

SMOKE SIGNALS

NEWSLETTER

MAY CALENDAR

June 7
Club Meeting
Show and Tell

June 21
Club Meeting



Send all suggestions to:
newsletter@meroke.com

BIRTHDAYS

John Wolkiewicz

UPCOMING EVENTS

PAINTBALL JULY 29



VET BENEFIT AUCTION

On Thursday night May 17, a special Auction was held at the Meroke meeting. The items were donated by Jim Gilmartin to raise money to support his work with Disabled Vets.

A lot of quality parts, kits and planes were auctioned off by our master of ceremonies , Mark Klein. We raised more than \$1,000 to help benefit the Disabled Vets. THANKS TO ALL WHO PARTICIPATED.



Presidents message. A big thank you, to Jim for all of the planes and products, we will miss you at the field and the building club. The door will always be open if you want to come and take a flight, or hang with the members of the club. The Vets at Northport I am sure will always remember the guy that taught them to tie a wooly bugger or a nymph, Thank you for your generosity. That's a Volunteer!

Joe

THE FIRST TOP GUN EVENT SUNDAY MAY 6 - by Dave Bell

We had a good day of flying and we had a lot of fun. The weather wasn't the greatest, but no rain, no wind and no other fliers but the Contestants. Lets hope for the same turnout and better weather for the June event.

Bob Henken (shoe-in, as the only novice).

Top Gun...Ted Evangelatos

Second.....Tony Polio

Third.....Nelson Ramos

Fourth.....Gene Kolakowski

Fifth.....Tom Dutton

Sixth.....Mel Brenner

Explanation of how Top Gun for the year will be chosen:

We will have monthly contests. The winner will acquire 1 point, the second 2, etc, etc, etc. At the end of the season, the Pilot with the least amount of points is the 2018 Meroke Top Gun winner. If you miss an event, you will acquire the points from the highest total cumulative points from the preceding months. If you haven't participated from the start, you will acquire the highest points recorded to date.

Next month Top Gun will be June 10:

#1....Hit the circles. The Contestant will perform two touch and go passes, trying to hit the circles on the runway. The inner circle is 3 points, the middle circle is two points and the outer circle is one point. In the event of a tie, the shortest time will win.

#10...Speed and stop in Box. Takeoff, fly racetrack pattern around field. Do touch and go. Fly same pattern and land on runway. Contestant must then stop in box. Time will stop when complete plane stops in box.

#3...Bomb drop. Contestants must drop bomb closest to designated target. Three attempts are allowed.

Novice events will remain the same as already posted.





A



builder's guide to common adhesives

Written by Terry Dunn

As seen in the October 2013 issue of Model Aviation.

There's a television commercial that reminds us to shop around for car insurance every six months, lest we miss out on a better deal. Maybe we should apply similar logic toward the glues we use. If you haven't scanned your hobby shop's glue shelf in a while, you may be unaware of some contemporary offerings.

As new materials have been ushered into the modeling realm, so have new adhesives. Likewise, new modelers are often unfamiliar with some of the classic hobby glues that have stuck around.

This article is not intended to be a comprehensive catalog of modeling glues, but is meant to serve as a broad overview of what's available. This article also avoids the technical aspects of how and why glues work and behave the way they do. Chemistry never was my best subject, so I'll stick to the basic properties and practical applications for each of the listed glues.

Polyurethane glues expand as they dry and fill gaps. This is useful when repairing damaged models.

In no particular order, the glues I've chosen to discuss are:

- Cyanoacrylate (CA): This is the most popular type of glue in all of modeling. I'm comfortable making that assumption. Thick, thin, foam-safe—at least one type can be found on nearly every modeler's workbench.

Yet, CA is also one of the most hazardous glues on the list. Who among us has not glued his or her fingers together, ruined a pair of jeans, or cried from the fumes? Most of us are willing to accept and manage that risk for the reward of strong and immediate glue joints.

- Polyvinyl acetate (PVA): Most of us have been using (and perhaps eating) PVA glue since grammar school. Whether you call it Elmer's Glue or white glue, you already know that it is ideal for attaching raw macaroni to construction paper. It is also useful for gluing balsa airframes together.

Yellow Carpenter's Glue is also a PVA glue. It tends to be a tackier than white glue when wet, which is often useful.

- Canopy glue: Although canopy glue looks similar to common white glue, it performs differently. Canopy glue bonds well to nonporous materials and remains flexible when dry. These properties are what make canopy glue well suited for attaching plastic parts (such as a canopy) to the skin of a finished model.

- **Goop:** This household glue has a strong odor until it dries into a rubbery consistency. It sticks to nearly anything, but it will dissolve some foams (always test first). It works great on vibration-prone joints.
- **Cellulose glue:** Modelers have been using cellulose glues such as Ambroid for decades. It is still a favorite adhesive for weight-conscious and/or nostalgic builders. Cellulose glues can be thinned with acetone to the desired consistency and applied with a syringe for extra precision. When dried, the glue is lightweight and easily sands.
- **Contact cement:** There are many types of contact cement but they work in the same basic way. Glue is separately applied to each of the mating parts and allowed to dry, then the parts are combined for a quick bond. This is a popular adhesive for sheeting foam wings and building foamies.
- **Epoxy:** A longtime favorite for high-stress joints, two-part epoxy is hard to beat when strength is the main objective. It requires careful mixing to ensure proper curing and deliberate application to avoid excess weight.

Epoxy is available in versions with various working times (5-minute, 30-minute, 1-hour, etc.). There is an art to dispensing each part in equal amounts and also sizing the batch to have the right amount of epoxy for the job.

- **Hot glue:** Hot glue is applied using a gun-like, heated applicator. The low-temperature versions of hot glue can be applied directly to sheet foam without melting it. The quick drying (cooling) time of hot glue makes it ideal for assembly of flat foam models. Keep in mind that hot glue joints can get brittle in freezing weather.

Hot glue is handy for quickly assembling sheet-foam models. This fancy glue gun has a variety of applicator tips. Even inexpensive glue guns are effective.

- **Polyurethane glue:** This glue expands as it dries, making it ideal for repairing crashed models. Bond strength can be improved by poking holes in the mating surfaces. It can also be used for initial builds. Water (including humidity) is the catalyst that kicks off the curing process. Care must be taken to keep the bottle airtight between each use to prevent curing.



- **Water-based polyurethane:** This easily applied, brush-on liquid can be found in the household paint section at your local hardware store. It provides a lightweight method for adhering fiberglass cloth to balsa or foam models, although it does not provide the same degree of structural rigidity of an epoxy-based finish. It can also be used to laminate foam sheets together.

You may have a favorite glue or two that isn't on this list. Be sure to share that secret adhesive with your flying buddies. More importantly, watch for new glues. It appears that there is always something new, and this week's release might be what you've been looking for!

Glue type	Common names	Common application	Drawbacks	Advantages
Canopy glue	Pacer Formula 560	Attaching plastic detail parts	Overnight drying time	Water soluble; dries clear and flexible to finished models
Cellulose glue	Ambroid, Duco Cement	Wooden airframe assembly	Flammable when wet because of acetone	Lightweight and easily sanded
Contact cement	GWS Glue, UHU por	Applying wood sheeting to foam wings	Requires a two-step process	Bonds are typically instant and permanent
Cyanoacrylate	CA, Super Glue, Zap, Hot Stuff, Jet Glues	Nearly everything	Can be an irritant; joints are brittle	Fast cure time
Epoxy	Z-Poxy, two-part epoxy, 5-minute epoxy, finishing resin	Bonding high-stress joints; applying fiberglass cloth	Heavy; requires precise mixing	Robust
Goop	Amazing Goop, Shoe Goo	Joining vibration-prone components	Strong odor; somewhat heavy	Strong, flexible joints
Hot glue	Hot glue, low-temperature hot glue	Sheet-foam models	Brittle in cold weather	Allows for fast building
Polyurethane glue	Gorilla Glue, Elmer's Pro-Bond	Crash repairs	Typically has a short shelf life	Expands to fill gaps
PVA glue	White glue, Elmer's Glue, carpenter's glue, aliphatic glue	Wooden airframe assembly	Slow drying; other glues do not stick well to cured PVA	Non-toxic; strong bonds
Water-based polyurethane	Minwax Polycrylic, Rust-Oleum Varathane	Applying fiberglass cloth	Finish is prone to dings and hangar rash	Lightweight; inexpensive; easy to apply

Dear Dr. Phil - Rides Again

Q: Does it matter what size fuel tank I use with my engine? I would like to increase my flying time by adding a larger fuel tank.

A: Three forces act on fuel flow to the engine. They are gravity, head pressure and muffler pressure. The fuel tank's size depends on the engine's displacement. The .25 cu. in.-displacement engines use 4- to 6-ounce tanks, .40-size engines use 8- to 11-ounce tanks, and .60-size engines work best with 12- to 16-ounce tanks. Size does matter with fuel tanks. Why can't we just put a 16-ounce tank behind a .25 cu. in. engine and fly for an hour? Because of something called "head pressure," which is one of the

forces pushing fuel into the engine.

The weight of the fuel itself is acting to push it through the small opening, into the engine. The larger the tank size, the heavier the fuel is and the greater the force pushing it out of the tank. In the .25-engine scenario, the needle valves would have to be set extremely "lean" to compensate for the full tank's high head pressure.

But as the tank empties during flight, the head pressure drops. Approximately halfway into the flight, the pressure gets so low that the mixture settings, made with a full tank, are too lean. The engine dies in the next vertical climb or high-gravity ("high-G") maneuver. The initial mixtures could be set extra rich to compensate, but then the first half of the flight would be underpowered, if the aircraft could even take off, and not much fun at all.

Q: I'm am assembling an H9 War bird and I would like to include a scale pilot. How do I figure out the proper scale?

A: Simple!!! Follow the chart below:

Wingspan Scale

442" = Full

147" = 1/3

111" = 1/4

88" = 1/5

74" = 1/6

63" = 1/7

55" = 1/8

49" = 1/9

Q: How do I safely dispose of lithium-polymer battery pack?

A: Throw them in the bushes and walk away. JUST KIDDING !!

To dispose the lipo batteries. Discharge the battery until its voltage reaches 1.0V per cell or lower. For resistive load type discharges, discharge the battery for up to 24 hours.

Submerge the battery into bucket or tub of salt water. This container should have a lid, but it should not need to be air-tight. Prepare a plastic container (do not use metal) of cold water. And mix in 1/2 cup of salt per gallon of water. Drop the battery into the salt water. Allow the battery to remain in the tub of salt water for at least 2 weeks. Remove the battery from the salt water, wrap it in newspaper or paper towels. Editor Note- Home Depot, Lowes and other locations have box for recycling LiPo and NiCd batteries.

See you at the field!

Phil

INSTRUCTORS CORNER - A couple of Tips for instructors and new flyers.

If you are new to flying, you look at your instructor and ask "Wow, how did he do that?!"

Instructors, OK, the adulation feels good, but it works even better when the student "GETS IT!"

Suggestion:

- 1- **keep it simple, keep it short** - break each maneuver into parts so that the student can get the idea.
- 2- First time: Talk them through maneuver ON the GROUND (maybe, have them mimic you on the buddy box so they have an idea how it will feel) .
- 3- Now into the air and repeat, repeat, repeat. When they get comfortable, go to the next part.
- 4- DO NOT TALK THEM TO DEATH. Make them feel comfortable.

Instructor example - When you of break a turn into parts: the standard left turn becomes

1. Bank 30 degrees to left.
2. Center stick.
3. Add a little elevator to bring it around and control turn (coach them - a little more or a little less).
4. Bring wings level.

CONGRADULATE!

- 5- Repeat until the student FEELS comfortable, then go to the next maneuver.

Students- Relax, this is supposed to be fun.

- 1- It is much easier when you relax.
- 2- Make small movements on the sticks. You can always add more.
- 3- Keep it close. You can't control what you can't see. (Instructors, You are responsible for this.)
- 4- Communicate with your instructor. Let him know if you are unsure (before you get into trouble), or have a question, or getting tired or having FUN.