

First time Fun Pic Owner.....

.....or some of the lessons I've learned being a newbie to helis.

By Steve Harness

OK, off the bat I'll admit I'm a beginner and by NO MEANS know a whole lot about helis --- but I'm learning. I thought I'd take a few moments to condense what I've learned in the last month or so from the great folks on this BB and Hobby-Lobby, and some painful experiences. The intent is to try and shorten the learning curve for first time Fun Piccolo (FP) owners. There's obviously folks that know TONS more than I, and I'd encourage them to make comments, criticisms (and even snide remarks)!!!

1. **Building** – The FP instructions are quite good. OK, most of us are guys and don't do instructions. However if you really want to fly this baby, you need to follow the steps and check, double-check and triple-check the entire assembly process. It can save some frustration and aggravation along the way! Don't put CA on anything until YOU'RE SURE you've put the pieces together correctly.
2. **Motor Run-In** – This is important for conditioning the brushes (assuming stock motor) to seat properly. Otherwise, the brushes could cause arcing and TX-RX interference. As in the FP instructions, run the motor WITH NO LOAD at low RPM.
3. **Set Up** – The FP has to be set up right in order to fly. It is a tolerant heli, but setting everything up right (the first time) makes it more stable. The pinion-drive gears on the main and tail rotors are critical. Too tight and they bind – reducing power/ speed --; too loose and they'll slip. Using the “paper method” spelled out in the instructions is a good way to start. However if the FP doesn't seem to have enough power (and the batteries are OK – see #5), try backing off the pinion gear a LITTLE!
4. **Balance** – Yeah, just like fixed wings, the FP needs to be pretty well balanced -- on the Main Rotor Shaft (the one that runs vertically from the motor to the main rotors blades). Set the main rotors so that they are parallel to the tail boom. Make sure the battery pack (and cowling, if desired) are installed. Pick the FP up (gently) by the fly bar shaft and watch the skids. If the FP tips forward (keep an eye on the skids as they leave the ground), move the battery pack back a little, if the FP tips back, move the battery pack forward. The folks at Ikarus have done a pretty darn good job of matching & balancing components, but minor adjustments to battery pack location might be needed. Next, check the side-to-side balance by turning the main rotor blades perpendicular to the tail boom. Lift the FP up by the fly bar and watch the skids. Same as before, the FP skids should lift evenly – if not then some weight re-distribution is needed. ALSO, the main rotors, fly bar and fly bar paddles, and tail rotor must be balanced. Fortunately, the main rotors seem to come from Ikarus pretty well balance. The fly bar paddles can shift after a hard landing. After getting the fly bars balanced and evenly spaced from the head, I cheated and made a jig (from a dowel) to quickly check the paddle spacing after hard landings. The tail rotor needed a little adhesive tape (just like the instructions recommended).
5. **Swash Plate** – That's that thing-a-ma-jig (sorta looks like a spider) that is connected between the servos and fly bar that has “spokes” coming out of it. It should be set parallel to the ground. (OK, to be honest, I didn't use calipers, just eye-balled it and it seems to work!).
6. **Fly bars** – Both fly bars need to be parallel first to EACH OTHER, then to the swash plate thing-a-ma-jig. Again, I used the eyeball approach. It also sorta helps if they're facing the right way—in the direction of head rotation.
7. **Batteries** – The NiMH batteries that come stock need to be CYCLED before they'll hold a decent charge. Fortunately, the charger in the kit has this capability (ok, you'll need to read more instructions – on the charger this time). This was counter to what I've been used to with NiCDs and it took some folks much wiser than I to point this out. (To be honest, I ASSUMED –yeah, I know about that—they were NiCDs).

8. **Location, location, location** - Sounds like a realtor's motto, but it also applies to helis –especially for beginners. When you try to fly the FP the first several (ok, many) times, pick an area that is hard (i.e. NOT CARPET or grass) and fairly large – maybe 20'x20'? The unevenness of the carpet (or grass) creates drag on the skids, and turbulence in the Ground Effect (GE) range – see #11. It's also easier (on a big, smooth surface) to find the pieces that have flown off – like the plastic bushing that hold the Main Rotor head on! (Ikarus part number 69028 – I've lost a few!!)
9. **TX/RX – TX (transmitter) FIRST ON, LAST OFF!** ALWAYS, ALWAYS, ALWAYS turn on the transmitter BEFORE you connect the battery to the receiver. Conversely, disconnect the battery first, then turn off the transmitter. Seems simple, but if you connect the RX (receiver) to the batteries first the servos and motors will do unpredictable things and can EVEN DAMAGE the electronics. I've done it – once -- and it sure scared the heck out of me when the main rotors went full throttle! Fortunately (it's better to be lucky than good) it didn't damage anything on the FP, and that didn't heal in a couple of days.
10. **Initial Run Up** – Once you've gotten everything turned on – IN THE RIGHT ORDER – SLOWLY advance the throttle and watch the FP. Does the head or tail shake and shimmy? If so, something's out of kilter and needs to be fixed before you proceed. If not, keep SLOWLY advancing the throttle and watch for the FP to get light on the skids. It probably will want to slide across the ground, but that's kinda "normal". Your job is to use the TX sticks to keep it in one place. HOWEVER, before you go any further, I'd take the time to check out Radd's School of Rotary Flight, listed in #11!
11. **Hovering** – It's not as easy as the experts make it seem! My FP kit came with a simulator which is great for learning what the TX sticks do. However, the simulator doesn't seem to take into account that thing called GROUND EFFECT. From what I've read, this is a phenomenon where at low altitude (below around 10-12", for the FP) the down thrust of the main rotors actually pushes the heli up. Sounds good, right? Yes and no! Yes, because it takes less power to hover near the ground; NO because it creates a TON of turbulence, making the FP seem to slip around on it's own accord. It's nerve-racking for beginners, but if you can get out of GE, the FP actually hovers easily and quite well on its own! I'd HIGHLY recommend checking out Radd's School of Rotary Flight, "Learn to Hover" at (<http://www.dream-models.com/h/flying-index.html>). There are very wise words of wisdom from an experienced heli flyer!
12. **It's gonna break, get used to it!** **The only way not to crash, is not to fly.** I've seen guys with MANY years flying experience (both Fixed wing and Helis) auger in. Sometimes due to pilot error; sometimes due to mechanical breakdowns. However, if you give up now, you'd be missing a whole lot of FUN -- like (legal note – DO NOT try this at home!!) buzzing the neighbors annoying, noisy dog. Fortunately, the FP is pretty durable and is DESIGNED to come apart and not actually break! Except for the plastic bushing (remember, part number IK69028) everything seems to stay attached to the FP and just needs snapping back together. When something actually does break, all the parts are readily available (except #69028, I must've bought them out) from Hobby-Lobby.com (<http://www.hobby-lobby.com/piccoloparts.htm>), or Ikarus (<http://www.ikarus-modellbau.de/Ikarus/USA/index-us.html>) or any number of excellent dealers. Once you come to the realization that broken parts can be fixed or replaced relatively inexpensively, you become more relaxed (*and* less tense about screwing up) and can focus on controlling the Heli!
13. **HAVE FUN!** – We got into this to have FUN, right? Why get bent out of shape over a FUN hobby? Beginners will take days/ weeks/ months to become decent (not great) heli pilots. From there the sky is literally the limit!!! Yeah, it's easy to get frustrated and aggravated after a hard landing (and your on your hands and knees looking for those bushings – part# 69028), but DON'T GIVE UP!!!! Once you've found and reinstalled the bushings, walk away for a few moments to settle your nerves and clear your head. (In my case the latter is easier than the former). Take your time and go slowly. The more you practice, the better you get; the better you get the more you enjoy it; the more you enjoy it, the more you'll want to practice!! Simple, but hard to remember when you're trying to find part #69028!!!