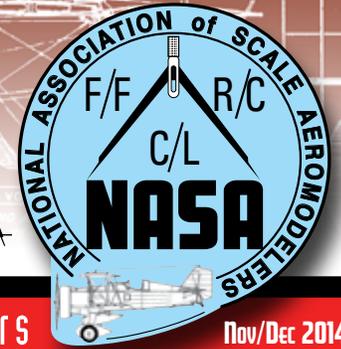


REPLICA



Newsletter of the National Association of Scale Aeromodelers

Nov/Dec 2014

IT IS TIME TO RENEW YOUR NASA MEMBERSHIP!

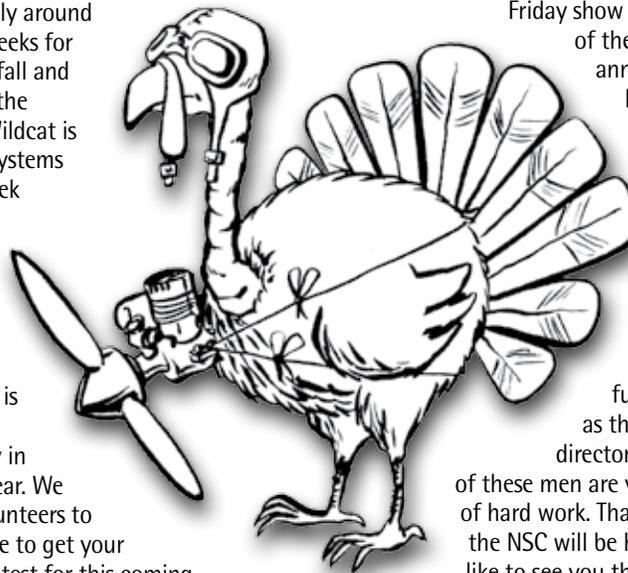
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PRESIDENT'S NOTES

Happy Thanksgiving everyone! Usually around this time of year we get a couple of weeks for some flying but this year the 5" snow fall and cold put a stop to that. So in my case the migration to the shop was early. My Wildcat is progressing nicely, most of the flight systems are installed and working. The past week I put primer on the wings and started the panel and rivet lines. This will be my first attempt at a camo finish and British markings. If anybody has any hints, e-mail them please. And if you are wondering, no yellow - well, I take that back as there is a little in the markings.

I hope you had an opportunity to fly in one of the NASA Open contests this year. We have a great group of officers and volunteers to promote these events. If you would like to get your club involved and schedule a scale contest for this coming season, I would be happy to help with the planning. Please check this year schedule so we can eliminate conflicts. We will try to publish an early schedule for the 2015 NASA Open events on the NASA web site.

I did miss one event this year, but I think the conflict helped promote scale modelling in a very different way. I flew my T-34 at Oshkosh, in the airshow on Wednesday and Friday. Matt Chapman set this up and



five of us had the opportunity to fly in front of nearly one-hundred-thousand on Wednesday and two-hundred-thousand on Friday. The

Friday show was well attended because of the return of the Thunderbirds. What a thrill, and the announcer did a great job of explaining the hobby and its family benefits. You can view some of our flights on the EAA website under tower cam Oshkosh. Comments from the full scale guys were great and the gentleman who owns the full scale version of my T-34 was impressed.

The first NASA Scale Classic at Muncie was a great event. Although the weather was not very good (my fault) the first time venture was well attended and we all had fun. Thanks to Mark Lanterman for his duties as the contest manager and to our two contest directors - Dale Arvin (R/C) and Allen Goff (C/L). All of these men are very dedicated to the hobby and not afraid of hard work. Thanks guys. We will announce shortly where the NSC will be held in 2015. Plan for next year, we would like to see you there. Enjoy a weekend of scale flying with both R/C and our C/L brothers.

Thank you all for making it another great scale modeling season. Now off to the shop.

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EDITOR'S NOTES

After a couple of months to rest, relax after this year's NSC, it's time to plan for the winter build.

As mentioned previously, we at NASA have been hard at work with details regarding next year's NATS and NASA Scale Classic contests. Finally, we have been able to convince the AMA to move the dates of the Scale Nationals to a different week than the blasted IronMan competition, so it should make it much easier to find rooms. The dates are July 17-19.

Dates have yet to be set for next year's NSC, but we are very, very close. From the outset, the NSC was envisioned as a contest that could move around the country. We are close to having the 2015 locked in, so be sure to check the NASA website from time to time, as it will be posted there first.

Also, we are very close to finalizing the 2015 raffle plane to help benefit the operational expenses of the NATS. Our good friend, Danny Carozza of the WRAMS show has been instrumental in putting together a deal for 2015. If this all comes together, we hope to have news by mid-December, so again, watch the NASA web site.

Speaking of the WRAM show, it's still a ways off, but NASA will have a booth there, and at the Toledo show. If you're coming, please stop in and say hi. Also, if you have the time to help with the booth, please contact Mike Barbee as he's looking for a few volunteers to help. Just a couple of hours could make the difference!

Share your current project with the rest of NASA. Gather your photos and a couple notes on the model - then send them to me - mark@airbornemedia.com and I'll get those posted in their own set.



To see all of NASA's photo collection, including pictures from the recent Horizon Indoor event, please the links below.

- Coverage of the Hoosier Dawn Patrol Event - [click here](#).
- Coverage of the Indiana Warbird Campaign - [click here](#).
- Coverage of the Horizon Indoor - [click here](#).
- Dan Gaston's Amiot 143 build - [click here](#).
- Dan Gaston's Miles Hawk Speed 6 build - [click here](#).
- Bob Patton's Cessna 152 build - [click here](#).
- Mark Lanterman's Ryan SCW-145 build - [click here](#).
- Allen Goff's Extra 300S build - [click here](#).
- Individual NASA photo sets - [click here](#).

MARK LANTERMAN
mark@airbornemedia.com

TREASURER'S NOTES

I am thrilled to say that NASA has grown from 139 members last year, to 166 members this year! We'd like to welcome and thank our new members, and thank our returning members for making 2014 a successful and fun year for NASA.

Below is a quick overview of the NASA finances for the end of 2014. It's always good to end the year in the black!

REVENUE

Dues	\$2,886.00
Pins and Stickers	\$26.00
Shipping Fees	\$17.50
NATS	\$2,292.18
NASA Scale Classic	-\$951.67
Total Revenue	\$4,270.01

EXPENSES

Membership Expenses	\$404.51
Office Supplies	\$40.18
PayPal Fees	\$107.94
Advertising	\$1,276.25
Postage	\$339.27
Newsletter	\$60.66
Website	\$272.20
Flight Achievement Awards	\$246.65
Total Expenses	2,748

Change in Net Assets **\$1,522.35**

We all would love to see NASA continue to grow, and the best way that we can accomplish this is by word of mouth! Please tell your fellow modelers about NASA, tell them to make plans to attend some of next year's NASA Open events and try to earn an invite to the NASA Scale Classic.

And if they haven't already, ask them to check out our website and see what they've been missing out on!



TINA PATTON
tpatton60@sbcglobal.net

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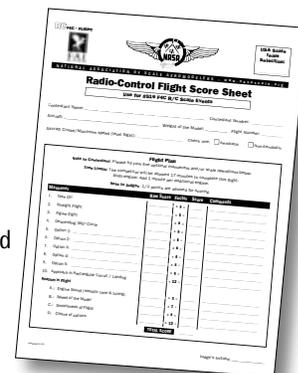
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NASA NEWS AND INFORMATION ON THE INTERNET

If you have internet access, you owe it to yourself to visit NASA's web site - www.nasascale.org. The NASA site was designed from the start to be the only place you need to go to find out everything that's happening in the world of scale aeromodelling - whether it's here on the National front, or on the International front - the domain of the FAI.



COMPETITION DOCS/FORMS

This is one of the more exciting features of the web-site. We have all the competition forms and documents for scale competition online in pdf form. Not only are the documents up-to-date, but we now have two versions of each.

One is the regular pdf that we invite contest directors to download and printout for use in their contests.

The second (and more exciting) version of the form is the "intelligent" form. Using this version and an up-to-date version of Adobe's Acrobat Reader, you can fill out all your information using your computer, then pre-print copies to take to your next scale event: information about yourself, your plane and your maneuvers/options. All AMA rule book maneuvers/options (as spelled out in the current AMA rule book) can be selected from pull-down menus; right on the .pdf. Imagine not having to spend time at your next contest filling out forms!

The Piper Cub is the safest airplane in the world; it can just barely kill you.



**R/C AND C/L SCALE:
 JULY 17-19 2015**

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12 INCHES TO THE FOOT

Well it's that time of year where many of us retreat into the shop and aren't flying as much as we should. But if you flew at the NASA Scale Classic you already know what a chilly flying day can be like. But we had a great time and seeing this event come to life and all the work that Mark and others did for the event was exceptional. I can't wait till next year!

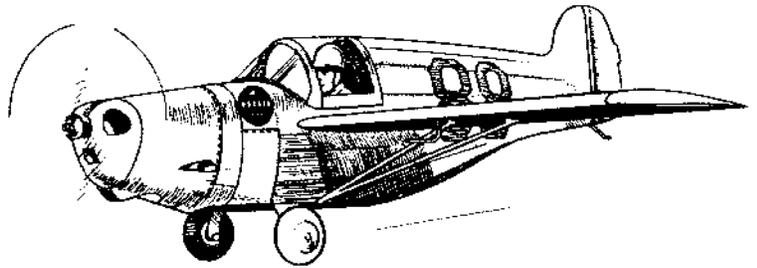
On the r/c side, we had an official class, which will be a different theme every year. This year was WW1 era models to commemorate the 100th anniversary of the start of the Great War.

We flew a maneuver there I called a "reverse Chandelle" instead of a climbing turn it's a descending turn. In WW1 with some of the earlier aircraft this would be considered an aggressive maneuver and in some cases diving in this fashion on an opponent could be quite dangerous. Anyway several modelers who flew in the event seemed to have a lot of fun.

The "unofficial" WW1 event came off well and we are planning on an air racing theme for next year. All models have to be pre-WWII to qualify. Hope we have as much fun with the air racers as we did with the WW1 models. This class is open to everyone, so start thinking of what to build or buy. Also, remember there's a 3% bonus for competing with a kit-built model (non-ARF).

Speaking of air racers, there are a lot of plans out there for Golden Age classic racers. Some were beautiful. Others, well they were so ugly they were pretty - I think. Taking a look at the "Old Time Plan Service" plans catalog from AMA Plans,

just look at page 182-183, There is a Cessna CR3 Racer (both of these plans are for FF). Then you go to the next page and Art Chester (who designed the spinner for the P-51 Mustang) has a whole list of plans for his aircraft including: The Goon, Jeep, and his last racer the Sweet Pea. The Church Mid-Wing Special is also listed, as are many others. AMA also has several of the Henry Haffke Gee Bee designs including the Model Y Senior Sportster at two different sizes. Also included is his 1/4 scale design for the Gee Bee R-1 in which Doolittle flew to win all the marbles at the 1933 National Air Races. He also set a closed course speed record with this airplane. The earlier Model Z Super Sportster is also included in the AMA offerings.



Then you can go to the Flying Models magazine plans list- Henry Haffke also has several racers in that catalog including "Time Flies" and several .40 size models including the Gee Bee Model D in-line Sportster. The 1/4 scale version of that aircraft is also included.

Now the neat thing about AMA's plan service you can enlarge or reduce your plans to the size you would like to build to. Check out the additional services offered by Greg Prater, Plans Coordinator for AMA has there. It's truly one of the best that AMA offers in my opinion. To contact him: gregp@modelaircraft.org or at 765-287-1256 ext. 507.

I've mentioned the Antique Airplane Association and their Fly-In before. They have a different theme for each year and next year's theme has just been announced! The 2015 Fly In, held during the week of September 2nd-7th will be "Record Breakers" Over the past 60 years the Assn. has had many members whose accomplishments and flight were officially recognized by the NAA and or the FAI as record breaking flights. This year's fly-in will honor those record setting airplanes and their pilots with our "Join the AAA Record Breakers" fly-in theme. There is a full write up on this on their main web page. If you've never been you are missing a treat for any airplane buff. check out there web site at www:antiqueairfield.org They also have a list of attending aircraft and update it on a regular basis. Hope to see you there.

Our Nationals will finally be on a different weekend other than the Iron Man event in Muncie. But I would still get your reservations early! Received an e-mail from Frank Tiano the other day and it seems the hotel operators in Lakeland are also getting greedy, charging resort prices for a standard room, just milking the participants for all they can get, just like the dear motel operators in Muncie. It's disgusting. If there was any other place to hold the Nationals and send all of Muncie a message it might be the time to do it. No I don't mean just our Nationals, but the entire event.

The sad thing is they could care less. There are more events, civic, sports, athletic as well as modeling going on in Muncie now on a very regular basis. So at times of the year there is a shortage of motel/hotel rooms. But paying more for a hotel room in Muncie rather than say Florida or a standard European hotel is a bit much to swallow. Ok, I'm off the box now.

Fair Skies & Tail Winds,
STAN ALEXANDER
onanwing4602@att.net

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HOW TO PAINT FABRIC-COVERED AIRPLANES

I've been painting scale models with Stits Lite fabric and Poly-Tone products for close to 20 years. The techniques required are easy and the products are very user-friendly. This article highlights the basics and includes tips to help you get excellent results. For information on covering your model with Stits Lite fabric, go to ModelAirplaneNews.com and check out my "Build-Along" posts. For this article, I'll show you how to paint and finish a covered model using my Balsa USA 1/3-scale Fokker Triplane as an example.

SAFETY TIP

Whenever you work with solvents and strong chemicals, use a chemical-blocking hand cream like Invisible Glove. Available from F&M Enterprises, it allows easy cleanup with warm soap and water.

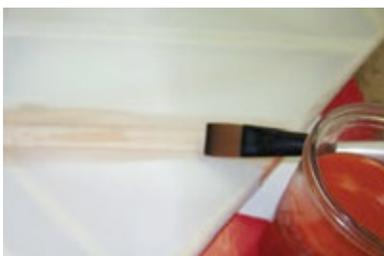
A GOOD START

Available from F&M Enterprises (stits.com), the Poly-Tone finishing system is designed to all work together and it bonds both mechanically and chemically to the Stits Lite fabric. The first step in producing a great paint job is to build your model as precisely and as smoothly as you can before applying the covering. Fill all the seams and use lots of sandpaper. Wipe the structure down with a tack cloth and then do a great job applying the fabric covering. No amount of paint will cover up wrinkles or uneven seams.



SEALING THE FABRIC

Clean off and make sure there is nothing sharp on your worktable that could damage the fabric. Pour some Poly-Brush fabric sealer into a glass jar. Working with a largemouth, sealable container is much easier than dipping the brush into the small opening of a can. Having some MEK in a glass bowl also makes for quick brush cleaning. I start with the smaller control surfaces and work my way up to the wings and then the fuselage. Use a 1/2-inch brush to apply the Poly-Brush to all the ribs, stringers, and edges of the part you are finishing. The Poly-Brush both seals the fabric and helps to bond the cloth to the underlying structure, so I apply it to all the contact points first and then I fill in the open areas in between with a wider brush. Poly-Brush dries very quickly, so make all brush strokes in the same direction, slightly overlaying strokes as you go. Apply all of the first coat strokes in one direction, let them dry for about 20 to 30 minutes, and then apply the second coat with strokes 90 degrees to the first. This is all that's needed, but the more coats you apply, the smoother your finish will be.



SURFACE TAPE

After applying your first two coats of Poly-Brush, you'll have to decide whether or not you want to add rib tape and stitching details. If you do, now is the time to get it done. I use a combination of paper hair setting tape and cloth bandage tape both available at drugstores



and beauty supply shops. A good rule for applying surface tape is to apply all the short pieces first and then apply the longer edging tape to cover the ends of the shorter ones. Also, do not wrap the short ones all the way around the edges – cut them flush with the edges and then use the longer tape to finish up the edges. This makes the edge tape smoother and neater. You will find that the fabric bandage tape works great in straight lines but it is not as flexible as the paper tape. I use the paper tape to cover the sharp trailing edges and the curved wingtip bows. It works great for this. I find that the combination of both tapes produces a very nice scale appearance.

Brush on more Poly-Brush over all the tape. I apply four or five coats over the tape and then after the tape has dried, I apply two more coats over the entire part running 90 degrees to the tape. This helps fill in the tape edges and blends them into the finish. F&M Enterprises also offers scale rib tapes cut from the same material used for the Stits Lite fabric.



SILVER UNDERCOAT

The Poly-Spray silver undercoat is very heavily pigmented (aluminum powder) and therefore only takes a couple of light coats for full coverage. With full-size airplanes, Poly-Spray is used to protect the fabric from the sun's UV rays. With our models, it helps get the colors right and prevents the sun from showing through the painted finish. I use a High Volume, Low Pressure (HVLP) spray gun to apply the Poly-Spray and Poly-Tone paints. Whenever using spray paint equipment, do it in a well-ventilated work area and remove anything from your shop that you don't want coated with overspray. Use a good-quality dust mask with removable filters and you might also want to remove your watch.

I like to hang the large parts from the rafters with hooks made

...continued on page 6

...continued from page 5

from stiff wire. Smaller parts can be hand-held or elevated from the worktable with cans and sprayed one side at a time. Before spraying, be sure to lightly wipe down the surfaces with a tack cloth to remove any dust.

MIXING TIP

Mix the Poly-Spray with reducer to thin it for spraying. Apply one part reducer for every four parts of paint. Apply a light mist coat, let it set for several seconds, and then apply a slightly heavier coat. Go over the entire part and use just enough Poly-Spray to give a solid, smooth coat. Hang the part to dry and spray the next part. Once all the parts have been sprayed with Poly-Spray, let them dry overnight before applying the Poly-Tone paint.

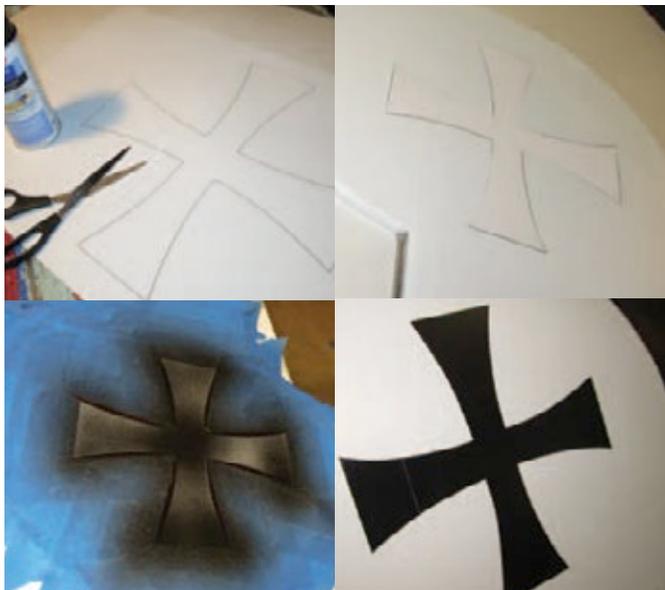
SHOOTING COLOR AND MASKING

When applying the Poly-Tone paint, I use a medium paintflow and airflow. If you increase the airflow, it seems to make the paint dry too quickly. After the Poly-Spray has dried, apply your first coat of Poly-Tone paint. The rule here is to apply the lightest colors first and then apply darker colors over them. I use white as a base coat as it makes other colors applied on top of it brighter. Also, I mask off the areas for the typical WW I German markings.

White Poly-Tone takes about two or three passes to cover the silver coat. After spraying on the white, I let everything dry overnight. Take it one step at a time and don't rush it. When you are done painting for the evening, clean your equipment with MEK and seal all your unused paint containers. I have a couple of paint cups for my spray gun, so one is always filled with MEK and the others have paint. I allow about 20 minutes or so for the paint to set enough before I move the parts into a dust-free drying area.

The next step is to mask off the white areas where you need to and then shoot on the red Poly-Tone. I use vinyl E-Z Mask Tape from Great Planes for the outer edges of my masking and then fill it in with blue painter's tape and drafting paper for large areas. Again, take your time and apply each piece of tape precisely where you need it. Make sure everything is straight, square, and pressed down tightly against the model. You can also simply use a lot of blue tape, but paper is cheaper than painter's tape. I also like to wash my hands before unmasking the parts. There's nothing worse than putting red fingerprints onto a white background (ask me how I know!).

AIRCRAFT MARKINGS



When it comes to specific aircraft markings such as national insignia and personal pilot side badges, you can start working out the details ahead of time in between spray painting the basic base colors. I like to get as many photos of the actual airplane. To make properly sized patterns, I import them into my CAD program, trace them, and print them out to the scale of my model.

Since most markings will be the same except for size, I simply resize the patterns and print them out. I printed out three Maltese crosses for the top and bottom wings as well as the rudder. I use spray adhesive to bond them to some stiff poster paper, and I carefully cut the patterns out. I then use these to trace the markings lightly with a pencil onto the model. I then use a combination of tapes to mask off the markings and shoot on the black Poly-Tone. Applied with a couple of light mist coats, the black builds up quickly and requires only a few coats.

The Old Rhinebeck Aerodrome's Triplane built by Cole Palen (see photo above right) had a rearview of a flying pig on one side and a red heart on a cloud and blue sky background. I mostly use blue tape for masking these markings, which I applied to the two white sided panels masked earlier before applying the red coat. Just like the rest of the model, you apply your lightest colors first (white) and then add the darker ones on top (blue for the sky and then a flesh color for the pig). Again, take your time and make sure you press down the tape nicely, so it is smooth with no lifted edges. My daughter, Rebecca (bottom right), hand painted on the pig with acrylic craft paints and a brush to give my model the "Old Rhinebeck Aerodrome" look.



METAL AND FIBERGLASS

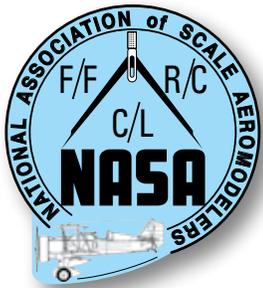
For painting metal parts and fiberglass surfaces, Poly-Tone has a primer called Feather Coat. To prep the surface, sand it with 320-grit sandpaper, wipe it clean with MEK, and spray on two mist coats of Feather Coat. Let it dry and then spray on the two coats of paint. For the aluminum engine cowling, I made patterns for the face and was able to flip them over to make mirror image maskings.



BOTTOM LINE

That's it! Your model is now ready for final assembly and a trip to the flying field. After 24 hours, Poly-Tone is fuelproof, but I prefer to let the paint dry for about a week before running the engine and flying. F&M Enterprises also has a very good Poly-Tone clearcoat available only to modelers. However, being a polyester vinyl material (like the rest of the Poly-Tone paints), it can affect stick-on vinyl markings, so test it before applying it over decals. Poly-Tone paints are the same products used on full-size, cloth-covered aircraft. Using it on RC models is easy and looks exactly like the real thing! Give it a try, I know you'll like the results.

GERRY HARRISH
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IN THIS ISSUE:

- **NASA FINANCIAL REPORT** • **PAINTING FABRIC COVERED PLANES**
- **THE LATEST IN SCALE NEWS!** • **LUSCOMBE MODEL IIA 3-VIEW**

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