



PRESIDENT TO PRESIDENT

# Potential New Members?

by Dave Brown, AMA President

The increase in availability of inexpensive model airplanes has helped expand the number of Park Flyer hobbyists. Families are purchasing models for their children and using the local park for time together away from the television.

There should be a place for these Park Flyer pilots to go where they can receive support and camaraderie with fellow pilots. Park fliers should be able to share their common interests as well as experience the other sides of model aviation.

**Can we be where these pilots feel welcome?**

If your definition of we in this instance is narrowed to those who fly larger models, jets, helicopters, or whatever it is that you fly, then I think you need to consider an expansion of your definition. We are all in this wonderful hobby together, and that needs to include all types of

model airplane activity.

Only by inviting those new modelers into our “house” can we enjoy the advantages that their numbers bring to our activity.

While aeromodeling may seem to be an activity which is enjoyable by oneself, it quickly becomes as much a social activity as a technical one. Aeromodeling is so much more pleasurable when it involves flying with others. Those modelers who are loners simply do not last. The secret is to make the park flyer pilots feel welcome to join your club. Even those “Wal-Mart” models are being purchased by potential members; all we need to do is seek them out.

**How do we find these potential members?**

Most clubs are looking for programs to run in the winter and spring. How about giving this a try? Sometime after Christmas, run an ad in the local paper inviting anyone who has a new RC

model aircraft to attend a club meeting, where he or she will receive some help in getting ready to fly it successfully.

How about setting up a day in the spring where your club members will help kids with their new models? If you restricted it to youth members and sanctioned events with a CD, you could sign up kids as AMA members for \$1 apiece and be fully insured.

Given proper execution, this could become an event that serves a number of purposes. It could raise the positive visibility of your club in the community and it could grow the club.

Inviting Park Flyer pilots to be a part of the we exposes members to a new part of the aeromodeling hobby. It can expand our membership. Making more friends and learning a little bit along way—isn't that what AMA's all about? →

TIPS FOR CLUBS

From the Ocean County Modelers, Inc., Lakehurst, New Jersey

# Windy Days: Good Rudder Practice Days

by Salvatore Piu

One of my friends asked me for some flight training, but canceled a few times because of windy conditions. For student pilots—since student pilots usually are flying on a buddy-box system anyway—take advantage of this: get some buddy-box stick time on a windy day.

There are several benefits for students to do this while still using the buddy-box system. First, in order to keep the airplane under desired and controlled conditions, wind generally forces student pilots to be more active to maintain control during the flight, which equates to a faster learning curve. Second, we always have some amount of wind at the field, therefore pilots should not be afraid of it. Better yet, pilots should learn how to deal with windy conditions, provided the model is capable of flying in that condition. An electric foamy airplane weighing less than 10 ounces, for instance, should not be flown on windy days, especially by a student pilot or one having recently soloed.

An underpowered or marginally powered

model will also be more sensitive to even light wind. The general rule of thumb I use for not flying because it's too windy depends on how hard it is to assemble the model in the wind. If the wind places my model at high risk for damage during assembly, then it's too windy to fly.

I have flown in excessively windy conditions a few times over the years. However, in each case, the flight was no longer enjoyable because I was constantly correcting for wind-related issues, with the landing being the most intensive and nerve-racking part of the flight.

If the wind is a little annoyance during assembly, I will fly knowing the wind will be a little annoyance to contend with in the flight also. I call windy days “good rudder practice days” because rudder typically needs to be used more often on windy flights.

**Bottom line:** fly a few times in moderate wind conditions while you are a student on a buddy-box system because it will make you a better overall pilot. →

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## Gas, Check! Battery, Check! Safe Pilot?

by Marc Niehus

### “The best safety device of any aircraft is a well-trained pilot.”

If you have heard this phrase before—or for the first time—it needs to be said again. When was the last time you were at the field and saw something that you thought looked unsafe? What did you say to that person who was committing the unsafe act? Did you say anything or think to yourself, “that guy’s been a pilot for a long time. I’m sure he knows what he’s doing.” Did you know that, under the Official Academy of Model Aeronautics (AMA) Aircraft Safety Code, you should ask that person about their actions if they appear to be doing something in an unsafe manner?

I was new to the club and the pits were busy. Trying to stay out of other people’s way, I set up my airplanes behind the line of airplanes in the pits. I remember getting a few funny looks as if my fly was open. I won’t mention Rich’s name, but finally this pilot told me that they could make some room on the line for me and not to set up behind others in case something would happen. Others looked at me while he acted!

Before I write this next part, please knock on wood! The Aerohawks have not had any major accidents. Does this mean that we are a safe club—yes! Does this mean that because we are safe, we are immune from having a major accident—no!

This brings me back to being a well-trained pilot. Here are a few selected safety rules and practices that you might want to think about the next time you’re out at the field. So grab your favorite book of faith or a *Model Aviation* magazine, place your left hand on it while raising your right, and repeat after me:

#### 1. I shall not willfully fly my model aircraft in a reckless and/or dangerous manner. This one is self-explanatory.

Don’t fly beyond your skill level without a spotter or an instructor. If you are flying you’re brand new high-performance model, have someone with experience help you out, maybe even fly it for you the first time.

2. I shall not fly my model aircraft until it has been proven airworthy. This includes range checks, making sure everything is secured, battery charged, fuel in the tank, correct control deflections. Have an experienced pilot look at your airplane if you’re getting ready for its first flight or after a major

repair. Believe it or not, you might have missed something!

3. I shall not operate model aircraft with metal-blade propellers or with gaseous boosts (other than air), nor will I operate model aircraft with fuels containing tetranitromethane or hydrazine.

4. I shall not fly over houses or buildings in the vicinity of the flying field. No one, on or off the field, should ever have cause to feel threatened by one of our aircraft. This is a big one! If you see it happening, tell the individual and tell your safety officer. It needs reported so the club can correct the wrong. If you do it by accident, admit it so it can be corrected.

5. Children under six years old are only allowed on a flightline or in a flight area as a pilot or while under flight instruction. *Watch your kids!* Yes, this can be a great hobby to involve your sons and daughters in, but do you want to pay for someone’s airplane that was wrecked by your child by accident? Worse yet, have your child end up one finger short of a full hand. Aerohawks club policy includes that your children must also have someone designated to watch them while you fly. Supervise your family!

#### 6. At all flying sites a straight or curved flightline must be established, in front of which all flying takes place.

Only personnel associated with flying the model aircraft are allowed at or in front of the flightline. When you’re pulling out of the pits—ask, announce, communicate your intentions, and give the right-of-way to the people flying. It’s just “plane” considerate!

7. No powered model may be flown outdoors closer than 25 feet to any individual. When taxiing your aircraft to the pits, do not point the aircraft into the pits. Kill the engine, grab the tail, and push it the rest of the way. This one I saw firsthand and it scared the you-know-what out of me.

8. AMA has seven of 17 bullet points that just involve propellers. This means that fast, spinning, sharp things do damage. In a nutshell, don’t use repaired blades, do keep all body parts out of propeller arc, do check that your propeller is securely fastened, do exercise extreme caution when making needle valve adjustments and make them from behind the spinning propeller (unless of course you have a pusher.)

9. Airplanes must be secured in the pit area at all times when the engine is running, with engine facing the fence

and away from all spectators and the pilot. The use of some type of restraining device is required when starting and running aircraft in the pit area. Do not leave airplanes unattended during run-ups or break-ins. These should be accomplished in the designated area at the south end of the pit.

The preceding is an abbreviation of AMA General and Radio Control Rules, Safety Recommendations published by AMA, and the Iowa City Aerohawks club rules. The full document for the 2007 Official AMA Aircraft Safety Code is located at [www.modelaircraft.org](http://www.modelaircraft.org) and you need to check out our Web site for the full version of the club rules: [www.iowacityaerohawks.com](http://www.iowacityaerohawks.com).

Let’s all work together and make this another safe year for the Aerohawks. Be considerate to other fliers, communicate what you are doing when it comes to sharing the air (last year I witnessed two mid-air,) and if you see someone doing something unsafe or that you might think is unsafe, say it! What we do as an individual reflects the club! →

From the Rock River Aero Modeler Society, Janesville, Wisconsin

## Crazy Glue Safety

When using Crazy Glue there are certain precautions that need to be addressed:

1. Using small amounts and not using it directly from the bottle not only is efficient, but is also safer.
2. Many people are allergic to this type of glue so take steps to ensure that exposure is minimized by protective gloves and proper respiratory gear.

3. Since the fumes from Crazy Glue are not safe, anyone who uses this glue should also work with a gas mask and safety glasses when a lot of this material is involved.

Sounds like overkill, but if it prevents a serious injury due to a spill accident, it could be worth the extra effort. →



# Braiding a One-Loop Motor

by George White

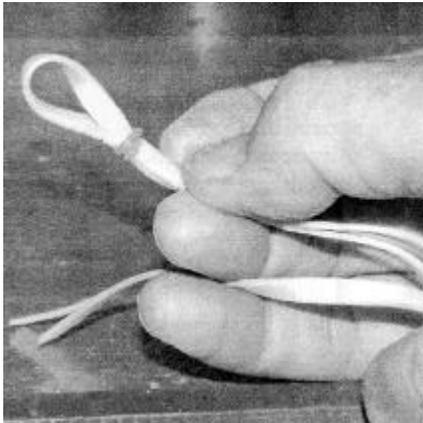


photo 1

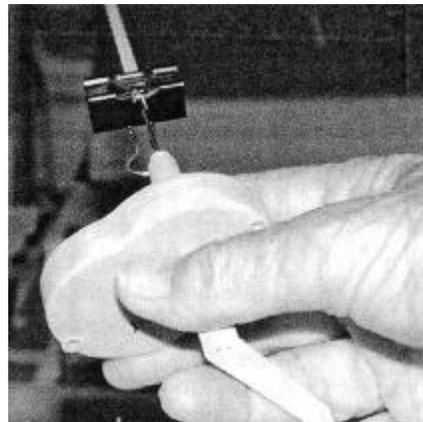


photo 2

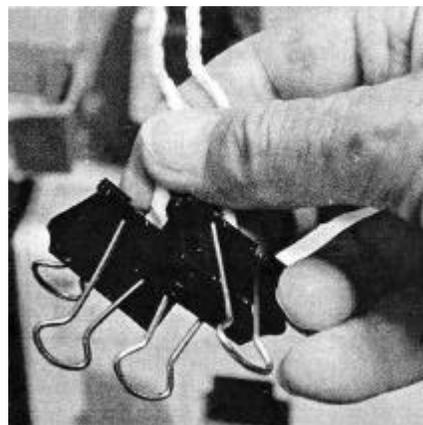


photo 3

I've seen a few articles written about how to braid a multi-loop motor, but none on the "fine" art of braiding a single loop. For what it's worth, here's how I do it.

1. Measure out rubber to whatever length you want your motor to be, adding about 4 inches to each strand for knot-tying purposes.

2. Find the center of the rubber and double it over. If you intend to use an O-ring for a crocket hook, be sure to place it at midpoint on this step. If you are going to use a conventional crocket hook, create a small loop about 1-inch in diameter at the midpoint, and in either case tie that with a small dental rubber band as shown in photo one.

3. Hook the loop or O-ring around a nail, peg, or whatever you have handy. Then grip each of the two tag ends of the motor with a binder clip available in any office supply store. Find another nail, peg, or other suitable device that is a distance from the end containing the loop or O-ring and equal to a few inches short of the original length of the motor before braiding. Secure one clip to that peg.

4. Attach one of the legs of the binder clip holding the other strand to a winder. The cheap, indoor plastic winders shown in photo two are very useful for doing this. Notice in photo two that the other strand—in the background to the left—is just hanging over a peg with a clip attached to it.

5. Turn the winder in the same direction you would use if you were winding the motor to fly the model. There's an old wives' tale that says a good rule for determining how many turns to put into a braided motor should equal four turns per inch of the unbraided motor length. Some folks use less, some more, depending upon how short you want the finished motor to be. You do lose a few turns when braiding a motor—the more you braid the more you lose.

6. When you've twisted the desired number of turns into the first strand, unhook that binder clip from the winder and secure it to the peg you used to hold the clip attached to the other strand. Repeat the same process with the other strand. When you've finished you've got two strands twisted as shown in photo three.

7. Grab the two twisted strands, using the binder clips to keep them from unwinding. Place a third binder clip about 3 inches into the motor length from the first two binder clips. While holding that binder clip, remove the two clips you used to wind the strands and you have something which looks like photo four.

8. While that clip holds the strands together and prevents them from becoming unwound, tie a square knot in the two tag ends that have become unwound, and pull it very tight. Then, with the remaining tag ends, tie an overhand knot. Pull the two tag ends from the overhand knot tightly until that knot slides down onto the square knot. That knot combination will not come untied—provided you didn't lubricate the motor beforehand. The finished product is shown in photo five. Trim the tag ends, run your fingers up and down the twisted mess and you've got a nice braided motor. →

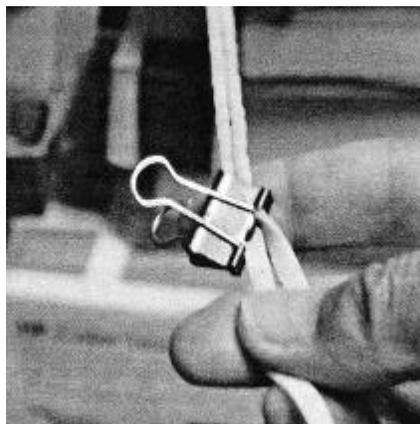


photo 4

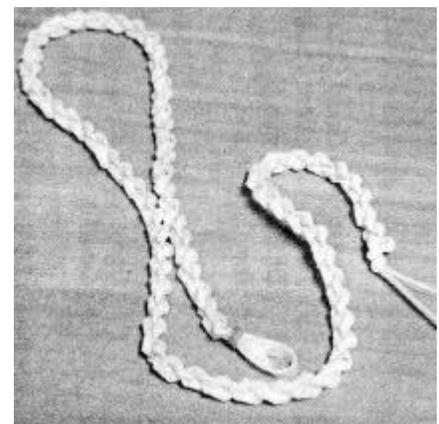


photo 5

# The Benefits of a Logbook

by David Nuetzel, RCAM President

I started a log, which started the whole world crying! A joke, right? No, not a joke. I hope the Bee Gees don't mind me misusing a line from one of their songs, but my memory of the past is in constant flux if I don't write it down. The memory of crashing an airplane could very well become a "halfway decent save" a couple of years down the road. History always has a way of changing. There is no stopping that.

As long as people are willing to study it, it will keep changing. Someday that long sought after, critical piece of evidence will surface that proves either the Australians or Lieutenant Brown shot down the Red Baron. Until then, you can take your pick. With each different viewpoint taken, George Washington's historic image can go from semi-god to great leader, but would his image have been diminished if his personal letters to Martha were not destroyed?

The term historiography is not in my 20-year-old dictionary, so my unofficial definition of the word is that it is the study of historical viewpoints that make up history. History is therefore made of viewpoints that are voiced and heard or read by the historian.

Who is to say that there wasn't an irritated farmer near the western front taking pot shots at the red triplane and exclaimed, "I got him!" His story will never muddy the history of the death of the Red Baron because he only told the story to his wife, and she didn't believe him anyway.

Accurate history is hard to come by. The most accurate history is recorded immediately after the event and includes as many viewpoints as possible (or at least the viewpoint that has the greatest following). Then we record the history of that event to give praise to the good and study the bad to learn from our mistakes.

We all make mistakes and would probably rather forget them. The downside is that we will most likely repeat those mistakes if we don't deal with them.

The most costly mistakes are those we deal with the quickest. A series of little mistakes that lead to a bigger mistake is much harder to correct or learn from

because the first couple of mistakes become insignificant in our memory and forgotten. We find ourselves thinking, "If only I had recorded these events with their minor problems, I could figure this out."

Logbooks or journals are not for everyone. It would be another obstructive task during the flying day (such as cleaning the airplane.) Then there is the problem of forgetting to write in your logbook/journal. Here's a tip to help keep you from forgetting: If you rubber band your wing on, put one of the cleaner bands on your wrist when you disassemble the airplane at the end of the day. Don't take the band off until you have written in your logbook.

You can record what you like, but I like to record an overall view of the day including what field I flew, weather conditions, and what airplanes I flew—a couple of sentences about each flight and how long they lasted.

The more accurate the information, the more it can help you later on.

Knowing how humidity levels effect the mixture setting on your engine from past experience, can allow you to set your mixture properly before you take off.

It can also give you an accurate record of usage. You'll know if an engine has had 1,000 flights or if a field pack has been fast or field charged more than 100 times. You could keep a record of how your batteries have performed on the cycler in the back of your logbook instead of sticking Post-It notes all over your workbench.

Information such as this can add a level of safety to your flying. It's also a fun way to look back. Going back in your log and finding a picture that your flying buddy gave you brings a smile to your face instead of wrinkles on your forehead from trying to remember.

Now this is time well spent, and it's not just another task at the end of the flying day. I started my logbook this year, and have recorded the first flight of my Fokker D.VII. Now, I won't have to remember how my inexperience and lethargic left thumb let that airplane wiggle down the runway before it took to the air on its first flight because I wrote it in my logbook. →



## Antennas

With all of the technological advances in transmitters and receivers, we spend more time learning how to use the new features to improve our flying enjoyment. It is easy to forget that these complex signals must be sent from the transmitter to the receiver in the aircraft, and it is the antennas of each that are most important in maintaining a strong signal.

Metal-whip transmitter antennas can take a beating and should be inspected regularly. Inspection before each flying session is not a bad idea. Things have a way of happening during transport to and from the field, and back at the hangar.

Extend the antenna fully and give it a mild shake. Look for slop between the sections as this can cause an intermittent connection. If any section slides back (collapses) without force, replace the antenna. Also check that the antenna is tightly screwed into the base. Sometimes the threaded inserts break loose.

Never use metal gadgets to attach the frequency flag. Clean with tissue and alcohol, and lubricate with WD-40. If a section breaks, it can be soldered together with brass tubing while you wait for a replacement.

Receiver antennas must be handled gently. Do not pull on the connection at the receiver body. The antenna should be routed at least 2-inches clear of other electronic parts. When bundling the receiver in foam, be sure the antenna comes out one end and the servo/battery wires out the other.

Never attach the receiver antenna with a metal clip. Route it through plastic tubing, or tape it in place. If a portion of antenna breaks off, an extension can be spliced on and covered with shrink tubing. The standard length is 3 meters, but some US makers use 3 feet, and some Park Flyer, single-conversion receivers are less. A few inches in length is not critical.

The new 2.4 GHz radio systems will improve the reliability of antennas because they are only a few inches long, but existing radios have a lot of life in them. In any case, the gold standard for determining a good radio signal is a range check with the engine running. Take the few minutes of time to check your antennas. →

### Save that stamp!

If your club newsletter is sent to AMA electronically there is no need to send a hard copy.

E-mail your newsletter to [ashleyr@modelaircraft.org](mailto:ashleyr@modelaircraft.org)

# Turning Your Trainer into a Fun-Fly Airplane

by Ed Moorman

You've got a club fun-fly coming up and want to enter. Which one of your airplanes should you use? Your low winger? Your old trainer? Should you build a new one? Some clubs restrict you from using specialty fun-fly airplanes in local club meets. You know, the ones with the carbon-fiber boom and the single big wheel. If this is the case, the best airplane you can use is your old trainer!

The first thing you want to do is find out what kind of events are typically in your local fun-flies. Usually you'll have Most Loops in a certain time, Taxi Race, Spot Landings, Climb 'n Glide, Limbo, and other events similar to these. The Loop Landing, Touch 'n Goes, Dixie Death (take off, 3 loops, 3 rolls, land for time), and inverted limbo events are generally left to the real competition fliers and usually not flown locally unless your club is a hotbed of fun-fly activity. So for your local events, you'll need a light model with a lot of lift and a good engine. What does this sound like? Sounds like a trainer with a hot .46 to me. Pull out your old FP .40 and drop in a .46. Add a lot of control throw and you are in business.

Here are some modifications you can do to turn your trainer into a ringer for fun-fly events.

1. Replace the original landing gear with a much wider one. Your old trainer's worst event may be the Taxi Race. It might have a tendency to tip over, especially if there is any wind. You will also want to add a wire between the gear legs. The wire gear normally found on trainers always tends to spread out letting the tail sit lower. This makes it easy to hit the nose wheel first, insuring a bounce. You want the airplane level, so take some 1/16 wire, bend to shape, and wrap and solder it between the gear legs down by the wheels. Pull the legs together so the airplane sits level.

2. Install your most powerful .40 to .50 engine. If there are events that require you to loop, set the needle valve so the engine runs slightly rich in level flight. Under G-forces during the loops, the engine will lean out to max power.

I sometimes have trouble convincing people to do this. Go up and do 10 loops in a row and see if your engine sags or not. If your engine is set screaming lean, you won't get 5 loops before it sags. Most people's engines will sag at 7-8 loops. You need to set it a little richer for loop

events and also for Climb 'n Glide.

Set your elevator throw by going up and doing several loops at full back stick. As the airplane goes through the loops it may slow down and try to stall. This is why you need a powerful .46 engine, to keep your speed up in maneuvers. If the airplane stalls and rolls out of the loop or drops a wing, land and reduce the elevator movement. If it can do continuous loops, land and increase throw. Do this until you can do 10 of the tightest loops possible without stalling.

3. Next, if you get a chance, remove the ailerons and replace them with 2-inch-wide aileron stock. Going to ailerons wider than 2 inches would probably require two aileron servos which many people might not want to undertake. If you do, look for "The Moorman Flies: Using Two Aileron Servos" on RC Online.

After you install the wider ailerons, seal the aileron-wing gap on the bottom with tape or MonoKote. If you are not going to change out the ailerons, seal the ones you have. Sealing the ailerons will increase their authority, giving you a higher roll rate. Install your most powerful servo on ailerons. If there are going to be events with rolls in them, set the throw for all you can handle. Guys with computer radios will need exponential.

There is a one-time way to make wider ailerons. Go to a drug store and pick up some poster board. Cut a strip 4 inches wide, fold it down the middle, and tape it to your original ailerons. You will have to clean them off with alcohol or acetone first to get the tape to stick. Remember, you are going to need a strong servo on ailerons.

4. Flaperons and Spoilers: Here's how you can have flaps without the aid of a computer radio. Make up three sets of aileron pushrods. This includes the servo arm, pushrods, and devices. One set will put the ailerons level for normal flying and events like Climb 'n Glide. A second set will be short and pull the ailerons down about 20-30 degrees or so. You'll have to experiment to get the best setting. These are your loop ailerons. Down flaps will give you tighter loops. You'll need to test fly to see where the elevator trim has to be for flying with flaps.

The final set, or premade aileron pushrods, is for Touch 'n Goes. This set gives you about 10-15° of up ailerons. Up ailerons, or spoilers, will kill some of the

lift your trainer is making and keep it from floating. This will let you make faster Touch 'n Goes.

All right, let's see what we have. We have a trainer that should have the same power as the other guys and it ought to be as light or lighter. It ought to glide much better than any airplane with a fat, thick, symmetrical airfoil. With flaperons down it ought to loop with just about anything. Even without flaperons, the light-weight, high-lift, flat-bottom airfoil and lot of power should keep you in the ball game. All trainers are floaters, but setting the ailerons slightly up like spoilers should help you get down quicker. This should be a very competitive airplane in local fun-flies.

If you don't have a trainer and want a good club fun-fly airplane, I suggest a Sig Kadet Serorita. It is big and light. This model is built from sticks and ribs. Build the wing flat and replace the spars with spruce. If you can, leave off the cabin and just build a box fuselage out of sticks. The airplane was originally a three-channel trainer without ailerons, so use two servos and make some 3-inch wide ailerons out of sticks and cover with MonoKote. Use Kevlar cord for bracing on the tail. Use a wide and fairly long gear for good propeller clearance. This airplane should be very light and, with a hot .46, should be a sleeper in local fun-flies. →

## Suggestion Box

As you probably already know, most of the club flying sites are in obscure, remote locations and often difficult to find.

With the popularity of GPS units used in cars, it would be helpful to know the coordinates of the flying site you are trying to locate. This would take you directly to the field.

My suggestion is to encourage clubs to show this information on their contest brochures and ads.

Thank you,  
Don Coombs  
Fort Wayne, Indiana  
AMA 374547

# Propeller Problems

by John Hice

The subject of glow engines backfiring and sending the spinner, propeller, nut, and backplate flying was discussed in "The Engine Shop" article by Joe Wagner (August 2007 issue of *Model Aviation*). The cause was properly defined as fuel mixture too lean, causing overheating and resultant increased compression and pre-ignition.

The correction of course, is a richer fuel mixture. However, there are times when the backfire can occur before you recognize the mixture is too lean, such as the first start after several weeks when atmospheric conditions may require a richer mixture.

There is a simple fix to prevent all that stuff on the end of the crankshaft from spreading over the countryside. Yes, it can happen in the air and your chances of finding any of it are mighty slim.

Use a nylon insert nut as a second lock nut, or alone if the shaft is not long enough. Trust me.

## More Prop Problems

We all know that the whirling stick on

the pointy end of our airplanes provides the thrust to propel the airplane through the air—thrust being one of the four basic components of flight. (You do remember the other three, don't you?).

It also creates four other distinctly different forces that act upon the manner in which the airplane flies. You may or may not be familiar with all of these, which are:

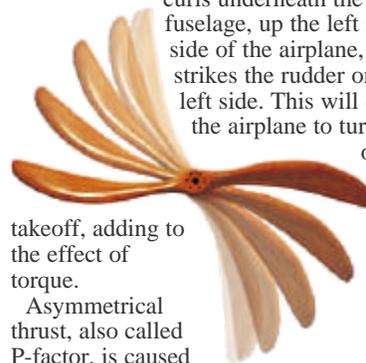
1. Torque
2. Slipstream
3. Asymmetrical Thrust
4. Gyroscopic Precession

Commit these to memory as there will be an exam conducted by nature without prior notification—the way life really is.

Torque is most familiar—the equal and opposite reaction to the rotation of the propeller that forces the airplane to rotate (roll) to the left. Because the mass of the airplane is so many times greater than that of the propeller, the roll rate is small but still very noticeable—especially on takeoff when full power is rapidly applied. The airplane wants to turn left.

Slipstream is the movement of air that curls around the airplane as it is blown back by the propeller. In theory, once the airplane reaches speed and achieves equilibrium, there would be no slipstream. This rarely occurs however, and the slipstream can be quite strong as an airplane accelerates from stationary to flight speed during takeoff.

The most noticeable air stream is that coming from the downward turning propeller blade on the right side. This air curls underneath the fuselage, up the left rear side of the airplane, and strikes the rudder on the left side. This will cause the airplane to turn left on



takeoff, adding to the effect of torque.

Asymmetrical thrust, also called P-factor, is caused by increasing the angle-of-attack of the airplane. Hold a small airplane straight and level at arms length with the propeller horizontal. Now raise the nose to about a 30° angle up. Look at the propeller from the left side. The pitch (twist) of the blade is nearly vertical. Now look from the right side. The pitch is nearly at a 45° angle. The blade turning down the right side is providing almost all of the thrust! When at slow speed and a steep angle of attack, such as during takeoff, the P-factor is greatest and pulls the nose of the airplane to the left.

Gyroscopic precession is one of those natural forces that was unknown until someone invented a gyroscope and started fooling around with it. It became apparent that when moving a spinning gyro, such as up and down, the gyro tries to move in a 90° direction (sideways). The propeller is a gyroscope, and when tilted up, such as during takeoff, wants to go left. This is the best I can do. If you desire more thorough explanation, many colleges offer physics courses on the Internet.

If you have noticed a theme developing here, give yourself an attaboy! All of these prop-driven forces are trying to roll and turn the airplane to the left, with greatest effect during takeoff. If allowed to continue unchanged, nature will swiftly provide a predictable result. It's like NASCAR—go fast, turn left; but you better have it under control. →

## Tips & Tricks

### Removing Covering from Balsa Sheeting

Removing covering from balsa sheeting can be tricky. If you cut too deeply, you can compromise the wood's integrity. By placing the blade in the knife handle as shown in the photo, you can easily adjust and control the depth of the cut. To set the blade's depth, use it on a scrap piece of sheeting and make test cuts before you make the actual cuts on the model.



### Rubber Band Storage

Here is a good way to store your rubber bands. Just put them in a Ziploc bag and cover them with Talcum Powder or Corn Starch. This will soak up the exhaust oils and condition the rubber and help them last longer!

—All tips and tricks from Jim's RC.com (<http://jimsrc.com/tips.html>)

### Cheaper Small-Parts Storage

Here is a suggestion for easy storage of small screws and bits. All you need is an ice cube tray. The advantage of this idea is that ice cube trays can be bought at low prices unlike professional parts organizers.

### Efficient, Glow-plug Igniter Cleaner

Oil residue can prevent glow igniters from working properly. If you carry yours in your pocket, even the lint in there can cause your igniter to malfunction. A good way to clean igniters is with alcohol and an old electric toothbrush. A clean tip on the igniter will allow more current to reach the glow-plug element for more reliable starting.

### Clear Canopy Polish

Here is a good canopy polish tip, use toothpaste on the canopy. Smear a liberal amount of toothpaste on the canopy and use toilet tissue to buff the canopy to a glossy finish that will not scratch at all. Then use alcohol cleaner to remove any residue left by the toothpaste. It works very well!

From the Bartlesville Falcons Model Club, Inc.,  
Bartlesville, Oklahoma

## Finishing Tip

by Ed Spann

When I am about ready to cover a model, I always have some final repairs to make. I cover and smooth blemishes with lightweight spackling such as Bondex. It sands nicely and does a good job except that it is dead white and shows through translucent or light colored coverings.

The solution: Tint the spackling with a very small amount of brown water color, or walnut water, or alcohol furniture stain. Adjust to a color that blends with balsa. With this, your patches are invisible! People will say, "How does he build so nicely?"—You don't have to tell them. →

From the Tucson Radio Control Club,  
Tucson, Arizona

## The Perfect Job



My first job was working in an orange juice factory, but I got canned ... couldn't concentrate.

After that I tried to be a tailor, but I just wasn't suited for it ... mainly because it was a so-so job.

Then I tried to be a chef—figured it would add a little spice to my life—but I just didn't have the thyme.

Next I tried working in a muffler factory but that was too exhausting.

I managed to get a good job working for a pool maintenance company, but the work was just too draining.

I attempted to be a deli worker, but any way I sliced it, I couldn't cut the mustard.

Then I worked in the woods as a lumberjack, but I just couldn't hack it, so they gave me the ax.

Next was a job in a shoe factory. I tried, but I just didn't fit in.

So then I got a job in a workout center, but they said I wasn't fit for the job.

After many years of trying to find steady work I finally got a job as a historian until I realized there was no future in it.

I studied a long time to become a doctor, but I didn't have any patience.

My best job was being a musician, but eventually I found I wasn't noteworthy.

I became a professional fisherman, but discovered that I couldn't live on my net income.

My last job was working at Starbucks, but I had to quit because it was always the same old grind.



So, I retired and found ...  
*I'm perfect for the job!*

From the Sacramento Valley Soaring Society, Novato, California

## You're Addicted to RC, When...

-You read nothing but transmitter and model manuals in the bathroom.

-You have converted a mobile home to have room for all your airplanes with just space enough to sleep.

-Your RC insurance costs more than your car's.

-You have something RC within a radius of 5 feet from you at all times.

-You've heard, "Hey that looks just like the airplane I tossed in the bin after crashing last week," more than once at your flight field.

-A full-scale airplane passes overhead and you move your thumbs to match its movements.

-If you plan to go outside for any reason and it's windy, you go back inside again and find out when it's due to be calm next.

-When the power steering goes, you tell the people at the garage to change the servo.

-If you worked feverishly in all your free time, it would take three years to clear up your backlog of kits.

-You host a fun-fly when it's so cold that one of the events is starting your engine.

-You accept a crash as an opportunity to start a great new kit.

-Every time you pass a garage sale, you look for wings.

-If you spend more money at the local hobby shop in one hour than you make in a month.

-You keep your old van just to transport airplanes in.

-When you go to Home Depot and the PVC pipe and fittings section gives you ideas for new wing racks instead of

plumbing projects.

-The smooth tarmac bike trail

at your local park has funny airport markings

sprayed on it.

-Your car has a ski box on its roof, yet you never go skiing.

-You have a "special room" for your airplanes.

-You have a gallon drum of adhesive in your shed.

-You have at least three different heating irons.

-Your neck shows a white strip, that is the same width as your transmitter strap.



by Ron Boyer, Camarillo Flying Circus, Camarillo, California



# Letter to the Editor

Gentlemen:

In addressing the issue of some clubs putting a cap on membership to keep from getting too large, there must be a solution to avoid doing that, such as example:

If there are too many fliers flying at the club field at any one time, then the time allowed to fly at the field could be split up evenly into two (or more) groups: Monday group A only, Tuesday group B only, Wednesday group A only, Thursday group B only, etc. On weekends a Saturday could be split up according to the hours available for flying: A typical Saturday flying would be from 10 a.m. to, say 6 p.m. That is 8 hours of flying time. The first 4 hours would be for group A, the second 4 hours for group B. On Sunday, that day would be wide open for all groups. Fly if you can or just get one or two flights in and be happy.

This is only a suggestion. No doubt that someone will come up with a better idea. We have to start somewhere to get the juices flowing with ideas.

Don Godfrey  
AMA 5165CD  
Hall of Fame

## AMA Vision

We, the members of the Academy of Model Aeronautics, are the pathway to the future of aeromodeling and are committed to making modeling the foremost sport/hobby in the world.

This vision is accomplished through:

- Affiliation with its valued associates, the modeling industry and governments;
- A process of continuous improvement;
- A commitment to leadership, quality, education and scientific/technical development; and,
- A safe, secure, enjoyable modeling environment.

## AMA Mission

The Academy of Model Aeronautics is a world-class association of modelers organized for the purpose of promotion, development, education, advancement, and safeguard of modeling activities. The Academy provides leadership, organization, competition, communication, protection, representation, recognition, education and scientific/technical development to modelers.

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The Academy of Model Aeronautics' *AMA INSIDER* is published electronically on a bimonthly basis for members of the Academy of Model Aeronautics. Its purpose is to create a network of information exchange between the Academy of Model Aeronautics-chartered clubs as well as the Academy of Model Aeronautics officials and chartered clubs.

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