RC REPORT

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Blade 330X RTF

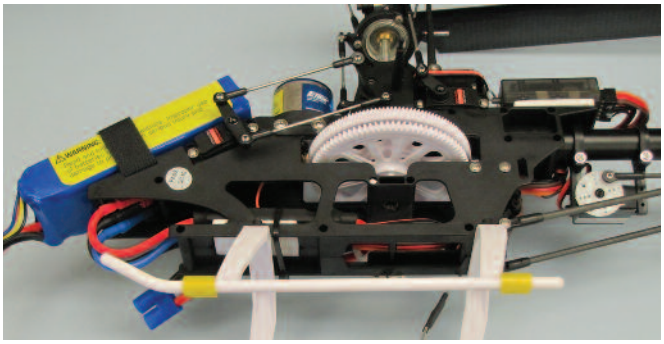
Intended for the more advanced pilot, it's a really nice heli.

It was many years ago, but after developing a strong sensitivity to epoxy and cyanoacrylate adhesives I was on the verge of leaving the world of hobbies. Then one day a friend of mine suggested I look into helicopters. "You don't glue anything, they simply bolt together." Intrigued, I began looking into the machines and it wasn't long after that I purchased a JR Ergo .30 size (glow) helicopter.

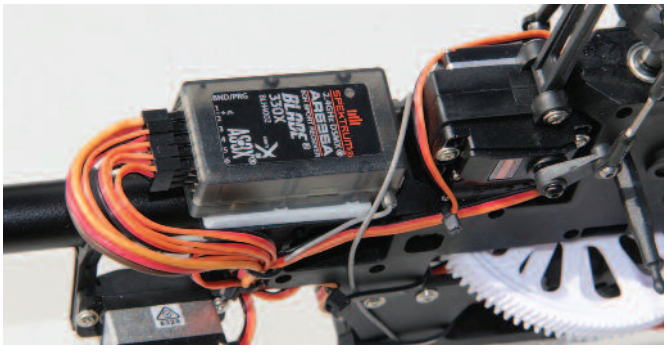
Those were the days. Although the internet was under development, it was nothing like it is today. Assembling, balancing the wooden blades, programming the transmitter and learning to fly was pretty much done alone and by trial and error. In fact the only way to gather information was at a local fun-fly where pilots with similar interests would attend and share experiences. To this end it was around 25 years ago that I attended my first Al's Helicopter Fun-Fly. There was a saying in the early days of model helicopters that you purchased the machine twice before successfully learning to fly. As an example, if the initial price of the heli was $350 (without ancillaries) the student would go through another $350 in repair parts before he caught on.

As mentioned, those were the days. Filled with challenges, fun and frustrations, even with a career in public service I never really knew how to swear until trying to program a World Class II transmitter. The advent of quality ARFs brought about the ability to re-enter the world of fixed wing flight and although I don't fly helicopters exclusively anymore they have never been put to the side. What I describe as the gizmoness of a model helicopter—watching everything work in unison to make the machine fly properly—is simply fascinating.

That said like everything in this hobby the radio control helicopter certainly has changed. One of the bigger changes occurred not all that long ago when the concept of logic entered the picture. With the advancement in micro electronics came the ability to add stability to a



Manufactured from a composite material, the frame of the 330X is beefy and will take most impacts without much fear of damage. However the stock landing gear struts/skids are pretty lightweight. One way to protect the skids from damage caused by the heli dancing around on a blacktop surface is to cut small sections of fuel tubing to slip over the skids. Silicon is prefered, but on-hand was tygon and anything will help protect this part of the helicopter.



Included with the package is the ultra reliable Spektrum AR636A receiver. As a person can see the installation is very well executed with all of the servo leads neatly bundled together making for a clean setup

model helicopter, eliminating the need for complex programming and lightning fast thumbs.

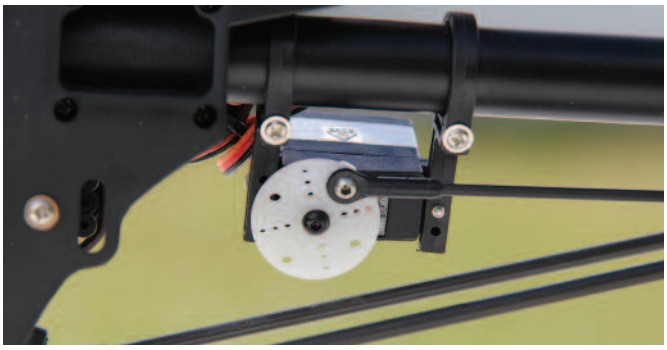
In opening the box of the Blade 330X the first thought, and it was said out loud, was "Wow, this is nice." Like many of today's designs, the helicopter comes completely assembled. The first thing noticed is the canopy. Not only is it brightly colored for orientation, but the scheme is very attractive. In removing the helicopter from the box one sees the 330mm long blades (hence the 330 designation) are manufactured from carbon fiber and are flawless in appearance.

The 330X is 870mm (34.3 inches) long and stands 225mm (8.8 inches tall). The main rotor spans 725mm (28.5 inches)—both blades and the rotor head—and the tail rotor is 155mm (6.1 inches) all up flying weight is 717grams or 25.3 ounces. Not a large heavyweight by any means, but of enough substance not to get blown around in modest winds.

For those interested, other details include a BLH4002 (Spektrum AR636A) receiver, 4200kV brushless outrunner and a 45amp ESC. The servos are all digital sub-micro metal gear units. Three H3050 (SPMSH3050), which are slower but offer more torque are used on the swashplate for pitch and cyclic, and one H3060 (SPMSH3060), which sacrifices torque for speed, is used for tail rotor control. With metal gear servos installed from the factory there is little fear of stripping the gear sets during normal operation. Included with the Ready-to-Fly package is a Spektrum DXe transmitter programmed specifically for the 330X. Also in the package are a rudimentary charger and a lead for the charger that uses a 12V battery or similar power source.

Most likely by the time the end user is ready for this machine he already has a quality charger, but if not, a 12V power source (EFLC4001) should at the very minimum be an add on sale item, or better yet, a more advanced charger such as the Prophet Plus 50W AC/DC (DYNC2010CA) should be added to the package.

The 330X uses the extremely popular, practically the industry standard, 3S 2200mAh LiPo for airframe power, so not only was the included battery charged, but a couple more were pulled from spares to keep the fun going during the flight evaluation. As always, while the batteries were charging the included instruction manual was read. The manual is extremely comprehensive and it was actually read a couple of times until all the ins and outs of the 330X were known before the first flights. Of particular interest was



All of the servos included with the 330X are of the metal gear variety for strength and longevity. The three cyclic servos are high torque units whereas the boom mounted tail rotor servo, by virtue of slightly different gearing, provides lower torque, but in exchange it is an extremely high-speed servo for precise tail rotor control.

the location of the various flight mode switches on the DXe transmitter. The Blade 330X is not a beginner's machine by any stretch of the imagination and knowing where flight mode switches are located and their operational use was memorized before the first liftoff was even attempted. This is of paramount importance and dealers should drum this into the potential purchaser so he doesn't make silly mistakes fumbling for the correct switch.

While all of the switches on the DXe transmitter are clearly marked for function, it's imperative the pilot memorize the location and position of each switch before taking flight, as the last thing wanted is to flip the wrong switch when loss of control and a crash is imminent.

With all of the preliminaries out of the way it was time to fly. With a freshly charged battery secured to the airframe, the transmitter was placed in normal flight mode and the main rotor was spooled until the heli became light on its skids. Another burst of power brought the heli up to chest height and out of ground effect. A quick check of the blades indicated they were tracking true and in plane. Since no adjustments were necessary the flight continued.

The first flight was nothing more than an orientation flight. Simple hover, close in horizontal figure-eights, a couple of climbs to altitude and the resulting settle back to chest height. About five minutes into the flight it was time to land.

I'm certainly not a demonstration pilot, not even much of a precision aerobatic pilot anymore, but on the second flight aerobatic mode stunt-1 was entered. This moved the throttle stick into what's known as "idle up" which basically puts idle in the middle stick position and allows for full throttle with full positive pitch in the up position and full throttle with

While the main rotor head is machined aluminum, the swash plate is a robust composite structure. All of the control links feature metal balls for precision control and under normal use the stock swash will last the owner a considerable length of time before needing replacement.

The canopy's paint scheme is certainly bright and easy to orientate and even though it's easy to see and ready for flight in its stock form, for those so inclined there are a number of aluminum hop-up and colorful replacement parts available, which will allow the individual user to personalize his machine to his own liking.

full negative pitch in the down position. Once in idle up a few loops and rolls were attempted. The loops weren't necessarily very round, nor were the rolls completely linear, but, and this is key, they were easy to accomplish. For an aerobatic helicopter the Blade 330X is an extremely easy helicopter to fly. Entering mode stunt-2 increases the head speed slightly and drops the gain on the tail rotor way down, allowing for all sorts of pilot aggression to be released. In stunt-2, tail rotor control and therefore the direction the helicopter will be headed is the responsibility of the person wiggling the transmitter sticks. This mode is recommended only for the accomplished helicopter pilot.

As with all offerings from Blade, the only difference between the Bind and Fly and the Ready to Fly is the included transmitter, flight battery and a charger for the flight battery. Odds are the consumer of this product will be experienced, and will therefore have a transmitter that can fly the 330X in his existing inventory. That said any Spektrum DUX transmitter of six or more channels is capable of being programmed to the 330X. Settings for the various transmitters are, as always, part of the instruction manual, but in this instance, unless the end user is well versed in programming, most likely the better, and therefore recommended, solution is to download the settings from spectrum.com. That way there is no chance of having missed a setting that could have an extremely negative impact on the way the 330X flies. If your customer is resistant to this, suggest he make a photocopy of the settings, and check each step off one by one as he programs his transmitter.

Having been around the block a few times, those who know me also know I'm not easily impressed, but this machine is pretty impressive. The helicopter not only looks good, but it employs some top-notch equipment such as metal gear servos and carbon fiber rotor blades. Small enough to be flown in a large backyard or any open field, it's a take everywhere machine. Plus since it's relatively tame in the normal flight mode, but fully aerobatic in the stunt modes, more experienced and newer helicopter pilots alike will enjoy flying the Blade 330X.

The 330X is a nice size helicopter. It is small enough that it can be flown in a person's yard and yet it's large enough that a modest wind won't be blowing it around. Even though it's equipped with all sorts of modern stabilizing technology by its very nature flying a model helicopter is a challenge and requires a learning curve that when mastered is an extremely satisfying piloting skill to possess.

Considering its aerobatic capability, as long as the newer pilot has soloed a couple of intermediate helicopters, and provided he starts slowly, he shouldn't have much trouble with the Blade 330X, but the manual does include a comprehensive parts listing for when the inevitable crash occurs. Along with everything else, for those so inclined, in addition to the already impressive basic platform there are all sorts of polished aluminum accessories for even more bling should the purchaser so desire.

For stores that inventory helicopters, the Blade 330X is a must. It's impressive to look at. It incorporates all sorts of upper end electronics and mechanics. And best of all, it flies great.

Like all Blade products, the 330X is available exclusively through Horizon Hobby. **HM**