



**PRESIDENT TO PRESIDENT**

# With Spring Comes Program Deadlines

by Dave Mathewson, AMA President

Hi again. Club Charter Renewal Kits are in the mail and should be arriving about the same time as this issue of the Insider. If you are listed as your club's contact, you should be receiving the renewal package soon, if you haven't already.

Included with this year's renewal you will find a short survey we're asking our clubs to complete and return along with your renewal paperwork. The information you provide in your completed survey will be used to help us provide a higher level of service and benefits to our membership. Thanks, in advance, for taking a few minutes to participate.

In 2009 AMA conducted its first-ever

nationwide membership drive. While not as successful as we might have hoped, the drive did provide some level of success. More-so, we learned a lot from last year's effort and have used that to redefine our 2010 membership drive.

The foundation of our membership drive in 2010 will be our long-standing AMA Ambassador Program. Any current AMA member who signs up three new members will receive a one-year membership credit. Sign up three new members and your next year's dues are free. And, there's no limit to the number of memberships you can receive. Sign up six new members and your dues will be covered for the next two years.

Qualifying new memberships include, Senior Citizen, Open, Affiliate, and Life. Current Life Members who participate will receive a credit equal to one year's dues in AMA's Merchandise Department.

Taking part in the 2010 membership drive is a great way to introduce new people to model aviation and AMA. Good luck to everyone who takes part.

The cutoff date for a couple of AMA programs is fast approaching. Nominations for the AMA Model Aviation Hall of Fame are being accepted until

please see **President to President ... on page 3**

**TIPS FOR CLUBS**

## The Club Corner

by Jim Wallen, *Insider* Club Column Editor

One of the things to keep in mind is that our hobby is all about having clean, wholesome, safe fun. Maintaining a positive, interesting atmosphere at our club meetings and at the flying field is what it's all about. Anything club officers or members can do to promote this atmosphere makes our hobby enjoyable for all our participants.

How can we best accomplish this?

Shake things up a bit. The same old routine at club meetings can get a little boring. Add a new and different fun-fly at the field. Bring in a guest speaker. Conduct one of your club meetings in a new place that perhaps you have never thought about. How about a senior citizens' center?

Our hobby thrives through diversity. We can focus on warbirds, Scale, helicopters, static displays, gliders; the list goes on. Bring some diversity into your club membership. Strive to recruit some females and youth. Initiate a fun-fly specifically for teams of spouses or "significant others." Think out of the box. Your club will grow and benefit from your efforts. →

### March 2010 CONTENTS

**PRESIDENT TO PRESIDENT** ..... pg 1

**TIPS FOR CLUBS** ..... pg 1

**ON THE SAFE SIDE** ..... pg 2

**LEADER TO LEADER** ..... pg 3

**EDITOR'S PICKS**

2009 *AMA Insider* Survey ..... pg 4

Reminiscences of a Flying Aces

Fall Meet, 1975 ..... pg 4

Learning to 3-D and 3-D Well:

Rolling Harrier ..... pg 5

Picking Thermals ..... pg 5

A Micro Drop Glue Applicator for

Indoor Models ..... pg 6

Getting Kids Interested in Modeling . pg 6

Tips & Tricks ..... pg 7

# The Need for Speed

Don Nix, *Insider Safety Column Editor*

Bear with me for a couple of minutes. I've gotta work up to the title subject, after writing a little more about the importance of preflighting.

I first participated in competition modeling more than 50 years ago, in U/C Stunt, Rat Racing, and Combat, then added Free Flight a little later. I only competed for a few years, and wasn't particularly good at any of the four events. During that time, the only safety incident in which I was involved was at a Free Flight contest in Dallas, circa 1960.

After a couple of official flights, I failed to check out the trim settings after the last landing and hand launched a big Class C model. Apparently the Up trim in the elevator had gotten slightly out of kilter. Instead of screaming straight upward, it screamed straight forward at shoulder height directly toward the score keepers' open-sided tent about 50 yards away.

Horrified, I screamed a warning and the several occupants took cover. Fortunately, the left wing hit a tent pole, spun around from whence it came and splattered into the ground. That was the closest I ever came to hurting anyone with a model airplane. The lesson was clear: always, check the model before every flight.

Fast forward to 1991 when a couple of friends dragged me kicking and screaming into Sportsman class Quickie Pylon Racing. I enjoyed moderate success for about 10 years, mostly because that class had relatively few entrants.

During a several-month RV tour of the western states, we found ourselves near Phoenix in January of this year at the same time one of the earliest Pylon Races in the US always takes place. We decided to go see some old friends and watch a little Racing. I hadn't been to a Pylon Race, even as a spectator, in several years. I was amazed at the changes made to enhance safety since the last time I saw one.

For the benefit of those who aren't familiar with the fastest event in modeling, these airplanes are in a big hurry to get to the finish line. The Quickie Sportsman class is now running 120+ mph, the Advanced approximately 170

and Q-40s are nudging the 200 mph mark. From a racehorse start, they fly in heats of four models for 10 laps around three pylons, making up a 1/4-mile circuit—2.5 miles total. Most of them fly at heights of 30-75 feet.

Until a few years ago, every heat required 19—count 'em—19 people on the course: four pilots, four callers, four lap counters/timers, four judges at Pylon 1, one judge at Pylon 2, one at Pylon 3, and one race starter/flagman. The lap counters/timers and pylon judges were all protected by heavy steel wire cages. The pilots, callers, and starter were exposed.

A few years ago, a Pylon judge had his head leaning against the cage at Pylon 1, so he could look straight up to catch any pylon "cuts." One pilot, flying too low and too tightly, hit the cage and the spinner poked through an opening directly into the back of the judge's head, killing him. Not long after, in a Texas race, a very experienced Pylon flier hit one of the cages with such velocity it went through the cage wall, shredding itself in the process. Fortunately, it didn't hit anyone.

Understandably, the Racing group became concerned (as did the AMA), and decided something had to change. Rather than wait until they were forced to do so, they took action to correct the situation.

Some 10 years earlier, 1991 World Pylon Champion Dub Jett had conceived the embryo of an idea that would require only the pilots, callers, and the starter to be on the course. The 10 others would be several hundred feet away. A group of racers, mostly from Texas (including Mike Helsel, who has been racing since the earth cooled), got to work on the project. Veteran Pylon Racer Jerry Small of Dallas devised the first off-course electronic timing system.

With the help of many others from all over the country, Pylon Racing evolved to its present status: No one is on the course but the pilots, callers, and the starter. The current models are going faster than ever, and, to the best of my knowledge, there have been no serious incidents since.

For those who are inclined to take safety a little too lightly—or ignore it altogether—I urge you to adjust your

thinking and your method of flying. As full-scale pilots learned over the decades, if we don't police ourselves, some entity will do it for us, usually much stricter than we like.

In conclusion, I'll have to shift subjects to mention some comments from last month's *Insider*.

Former Executive Council member Ed McCollough pointed out an error in my statement that AMA regulations require that all models have the owner's name and address in, or on the model. Well, not exactly.

Prompted by Ed and aided by District VIII Vice President Jim Rice and Ilona Maine at the AMA, I found that Item 6 of the Safety Code reads, "I will not fly my model aircraft unless it is identified with my name and address or AMA number inside or affixed to the outside of the model aircraft." Note the operative word is *or*. (This does not apply to model aircraft flown indoors.)

My personal opinion is that the regulations should require all three. In the event of a fly-away, the AMA number would mean nothing to a non-modeler who might recover it.

John Goegl wrote, "I have found the key to safe flying starts with the training protocol. I have noticed that one human trait trumps all others: habit. As a flight instructor, I try to encourage good habits by beginning each session with a thorough preflight. Through repetition, these 'good' habits are picked up by the student ... and the instructor."

From Ben Lanterman: "Your comments on safety were great and on target. Like you, I normally check the control throws and direction before each flight. But with some of the small foamies I have flown for some time, I tend to get complacent. It backfired when I changed transmitters to a newer one. I checked to be sure all the control reversal switches were set the same for each airplane I switched over to the new transmitter, but I missed one."

The rest of his note tells of the results, reversed ailerons and a foamie turned into packing peanuts. Fortunately, nothing was injured but the model and Ben's ego.

Til next time. Flyerdon1@yahoo.com→

# Membership Update

Jim Rice, Chairman Leader Member Development Committee

Sadly, we lost a significant Leader Member in January. Jim Giffin, the District X vice president, passed away. He was a member of AMA's Executive Council for only a short period of time, but it was easy to see he had a passion for everything and everyone involved in modeling. His long time involvement with International Miniature Aircraft Association (IMAA) prior to joining the Executive Council (EC) leaves many friends around the country with memories of their connection with this well-traveled and seasoned modeler. He was also a retired US Army officer, so I thank him for his service to both his country and his passion! Thoughts and prayers to his family.

My last column generated a lot of discussion. If you don't remember it, go back and review it. I had 95% favorable comments and a few that took exception to my critical view of how we might be running off, or not retaining, current members.

My general comment to that would be if you and your club have none of the problems I pointed out, then export your secrets to the rest of us, and if you see one or more of those problems in and around your club, set about trying to fix them. I would guess very few clubs can say they have none of the problems and very few have all of the problems, but as an organization we have all of the problems outlined ... somewhere in our membership and chartered clubs.

Good thoughts for 2010: Our national membership drive is simple this year—We are going to resurrect the AMA Ambassador program and encourage/advertise the sign-three, fly-for-free program. While that program has remained in effect for the last five to six years, there was much discussion after last year's drive indicating that many folks, leader members, club officers, and even officers of the organization, were either

unfamiliar with that program or had forgotten about it.

When you get a chance to explain the program to clubs and individuals, definitely take a moment to do so and encourage everyone to take advantage of it. It could grow the membership significantly and reward those who work the hardest with free membership.

It is time to start planning for 2011 and the celebration of AMA's 75<sup>th</sup> Anniversary. The HQ staff is busy planning national events and advertising, but we should all take advantage of this opportunity to toot our own horns locally. You might hang the 75<sup>th</sup> Anniversary Banner at one of your traditional events, or create a special event to celebrate, but as you do so, make an extra effort to get local media coverage.

Most papers, radio, and TV stations like to support long-running and historic things. We have a great history and superb track record and we ought to be bragging about it during that banner year. Start looking out a year and see what you might be able to do and get the plans rolling. Heck in 1976 I built several airplanes with red, white, and blue color schemes and Bicentennial marking to celebrate America's birthday. I was stationed in Germany at the time and my German flying buddies loved it!

The AMA Forum continues to grow and has established some permanent threads. The Safety-specific thread will have official AMA positions on questions asked locked in place to allow others to quickly get answers for which they may be searching. The forum is moderated, but generally has kept a spirited yet gentle atmosphere with little need for moderator input. You should visit it if you haven't. We are nearing 1,000 members as of this writing. →

## President to President continued from page 1

March 31. The HOF Award recognizes aeromodelers who have made outstanding contributions to model aviation.

Selection is based on the individual's contributions in several areas, which may include competition, design, experimentation, leadership, education, organization, writing, publishing, manufacturing, or other related activities. Emphasis is on the accumulated contributions in one or more of these categories over an extended period of time. The selection of inductees is determined by the Hall of Fame Selection Committee, which is comprised of past AMA presidents and a selector from each AMA district. More information on this program can also be found on the AMA Web site at [www.modelaircraft.org/files/152.pdf](http://www.modelaircraft.org/files/152.pdf).

The last date that an application can be turned in for an AMA/Charles H. Grant Scholarship is April 30. Each year, the AMA awards scholarships to deserving high-school seniors who will be pursuing a continuing academy program at an accredited college or university. In 2009, roughly \$34,000 was distributed to six individuals in varying amounts based on AMA modeling activities, scholastic achievement, and citizenship achievement.

Scholarship information or information regarding donations to the programs can be obtained by calling AMA Headquarters at (765) 287-1256, ext. 516, or by e-mailing [aprilh@modelaircraft.org](mailto:aprilh@modelaircraft.org) or [education@modelaircraft.org](mailto:education@modelaircraft.org). Applications are also available on the AMA Web site under Education at [www.modelaircraft.org/education.aspx](http://www.modelaircraft.org/education.aspx).

That about does it for this issue. The outdoor flying season, for many of us, is right around the corner. I'm sure many of you are as anxious as I am and looking forward to dusting off a couple of models and getting out to the field. I hope you have a great season.

See you next time...→

### Need Articles for your Club's Newsletter?

The Archives section of the *AMA Insider* Web site is a great resource for construction, safety, and how-to articles as well as hints, jokes, and cartoons all for you to use in your club newsletter!

Visit the newsletter archives  
online at

[www.modelaircraft.org/insider](http://www.modelaircraft.org/insider)

# 2009 AMA *Insider* Survey: Summary

by Ashley Rauen, Editor

In the November 2009 AMA *Insider*, subscribers were invited to take part in a survey about the publication. Approximately 1,000 subscribers participated.

Those who took the survey reported that technical articles were the most widely appreciated followed closely by Tips & Tricks and How-to articles.

When readers were asked what new column they'd like to see in AMA *Insider*, the most popular answer was Contest Director information and tips.

The survey also showed that AMA *Insider* readers are predominately gas and glow fliers, but at the same time feel that there isn't enough attention given to Free Flight and Control Line models and fliers and they want to see more of this

type of article.

With these results in mind, AMA *Insider* is looking for modelers who possess knowledge of Free Flight or Control Line and a desire to write. Anything you'd like to say about your hobby is encouraged and please submit any articles for consideration to [ashleyr@modelaircraft.org](mailto:ashleyr@modelaircraft.org).

The *Insider* is also interested in finding Contest Directors who would be willing to write for the newsletter once or twice a year. Personal accounts of what made your club's event special could be a valuable source for readers.

Anyone interested in contributing, please contact AMA *Insider* Editor Ashley Rauen at [ashleyr@modelaircraft.org](mailto:ashleyr@modelaircraft.org). →

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## Reminiscences of a Flying Aces Fall Meet, 1975

by Bob Clemens

I wrote the following after attending a Flying Aces Club (FAC) contest in the fall of 1975, held at a meadow near Durham, Connecticut, known to FAC members as Pinkham Field, a reference to the Phineas Pinkham character who appeared in the old *Flying Aces* magazine. This piece was published in the December 1975 edition of the *National Free Flight Society Digest*. At that time I was the digest's contributing editor for Scale. The FAC has grown considerably since that day 35 years ago when its membership numbered around a mere 100, but I know the same spirit pervades the club and its members today as it did on that long-ago autumn afternoon.

*Only a dim afterglow remains beyond the low Connecticut hills to the west as I slide my two model boxes into the back seat of my car. The 1975 Flying Aces Club fall meet is over, but its impressions linger on. As I drive off through the deepening twilight my mind replays the day's recollections ...*

The morning dawns clear and crisp; the ground fog and heavy dew are just burning off the meadow at Durham as the now-familiar yellow judging tent, fashioned from a large parachute, goes up. Contestants trickle in at a steady rate, their model boxes and paraphernalia dotting the grassy area around the tent.

A few tentative test flights by peanuts and profile models test the air; it is ideal and will remain so for the next two hours, calm and buoyant. My quarter-ounce Bede-4, inactive since the first *Model Builder* magazine postal contest, comes out of the box and on to the winding stooge. Two quick test flights confirm its trim, with the little ship turning 1:10 on the second flight. Mike Midkiff from Erie, Pennsylvania, has joined me and will be my flying companion throughout the day.

I change to a fresh motor for the Bede, but the rubber must be lousy as the model fails to climb and hits only 34 seconds. Not good in an event where the flight score is the total of three officials. Back to the test motor: 1,300 turns on the long loop of .065 rubber. The model rides the good air for a beautiful 1:43. Circling with it is a Folkerts Toots 1930's racer warming up for the Greve and Thompson mass-launch events.

Walking back to my table, I look up and see a Mattel Super Star electric model thermaling smoothly about 300-feet overhead, then start to slowly descend. What air!

Charlie Learoyd has arrived, and is flying his Lacy M-10 in Peanut Scale. His first flight with the nine-gram ship hits 1:21. The second maxes out at 123 seconds, followed by a spectacular thermal flight of 5:31 that peaks out at about 350-feet overhead and lands only a few hundred feet from the launch point.

Charlie has just retrieved his ship when Mike Midkiff flies his clipped-wing Piper Cub into the same air. It orbits in the light lift for six minutes. Again, the model lands only a short walk from where it was launched. Does it get any better than this?

Trying for 2,000 turns on the BD-4, I blow the motor, luckily without damage. Noting that the break was at the knot, I retie and use it for my final official: 1:40. Damn that first flight! But my total score will be good enough for second place behind Charlie Learoyd.

My 18-inch Farman Mosquito makes 1:19 on its first flight in FAC Scale, and I turn it in for scale judging. Mike Midkiff winds up his jumbo Bristol M1-C World War I fighter, his second entry in FAC Scale. It rises slowly and realistically for a short but impressive 34-second flight.

The wind has shifted and picked up, now coming from the south. The blue sky has given way to a light overcast, and the good air has started to fade. My Eyeball Embryo endurance ship, flying in its first meet, lifts off the card table and climbs into what's left of the lift. I'm able to jog under it as it drifts off the field, finally landing in an open area beyond a tree line. This would be the only max anyone gets in Embryo that day. Lucky!

Some guy shows up a little later to post 73, 117, and 109 and win first place in Embryo for the third year in a row. What was that name again? Oh yes—Henry Struck, one of Free Flight's greats.

My second flight is a fair 87 seconds, but the third dies out at a disappointing 63, still good enough for second place.

By now most of the contestants have moved to the south end

please see **Reminiscences ...** on page 7

# Learning to 3-D and 3-D Well: Rolling Harrier

by Jeremy Chinn

## Part 5 of 5

The next 3-D maneuver in the series, the Rolling Harrier or Harrier Roll, relies heavily on the basic aerobatic skills you have built prior to learning to fly 3-D. If you can't fly the basic aerobatic rolling maneuvers, such as a slow roll, four-point roll, or rolling circle, you will have very little success attempting to do a Rolling Harrier or a Rolling Harrier Circle. Take the time to learn those skills first.

Earlier in the series, you learned the Upright and Inverted Harrier as well as the High Alpha Knife Edge. To simplify matters, a Rolling Harrier is simply harriers and hakes strung together end to end and flown with a particular rhythm. Additionally, varying that rhythm allows you to steer the Rolling Harrier straight, left/right, or up/down.

There are a few common mistakes that many pilots make that you should try to avoid:

- Don't practice this maneuver in only one rolling direction. That will build a bias into your flying and make later

maneuvers more difficult.

- Always fly the maneuver with both rudder and elevator inputs for altitude and heading correction. Flying with only one or the other results in a choppy-looking maneuver that is much harder to control.
- Try this maneuver on the simulator first and then transfer to real life. Flying Rolling Harriers comes from properly building muscle memory and rhythm, which can be done much more quickly on the simulator using the 'reduced time' method.

To begin the Rolling Harrier, start with the airplane in an Upright Harrier flying into the wind two to three wingspans high. With full control of the airplane, use the ailerons to roll the airplane to a High Alpha Knife Edge and hold it there. Next, roll the airplane to an Inverted Harrier and again hold it there. Follow with a roll in the same direction to High Alpha Knife Edge. Complete the sequence by rolling the same direction back to Upright

Harrier. Practice this sequence of events repeatedly until you feel comfortable transitioning from one position to the next.

Next, decrease the amount of time you hold the airplane at each position and practice the sequence again. Continue practicing the sequence and reducing the hold time at each position until you can roll the airplane through each position without stopping the roll. Congratulations, you've just done a Rolling Harrier.

To build this skill, practice it in both directions and from starting points of upright and inverted harrier as well as from both orientations of High Alpha Knife Edge. Practice stringing Harrier Rolls together seamlessly until you can fly the entire length of your runway without stopping the Rolling Harrier.

For extra credit, learn to steer the Rolling Harrier by changing the timing of your rudder and elevator inputs. This aspect of the Rolling Harrier is learned most quickly on the simulator using the 'reduced time' method. →

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From *Thermalier*, newsletter of the Pensacola Free Flight Team

## Picking Thermals

*An article by Peter Brocks, which is stolen here from the November 2001 Ontario-based Sam 86 Speaks, who in turn stole it from the August 2001 Bat Sheet.*

Picking thermals has to do with feeling the subtle changes in the environments, which, to the untrained, are not apparent. Therefore there is no simple recipe.

**Tools:** Mylar streamers, fast sampling thermistor devices, fluffies, bubble machines, piggybacking (on) birds, and other models.

**Early morning:** The air is buoyant neutral, small rises in temperature possible (as little as 2° F).

**Midday:** Strong thermals (boomers) develop that exceed the sink rate of

models, rise in temperature can be a few degrees with wind calming, wait until a cooler breeze (fill) is felt and the temperature clearly drops. Do not launch right away, especially with fast, higher climbing models. Wait 10 to 20 seconds, depending on wind velocity.

**Late Afternoon:** Thermals stay closer to the ground, tend to be larger size. Smaller rises in temperature (1°+ F). Be patient; fly over dark areas.

**Strong wind:** Wait for a three- or four-second lull of lower wind velocity; launch immediately at an angle to the wind.

**No wind:** Watch streamers to see center of building hot air column. The rising air circles counterclockwise. Wait for light air movement indicating fill. Be patient as the air rises very slowly. When

launching, place the model in the center of the rising air.

**Cold front:** Rising air precedes the rain and the breeze. Good air is still present even when rain starts.

**Flapping:** If wind is moderate and ground surface is warm, then flapping a shirt or running or driving under the model will release rising air.

**General Rules:** Do not launch if there is a chance that the sun might soon come out of the clouds. Do not fly if other models are launched when a conscientious decision to launch has not been made; rather watch other models behavior. Most of the time flying a little later will give better results. Concentrate and take in your environment. →

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# A Micro Drop Glue Applicator for Indoor Models

By Roy Bourke-Markham Indoor Group

One of the secrets of building light indoor models is to pay attention to the glue joints. Excess glue is heavy, and does not necessarily add strength to the joint. A good glue applicator can go a long way to ensure the accurate placement of just the right amount of glue to each joint.

The accompanying sketch shows an excellent glue bottle that can be used with acetone-thinned white glue (Weldbond) or aliphatic (Titebond), as used on indoor models. (Incidentally, I did not design this glue bottle. It is available commercially for the USA, but it is much cheaper to make one yourself.)

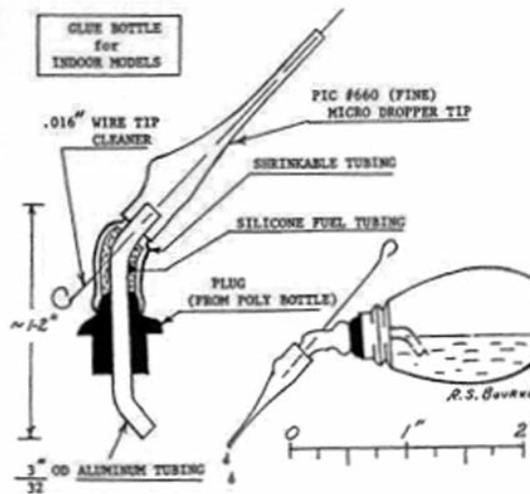
The best poly-bottle to use is a small food coloring bottle (e.g. McCormack's food coloring), but there are several other poly-bottles that could be used with minor modifications to the design. Begin by bending a piece of  $\frac{3}{32}$ -inch aluminum tubing to the shape shown, and fit it to the plug that comes with the poly-bottle that you are using. (Make sure you make the lower bend such that you can still insert the plug into the bottle

without interference from the tubing.)

Drill a small hole (.016) in the upper bend for the wire tip cleaner, then cover the bend with a short piece of silicone fuel line. Add a piece of shrinkable tubing over the silicone tubing, shrink in place, trim, then add the Pic Micro Dropper tip to the end of the aluminum tubing. Make up the wire tip cleaner, and insert it backwards through the nozzle to pierce a hole in the silicone and shrinkable tubings. Finally, reinsert the tip cleaner from the back end of the nozzle, and the glue bottle is complete.

To use the bottle, simply draw the wire tip cleaner back only far enough to clear the narrow part of the bore of the Pic nozzle, tip the bottle, and squeeze. You will find you have excellent control of the amount of glue that appears at the tip. During storage, the tip cleaner is left fully inserted to seal off the

nozzle. Since polyethylene does allow some evaporation of the acetone, you should check the thickness of the glue periodically, and add acetone as necessary. →



From the District X Newsletter

## Getting Kids Interested in Modeling

By Mike Brown, Interim District X Vice President

Today's youth have "more choices" of things to do, such as video games, which for the most part are done indoors. But many still like to do outside things.

So why don't we see them hanging out watching us fly, asking question after question? I think it's because clubs are not in towns the way they used to be. Kids can't watch modelers fly right in their own neighborhoods, becoming interested the way I am sure many of you did when you were young.

So, because most clubs are way out past the edge of town, how can we introduce kids to modeling?

One way is at events where we advertise something such as buddy-box flying, or free rubber-powered airplane building. Parents will bring their kids to those events.

I thought the Park Pilot program would be huge. With very low-cost insurance, pilots could have another club in town, flying little stuff. Then once again we

would introduce modeling to kids. If you've ever flown a small airplane or helicopter at your local ball field I am sure you know what I mean. I bet you've had kids (of all ages) come by to watch and ask questions.

Another way is to go to schools and talk with teachers about our clubs. Invite them out for a field trip or offer to come to the school with a couple club members and build and fly gliders or rubber-powered airplanes. This way we can reach classrooms full of students all at the same time.

That is what this article is about, getting kids interested in aviation, modeling, and learning a little science, math, and a few other things, all at the same time.

The AMA has a program called AeroLab. It is a set of two DVDs, that teaches folks like us, or school teachers, how to teach kids how to build and fly a few simple rubber- and glider-type

airplanes (even a paper helicopter), and learn some basic concepts in physical science at the same time. Now before you say, "I can't teach that stuff," I never learned it as a kid myself. That is why the DVDs are so good. They teach you how to do it, and it's simple, basic stuff.

I thought I'd let you know about one part of the program I am going to use soon. It's been raining every day here lately and it's something we can do inside a classroom, or several at the same time in a gym. This is the simplified version, but if you get the DVDs it goes into detail with a video of everything.

You build a slide-together, rubber-powered balsa plane. One end of a two-meter piece of string is attached to one end of the wing, the other end is attached to a nail (by means of a paper clip). The nail (in a piece of wood) is taped to something such as an upside down

**please see Kids ... on page 7**

## Reminiscences continued from page 4

of the meadow for the raceplane events, the Aerol, Greve, and Thompson trophy “races.” These events feature simultaneous launches of rubber-powered Gee Bees, Keith Riders, Travelairs, Folkerts, and other gems from the Golden Age of air racing. They must be seen to be fully appreciated. Last ship down wins the heat.

As I look back at the main flying area, a Comet Waco Coast Guard biplane is thermaling slowly off to the north. Talking later to its builder, Ed Taylor, I was told those familiar words, “It was just a test hop.” Ed had to retrieve the all-blue ship from a tall tree. Even at a small contest such as this, the variety of scale models is both fascinating and amazing.

The contest ends at 5 p.m. Final scores are tallied, and awards are handed out as a Bellanca Airbus circles over the headquarters’ tent. My Farman gives me my third, second place of the day, scoring maximum scale points under the FAC rules, finishing behind Chet Bukowski’s Allied Sport low winger, based on a Comet kit plan from the late 1930s.

His CD chores finished for another season, Dave Stott breaks out some of his own ships for some fun-flying. By now the air is very calm. The sun is setting. Up goes Dave’s Beardmore Inflexible, a Jumbo Scale bomber prototype from the 1920s. It rises like a Wakefield, smooth and strong. Several Embryo endurance models are up again, floating on the cool, dead air. A peanut Mister Mulligan goes up, quickly followed by Bob Thompson’s profile Boeing biplane. Dave Stott trots out a real eye-catcher, a two-foot B-25 Mitchell. Off it goes, its two rubber motors each driving a three-bladed propeller. Beautiful!

Ed Novak winds up a Boeing P-26. Up it goes for a short, but very stable flight. These guys are having a ball, flying in the final minutes of daylight. Dave Stott winds up again, this time it’s his sleek Mr. Smoothie Thompson Trophy racer. And it is smooth, and fast, built with its landing gear retracted.

The fun is contagious. I get out my Farman Mosquito again and quickly put it up for two flights.

Suddenly, it’s all over. The tent is down and gone. Car doors slam in the gathering darkness. Scattered voices sound good-byes along the meadow’s edge.

As I put my key in the ignition I think to myself, “This, my friends, is what stick-and-tissue Free Flight business is all about.” →

## Tips & Tricks

The first tip is from Bill Womble who is repairing his Hangar-9 P-51D: Bill needed to repair a few cracks in the balsa skins of his airplane’s wing near the root rib. He removed the flap servo, and realigned the pieces of balsa. Bill then reinforced the area by laying a piece of fiberglass drywall tape, adhesive side to the balsa, over the cracked area and drizzled CA onto the balsa and tape. This made a quick, effective repair.

The second tip is from an anonymous source: If you need an air scoop, use a portion of a plastic spoon. Glue it to the wing or fuselage, fair it in, and paint it to match the structure. Looks great!

Third tip: When repairing Coroplast airplanes, it is essential that all oils are removed from the surfaces to be glued. One method is similar to that used in repairing balsa airplanes—wipe down the surfaces with a degreaser, then wipe again with alcohol. This will remove 99% of the oils and glue will adhere to the surfaces. The best glue to use is a contact cement such as 3M’s Super 77.

Fourth tip: The best way I am aware of to prevent your landing gear wheels from falling off the axles is to thread the axle and fix the wheel with an aircraft (self-locking) nut. It will not fall off!

—From *Flightplan, Flight Masters Model Airplane Club, Fort Smith Arkansas*

## Kids continued from page 6

garbage can (to hold the string in the air). You wind the rubber band (the same number of winds each time) and place the airplane on the ground. One student has a stop watch, another will count laps. The airplane is released and within a lap it will take off and the time started. The laps are counted and the time stopped when the wheels touch down. Figuring the distance around the circle and the time flown will give speed. Weight can be added and the effects of drag taught, or two airplanes can be put on the same nail and you have Pylon Racing!

The DVDs are helpful. It’s a simple way to get kids started in modeling and inviting them to the field for a field trip will provide even more fun.

The fun ideas on the DVDs can also be done at the field, but so can others. Take a simple Delta Dart build. It takes about one hour for a group of 40 people to build and balance their creations. That is of course with a good group of volunteers and setting up properly at the start.

If you plan to do this with a larger group, or if you need to get the build done faster (like at a mall show), stick to a glider or simple, slide-together, rubber-powered airplane like the DVDs talk about. These can do the trick nicely.

For a more challenging build, the Delta Darts are only \$41.99 for a pack of 35 through the AMA store. All you need to supply are pins, single-edge razor blades (supervised of course), glue, and a building board (which is a small piece of cardboard).

The Northern California R/C Unlimited Flyers like to have the builders meet in the center of the runway at noon for a mass launch.

Remember to read the directions and balance your airplanes. Little rubber planes such as the Delta Dart don’t fly worth a hoot if they aren’t balanced! →

## 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.
- 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 safeguarding of modeling activities. The Academy provides leadership, organization, competition, communication, protection, representation, recognition, education and scientific/technical development to modelers.

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