



An easy-to-fly high-performance pocket rocket

READYTOFLYFUN

Thunderbat

by Thayer Syme

SPECS

PLANE: Thunderbat XF PNP

MANUFACTURER: Tensho Model Company Ltd.

DISTRIBUTOR: ReadyToFlyFun.com

TYPE: High performance foam jet

FOR: Intermediate pilots

WINGSPAN: 24.63 in.

WING AREA: 200 sq. in.

WEIGHT: 12.3/13.3 oz.

WING LOADING: 8.9/9.6 oz./sq. ft.

LENGTH: 28 in.

RADIO: 3 channels required; flown with a Spektrum DX7 transmitter, Spektrum AR6100 receiver, (3) RTFF.com 9-gram servos, Esky EK2-0704 gyro

POWER SYSTEM: GWS 2204/15T 2160Kv brushless outrunner electric motor, Tenosho 6.25x3.2 prop, GWS 25-amp speed control, FullyMax 2S 1050mAh Li-Poly Battery, (alt. FullyMax 3S 1350mAh)

FULL THROTTLE POWER: 2S 9 amps, 66 watts, 5.36 W/oz., 85.8 W/lb.; 3S 15.8 amps, 165.9 watts, 12.47 W/oz., 199.6 W/lb.

TOP RPM: (2S/3S): 12,050 / 15,450

DURATION: 10-15 minutes

MINIMAL FLYING AREA: Ball field

PRICE: \$59.95 airframe only; \$179.95, PNP; \$279.95, RTF

COMPONENTS NEEDED TO COMPLETE: 3-channel transmitter and micro receiver, 2S-3S 1050-1350mAh Li-Poly battery, Li-Poly compatible charger

SUMMARY

A perfect lunchtime pocket rocket, the Thunderbat XF is a high-energy adrenaline pump that satisfies the need for speed in a compact, go-anywhere package. Available as a basic kit, ready for a receiver, or fully ready to fly, ReadyToFlyFun.com has a Thunderbat XF for everyone.

AIRBORNE

I will be honest, I had my doubts until we were out at the field. This is a small model that clearly needs to be moving for the wings to earn their keep. As soon as I spooled up the motor though, my doubts were erased. It was immediately obvious that I would soon have a tiger by the tail—and I couldn't wait. I throttled up to somewhere around half stick where the thrust seemed sufficient, then gave it a good firm toss out and away. The molded finger recesses on the underside of the fuselage made it easy to get a good launch and keep your arm well away from the prop.

Now the adrenaline was starting to pump. This little flyer was moving out pretty well, and I was only holding a little stick pressure to keep it climbing for trimming. As soon as I had it at a safe altitude, I gave it a few clicks, then set up for my first pass.

I came in at partial throttle, then punched it right before I got abreast of where I was standing for maximum effect. You could see the model leap forward with the acceleration. I couldn't help but toss the stick full over as I climbed out for a few victory rolls. All this fun, and with just the 2S battery.

Continued expansion of the flight envelope showed that it would do anything I wanted. I've flown several small fast models, and it was clear that the gyro was doing its job keeping the wings level. It gives the Thunderbat a much larger and more stable feel as you charge around the park. Because the aileron effectiveness is speed sensitive, the roll rate can catch up to the gyro at higher speeds, causing



the model to oscillate in roll. Backing off the throttle just a touch will damp the motion, as will easing off the gyro gain just a little.

The 3S pack offers even more top-end speed, but only the most power hungry will feel it necessary. The 2S pack offers a lot of performance, and you don't have to worry about running flat out for too long, as the system can not overdrive itself with the smaller pack.

The gyro really helps out when landing. Sharply swept wings can rock a bit as you slow them down and get the nose up to bleed off speed. The gyro holds the wing steady, and really makes you look like a pro. Landing is as simple as reducing the power and holding the nose a little above level until it gets close to the ground. Chop the power completely before touching down to protect the prop, and simply let it drop into the grass. Now grab another battery and great ready to go again!



is truly ready to fly, and you won't want to wait any longer than necessary to go fly. I used the FMA A123 Cell-Pro 4S charger programmed for conventional Li-Poly packs. This charger is all but foolproof, and offers a thorough charge with minimum hassle. Just plug in a 2-4S pack and watch the display. Among the on-screen data this charger offers is the relative "fullness" of your tank. Nice. Various adapter cables are available to fit all currently

known balancing plug conventions so you don't have to do any crimping or soldering. Doubly nice.

The manual gives you pretty precise instructions on balancing this model. I took them to heart, and carefully setup the Thunderbat with both the 2S and 3S packs. The planform suggested a pretty narrow CG range, so I tried to get it perfect. I marked the batteries relative to the fuselage so that future battery swaps would not shift the CG.

The nose of the fuselage has two small "nostrils" that allow cooling air to flow through the fuselage. After overheating and shutting down on an early flight with the 3S pack, I opened up the air holes to increase the air flow. A Robart carbide cutter in

The Thunderbat XF is a compact pusher jet that packs a lot of punch into a small package. We tested the PNP version, so only had to add a receiver and charge the batteries before we could go out and fly. While a bare kit is available, we would definitely lean toward the PNP package as all the decisions, and setup effort, have already been made for you. There is also an RTF version available that includes the transmitter, receiver, battery and charger.

The airframe is constructed of injection molded Arcel foam and has a smooth upper surface without the usual molding "pips." The nose is blow molded polyethylene and is very durable. Once I had the Spektrum receiver installed and bound to the transmitter, I taped the PVC turtledeck in place and was ready to go.

TIPS FOR SUCCESS

Get your battery on a charger as soon as you open the box. The PNP version of this model

my Dremel tool made quick work of that fuselage plastic.

Don't be afraid to tune the gyro to your liking. At high speeds the ailerons become more effective, and if the gyro gain is a little high the wings will appear to flutter in a dive, or even just a high speed level pass. By backing off the factory setting just a little, I was able to smooth out the gyro response.

Lastly, abide by the throttle restrictions listed in the manual. If you maintain full power for too long, the ESC will overheat and reduce the power output. Not so bad as to cause a crash but you will definitely be landing soon and waiting for everything to cool off.

CONCLUSION

The ReadytoFlyFun.com Thunderbat XF lives in my car these days, and the batteries are always charged. My hat is off to the RTFF.com crew, this model is a hoot. From crawling harrier passes to punching through the sky at full power, I am having a ball with the Thunderbat XF at every opportunity. And with its durable construction, I expect it will hold up well for many flying sessions.

Links
FMA Direct, www.fmadirect.com, (800) 343-2934
ReadyToFlyFun, www.readytoflyfun.com, (866) 472-8697

Robart Mfg., www.robart.com, (630) 584-7616
Spektrum, distributed by Horizon Hobby, www.spektrumrc.com, (800) 338-4639

For more information, please see our source guide on pg. 177.