



Northwest Scale Aero Modelers

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Hands on Throttle and Stick Newsletter

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Vice Director -
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Dave Rawlings

NWSAM Editor Speaks Out

Greetings,

Roly is or was vacationing and I'll be filling in this spot for this issue.

Speaking of... there lots of pictures from two events this spring – the Cascade Scale Rally from Snohomish, WA and the new Northern Idaho ScaleMasters regional from Farragut State Park. I had hoped to make one or both events, but work dictated otherwise. If the pictures are any indication of the quality of planes and pilots, they should both be well worth the effort to attend next year.

At the end of this issue is the article I promised last time about my method of producing realistic rib stitches. Its fairly easy and takes little time for the scale effect. As always, feedback is welcome. It's the only was we know we're on the right track for constructive articles.

Those of you who've met me, know I prefer scratch building over kits and kits over ARF's. They all have their place and each flier has their preferences based on time to build, space to build or building skills. The ARF's today are like night and day compared to those produced at their infancy – about 20 years ago. That's great for those who'd like to take a shot at flying without much invested. There is an unlimited number of genres to choose from ranging from

early flight (we can fly the Wright Brothers' planes better than they ever could!) through today's modern jets and everything between.

The choice of power is even more than we had when I started way back in 1967 (yeah, I'm that old!) Nitro, some gas and rubber were our choices. Today's electrics have probably done more to get new fliers into the hobby than anything else. They are quiet enough to fly anywhere there is space available and can be just about any size.

But getting back to my original thought... scratch building can be one of the most rewarding aspects of this hobby. I enjoy it because I tend to gravitate towards those planes that are "off the radar" as far as being well known – the weirder, the better.

I would encourage those of you who have a few kits under your belts to give it a try. There are numerous sources for plans for your favorite at many complexity levels. Ask your club members if they have a set they are finished with and would be willing to let you take a shot at. You'll be doubly proud when you can say, "I did it from scratch." -Dave

NWSAM in IDAHO



Greetings from Idaho,

Our membership continues to grow and we are up about 10 members from last year thus far. We picked up 2 new members at the North Idaho Qualifier and memberships continue to trickle in. I think our efforts are definitely paying off.

The Red Apple Flyers are busy preparing for the 3rd Annual NWSAM Championship in Wenatchee Washington on August 16th – 18th, 2013. Preliminary estimates indicate we may need to add a third flight line for the event. If you are staying at the field in your RV, remember to contact Virgil Johnson to reserve a spot. Contact info available through the web site. www.NWSAM.org This year is shaping up to be our biggest and best event yet. I hope everyone can make it. I'll see you there!

That's about all I have for now. I am including pictures taken from the Cascade Scale Rally and the North Idaho Qualifier. As always, It is great to see old friends and meet new ones!

Respectfully submitted,

Mike Ingram-Vice Director NWSAM

NWSAM in OREGON



Things are definitely starting to heat up. One of the best kept secrets is how great the summers are in Oregon and the Pacific Northwest. But something that's not a secret is the number of scale events scheduled in Oregon throughout those great summer months of (late June) July, August, and September. Here's a re-cap of what the local scale modelers can look forward to:

- June 22-23 Bigger Bird –Dusters RC, Woodburn, OR. As the name implies, an event for larger models
- June 27-30 IMAA Rally of the Giants – Medford, OR. The biggest and best IMAA event of the year.
- July 6-7 Dolittle Days –Dusters RC, Woodburn, OR. An event for golden age racers and warbirds celebrating the life and times of Major Jimmy Doolittle, commander of the famous Doolittle Raiders (30 seconds over Tokyo)
- July 19-21 –Pacific Coast Scale Tournament – Molalla, OR. A new scale tournament with competition for cash and prizes. Details to be released soon.
- July 26-28 Oregon International Air Show – Hillsboro, OR. OK, it's not RC, but it's airplanes and it's BIG!
- September 14-15 Oregon Scale Fly-In & USSMA Challenge – Fly-A-Ways RC, North Plains, OR. A concurrent scale fly-in and USSMA regional qualifier. **To pg. 3**

Continued from pg. 2

- September 28 EDF Jet Rally – Fly-A-Ways RC, North Plains, OR. So many RC enthusiasts have caught the EDF jet disease that we thought they needed to be rounded up and quarantined.

Hope I haven't missed any! It's time for me to make my way to the shop. I'm busily trying to get a couple projects off the building board and into the air so I'll have something to fly at these marvelous events. I have been bitten by the accident bug and most of my prized flying machines are in a serious state of disrepair. What is that sound I hear? Did someone say "ARF"?

Hope to see you soon!

NWSAM in Washington

Hosted by **Washington Scale Squadron** the annual Cascade Scale Rally and [US Scale Masters Qualifier](#) took place in Snohomish, WA on May 17 - 19, 2013. We were treated with very good flying weather with light winds and high clouds allowing us to fly 5 judged rounds.

Pro-Am Sportsman

1st	Mike Ardy – Renton, WA	Piper J-3 Cub	117.75
2nd	Del Herring – Wenatchee, Wa	Piper J-3 Cub	116.67
3rd	Virgil Johnson – E. Wenatchee, WA	Piper J-3 Cub	

Pro-Am Pro

1st	Mike Ingram – Caldwell, ID	Dornier	123.5
2nd	Bob Bailey – Auburn, WA	Ryan	120.92
3rd	Bob Benjamin – Olympia, WA	Waco	119.33

Advanced

1st	Mike Ingram – Caldwell, ID	Hawker Sea Fury	97.00	91.83	188.83
2nd	Duane Kaasa – Leavenworth, WA	Nieuport 28	93.50	87.83	181.33

Team

1st	Mike Ingram – Caldwell, ID & Mike Brewer – Astoria, OR	Stinson	93.50	95.17	188.67
2nd	Bob Benjamin – Olympia, Wa & Randy Smithhisler – Edgewood, WA	Piper J-3 Cub	89.50	95.33	184.83
3rd	Bailey & Bailey – auburn, WA	SE5A	83.50	95.17	178.67

A big thanks to the Contest Director **Bob Bailey** and Co-CD **Randy Smithhisler** - [Washington Scale Squadron](#) all the volunteers, judges, scorekeepers/runners and the Cascade Family Flyers - <http://cascadefamilyflyers.com/> for allowing us to use the field over the weekend. The site has a very nice runway - an open hay field to fly over with the backdrop of the Cascade Mountains. Slide Show of event photos;
<http://cascadefamilyflyers.com/ScaleRally.htm>

Fliers participated from Washington State, Idaho, Oregon and British Columbia. Of the 21 entries **Bob Benjamin** - (AMA Hall of Famer), **Mike Brewer**, **Ward Emigh** all long time national scale participants were some of the notables attending.

Note: Scale Aero-modelling events have categories for every level of skill from beginner to expert - participants see what others are doing and enjoy some flying with great company. "Scale aero-modelling" events, support our National Programs and the hobby with new members through the spectators.

The event featured a relaxed friendly atmosphere with lots of idea sharing and old friends getting caught up on each other's winter activities and building projects.

Results:

Expert

1st	Ward Emigh – Bothell, WA	Fairchild PT-23	98.00	90.42	188.42
2 nd	Mike Brewer – Astoria, OR	Ercoupe	95.50	91.00	186.50
3 rd	Randy Smithhisler – Edgewood, WA	Piper J-4 Cub	91.00	92.25	183.25
4 th	Gary Ritchie – Olympia, WA	Tiger Moth	88.50	82.50	171.00

Note: Points earned can be used towards the [North West Scale Aero-Modelling Championships](#) held at the Wenatchee, WA Scale Rally.



The M² team of Mike Ingram & Mike Brewer – Stinson on final. Gary Ritchie photo



From Lynwood, Wa.. came John Witt's Mechanix Illustrated's Baby Ace seen warming up for take off. Gary Ritchie photo



Mike Ingram's Sea Fury builds up a head of steam for take off. John Witt photo

Pictures from CSR





Now, some pics from the Northern Idaho meet..







Hints, Tips & Tricks

I promised last issue to show you easy it is to make scale rib stitches and how I approach it. Again, as mentioned last time, this is NOT my original concept. I found it on the web and this is simply how I interpreted it.

Before we start, there are a few important things to set up. I haven't done all that much research into rib stitching so I can't say for certain when they first came into use. I do know that there were some WWI planes that did not use them so you will have to do some of your own homework to document your particular model to see if they are needed or not.

The second thing one needs to document is the proper rib stitch spacing. Things to take into consideration is the speed envelope of the plane as well as the placement on the wing. The area that falls in the path of the prop blast have stitches that are closer together. Stitches on the tail feathers and fuselage follow another spacing pattern. This is something you will have to document. If you are building for FAI scale, you will need to have it 100% right on the money. For anything else, you can probably get away with a single spacing for the entire plane and it will still look right.

Okay, lets get started. First, you will need a plank of wood about 2" longer than the widest chord of the wing and about 6" wide. I use a 6" x 24" length of pine about 3/4" thick. This will be long enough for a wing chord of about 22".



The next step is to line the long edge of each side of the board with nails the scale spacing required. For the sake of simplicity, we're going to assume that a constant rib spacing for the entire plane is proper. I have my nails 5/8" apart and extending about 1/2" out of the plank.



Lay a piece of waxed paper over the top face of the board. You may tape it in place to keep it from shifting if you like, but don't have any tape exposed on the top surface.



Cut a piece of covering fabric large enough to cover the face of the plank and about an inch or so longer on either end. The best material to use is one that is not painted nor has any adhesive on the back. I use SIG Koverall for my fabric covered projects and use a piece of that for this procedure as well. Never mind the wrinkles, they'll come out in the end. Do the same as with the waxed paper and tape in place, pulling out as many of the wrinkles as possible without separating the weave in the fabric.

The next step may seem silly, but is just as important as spacing – the size of the stitch. Remember that this is all an illusion. It only has to **look** right. The best thread to use is size 10 crochet thread. White is always best. It comes in “spools” of several hundred yards for less than \$5. if you look at a full scale rib, you will notice that under the tape and all that paint, the stitches seem awfully small, diameter-wise. If we were to make ours to proper scale, they would hardly be noticeable. So, we add in the fudge factor and pump them up a bit.



To start the process, make a small loop on one end of a piece of thread about 24' long. Put the loop over a nail on one end then start looping the thread over the plank and around a corresponding nail on the other side. **Look at the previous picture carefully!** You will notice that the thread always loops around the nails on the **same** side, in this case, on the left side facing the edge of the board. This is necessary to keep the stitches the same distance apart. Any other way and your stitches will come out closer together every other stitch. Make your loops the same on each side of the board and they will all be even. Continue the looping the full length of the board and tie off the end at the last nail.

The next step needs a paint brush with fairly soft bristles, a paper cup, white glue and some water. Pour about half and inch of white glue in the cup, add enough water to thin and stir. You want a consistency thin enough to brush freely but not run out of the brush when you hold it over the cup. It's not rocket science, but is important. Now, brush the glue mixture over the entire surface of the cloth and threads being sure not to stretch the fabric. The reason for the waxed paper is now evident... Wait just long enough for the gloss to disappear from the glue and brush on another coat. Let dry thoroughly. Depending on the temperature of the air, it may take several hours. It will be drying toward the upper surface as the waxed paper will be a vapor barrier.



When dry, cut it from the board. The threads should be stuck tight to the fabric.

Just a few more steps and we'll have stitches.
Lay your fabric on a hard flat surface, threads up.



Using a straight edge and new Xacto blade, cut strips only as wide as your rib is thick, usually about 1/8". Cut as many strip as possible keeping them very straight. Pressing very hard on the straight edge will help a lot.

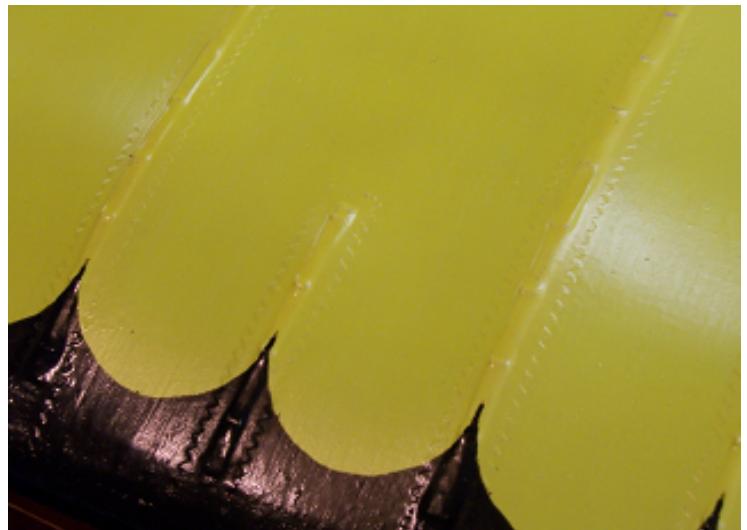
I don't have a wing at the time that needs covering, but I'm sure you'll be able to follow along for the next few steps.

After your wing (or fuselage, or tail feather) is covered and the weave is properly filled, take one of your strips thread side up and lay it over the rib all the way from the LE to the TE tacking it down in a few places with medium CA . If you tack it at the ends, you may cut off the excess. You can now see the effect and how you got there. The stitches will be running perpendicular to the chord and at a constant spacing and only as wide as the rib is thick. This mimics the full scale stitches that go down one side of the rib, across the bottom and back up the other side.



The last step is to cover the stitches with rib tapes. I used 1/2" wide pinked tapes for my 1/3 scale Church Midwing and that came out perfect for 1-1/2" full scale tapes. The tape I used was plain linen with no adhesive. I used SIG Stix-All on one side and ironed the tapes over the stitches pressing the tape down firm between the stitches causing them to be more prominent or you may use dope or whatever works for you. Just be sure to keep them straight during this process.

Primer and paint as you normally do.
This is how my wing came out.



You can easily see the stitches and the tape and the overall effect under the paint.

I'm not bragging when I say I get maximum craftsmanship points due to the effort of stitches – it's just something the judges look for and are pleased with the "scale-ness" of the effort. You can have the same bragging rights with a few hours time. Speaking of time, outside the drying time for the glue, I made enough strips for all rib surfaces, both sides of the tail feathers and the entire length of the fuselage stringers in about 2 hours. I'd say that was a pretty good trade off of time for static points!

Dave,
Editor