

AIRMAIL

THE EXTREME FLIGHT RC NEWSLETTER

Big Raven

Focus on Designers

WOA 2024



EXTREME FLIGHT
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From the GM

Tim Hanstine, General Manager

As I write this year end review, I'm realizing it's almost my one-year anniversary as General Manager of Extreme Flight! And WOW, what a year it's been!!

From the bottom of my heart, I'd like to thank every single customer of Extreme Flight RC for another year of your support. You make all of this possible. You're the engine that drives Extreme Flight forward, and because of this we'll keep doing our best to give you the world class products and service you deserve!

This year brought us a tremendous amount of growth and change at Extreme Flight. We embraced the opportunity to refine then build the best team possible, both in and out of HQ and feel we succeeded even better than I could have ever expected. Armed with our world class team of development and demonstration pilots we were able to fast track new sizes and updates at a record pace.

We implemented and staffed a new Fulfillment Department, challenged to meaningfully decrease the time before an order shipped while further improving shipping accuracy. This was during a period when the volume of our orders roughly doubled year-over-year. I have to thank Keith Stratton, our Fulfillment Manager, for digging into these complex projects during 2023 as he took the ball and ran with it, training new staff and making all these new processes work (not to mention pivoting at a moments notice each time I wanted to try something new.)

We also looked hard at our customer service function and set the goal of radically increasing the responsiveness of the company to customer inquiries

and needs. We formed a Customer Service Department and hired Antonio de Souza to run it. Antonio is a long time team pilot for Extreme Flight and his knowledge of our products and RC topics is exhaustive. We were very glad to get him onboard and the effects were felt immediately.

2023 marked the year of introducing some exciting new products with near "earth shattering" results. Following the merger with NWRC we added Skywing RC aircraft in both ARF and PNP to the lineup. Skywing is another, high-quality brand which we were so happy to partner with. To be sold alongside Extreme Flight products, a brand has to be world-class in quality and performance, and Skywing most definitely is. We started receiving containers of Skywing into the USA headquarters in the Spring of 2023, increasing our volume steadily over the year. In 2024, we plan to increase the spare parts lineup for Skywing while we further increase the stock of aircraft in the warehouse to try and keep up with the feeding frenzy. If you haven't tried a Skywing airplane yet, you may want to take a look...

Another huge step for Extreme Flight in 2023 was introducing its first Receiver-Ready airplane, the 67" Extra 260. Sales of the 260, in ARF and RXR formats far surpassed our expectations so we had to go back to our supplier and make a strategy to radically increase the production volume of these aircraft for 2024. Based on the results we plan to release more 67" aircraft in 2024, starting with the 67" Laser which is due in our USA Warehouse in January-February 2024.

Look for even more RXR aircraft in 48", 60", and 67" sizes. Along with the release of the 85" Laser, 70CC Peregrine, 104" Extra 260, and several other secret new designs, 2024 is going to be a HUGE year.

Speaking of new designs, I'm proud to be working with some of the best designers in the business. Ben Fisher heads the design office at Extreme Flight, working countless hours each day developing our projects while coordinating with some of our newest additions to the design group. Cody Wojcik has been with us for years and is responsible for the amazing Bushmaster line of aircraft as well as the Turbo Raven series. We hope to introduce a new line of aircraft from him in late 2024 or early 2025. We're also excited to be working with Terry Wiles who has designed many 3D aircraft for various manufacturers in the industry. He has two projects underway for us at the moment. You can read more about both of these great designers in this newsletter.

I've said it before and I'll say it again, we truly

have the best guys on our team! They make events fun and productive, help us evaluate and improve aircraft designs, help customers, and do the dirty work like loading and unloading trailers. They sacrifice their time and talent to help other pilots, each other and are tenacious in making Extreme Flight the leader in the industry. I cannot brag on them enough to convey how much I love our Team. As we continue to grow we'll be looking to expand the roster to represent Extreme Flight as our core team can't be everywhere. If you've got what it takes, let us know.

Lastly, I want to thank my wife and family. They've joined me in a cross country adventure to an unfamiliar place to start the next chapter of our lives. They did this on faith and without them and their support none of this would have been possible.

I'll wrap this up thanking everyone again for the support along the way. And while 2023 was the "Best year yet" I can't wait for "Even more in '24."

- Tim Hanstine





It's RAVEN time!

**January 2024 brings
the Turbo Raven in the
new 88" size and in a
new blue color scheme
in both sizes!**







CODY WOJCIK

AIRCRAFT DESIGNER

What does it take to be part of the Extreme Flight Team? Lots of things, but most fundamentally, you have to be crazy about airplanes. That's what ties us all together, a lifelong obsession with model airplanes and things that fly. And, if you obsess about model aircraft enough, you might come up with some truly great ones.

Cody Wojcik is exactly that obsessed. Cody is a mechanical engineer who has designed and built laser equipment and industrial automation machinery and other hyper-complex things...but his passion is flying machines. His "day job" is as an engineer for commercial UAV systems. When we ask Cody what

he's doing at work these days, his typical answer is "I can't talk about it." But occasionally, we see video of some mind-bending machines doing mind-bending things in the sky.

In his "free time," Cody builds and races cars and rides mountain bikes... and he designs some of the most groundbreaking model aircraft ever.

Cody is the designer of the Bushmaster series of aircraft produced by Extreme Flight under our Legacy Aviation brand. The Bushmasters are incredible, lightweight bush planes which can fly like trainers if desired, or can tear up a 3D routine in the most unexpected way.



Bushmasters at play.



Cody and Team with the world-record endurance multirotor circa 2014.

Bushmasters are incredibly light for their size. The 140" version requires only a 120cc gas engine for perfect performance, and weighs only about 32 pounds ready-to-fly. People often think the specs of the airplane are a misprint. The version which flies on 6S 4000mah batteries is a huge 84" in span.

The design of the Bushmaster is so useful and flexible, it is used as an easy sport flyer by many, a 3D

plane by others, a float plane, and has even found success in the commercial UAV industry as a workhorse. We produce Cody's Bushmaster in 84", 100", 120" and 140" sizes. Float kits are available for every size.

But wait, there's more. Cody also designed the Extreme Flight Turbo Raven, one of the most popular "cult" ARF designs in history.

Often in the industry, to be a commercial success, a design needs a popular and recognizable name. This can be as important as any aspect of design or performance. This is why there are so many Extras, Edges and Slicks in the world (even though some of the planes with these names bear little resemblance to their full-scale counterparts.) The typical response to hearing about the Turbo Raven is "What's a Raven?"

In the full-scale world, a Raven is one of the scratch-built full-scale aerobatic aircraft by legendary airshow pilot Wayne Handley. The first one was a hybrid of a Kraska Rebel and an Edge 540, and used a piston engine. Then he built the mighty Turbo Raven, a highly modified Giles-202 powered by a Pratt and Whitney turboprop. It was a truly amazing airplane capable of greater than 1:1 thrust-to-weight. It could accelerate straight up.

Cody designed a version of this amazing airplane for Extreme Flight, and because few people are familiar with Turbo Ravens, it sometimes takes a little coaxing for people to try it. Once they do, they are hooked. It's incredibly light, incredibly precise, and incredibly easy.

We have produced the electric 69" Turbo





The full-scale Turbo Raven

Raven for several years, and it quietly sells out every time we build it. It definitely has a strong cult following. “I picked the right airfoil, right surface sizes, right moments, and gave it low drag, all with the goal of making a really lightweight aircraft that isn’t sluggish. It has a really locked-in feel that you often don’t get when an aircraft is this light” says Cody.

Now it’s time to make a big Raven! Cody has designed an 88” version for us, and you may have seen us testing it during 2023. It’s awesome, and it’s coming to our USA warehouse in January 2024. Power for the big one comes from either a 50-61CC gas single cylinder, or the XPWR60CC brushless system on 12S lipo. With the introduction of the 88” Raven, we’re also introducing a new Blue and Yellow color scheme on both sizes.

What’s next for Cody? It’s a big secret, but Cody is working on a new series of aircraft for us and he says it’s going to be nuts. We can’t wait. Cody is also a high-level aerobatic pilot and a Team Pilot for Extreme Flight, so he does much of his own flight testing.

Cody says “I went to school for mechanical design engineering, and picked up some aerospace engineering while designing RC aircraft and commercial UAV’s.” He’s designed over 20 commercial RC aircraft and UAV’s, and we think he’s learned a few things along the way!



Cody at his “day job” testing another UAV system.



RC ***SKYWING***



Extreme Flight is celebrating one year of supplying Skywing aircraft and parts to the United States! In 2024, we will expand our spare parts range for the brand and we will supply and support the Skywing turbine jets. If you haven't tried a Skywing, you need to! High-quality and great flight performance, Skywing is available at ExtremeFlightRC.com



TERRY WILES- AIRCRAFT DESIGNER

If you, like me, are a model airplane nut, then you can probably identify nearly any airplane you see at the field. You know at a glance what it is, which company produced it, what engine it takes, and probably when it was built. Car guys can do the same with any year model of car. And, you can probably also easily tell the difference between a factory-built ARF and a kit or scratch-built plane that comes out of someone's basement or garage. The home-built airplane was obviously made with a lot of love and enthusiasm, but it typically lacks the laser-cut and jig-assembled precision of the factory ARF.

I can remember the first time I saw one of Terry Wiles' scratch-built airplanes. I saw a what I thought was a factory-built ARF that I didn't recognize at a big fly-in, and it stumped me. It was obviously a factory-built plane, because it was engineered like one, and none of the pieces had any sign of being home-made. I looked it over, thinking maybe it was something brand new from a competitor, and asked a few people. "Oh, that's one of Terry's planes," they said.

Terry Wiles is an engineer, designer, project manager, CAD artist, CNC programmer, and fabricator. He is one of the few people in the aerobatic part of

the RC hobby who can conceive of a new aircraft design, draw it, fabricate every component, and build the design to near-perfect standards. If that wasn't enough, he's also an excellent pilot who can do his own development testing.

His secret weapon, he notes, is living in South Dakota where he has a long winter building season. As our friend Bill Daniel said, "The hobby advances because Terry Wiles has bad weather!"

Terry has been flying RC since 2006 and designing and building his own aircraft since 2011. He has designed several giant-scale 3D planes for various ARF and kit manufacturers. He flies electric, gas, and turbine power. He is an AMA District 9 AVP, Contest Director and Leader Member. He is also a business owner with his wife, Lori. They run a CNC fabrication shop serving the cabinet industry.

After years of flying with Terry and trading building secrets with him, we're finally getting to work with Terry, and we couldn't be happier. Terry is now a sponsored pilot for Extreme Flight and is creating aircraft designs for us.

Terry's first design for Extreme Flight has been through the prototype phase and, as of this writing in December, is about to enter the factory-built sample



Terry creates everything for his aircraft. He designs and produces all of the composite parts and canopies and can even paint them to factory standards.

evaluation phase. We'll keep that first design a secret for now and talk about project #2:

In mid 2023, we asked Terry to take on a big project for us, the design of a new Cap580 aircraft. We thought Terry would be the perfect designer to tackle the Cap, because Terry's aircraft are notably easy to fly and confidence-inspiring. Caps are great aircraft to model, but there have been a few poorly-developed ones since the turn of the millennium in the ARF industry which hurt the design's reputation. Terry took on the challenge of designing and prototyping a Cap that everyone will love to fly.

Terry started with a 104" Cap for 120cc, and once the design was finalized in CAD, it took him about one month to fabricate prototype #1 and fly it. As is typical of Terry, it looks like a factory-produced airframe. As of this writing, shakedown flights have been completed and the aircraft is very close to perfect. It's exactly the kind of gentle-but-high-performance package we've come to expect from Terry.

Since the 104" has gone so well, we've asked Terry to move on to a 67" version of the Cap and after only a few weeks, he has the CAD model almost done. He expects to be flying it in early Spring 2024.

We are so excited to be working with Terry, one of the greats of the modern RC hobby. We look forward, when someone asks us who designed one of our latest Extreme Flight planes, to saying, "Oh, that's one of Terry's planes."



The fuselage of the 104" Cap580 prototype is typical Terry Wiles quality, made with interlocking laser-cut parts.

The 104" Cap580 prototype in flight.



We'll post updates on this project and others in our
Extreme Flight Owner's Club group on Facebook.



Testing has been completed on the pre-production samples of the 70cc Peregrine biplane, and production has begun! This big brother to the very popular 53" electric Peregrine should arrive in our USA warehouse in Summer 2024.

The 70cc Peregrine spans 2 meters and uses a 70-76CC gas twin engine, or the XPWR60CC brushless outrunner with 12S 5000mah lipo.



DEVELOPMENT REPORT

The NEW 85" Laser



Testing and development is complete on the 85" Laser! This new aircraft is now in production and should arrive in our USA warehouse in Spring 2024.

The 85" Laser shares its aerodynamic package with the 104" Laser (with a few tweaks added) and has an incredibly locked-in feel. The Extreme Flight Lasers are known as true all-around workhorses of 3D, Freestyle and Precision flight modes - the 85" takes this up another level.

Power it with either 50-61CC gas, or the XPWR60CC brushless system on 12s lipo - it's great either way. More info is coming as we get closer to the landing date.





Wings over America 2024

Extreme Flight cordially invites you to join us for the 3rd annual Wings Over America fly-in, April 3-7, 2024. Held at the world-famous Hodges Field in picturesque Andersonville, Georgia, our event is a relaxed, friendly gathering of RC enthusiasts with maximum open flying time, a huge raffle, great food and fellowship. Come see all the latest, greatest new offerings from Extreme Flight, meet the company owners and team pilots, and fly to your heart's content. On-site camping with hookups available, please contact Jeremy Jackson at 470-514-0770 or Jnjackson@gmail.com to reserve a spot. See you in April!

Merry Christmas



EXTREME FLIGHT