

# May 2024 Edition

# Member at Large's Corner: Jay Langley



No Club, field, fixed wing, or helicopter insights this month.

# Jay

### **President's Pilot Box**: Gordon Collyer

It was cold and wet on the 27<sup>th</sup> of April, but several students from Liberty High School braved what the TV weather people said was the last day of winter. Many thanks to Jay Zompanti, Jay Langley, Nic Burhans, Bill Pratt, David Dix, and Ernie Padgette for their intrepid support and flying; dodging the rain showers that were supposed to be 20% but became 60%. Bill Pratt became our version of the "Maytag repairman", as the lone gate keeper. Pictures courtesy of Nic. Many thanks guys, even with lousy conditions the students and their teacher report that they had a good time.





Every now and then I like to search the "Model Aviation" archives on the AMA website. In the nostalgia department, I enjoy looking at the planes and products that defined my Junior and Senior High days flying Ucontrol and free flight. I was fortunate to have a hobby shop and park to fly in, both within a ten-minute bike ride. The flying gang I was a part of was all self taught. Crash until you figure it out was the standard training approach. In my case, old model magazines and the occasional bought copies, were also examined at length during the northern Ohio winters for building and flying tips. In looking through the archives I am still surprised about how much fundamental knowledge can be found in old magazines. In the "olden" days before ARF reviews dominated, construction articles, even if well beyond my skill level, yielded volumes of information about building and flying a very wide range of plane types that I was able to use sooner or later. In addition, way back then, a lot of copy was dedicated to aerodynamic and electrical technical information as designing planes, building primitive electrical gadgets, and even home built glow and compressed CO2 engines were all part of the hobby. That information is still there! I've been thinking about flying wings and canards recently for projects and have found tons of good information from old magazines that was published in the 1960-1970s when improvements in radios made control of these configurations easier for the average modeler. Also, some of the plan services offer copies of construction articles to review on-line. How folks solved assembly, alignment, and flying issues can make interesting reading. In the "grins" department I ran across an early "SAFE" mode device, no not something from Spektrum, but a parachute system that could be sized for any model and would provide an automatic three-point vertical landing to allow the flyer to literally bailout if things got out of control. A good idea whose implementation finally came of age. You may be aware that such parachutes are used in Cirrus full scale aircraft and that several private aircraft navigation suites now have features akin to the Spektrum SAFE mode, including auto-land. Anyway, as we are seemingly losing some traditional equipment manufactures, some of these old how-to articles may be helpful once again as we may have to rely more on DIY strategies. Propeller theory, weight and balance, float design, motor sizing, performance estimation.



It's there somewhere.....take a look.

#### C-Stars to visit Barnstormers.

C-Stars, a Culpeper pediatric outpatient physical therapy clinic, will visit Lenn Model Airpark during their annual summer camp weeks in June and July. Their summer camps are held each year to allow clinic families an opportunity to get together and also to experience a variety of outdoor activities around Culpeper.

We will support their visit to Lenn Park with RC flying demonstrations, helping the kids assemble wind-up rubber band airplanes, and then turning the Airpark over to the camp to let the kids fly their airplanes.

The dates are June 13<sup>th</sup> and July 16<sup>th</sup>. The airfield will be closed from 9:00 AM to 1:00 PM with RC and kids flying from 10 to noon.

**Barnstormers volunteers are requested!** Please contact Gordon (<u>gl.collyer@gmail.com</u> or 540-729-6041) if you can:

- 1) help move tables the evening before,
- 2) demo RC aircraft, and/or
- 3) assist with assembly and flying/repairing the kid's wind-up airplanes.

We would like four or five demo aircraft flights of varying types, electric, fuel, EDF, big and small. Static displays will also be useful. Please contact Gordon, per the above, who will be "curating" the demo aircraft. Please understand that with the visitors anticipated, reliable and airworthy aircraft for the demos will be a must.



# Vice President's Pilot Box: Jay Zompanti

- No Club specific items this month.



## Secretary's Pilot Box: Nic Burhans

- The updated 2024 Mowing Schedule has been sent to all Club members and posted on the Club website.
- The updated Club calendar has been sent to all Club members and posted on the Club website.

#### Upcoming 2024 events:

June 13	Thursday	C-Stars Demonstrations. The field will be closed to until 2 PM. CD: Gordon Collyer gl.collyer@gmail.com (See Pr	
June 15	Saturday	FARM Float Fly #1 @ Lake Ritchie, Bealeton VA CD: Nic Burhans <a href="mailto:npb6218@earthlink.net">npb6218@earthlink.net</a>	,
June 23	Sunday	CMB Club Meeting @ Lenn Model Airpark Club Fly Day #2, Pilot Training, and Flight Chec	1:00 PM ks all day
July 16	Tuesday	C-Stars Demonstrations. The field will be closed to general flying from 9 AM until 2 PM.  CD: Gordon Collyer <u>gl.collyer@gmail.com</u> (See President's notes above)	
July 16-19	Tue-Fri	AMA Aerobatic (pattern) NATS @ Muncie, IN www.modelaircraft.org	All Day
August 24-25 Sat-Sun		Florence, SC Pattern Contest CD: Robert Gainey <a href="mailto:ruddercable@yahoo.com">ruddercable@yahoo.com</a>	All Day

Remember to be SAFE Nic

### Treasurer's Pilot Box: Nic Burhans

- As of 24 May, the Barnstormers have 51 members. (25 Regular members, 24 Senior members, 1 Junior member, 1 Associate member, and No Life members).
- Welcome to our newest member, Bobby Hurst, from Locust Grove, VA!
- The updated Club Roster has been sent to all members.

- All bills have been paid and the Club presently has a balance of \$4,989.45 in the general fund, \$822.16 in the runway fund, for a total of \$5,811.61.

Be Safe Nic

# Safety Officer's Pilot Box: Ernie Padgette

- No Club specific items this Month.

Ernie

### Field Marshal's Pilot Box: Jay Zompanti

- No Club specific items this month due to the weather.
- Thank you to Gordon, Jim, and JayZ for mowing Wednesday to take advantage of the "dry" spell to get ahead of the forecast rain this weekend and make up for the wet weather last week.





Jay 3

## Member at Large Pilot Box: Jay Langley

- See above.
- No Club specific items this Month.

Jay L

# Member at Large Pilot Box: Bill Pratt

- No Club specific items this Month.

Bill P

# Member at Large Pilot Box: Bill Towne

- No Club specific items this Month.

Bill 7

### Web Master's Pilot Box: Dick Sutton

As of 12:10 pm on April 24, 2024, the CMB club website is now supporting fully encrypted end-to-end transactions between users and the host. This means that we now use <a href="https://cmbclubrc.com">https://cmbclubrc.com</a> instead of the previous <a href="http://cmbclubrc.com">http://cmbclubrc.com</a> instead of the previous <a href="https://cmbclubrc.com">http://cmbclubrc.com</a> instead of the previous <a href="https://cmbclubrc.com">http://cmbclubrc.com</a> instead of the previous <a href="https://cmbclubrc.com">https://cmbclubrc.com</a> instead of the previ

I know that y'all (that's southern for "you all") will sleep more soundly at night knowing that our website's traffic is fully encrypted end-to-end.

See you next time...



## "CMB Tips and Projects Jar": All CMB Members

- Liquid Electrical Tape - Say What?



### The names have been changed to protect the innocent. J

**Liquid Tape** is a versatile synthetic rubber coating that serves various purposes in electrical applications. Let's look at its features, uses, and how to apply it.

### Features of Liquid Tape:

Air Dry: Liquid Tape dries naturally when applied and forms a protective layer.

**Resistance**: It exhibits excellent resistance to moisture, acids, alkaline, abrasion, and dielectric properties.

Flexibility: Even under extreme conditions, it remains flexible without cracking or hardening.

### **Applications for Electrical Connections:**

Use Liquid Tape for insulating and protecting electrical connections in various settings:

#### RC Planes, Boats, Cars, Trailers, RVs, and Trucks - LOL!

Boats, Trailers, RVs, and Trucks

Automobiles

Timers

Pool electrical components

Bilge pumps

Sprinkler pumps

Instruments

Computers

Circuit boards

**Switches** 

Terminal Screws: It prevents terminal screws from vibrating loose.

#### **Color Coding:**

Liquid Tape can be used to color code wires and components.

#### **How to Use Liquid Electrical Tape:**

#### **Surface Preparation:**

Ensure that wires, terminals, or any other surfaces are clean, dry, and free from oils, grease, wax, and loose rust.

#### **Application Steps:**

Mix Well: Stir gently with the brush applicator cap to avoid bubbles.

**Apply Wet Overlapping Coats**: Brush on overlapping coats, allowing 10–20 minutes of drying time between coats.

**Recommended Coats**: Apply a minimum of 2–3 coats for optimal results.

Full Cure: Allow 24 hours for complete curing.

#### Caution:

Always turn off power before starting electrical work and follow local electrical codes.

Proper ventilation and protection are essential.

Allow sufficient drying time per coat.

Apply at least 2 coats (5+ mils) for good dielectric protection.

### **Specifications**:

(Example: Gardner Bender White LTG-400 Liquid Electrical Tape):

**Dielectric Strength**: 1,400 v/mil

**Solids (wt.)**: 24%

Tensile Strength: 430% Cut Resistance: Very good Shelf Life: 1 year at 77°F

**Temperature Range**: -30°F to 200°F

Weather ability: 3–5 years

**Salt Spray Resistance**: Passed 1,000 hours **Viscosity Range**: 90–110 K.U. @ 77°F

Remember, **Liquid Tape** is a valuable tool for insulating, protecting, and ensuring the longevity of your electrical connections! Not only can you use this in place of heat shrink tubing, terminal screw vibration reduction, and multiple other uses, but I stumbled upon a little trick that might be for those flyers who don't need extreme precision in flight which I will mention later.

### **Clevis and Horn Application:**

I built a Sig T-Clips EP this past winter and have many flights on it as of this writing. However, it seems the wind is always a factor on the days I fly (April go away) and it has been hard to dial it in due to the wind.

I was experiencing some in-flight "twitchiness" on the roll side of things. The wind just made it harder to troubleshoot. After a few flights, I would go home and look over the plane looking for a mechanical reason for this "twitchiness".

On one of these inspections, I came across a control rod for the aileron that had something wrong with the threads that would allow the clevis to jump around on the thread. Luckily I found it before it caused bigger problems in the air. I replaced that rod and went back out.

Flying was improved after the control rod was replaced, but still not locked in. Back to the bench. Upon further inspection, I found some (very little) play in the hole used for the clevis on the control horn. This couldn't be it, could it? After all, it was minimal at best.

Only one way to find out, swap the control horn. No, WAIT, I know...(this is the trick) I could put a bit of liquid electrical tape in the hole on the control horn, fill the hole leaving just a bit on the outer edges, securing our soon-to-be flexible bushing. I did that very thing and waited a day before re-attaching the clevis to the horn. The metal clevis had no problem piercing the material. When I reattached the clevis to the horn I found no play between the clevis and the horn. Pretty cool! Think duct tape and how many uses. Kinda like that.

Like I said, not for everyone, but I'm sure for some. And if you are just looking for a great product and a replacement for electrical tape, this is it.

Jay Zompanti

# Member "From the Field" Anything Input Box:

#### WRIGHT BROTHERS NATIONAL MEMORIAL:

In a recent trip to the Outer Banks of North Carolina, I couldn't miss the opportunity to visit the Wright Brothers National Memorial in Kill Devil Hills. The Memorial is maintained and operated by the National Park Service. The Wright Brothers Monument, set on the summit of Kill Devil Hill, conveys the enormity of the events leading up to, and taking place on, December 17, 1903. Used for the Wright's kite and glider tests

between 1899 and 1902, Kill Devil Hill is worth the trek up to the Monument and the view of the powered flight area to the north.



The Wright Brothers Memorial



First Flight Area from the Memorial

The Visitor Center, including a full-scale replica of the 1903 Wright Flyer, is comprehensive yet not overwhelming. Information and exhibits present the Wright Brothers' achievements including development and implementation of their aeronautical theories. The building, constructed in 1960, is designated a National Historic Landmark for its architectural significance.



1903 Wright Flyer Replica



The Wright Flyer and with Kill Devil Hill in the Distance

The site of the first powered flight is an easy walk from the Visitor Center. Replicas of the hangar and separate living quarters/repair building are in their original location adjacent to the first flight site. A placarded stone, located at the liftoff point near the end of the "catapult track", directs visitors to view the paths of the first flights. Markers, located 120, 175, 200 and 852 feet from the stone, demarcate distances achieved by those first four powered flights of December 17.



Hangar Left, Living Quarters Right



1903 Flight Line and Distance Markers

A visit to the Wright Brothers National Memorial is highly recommended for both aviation and non-aviation enthusiasts to view and appreciate the dawn of powered flight. The Memorial provides perspective to the progress of aviation in the 120 years since 1903.

#### Jim Bouquet

#### - FYI #1

Two aviation events that the Fauquier - Warrenton Airport will be hosting:

The CAF B-17 and B-25 will be at the airport the week of 17-24 June 2024.

The IAC East Coast aerobatic competition is planned for 28-30 June 2024.

Lloyd Hinrichs

### - FYI #2

At their Sowego Road field in Catlett, VA





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The CMB Newsletter is published monthly by the Culpeper Model Barnstormers, AMA charter #4894. It is forwarded to CMB 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 CMB Inc.

Publishing input deadline is the 2<sup>nd</sup> Tuesday of the month. Please forward all inputs (Pictures in jpg format) to: Nic Burhans

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