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PRECISION AEROBATICS Precision Aerobatics.com RACER

Love at first flight!

recision Aerobatics continues to keep on doing what they lo best and that is create mid-size aerobatic powerhouses that redefine their class. The Bandit is a 50-inch 3D machine that was inspired by the Red Bull Air Race. It is a completely unique model that was designed to give you the feel of a full-size aircraft even though it is not scaled after one. The term "3D Racer" means that the Bandit is capable of every aerobatic flying style that you wish to perform. It is capable of high-speed precision flight but it still retains the ability to slow down to a walking pace and perform high-alpha maneuvers such as elevators and harriers.

The Bandit is very light, yet it maintains rigidity with PA's FiberFusion technology. FiberFusion is the bonding of carbon fiber to the airframe's structure to drastically increase strength with a minimal weight penalty. Since the Bandit is exceptionally lightweight for its size, this keeps the wing loading very low and makes it a versatile aircraft that pilots can grow with.



Author's Opinion

There is always a question of which power system to outfit an electric model with. With so many options on the market, this can pose a real challenge. Th<u>e folks at</u> Precision Aerobatics have done the hard work for you, and their PA Thrust 40 brushless motor has been proven by their engineers and test pilots to be the optimal choice for this model. I totally agree; the power is incredible. I really like the carbon reinforced airframe because of its light weight, superb flying traits, and rigidity. The Bandit is a real 3D performer.

Key Features

- ly light and very strong. > The Thrust 40/Quantum power system
- delivers 600 heart pounding watts of power; enough to take the Bandit through any maneuver.
- best performance.

3D AEROBATIC ARF

MANUFACTURER/ **DISTRIBUTOR:** Preci

TYPE: 3D aerobatic ARF

FOR: Intermediate through expert pilots

PRICE: \$234.95

MINIMUM FLYING AREA: RC club fiel

NEEDED TO COMPLETE:

eller, 3S or 4S 2200mAh ght battery, hand tools, s ring iron, glue

> The Bandit uses carbon FiberFusion rein forced construction, which is exceptional-

> You can order the Bandit as a complete package with all required components from Precision Aerobatics. This takes the guesswork out of outfitting the model for

- The light wing loading gives the Bandit very forgiving flight qualities.
- > The Bandit will easily fit in the car for lunch time flights without disassembly.

Pros

- Lightweight and strong airframe
- > Excellent acceleration out of hover
- > It is a delight to 3D



> None

IN THE **AIR**

My experience with the Precision Aerobatics power systems has been nothing short of spectacular as they deliver an incredible amount of power, and the Thrust 40 no different! The Thrust 40 when powered by a 4S LiPo battery is insane and the light VOX 12x6 wooden prop accelerates from zero to full-power in a nanosecond. As one would expect, the take off roll was brief and the Bandit was airborne in a flash. The

acceleration of the Bandit with a freshly charged battery pack is bordering on violent, but in a good "on the seat of your pants" sort of way.

In the air, the Bandit shares traits that other PA aircraft are noted for. The feathery light wing loading gives the



Bandit a nimble feel. Interestingly enough, despite having rather large ailerons and generous aileron deflection, the roll rate was very manageable. I found myself removing some of the expo that I added to obtain a comparable feel on the elevator and rudder. The pitch was on the sensitive side but that was due to the slightly tail heavy configuration. This was smoothed out by sliding the battery forward so it hung over the battery tray and was positioned slightly into the rear of the motor box. This adjustment reduced the sensitivity and improved tracking.

With the CG figured out the Bandit really came to its own and performed precision-style maneuvers very well for a plane that is tagged as a 3D aerobat. There was minimal coupling when on its side and the massive rudder made high-alpha knife edge flying a snap. Slow and point rolls were a walk in the park especially after dialing it in. Snap rolls, inside and out are very manageable as if it were a bigger plane. It flat spins well and performs inverted flats even better. Blenders are over the top!

During one high-speed pass, I experienced the canopy departing the aircraft. If you don't want yours to do the same, make sure to cut a cooling air outlet in the bottom of the fuselage.

Slowing down the Bandit and pointing the nose up for some high alpha flying was anticlimactic. That is not to say that it's not exciting, it just performs it so well. Walls are instant with no regard to the airframe. You can pull up as hard as you desire and the Bandit simply does as commanded. I harriered right-side-up and inverted and the control surfaces did an amazing job maintaining attitude. If things got messy, a punch of the throttle would send the Bandit back into orbit. Rollers were performed with ease. The Bandit is nimble but has an uncanny feel of stability that it gets away with because it has such a light wing loading. Stalls are quite manageable with a tendency to drop a wing when pushed hard enough. The Vortex Generators are designed to reduce stall speeds (which they do and exceptional job of), but when a stall does occur you must get off the elevator and add power.

Landing a lightly-loaded 3D plane is text book as long as you use elevator for pitch and power of altitude. With the airframe drag, a little power keeps the Bandit moving and controls effective. Dragging the Bandit with a little power and cutting it over the target is the way to go for best results.





airplane flies better, and that is precisely why I enjoy the flight characteristics of the Bandit as much as I do. The Bandit has all the traits I look for in a plane; it looks awesome, has a huge flight envelope capable of a wide variety of flying styles, is available as a package, and it is so much fun to fly!

THE LAST WORD The Bandit is another fine

example of excellence form

the people at Precision

Aerobatics. The airframes

are light as a feather but

with the carbon inlay it is

MUCH stronger than one

would expect. I learned

many years ago that a light

SPECS

NINGSPAN: 50 in.

- WING AREA: 537 sq. in.
- WEIGHT: 2 lb. 11 oz.
- WING LOADING: 11.5 oz./sq. ft.

CUBE LOADING: 6

LENGTH: 46.3 in.

RADIO: 4 channels required; flown with a JR 12X transmitter, Spektrum AR6200 receiver, (4) Voltec VTS-70MG servos

MOTOR: PA Thrust 40 brushless outrunner motor, Quantum 45 amp brushless ESC with BEC

PROPELLER/SPINNER: VOX 12x6 propeller and Precision Aerobatics 2.17-inch carbon fiber spinner

RPM: 9,500

BATTERY: Precision Aerobatics 4S 2200mAh LiPo



RECEIVER Spektrum DSM2 AR6200, SPMAR6200







(4) Voltec VTS-70MG,

SERVOS



ESC Quantum 45A Pro ESC, AC-2189



CONTACTS JR jrradios.com, (800) 338-4639

PRECISION AEROBATICS precisionaerobatics.com, (770) 292-9122

SPEKTRUM spektrumrc.com, (800) 338-4639

THRUST MOTORS thrustmotors.com, (770) 292-9122

VOX PROPS VoxProps.com, (770) 292-9122

For more information, please see our source guide on page 105.