

THE BRASS POUNDER



**Newsletter of the Carolina Southern Division 12, Mid-Eastern Region,
National Model Railroad Association**

Volume 24 Number 5

May 2024

Division Coming Events

**May Meeting – Come out
and see us at the NC
Transportation Museum's
Train Show at Historic
Spencer Shops**

**Time: May 18, 9-5 and
May 19, 10-4**

**Location: 1 Samuel
Spencer Dr, Spencer,
NC 28159**

Superintendent's Corner

By Andrew Stitt

I enjoyed myself at the recently completed Railroad Model University held in Concord. I got to see a number of familiar faces, plus a few new ones. It was nice to see some folks from the SER Palmetto Division, and Jack Dziadel from the Carolina Piedmont Division. I hope in the future we might convince a few more of our fellow modelers from neighboring Divisions to attend.

One of the things that struck me during that event is that it is an entirely volunteer effort by our members. Quite a few of them are already volunteering for other things that needed to be done by the Carolina Southern Division to complete our mission of presenting and promoting our hobby to the public. RMU Dean Doug Algire spent a fair amount of time organizing the event by communicating with the clinicians, the church (thanks again to the West Concord Baptist Church!), Roy Becker for helping to

organize the registration, and Joe Skorch for getting things onto our website in a timely manner.

We hear on a fairly frequent basis about the help needed to support the model railroad displays at the Newton Depot. Thanks to volunteers Gil Brauch, Ed Smith, Bob Halsey, Keith Iritsky, David Manko, Andy Thompson, and Tim Rust (sorry if I left out others), the model railroad center and Taintown continue to be open every Saturday for visitors to drop by and enjoy seeing model trains in action. It seems that word has gotten out around there as it being a place to take the family to be entertained for a while. Again, they are doing the work to help CSD's mission.

We have been invited to the train show at the NC Transportation Museum coming up later this month. We will have two tables near the Metrolina Model Railroaders modular layout. I expect we will have our display on one of these tables complete with brochures from the NMRA and copies of the NMRA magazine to give to interested parties. (We will not be selling anything at this show.) The other table's use is open for discussion. In recent times, we have had our Timesaver switching layout, or done demonstrations on making things for the layout. Again, the key here is we need volunteers to man the table during the show. It's not hard to do. Just talk with fellow model railroaders! Sure, you will meet some that will have plenty of reasons not to become a member, but you will also meet some people who know little or nothing about our organization.

Please consider giving a little of your time Saturday and/or Sunday. If so, let me know so I can schedule times appropriately.

One final thing, as an added bonus this year, I have learned that Gary Brown, the VP of the Mid Eastern Region will be attending the show. After many years in the Navy living across the US, he and his family have settled in the Tidewater Virginia area. Gary has decided it is time to “thin the herd” and sell some rolling stock that “doesn’t quite fit” the era or locale he is now modeling. So, while you’re at the show, say hi and check out his stuff. Let him know that CSD is alive and well.

Editor's Notes

By Chad Barnette



What a great time! We all just got from attending this year’s RMU and it was a blast! I enjoyed doing my 3D Printing / Laser class again. It was certainly rewarding to have Joe Skorch really take off with his 3D Printing pursuits after last year’s class. He most certainly has passed me by in skill level for FDM printing. Resin printing is my new thing and I’m enjoying learning how to improve my skills there. A little bit of a resin printing article can be found later in this issue.

I also had a lot of fun attending John Duino’s Z-scale class. It was a great primer on a subject that sometimes seemed not so approachable. I think I have enough of an idea now to move forward and dabble a bit in Z. That seems to be what I like to do these days – dabble in a little of this and a little of that. If I get a little Z layout, then I’ll be involved in three scales at the same time. The more the merrier I say!

Area Train Shows

**Historic Spencer Shops Train Show @ the NC
Transportation Museum.**

May 18: 9-5 and May 19: 10-4

SUBMISSION GUIDELINES

I target the 1st of each month for publication. Please submit articles for publication by the 25th of each month.

The preferred format is MS Word, but I can convert most other formats.

For questions and help, email me at editor@carolinasouthern.org

Division and Regional News



AP Awards from the Plywood RR Desk

Contributed by Neal Anderson, MMR

Neal Anderson has provided the following updates for the achievement program activity last month.

- Andrew Stitt received his golden spike and his Chief Dispatcher (pictured below).
- At RMU there was one model to evaluate. After talking to Howard Garner/owner about the bridge, it received a Merit award.
- Other models were present and working on the paperwork to get them ready by Joe Skorch.
- I have two more Merit awards to hand out at next month's meeting.



RMU 2024

Well, that's a wrap on RMU 2024! We had a nice turnout this year as we get into the groove of holding the event in the post-COVID world. We had over 14 instructors and even more classes on offer as some instructors had more than one class on offer! Thanks so much for everyone's help in making the event so successful – Doug and Roy for event planning, and thanks to all those that offered a class, or helped setup in some other fashion.

The Workbench Wing

This month we are taking an extended look at the workbench of Keith Iritsky and Ed Smith. Thanks Keith and Ed for your submissions. While I'm on the topic, I'm fresh out of workbench photo submissions after Keith. If you like this feature of the newsletter, then by all means please send me a photo of your workbench. Messy, neat.....we accept all types. OK Keith and Ed, take it away.....

A look at Keith Iritsky's Workbench

Contributed by Keith Iritsky

The photo "workbench" is an overall shot. Paint rack from Amazon in the back, along with other racks for larger than Vallejo bottles. Tool bins from Harbor Freight holding various tools, tapes, popsicle sticks, epoxies etc. The cutting mat, at the moment, is covered with a piece of 1/2 inch tempered glass which is an absolutely flat surface for building objects. 123 blocks on the left along with some machinist blocks and steel plates for weights. and on the right a Choppah, (As Arnold would say.)



The photo "Workbench left" is a closer shot of the workbench, with hookup wire, pencils, and frequently used tools. Workbench right has a 16" long magnet, holding knives, files, tweezers etc. Glues are on the bench, along with optivisors that I use more and more

every year. Homemade sanding sticks are hanging with various rulers. Just glue sandpaper to free paint stirring sticks from Lowes. Power tool row is a shot of my scroll saw, and 1" belt sander from Harbor Freight. Homemade spray booth at the end. Not shown is my laser cutter and Micro Mark mini table saw that didn't fit in the frame.



Photo 1 – Workbench Left



Photo 2 – Workbench Right

The IV Dremel stand was a \$20 buy, from a discount medical supply house. It has wheels so I can wheel it over to where I'm working with the Flexible Dremel attachment held out of the way. On the floor next to the chair is a four-tiered rotating shelf holdy thingy from, you guessed it, Harbor Freight. the wood and plastic strip Photo shows My paper towel cores hot glued to a wood base to hold the wood. The plastic stock still in their bags, for Identification, are held by cup hooks screwed into a piece of 1/4" plywood that slides out for access.

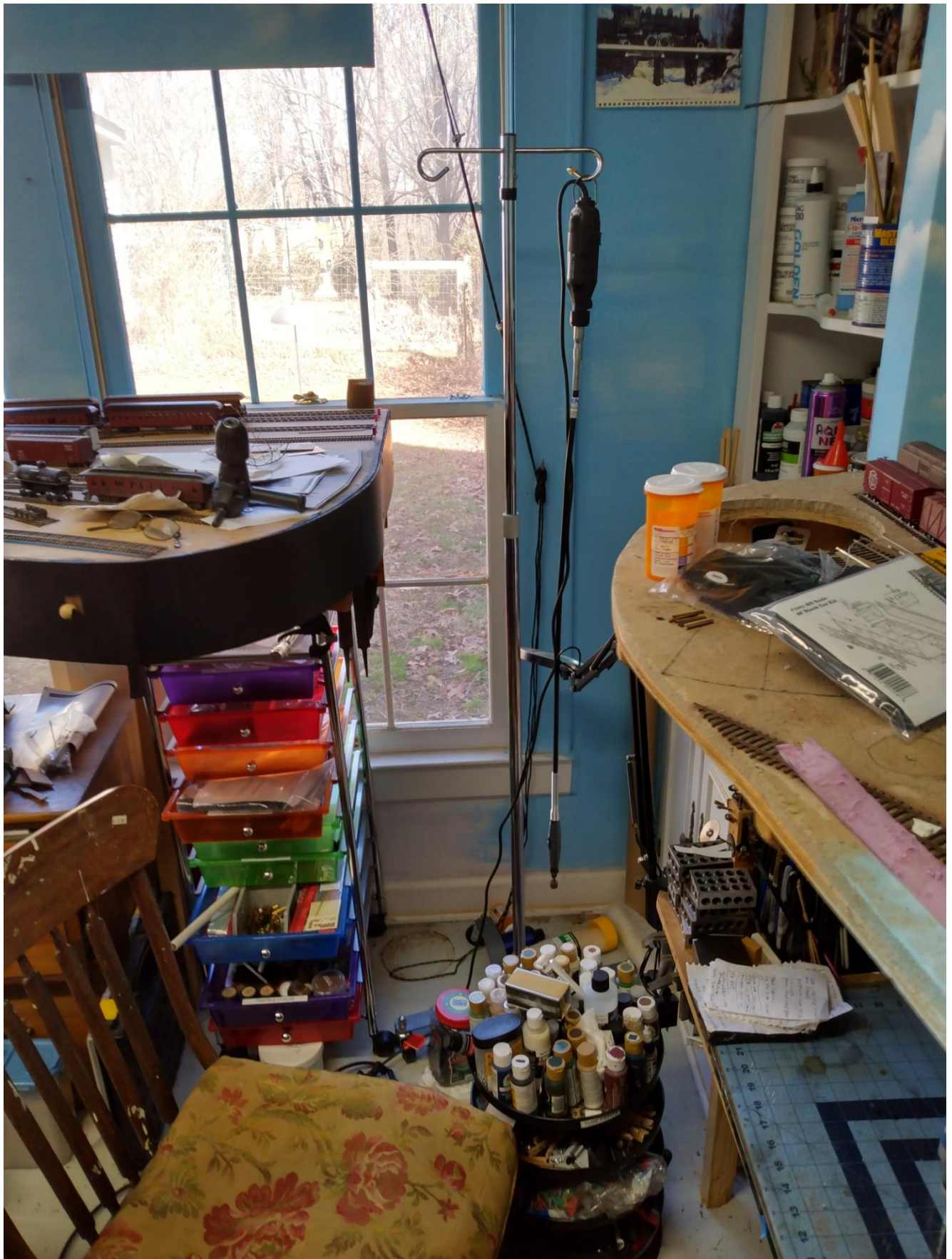


Photo 3 – IV Dremel Stand



Photo 4 – Woodland Plastic Strips



Photo 5 – Tool Row

A Look at Ed Smith's Workbench

Contributed by Ed Smith, MMR

For the last 5 or 6 years, I've written in this newsletter many articles on all facets of model railroading. So, here are pictures of the laboratory where I, the mad scientist, create all the magic.

First, you enter the workshop, which is next to the utility room where my helix is stored. When it was empty, I thought the 10' x 12' space was more than adequate, but now I have second thoughts (pic 1). One long side has the workbench and storage for building structures, etc. (pic 2). The opposite long side has a bench for rolling stock, engines, and all electrical work (pic 3).



Picture 1



Picture 2



Picture 3

The short walls contain a desk, table, and shelves with paints, stains, and weathering products, plus more storage (pic 4, 5). In the corner near the entrance, I have a computer and auxiliary Digitrax System where I plan on setting up my programming track (pic 6).



Picture 4



Picture 5



Picture 6

Finally, the last picture 7 is where I'm starting to lay out the 42" long Susquehanna Station that I hope I can scratch-build before our October regional convention.



Picture 7

Help Wanted

Contributed by: Andrew Stitt, Superintendent, CSD

I am looking for a person or persons to help with improving the marketing of the Carolina Southern Division. Among the tasks are improving the design and development of new materials to be used on our tabletop display as well as developing a new tri-fold brochure to promote the features and benefits of being a member of CSD. We would then use it in addition to the promotional materials provided by the NMRA at train shows and other events.

I'm also looking for a person or persons (same or different from above) willing to help develop and update our website. Understand that our budgets for these projects is nil or none, so professional services need not apply.

So, anyone who has experience in these areas and is willing volunteer their time please contact me at the Superintendent's email address below. Thanks



Resin Printing and the Scary Things

Contributed Roy Becker

Hop aboard for a brief primer on the steps involved in post-processing resin prints. If you have looked into resin printing at all, you're probably familiar with the terminology of post-processing. In the context of resin printing there are two aspects to post-processing:

- Removing uncured resin from the surface of the print. Invariably there will be some level of resin on the print. Under no circumstances would you go directly from printing to curing.
- As you might have guessed, the next step is curing. "Curing!?" you might say. "It's already cured isn't it". Just like when you go to the dentist, there are multiple cures. In this case, the primary curing takes place during the print cycle while the screen on the printer exposes the vat of liquid resin to the shape of each subsequent layer of the print. The final cure takes place after the printed object has been cleaned. A little more on this later.

First let me orient you here with my machine. Below you see my Elegoo Saturn 8K machine with the UV light shield removed from the top. By the way, the shield does more to protect you from fumes than it does to protect you from light. Below you see the star of our show, the "vat". The vat is the reservoir of resin that you simply pour in. At the bottom of the vat is the "FEP" (fluorinated ethylene propylene) film that is stretched across the vat and attached via a series of about 40-50 screws. The vat of resin liquid and the FEP sit on top of the LED screen. The job of the LED screen is to light up in the shape of each "slice" of the print.

The flat metal plate seen at the top of the machine lowers itself into the vat of liquid resin until it is right up against the FEP. The shape of the first layer lights up on the screen and the first layer of the print solidifies on the metal plate. The process repeats itself over and over again with the metal plate rising (in my case) only 0.01mm each layer. In case you're curious, each layer takes about 3 seconds, but is totally dependent on how you setup your machine.

Ok, so enough about the printing process, let's move onto what I referred to in the title as the "scary things". I don't know about you, but before I dove into the world of resin printing it felt like all the information I could get my hands on was warning me about all the dangers of resin printing. To be fair, some of these warnings are legitimate and we should all heed these warnings. I was always afraid of dealing with the resin "post-processing". A very messy job indeed it seemed. How would I, Mr. Safety, deal with this poisonous resin and how on Earth would I get it all cleaned up.

Well I'm going to briefly walk you through the steps of the process so you can see for yourself what's actually involved. Then you can decide for yourself how difficult this post-processing thing is. The next picture you'll see is right after the print is complete. The print is stuck to the build plate awaiting removal. All I have to do at this point is remove the build plate which just requires unscrewing a thumb screw that you cannot see in the picture.



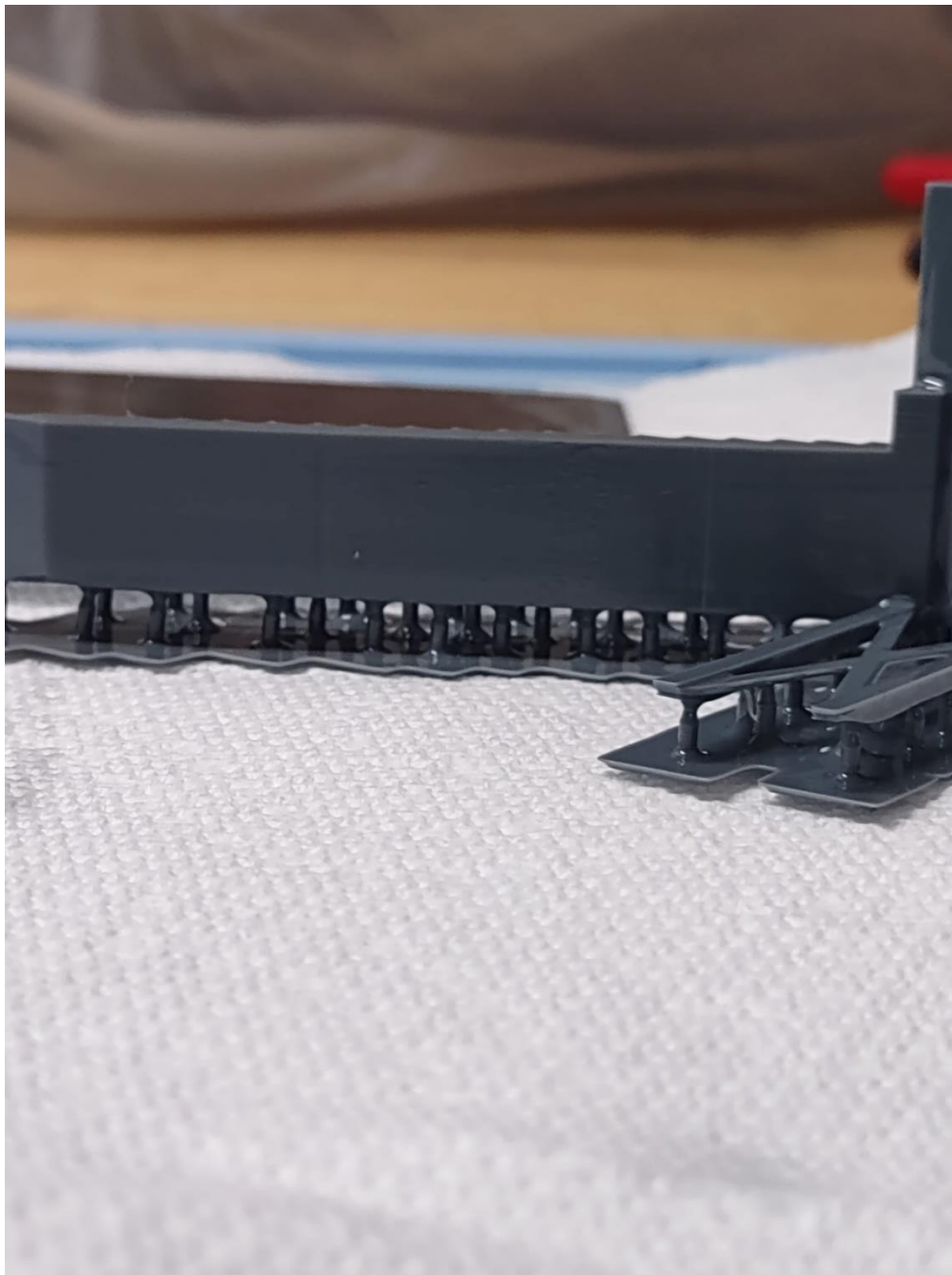


This is probably the messiest stage of the cleanup. The build plate is covered in resin. I prepare the area with a boatload of paper towels. By the way, if you are trying to skrimp on paper towel usage, resin printing is probably not for you! The way I figure, the more I absorb the resin, the less likely it ends up on my skin. Next, you simply use the putty knife provided with your machine to slide underneath the print until it releases and falls off the plate. Note that you should hold the plate close to vertical so as to not put pressure on the piece that connects to the machine. You can easily alter the level of the build plate if you do this.

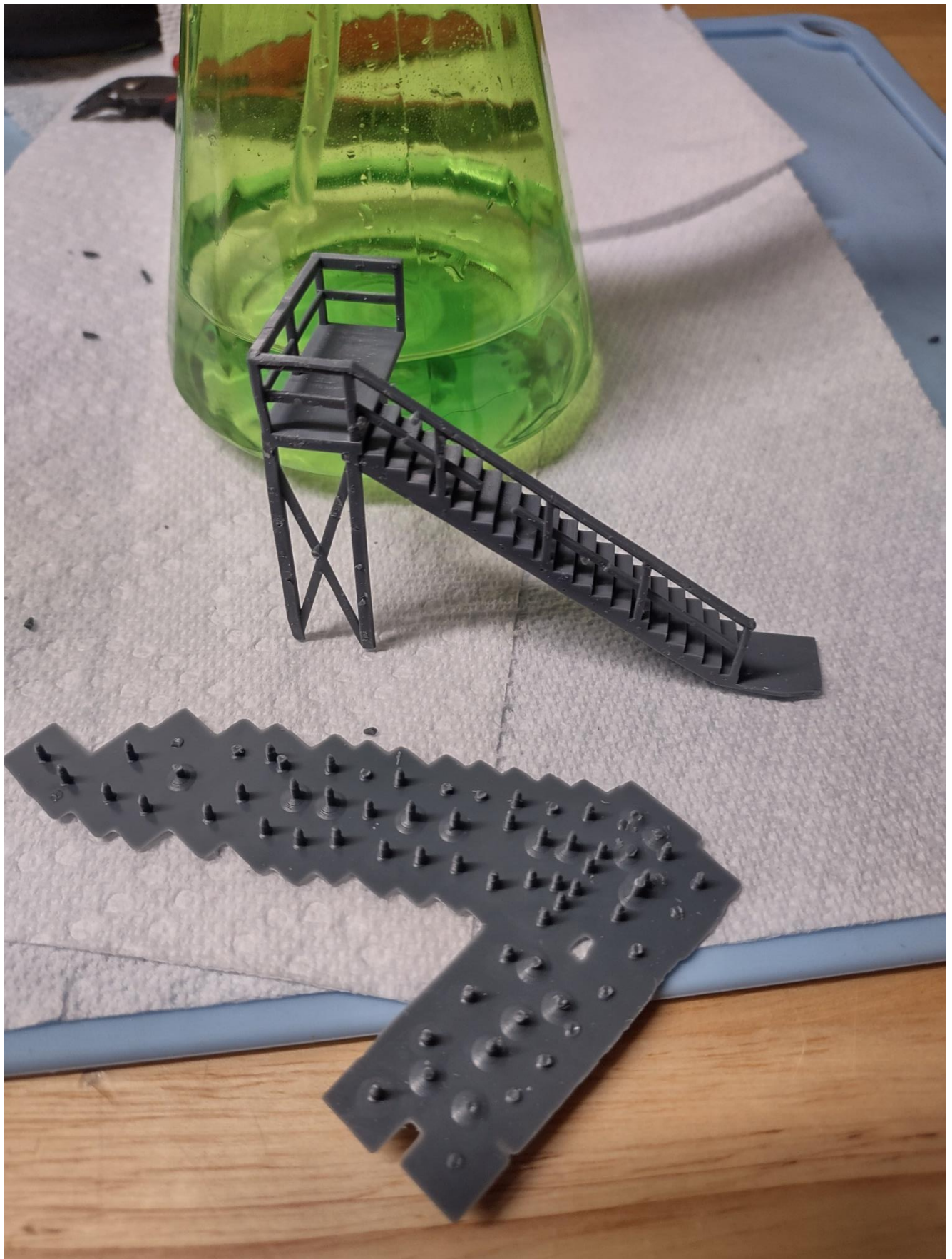


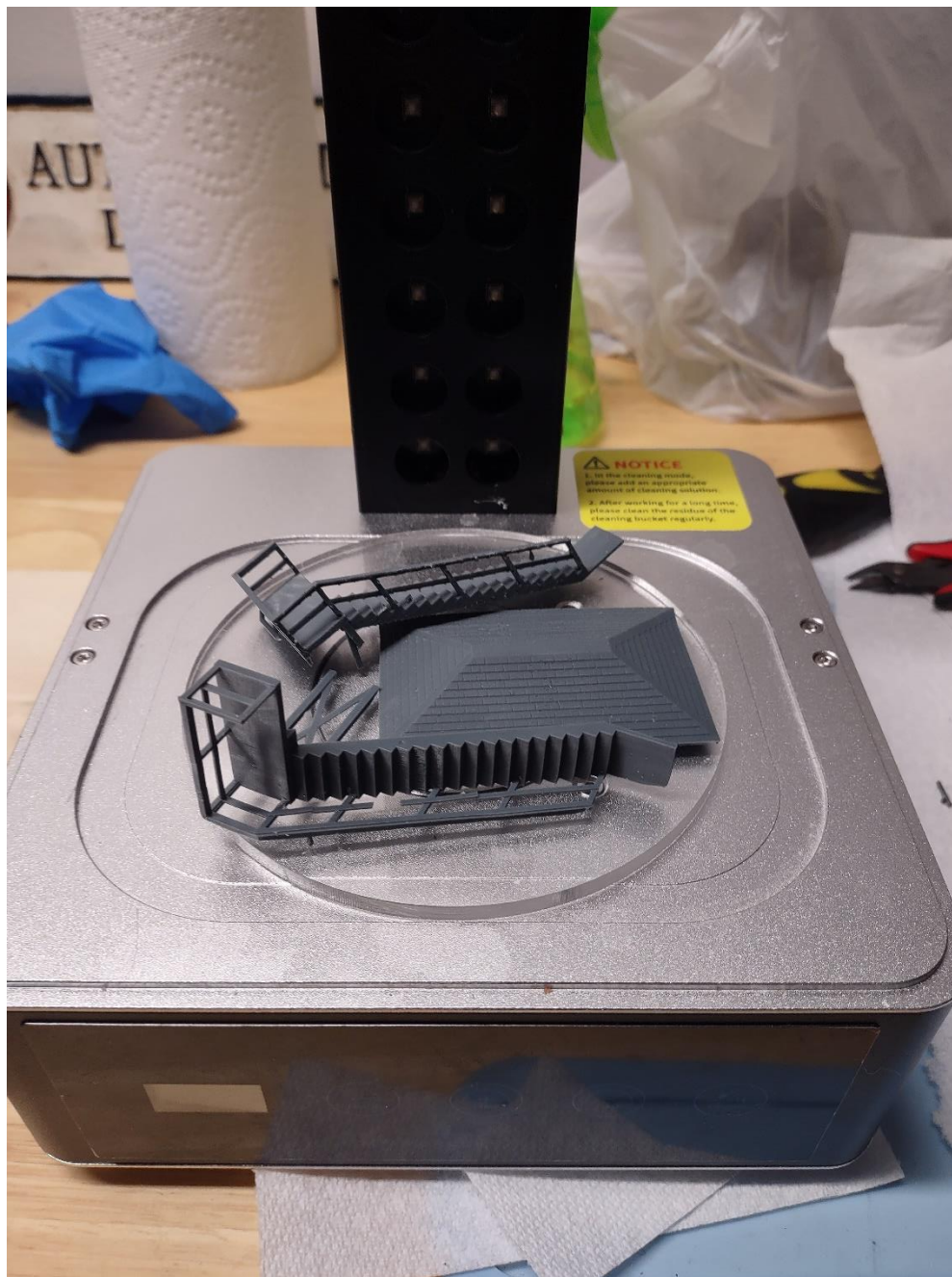
Next in the post-processing sequence is to wash the print. There is layer of uncured resin on the entire print. If left uncleaned, the uncured resin will cure and become part of the finished piece. There are several schools of thought on the solvent to use for cleaning, but the most popular by far is IPA. I use at least a 91% mix if I can, but there's nothing to say you can't go lower - it just won't clean as well. Above you see my favorite purchase that I've made in relation to the resin printer. That's my cleaning and curing station. It's a two-in-one deal. The container that the print goes in has an impeller driven by a magnet in the base of the station. It does a nice job of cleaning the print. I clean them for around 5-10 minutes.





Now that the print is clean, it's time to remove the supports. Depending on what you have printed this can be a delicate stage that you certainly don't want to rush through. If you are not careful, you can break your piece or remove unwanted chunks of your print by just ripping the supports off. Using nippers is an easy way to work around delicate areas. In general though, they do snap off cleanly, but a little bit of sanding is advised after you cure the print to remove marks left by the support removal.





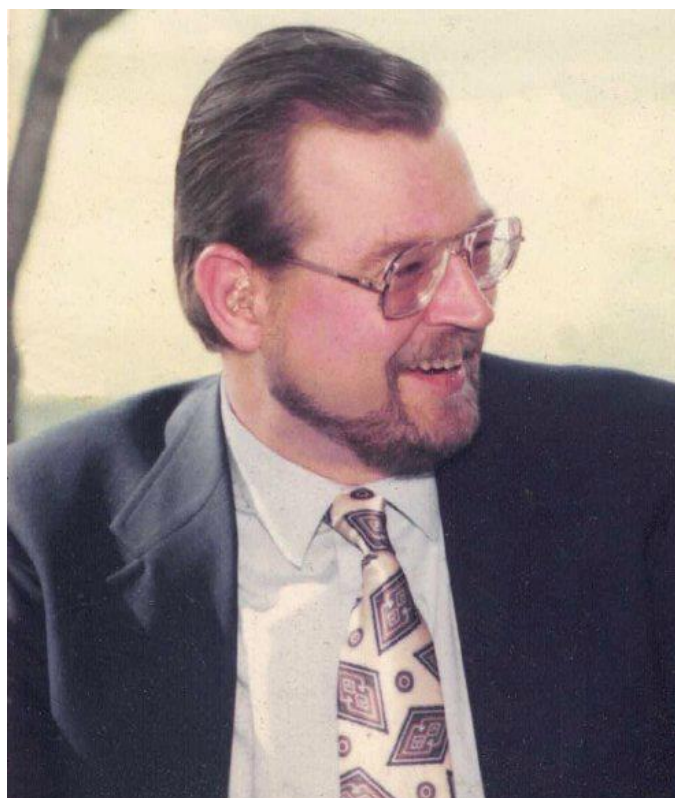
And now we return again to the same station, except this time we will be curing the print with UV lights. A nifty turn table takes the place of the bucket of IPA. Place your items on the turn table and put the cover over the machine to protect your eyes from the UV light. Personally I never trust that these covers offer any type of protection and I avert my eyes religiously while this thing is on. Well that's it! One final note is there is a very small percentage of shrinkage that occurs during UV curing. So far for me, I haven't had any deformation that I couldn't live with, but some folks take this shrinkage into account when designing their prints. I'm just not that sophisticated I guess!



One final thought – and if you took my class at RMU you already know what I’m about to say – if I had to choose between FDM printing and resin printing, generally speaking I am going to pick resin printing. The quality I am able to achieve and the consistency seem to far outweigh the difficulties I have had with FDM printing. However, it certainly depends on what I’m making. There are certain types of parts I would much rather print on the filament printer – particularly small, flat parts. Was resin printing really as scary as I made it out to be in my head? No, not really. It has taken me time and repetition to get accustomed to it though. Well that’s all for now, thanks for tuning in to the resin broadcast today.

CLOSING PAGE BONUS

From Trains.com - In Memoriam: Dennis E. Storzek. Noted freight car hobbyist Dennis E. Storzek died April 21, 2024. He produced resin kits under the Dennis Storzek Modelmaker label and was a co-founder of Accurail Inc.



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