



February 2024 Edition

Secretary's Corner: Nic Burhans



Lets see, Sunshine, Wind, Fog, Rain, Sleet, Snow, Low Overcast, and Broken skies with hot and cold temperatures. We have had quite a weather start to February!

The FARM Club membership renewal period has ended. For various reasons, we lost eleven members this year which brought our 2024 membership number down. However, we already have a new member, Michael Murphy (WELCOME MICHAEL!), who brings our membership back up to 57 to start the year off. The updated 2024 membership roster has been forwarded to all. The Club's AMA files have been updated.

As a result of the membership changes, the FARM Club lock combinations have all been changed and the new one emailed to all the 2024 membership. Please remember, **for security, right after** you have unlocked any of the FARM locks, please zeroize (set to all zeros "0000") the lock **before** you set it down.

On last Monday the field looked good, but a walk around proved that everything is quite "squishy" and the snow/rain through Tuesday was sure not to help.

The big mower has returned from the "speed" repair shop (thank you Ralph) and ready for its spring awakening for another year.

We still have several members that need to complete their SOLO check flights. Please take the time to help them get over this hurdle.

The U.S. Senate Committee on Commerce, Science and Transportation and the full Senate passed the bipartisan Senate Federal Aviation Administration (FAA) Reauthorization Act of 2023. The legislation includes several provisions to strengthen safety standards and oversight as the FAA and responds to safety concerns from recent aviation accidents and near-misses. This link will get you to the AMA's summary and updates to the Congressional actions.

<https://amablog.modelaircraft.org/amagov/2024/02/09/senate-passes-faa-Preauthorization-act-of-2023-with-ama-s-amendment-included/>

Changes include: UAS operations permitted up to controlled airspace without FAA authorization (not just at fixed flying sites). A process to request flights into controlled airspace from uncontrolled airspace. CBO designation to self-declare FRIAs. CBOs must be TRUST Administrators. Updates educational provision to allow elementary and secondary schools to fly under recreational rules. Changes the term "sanctioned events" to

“CBO-sponsored operations”. Uses the word “drone” in place of UAS (definition remains the same from 2018). Better clarifies model aircraft operations in Class G airspace (G up to the bottom of E for us).

Up coming FARM Club events:

- February 27 Tuesday FARM Club Zoom Meeting 7:00 PM
- March 15-17 Fri-Sun FARM Pattern Flying Intro & Practice Sessions All day
@ Club Field CD: Gerald Hood
- March 26 Tuesday FARM Club Zoom Meeting 7:00 PM
- April 7 Sunday FARM Club Day & Fun Fly #1 @ Club Field All Day
Picnic, Pilot Training, and Flight Check day
CD: Nic Burhans

If you are interested in being the CD for one or more of the remaining five Club “Fun Day” events, please let me know by email at npb6218@earthlink.net .

As noted, Gerald Hood and Don Szczur will be hosting an introduction Pattern Flying Workshop at the FARM Club’s field from Friday, 15 March 2024, through Sunday, 17 March 2024. Topics covered will be a general introduction to pattern flying (bring along any flyers who may be interested in learning about pattern flying), general flying techniques, the new pattern sequences for this year, the new judging guidelines, review and judging insights of actual demonstration flights.

- Mrs. Hood and Mrs. Szczur will be providing lunch Saturday.
- There will be a local restaurant eat-out Saturday night.
- Sometime during a lull in activities, Don Szczur will be providing a summary/discussion of the last World Championships.
- If you are planning on participating in this 2024 Pattern Workshop, please let me know by email at npb6218@earthlink.net .

The FARM Club’s two Float Fly events have been sanctioned for Saturdays, 15 June and 21 September.

The 2024 Culpeper Airfest and STEM demonstrations have been scheduled and sanctioned for the week of 7 through 12 October.

Remember to BE SAFE!

Nic

President’s Pilot Box: Bill Towne

- No specific items this Month.

Bill

Vice President’s Pilot Box: Ernie Padgette

- No specific items this Month.

Ernie

Secretary’s Pilot Box: Nic Burhans

- See above.

Nic

Treasurer’s Pilot Box: Nic Burhans

As of 11 February, FARM Club’s 2024 Membership renewal period closed.

The FARM Club presently 57 members. (21 Regular members, 31 Senior members, No Junior members, 1 Associate member, and 4 Life members).

The Club’s field rent has been paid through April.

The club presently has a balance of \$8,344.98.

Nic

Safety Officer's Pilot Box: Mike Wiczalkowski

Safety tip for the month of February:

Pilots using Nitro and Gas engines, the closer you start your airplane to the runway the less chances there are for a slip, trip or fall into a spinning prop!

Remember everyone is a safety officer!

Report all safety issues you see!

Keep your head on a swivel!

Eye's in the back of your head!

Have a safe flying day!

Mike

Field Marshal's Pilot Box: Ralph Graul

- No specific items this Month.

Ralph

Member at Large's Pilot Box: Charlie Koustenis

- No specific items this Month.

Charlie

Member at Large's Pilot Box: Bill Flathers

- No specific items this Month.

Bill

Web Master's Pilot Box: Dick Sutton

This month, I want to provide you with a tip on web browsing that, as a developer, I couldn't live without! Its technical name is "cache clearing".

Here's the scenario that you might run into. You know that an updated page, image, or pdf file exists, but your browser keeps giving you the old one. That ever happen to you? Well, if it has, here's an explanation.

Browsers reserve a storage area (called a cache) that keeps a list of recently requested webpages. They do this so that if you frequently request a page multiple times in a visit to a website, the browser doesn't have to go to the website and re-fetch it again, it simply uses the local copy. However, if the page has been updated and you try to request it, you will likely get the "cached" version instead of the updated one.

When I am developing a new version of a given web page, I absolutely need the updated copy. To make sure that this happens, I use the following trick: hold down the shift key and click the browsers circular Reload button. This forces a reload from the website! I should point out here that I am talking about a laptop/desktop. All of the major browsers have this capability (Chrome, Firefox, Safari, Edge, etc).

Doing this on a phone/tablet is a different matter. That's technical talk for "it gets complicated". I'll save that for another time. See you next time... *Dick*

FARM Member "Tips & Projects" Box:

** Travel tip:

FAA-Recognized Identification Area (FRIA) status has been extended to more than 1,500 AMA club flying fields. The FAA has published a map that allows you to easily find FRIAs before and during your vacation travels: (Just copy this link into your desktop or phone browsers)

https://modelaircraft.mmsend.com/link.cfm?r=USz6zF9Nww_wzgNfxkYC2g~~&pe=ZiQETqbfS7AAVTroRn wKTULIEMB7YxucmfB_aeGA83jaAQ3Hwfm6cUtnZeHhKN31E0fyI2BpsTXgbs3rsT7_CQ~~&t=k7pLY-PA UZLI1ijFpHYMMsg~~

Nic Burhaus

**Growing Pains:

If you are a new builder you may often find yourself making mistakes and having to back out and re-do your work the correct way. There are so many famous quotes out there on making mistakes but I will use this one “Anyone who has never made a mistake has never tried anything new.” — Albert Einstein

For those of you who have just started building, or have thought about starting, this is for you. This bit of advice pertains to HiTec standard-size servos used in RC aircraft. However, this may be useful in many different areas of the RC hobby.

Nowadays manuals or instruction sheets are becoming a thing of the past. Being a thing of the past myself, I miss those instruction sheets. Yes, manufacturers should consider me dumb and tell me how to assemble it. It does seem as if the manufacturers of certain components needed to build a flying machine assume you already know what you need to know. They must think you have someone with great building wisdom sitting next to you every minute of the build. I guess in the age we live in many assume we can just look it up on the internet. We can, but my old self still appreciates the instruction sheet in the box.

Okay, off of my rant. I have used HiTec standard-size servos in my builds to date. As many of you know, you get the servos and a bag of parts (no instruction sheet). Most of us can figure out how to attach all these pieces...or can we? We may know this goes here and that goes there, but are we configuring everything the way it should be? There lies the issue of the lack of instructions in the package. What if I have no access to the internet? What if the power goes out? Yeah, let's make everything electric.

What if you are just a plain old troubleshooter and don't go to the internet or call the company because “you got this”? You know what I'm talking about. Sort of the same thing happens when you are lost while driving somewhere new and refuse to ask for directions. Oh, there I go again, dating myself. Who gets lost these days with GPS and all? I think I liked it better when you had to rely on a road atlas.

You remember those days when you had to think it out for yourself or experience enough driving in circles, along with the repeated complaints from whoever is riding shotgun, to pull into the dreaded service station to ask for directions. Oh, we are a tough bunch when we think we know it all. However, we all fall. Falling is easy, getting up is the hard part.

Now that I'm upright again let me get back to the point. Servos. If you have ever wondered if you have all those pieces that come in the bag together correctly and don't have a seasoned builder on speed dial, look at the links I have supplied here. Your experience will turn out much better. Although I had a little fun writing this little piece and intentionally tried to make it a touch humorous, there is still the need for instruction. The links below will lead you there.

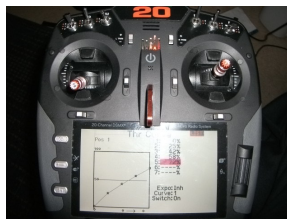
<https://youtu.be/DgFtWd4zdjI?si=W10ARGbaZrKrxDzj>

<https://www.promodeler.com/askJohn/Rubber-servo-mounts-done-right>

Jay Zompanti

** Pattern Airplane Setups:

I've also been getting some questions on mix setups and rates for pattern flying so I thought that I would share the setup for my Apollo.



These kinds of setups are what I've felt comfortable with, but of course settings are always the preference by the pilot and unique to individual aircraft design.

- Rates: Spektrum NX 20:

- Aileron – normal flight 59%, 24% expo; Snap 100%, 34% expo; Spin 80%, 29% expo
- Elevator- normal flight 92% up 97% down, 23% expo; Snap 90%, 23% expo; Spin 97%, 23% expo
- Rudder- normal flight 120%, 65% expo; Snap 65%, 50% expo; Spin 100%, 65% expo

- Mixing Spektrum NX 20:

- Rudder to Aileron: -12%L and -19%R, no multi-point used.
- Rudder to Elevator: 1%L and -4%R, no multi-point used.
- Low Throttle to Elevator: 2% low elevator. Note- only activates to provide about 1/16 down elevator which comes into play two clicks above idle for straight (down line) trim.

- Other Spektrum NX 20:

Aileron Spin (switch position) to rudder. This puts a very small amount (1/16 inch) of rudder in on spin rate switch position, as I had one wing drop early during spin entry. This keeps the nose pointed straight without an unexpected wing drop. I have done this on other models in the past to very good effect.

- Aileron droop switch D2:

Provides about ¼ inch of down ailerons activated with switch D2. This slows the airplane down nicely for landing while keeping the tail up. I was finding that the tail wheel would hit when trying to flair on tall-grass runways in particular.

Don Szczer

**** Home Built Arming Plug:**

I'm restoring, with electric power, a Hanger 9 Alpha that was donated to the club (for sale with donation to the club) and wanted to save a few dollars but still build it with a power safety plug. I routinely cut the connectors off of used-up LiPo batteries, so I have a few Deans female connectors with the battery lead pigtailed. I also had spare Deans Male and Ec5 male connectors for the ESC and battery connection, so save the mounting of the safety plug receptor I had all the trappings of an inhibit plug except the fuselage mounting bracket.

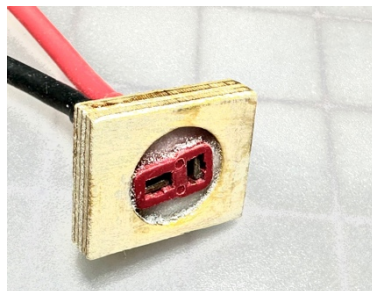
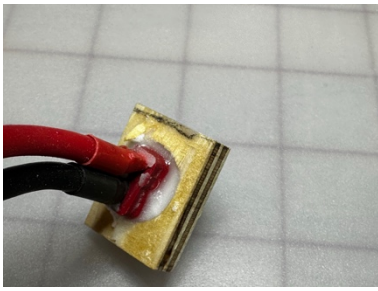
To fabricate a substitute, I used a small piece of ¼" plywood, drilled a 5/8" hole and secured a female Deans plug in the hole with baking soda and super glue. Examples of the use of baking soda and super glue can be found all over "YouTube", with a myriad of uses. If you're not familiar with this use of super-glue you may want to check "YouTube" out for ideas. A note from the ARON ALPHA Industrial Krazy Glue website:

"Chemically, the bicarbonate molecules in baking soda react with cyanoacrylate to create a reactive ion that more easily bonds with other cyanoacrylate molecules. These bonds establish long, polymer chains that are stronger and more resilient than cyanoacrylate-water bonding. The resultant substance is a super glue and baking soda plastic with a cement-like consistency that creates stronger, exceptionally durable bonds." I used packing tape to hold the connector flush with one side of the plywood and then held this against wax paper on a flat surface. I filled the hole from the back with baking soda and then saturated it with thin super-glue. After it dries it holds the connector firmly in the hole with a very hard baking soda and super glue composite like plastic.

A male Deans connector was turned into an arming plug by shorting it with a short section of solid copper wire soldered across the terminals. The arming plug was covered with a large heat shrink tube, which while shrinking to be conformal with the back of the plug, didn't stay attached. To keep it attached, I epoxied it over the back of the plug and also dripped some epoxy into the round part of the shrink tube that extended above the soldered area of the connector.

The plywood will be glued into the inside of the plane to cover a round hole that will allow the male Deans plug to be inserted. Variations of the mounting for other connector types would seem possible, as would using ¼ inch balsa and square holes vs. a round drilled out hole.

With some planning during construction, the arming plug could also be installed using the soda and super glue, directly into the fuselage side.



Gordon Collyer

“From the Field” Input Pilot Box:

- No inputs this Month.

FARM CLUB 2024 OFFICERS		
President.	Bill Towne	540-428-1053
Vice President	Ernie Padgette	540-439-6085
Secretary	Nic Burhans	540-219-9646
Treasurer	Nic Burhans	540-219-9646
Safety Officer	Mike Wiczalkowski	571-437-4705
Field Marshall	Ralph Graul	540-729-1586
Member at Large.	Bill Flathers	540-272-7236
Member at Large.	Charlie Koustenis	703-378-6214
Webmaster.	Dick Sutton	rsutton43@comcast.net

The FARM Newsletter is published monthly by the Fauquier Aero Recreation Modelers, AMA charter #1654. It is forwarded to FARM members and to other clubs on an exchange basis. Articles related to all types of aviation are welcome. Opinions expressed in the newsletter articles are those of the individual author and do not necessarily reflect those of FARM Inc.

Publishing input deadline is the 2nd Tuesday of the month. Please forward all inputs to:

Nic Burhans

6061 Captains Walk

E-Mail: npb6218@earthlink.net

Broad Run, VA 20137-1959

540-219-9646

Our Club web site is: <http://www.farmclubrc.com>