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paragliding by air turquoise

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Assessment of conformity

EN 926-1 and 926-2

PARAGLIDING PWC SUPERFINAL BRAZIL 2013

FEVRIER 2014

Performed by:

Air Turquoise SA
Route du Pré-au-Compte 9
1844 Villeneuve
Switzerland

Required by:

Paragliding World Cup Association
364 route d'Annecy
74210 Marlens
France

Concern:

Verification of conformity with the EN 926-2:2005 norm, for paraglider **Gin Gliders Boomerang 9 M BP12-K6200003.**

Facts:

1.1 Gin Gliders Boomerang 9 M serial n° BB11-K5600353P underwent a complete certification procedure in accordance with the EN 926-1 and 926-2 norms.

1.2 On the January 7th 2013, the procedure was finalized, and the glider was therefore homologated EN D.

2.1 During the 2013 World Cup Superfinal, the PWCA proceeded to test a sample of the gliders flown, as is permitted by the 2013 PWCA Rules, § 7 of the chapter concerning pilots' equipment.

2.2 At that point, doubts were emitted concerning the compliance of Gin Gliders Boomerang 9 M BP12-K6200003 with PWCA rules.

3 The PWCA therefore requested an expertise on said glider, in order to determine if it is in fact to be considered homologated, according to the applicable norms, at the time of the competition.

[4] Measurements were done on February 13th 2014 in Air Turquoise's offices, under supervision of many witnesses of all concerned parties. Results are the following:

- The total length of each line, including risers, is conform to those of the homologated specimen
- After a rigorous check of the canopy, no noticeable difference was observed
- The distance between accelerator pulleys is conform to that of the homologated specimen.

Judgments:

[1.1] Air Turquoise is an independent homologation laboratory, authorized to test according to EN and LTF norms, and well respected within the paragliding world.

[1.2] *A contrario*, in order to ensure that the spirit of these norms and therefore the public's safety are respected, Air Turquoise is competent to verify *a posteriori* if the gliders sold to the public are conform to the sample tested, homologated and archived by us.

[2.1] According to § 5.3.1 of the EN 926-2 norm, the production gliders must be in all points conforming to the tested specimen.

[2.2] This means that a competent organ may verify the conformity of whichever parameter of the serial glider he sees fit, in order to compare it with that of the homologated specimen.

[2.3] The norm defines tolerances for some of these parameters (EN 926 -2:2005, § 7 lit. c n. 14 et 15): ±10mm for lines and ± 5mm for risers.

Conclusions:

[1.1] All verified parameters are within the acceptable tolerances, as defined in the EN 925-2:2005 norm (§7 lit. c par. 14 and 15).

[1.2] However the archived glider had trimmers on the rear risers

[1.3] The manufacturer mandated us to conduct the homologation procedure in a certain trimmer configuration, but it is impossible to assess whether riser geometry is analogous when using the speed system on the production glider.

1.4 Therefore we cannot, as of today, assess whether the glider Gin Gliders Boomerang 9 M BP12-K6200003 is in conformity with the homologated specimen without conducting additional tests (speed comparisons in flight).

For Air Turquoise SA :

Claude Thurnheer	**Alain Zoller**	**Gilles Berruex**
EN/LTF Test pilot	EN/LTF Test pilot	EN/LTF Test pilot
Flight tests mini weight	Flight tests maxi weight	Technical



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Glider: GIN Gliders : Boomerang 9 M **S/N:** BB12-K6200003 **Done by:** GB **date:** 13/02/2014

Line measurement of PWC Competition Glider

		Archive	Glider		Archive	Gliders		Archive	Glider		Archive	Glider	
			A1	Diff		A2	Diff		B	Diff	B2		Diff
Center	1	8442	8465	23	8416	8435	19	8389	8408	19	8539	8571	32
	2	8315	8337	22	8289	8313	24	8261	8277	16	8407	8440	33
	3	8278	8296	18	8253	8266	13	8216	8241	25	8367	8396	29
	4	8332	8353	21	8307	8327	20	8278	8299	21	8423	8451	28
	5	8239	8265	26	8216	8244	28	8169	8196	27	8331	8359	28
	6	8104	8122	18	8082	8105	23	8038	8064	26	8195	8223	28
	7	8045	8065	20	8026	8050	24	7979	8010	31	8127	8152	25
	8	8067	8084	17	8055	8072	17	8006	8039	33	8140	8161	21
	9	7868	7875	7				7831	7846	15			
	10	7819	7831	12				7784	7798	14			
	11	7737	7748	11				7706	7724	18			
	12	7725	7738	13				7695	7707	12			
	13	7667	7655	-12				7636	7651	15			
	14	7646	7657	11				7616	7629	13			
	15	7643	7655	12		.		7612	7621	9			
	16	7658	7669	11				7628	7629	1			
	17	7446	7463	17				7443	7455	12			
Wing tip	18	7402	7419	17				7418	7430	12			

Pressure	**1002**	**hPa**
Humidity	**37**	**%**
Temperature	**23**	**°C**
Number of cell:	**94**	
Tolerance	**10**	
Weight of glider	7.6	

Mesure of half wingspan with 5 kg tension

	Archive	Glider	Diff
Leading edge	6728	6725	-3
Trailing edge	6791	6781	-10

Archive

Risers	trim	accel
A	493	358
A'	488	419
B	491	492
accel	**14**	cm

Glider

trim	accel
493	358
488	419
491	492
14	cm

Archive Glider GIN Boomerang M / SN BB11-K5600353P
PWC Glider GIN Boomerang M / SN BB12-K6200003

Prepared by RE
Rev 5, 24.03.2011

ISO 9001 BUREAU VERITAS Certification