



The photo above shows the front portion of the fuselage in my modified Score called RToucan.

Total RTF dry weight: 65.2 oz.

Wings area with flaps: 715 sq.in. (the wings have been extended by 2.25" per side)

Tank: 8 oz., SS-8 with clunk.

The engine, Jett60 with standard Jett venturi (0.185" ID) and **almost new liner and piston from Ro-Jett**, has been mounted as shown. The header is equipped with the end piece allowing to mount the silicone exhaust deflector (not shown).

Comment: this Jett was used in my Great White (modified Intrepid XL) with Windy's carbon composite pipe but I smashed this model learning the pattern. Miraculously, the engine survived with negligible damage and has been disassembled, inspected, assembled and bench tested for 5 minutes the next day after the crash.

RToucan has been flown for the first time yesterday using the lines giving 66' from the handle to the model CG and 10% nitro Omega fuel with the total oil content ~20% (castor oil has been added).

Initially, Zinger 13x5 has been used but the model was sluggish with not enough lines tension. Then, I mounted Zinger13x6 and the lines tension improved a bit but not enough.

Comment: the launch RPM were max ~8,000 and I could not get more.

I feel at least 9,000 RPM is needed on launch to get a decent lines tension with 13x5 or and 13x6 Zinger propellers.

Comment: starting the engine is somewhat difficult and requires priming but when the engine starts it runs nicely.

Comment: when the engine is primed and the prop flipped, the piston has a tendency to get stuck while reaching the top of the stroke (TDC).

Question: is it possible that the piston-liner fit is still too tight and the engine must be simply run on the bench for some time to break it properly? Perhaps the engine cannot develop higher RPM because the piston-liner friction is still too high?

Answer: the answer is yes. It was friction.

I have run the engine for 22 minutes today (April 26, 2016) with **smaller** propeller (please refer to the Ro-Jett guidelines titled “how to break your engine”), keeping the RPM in the 9,000 -10,500 range and I have found the following:

1. the oily exhaust contained “dark matter” that was simply aluminum
2. the amount of this “dark matter” decreased after 15 minutes of running
3. The piston is not getting stuck in the highest point like before
4. compression is excellent but the cold wet engine is not squeaking while the piston travels through the highest point (TDC)
5. The engine is a bit easier to start
6. The engine requires priming to start.

I will find out why the priming is needed as it was not needed when the engine was mounted inverted in the Great White having the metal wedge style stunt tank.

This week I will finish breaking the engine using the 10x6 APC propeller (ref: Richard Olivier guidelines re: RO-Jetts) and will be trying to fly RToucan with three different propellers: 12x7, 13x6 and 13x5.

The target is 8,600-8,800 RPM on 13x6 and/or 13x5 and 9,000-9,300 on 12x7.

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About three weeks ago, I visited the Control Line Club in Barcelona-Sabadell, Spain.

The area is very close to the Olympic Stadium, is well maintained, fenced and gated.

The quality of the main circle is very high, with smooth and properly weather protected hard surface.

The club is well supported by the City of Barcelona and I wish we had such support from the City of Toronto.



There is also a large terrain park for R/C cars – everything properly fenced and gated that is a must in urban areas.



Main C/L circle.

The lights of the Barcelona Olympic Stadium are visible.



Grass circle with some of the top Spanish combat pilots, Club building with the modeling school, machine shops (wood and metal) and bar (excellent Sangria and tapas).

Heinkel HE219 UHU was unfortunately rather crudely made but flew well.



Partially finished flying boat (type unknown) with some of the Barcelona hills in the background.



From Barcelona we flew to Seville where I met these Flamenco Ladies.
I could not find anybody interested in the control line flying in Seville as everybody was celebrating Feria.

Now back to RToucan and EParrot.