



July 2021

SECRETARY'S CORNER

Jeff Killen

I also needed to tighten the covering at the wing tips. So I slit each end, installed a narrow strip of balsa for the covering to land on, and applied some glue. This is holding well.



My work on refurbishing my Piper J-3 Cub continues. I'm in the final stages of getting this bird ready to fly again. In my last installment (6 months ago), I noted that this job would not be work intensive; it's a plane that just needed to be cleaned up, and made ready to fly. Nonetheless, there have been a few things of interest that I'll relay to you here.

First the wing covering - This wing is covered on top with coverite which looks like fabric. It has a nice look and feel. But over the years (this model is about 15 years old), the covering had loosened. I tried tightening it with a covering iron, and a heat gun, but these measures did not work. Since the under surface is sheet balsa, I found some spray contact cement from Gorilla glue. It worked well, and was also the lowest price product I could find. See the picture below of the top side of the wing.



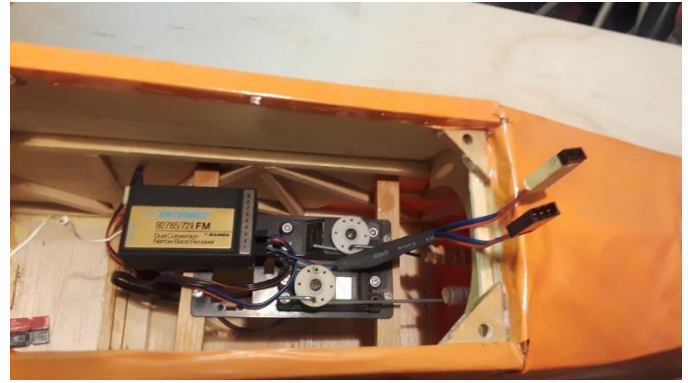
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Final work on the wing was to trim off stray edges with a razor blade. The wing bottom has some bare

wood, which reduces weight a bit, and makes the top and bottom of the wing appear differently when flying.



RX installation and hook up – I have an old Airtronix 72 Mhz Rx. Cabin servos are all Airtronix with their proprietary connectors. The wing servos are Futaba, with a conversion to Airtronix at the Y connector. While this equipment is getting old, I will continue to use it as long as it will work.



Power – I have an Eflite Power 32 motor for this model. Last time I flew it I had two 3S Lipos connected in parallel. This worked fine. But my supply of 3S batteries is running low, and I have an added 4S Lipo in my inventory of late, so I would like to use this. I went online to see what guidance I could find in regard to making this switch. I found some flyers who were using a 4S battery with about 3600 mah capacity. This seems to work well for others. I was not sure about going from the 3S pack rated at 11.1 volts to a 4S pack rated at 14.8 volts. But again, the voices on line indicate that these differences just change the resulting RPM with various size props that I can use; voltage difference is not that much and doesn't seem to matter. I have a 14 inch prop on the plane now (perhaps the largest I could use), and don't plan to change that unless the full throttle revs seem too low.



Last of all, my workshop has two recent improvements. These are a new flat hardwood working surface, and a new (slightly used) work lamp courtesy our buddy Herb Weinberg.



SECRETARY'S REPORT

Jeff Killen

The club meeting in June was held at the field on June 22.

Dave Rothbart began with a few bits of news. Hero of the month went to Nic Burhans who mowed the field when the usual crew did not show up. Thanks, Nic.

The pavilion at the field will be renamed in honor of Phil Coopy, per a vote by the Board. We are looking into posting a plaque at the pavilion.

Dick Sutton and Jeff Killen will work together to stand up an on-line way to receive ballots for the 2022 Board of Directors.

Some folks are dealing with back pain. These are Don Manson's wife, and John Hunton.

Nic Burhans has booked the Outback Steakhouse in Warrenton for the Christmas Party this year.

Officer Reports

Nic Burhans – Treasurer – We now have 61 members, and \$6609 in the bank. This amount is about \$700 ahead for the year. Our second float fly event is set up. The porta John will be cleaned out soon. The mower repairs are done; and Bill Towne now has his loaner mower returned to him.

Air Fest event in October (2nd weekend) is on, but with a less aggressive event schedule. STEM program will occur Tuesday, Wednesday, and Thursday. A night time demo (by Kwang) is being planned. Also, a sailplane with lighting that flies 15 minutes is planned. There will be buddy box flying. Women in Aviation participation is still uncertain.

AMA News – TRUST test can be taken now on the AMA web site or the FAA drone web site. Use modelaircraft.org/trust. Do this by 12-31-2021; print your results and always have it with you when you fly.

Herb Weinberg will be leaving Reston to move to Silver Spring, MD. Soon, Nic will be doing an RC yard sale. This will include another CMB guy's estate.

Not sure if I'll have this bird in the air before the July meeting, but if I do, I'll make a note of it here.

Jeff Killen

EDITOR'S NOTES – Upcoming Events

Jeff Killen

- 1. Club Meeting, at the field, 7:00 PM, 7/27/2021**
- 2. FARM Club Day & Fun Fly #5 at the field, all day, 8/8/2021**
- 3. National Model Aviation Day, all day, 8/14/2021**

Jeff Killen – Secretary – no report

Ernie Padgette – Safety Officer – Members are following directions, which is good.

Bill Towne – Vice president – no report

John Gilbert – Field Marshall – no report

Charlie Koustenis – Member-at-Large – no report

Dick Sutton – Web site – He is writing code on the side.

Show and Tell

John Hunton

- Duet – park flyer with differential throttle and elevator control. By Hobby Zone.
- Valkyrie – a Carl Goldberg kit, was free flight, flew first in Canada, also in 1936 Nationals, wing is parabolic, uses space frame structure. 98 ribs all built with 1/8” square balsa. Built the wing in 4 19” sections. Enya 240 4c, but John want an ignition system engine. 3 channels, wooden wheels. Weight = 8 lbs. 6 square yards of silk, and 6 coats of nitrate dope.

Nic Burhans

- AT-6 – ARF bought from Dave Rothbart, new canopy, retracts, Saito 100 4c
- Cessna 172 – trike gear, semi-scale, with Saito 120 4c. Bigger tank, batteries in rear for balance

Dave Rothbart – Nieuport 28, a Seagull Models ARF kit. Motor, 26 cc gas motor with choke. 16/8 prop balanced with epoxy. Weighs 12-13 lbs. 5 channels with 6 servos. Beautiful model colors.

Ernie Padgette – Fokker D9 (Tell) Fan Jet. Fly with gyros program is hard to turn on.

LEARNING TO FLY

John Hunton

Learning to fly RC models is a lifetime challenge.

In my opinion flying RC models well is one of the most difficult things people can do and we should admire those who do fly RC well.

As an example of how difficult it is to fly RC, an experienced full scale pilot, who knows very well all of the basics of flight, give him an RC model and he will not be able to fly it successfully the first time.

Take level flight in an RC model as an example. In looking at the model from the ground, how do you judge when it is flying parallel to the ground and the wings are level when your perspective of the model is ever changing as it passes by? This is an acquired skill, learned by hours of trial and error, hopefully with an experienced instructor standing by.

Flying RC models, like full scale flying, is a continual learning process and the more you learn about what the airplane is really doing up in the air, the better pilot you will become. One of the best learning tools is a book titled: "Stick and Rudder" by Wolfgang Langwiesche, Subtitled "An Explanation of the art of flying" copyrighted in 1944 and illustrated by Joe Kotula (who illustrated the covers of many model magazines over the years).

The book has 230 pages. 104 pages (nearly 50%) are dedicated to use of the Rudder and the Turn.

The function of the rudder, however is simply summarized thus: it is to make the tail follow the nose.

The main things keeping the tail from following the nose are torque and adverse yaw.

Torque effects are maximum during a full power takeoff and climbout. The plane strongly want to turn left (right in the RAF), so you must apply a lot of right rudder to correct for torque. You get up to cruise altitude and trim up (10 pages in the book on level flight).

With cruise trim in place you descend to land and now you have to apply left rudder to counteract the cruise trim. You wonder why the model tends to stall to the left when landing, but who changes trim to land?

The proper turn is a very exciting maneuver. A lot of things happen in a turn. First, with the control inputs creating more drag, and the wing tilted in relation to the ground requiring it to produce more lift to

maintain altitude, thus creating more drag, the airplane will tend to descend without the addition of more power, but who does this?

Try turning your model with rudder only. if your model has dihedral it will turn, but with a big yaw to make the wings produce unequal lift. And this yaw produces drag.

Try turning your model with aileron only, which most of us do. Crank in a left turn and the model yaws to the right (adverse yaw) because adding lift to the right wing adds drag. The wings lose lift in relation to the vertical, so the nose drops. We crank-in up elevator. This is the "bank and crank" maneuver and it is adequate to get around the patch.

To make a fair turn we should "always use rudder whenever we use aileron". This is a good habit to develop.

To make a good turn we should apply a little up elevator, not when you see the nose drop and react, but going into the turn and adjust.

To make a great turn we should add a little throttle going into the turn, again, not in reaction to when you see the nose drop.

The above suggestions are fun to practice and when they become second nature you will be a better RC pilot.



FUN FLY #4

Nic Burhans

The FARM Club's Fun Day and Fun Fly #4 was held on 11 July.

Vince Tabacco was the event CD under very muggy, partly sunny skies and minimal wind conditions.

We had two members who only participated in the Fun Day and received 3 total points each for signing in.

We had six members who participated in the Fun Day and the Fun Fly and received points:

--- 3 points for signing in, 8 points for being the Fun Fly CD, 5 points for flying in the Fun Fly, and Fun Fly placement points (reverse order number of the number of participants)

The 11 July 2021 Fun Fly results:

1st place – Vince Tabacco (6 pts.)

2nd place – Ralph Graul

3rd place – Nic Burhans

4th place – Ken Bassett

5th place – Ernie Padgette

6th place – Dave Rothbart (1 pt.)

Our next FARM Club Fun Day and Fun Fly will be held on Sunday, 8 August, with Ernie Padgette as the CD.

Be Safe, Nic

<- pictures from the June club meeting.



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