The moment of truth — The Buzz about to be launched into the gentle spring breeze for the first time.

# RC Soaring Diaries

## Feelin' the Buzz: Test flying the Buzz VTPR from Slopecorn.

Michael Berends Follow
May 19 · 6 min read

*Many RCSD readers will already be familiar with* RC Soaring Diaries *and the force of nature behind it, Michael Berends.* Diaries *is a popular fixture on the RC soaring scene so you can imagine our delight when Michael agreed not only to extend the franchise into RCSD, but also write up some additional, exclusive material to enrichen the readers experience when watching his videos. We look forward to Michael's ongoing contributions in the future. — Ed.*

After being involved in RC soaring for close to 40 years, I'm always amazed that there are new planes and flying styles that constantly give us 'Glider Guiders' new challenges. The *Buzz* from Slopecorn gives exactly that!

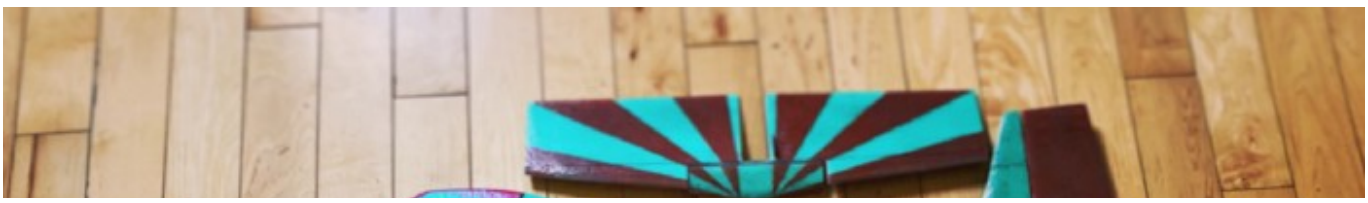
I remember first hearing about VTPR (Voltige Trés Prés du Relief) around seven years ago and was absolutely fascinated with it. VTPR, in general, is low level slope aerobatics done within close proximity. Something that's right up my alley as I love flying close and low and it's guiding me closer to something that I've envisioned since I was really young learning how to slope soar. I've always wanted to do genuinely interact with my plane on the slope and this type of flying is the closest thing that I've seen to it.

My initial plunge into this style of flying was done with a Dream-Flight *Ahi* and although it's a great flying plane and served me well for a few years, I wanted something with better performance. This is where the *Buzz* came in.

Because of my involvement in so many other facets of RC soaring, the pursuit of a better VTPR plane was placed on the back burner till I saw that Justin Gafford from *Slopecorn* was putting a new batch together recently and knew that this was the plane I needed to take my flying to the next level. I seized the opportunity and reached out to him where he notified me that he could build one for me in the current batch he was building. This started lots of great conversations with Justin where I pleasantly found out that he is quite the character!

> I was bewildered when he told me to set up the CG (Center of Gravity)at 55% behind the Leading Edge and to set my control throw Exponential at 90%...

It was great too see the progress as Justin sent me pictures at various stages. As far as color schemes went, I let him have free reign on that in which he chose a *groovy retro look* with seafoam green and a red sunburst that I instantly thought was awesome!



The Buzz freshly out of it's shipping box. All pieces arrived in great condition after their journey from California to Calgary, Canada.

Justin offers a few versions of this glider in various forms of completion and I opted to get a complete plane with servos installed to expedite the building time. Arriving in a stout cardboard box, all the components made their journey unscathed. The EPP foam (*Expanded Polypropylene*) components were painted and covered with laminating film. All servos came installed and a small accessory pack along with some laminating film came in the package to complete the assembly.

The pre-cut hatches were sized just right for the battery and receiver I chose to use in this very unique bird. I went with a flat 4 cell pack of Eneloop NiMH (nickel-metal hydride) batteries because of the safe chemistry used in them. The 4.8v output works great with inexpensive servos also with no need for any voltage regulation such as those needed with lithium batteries. Pretty much all of my slope ships carry NiMH batteries as the last thing I want to be concerned about is a lithium battery catching fire on the edge of a remote hill somewhere in a crash. Unfortunately we are losing flying sites all the time and I see no point in taking any extra risks.

The assembly was pretty straight forward and required me to join the wing halves, reinforce it with the some of the extra laminating film and glue it into place with a nice bead of hot glue. The stabilizer was glued in the same way. Once that was completed all that was needed was to install the rudder control horn and the pull-pull control lines along with making the aileron pushrods with the provided components. once everything was completed there was some more reinforcements made in the nose area with laminating film and all was done. An easy laid back assembly that took me a few hours one night to accomplish.

Setting up all the control throws and balancing this plane was highly entertaining and had some fun and questionable instructions from Justin. I was bewildered when he told me to set up the **CG (*center of gravity*) at 55%** behind the leading edge and to set my control throw **exponential at 90%**! Along with this he stated that *"If you don't activate elevator to aileron/flap mixing, this plane will fly like a paper plate".* The ailerons both drop down when the elevator goes up and they deflect up with the input of down elevator.

Pull-pull servo configuration and the resulting extreme deflections of the tail surfaces.

With some hesitation I heeded his advise and set the tail surfaces up for approximately 80 degree deflection along with 90% expo. Also programmed the elevator/flap coupling. It balanced at the recommended 55% mark with no weight needed to accomplish this.

Finishing this at the end of the unpredictable winter weather here in Canada, I needed to patiently wait for a few weeks for favorable conditions. Not my strong suit but that's what happens when you're involved in weather dependent pursuits. The day finally came and I zipped out to a hill close to my home after work. Gave everything a final check and tossed the *Buzz* into the light and variable, slightly cross, winds. You can see the results in the accompanying video below.

It flew straight out of my hands and I didn't find it twitchy at all with such a rearward CG and gigantic control throws. Much to my surprise, Justin's recommendations were bang on!

The conditions were less than optimal, but I certainly had a chance to see how it flies. Some of the initial observations were that it flew with far more authority than I expected it and went exactly where it was pointed, inverted flight needed no down elevator to maintain altitude and the rolls were nice and axial. It was a fun game playing with the energy management of the glider to learn how to do flips and extreme maneuvers. You can come to a grinding halt when you fully deflect the tail surfaces for too long, or without enough energy. *You can see an example of this at the end of the video.*

Since the video was posted I've had a chance to get more time on the *Buzz* and can tell you that it does some amazing things. Continuous flips, sustained knife edge, wingtip scraping rolls and elegant spins. One of my favorite ways to fly is to put in some earbuds, play some music and "dance in the sky". The **Buzz** definitely allows me to do that! Looking forward to seeing what else this agile little ship will do!

I highly recommend giving VTPR flying a try. A nice change of pace from the norm, a great way to improve your skills and it's always rewarding seeing what type of new maneuvers you can do!


The maiden flight of the Buzz from the RC Soaring Diaries channel on YouTube.

Thanks for reading, and watching, and we will see you next time!

*All photos and video are by the author. Read the **next article** in this issue, return to the **previous article** or go to the **table of contents**. Downloadable PDFS: just this article or this entire issue.*