

by Scott Stoops

*Innovative 3D profile aerobat for gas or glow power*



## AEROWORKS ProX 260 QB Freestyle

**A**eroworks continuously innovates and expands its reach into new markets, so I wasn't surprised to see their entry into the large profile aerobat world with the ProX 260 ARF. Although they have been doing smaller profile designs for years, this larger design is an exciting departure for them and is available in .46 and .60-.91 sizes. I was pleased to see Aeroworks supporting both glow and gas power with the larger model considering the new eco-

nomical gas engines now hitting the market. In fact, with minimal modification, I think electric power could also be easily installed.

Due to its size, I'm glad that the wings are removable. They are secured with a single long bolt that spans through the fuselage and into a blind nut in the opposite wing. Very innovative and clean! Additional unique features include quarter turn latches to secure the hatches on the top of each wing that cover access bays for the elec-

tronic equipment. Those and many other unique assembly techniques made the ProX 260 a joy to assemble. Let's get started.

### ASSEMBLY

Typical of Aeroworks QB designs, the ProX 260 includes a very thorough instruction manual that should be a mandatory read. Every time I read one of their manuals, I learn a new way to do things. After some tightening of covering, I started by gluing



PHOTOS BY DAVID MIELKE

### SPECS

**PLANE:** ProX 260 QB Freestyle

**MANUFACTURER:** Aeroworks

**DISTRIBUTOR:** Aeroworks

**TYPE:** 3D aerobat for gas or glow

**FOR:** Intermediate and Advanced pilots

**WINGSPAN:** 56 in.

**WING AREA:** 952 sq. in.

**WEIGHT:** 118 oz.; 7 lbs 6 oz.

**WING LOADING:** 17.85 oz./sq. ft.

**WING CUBE LOADING:** 6.94

**LENGTH:** 56 in.

**RADIO:** 4+ channels required; flown with a Hitec Aurora 9 2.4GHz transmitter, Hitec Optima 7 2.4 GHz receiver, 5 Hitec HS-5955TG digital servos

**ENGINE:** .60-.91 glow engine or 20cc gas; flown with DLE 20cc gas engine and muffler

**PROPELLER/SPINNER:** Xoar 18x6 propeller and 3-inch plastic spinner

**TOP RPM:** 9,110

**FUEL:** 40:1 gas/oil mix

**ONBOARD BATTERY:** Thunder Power 2S ProLite 3600mAh LiPo pack (radio), Intellect 4-cell NiMH pack (ignition)

**PRICE:** \$199.95, ARF; \$24.95, DLE 20 installation kit

### COMPONENTS NEEDED TO COMPLETE:

4+ channel radio system including moderate torque standard size metal gear servos, onboard battery and ignition battery, .60-.91 sized glow or 20cc gas engine, fuel tubing, propeller, spinner, various adhesives, common hobby tools

### SUMMARY

Aeroworks new ProX 260 Freestyle airframe is a profile version of their popular Extra 260 optimized for .60-.91 size glow or 20cc gas engines. Its style is reminiscent of Fun Fly designs with a thick airfoil section, huge wing area and short coupled tail that allow the in your face on the deck 3D that has become so popular. It features removable wings on a carbon fiber spar tube, durable aluminum landing gear and a rigid yet lightweight fuselage. Covered in genuine Ultracote, the ProX 260 also features Aeroworks Quick Build (QB) construction which allows you to minimize assembly time on the bench.

the CA hinges in the wings.

Be sure to pay attention to the note about aligning the ailerons. They can interfere with the SFG's if they're glued too far out on the wing. I found that aligning the covering patterns between the two surfaces ensured this wouldn't be a problem. Aileron servo installation was somewhat unique in that they mount from inside the wing with only the output shaft exposed. Again - a great idea that I'd not seen before. Access to the servo is through the electronics hatch. Pre-drilled holes locate the nylon aileron control horns

through and steel pushrods with metal clevises on both ends ensure a precise setup. Rounding out the wings, the SFG simply screws onto the wingtip using the included hardware. I've flown the model with and without the SFG's and think that most modelers will prefer it with the SFGs installed.

Fuselage assembly is similarly simple. The elevator and rudder servos mount externally in the tail. Be sure to secure the servo leads as they'll be pulled through the profile fuselage with pre-run strings and you don't want them coming undone mid way. I used 24-





Caption

inch extensions and had plenty of extra length to reach the electronics bay in the wings. The fin glues to the top of the fuselage while the stabilizer and elevator assembly slot into the fuselage from behind where a small vertical support is cut away providing access. This allowed me to fully hinge the elevator prior to slotting the stabilizer into the fuselage. Be sure to avoid attaching the rudder before this step. The tail servo hardware is identical to the ailerons. Finishing the basic fuselage assembly, the aluminum main landing gear and tailwheel are hassle-free. Just bolt them in place. You will want to use Loctite on all of the wheel collars and wheel pant attachments as glow and gas engines can shake quite a bit.

#### ELECTRONICS AND ENGINE INSTALLATION

Although overkill, I chose the Hitec 5955TG servo for the ability to run unregulated 2S LiPo power for the entire radio system. The Thunder Power 2S 3600mAh pack will last all day, which means I don't have to bring a charger to the field. I did choose the DLE 20 gas engine which requires an ignition pack under 6 volts, and the Intellect 4-cell 750mAh NiMH pack has proven itself to be the perfect match in several other models. To further simplify the electrical system, I eliminated all switches and simply plug the leads directly



#### AIRBORNE

I have never played with a gas engine this small and was a little concerned about hand propping it. I had envisioned a finicky starting process especially until the engine was fully broken in. I really couldn't have been more wrong. Once fuel hit the carburetor for the first time and I got her tuned, the DLE 20 has been a dream to start and operate. Tuned for slightly rich of peak rpm, it provides a clean transition, great top end power, and is a perfect match for the ProX 260. I wouldn't change a thing.

My initial flight was somewhat tail heavy as I tried to check the CG by myself measuring from the wingtips. With some lead added before the next flight the airplane instantly became a stable and responsive 3D demon. Be sure to program in aggressive expo and consider dual rates as on high rates it has extremely high pitch, roll and yaw rates. I have a hard time imagining a model that is more responsive in 3D. I ended up detuning the ailerons somewhat for a more manageable roll rate, but kept the rudder and elevator as close to bevel-to-bevel throw as possible. I found it to be very responsive with very little rock in upright or inverted harrier. With around 80-percent expo on all surfaces, the rolling harrier stir is absolutely predictable. Hover and torque rolls are also very stable. The DLE offers more power than needed for climbing flat spins and great vertical acceleration for low hover punch-outs and recoveries. Probably the most fun, however, is aggressive vertical pop-tops that rotate in yaw multiple times before dropping the nose.

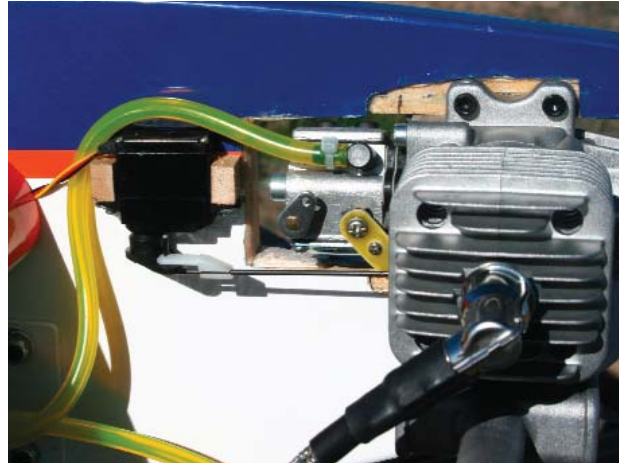
Like most short coupled profiles, the ProX 260 isn't a precision competition machine. It does roll predictably, and has great knife edge performance both during high and slow speeds, but it isn't going to win any precision contests due to its short tail moment. I also found it hard to do clean snap rolls as the thick wing just doesn't want to stall and release into the autorotation quickly. All of this was expected though, and is countered with its excellent 3D performance. Back to KE, I found roughly 2 or 3-percent roll coupling left wing high, none right wing high and around 3-percent pitch coupling to the landing gear. Each was easily mixed out using the Aurora 9.

I expect this airplane will find a large audience initially due in part to its styling, ease of assembly and price point, and will come to be appreciated for its excellent performance. It would make a great glow/gas 3D trainer as it is exceptionally responsive yet stable, and it seems to be quite durable. The aluminum landing gear is flexible and able to accept harrier landings, and even pseudo crashes falling out from hovers. That stability and durability allows newer 3D pilots to explore and learn without feeling like they're constantly on the edge of losing control of their new model. On the other end, the ProX 260 can be an all-out aggressive 3D demon in the right hands.

into the respective receiver and ignition plug. The top mounted hatches are secured with quarter turn fittings that require only seconds to open and close, so battery access is simple and quick when powering and depowering the model. I secured the receiver and batteries with Velcro pads.

The ProX 260 can use either glow or gas power and personal preference reigns here. If you choose glow power, simply bolt the engine in place and attach the included fuel tank immediately opposite the engine with the include hardware. If you choose a gas

engine, The DLE 20 is the perfect choice. You'll want to purchase the conversion kit which includes a template to alter the mounting rails, a drill guide for extra holes in the fuselage, a smaller tank, extra zip-ties and the wood parts needed for the conversion. Following those instructions, you'll need to relieve the stock rails for the wider mounting platform of the DLE. I used a combination of a Dremel tool with cutting disk and a razor saw. You'll also add a support to each side of the fuselage aft of the engine and slightly below the wing that becomes the mounting area for the fuel tank and ignition unit. The throttle servo also gets moved aft and attached with hardwood blocks. Be sure to mount the engine as far forward as possible on the rails and consider moving the fuel tank back to the stock position opposite the engine if you end up tail heavy as I did. Another solution is to use a heavier than normal spinner, or even a weighted spinner adapter.



Having neither, I ended up adding 6 ounces of lead to the nose for a good CG. Going forward, I may replace the spinner with an aluminum one which will allow me to remove some of the added weight.

#### CONCLUSION

Available in two sizes, .46 and .60-.90, the ProX is very easy to assemble and features some of the highest quality components and construction techniques of any similarly sized ARF on the market. It is also priced to sell, so I suspect that this new design will be extremely popular with a wide range of modelers. For me, the convenience of removable wings and an economical gas engine combined with outstanding 3D performance make the ProX 260 a great value. 🌟

#### Links

**AeroWorks**, [www.aero-works.net](http://www.aero-works.net), (303) 371-4222

**Hitec USA**, [www.hitecrd.com](http://www.hitecrd.com), (858) 748-6948

**Thunder Power RC**, [www.thunderpowerrc.com](http://www.thunderpowerrc.com), (702) 228-8883

**Xoar Propellers** are sold by Bob's Hobby Center, [www.bobshobbycenter.com](http://www.bobshobbycenter.com), (407) 277-1248

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