

The Flightline



Volume 38, Issue 8

Newsletter of the Propstoppers RC Club

AMA 1042

August 2008

President's Message

Well for those who keep up with the program we skipped the second picnic. The reason being; members on vacation. We should make up for it at the Walt Bryan Electric-only fly in August. 23rd at the Christian Academy.

For those who land in trees and beyond at the Sleighton field be aware of an electric fence. This is alive and is used to keep the horses in. If you open any gates Please close them tight, we don't want the horses out [THANKS]

Until it's discussed at the meeting NO fuel engines larger than 50 are to be run at the Sleighton field on Saturday flying or on meeting nights.

Thursday nights at the Christian Academy are still the place for a good time; come on out and bring a friend. All new members; this is a good time to meet the members who do all the flying in this club; you can sure learn a lot, and meet new friends.

Well hope to see you Thursday nights at Christian Academy and Tuesday August 12th at Sleighton Field for the meeting. Bring some show and tell or just bring planes to fly. See you then.

Dick Seiwell

Agenda for August 12th Meeting At The Sleighton Field; Fly from 5pm, Meeting 7:00pm.

- 1. Approval of July Meeting Minutes
- 2. Membership Report
- 3. Finance Report
- 4. Discussion Walt Bryan Fun Fly plans
- 5. Show and Tell
- Continued Flying

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Minutes of the Monthly Meeting

Apparently there were no minutes taken at the July monthly meeting, although we did have a good meeting!

Propstoppers and SAM 76 at the SAM 12 NJ Meet

Propstoppers including Chuck Kime and wife Tina, Mick Harris and wife Barbara and Dave Harding attended the SAM 12 meet in Mays Landing NJ on Sunday 3rd August. This is the 21st year for this meet which is held in a State forest on a Forest Service emergency landing strip called Strawberry Field. It is a wide open flat mostly grassy area completely surrounded by a forest. This is the field for the Atlantic City Skyblazers RC club and once a year they host this Old Timer meet. The great thing about this field is there is NOTHING near it for miles so they can make as much noise as they want. Un-muffled engines are welcome.

Although this was a contest it was also a fun fly for SAM models and anything else you wanted to fly. Your editor flew his B-24 and made another test flight with his Boehle Giant contest model shown on the cover picture.

Chuck Kime flew in $\frac{1}{2}$ A Texaco. Chuck and Dave Harding flew in Spirit of Sam contest events.

The weather was generally fine, in the 80's but with winds of over 12 mph and gusts at the lower altitudes; not ideal conditions for test flying or flying lightly loaded electric models. Nevertheless we did fly.

I had flown the Giant at the CA Thursday evening fun fly a week or so earlier but I now needed to fly it with the low power setup for competition flying in Muncie next month. The flight went well after some spirited pushing by Mick and Chuck.

Chuck flew a Spirit of SAM model despite the conditions and I flew one too, after adding an ounce of lead ballast. That model flew modestly in the ground turbulence but once it cleared the trees it immediately blew downwind and away. Not to be found by the locals until the day after the contest. Chuck however won the SoS event and is shown below with his trophy. I won "Most Interesting Model" with the Giant.

Dave Harding



Calendar of Events

Club Meetings

Summer Monthly Meetings at Sleighton Field, Second Tuesday; gas flying ok. Fly 5 till 7. Meeting 7, fly till dusk. 12 August 9 September

Walt Bryan Memorial Electric Fun Fly at Christian Academy on Saturday 23rd August

> **Tuesday Breakfast Meeting** The Country Deli, Rt. 352 Glenn Mills 9 till 10 am. Just show up. Flying after at Sleighton Field 10 am.

Regular Club Flying

At Middletown / Sleighton Field Monday - Friday;

10 am until dusk - Electric Only Saturday

10 - 3pm-for FUEL PLANES and 10 - Dusk for Electric

Sunday - 12 - Dusk - Electric Only

At Christian Academy; Electric Only Monday through Friday after school till dusk Saturday 10 am till dusk Sunday, after Church; 12 pm till dusk

Special Club Flying

Saturday mornings 10 am Sleighton Field Tuesday mornings 10 am Sleighton Field weather permitting after breakfast.

Beginners using due caution and respecting club rules may fly GWS Slow Stick without instructors.

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Warbirds over Delaware

By Eric Hofberg

On Saturday, July 12th, my friend Larry and I attended Delaware RC Club's annual Warbirds over Delaware. It had been many years since I last attended this event, but it was Larry's first time.

Let me state at the outset that this is a first-class event and it's a "must see." It is held at Lum's Pond State Park, only a few miles from Newark, DE. The state collects \$6.00 per out-of-state car; however, the event itself is free. For an additional \$10 a person, you can go right down to the flight line and wander through the pit areas. It's \$10 well-spent, as the proceeds go to charity. This year the charity was Alex's Lemonade Stand for childhood cancer.



On to the planes: In the morning there was open flying, and the sky was constantly filled with Warbirds-Warbirds only-of all different vintages. The more daring fliers, and there were many, were having their own impromptu "how low can you go at a high rate of speed" contest, the results being 100+ mph passes, often tilting the wingtip into the grass, but somehow surviving without any crashes. These antics were performed by WWII vintage Mustangs, Corsairs, Thunderbolts, all of 80-inch wingspan or larger.



After the open flying, the "demo" flying portion of the day's program took place. This was led off by a gaggle of WWI aircraft. Supposedly, the goal was to get 34 planes in the air at one time, and they may have succeeded. There were many close calls, but I didn't witness any collisions. It was something you don't see every day.



We were then treated to the classic "flying farmer" routine, but in this case the "farmer" was dressed as an Army Major. The scenario was that he was a newcomer with little or no flying experience who somehow got control of a Piper Cub minus one wheel. Of course, the Major was a dazzling flier, often dragging a wingtip and the one remaining wheel down the runway and performing other entertaining aerobatic stunts.

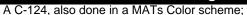
Next came the jet demonstration with the turbine-powered BVM Viper flown by Dave Malchione, Jr., at 200 mph with a vertical climb rate that would take your breath away. This incredible performance was followed by one featuring an electric-powered jet flown by Nick Ziroli, Jr. This jet was also capable of 200 mph and an astonishing climb rate.

These performances were followed by an aerobatic routine featuring a half-scale clipped-wing Piper Cub. Unfortunately, I don't know the name of the pilot. But the size of the plane and its presence alone left you wondering how many grandchildren could fit in it.



A demonstration of giant size multi-engine aircraft came next, featuring the following: a Constellation in polished metal done in a MATS color scheme;







A C-46; and a C-47.



After these planes had landed, the C-124 taxied up to the fence, and there was a whir as the cargo doors opened under the nose, and a ramp deployed. The pilot then maneuvered an RC tank up the ramp and into the cargo bay.



And then there was the B-29. Many of you may have seen the videos of this on *You Tube*, and I recommend that you view them. It has to be seen to be believed. The plane has a 20 ft. wingspan and features an X-1 rocket plane slung below one wing. The B-29 takes off, the X-1 is released; and as the X-1 glides around, a rocket motor is fired in its tail—and off it goes into the wild blue yonder.





Meanwhile, the B-29 has continued climbing, and with a smoke system turned on, proceeds to go into a spin. It finally pulls out after many revolutions and then releases two parachutists.

But that's not all. Mac Hodges, the pilot, proceeds to wring the B-29 out like an aerobatic plane—loops, rolls, inverted passes flown low over the length of the runway—followed by a perfect side-slip landing.







Open flying resumed after the B-29 show. There was so much to see and do between the pits and the flight line; we didn't know where to look next—impossible to focus on any one airplane.

















Oh, and I can't forget the food provided by the local Cub Scouts, both very good and reasonable. Can you say "cheeseburger, soda & chips for \$4.00?"

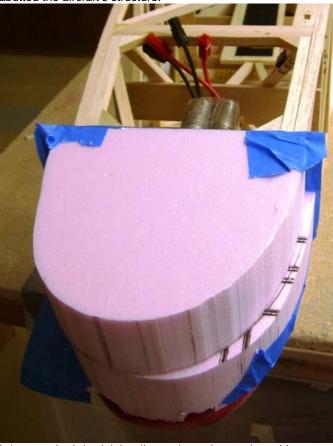
All in all, it was a great day. This is something any RC flier would love, but would also be greatly enjoyed by non-fliers. I can't wait for next year!

Eric

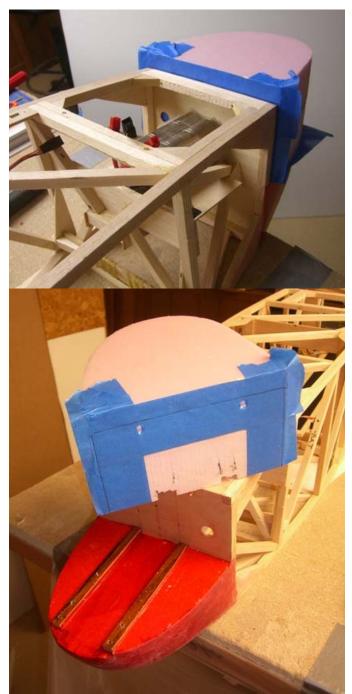
Build a Cowl

Slogging along to finish my Boehle's Giant Old Timer I reached the point where I realized I would need to build a cowl. The front former on this beast is about nine inches square and that would be a lot of drag unless I did something about it. I only needed to build one (or so I thought) so the "conventional" process of molding fiberglass was not necessary. Conventional you ask? Well in the professional world they first make an exact model, and then take a female form off it with plaster of Paris, or worse, fiberglass. Then they build a structure around the fiberglass mold before covering it with wax, building layers of fiberglass and epoxy then applying a vacuum bag, pull vacuum apply heat and stand back.

No, all I wanted is a simple fiberglass shell so I decided to build one over a mold or plug then finish the outside by sanding smooth, applying some sanding sealer and painting it. So to begin I glued up some oversized pink extruded foam blocks and covered them with masking tape where they abutted the aircraft's structure.

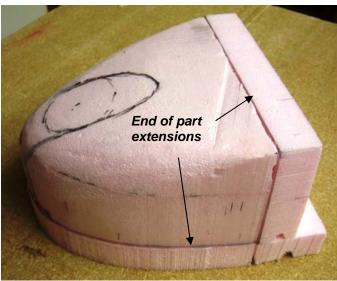


I then marked the joining lines where the cowl would mate to the structure. But I would need to make the plug undersize so the outer mold lines of the finished cowl would fair into the model. The cowl will have thickness so I needed to make the mold undersized by this thickness. This I did by eyeballing an offset to the scribe lines. Next I had to judge the overall shape before beginning to carve. Obviously I could just eyeball a smooth aerodynamic shape but there were features of the Forster 99 engine that needed to be accommodated, specifically the exhaust and needle valve access. So I did another eyeball job with the Forster offered up alongside the rough foam block.



Now it was time to carve, but not so fast. Thinking ahead (and watching the pros for a lifetime) I realized you need to extend the mold to allow the laid-up material to extend beyond the finished edge. This allows the part to have a good edge when you make the final "end of part", or EOP cut. So I added two more blocks to the surfaces that would be cut to match the model; then I carved. The extruded foam, available from Home Depot or Lowe's, carves and sands very easily and takes a good finish too. Don't use Styrofoam; the beads will give you troubles. Finally I needed to finish the surface so as to allow the part to be removed from the mold; you don't want to have to scrape and tear the foam glued to your nice finished part. Some even accomplish this by soaking it in gasoline, ending up with a noxious gummy soup; don't do it.





I decided to finish the mold with thin cheap packing tape applied as smoothly as I could then shrunk tight and smooth with my heat gun. It was not perfect but good enough.



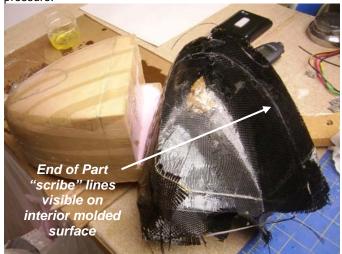
Next step to apply some good automotive paste wax to allow for separation, but wait; in my haste to make a smooth mold I had sanded over the EOP lines! How would I know where to

cut the overflow material? Better do something about it. I know, I will hot glue a cotton thread at the now still visible EOP lines. I was ready to lay up the cowl.

Now where is that three-ounce fiberglass boat cloth I have been hoarding for about thirty years; can't find it. What to do? Well, I do have a stash of graphite cloth "off cuts" and rejects from my days at Scaled Composites (the shop guys were very good to me). But do I want to use this black gold on this part? Time is a wasting, so yes, get on with it. And what will I use for epoxy? How about the half gallon of West Systems the same helpful guys gave me?

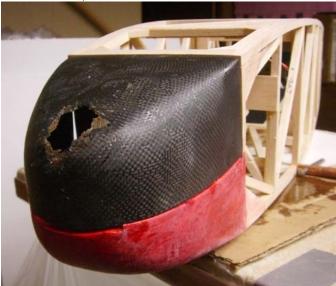


I cover it with Saran Wrap and again heat-shrink it. This layer will be faithfully reproduced on the outer surface of the part so I want it to be as close to finished as possible to minimize the sanding and finishing. I also want the Saran to apply some tension or pressure on the layup, and this is the result when tension is applied to this layer except where the surface is flat. Here I apply some foam pads and rubber bands to apply the pressure.



Hey, how about that? A great part and I can clearly see the EOP lines on the inside. Trimming this part will be a breeze. And so it is. Now to sand the exterior, easy to do by laying it back on the mold and sanding away with my long sanding boards; Oh, yes, at this step it is MANDATORY to wear a mask, the evil little particles in the sanding dust are rather like those in asbestos, and we all know how bad that is.

How about that; a cowl that fits.



Now to apply some structure and fastening means. I already installed some locating dowels in the front former so I added a ¼ inch ply piece and mated it to the dowels.



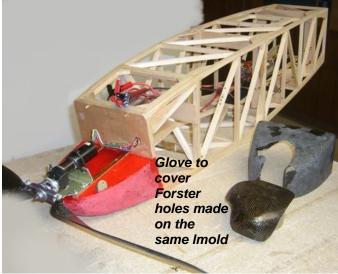
Now to trim it to clear the Forster. Not only does it need to clear the engine while in place, but I need to be able to install it too, so extra clearance is necessary. I decide to make the final fastening with two 6-32 screws through small aluminum angles fastened to the lower fairing. Hey that Forster installation looks pretty neat, but I also need to fly with the small electric motor in the electric Texaco event and the Forster "holes" make it look like there is no cowling at all. I need to make a glove to cover the hole when I fly electric. Hey, I can do that with the mold.

Just lay up a new piece





Here is the glove made off the same mold. It fits like.... a glove!



All in all a satisfying job. You could do this too; you might even use just brown paper and thinned white glue instead of fiberglass or graphite. Joe Secunda reminded me that this would be papier mache a form loved by fine arts majors.

But I like my graphite cowl. In fact I won't paint it, but rather put one clear coat and admire what the rich folks pay \$100k for in their classy automobiles; a graphite dashboard.

Dave Harding

Light, Soft Balsa (long reply about the industry) This is a reply to a discussion by SAM members looking for some lightweight balsa.

First, if all you want to know is where you can by exact graded wood scroll to the bottom. If you want to understand more about the industry and balsa in general read on.

I always like to follow discussions on balsa wood as I have developed an interest in how people view the material. I consider myself to be fairly knowledgeable on the subject based on cutting and handling over 5000 sheets of Tru Weight balsa, handling the thousands of sheets of contest wood we use at Peck Polymers, looking through all the Indoor Model Supply wood we got with our purchase of IMS, and developing the process we use to cut wedge shaped pure C gain wing blanks for Sting Aero glider.

Basically I have seen, handled, and cut more wood in the last few years than most modelers would purchase in 10 lifetimes. I have also dealt with and discussed the subject extensively over the years with Superior, LoneStar, Specialized, National, Nosen, Balsa USA, Sig, Baltek, MAL Hobby, Lew Gitlow, Joe Maxwell, as well as numerous others that have spent time learning to cut quality balsa. My point is I have dealt with a LOT of balsa and between raw blocks and cut wood probably have enough on hand to fill a 20' tractor trailer. So I feel I am familiar with balsa on a level that only the others in the world that deal with it professionally and in large quantities know the material.

Here are my main points:

- 1 There is no one mill that has magic wood that is always exactly what you want.
- 2 Wood from all the mills will vary in color, quality, and density.
- 3 For a mill to make a profit and stay in business they need to be able to either sell all the balsa they receive as raw stock or charge a higher price for the pieces they sell to include the cost of the pieces they scrap.
- 4 You can not determine the density range of a specific sheet by only weighing the block it is to be cut from.
- 5 To get specific density sheets you have to weigh and grade individual sheets. Unfortunately this costs money and results in more expensive balsa. Remember, these are businesses and the people working there want to get a pay check.

So what is the bottom line of all this? Well quite simply, the only way to get the density, grain, color, etc you want is to select it out of a large stock of wood.

Think about it when you go to (or more likely in the past when you went to) a well stocked hobby shop and looked through their balsa bin. How many of those sheets were what you wanted? I have stood in front of Superiors Contest wood rack that probably held 3000+ sheets of wood. I only found maybe 30 - 40 that were what I wanted. But if you don't have the opportunity to pick it yourself, you would have gotten a random selection from that rack. Some great, some not so great.

This is true of ALL suppliers that do not offer individually graded product. There are a very few suppliers that will actually send you more closely graded wood. But it also costs more money as there is the labor as well as the need to allocate the cost of the scrap material to the salable material.

As far as I am aware, we at Peck Polymers are the only company that is offering wood graded by the individual sheet into 1 lbs/cu ft increments. It is a very cost intensive process. It also gives us great details on how rare (rare = valuable) light thin sheets of balsa are. When we grade through 100 sheets of wood provided by a mill as 4 - 6/7 lbs contest here is what the normal distribution is for thinner sheets:

- 1 2% 4lbs
- 2 4% 5lbs
- 10 25% 6lbs
- 40 60% 7lbs
- 5 20% 8lbs
- 2 5% 9 & heavier

For thicker sheets the distribution from the same suppler out of the same batch of logs tends to trend a little lighter. I will not get into my theory on why this it, but I can assure it is a fact. So if you want 4 lbs wood you either need to buy 100 sheets and you the historical statistics say you will get 1 - 2 of what you want, or you have to pay some one else to do the sorting for you to find that rare sheet.

Now if you bought 100 sheets and let's say they cost you \$1.00 each and you then invested 2 hours to weigh, stamp, and store them, what is the value of those 1 or 2 4 lbs sheets? It is definitely not \$1. Economic theory in our capitalistic society says that the price should rise so that the demand matches the available supply.

So now that you have suffered through my soapbox lecture you have a couple of choices.

- 1 Spend your \$4/gal gas to drive around to lots of shops and search for that piece of 4lbs wood you want. This will make for VERY expensive wood even if you don't include our time.
- 2 Buy a lot of wood for the supplier that has magic wood and feel like you saved money because you spent \$100 for 100 sheets even through you will only use 10 of them in your lifetime. To me that means you just spent \$10 per sheet for what you really wanted.
- 3 Pay someone else to do all the above and get a sheet that is what you wanted in the first place. Yes the price on that sheet may seem high, but not when you consider that you didn't have to buy lots of sheets you will never use or spend your time and gas money searching.

If you want to by an individually density graded sheet visit our e- store. This link will get your directly into the Peck Contest Balsa department http://www.peck-polymers.com/store/Category.asp? Category=BuildingMaterials%3

ABalsa%2CPeckContest Here it is as a tiny URL incase you can't get the long one to work: http://tinyurl.com/ContestBalsa

Tim Goldstein,

A2Z Corp Peck Polymers, Indoor Model Supply, Sting Aero divisions 1530 W Tufts Ave Unit B Englewood CO 80110 www.Peck-Polymers.com/store





Up and Coming Activities

The NEXT two club meetings will be at Sleighton Field;
Fly at 5 - 7, meeting at 7.
12 August

9 September

Gas models OK

Walt Bryan Memorial Electric Fun Fly at Christian Academy Field 23 August

Hey, let's fly in the Electric Texaco Postal Competition again and the Speed 400 Postal too.

Please mark your calendars