

can remember my first experience with an Addiction a few years ago. My buddy Jim Champion brought his out to the field to wring it out. Truthfully, when he told me he was bringing an Addiction for us to fly, I wasn't very excited. I had only seen the Addiction in the magazine and thought it

resembled a "pregnant profile." Seeing it first hand and getting my hands on the transmitter taught me real quick that the Addiction was no porker! The original Addiction looks fierce and flies awesomely. I came away that day thinking that the only thing better than the Addiction would be a bigger one! Enter

the Addiction X! The Addition X, like all other Precision Aerobatics products, is performance-tested and ready to rock!

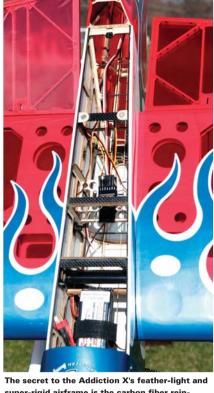
## **INITIAL IMPRESSIONS**

I received the Addition X for review complete with their IPA Bling combo package with all the bells and whistles. Included in the combo package are: fabric wing bags, expertly covered laser-cut balsa and plywood airframe with two pieced wing, carbon wing tube, carbon gear, carbon wheel pants, painted fiberglass wheel pants and cowl, wheels, Hitec servos, carbon servo arms, 45amp speed controller, brushless motor, 3S LiPo battery pack, Deans connectors, carbon spinner, prop, servo wire, carbon vortex generators, pushrods, rudder pull-pull system, control deflection gauge, decals, hardware package and direction booklet. The IPA Bling package will save you over \$85 compared to purchasing individual components and everything need is included minus the receiver. The airframe comes in three different color choices: red/white/blue, purple/white/blue and green/white/red.

I'm glad that the base color of the "X" is transparent. It allows you to see all of the intricate laser workings and copious amounts of carbon fiber that make up the feather-light airframe. While it looks great with all of the composite construction, I love how rigid the FiberFusion construction makes the airframe. With laminated carbon occupying much of it, it's got a robust nature that handles extreme flight loads, and normal handing, as well.

## **TIPS FOR SUCCESS**

The Addiction X is so thoroughly designed that there is little to say in terms of helping you do a better job. Let's walk through the assembly so you can see what I mean. You start off with the installation of the horizontal stabilizer. The stab fits securely in a slot in the fuselage and self aligns when fully seated. All the control surfaces feature flex-style CA hinges. The wire tailwheel fits into a drilled hole and slot at the base of the rudder.



super-rigid airframe is the carbon fiber rein-

The two-piece wing slides onto a carbon fiber main spar and alignment dowels with a plastic thumb screws to keep the wing secured to the fuselage. The carbon landing gear screws into a carbon reinforced plate with machine screws. The directions indicate to "loctite" the threads before installation. Take it from the seasoned expert here, who specializes in learning from his mistakes, this is an essential step!

The wheels install with traditional wheel collars, while the pants feature a single mounting screw to prevent rotation. The



# **SPECS**

**PLANE:** Addiction X

MANUFACTURER: Precision Aerobatics

**DISTRIBUTOR:** Precision Aerobatics

TYPE: Unlimited 3D

FOR: Intermediate through advanced

WINGSPAN: 50 in.

WING AREA: 744 sq. in.

**WEIGHT:** 41.6 oz.

WING LOADING: 8.06 oz./sq. ft.

**WING CUBE LOADING: 3.54** 

**LENGTH:** 52.4 in.

RADIO: 4 channels required; flown with a JR 12x transmitter. Spektrum 6110e 6channel receiver, 4 Hitec HS-85MG servos

**POWER SYSTEM:** Thrust 40 brushless outrunner motor, VOX T40 prop, Quantum 45-amp brushless speed control with BEC, Precision Aerobatics 3S 2200 mAh LiPo battery

**FULL THROTTLE POWER:** 12 amps, 127 watts; 3.05 W/oz., 48.84 W/lb.

TOP RPM: 6.700

**DURATION: 8-12 minutes depending on** flving style

MINIMAL FLYING AREA: Ball field/RC club field

PRICE: \$224.95

**COMPONENTS NEEDED TO** 

**COMPLETE:** Hand tools, soldering iron, glue, receiver, and an appetite for fun!

### SUMMARY

Precision Aerobatics continues to be one of my favorite planes for all out fun. As light as the airframes are, they are completely rigid, take the vigors of extreme punishment in the air, and don't need the white gloves when handling. There is no guess work when equipping your Addiction X because Precision Aerobatics does it best! Don't second guess any of the details in the Addiction X; Precision Aerobatics designed it that way for a reason.



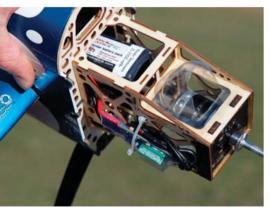
**76** FLY RC MAGAZINE

# PRECISION AEROBATICS ADDICTION X

canopy hatch is held on with rare-earth magnets and has an indexing pin to prevent shear loads from ejection the canopy during an erratic maneuver. The cowl requires the mounting screw locations to be drilled and then installed with wood screws.

Another interesting feature of the Addiction X is the carbon fiber vortex generators. The thin carbon VGs slide into precut slots in the wing and are secured with thin CA. I am using a JR 12X transmitter and Spektrum 6110e receiver to control the model. I used the Hitec HS-82MG servos included for all flight controls as their metal gear train will suck up all abuse you can throw at them. The elevator and aileron servos mount close to their respective control surface and the rudder servo has an option to be mounted aft of the wing spar or under the motor, allowing you to keep the Addiction's CG in check with different weight power systems.

The control surfaces each have carbon fiber control horns that fit neatly into precut slots that are glued into position. Each servo was fitted with an extended carbon fiber servo arm



The Thrust 40 motor, Quantum 45 speed control and PA 3S 2200mAh LiPo battery are a potent combination. Note the huge scoop directing cooling air directly onto the motor.

to maximize deflection. The pushrods on elevator and ailerons consist of a carbon fiber rod with machined aluminum clevis for the control surface and a ball link for the servo end. Each end of the pushrod is epoxied into position after length is verified. The rudder is a pull-pull system that uses Kevlar line with cable length adjustment at the servo arm.

Before installing the power system the motor box has to be installed. The motor box is keyed with the firewall and is secured with epoxy as well as the addition of carbon rods to lock it in place. The Thrust 40 motor attaches directly to the back side of carbon reinforced mounting plate. Plastic air scoops direct air over the motor for cooling. The Quantum Pro 45-amp speed control gets the



# **AIRBORNE**

The Thrust 40 motor really delivers for rapid acceleration. The takeoff roll was relatively long before lift off. I attribute this to the shallow stance of the Addiction X, which does not allow the wing a high angle of attack on the ground. In the air, the Addiction X proves that it's a breed all to itself. The feather-light wing loading gives a nimble feel for which Precision Aerobatics is noted.

I flew level for a couple passes and added a click or two of trim before I had an over-whelming temptation to explore the wild side of the Addiction X. What a superb 3D flying machine! The Addiction can fly high-alpha maneuvers until the cows come home! I had no problems getting excellent camera opportunities because the Addiction X could easily hold virtually any position. There is enough side area that rollers and high-alpha knife-edge require little speed. With a blast of power and sticks pinned to their corners, the Addiction performs awesome gyrations that can be stopped as quickly as they were entered.

Flat spins, snap rolls, knife-edge spins are all performed with ease. The wing has lots of area towards the tips compared to some tapered, traditional aerobatic plane wings, making the plane fly as if it were larger than it is. This gives the Addiction X a slightly slower snap roll, and a bigger advantage by taking the sting out of tip stalls. The vortex generators keep help with laminar flow by increasing lift and aileron sensitivity at slow speeds and high alpha.

Let the Addiction X float around on the wing for awhile and you will see the gentle side of its personality. I would never consider the Addiction X as a trainer, but with sane rates, it could be flown and appreciated as a Sunday flier. Tracking is quite good considering how agile the Addiction X is. Slow rolls, point rolls and knife edge show minimal coupling. The fact that the Addiction X will sustain flight at what seems like a snail's pace, makes landing a piece of cake. Despite having a relatively narrow fuselage, the Addiction slows down well. I found that dragging the Addiction X nose high with a little power worked best for me.

Velcro and zip-tie treatment to the side of the motor box. The Precision Aerobatics 3S 2200 mAh LiPo battery is fitted with Deans connectors. A carbon 1.8 inch spinner and VOX T-40 prop finish the motor installation.

## CONCLUSION

I'm sure it's a little obvious, but I really like the Addiction X! The fact is that the Addiction X does every bit of what it's supposed to do and more. I loved flying this thing, and what it comes down to for me is the fun factor. And, the fact that the plane is more capable then I am and I feel comfortable when I fly it. Not much more to say but it's a keeper! Happy flying.  $\bullet$ 

Visit find.flyrc.com/071106 to watch the video!

### Links

Hitec USA, www.hitecrcd.com, (858) 748-6948

JR, distributed exclusively by Horizon Hobby Distributors, www.jrradios.com, (800) 338-4639

### Precision Aerobatics,

www.precisionaerobatics.com, (770) 292-9122

**Spektrum**, distributed by Horizon Hobby, www.spektrumrc.com, (800) 338-4639

Thrust Motors, distributed by Precision Aerobatics, www.precisionaerobatics.com, (770) 292-9122

Vox Propellers, distributed by Precision Aerobatics, www.precisionaerobatics.com, (770) 292-9122

For more information, please see our source guide on page 121.