take-off - 4.1.1					
lising behavior		Smooth, easy and constant rising	А	Smooth, easy and constant rising	А
Special take off technique required		No	A	No	A
2. Landing - 4.1.2					
Special landing technique required		No	A	No	A
3. Speeds in straight flight - 4.1.3					
Trim speed more than 30km/h		Yes	А	Yes	А
Speed range using the controls larger than 10km/h		Yes	А	Yes	А
Minimum speed		Less than 25 km/h	A	25 km/h to 30 km/h	В
4. Control movement - 4.1.4					
Max. weight in flight up to 80kg			-		-
Max. weight in flight 80 to 100kg			-		-
Max. weight in flight greater than 100kg		Increasing >65 cm	А	Increasing >65 cm	А
5. Pitch stability exiting accelerated flight - 4.1.	5	•	l		
Dive forward angle on exit		Dive forward less than 30°	А	Dive forward less than 30°	А
Collapse occurs		No	A	No	А
6. Pitch stability operating controls during acce	lerated fl	ight - 4.1.6			
Collapse occurs		No	A	No	A
7. Roll stability and damping - 4.1.7					
Oscillations		Reducing	А	Reducing	А
8. Stability in gentle spirals - 4.1.8					
Tendency to return to straight flight		Spontaneous exit	А	Spontaneous exit	А
9. Behaviour in a steeply banked turn - 4.1.9					
Sink rate after two turns		Up to 12m/s	А	More than 14m/s	В
10. Symmetric front collapse - 4.1.10					
Entry	71	Rocking back less than 45°	А	Rocking back less than 45°	А
Recovery	trim speed	Spontaneous in less than 3 sec	А	Spontaneous in less than 3 sec	А
Dive forward angle on exit	rin	0° - 30° Keeping course	A	0° - 30° Keeping course	А
Cascade occurs	t	No	A	No	А
Entry	p	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	accelerated	Spontaneous in less than 3 sec	А	Spontaneous in less than 3 sec	А
Dive forward angle on exit	cce	0° - 30° Keeping course	А	0° - 30° Keeping course	А
Cascade occurs	a	No	A	No	A

11. Exiting deep stall (parachutal stall) - 4.1.11									
Deep stall achieved		Yes				Yes			
	Spontaneous in less than 3 sec		٨	Spontaneous in less than 3 sec			^		
lecovery			less than 3 sec		A		less than 3 sec		A
ve forward angle on exit nange of course		0° - 30° Changing course	less than 15°		A	0° - 30° Changing course	less than 45°		A
Cascade occurs		No	1633 (1811 45		A A	No	1633 (1811 43		A
12. High angle of attack recovery - 4.1.12									
Recovery		Spontaneous in	ess than 3 sec		А	Spontaneous in	ess than 3 sec		А
Cascade occurs		No				No			
13. Recovery from a developed full stall - 4.1.1	3	NO			A	INO			A
Dive forward angle on exit	5	0° - 30°			А	30° - 60°			В
Collapse					A	No collapse			A
Cascade occurs (other than collapse)	No			Α	No Less than 45°			A	
Rocking backward Line tension		Less than 45° Most lines tight		A	Less than 45° Most lines tight			A	
14. Asymmetric collapse (trim speed) - 4.1.14		indet infed tight				inoct inico tight			
		< 90°	Dive or roll angle	0° - 15°	٨	< 90°	Dive or roll angle	15° - 45°	•
Change of course until re-inflation	bse	< 90	Dive of foil angle	0 - 15	A	< 90	Dive of roll angle	15 - 45	A
Re-inflation behavior	speed, % colla	Spontaneous re-	inflation		А	Spontaneous re-	inflation		А
Total change of course	%0	Less than 360°			A	Less than 360°			A
Collapse on the opposite side occurs	trim speed, max 50% collapse	No			A	No			A
Twist occurs Cascade occurs	E	No No			A	No No			A
			Dive or roll angle	150 450			Dive or rell	160 450	
Change of course until re-inflation	bse	< 90°	uve or roll angle	15° - 45°	A	< 90°	Dive or roll angle	15° - 45°	A
Re-inflation behavior	trim speed, max 75% collapse	Spontaneous re-	inflation		А	Spontaneous re-	inflation		А
Total change of course	o spe	Less than 360°			A	Less than 360°			A
Collapse on the opposite side occurs	trim ax 75	No			A	No			A
Twist occurs	an an	No No			A	No			A
Cascade occurs					A	No			A
Change of course until re-inflation	e	< 90°	Dive or roll angle	0° - 15°	А	< 90°	Dive or roll angle	15° - 45°	А
	accelerated, max 50% collapse	0			•	0			•
Re-inflation behavior	erate col	Spontaneous re-	Inflation		A	Spontaneous re-inflation		A	
Total change of course	50%	Less than 360° No			A	Less than 360°			A
Collapse on the opposite side occurs Twist occurs	nax	No			A A	No No			A
Cascade occurs		No			A	No			A
Change of course until re-inflation	m	< 90°	Dive or roll angle	15° - 45°	А	90° - 180°	Dive or roll angle	15° - 45°	В
	ed, lapse								
Re-inflation behavior	erate coll	better a standard for the standard for t		A				A	
Total change of course	cel€ 75%	Less than 360° No No			A	Less than 360° No No			A
Collapse on the opposite side occurs Twist occurs	ac				A				A
Cascade occurs		No			A	No			A
15. Directional control with a maintained asymptotic	metric col	lapse - 4.1.15							
Able to keep course straight		Yes			Α	Yes			A
180° turn away from the collapsed side possible in 10 sec		Yes		A Yes			А		
Amount of control range between turn and stall or spin		More than 50% of the symmetric control travel		٨	More than 50% of the symmetric control travel		^		
-	spin	More than 50% C	of the synthetic c	onuor uaver	A	More than 50% C	of the symmetric c	ontrol traver	A
16. Trim speed spin tendency - 4.1.16		L Ma				L Ma			
Spin occurs		No			A	No			A
17. Low speed spin tendency - 4.1.17 Spin occurs		No			А	No			^
18. Recovery from a developed spin - 4.1.18		no			A	no			A
		Stone	loss that 000			Stop	loss then 000		
Spin rotation angle after release		Stops spinning in less than 90°			A	Stops spinning in	i iess than 90°		A
Cascade occurs			No			No			A
19. B-line-stall - 4.1.19		Changing course	loss than 45°			Changing	loss than 45°		
Change of course before release		Chanding course	e less than 45°		A	Changing course			A
haviour before release Remains stable with straight span						Remains stable with straight span			A
Behaviour before release			with straight span		A	Remains stable	Spontaneous in less than 3 sec		
Behaviour before release Recovery							ess than 3 sec		А
Recovery		Remains stable Spontaneous in			A A	Spontaneous in	ess than 3 sec		
		Remains stable			A		less than 3 sec		A A A
Recovery Dive forward angle on exit		Remains stable Spontaneous in 0° - 30°			A A A	Spontaneous in 0° - 30°	less than 3 sec		A
Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20		Remains stable Spontaneous in 0° - 30° No	less than 3 sec		A A A A	Spontaneous in 0° - 30° No			A A
Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure		Remains stable Spontaneous in 0° - 30° No Special device re	less than 3 sec		A A A A A	Spontaneous in 0° - 30° No Standard technic			A A A
Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears		Remains stable s Spontaneous in 0° - 30° No Special device re Stable flight	ess than 3 sec		A A A A A A	Spontaneous in 0° - 30° No Standard technic Stable flight	jue		A A A A
Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery		Remains stable Spontaneous in 0° - 30° No Special device re Stable flight Spontaneous in	ess than 3 sec		A A A A A A	Spontaneous in 0° - 30° No Standard technic Stable flight Spontaneous in	jue		A A A A A
Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit		Remains stable s Spontaneous in 0° - 30° No Special device re Stable flight	ess than 3 sec		A A A A A A	Spontaneous in 0° - 30° No Standard technic Stable flight	jue		A A A A
Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery		Remains stable Spontaneous in 0° - 30° No Special device re Stable flight Spontaneous in	ess than 3 sec		A A A A A A	Spontaneous in 0° - 30° No Standard technic Stable flight Spontaneous in	jue		A A A A A A
Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit		Remains stable Spontaneous in 0° - 30° No Special device re Stable flight Spontaneous in	ess than 3 sec equired ess than 3 sec		A A A A A A	Spontaneous in 0° - 30° No Standard technic Stable flight Spontaneous in	ue less than 3 sec		A A A A A A
Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.1.21		Remains stable v Spontaneous in 0° - 30° No Special device re Stable flight Spontaneous in 0° - 30°	ess than 3 sec equired ess than 3 sec		A A A A A A A	Spontaneous in 0° - 30° No Standard technic Stable flight Spontaneous in 0° bis 30°	ue less than 3 sec		A A A A A A
Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.1.21 Entry procedure Behaviour during big ears		Remains stable of Spontaneous in 0° - 30° No Special device re Stable flight Spontaneous in 0° - 30° Special device re Stable flight	ess than 3 sec equired less than 3 sec equired		A A A A A A A A A A	Spontaneous in 0° - 30° No Standard technic Stable flight Spontaneous in 0° bis 30° Standard technic Stable flight	iue less than 3 sec		A A A A A A A A
Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.1.21 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.1.21 Entry procedure Behaviour during big ears Recovery		Remains stable Spontaneous in 0° - 30° No Special device re Stable flight Spontaneous in 0° - 30° Special device re Stable flight Spontaneous in	ess than 3 sec equired less than 3 sec equired		A A A A A A A A A A A	Spontaneous in 0° - 30° No Standard technic Stable flight Spontaneous in 0° bis 30° Standard technic Stable flight Spontaneous in	iue less than 3 sec		A A A A A A A A A A
Recovery Dive forward angle on exit Cascade occurs 20. Big ears - 4.1.20 Entry procedure Behaviour during big ears Recovery Dive forward angle on exit 21. Big Ears in accelerated flight - 4.1.21 Entry procedure Behaviour during big ears	ator while	Remains stable of Spontaneous in 0° - 30° No Special device re Stable flight Spontaneous in 0° - 30° Special device re Stable flight	ess than 3 sec equired less than 3 sec equired		A A A A A A A A A A	Spontaneous in 0° - 30° No Standard technic Stable flight Spontaneous in 0° bis 30° Standard technic Stable flight	iue less than 3 sec		A A A A A A A A

22. Behaviour exiting a steep spiral - 4.1.22						
Tendency to return to straight flight	Spontaneous exit	A	Spontaneous exit	А		
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	А	Less than 720°, spontaneous recovery	А		
23. Alternative means of directional control - 4	4.1.23					
180° turn achievable in 20 sec	Yes	А	A Yes			
Stall or spin occurs	No	A	No	А		
24. Any other flight procedure and/or configura	ation described in the user's manual - 4.1.24					
Procedure works as descibed		NA		NA		
Procedure suitable for novice pilots		NA		NA		
Cascade occurs		NA		NA		
25. Remarks of testpilot:						
	* Beim Manöver * Verhalten in Steilen Kurven* konnte nur eine Sinkgeschwindigkeit vo	* Beim Manöver * Verhalten in Steilen Kurven* konnte nur eine Sinkgeschwindigkeit von 7m/s erreicht werden.		Schirm zieht ab ca.8m/s Sinken zügig weiter in dieSpirale,		
				leitet aber dann selbständig nach 720° aus!		
			B-Stall kann aufgrund der hohen Last nur mit			
		Hilfe des Passa				
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