

Review: Quick 30 Pro

Having wanted to actually pilot Remote Control Helicopters since I was a kid, and with my increasing age coupled with my own children out on their own now, the opportunity has finally and gratefully arrived. I am in my 3rd season of flying these marvelously complicated and rewarding machines!

As a flyer yourself, you are aware of the fantastic technology that has been developed over the years of growth in the RC Industry and in which, we who presently fly, are so obliged to enjoy here at the turn of the millennium. Our hearts go out with many thanks to the genius of those who came before us to have tweaked and detailed and refined these tiny, yet incredible designs, which in a special manner, allow our very souls to take the air as eagles to the wild blue! This is a fabulous and rewarding way to pass and savor the time we have been given to live, enjoy and share our lives. There is a distinctive camaraderie among those of us who have so discovered that we can actually spool up and place these whirling dervishes into the air stream surrounding us. Not very many can accept the complicated challenge.

To this end I have come to tender my personal conclusions regarding a wonderful new design in Model Helicopter Technology - The QUICK 30 PRO! Having flown the Shuttle, the Raptor, and the KyoshoPlastic helicopters, they have brought this pilot to the delight of discovering an ALL METAL 30 Size helicopter, in the same price class, that is as charming to build as it is to fly. If you are looking for a new machine that is astonishingly Smooth and Easy to fly and will do all the tricks. This is one that you will want to look at. You can really get this baby airborne for way under the thousand dollar plus price tag of the 60 class machines, and you have found a winner.

When you first begin to look for a new model, the very Inexpensive Plastic Kits available on the market today appear respectable. But the amazing feature of the Quick 30 Pro is that there are no necessary upgrades of any kind ever needed. This puppy is complete in every way! The other popular machine of this day is in desperate need of extra's including a complete renovation of the Ball Links of a more capable and smoother type, as well as the Tail Rotor Hub which, in my opinion, is totally unsatisfactory as an offering from the factory for a Ready to Fly Machine. (Yes, dear, I have Loctited the Grubs and still flung a Tail Rotor blade!) Although the factory now offers an Upgrade part to "Correct" the deficiency, this continues to add to the expense. These continued sneakings into the wallet to rectify mistakes bring the All Metal Quick 30 Pro into the limelight as a great little Saturday and Sunday flyer!

I will grant you that as your pilot-in-command curve log rhythmically proliferates, and your budget will allow, you will no doubt wish to jump up into the very much more expensive 60 Class Machines. But this fine little All Metal kit is THE Contender for that intermediate and smooth running ship as you learn and grow more proficient.

Let's take a look at the inner workings and assembly of the Quick. The Manual doesn't appear in the box! Only a little piece of lexan strung along with zero's and one's on it the Computer adept individual's instantly know as the CD-ROM. (Should one not have a

PC available today, the local Kwik Print can make this an easy task!) I had no difficulty at all in putting together the model from the Pictures and Instructions contained in the guide. I must mention there were a couple of places I did get stuck and had to think through what was the designed intention to complete that portion of the task. It was a joy to assemble such a nicely machined Metal framework.

I believe it best to put together the frames without locking compound first and slightly tightening the 3mm screws to get the frame precisely true and square. Then when the Main Gear goes in with the addition of the 10mm main shaft, the gear mesh is perfectly set utilizing a piece of regular paper folded over and cut 3/8 inch wide, this is inserted into the clutch drive pinion and rear Counter gear which are positioned by the oblong slots along the bearing pillow blocks and secured. Then each screw is taken out and blue Loctited. Now is go the time to go back and Blue Loctite the screws for the entire frame one at a time. This will give you the best possible build, keeping things true and square. It is an extra Step to be sure, but worth it in the long run, not to mention that with a rig this fun to build, you should be in no particular hurry.

Since the machine is cut CNC in Japan, all the bearings are of Japanese make. These are Good Bearings! There isn't a bushing anywhere. Every pivot point is tight and precise.

The head comes already assembled from the factory. Take care to check the artist's workmanship and check for tightness on every screw and re - Loctite as necessary. As I did find a few a bit loose. After all, the Engineer's envisioned a grand design that had safety as it's forefront, can have their vision immediately negated by placing such in uncaring hands. Take your time, check and enjoy each step as you go through the construction process and see the model slowly take shape right before your very eyes. This to me is one half the fun!

The Three Point Mixing Swash Plate design that Quick calls EMS for Electronic Mixing System, is the same as CCPM. (Collective Cyclic Pitch Mixing). It is a wonderful concept and is no wonder why the world champion's are using it on their high-dollar precision machines. One just doesn't slap it together, but by precisely setting up the three servos that render full and complete Cyclic as well as Collective swash plate movement, a slop-free, and High Collective Torque head is available for instantaneous commands. I used the very well made Futaba 9202's on mine.

The key to accurate alignment in the construction of this CCPM (EMS) Head is to have the Main Blade Pitch at ZERO when the Throttle/Collective lever is dead centered. This places the servos at their center of their throws when at zero pitch. I set mine up with ATV's set to achieve a plus and minus 10°'s of pitch swing. Then utilize the various pitch curve points, of which my Futaba 8UHFS has five, to achieve the following. Normal mode: Top end at +9, bottom at -6°. Idle up-1 and 2: Top and Bottom at 9° plus and minus. Throttle Hold: Each end at max 0% and 100% equaling Plus and Minus 10°. Personally I do not believe one needs 12 degrees of pitch on the top end to auto-rotate accurately. There is, after all only so much altitude available in an emergency engine

out condition where the full Negative TEN isn't enough to get that head a swingin' to stop it at "6 inches AGL" with Ten Degree's on the top! Kinetic energy management is the answer. And should one forget to hit hold, the bird is still fully capable of getting to the grass successfully in any of the other modes.

The Quick doesn't have an auto-rotation type of SLIPPER Clutch which gives the pilot full tail authority during a Power Off descent! And frankly, this is just fine with me. In the unlikely event of a Tail Blade failure, Throttle / Hold will actually STOP the Tail Rotor and one can get her down by the forward motion and proper flare the Big Boys use. Ever wonder why a Full Size Heli has no Negative Pitch available on the Collective? Transitional lift, Weather-veining tail and flare will get your machine back in one piece! If you fly like Curtis, it's time for a Big Expensive machine!

I set my Head control rods up so that the Washout Links are horizontal at 5 degrees of hover pitch. The manual says to do this at the Zero Pitch Point, but frankly I like this control feel at the hover, and FFF is where I spend most of my time enjoying the flight anyway.

There is a thought regarding this machine and about mounting the Rudder Servo so that the Control Rod can be run UNDER the Tail Boom. I tried this idea, but came back to locating the Rudder Servo inside the frames with the Servo Control Horn coming out the PORT side (L). The Three Control Rod holders can accommodate the curve of the rod just fine. I use two balls inside the Horn to get the rod as close to the Tail Boom as was possible. One could place the servo within the frames prior to assembly, but in doing so a retrofit means that you have to disassemble one half of the Rear Frame to replace the servo. Once you have the Rod smoothly actuating the tail control lever, you secure the guides to the Boom. I used two layers of 3M black electrical tape tightly wrapped to the Boom with the sticky side out to hold the guides in place on the Tail Boom. You may have a different technique. Use this same technique to hold the Tail Fin Mounts as you will find that there is no way to tighten the plastic mounts to keep them from slipping on the Boom.

Watch out for the Tail rotor "Y" slider when all done. It can touch the lever stand-off if not corrected by ATV's on the transmitter during full RIGHT Rudder Commands. Nothing serious, just pay attention to this detail. (My Futaba 8U accommodates this perfectly!)

I like the little inexpensive Telebee GR-701! For under an Eighty dollar bill, one can have full Heading Hold and Normal Tail Pitch control that is completely adequate for this type of Machine! I have mine set up to the Idle-Up switch to be in HH mode, and revert to normal Tail Control while descending and landing in Normal Flight Mode. (Switch towards ground.) While in HH mode in Idle up a 45° backward FBF is possible with the tail staying in the direction of flight and no weather-veining at all. Gains on Ch 5 ATV's on the 8U are round 90% for both modes. On this machine I am trying a Metal Geared Hitec 625 which runs just fine with the GR-701 Telebee. Now that is fine tail holding power for a combined price of 80 plus 40. Not too bad indeed! Sure one CAN spend 500 dollars for a Gyro Combo but why? Save your money for that 2000 dollar machine deserving such expensive equipment. After all, this intermediate Machine is a wonderfully smooth operator whose use is to simply support and Train those reflexes as proficiency expands.

On the tail boom cantilever support Carbon Rods - just JB Weld them to the rods and set them aside to dry. Be sure to tape them securely at the same lengths while the JB Weld sets up. The 22mm tail boom installs perfectly in the front frame Grabbers. The Belt is twisted 90° to Clockwise when looking AFT at the Tail as you set it over the counter gear. You want the Tail Blades to swing UP into the down wash of the Main Blades. The Tail Rotor will be rotating Counterclockwise when viewed from the STARBOARD (R)side of the machine. Set your tail Blades for about 5 or 6° 's of RIGHT Pitch to achieve a stable tail at take off. One Note: On the TELEBEE, the SUBTRIM menu on the Transmitter sets the Creep-Rate of the Gyro in HH mode. In HH set the Subtrim so that the creep rate is near zero, then Mechanically adjust the Tail Rotor Control Rod to get the tail to stay straight in Normal Mode. Inhibit Rudder OFFSETs in all modes. Otherwise competition will occur for trims since the 8U allows complete memorization of the TrimCommands while in the other modes! (In Normal Mode the digital trim lever, trims and graphically displays the Trim on the LCD. But while in IDLE/UP modes the ENABLED OFFSET for Aileron and Elevator (CYCLIC!) will carry the memorized trims with no graphic display.) Just un-inhibit Offset trims during radio set up on all except Rudder. This is the Hidden Secret for success with the Telebee Gyro. Just ask me how I know all this! The Hard way!

I utilized the OS32SX-H on my rig. She fits in like a dream! One really needs a Throttle extension clamp to make this work beyond just adequate. I set mine to the TOP of the Horn (and inside) to facilitate Carb opens CCW with AFT throw on the Throttle Servo. The manual shows this on the Down side of the horn but I like this much better. The key to a good Throw is of course to get the arms to be the same length from center. Then align the 50% center Point carb opening so that the actuator and Throttle horns are in their center positions. Set the Linkage length to this center. Then with ATV mode enabled on the TX, connect the Throttle Linkage to the Throttle Servo Horn but NOT to the Carb horn yet. With the Carb lever disengaged from the control rod it is now very easy to set the Full Open and Closed Carb position with the TX ATV's! Then to get her flight ready Roll the CLOSED ATV (THRO LOW) a bit open to allow the engine to idle. Then set the Engine STOP command point to pull the Control link forward just to it's stop. You are setting the End Points for 'Run and Stop' here. Then you can KEEP the Throttle Trim Lever near it's center during start-up and simply adjust the Low end ATV to get the proper Idle relationship. Be sure and check the cutoff one more time as to not stall the servo when you are all finished.

The Canopy is a marvelous work of Fiberglass art. To get it ready for painting I sanded the Gel Coat with 400 grit to take away the shine and made it ready for primer. I found out that when getting ready to drill the Canopy for the four stand-off's, it will make it easier to find the center of the canopy if you glue an 1/8 piece of wood to the bottom of the canopy right where it meets the frame. Then Prior to painting simply shine a light through for alignment of the four grommet holes and drill um out. Nothing to it here. Then primer it and hit her with your favorite colors and set the decals and clear coat it. On my canopy I have placed a Volt Watch LED Bar Graph to see exactly what the battery level is on the Starboard (R) side. I fuel on the left, and the Main Battery Switch is on the left side. As I start up the heli with the Volt Watch on this side I know I have RX on line at startup. Very

important! As I am also captivated by the modern wonder of the LED, I have placed five LED's on the outside of the canopy just for looks. A separate 9Volt Transistor Radio Battery and 220 ohm resistors in series with each light places the forward current at 22 milliamps, just right. Blue, Aqua and Red! Two switches are used: RX battery, and Light pack battery. I have just begun to utilize the Nickel Metal Hydride types of RX batteries. I put a 2700mah in this bird just under the front Radio tray. Why, if it wasn't for running out of fuel every fifteen minutes I could be flying around all afternoon!

Slap a nice set of Carbon Fiber or Fiber Glass Blades of the 55 centimeter variety and take this baby up for some fun. You'll be glad you did! The Quick 30 Pro is a very well made and smooth running Model Helicopter. After you get by most of the learning and crashing stages, it is The Next Step Up in Fun from the Plastic machines. CCPM is a new nut to crack and takes a little getting used to, but with perseverance the accomplishment will be very rewarding. And for just a C-Note more the entire Metal Frame Set can be converted to a "Lighter" Carbon Fiber Set. Nice!

It is a Smooth, Capable and Precision designed Radio Control Model Helicopter whose Price and Performance Ratio make it a fine Value.

Thanks for listening!

Have a Super Flying Season!

Your Reviewer,

Byron L. Head Member: Omahawks RC, Inc. AMA 668462

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