



February 2018
VICE PRESIDENT'S CORNER
Bill Towne



January and the first part of February have been miserable for flying. But hey that's OK its building time. I finally got to around to cover my "Pete and Poke" that's been in the bones for the last two years! And now John Gilbert and I have started to build an 88 inch Ben Buckle Majestic Major. This is a kit from the UK that originally was designed by Ben Buckle for free flight back in the 30's. His son Colin is now re-kitting many of these old time flyers you can check them out at www.Benbucklevintage.com or www.radicalrc.com. Mike Dale got me into this, showing up at the field with his Majestic and having a great time flying it and he let me fly it as well. As he pointed out there is always a rewarding feeling about building a kit and then seeing it fly.

We will electric fly this normally four stroke 60 size fueler with a Rim fire 46. Also purchased a GP Silver series 60 amp Esc and are using a donated 5 amp Castle BEC. I have never done this before so my electric buddies are helping me out with the technology. This will be a 9

lb., 3 channel model, just rudder and elevator. We haven't flown that way before either. However, this will be a really slow flyer and with 5 inch. wheels should not be a problem on our grass runway.

The fuselage was fun to build but took quite some time and patience to cut in all the sticks. I now know why more modern models have one piece plywood sides, tops and bottoms! This kit is different that my other kits, no instructions, just a full size plan with a few notes. You need to do a lot of thinking ahead. We just stared the wings and found out if you are going to build two 44 in. wings and the kit box is only 36 inches long you will be using scarf joints for splicing all the spars and sheeting!

Please note we have a very special event coming up on Saturday, March 3rd. The club will be given a docent guided tour of the Udvar-Hazy Aerospace museum. To avoid everyone paying the \$15 parking fee we can meet at Hobby Hager in Chantilly at 9:15 am, cram as many people in each car/van and carpool in. The Museum is free but not the parking. If you miss the carpooling you can meet the group at 10:00 am just inside the center hall of the museum.

The February 27th FARM meeting will also be special as Kuan Ko will be demonstrating FPV and will have small quads with hands on for the members. The meeting is at 7:00 pm at the Warrenton Community Center.

Hope the weather improves and will see you at the field.....

Bill Towne
FOR SALE
Dave Rothbart

	For Sale	\$125.00	
Multiplex Stunt Master <u>New</u>			Cost \$129.99
Wing Span: 34.25in	Length: 36 in		
Install Your Receiver and fly			
or add Futaba Receiver installed:			add \$79.99

Small Parts Bag	Cost	\$9.99
Three Lipo Batteries : 3@	Cost	\$38.99
Extra Props		
	Total	\$178.97

EDITOR'S NOTES – Upcoming Events

Jeff Killen

- 1. Club Meeting, at Warrenton Community Center, 7:00 PM, 2/27/2018 (Kwan will demo FPV gear, quadcopters and drones)**
- 2. AMA Expo East, at Secaucus, NJ, all day, 2/23-25/2018, amaexpo.com**
- 3. Udvar-Hazy Field Trip, at the Museum in Chantilly, VA, 10:15 AM, 3/3/2018**
- 4. Southeastern Model Show, at Perry, GA, all day, 3/3/2018, gamarc.com/SMS2018.html**



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SECRETARY'S REPORT

Jeff Killen

Here are a few notes from the club meeting held on January 23.

There were no new members or guests at the meeting. There were 5 officers and 5 other members present at the meeting.

There was no old business.

New Business

Ernie Padgette announced a private tour of the Udvar-Hazy Museum in Chantilly, VA. This will be held on March 3. Tom T. (engine expert who spoke at one of our club meetings) will be our guide.

We received a proposal from Andy Kane to participate in round robin flying events with 5 other clubs. We would host one event a year. There would be 6 events a year,

one per month. After much discussion, we decided to offer up our two float flies as the events.

We have hats and T-shirts available. Sales have been slow lately. Ernie Padgette has the items, and will provide an inventory to Nic.

John Hunton thanked Nic Burhans for taking over the Culpeper Airfest model events.

There are big changes in the industry. JR is now out of business. Tower Hobbies went bankrupt.

Officer Reports

Nic Burhans gave the Treasurer's report. We have 86 members now. We lost 10 members with the new year. Nine others from last year have not renewed; 9 members still need to complete their check flights. We have \$2754 in the bank currently. State corporation commission fees have been paid. Taxes will be filed soon. Schedule of events for 2018 is ready; we received money back for last November's meeting (where the community center was closed). The two float fly sanctions are submitted to AMA; 2 flyers are ready for promoting these events.

The Secretary had no report.

Presentation

Ernie Padgette gave us a detailed presentation on soldering techniques.

Show and Tell

John Hunton – GliderTex, many models. B-36 (4 motors), Hughes Spruce Goose (8 motors, 4 R/C systems with 4 transmitters), C-60 (3 tri-wings with 2 trial planes to understand the big one), 3 other twins (foam)

Gene Flynn – Power HD servo, just \$15, loads of torque, by Bill Hempel from AZ, for up to 60 cc models.

Gene Flynn – Phoenix Models PA18. This is a tow plane for gliders. 6s battery, 4500 mah, 100 amp, Rimfire 120 motor, about 90" wing

50/50

Ernie Padgette won the drawing, and donated the money to the Christmas party expenses.

Board Meeting

Nic Burhans gave us a budget plan for the year. Funds will be tight this year. In Oct-Nov, we could have a cash flow problem.

The pattern contest in May will have a new class called club class. It is a super simple pattern.

We will have pattern training classes to be organized by Dave Rothbart.

Set Screw Tricks **Ernie Padgette**

Some time back, I mentioned having a problem with set screws; a problem that led to a wheel falling off and damage to one of my planes. I said I'd figure out the solution. I have, and here it is. As a starting point, I'll again mention I used to race slot cars. We used set screws on the wheels; and in the early days we used to have problems with wheels coming loose. I solved that problem by finding some stainless set screws that could be tightened down solidly, without stripping out. IOW, the same problem some of us seem to have with the wheels on our planes. So, I knew there was an answer to the problem when I started.

After talking to some people and asking their opinion; and getting lots of different answers; I decided to start at the source, by contacting Dubro directly. It turns out Dubro, which is the main supplier for most of us when it comes to wheel collars, makes wheel collars in the following sizes, using set screws in the listed sizes, and requiring Allen wrenches in the listed sizes.

Dubro Wheel collars set screws:
1/16, 3/32 and 1/8 collars use a 4-40 x 1/8 set screw
.050 wrench

5/32 and 3/16 use a 6-32 x 1/8 set screw
1/16" (0.0625") wrench (Dubro says you can use a 1.5mm wrench, but actually, a 1/16" wrench is 1.5875mm. Close, but not exactly the same.)

7/32 and 1/4 use an 8/32 x 1/8 set screw
5/64" (0.0781) wrench

Now, from talking to some of you, I know there are other opinion; usually involving various sizes of metric wrenches. But I hope you'll forgive me for going with the opinion of the people who make them. Dubro doesn't make any wheel collars in metric sizes; and they don't use metric set screws or metric wrenches. It's all American Fine (AF) threads. Or at least that's what they said. Opinions do differ.

Once I knew what size set screws and Allen wrenches I needed, I ordered a quantity of different set screws and wrenches from a couple of different retailers. Along the way, I found out very few retailers actually manufacture the products they sell. Most of them purchase set screws

in very large quantity (think 55 gallon drum size) from McMaster Carr and simply repackage them for sale under their name. For my purposes, I ultimately decided to purchase directly from McMaster Carr and save the money.

So how did it work out? Pretty well, I think. Those of you who attended the FARM Club meeting when I gave the soldering demo saw that I demonstrated how a standard set screw will "cam over" when tightened. Then, you can't get the wrench out. To get the wrench out, you have to back it off a bit, which can loosen the set screw. With good, hard, stainless set screws you can tighten the set screw down until the wrench distorts and still remove the wrench. And, you can loosen and retighten the set screw as many times as you like. Does the set screw hold the wheel collar on the axle? Well, several people tried to pull the wheel collar off the axle without any luck; so I think they'll hold the wheel on. And that was WITHOUT a flat filed on the axles. Below are the replacement stainless steel set screws from McMaster Carr. You'll notice they are Rockwell hardness rating B80; pretty hard and more than adequate for our needs. And they really aren't much more expensive than common set screws found in your local hardware store. Why take a chance?

Super-Corrosion-Resistant 316 Stainless Steel Cup-Point Set Screws



Made from 316 stainless steel, these set screws have excellent chemical resistance and can be used in saltwater environments. They have a thin edge that digs into the contact surface for a secure hold. Length listed is overall length.

 For technical drawings and 3-D models, click on a part number.

(Guys, there is a 6-column table which does not copy well to my 2 column format in the newsletter. See attachment to your newsletter from Ernie to get this data. Jeff)

Now, if you really want the ultimate in gripping power, consider "knurl" point stainless set screws. They have tiny ridges on the gripping surface that will leave a mark on a drill blank axle. They're a bit more expensive, but...

So there you have it. Problem solved. Thanks, Ernie

McMaster Carr:

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Lg.	Drive Size	Hardness	Specifications Met	Pkg. Qty.		Pkg.
316 Stainless Steel						
4-40						
1/8"	0.050"	Rockwell B80	ASME B18.3	25	92313A103	\$3.09
6-32						
1/8"	1/16"	Rockwell B80	ASME B18.3	50	92313A142	4.55
8-32						
1/8"	5/64"	Rockwell B80	ASME B18.3	25	92313A188	3.24

Udvar Hazy Field Trip March 3rd 2018

Dave Rothbart

The Udvar Hazy field trip is scheduled for Saturday March 3rd starting at 10:15 AM sharp. The group will meet in the center hallway just past security screening.

For those of you who want to car pool meet at Hobby Hanger around 9:15 AM 14014-D Sullyfield Circle, Chantilly VA 20151. Parking at Udvar Hazy costs \$15 per car load. Please do not park directly in front of the Hobby Hanger store. If you get to Hobby Hanger and everyone has already left proceed directly to Udvar Hazy. If you have a problem please call me @ 703 999-5164.

For those who are late and would like to join up with the group you can call me as to our location in the facility. Udvar Hazy has no accommodations for storing jackets. Depending upon the weather you might want to leave your jacket in the car. For those who are car pooling please note that you will be probably be staying for the entire tour.

There will be lunch break at approximately 12 noon. The tour director will announce the restart time and location.

Learn To Fly Better

Dave Rothbart

Below is the itinerary for the upcoming flying classes. Since this is a new event for the club it is subject to change once we get some experience. As always I look forward to your comments and suggestions.

Format for Improving Your Flying Skill Classes

- Class Instruction
- Instructor will demonstrate the maneuver/s for that days class
- Each pilot will then fly with the instructor during which he will be coached
- Second student flight with instructor will be more critically viewed
- Most improved pilot for the maneuver/s practiced will be recognized in the club newsletter & receive a certificate of recognition award
- Instructors will mostly come from pattern community
- There will be a donation box to help defray the cost of lunch

Classes will consist of but not limited to;

- Trimming your plane for stable flight
- Takeoff, Straight Flight, Landing
- Immelmann Turn and Split S
- Loops
- Rolls
- Procedure Turn
- Stall Turn

Advantage of participating in the class;

- It is easier to do than a fun fly event, no unknown and multiple flight maneuvers. Pilots will know the maneuver/s that will be flown that day
- This is not a timed event.
- Participants will perform the maneuver as many times as you are comfortable flying



Ernie Padgette does the soldering techniques presentation at last club meeting.



John Hunton's 4 TX set up for the Hughes Spruce Goose



Gene Flynn's PA-18 at the January Club Meeting.



Another John Hunton creation: One of the trial planes used to build his full-size C-60 model



A Jet – now that rocks ! (from a Sunday flying day at Kwan's field)



Dave Rothbart (red vest) with others at Kwan's field.



Lots of good support equipment for the Sunday flying day at Kwan's field.

FARM OFFICERS for 2018

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

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A plane named “Invitation to Grace” at a Hobby Hangar Sunday flying event – I like it !