Inspection record for motorized paragliders
Wing unit initial inspection

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

applicant	**Swing**						
wing unit	**Scorpio 28**	**MTOW**	140-175	**type test number**	EAPR-TW-7603/12	**serial number**	Sco50-128-99897
manufacturer	**Fresh Breeze**	**trimmer**	ja	**accelerator**	ja		
motor	**Sportix Simonini**	**type test number**	705-08	**serial number**			
propeller	**Fresh Breezeprop**	**pitch**	13° bei 75% des Radius				
harness	**FB Wingman Sportix**	**suspension**	tief, variabel	**maximum allowable total flying weight**	100kg im Gurtzeug		
test pilot	**Anselm Rauh**	**test location**	Wildberg	**date**	**24.05.2012**		
the wing unit is	**not suitable**	**for students training flights**					

1. test of launch	
special launch technique required	YES Trimmers closed according to manual
altitude gain after 300 meters > 15 meters	YES
2. test of landing	
special landing technique required	YES Trimmers closed, long flare
soft landing on pilots feet possible / soft landing on wheels possible (for paratrike)	Yes, special technique required (e.g. flaring, specific position of trimmers) flare landing
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	excluded corresponding to user guide

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° up to <15° but can be dampened by braking Easy to stop roll movments with brakes
9. examination of spin tendency by lightly useing 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	yes, termination when thrust of motor is released High resistance to enter,close throttle for exit!
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 the sink rate by itself to more than 14m/sec and needs to be controlled
tendency to finish the turn and to return to level flight when exiting the manoeuvre	bank angle stays the same, return to normal flight through slight pilot input (counter braking of the outside half of the wing) High steering pressure ofor countersteering to exit spiral dive
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

Drehmomentausgleich vor dem Spiralen lösen oder in die Gegenrichtung spiralen

Rollen klingt nur langsam und nicht ganz vollständig ab. Über die Bremsen einfach dämpfbar.