Inspection record for motorized paragliders
Wing unit initial inspection

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

applicant	**Swing**						
wing unit	**Scorpio 24**	**MTOW**	124-155 kg	**type test number**		**serial number**	Proto
manufacturer	**Swing**	**trimmer**	ja	**accelerator**	ja		
motor	**Fresh Breeze Sportix**	**type test number**		**serial number**			
propeller	**Helix Carbon**	**pitch**					
harness	**Fresh Breeze Sportix**	**suspension**	tief, vertikal variabel	**maximum allowable total flying weight**		150 kg	
test pilot	**Anselm Rauh**	**test location**	Wildberg	**date**	**20.10.2011**		
the wing unit is	**not suitable**	**for students training flights**					

1. test of launch	
special launch technique required	Yes Trimmer closed for starting
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, special technique required (e.g. flaring, specific position of trimmers) Trimmer closed, flair
3. test of trim speed in straight flight	
altitude gain after 300 meters > 15 meters	> 30 km/h
4. braking characteristics in accelerated flight without engine thrust	
execution	excluded corresponding to user guide

5. test of pitch stability and pitch damping and parachutal stall tendency when alternating between thrust and no thrust	
turning from the axis of flight >15° after each change of load	No
canopy collapses	No
parachutal stall or stall is happening	No
pitch damping	pitch oscillations decreasing significantly
6. test of roll handling with thrust	
horizontal figure "8" in less than 30 sec.	Yes
flat spin tendency	No
instable flight behavior, twist during change of direction	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. test of spin tendency using minimal brake input	
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	yes, termination when thrust of motor is released
	Under full throttel deap stall possible. High shooting on exit by throttling the engine
12. test of assymetric collapse with trimmers closed and no use of speed system	
execution	not possible

13. ***test of assymetric collapse with trimmers fully open and full use of speed system***	
execution	not possible
14. ***test of symmetric collapse with trimmers closed***	
execution	not possible
15. ***test of symmetric collapse with trimmers open and eventual full use of speed system***	
execution	not possible
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 pil ot input
behavior of the paraglider when exiting the manoeuvre	the energy when exiting the spiral dive must be reduced gradually by the pilot, because strong pendulum movements could occure followed by a collapse of the canopy

remarks

not suitable

Rollen klingt langsam ab