Squirly Steering on the ground - Fixed!
i figured it out.... you all may want to check this on your planes.

The rudder and tail wheel servos were loose, the screws that hold them in place onto the plywood base were overtorqued during installation at the factory - or else the stress of bumps on the bogey when landing / taxing - caused the little wood screws to strip the plywood loose. I checked the slack in the steering linkage by by manually rotating the wheel - found there was a lot of slack... when i opened the rear access hatch I saw the whole servo sliding forward and aft as I was fiddling with the gear! Fixed that with larger diameter screws and a small dab of epoxy between the servo body and the plywood. not enough to be a problem if i need to remove the servo in the future.
The amount of movement on the tail wheel would wreak havoc both on take off and landing!

I then checked the rudder servo - it wasn't completely loose to slide the servo around, but the screws were stripped and nearly useless as well (leading me to think they were all just overtorqued at the factory). fixed that as well.

Did some taxiing on the driveway - had to adjust the main gear toe-in / toe-out a bit... that was easy. BUT note you can not do that with the set screws on the struts, as the machined flats for the set screws are fixed - if you make a small adjustment, it will rotate back and have the set screw sit where it wants to on the machined flat, and essentially home in on whatever angle it wants to be at.
What you need to do is gently rotate/twist the wheel fork (ie: bend it). Twist the wheel-axle hub vs. the strut mounting point of the fork, using 2 small adjustable wrenches. it is quite easy - it's not very hard / stiff metal.

Also adjusted expo from 25 to 50% on full range... but found enough tail wheel yaw authority for steering with low rate (no need for high rate setting), so will practice take offs with that... see if that will give me enough rudder authority once the tail is off the ground.

the thing tracks straight as an arrow now - no rudder input required on take off roll... but havent tested teh transition to level-tail at speed - which is where p-factor plays the biggest role... that will be done tomorrow when i go to the field to try flying again!

Loose main gear struts & slop/slack - Fixed!

While repairing my plane after the take-off crash from yesterday - i had to re epoxy the main gear back into the wing.
I noticed the same slack/slop that others have been talking about, and decided to investigate. I also noticed that the strut can slide in/out of the gear-actuator trunnion to the tune of about 2mm. Clearly the set screws were loose.

I took the trunnion set screws out and replaced with a regular scew (same thread) - about 10mm
long. So the head of the screw (slotted screwdriver type) was actually sticking out of the pivot point trunnion. Essentially, I got 3 benefits:
1. longer screw / thread means better retention. I used loctite too
2. better screw head (slotted) so easier to get better tightening torque on the screw
3. the screw is flat bottomed instead of pointy like the set screw. This seats better against the machined-flat on the strut, preventing it from rotating at all

This takes 2 screws, on either side of the trunnion. The screw head sticks out 1mm above the pivot point, and is not bottomed out against the pivot... but that's OK... there is plenty of room around the actuator / mounting assy, to prevent the screw head from interfering with anything. This fixed the slop in the junstion from the trunnion to the strut (the little rod that connects the trunnion and the main strut)

I then re set the strut upper body (cylinder) onto the the little rod, to make sure the strut is butted up against the trunnion plastic body. Everything snugged up nice and tight. More locktite here as well. Note I kept the original set screws here as they are larger diameter and of decent quality.

in the end, all the slop is gone.... it wont be coming loose again I can tell you!

in the process, I noticed that the gear actuator was fighting some sort of friction as the gear was opening and closing. It would slow down/bog down in the process. It happens as the gear opens in my case, and nearly at the end of the travel (when the gear is almost fully down). no such issue on retraction. I wonder if this may be an indication of tolerances inside the actuator, that may be causing retraction problems in flight - for some of us. I didn't see anything obvious, but as I gently held my finger on the shaft as it was happening, I could feel the friction making the retraction action jittery a bit. I greased it up - it helped (the junction between teh trunnion and gear actuator body), as well as the worm-gear (screw) inside.

cheers!

Originally Posted by RustyShackleford

Tightening and loosening the set screws at the base of the strut does nothing. I have grounded my Old Crow until I get it figured out.

it's the setscrews inside the gear actuator - trunnion / pivot. take teh actuators out - you'll see them on either side. but I found tightening those screws was impossible with a tiny hex key.... whomever invented hex-keys, especially for small screws like that?!! hopeless.

see my other post
Sluggish / stalling main gear actuators - Fixed!

in an effort to understand my slow main gear (going down in my case) I took the strut off the actuator and then cycled the unit - clearly the unit was working hard. it took almost no effort to stall it.

so I split the actuator case to look inside. found the problem.

First of all - the mechanism is 100% metal. i was impressed!

The case is plastic.

The pivot point that is part of the metal actuator arm inside, fits into holes on the sides of the plastic case - to form the trunion (or hinge). The metal pin, fit into the plastic hole very snug. This is good in terms of zero-slack, but it was a bit too snug... friction was doing its' thing.
I took a fine round file and gently scraped the inside of the plastic holes in the case to open it up a few thousands of an inch. didnt take a lot of effort or time - but it freed it right up. still snug enough that it's not sloppy... but after greasing it, almost no friction.

put it all together and voila. fixed

the metal pin is cast/molded - looks like nickel (or nickel plated). The hole in the plastic case looks also molded.
it would appear that its' a case of tolerance stack-up that causes excessive friction in the pivot point.

it's possible that this is what is causing grief to all those folks who have retract problems in flight... why?... any action on the wheel/strut from wind, will either increase the friction, or simply overcome whatever little remaining torque there is in the mechanism, and cause it to stall.

6/15/15
well after about 10 flights, i can say the squirly behavior is gone.... both the loose servos at the back, and misaligned front wheels were to blame. I had some slightly harder landings - nothing damaged, but the front wheels got a little misaligned from the impact - they wanted to toe-out. This is a function of how soft the fork is, and the wheel axle. Also, the wheel axle bends to create camber as well - that needs to be corrected after a harder landing.

I had to correct the alignment once in the 10 flights I made because I started to see it wondering around again once the tail picked up...

All in all, it's good... but it for sure is a tail-dragger!
6/18/15

12 more flights (1 yesterday, 11 today), with an additional mod made - I swapped the wheels out with the Dave Brown Lite Flite 3.5" Treaded set (plus a smaller one for the back). The wheels are softer / spongy. Adds shock absorption, but most importantly, they have different traction characteristics which dampen any sudden urges for left/right yaw on take off roll and landing. Basically, the wheels are more forgiving against slight wheel misalignment. They are also significantly better when landing in a cross wind, where the wheel tracking vector is misaligned with flight direction vector prior to touchdown...... On touchdown, I find it's way easier to straighten out, compared to the stock wheels, as the softer lite flite wheels don't yank the plane off to the side the moment they touch the ground.

Today's 11 flights, both take offs and landings I didn't stray off the centerline by more than 1-2 feet. I would say, yaw control through the P-factor was actually a piece of cake!