



Inspection record for motorized paragliders Wing unit initial inspection

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EAPR GmbH - Marktstr. 11 - D-87730 Bad Grönenbach - Germany

applicant	Swing						
wing unit	Sting 2 S	MTOW	95 - 120 kg	type test number	noch keine	serial number	8-424-266-53
manufacturer	Swing	trimmer	ja	accelerator	ja, nur für Bergflug		
motor	Thor 130	type test number	826-12	serial number			
propeller	Helix H30F 1,25m	pitch	8° HA				
harness	Fresh Breeze	suspension	tief, vertikal variabel	maximum allowable total flying weight	115		
test pilot	Benni Hörburger	test location	Wildberg	date	03.08.2014		

1. test of launch	
special launch technique required	NO
altitude gain after 300 meters > 15 meters	YES
2. test of landing	
special landing technique required	NO
soft landing on pilots feet possible / soft landing on wheels possible (for paratrike)	Yes, by continuous braking
3. test of trim speed in straight flight	
altitude gain after 300 meters > 15 meters	> 30 km/h
4. behavior of the glider by using the breaks with open trimmers or /and foot acceleration without throttle	
execution	allowed
distortion of the canopy when braking in accelerated flight	NO

5. test of pitch stability and pitch damping and parachutal stall tendency when alternating between thrust and no thrust		
glider turns from the flight axis in a fast alternating between full throttle and no throttle		NO
canopy collapses		NO
parachutal stall or stall is happening		NO
pitch damping	pitch oscillations decreasing significantly	
6. examination of the curve behavior with throttle		
horizontal figure "8" in less than 30 sec.		YES
flat spin tendency		NO
instable flying, with the danger of twisting the lines by changing the direction of turning		NO
7. test of roll stability		
behavior in roll movements and roll damping		rolling decreases significantly
8. test of roll stability in straight flight		
rolling in straight flight		rolling <10°
9. examination of spin tendency by lightly using the braks on both sides		
turning against the torque of the motor at 25% brake possible		yes, 180° in 10sec possible
10. test of stall at maximum motor thrust		
brake travel in cm, braking force		>40cm, constant or increasing
tendency to enter parachutal stall		NO
movement around yaw axis		<10°
11. test of recovery to normal flight from high angles of attack		
followed by cascade		NO
termination	without pilot action necessary in less than 3sec	
12. test of assymetric collapse with trimmers closed and no use of speed system		
execution	without folding lines	possible
behavior of the paraglider after assymetric collapse not accelerated, trimmers closed	canopy reopens without pilot input turning only slightly (<90° until reopening), surging forward less than	45°

13. test of assymetric collapse with trimmers fully open and full use of speed system		
execution	without folding lines	possible
behavior of the paraglider	canopy reopens without pilot input turning moderately (<180° until reopening), surging forward less than 60°	
14. test of symmetric collapse with trimmers closed		
execution	without folding lines	possible
behavior of the paraglider after symmetric collapse (min. 40%) trimmers closed	canopy reopens without pilot input turning only slightly (<30°), surging forward less than 45°	
15. test of symmetric collapse with trimmers open and eventual full use of speed system		
execution	without folding lines	possible
behavior of the paraglider after symmetric collapse (min. 40%) trimmers closed	canopy reopens without pilot input turning only slightly (<30°), surging forward less than 45°	
16 test of behavior of the paraglider in spiral dive		
behavior of the paraglider when entering the manoeuvre	paraglider increases bank angle and sink rate continuously with increasing pull on the brake line	
tendency to finish the turn and to return to level flight when exiting the manoeuvre	less than 720°, return to normal flight without pilot input	
behavior of the paraglider when exiting the manoeuvre	paraglider returns to normal flight moderately after releasing the brakes. The resulting pendulum movements do not require pilot input.	
remarks		
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