Issue
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BIMONTHLY NEWSLETTER FOR CLUB OFFICERS AND LEADER MEMBERS

AMA INSIDER

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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.

AMA Vision

We, the members of the Academy of Model Aeronautics, are the pathway to the future of modeling 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.

President to President

Nats: Past and Future

Bob Brown, AMA President, bobb@modelaircraft.org

The AMA National Aeromodeling Championships (Nats) continue the 2012 edition on July 9. If you are interested in participating or spectating, information and a complete schedule are located at www.modelaircraft.org/events/nats.aspx.

One of the neat things about the Nats is that it contains many different facets or interests of aeromodeling. Included are various forms of Free Flight, Radio Control, and Control Line. Have you seen the excitement of Control Line Team Race? How about the serene beauty of Free Flight or RC Soaring? Want more thrills? Try RC Pylon. All of these different events are at the Nats.

This year marks the 70th anniversary of the Academy's recognition of Control Line model flying. A step back in history can be found in the October 1942 issue of *Model Aviation:*

"In a precedent-setting session officials of the AMA have agreed, in response to many requests, to recognize control model flying. The only reason that this step has not been made previously is that this type of activity, which is also known as G-line flying, tether flying, and U-control flying has been expanding so rapidly that it would have been practically impossible to set up the machinery of servicing the activity and licensing control model flights."

Following this announcement, Control Line aeromodelers were able to receive a special experimental license separate from the Free Flight license and upon receiving it would affix the official number to the wing of their airplane. Control Line numbers would be followed by the letter "C," for example 671C. Cost for the license was $1 and the first licenses were available December 1, 1942.

It was also noted that Control Line aeromodelers would be allowed to participate in the compilation of a set of national rules covering this new competitive sport and that every effort should be made to encourage this important development along the lines of scientific research, speed, and stunting.

This illustrates the fact that times and our interests do change. Could the involvement of First-Person View (FPV) be the next facet of aeromodeling to become recognized by the Academy? ✈

Crocheting Doilies

Jim Tiller, jtiller@hotmail.com

I heard a cute story the other day.

It seems when this couple got married, the lovely young bride told her husband she had a secret. She showed him a shoe box and asked him never to look in inside. The equally young groom, smitten with his new love, agreed.

Many, many years later the couple was celebrating 50 years of marriage and the old man finally asked his wife what was in the shoebox that had been on the closet shelf all those years. She told him he could look. He fetched the box, opened it and found two crocheted doilies and $82,500 in cash.

More than puzzled, he asked her to explain. She said, "Before we were married, my mother told me the secret to a happy marriage. She said that if I ever got angry or upset with you, instead of starting an argument, I should crochet a doily."

The man thought a moment. "I guess that's okay", he said, noting that only two doilies were in the box. "But where did all the money come from?

"Doily sales." She quietly replied.

I received an email last month from a modeler frustrated with the loss of his large, 3-D airplane in a collision with a small, electric ARF. By his account, the collision may even have been intentional. The events that led up to the incident and resulting "safety" discussions that came up at the club meetings were, to say the least, unfortunate, and only led to further arguments among the members. It seems there was ongoing, unresolved animosity between the small model fliers and the large 3-D fliers about sharing the airspace over the center of the runway. This collision could have been avoided and it is obvious that there are safety concerns in this club.

There are many points in this story where someone could have chosen to "crochet a doily" rather than take the argument to the next level.

I hear these stories often. Some of these stories would rival the Hatfields and the McCoys. Clubs split. Pilots refuse to go to events if another person attends. Malicious "mischief" occurs between the feuding parties. I have heard it all. These become safety issues. Irresponsible or childish behavior of a few definitely affects us all and can often create an unsafe flying environment for everyone.

We all feel offended at times. And there are times it should not be ignored. I do not always turn the other cheek. But, more often than not, provoking or prolonging an argument only leads to further problems. Very often, what we perceive as an offense is simply an accident, or even more commonly, a misunderstanding between two people. Try to give the benefit of the doubt—or at least hold you anger until further evidence is uncovered.

The solution is so simple, but so often almost impossible for some people to do. Let it go.

Further Thoughts Along the Same Line

With summer comes all the events that we all love to attend. Events often take you into an unfamiliar group of pilots outside of your trusted friends. This unfamiliarity can also lead to these same kinds of problems. Be especially mindful of your fellow fliers in these event environments. Approach everyone with courtesy and respect. Try to contribute to the event's success, but don't compromise on safety. Speak up if you think there are safety issues.

I am not a very experienced CD, but I have been part of enough sanctioned events to know a good one from a bad one. The one speech I still use as my example is a CD that said: "We enforce the AMA safety rules. If you don't know what they are, we have copies. Beyond that, the only other rule is the Golden Rule." I have found no better advice.

If your summer events are competitive, the competitive juices can get out of hand. I am as competitive as the next guy, but at the end of the day, I am sure my world will not end if I come in third, instead of first. In his autobiography, Lou Holtz, a great coach at Notre Dame, talks about a national title game that his team lost in the last few seconds. When he crossed the field after the final whistle, his words to the winning coach were: "Great game, I am glad I got a chance to be a part of it." There can be as much dignity in losing as there is in winning.

Also, there is no room in our hobby for the phrase I often hear now—even from parents at my 10-year-old granddaughter's ball games: "Don't get mad, get even." There are places where retribution might be okay, but certainly not at the flying field.

"The God Complex" Followup

I received some great emails in response to my last column on the "God Complex." Evidently some of you have this person at your own field. Although I too have seen these people in action, the article was not aimed at an individual person, but at the attitude. An attitude that, unfortunately, we all have at some times. Be careful about being labeled an expert in anything. The enemy is thinking you are in control of a certain situation because you are an expert. As I grow older, one thing I have learned is how little I can control.

I certainly won't claim to be a safety expert. But I will keep writing and promise to take your thoughts to heart. Thanks, again, for those of you who have sent me messages. Keep them coming. ✈

Implementing New Leader Member Program

Rusty Kennedy, Chairman Leader Member Program, rustylm@verizon.net

District II Vice President (VP) Eric Williams and District V VP Jose Soto have volunteered their districts to test the Leader Member (LM) program so adjustments can be made and hopefully sent to all districts.

The Leader Member program is an initiative to contact LMs and provide them an opportunity to actively assist the district associate vice presidents (AVPs) at the local club level. The initial function of the LM will be to keep his or her club abreast of AMA activities and programs that help enrich the club's modeling activities. In March 2011, all LMs were sent a survey and one reply stood out. LMs want to help AMA.

The initial goal is to have one active LM per club. Active means an LM, who regularly attends club meetings, flies, and participates in club functions. The LM will assist the VPs and AVPs at the local club level by helping keep clubs informed and up-to-date on AMA news and club and member programs/benefits by using a variety of regularly published AMA materials.

The long-term goal is create a tighter, more effective club service network of volunteer LMs to foster better support and communications between a club and AMA as well as between clubs in each district. This is done by a consolidated team effort between club officers, LMs, AVPs, and VPs, opening up and maintaining channels of information and mentoring.

District II and V AVPs will be contacting club officers and LMs to build a team of those LMs who wish to actively participate. This will be designed to be implemented easily with almost all information being available online. This will take team effort between VPs, AVPs and LMs. Regular communications are the best way to keep things running smoothly. Information about LM activities can be found at www.modelaircraft.org/membership/leadermember.aspx and http://amablog.modelaircraft.org/amaleadermember.

Club officers, at your next meeting you might ask if any of the members are LMs and point them to the LM website. If your club doesn't have a LM maybe you know of a member who would be a good candidate.

LMs desiring to be more involved in AMA—now is the time. If you are an LM from any district and wish to receive more information, contact me at amalmprogram@gmail.com. ✈

Recognizing Club Officers

Jim Wallen, Club Corner author, sjwallen@tde.com

AMA clubs use their club officers in numerous and varied ways. You are required to have a club safety officer, but it's up to your individual clubs what other offices work best for your specific situation.

What works for small clubs may not be the way to go for larger clubs. Perhaps you want to add a president, a vice president, a treasurer, a field marshal, an event coordinator, a chief training instructor, a membership coordinator, a newsletter editor, a webmaster, or some other position that makes sense for your club. You can establish a formal plan for succession or not. It is up to you. You might be surprised at the talents and skill sets your members have in filling these positions. Remember that club officers often times dictate the direction your club takes in being a viable progressive organization.

Sometimes we forget that our club officers are volunteers and spend many hours fulfilling their duties to make your club more enjoyable. If some are frustrated about the performance of a club officer, keep in mind that they have raised their hand to help out and are to be commended for doing so.

You may want to consider some form of recognition for past club officers. Recognize them at a club meeting. Perhaps you want to establish a recognition event and invite the club officers, some of which you may have not seen for some time. Get some treats and make a party out of the event. Everyone likes to be recognized and appreciated.

Recognition of club officers is a morale builder and adds the element of enthusiasm to your club. That is a key element in keeping your club pointed in a positive, progressive, and enthusiastic direction! ✈

How to Bend Balsa

Paul L. Daniels (pldaniels.com) printed in the newsletter of the Feather River RC Modelers, Oroville CA

Quite frequently in building with balsawood we need to bend balsa into a curved surface. For curves with fairly large radii, this can be done without any problem. When it comes to convincing balsa to bend around complex, varying, and tight curves (such as tail planes or wingtips), balsa has to be assisted into making these curves without crimping or snapping.

The reason why we choose to bend balsa around such curves is for a couple of reasons:

- Strength: Balsa is strongest when the grain runs the length of the wood.
- Finish: Sanding with the grain produces a smoother surface.
- Economy: It's cheaper to make a wingtip out of a strip of balsa than to use up a much larger sheet of balsa and having to discard the bulk of it.

The available methods of getting balsa to bend more can be broken down into sections: laminating, one-sided moisture/heat, chemicals, long soak.

With all bending operations it's suggested that you start out with the most flexible piece of balsa that you can obtain, typically this is referred to as A-grain balsa. Do not attempt to use C/quarter-grain balsa as it'll tend to split very quickly.

Stage 1: Getting the wood flexible

Laminating: The process of using laminating to make balsa curve around corners is based on the principle that a thinner sheet of balsa can be curved at a tighter radius. The radius of curvature limit varies between materials, but essentially it represents a percentage of compression (or tension), caused by the difference in curve radii between the inner and outer limits of the balsa. Thinner balsa will be able to be bent tighter before the same critical difference of curvature occurs.

Using the laminating process can be a fairly tedious one, but it does produce an appealing (to some) visual appearance. Laminating produces the strongest, but also heaviest, resulting form.

One-side moisture/heat: If you take a sheet or strip of balsa and dampen one side you'll see that in a few seconds that the balsa starts to curve away from the dampened side. Conversely, if you apply a hot iron to the sheet of balsa, the balsa will curve toward the heated side. The reason why this occurs in both cases is because of a difference in moisture content in the balsa wood cells. The more moisture in the cell, the more it expands.

In the damp application, the damp side of the balsa expands causing the sheet to curve away. With the iron application, the moisture is driven out of the balsa cells on that side to contract and causing the balsa to curl in.

Chemicals: Sometimes you really need to get a piece of balsa around things are already too thin for laminating practically—the solution can sometimes be to chemically adjust balsa to bend. Clouded ammonia (water with ammonia in it) or Windex will make balsa especially flexible. The action by which this occurs is the breaking down of balsa cell walls. Interestingly some people have reported that using vinegar also works, the key appears to be to soak the material in a non-neutral pH substance.

For clouded ammonia, use a 50/50 mix with water. *Caution*: use this mix in a well-ventilated area. Ammonia can suffocate you. If you would rather not take the potential risk, consider using the long-soak method.

Long soak: If using chemicals such as ammonia or vinegar isn't your idea of a pleasant experience, you can soak the balsa in hot/warm water for an hour or more (depending on the thickness). The heat is useful to accelerate the absorption of the water into the cell structure.

Stage 2: Setting the shape

Once you've made your balsa flexible, you can commence to shape it to your needs. For simple curves, such as cylinders, cones and such, you can simply apply the wood to the formers or suitable shape holder (having a good selection of tins, tubes, and rods help here) and tape/hold the balsa to the required shape and allow to dry.

Even if you're using the framework itself to form the curve, do not attempt to glue the balsa at this stage. Wet balsa and glue do not work together. Wait until the balsa is completely dry. Be forewarned that this sometimes can take a day or two in the cold weather. When you remove the balsa from its former shape holder, you'll notice that it tends to spring back a little bit, that is okay, it's normal. You can now glue your balsa to the airframe. ✈

Scale Plans Building for the Novice: Part 7

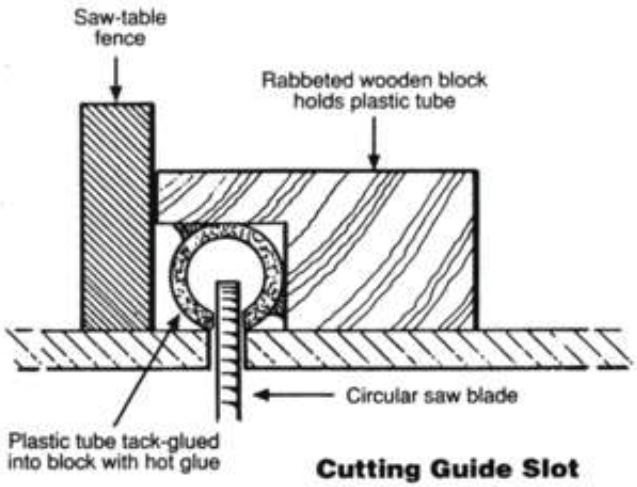
Jerry Bates, www.rcscalebuilder.com

by JIM NEWMAN

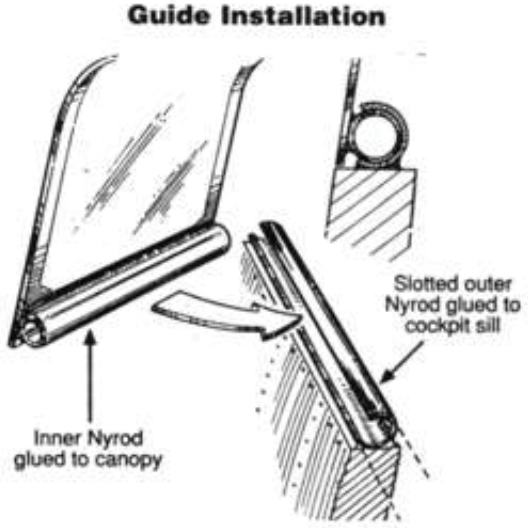
From the Drawing Board

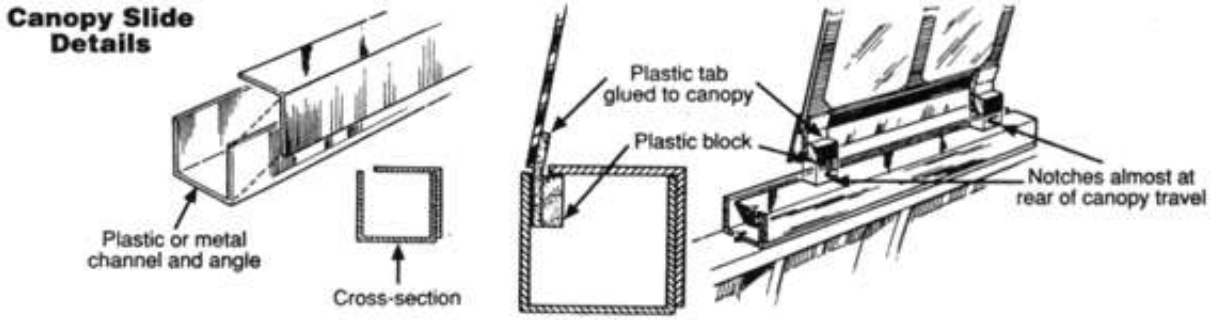
20 SCALE BUILDING DETAILS AND IDEAS

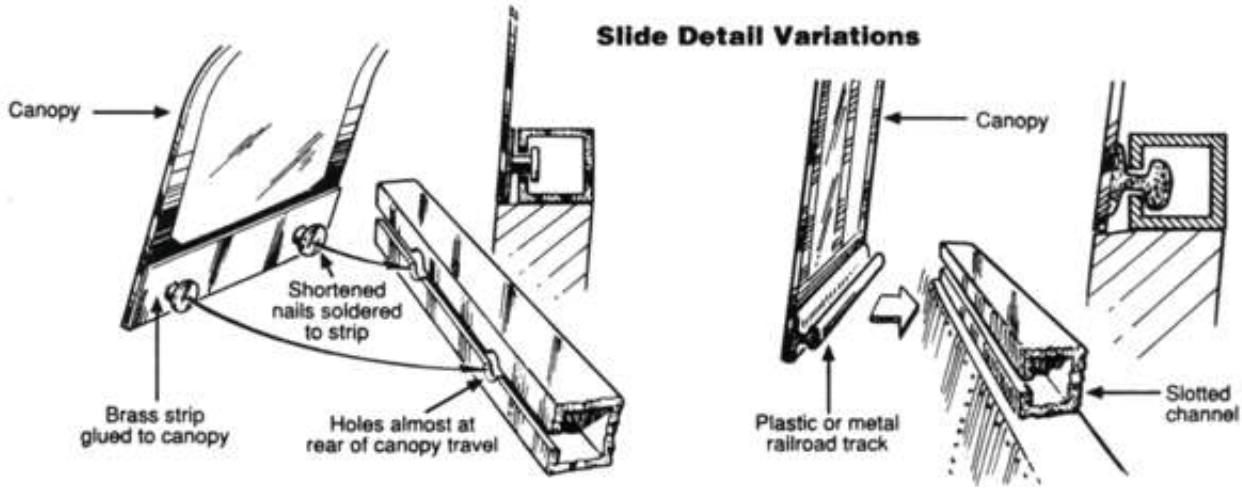
Sliding Cockpits



Cutting Guide Slot

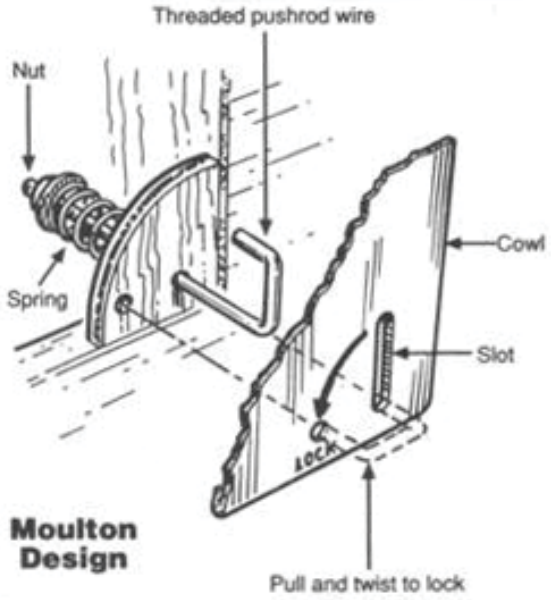




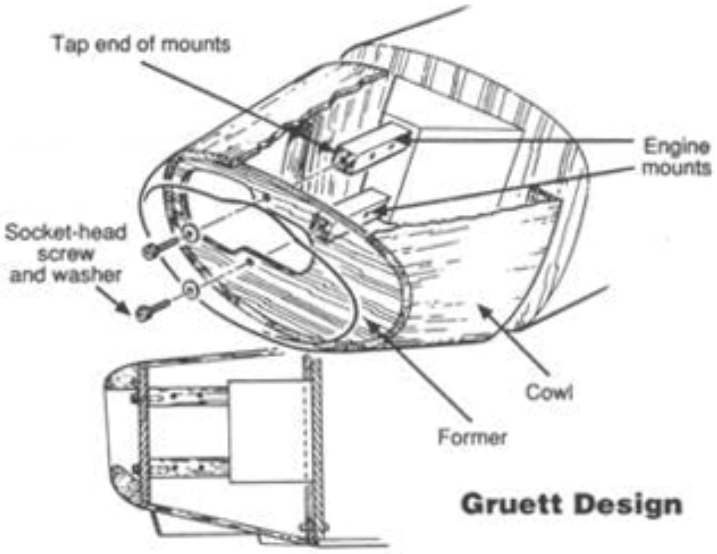


Scale Plans Building continued from page 5

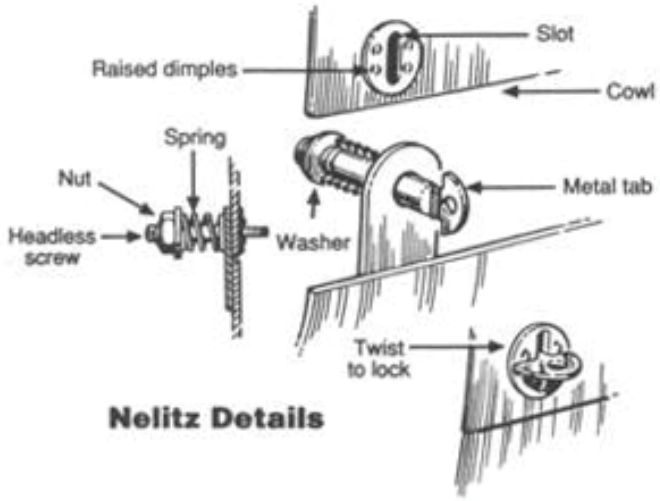
Cowl Attachments



Moulton Design



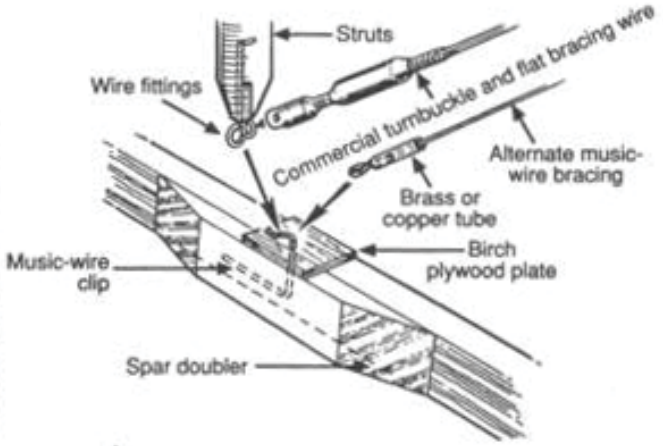
Gruett Design

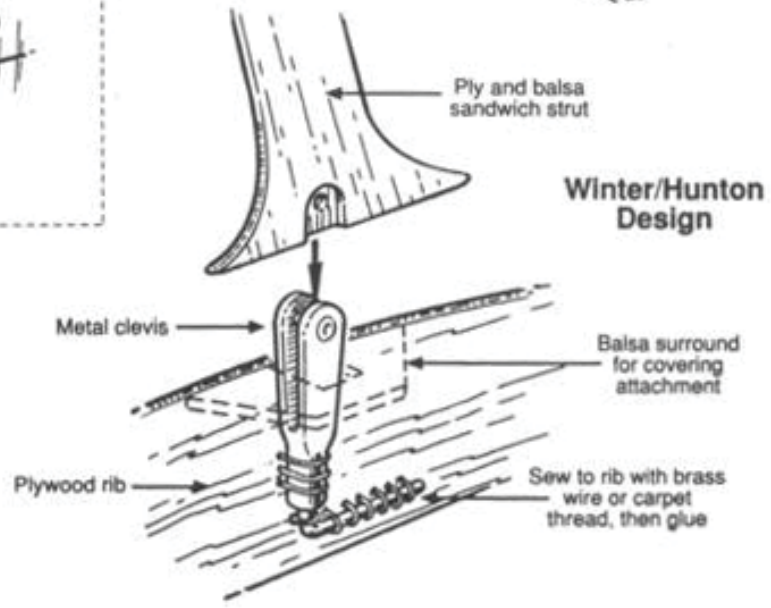


Nelitz Details

Attachment Details

Wing Struts





Winter/Hunton Design

Interplane Strut Attachment

Next issue we wrap up the Scale Plans Building series with more from Jim Newman's drawing board and advice from Jerry Bates on building materials compatibility. ✈

Heat Wave Exposure

Alex Szemere, Tri-County R.C. Club, New Jersey

I hope that all pilots are cautious about heat wave exposure. Here are a few suggestions to guard you against heat stroke and/or heat exhaustion. The best advice—do not fly during close to 100° weather!

Following is the OSHA source of information regarding heat-related health problems. Although this is for workers, the same thing applies when we are out there flying our RC models in a potentially hostile environment. I changed it from worker to "pilot" designation.

Heat-related illnesses and first aid

Heat stroke, the most serious form of heat-related illness, happens when the body becomes unable to regulate its core temperature. Sweating stops and the body can no longer rid itself of excess heat. Signs include confusion, loss of consciousness, and seizures. *Heat stroke is a medical emergency that may result in death!* Call 911 immediately.

Heat exhaustion is the body's response to loss of water and salt from heavy sweating. Signs include headache, nausea, dizziness, weakness, irritability, thirst, and heavy sweating.

Heat cramps are caused by the loss of body salts and fluid during sweating. Low salt levels in muscles cause painful cramps. Tired muscles—those used for performing work—are usually the ones most affected by cramps. Cramps may occur during or after working hours.

Heat rash, also known as prickly heat, is skin irritation caused by sweat that does not evaporate from the skin. Heat rash is the most common problem in hot environments.

The chart below shows symptoms and first aid measures to take if a pilot shows signs of a heat-related illness:

Illness	Symptoms	First Aid*
Heat stroke	• Confusion • Fainting • Seizures • Excessive sweating or red, hot, dry skin • Very high body temperature	• Call 911 While waiting for help: • Place pilot in shady, cool area • Loosen clothing, remove outer clothing • Fan air on individual; cold packs in armpits • Wet individual with cool water; apply ice packs, cool compresses, or ice if available • Provide fluids (preferably water) as soon as possible • Stay with individual until help arrives
Heat exhaustion	• Cool, moist skin • Heavy sweating • Headache • Nausea or vomiting • Dizziness • Light headedness • Weakness • Thirst • Irritability • Fast heartbeat	• Have the pilot sit or lie down in a cool, shady area • Give person plenty of water or other cool beverages to drink • Cool the pilot with cold compresses/ice packs • Take to clinic or emergency room for medical evaluation or treatment if signs or symptoms worsen or do not improve within 60 minutes. • Do not return to the field that day
Heat cramps	• Muscle spasms • Pain • Usually in abdomen, arms, or legs	• Have pilot rest in shady, cool area • Pilot should drink water or other cool beverages • Wait a few hours before allowing pilot to return to flying • Have pilot seek medical attention if cramps don't go away
Heat rash	• Clusters of red bumps on skin • Often appears on neck, upper chest, folds of skin	• Try to get in a cooler, less humid environment when possible • Keep the affected area dry

* Remember, if you are not a medical professional, use this information as a guide only to help fellow RCers in need.

Some Aviation Humor

From Steve Werderitsch, Valley City R/C Club, Inc., Ohio

Another Blonde Joke

This is the story poor blonde flying in a two-seater airplane when the pilot has a heart attack and dies. The blonde frantically makes a May Day distress call.

"May Day! Help! My pilot had a heart attack and is dead," she says. "I don't know how to fly a plane. Please help!"

She then hears a voice on the radio saying, "This is the tower. I will walk you through it. I've done this several times. Now, just relax. Everything will be fine. Now give me your height and position."

The blonde replies, "I'm five foot four and I'm in the front seat."

"Okay," says the voice from the tower. "Repeat after me: Our Father, who art in Heaven …" ✈

Tips & Tricks

Protecting Hinges

Petroleum jelly often has been used on pinned hinges to prevent epoxy glue from sticking to the hinge joint; however, it is difficult to get just the right amount on the hinge and to make sure the hinge is completely coated.

A very cool way is to melt the petroleum jelly in a small dish such as a dessert dish (an oven-safe type, of course). Use only enough to melt to a depth of about $^1/_6$ of an inch. Fold the hinge and dip the pinned end into the melted jelly.

Remove and touch the hinge to a paper towel to remove excess. In a couple seconds, the petroleum jelly cools and has penetrated the hinge.

You now have a completely coated hinge joint that epoxy will not stick to.

—From Gene Davis, Newsletter of the National Association of Scale Aeromodelers

Tricky Decals

Have you ever wanted to place a graphic or numbers on your model but find cutting them out of MonoKote just too much effort? Try tracing paper available at craft or office supply stores.

Here's how to do it with a computer and scanner:

1. Scan your artwork and save it.
2. Print it on thin tracing paper.
3. Cut it out and stick in on your airplane by spraying the back of the tracing with adhesive.

If you like to fly in the rain, you can waterproof the finished product by spraying it with clear spray paint before you place it on your airplane.

Unlike a commercial decal with a totally clear background, the tracing paper will be barely visible, but it's not that noticeable.

—From the Lewes RC Club, Lews DE

Convenient Clean Up

Want a nice, neat, convenient way to clean up that airplane? Use baby wipes—those soft wipe tissues that come under various brand names and are packaged in handy plastic boxes.

The wipes must contain some kind of cleaning agent because they remove oil well and the lanolin acts like a polish.

—From the newsletter of the Western New York Sailplane and Electric Flyers

CONTACT US

We always welcome your comments and suggestions about the AMA *INSIDER* and any of it's content. If you have anything to share, please send it to:

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SUBMISSIONS

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