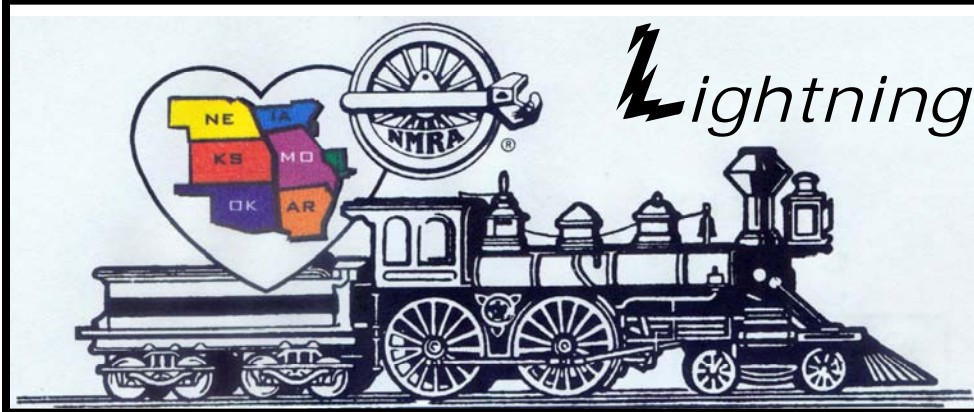


Turkey Creek Division



Lightning Slinger

VOL 25 NO. 10

“For all gauges and all ages”

October 2011

MONTHLY PUBLICATION OF THE TURKEY CREEK DIVISION
OF THE MID-CONTINENT REGION, NMRA

Clinics for October 25th meeting

How I designed operations on my Silver City Division of the ATSF ...

by Gary Hankins

Gary will describe how he designed the layout for operations
and how he sets up for sessions and decides
upon operations on his layout.

The layout is Gary's rendition of the "Silver City Division" of the ATSF
with one major ATSF classification yard and a receiving/distribution yard in Omaha.

Interchange occurs with the D&RG, Kansas City Southern,

Union Pacific and Burlington Northern RR's. Staging is

used to enhance operations with run thru trains, including Amtrak.

Quick Clinic

Stretch Modeling Presentations with a Touch of Art

by Larry Diehl & Pat Harriman MMR assisting

Larry and Pat will expand on a clinic given in Sacramento on the creating more visual interest in
your dioramas using basic design concepts used in Art & Architecture.



October 2011 Newsletter - Turkey Creek Division

Hello Everyone.

I hope everyone gained some better knowledge of resins, castings and methods. I've never used heat on the molds. I would have guessed the RTV would melt or burn laid on hot plates as Bob Hayes demonstrated. Obviously it works! Reading the book, it's recommended to achieve the best castings.



I did like the cars, being one that grew up in the 60's with hot rods, putting in high lift cam shafts, hand "polishing" my head ports and cranking up the timing mark straight up under the water pump on my 283 Chevrolet ... to get that precious little extra! At least I thought I did!

As great as Bob's cars were, they're still too big for my HO models! Back to reality. Bob did leave the extra resins with me and if anyone wants, call me and you can borrow them to experiment yourself, if any is left.



Don't know about you, but also never used the "putty". I think that has some good applications. How about a roof mold from Bar Mills or Paper Creek shingles ... the putty won't creep under the shingles! I'm going to try it. How about putty to make impressions of people figures? Did you notice how flexible the resin was when pulled from the mold early, and warm? You could bend arms, legs, sit them down, stretch the arms up "reaching" or "carrying things" like pipe or boards ... then let the resin cure for 24 hours.

I also never knew you could paint the mold and the casting resin would pick up the paint ... pre-paint wall molds gray for concrete, red for brick or black for "old wheels or junk". Interesting!

Thank you Bob for enlightening us. Thank you for coming down from Topeka. Very good clinic.



We are still looking for an alternate site for next year's annual meet in August. Please give this some thought!

As Pat Harriman reported, a gentleman, Mr. Tom Pogh, has purchased several older RR books and has them for sale at assumed to be good prices. You may contact him at (913)432-2100 to check out the titles he has and his prices.



If you have any articles or photos you would like to get published, please contact Ted Tschirhart (816)861-3449 who is publishing both the Lightning Slinger and the Caboose Kibitzer. Ted is looking for material.

Fall is upon us, I hope you have some projects in the works! For me, it's a great time of year to build on your desired projects. The evenings are earlier, the weather is great and the leaves are pretty. The baseball playoffs are in full swing and it's fun to build as I listen/watch the games. Inspiration is abound. Enjoy your modeling.

Mark your calendar for our **Turkey Creek meeting October 25th**. Gary Hankins will have presentation on the operations on his layout, the Silver Division of the Santa Fe.

Sincerely,

Larry W. Diehl
Superintendent Turkey Creek & "Black Rock Yardmaster"



*This is a partial copy
of the Alumilite Catalog.*

ALUMILITE Product Catalog & Moldmaking/Casting Manual



*I ended up with several extra catalogs ...
If you want one, I will bring the extras
to the October 25th meeting.*

Alumilite.com
Carol Wedlake
Customer Service Manager
Technical Representative
office: 269-488-4000
fax: 269-488-4001
World@alumilite.com

ALUMILITE
Mold Making & Casting Materials

- Catalog Contains:
- Technical Data
 - Product Line & Pricing
 - Equipment
 - Usage Calculations
 - How To Information
 - Moldmaking & Casting Tips
 - Frequently Asked Questions
 - Material Safety Data Sheets (MSDS)

Alumilite Corporation
315 E. North Street, Kalamazoo, MI 49007
Tel: 1-800-447-9344 E-Mail: world@alumilite.com Web: www.alumilite.com



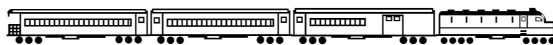


Physical Property Chart

Physical Property Chart

	Mix Ratio (wt or vol)	Mixed Viscosity (cps)	Pot Life	Demold Time	Specific Gravity	Hardness, (ASTM D-2240) Shore A or D	Color	Shrinkage (in/in)	Tensile Strength (ASTM D-638) (psi) or Tear Strength (ppi)	Elongation (in/in)	Temperature Resistance	Flex Modulus (psi)
Regular	1:1	190	90 sec	5-8 min	1.05	75 D	Tan/Black	.005	6,000	7%	250 F	310,000
White	1:1	90	2.5 min	5-15 min	1.05	72 D	White	.004	4,700	10%	140 F	200,000
Clear	1:1 wt	450	7 min	45-90 min	1.05	80 D	Clear	.005	7,020	8%	140 F	181,000
Water Clear	1:1 wt	400	5 min	30-60 Min	1.04	80 D	Clear	.005	4,700	7-10%	155 F	200,000
RC-3	1:1	110	3 min	5-15 min	1.05	74 D	Tan/Black	.004	5,000	12%	190 F	240,000
Amazing Casing Resin	1:1	90	2.5 min	5-15 min	1.05	73 D	White	.004	4,700	10%	140 F	200,000
Replicator 400	1:1	2,000	6 min	1.5 hr	N/A	85 D	Green	.0007	N/A	N/A	200 F	N/A
Replicator 421	1:1	2,000	6.5 min	1.5 hr	N/A	80 D	Green	.0008	N/A	N/A	170 F	N/A
Replicator 495	1:1	2,000	6.5 min	1.5 hr	N/A	80 D	Gray	.001	N/A	N/A	170 F	N/A
Replicator 532	1:1	2,000	6.5 min	1.5 hr	N/A	80 D	White	.0008	N/A	N/A	170 F	N/A
Ultra-Lite 400	1:1	2,000	7 min	2 hr	N/A	65 D	Lt. Tan	.001	N/A	N/A	200 F	N/A
Vac-Master 25	1:1	2,000	6 min	1.5 hr	N/A	80 D	White	.0006	N/A	N/A	250 F	N/A
Vac-Master 50	1:1	2,000	6.5 min	1.5 hr	N/A	85 D	Gray	.001	N/A	N/A	250 F	N/A
Shell	1:1	Gel	7 min	2 hrs	.56	60 D	Tan	Nil	N/A	N/A	200 F	N/A
610 Foam	1:1	400	90 sec	7-10 min	1.15	6 lb. Density	Tan	10x Expansion	N/A	N/A	N/A	N/A
Skin Coat - Flex	1:1 wt	Gel	8 min	3-4 hrs	1.05	75 A	Off White	N/A	N/A	N/A	N/A	N/A
Flex 30	1:1 wt	660	5 min	30-60 min	N/A	30 A	Honey	N/A	50 ppi	800 %	N/A	N/A
Flex 40	1:1 wt	660	5 min	30-60 min	N/A	40 A	Honey	N/A	55 ppi	700%	N/A	N/A
Flex 60	1:1 wt	760	5 min	30-60 min	N/A	60 A	Caramel	N/A	95 ppi	540%	N/A	N/A
Flex 70	1:1 wt	780	5 min	30-60 min	N/A	70 A	Ivory	N/A	150 ppi	510%	N/A	N/A
Flex 80	1:1 wt	790	5 min	30-60 min	N/A	80 A	Ivory	N/A	145 ppi	420%	N/A	N/A
Alumisol	1 pt	250	Heat Activated	Upon Cooling	.95	30 OO	Translucent	.1	N/A	<500 %	250 F	N/A

from catalog



RTV Silicone Rubber

We offer several different Silicone moldmaking rubbers. Here are some specifics on those rubbers:

Molding Material	Quickset	High Strength 2	High Strength 3	Plat 55	Putty	Amazing Mold Putty
Platinum/Tin cure	Tin	Tin	Tin	Platinum	Platinum	Platinum
Mixed Ratio	10:1	10:1	10:1	10:1	1:1	1:1
Mixed Viscosity	140	200	150	800	Putty	Putty
Specific Gravity	1.17	1.21	1.16	1.29	1.2	1.29
Pot Life	30 min	1 hrs	1 hrs	45 min	3 min	4 min
Demold Time	4 hrs	18 hrs	18 hrs	8-12 hrs	12 min	20 min
Hardness (Shore A)	45	20	10	50-55	20	20
Color	Tan	Pink	Pink	Blue	Purple	Yellow
Linear Shrink (%)	.6	.48	.48	Nil	Nil	Nil
Tear Strength (ppi)	20	145	115	70	35	35
Elongation	180%	500%	575%	200%	100%	100%
Tensile Strength (psi)	400	550	400	400	300	300
Temperature Range (F)	-70 to 400	-67 to 392	-67 to 392	-67 to 392	-67 to 392	-67 to 392
Key Characteristics Inhibition Sensitivity: Pattern Complexity: Dimensional Shrink age: Casting Material Polyester: Polyurethane: Epoxies: Low-Melt Metals: Flowmolded Vinyls	No Least Moderate Good Good Poor Poor Poor	No High Moderate Excellent Good Poor Poor Poor	No High Moderate Excellent Good Poor Fair Poor	Moderate Moderate Nil Fair Excellent Fair Good Excellent	Moderate Least Nil Fair Excellent Fair Fair Fair	Moderate Least Nil Fair Excellent Fair Fair Fair
Package Size Available	1 lb 5 lbs 25 lbs 500 lbs	1 lb 10 lbs 50 lbs 500 lbs	1 lb 10 lbs 50 lbs 500 lbs	10 lbs 50 lbs 500 lbs	1 lb 2 lbs 5 lbs 20 lbs 100 lbs	2/3 lb 3 lbs 6 lbs 20 lbs 100 lbs

Silicone Rubber



Tips for Successful Casting

As with all chemicals, you should always read and follow all of the safety precautions prior to working with the materials. Read all the safety precautions found on the Material Safety Data Sheets, printed on the bottles, and in this catalog before working with the materials.

Keep Alumilite out of the reach of children, do not take internally, and do not use in any way other than it's intended use. Even though it has very little odor, we still recommend using Alumilite in a well ventilated area. Safety first!

1. Mold Preparation

Before mixing and pouring the resin into your mold to achieve a cast resin piece there are a few things you can do to prepare your mold that will greatly enhance the physical properties and curing of your cast resin piece.

The first thing you can do is to preheat your mold. Warm the mold in a conventional oven at 150 degrees F for 30 minutes or warm your mold in a microwave for 1 minute/lb of rubber on high. This will only warm your mold and will not affect the microwave or your mold adversely. It will however help the thin sections of the mold and also help the resin set up uniformly to give you a consistent fully cured cast piece. It is highly recommended to warm your molds when using the Slow Set, Water Clear, or parts under a 1/2" in thickness to ensure proper curing.

Note: Do not heat the mold in a microwave if you have painted your mold or if you have already coated the mold with the Metallic Powders prior to casting.

Baby powder your mold prior to casting. Painting or sprinkling baby powder on all the surfaces inside your mold will greatly reduce the amount of surface tension in the mold. As the resin flows into the mold it will physically pick up each particle of the baby powder and will help the air bubbles away from the surface of the mold where they can be seen in your finished part. The powder will not change the appearance of your casting. Since the resin picks up and absorbs the baby powder, the white color of the powder will not show up in your finished piece. If you have a small paint brush, simply paint in the baby powder and knock out the excess before casting your part.

Warming your mold and baby powdering it prior to casting your piece will greatly enhance the physical properties and appearance of your cast piece by helping it cure properly and aiding in the prevention of air entrapment.

2. Mixing

Before mixing make sure you know the proper mix ratio of the material you are using. All of the casting resins are 1:1 by weight and/or by volume.

Before measuring out the B side of the Alumilite Regular you must first shake the B side. This allows the raw materials that separate to become homogenous again before measuring, mixing, and pouring. This will ensure the raw materials get properly mixed into the resin and that the cast piece sets up correctly achieving full cured properties.

You must mix at least a half an ounce of each side to ensure you have a proper mix ratio. If you measure out 1/4 of an ounce of A in one cup and 1/4 ounce of B in another and dump the A into the B you will be off ratio due to the residue left in the A side cup. In larger amounts of resin batches, this will not be enough to throw off the mix and cause an issue with the resin setting up. But with small amounts of resin (1/4 oz of each side) this will be enough to affect the mix ratio and will typically result in parts that appear darker in color and remain soft (never harden).

Once the materials have been measured out in separate cups, the preferred method of pouring one into another, to decrease the amount of air introduced, is to pour the A side into the B side.

After the materials have been poured together, mix vigorously (keeping the stir stick in contact with the bottom of the cup - reduces air from being introduced into your resin) for approximately 15-25 seconds. Make sure to scrape the sides and the bottom of the mixing cup.

3. Pouring

Once the material is thoroughly mixed, pour the resin slowly down the side of your mold cavity. Tilting your mold will prevent the resin from splashing in the bottom of your mold and creating unwanted air bubbles that would then need to find their way to the top of the mold. Similar to tilting your glass as you pour a beverage rather than letting it splash off the bottom creating air bubbles.

Squeeze the brim of the cup to form a point. This will allow you to pour a smaller stream of resin into your mold controlling the flow and reducing the chance of unwanted air bubble entrapment against the surface of the part.

If your mold has undercuts, pour enough resin into the mold to fill it half way. Then, tilt and rotate the mold in the opposite direction of the undercut to allow the air to escape up the side of the mold. Squeezing or burping the mold at the same time will also help relieve the air trapped in the undercut and allow the bubbles to release from the mold surface. Once you see air bubbles come to the surface of the resin and you can be confident you have removed the air from the undercut, simply top off the mold by pouring the remaining resin into the mold.

4. Open Time

To increase the open time of Alumilite resins, simply place the "A" & "B" sides of the Alumilite in the refrigerator for approximately 30 min. before pouring. This will increase your open time by 30-60 seconds. When cooling your resin, you must preheat your mold to ensure a proper cure.



Miscellaneous Tips

For Moldmaking & Casting

Demolding Silicone & Resin.

To aid in the release of silicone rubber from your mold box or your original, use a small amount of rubbing alcohol. The rubbing alcohol will make the cured silicone rubber very slippery and will help separate the silicone from the other surface. After you remove the original, dry out the excess rubbing alcohol with a paper towel or dry cloth. Be sure to warm and dry out the mold completely before pouring resin into the mold to avoid the alcohol from contaminating and affecting the resin.

You can also use rubbing alcohol to assist you in removing resin pieces out of a silicone rubber mold. Use the same process as mentioned above for removing your mold from the original and the mold box.

Release Agents.

When pouring RTV silicone moldmaking rubber against any non silicone surface, mold release is not required. If you are pouring RTV silicone moldmaking rubber against itself, you must use a mold release. Use Alumilite's Rubber to Rubber release or smear a thin layer of Vaseline anywhere the silicone will come in contact with the already cured RTV silicone rubber. If no release is used the RTV silicone will bond to itself and you will have a solid chunk of silicone. You will then have to cut the silicone to remove your original.

Barrier Coating.

Using a barrier coat will protect the RTV silicone moldmaking rubber and extend the useable life of the mold. Painting the mold with a fast drying acrylic or lacquer based paint will work sufficiently. Let the paint fully cure prior to casting. When Alumilite casting resins are poured into the mold, they will chemically bond to the dried paint. When you demold your piece, the paint will release from the mold because it is now permanently a part of the casting.

Painting the mold accomplishes three things:

1. Helps extend the life of your mold
2. Helps eliminate air bubbles on the surface, caused by surface tension
3. Gives you a finished painted part

Dyes.

Alumilite's coloring dyes can be added to Alumilite's casting resins to achieve any color you desire.

The dyes should be added into the "A" side of Alumilite's resin for compatibility reasons. The dyes are reactive which means they will crosslink and become part of the cast piece. The dyes will crosslink with components on the "B" side and that is why we recommend for shelf life reasons to add the dye to the "A" side.

As a rule of thumb, the dyes can be added up to 5% of the weight of the "A" side to reach a desired color. Adding less dye will achieve a lighter color.

Fillers.

Alumilite casting resins can be filled with any dry filler of your choice. Dry fillers are used to reduce the amount of resin needed to cast a part making it more economic, add characteristics such as weight, feel, or texture, and also to add physical properties such as strength, heat resistance, and durability.

If your filler contains moisture your part will foam due to the reaction with the moisture in the system. Use dry fillers if you wish to avoid foaming in your part.

Shelf Life.

The Shelf Life of Alumilite casting resins are 1 year in a sealed unopened container. The material will remain useable as long as moisture does not contaminate the resin. For extended storage periods, store in a cool dry place.

Pressure Casting.

Pressure casting is highly recommended when using Alumilite's Water Clear. The Water Clear is perfectly clear and all imperfections or bubbles will show up in your finished casting. The use of a pressure pot when casting the clear eliminates almost all possibility of air entrapment and will ensure your casting be perfectly water clear.

After properly measuring and mixing your Water Clear, carefully pour the resin into a warm mold. Then, simply place your filled mold into a pressure pot with 40 psi. Let the material cure under that amount of pressure. When you remove your casting from your mold you will notice the part doesn't contain any air bubbles.

Adhesion.

Bonding Alumilite is best when the material is still curing shortly after demolding. The best adhesives for bonding Alumilite are ones that promote a chemical bond. Adhesives that work include but are not limited to: MMAs, epoxies, CAs (super glues), one part silicones, one part urethanes, and hot melts.



Calculating Product Useage

1. Amount of RTV needed for making a Mold

Note: There are 21 grams per cubic inch of silicone rubber
There are 453 grams in 1 lb

Formula for a Square/Rectangle Mold. Length x Width x Height

Example: You have a mold that is 9" x 4" x 2" = 72 cubic inches
Now using the same formula subtract the Cubic Inches of your part.

Example: Your part is 8" x 3.5" x 1.5" = 42 cubic inches

Then you would take 72 - 42 to give you a total of 30 cubic inches

30 cu in x 21 grams/cu in = 630 grams of RTV needed

And then if you want to calculate that into lbs take 630 divided by 453 grams/lb = 1.39 lbs of RTV

For Round Mold. Pi x Radius (squared) x Height

Example: The diameter of a mold is 4" (the radius would then be half of that being 2") and the height is 3"
So this is what it would look like:

2" x 2" (radius squared) x 3.14 (pi) x 3 (Height) = 37.68 cubic inches

Now subtract the volume of your part. Use the same formula to figure out the volume of your part if it is round.

The part is 3.5" diameter by 2.75" high.

So this is how you would figure out the volume of the part and the amount of silicone needed to make your mold.

1.75" x 1.75" (radius squared) x 3.14 (pi) x 2.75" (height) = 26.45 cu inches

Subtract the volume of the part from the volume of the mold box to determine how much silicone is required.

37.68 - 26.45 = 11.23 cubic inches

11.23 cu in x 21 grams per cubic inch = 236 grams of silicone

236 grams divided by 453 grams/lb = .52 lbs for the total amount of silicone needed to make a mold of the part.

2. Amount of Resin needed to cast a part.

Note: There are .554 ounces in 1 cubic inch of Alumilite Resin

Formula for a Square/Rectangular Piece. Length x Width x Height

Example: If your piece is 3" x 4" x 2" = 24 cubic inches

Take 24 cu in x .554 = 13.25 ounces

If your part is round you can use the same formula as the silicone (section 1.) to calculate resin needed.

Radius squared x pie x height = cubic inches of volume. Then multiply that by .554 to determine ounces needed.

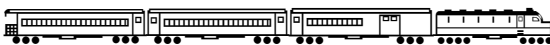
3. Volume Displacement

Another way you can calculate the amount of material you will need to fill a mold or to cast a part is by using volume displacement. This means you pour something into the box or mold to figure out how much material will be needed. You will need a graduated cylinder, cup, or beaker with volumetric measurements on it.

Example: You have a mold that is neither round, square, or rectangular and therefore is not easily estimated to use one of the above formulas. You can simply, pour water into the mold until it is completely full. Then, pour the water out into your container with volumetric measurements on it to see how many ounces you will need.

Note: It is very important to make sure your mold is completely dry before casting your part. Water/moisture will contaminate your resin casting.

Another material often used is sand. This is commonly used as a volume displacement when pouring a mold. You can easily pour it in your mold box (prior to pouring your silicone RTV) and pour it out into a container with measurements on it, without effecting the original. Remember the RTV silicones are mixed by weight and will not cure properly if mixed by volume (except Alumilite's one lb kits that provide a lid and scoop premeasured for proper volume mixing).



Frequently Asked Questions (FAQs)

Casting Resins:

Q: How do I avoid air bubbles in my part?

A: Cast Alumilite into a warm mold coated with baby powder. This will help the material flow better and cure more evenly. If you are using silicone rubber, stick the mold in an oven set at "Warm" for approximately 30 minutes or put your mold in a microwave on high (1 minute for every lb or rubber in your mold). Once your mold is warm to the touch, sprinkle baby powder or talc powder in the mold. Shake the powder around the mold so all areas are covered. Once covered, knock or blow out all of the excess powder. This will leave a light coat of powder on the outside of the mold that will release the surface tension and allow the material to flow much better prohibiting air bubbles. The powder will not influence the appearance/color of your casting.

Q: What is the best way to pour my part to eliminate air bubbles that are formed when casting?

A: If you are casting a part in an open or one piece mold, pour slowly from one corner of the mold and let the material flow naturally to fill the mold. If it is possible run the material down one side of the mold. If the mold has an undercut or complex corner you may pour the material to that point and then rotate your mold to evenly coat that area before topping off the mold. If you are pouring a closed or two piece mold, fill it completely until the material comes out of the vent hole and then tap the mold on the table to help release any bubbles that may need a little assistance to get through the vent hole. You may also wish to rotate the mold and possibly squeeze the sides of the mold to assist hesitant bubbles in reaching the vent.

Q: Is Alumilite safe or toxic?

A: Alumilite is non-toxic and virtually odorless. First of all, we recommend you read any and all MSDS (Material Safety Data Sheets) and warning labels on any product that you use. All urethanes contain some type of Isocyanate. We have a very small, diluted amount of MDI Isocyanate, which was deregulated as hazardous and is not considered to be a hazardous material. Alumilite contains no mercury, (found in many other urethanes). Alumilite is not considered to be carcinogenic. Alumilite is safe for home use.

Q: Can you vary ratios?

A: No. Varying the ratios will not affect the working time but it will affect the cure time and physical properties. Meaning, Alumilite will still start to set up in its normal time but could take hours to completely cure. When it finally does cure, it will not have the same properties of the regular resin and may be considerably weaker. The off ratio casting will appear a different color and much softer.

Q: How much heat does Alumilite generate?

A: This depends on the mass you are pouring, but typically ranges between 120°F to 200°F.

Q: Can the set time be increased?

A: Yes! To get an additional 30 - 60 seconds, cool the "A" & "B" sides of the Alumilite in the refrigerator for 3-5 hours. When you cool the resin it is important to remember to pour into a warm mold for proper curing.

Q: What is the Shelf life for Alumilite?

A: Alumilite: 1 year

Q: Can Alumilite be colored? What do I use?

A: Yes. Alumilite offers a full line of dyes specially formulated for Alumilite's Casting Plastics. If you use an outside source make sure that the dyes/pigments are not water based. Some oil-based dyes are compatible. Test a small amount before mixing in larger quantities. Most powdered dyes will work if they do not contain any moisture (known as a dry filler). We also have a line of metallic powders that you may use in your molds to color Alumilite.

Q: What is the difference between Alumilite Regular and Alumilite White?

Alumilite Regular is higher in strength and is more UV stable than Alumilite White. Alumilite White is thinner which makes it easier to mix/pour and also allows you brighter colors than the Regular and is recommended when using the flesh tone dyes.

Q: How long should I mix Alumilite?

A: Mix thoroughly for 20-30 seconds (be sure to scrape the sides and the bottom of your container).

Q: How much heat can Alumilite take before disformation or melting.

A: Alumilite will not melt. It will start disforming at around 425°F. If excessive pressure is applied, the resin may start to give way at about 250-275°F.

Q: Can I paint Alumilite?

A: Yes! We recommend lacquers but you may also use synthetics, water-based acrylics, or enamels. It is a great idea to paint the part as soon as it is demolded to ensure a good bond is achieved. You may wish to paint your silicone mold before casting Alumilite. Paint the mold with a fast drying acrylic or clear coat. Once it is completely dry, cast your piece. When you demold the part you will pull out a painted piece. Alumilite will chemically bond to the dried paint.

Q: Can I spin cast Alumilite?

A: Yes! Alumilite works extremely well in a spin casting machine. Although spin casting was originated for low melt metals, you can get excellent castings with Alumilite. This technique allows you to cast parts in a fraction of the time of conventional pouring.

Q: Can I rotational mold Alumilite?

A: Yes! Alumilite's low viscosity is ideal for picking up the detail required in thin walled rotational molded pieces. The hollow center will cut cost dramatically by reducing the amount of material that is required to cast your part.

Q: What kind of mold release can I use?

A: If casting with silicone, it is usually not necessary to use a mold release. If in doubt or you are pouring into molds that are not made of silicone, Alumilite's Stoner Mold release or a thick layer paste wax is recommended. Post washing your part may be required if you are painting your parts to remove mold release transfer.

Q: Is it necessary to vacuum or pressure the Water Clear and Flex 80?

A: Not in order for it to cure but yes in order for it to cure with absolutely no air bubbles present within the cast piece as well as the best physical properties. Both of these materials start out at a higher viscosity (thicker) than the other Alumilite resins. Therefore, when these two materials are mixed, the viscosity (consistency) of the material does not allow the air bubbles to freely find their way to the top of the cast piece as the other much thinner resins do before the material cures. These two materials feature a slightly longer open/work time in order for you to either vacuum and/or pressure cast to eliminate all of the bubbles within the casting.

Silicone Moldmaking Rubber:

Q: What is the mix ratio of my RTV silicones?

A: The mix ratio is 10:1 by weight for all of the silicone rubbers other than the Mold Putty which is 1:1 by weight or volume.

Q: What is the shelf life of Alumilite's silicone mold making rubbers?

A: 6 months.

Q: What types of molds can I pour Alumilite into?

A: With the proper release, you can make a mold out of almost anything. Here are a few examples: Silicone, Wax, Non-Sulfur Clay, Urethane, Latex, Plaster, Steel, Aluminum, and Wood. A thick paste wax is recommended for non-silicone based items.

Q: What is catalyst?

A: The catalyst is what causes the silicone RTV to cure or harden. It is either tin or platinum base. The tin base systems are much more user friendly and will harden against practically any surface.

Q: What rubbers are compatible to pour over one another?

A: You can pour tin over tin base, platinum over platinum base and tin over platinum base. You can not pour platinum base over tin base.

Q: How many parts will I get per mold before the mold starts to break down?

A: This depends on many things. Some of the factors are how many undercuts, how long the parts are left in the mold before demolding, the intricacy, the detail, the size of the part, and how well the mold is cared for. It also depends on how often you are pouring, how hot your mold gets and if they are allowed to cool between pours. The Quick Set and Mold Putty will release the fewest castings before tearing (10-40 parts) where as the High Strength 2 & 3, and the Plat 55 may release 50-200 parts. (This all depends on the type of part and mold along with all of the other factors we previously mentioned above.)

Q: Is there anything I can do to prolong the life of the mold?

A: Using mold release before pouring parts can double the life of your mold. You can also use Alumilite's Silicone Oil in your molds before storing them. This will rejuvenate or restore some of the depleted silicone oil the casting resins removed from the silicone mold.

Q: What is vacuuming and why should I do it?

A: Vacuuming: A vacuum pump is like a vacuum cleaner. A vacuum cleaner is designed to pick up things such as dirt off of carpet using suction or vacuum. A vacuum pump is identical to a vacuum cleaner, except it will have MUCH more suction. A vacuum system is measured in the amount of vacuum it will pull. In technical terms, it is measured in inches of mercury. A common household vacuum will pull 1-2 inches of mercury. A good vacuum pump will pull 29-30 inches of mercury. A vacuum pump is used to suck the air from the mixed silicone to assist in pouring air/void free molds.

Vacuuming Silicone: As you mix the catalyst into the base, you will also be mixing air into the silicone. This will cause the silicone to be full of bubbles. Our Quick Set Silicone has a thin enough viscosity the majority of air bubbles will rise to the surface without a vacuuming system. Plat 55 is too thick to allow air bubbles to rise. Therefore, you must pull a vacuum to assure no air is entrapped. Once your vacuum reaches 29-30 inches of mercury, the rubber will foam up. You will need a container around 4 times the size of the amount of silicone you are mixing. Once the rubber has risen, it will break (meaning to fall quickly). After the silicone falls, you will want to keep it under vacuum for another 2-3 minutes. Then remove the material from the vacuum and pour the rubber over your master. You may want to pull a second vacuum after the mold has been poured. This will remove any air that you may have entrapped while pouring. Remember, once the rubber has risen and fallen, it will not rise again. Our Vacuum Chambers are 10" x 12".

Trouble-Shooting: (Alumilite)

Q: Why isn't the Alumilite curing properly?

A: Discoloration: The mixture is either off or it was poured into a cold mold.

Not Curing: The mold was not warmed. It should be warmed to at least 100°F. The Alumilite should generate enough heat to keep the mold warm if you are continuously pouring. You can do this by putting your silicone mold in the oven or a microwave oven for a few minutes until it is warm to the touch. The silicone can withstand temperatures of over 400F, so don't worry about burning your mold.

Q: Why is my Alumilite Casting resin foaming?

A: Moisture contamination causes foaming. If it foams quite a bit, most likely the moisture is right in the Alumilite. The moisture is usually in the A-side. You can vacuum the A-side to relieve it of moisture. If you don't have access to vacuuming equipment, you may be able to boil the moisture off. This is possible because water has a lower boiling temperature than any of the other liquids in the A-side. To boil off the material, we recommend that you put the Alumilite resin in a glass or metal container and place the material in an oven at 250°F for 2 hours. This will draw the moisture out of the system and evaporate it. If you are getting a bunch of little pin-holes, the moisture is probably coming from some materials you are using (mold, cups, stir sticks, etc.).

Q: Why do I have air bubbles?

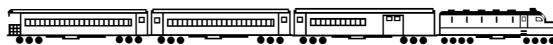
A: This is most likely caused by air pockets that are trapped between the resin and the silicone. To help combat this, dust your mold with baby powder. Then flip it over and slap the mold on the table leaving a very thin layer on the inside of your mold. This will act as a lubricant for the air and will allow it to easily rise to the surface. You can also use any kind of paint or commercial brand of urethane release to aid in the problem if baby powder isn't available. For complex molds that have severe undercuts, you may need to vent those troubled areas with holes that can be created with either some copper tubing or an Exacto knife.

Q: What can I do if I am still having problems with my moldmaking and casting project if I can't find the answer in this catalog?

A: You have a couple of options. First and foremost call 1-800-447-9344 and speak with one of our technical representatives that will be glad to assist you. Our office hours are Mon-Fri, 8 am-5 pm.

Your second option is to visit us online. There we have a much more in depth How To guide, FAQs, as well as an open moldmaking and casting forum for you to offer your questions to be answered by professional and hobby moldmakers and casters. Our technical representatives monitor the forum and also answer the questions that are often asked. So please visit us online at www.alumilite.com to find out more about the wonderful world of moldmaking and casting by Alumilite.

FAQ



Great List to get information for NMR Members to get on

The following is a periodic reminder of the operating guidelines of the general@lists.nmra.org mailing list. It will be automatically posted once a month. If you do not wish to abide by these, you should unsubscribe.

Please send any comments to owner-general@lists.nmra.org.

Enjoy,
Eric Schnoebelen
listmaster@lists.nmra.org

===== KEEP THIS MESSAGE FOR
EASY REFERENCE =====

[Last updated on: Sat Nov 24 11:57:48
2001]

General@lists.nmra.org is a general discussion list that exists for the sharing of model railroad, railroad information and Association matters pertaining to the interests of NMRA members.

It is a closed list open to NMRA members only. The member's first and last name and NMRA Member Number are required for joining.

General@lists.nmra.org is not an official 'Question and Answer'

list and all responses are to be considered opinions of the sender and not official NMRA positions unless so stated by someone with the authority to do so.

As this list exists to further communications between members from all levels and parts of the NMRA, the exchange of information about the promotion of the hobby and the NMRA is encouraged.

The NMRA is a family oriented organization. Spam, flame wars, personal attacks, posting of knowingly false and/or defamatory matter or other abusive or offensive behavior will not be tolerated.

Moderators can suspend or remove members who violate these rules after warnings, but reserve the right to remove members at any time due to excessive behavior.

OFFICERS

Superintendent

Larry W Diehl
913-338-2300
ldiehl@aci-boland.com

Paymaster

Jack Boren
HP: 913-962-2408
jbcmdl@me.com

Clerk

Louis O Seibel
HP: 913-393-3495
C: 913-927-6850
L-seibel@comcast.net

Division Director

Louis O Seibel
HP: 913-393-3495
C: 913-927-6850
L-seibel@comcast.net

Train Show Chairman 2011

Louis O Seibel
HP: 913-393-3495
C: 913-927-6850
L-seibel@comcast.net

Membership Chair

Jack Rosenfield
913-451-2177
rosenfieldjack@gmail.com

L S Editor

Ted Tschirhart
HP: 816-861-3449
tedtschi@kc.rr.com

Lightning Slinger
lightnings@kc.rr.com
Nov Deadline
Oct 28 2011

AP Merit Awards & Achievement

Joe B. Robertson, MMR
HP: 816-331-2773
piperva@aol.com

Past Superintendent

Shelly Levey
913-438-7065
shellylevy@everestkc.net

Web Master

Paul Myers, MMR
HP: 816-734-3719
paulwmyers@kc.rr.com

Web

<http://www.tc-nmra.org>
Turkey Creek Division
IS A 501(C) (3)



THE SWITCHING LIST

*=new since last issue

The Switching List contains all known Mid-Continent Region, NMRA, train shows and Division meetings. It also lists all known club shows and swap meets in the Mid-Continent Region (IA, IL, MO, AR, NE, KS, and OK). To list your event, send it to: glhemmingway@cox.net, or Gary Hemmingway, 3201 SW Stone Ave., Topeka, KS 66614. To subscribe, or unsubscribe, to The Switching List send an email to the above link. Look for us on the MCoR web site: www.mcor-nmra.org. Put me on your newsletter list. NOTE NEW E-MAIL ADDRESS

DIVISION MEETINGS

KANSAS CENTRAL DIVISION Meetings are at 1:00 pm. For the full schedule check the MCoR website or email: garyonho@cox.net. The next meeting is **August 13, 2011 Emporia City Library**: 110 East 6th, Emporia, KS. Coming in on interstate turn East on Highway 50, go to Commercial Street (main street going North/South.) Continue east about one block, Library is on your left; the parking lot for library is behind the Museum

GATEWAY DIV. (ST. LOUIS, MO) meets 3rd Monday each month, 7:00 P.M. Odd numbered months: Trinity Lutheran Church, 14088 Clayton Road at Woods Mill Rd (Hwy 141), Ballwin, MO; Even numbered months: VFW Hall, O'Fallon, IL <http://www.gatewaynmra.org/division.htm>

TURKEY CREEK DIV. (KANSAS CITY, MO & KS) monthly meetings 4th Tuesday, 7:00 P.M, Johnson County Offices, NE Branch, 6000 Lamar, Shawnee Mission, KS (DMV Building on SW corner of Lamar and Martway).

WESTERN HERITAGE DIVISION (OMAHA, NE / COUNCIL BLUFFS, IA) meets second Saturday (except June and December) at noon. Sump Library at 2nd & Washington Streets in Papillion. (across from Runza). Visit www.whdnmra.org for more info and a map.

EASTERN IOWA DIVISION

The EID Fall Meeting will be September 18th at the Cedar Rapids Area Chamber of Commerce, 424 First Avenue NE in Cedar Rapids, Iowa. Parking is free on Saturdays, so do not feed the parking meters! We will have a short meeting, silent auction, Bring & Brag / Show & Tell. I'm pulling together an interesting program on modeling. We will start at 9:00 am. The EID Annual / Winter Meeting will be 9am, January 15th, 2011 at the First Christian Church in Davenport, Iowa.

KATE SHELLEY DIVISION now meets the 4th Thursday at the Ames Public Library in Ames, Iowa. Time is 7 Pm to 8:45 PM. Due to Thanksgiving being the 4th Thursday we usually try to meet on the 3rd Thursday. Call Superintendent from NMRA web site for latest information. All are welcome to attend the meetings. The library is located at 515 Douglas Ave. We meet in the upstairs meeting rooms. December we have NO meetings due to the holidays.

PLATTE VALLEY DIV. (HASTINGS, GRAND ISLAND, KEARNEY, NE) meets 2nd Tuesday of each month at 7:00 p.m. in members homes on a rotating basis. Info: John O'Neill, MMR, Div. Dir., 308-384-5011 or jponeill@computer-concepts.com.

WESTERN KANSAS DIVISION (GARDEN CITY, KS) Meets every Tuesday evening from 6:30 P.M. to 9:00 P.M. at 409 1/2 N. Main St. (second floor above "Stage" department store) 7 layouts on display (2-HO, 5-N) Operating sessions available Info: Robert Simmons, Division Director (620) 521-3591 or ras@odsgc.net

INDIAN NATIONS DIVISION Unless otherwise specified, all Indian Nations NMRA meets are held at the new Hardesty Library, 8316 E. 93rd. St., just east of Memorial Rd. in Tulsa, OK. The library opens at 9:00 am and the meetings start at 9:30 am. Web page: www.tulsanmra.org Superintendent - Dave Salamon (918)272-5512 or drs_rr@yahoo.com

OK Heartland Division of the NMRA meets in the even months in the Oklahoma City area. All who are interested in Model railroading are welcome. Info: www.okcnmra.org

Cowboy Line Division (Norfolk, NE) meets 3rd Thursday each month, 7:00 P.M. at HyVee East upstairs meeting room. Corner of 1st Street and Norfolk, Ave. Info: Dennis Brandt, Div. Dir: 402-9925-2415 or email dennisbrandt44@gmail.com for more information.

Division Directors, Train Show Chairs, or Club Show Chairs: Let's get the word out about your 2010 or 2011 event! Get your information to Gary at any of the above addresses. **The Switching List is a service of Mid-Continent Region, NMRA.**

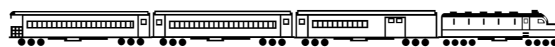
TRAIN SHOWS & MEETS

***OCT 22-23, 2011—TWO DEPOT MODEL TRAIN SHOW**, Kingman Armory, Kingman, KS; Displays also at the Santa Fe and Missouri Pacific depots; Celebrating the 100th anniversary of the SF depot. Information: sfdepot@sbcglobal.net or call 620-532-2142 weekday mornings.

NOV 26-27, 2011—GREAT TRAIN EXPO, Belle-Clair Fairgrounds Park, Belleville, IL

NOV 26, 2011—JOPLIN MUSEUM COMPLEX TRAIN SHOW AND SWAP MEET, Schifferdecker Park, 7th and Schifferdecker Streets, Joplin, MO; 9am to 3pm, Included will be several operating model railroad layouts along with over 65 tables of items for sale or trade. Admission is \$3 adult, children 12 and under admitted free w/pd adult. All proceeds at the door go to benefit the Joplin Museum Complex. For further information or table rental call Rick Gardner at 417-673-4888 or email rickgardner@sofnet.com. Tables rent for \$15 each. On the web at www.tristatamodelrailroaders.com

***JAN 28, 2012—THE GREAT TRI-STATE RAIL SALE**, The La Crosse Center, 2nd & Pearl Streets, La Crosse, WI, 10 am – 5 pm, Railroad Show, Flea Market, Swap Meet, guided tours of steam locomotive, caboose and Grand Crossing tower,



Adm: \$5.00 children under 12 free w/pd adult, BNSF Railway locomotive display at North La Crosse Yard, Canadian Pacific Railway exhibits and displays, proceeds go to maintain and restore the La Crosse Short Line Railroad Museum, Info: The 4000 Foundation Limited, P. O. Box 3411, La Crosse, WI 54602-3411, 608-781-9383, www.4000foundation.com

***FEB 11-12, 2012—WICHITA TRAIN SHOW & SWAP MEET, CHISHOLM TRAIL DIV., NMRA, Cessna Activity Center, 2744 George Washington Blvd., Wichita, KS, Sat: 9-6, Sun: 11-4, Swap tables, Modular Layouts, Switching Contest, Model Contest, Photo Contest, Live Clinics & much more;** Adm: \$6.00 for both days, Advance Table Registration includes 2 admission tickets, Before 12/31/2011 take off 10%, 8 foot tables are \$25 each, Info: mail registration to Phil Aylward, 603 Chestnut, Halstead, KS 67056-2302 or aylward1@cox.net

***MAR 17-18, 2012—CISCO JUNCTION MODEL RAILROAD GROUP TRAIN SHOW, The Cisco Center, North Eldon St., Cisco, IL, (exit 156 between Champaign and Decatur), Sat: 9 am- 4 pm, Sun: 9 am – 3 pm; Admission \$3.00 adults, Children 12 and under free w/pd adult, 5 operating layouts, Goodchild Brothers Circus layout, Children's Door Prizes, Breakfast and Lunch available, vendor and swap tables, Silent Auction, Info: Don Ploch, 10408 E. Washington St. Rd., Argenta, IL 62501, 217-669-2261 don@ciscojunction.com, or Randy Bennett 309-369-9600.**

Model train layouts, great deals and free Model Railroad magazines!

It's all at the Model Train Exhibit at 1111 E. Kansas Ave. in McPherson, Kansas every Sat. and Sun. 1 - 5pm.

The Mid Kansas Model Railroad Club would like to invite you to McPherson to experience our exhibit with HO and N-scale layouts, railroad memorabilia, train videos and activities.

We have some great deals on professionally built HO and N-scale structures at a bargain price!

We will give you a free Model Railroader magazine of your choice dating back to 1950 just for stopping by.

Please come see us soon!

John Madden MKMR Chairman

www.mkmrclub.org

Custom HO Scale Frisco 42' Flat Car

Sold by Texas Western Model Railroad Club • Made by Red Caboose

- **Ready to Run cars** in four numbers (includes Kadee couplers, Accurail Bettendorf trucks, IRC metal wheelsets) – **\$28.95**
- **Kits** – **\$19.95** (less t/c)
- **Wooden Decks** (laser cut/detailed) – **\$4.50**

Order online:

shop.twmrc.org/

Or call: **682-587-2092**

SHIPPING AVAILABLE

MC•VISA•Discover•American Express•PayPal•Check



Texas Western Model Railroad Club

501(c)3 Not-for-Profit Organization

6807-A Anglin Drive • Fort Worth, TX 76140 • 682-587-2092

www.twmrc.org

info@twmrc.org



From: Tom Stolte [mailto:mopac12@gmail.com]
Sent: Wednesday, April 06, 2011 6:23 PM
To: undisclosed-recipients:
Subject: new decals from Oddballs Decals

N and HO scale \$5.00. S and O scale \$8.25

953 Garvey Grain 3 bay covered hopper

<http://mopac1.tripod.com/953.gif>

954 Missouri Pacific 40 ft box car

<http://mopac1.tripod.com/954.gif>

955 Rock Island 3 bay covered hopper

<http://mopac1.tripod.com/955.gif>

956 Great Lakes Carbon 3 bay covered hopper

<http://mopac1.tripod.com/956.gif>

957 MILW Road 3 bay covered hopper

<http://mopac1.tripod.com/957.gif>

958 MILW Road 3 bay covered hopper

<http://mopac1.tripod.com/958.gif>

959 MILW Road 3 bay covered hopper

<http://mopac1.tripod.com/959.gif>

960 MILW Road 3 bay covered hopper

<http://mopac1.tripod.com/960.gif>

961 MILW Road 50 ft box car

<http://mopac1.tripod.com/961.gif>

962 MILW Road 80 ft box car

<http://mopac1.tripod.com/962.gif>

963 Monfort Feed Lots 3 bay covered hopper

<http://mopac1.tripod.com/963.gif>

964 Cargill 3 bay covered hopper

<http://mopac1.tripod.com/964.gif>

965 SRY 50 ft boxcar

<http://mopac1.tripod.com/965.gif>

966 SRY 50 ft boxcar

<http://mopac1.tripod.com/966.gif>

967 Bartlett and Company 3 bay covered hopper

<http://mopac1.tripod.com/967.gif>

Tom Stolte

owner of Oddballs Decals

<http://oddballsdecals.org>

My prototype photos

<http://oddballsdecals.rpicturearchives.net/>

my photos of the Missouri Pacific

<http://www.trainweb.org/mopac/> aka Grumpy, one of the seven Dwarfs only taller :-)

only 7 feet tall, 213 centimeters tall or 2130 mm tall

MP, CNW, MKT, KCS, DRGW, BN, RI, MILW, ATSF, SLSF and SP Forever

Now printing decals for your model railroad club only, Special till the end of June, N and HO scale \$3.00 each, S and O scale \$4.00 each. Club logo extra cost. July 1 will be N and HO scale \$5.00 each and S and O scale \$8.00 each.



HAVE 50 MODEL RAILROADING CLINICS RIGHT IN YOUR LIVING ROOM.

Just because you can't make it to a national convention doesn't mean you have to miss out. Right now the NMRA's Kalmbach Memorial Library has over 50 DVDs of clinics presented at national conventions from 2002 to 2010. Each is available for NMRA members to borrow for the cost of processing and postage.

So you can see clinics on everything from decoders to design, tools to techniques, helixes to highways, and research to resin casting.

All from the comfort of your very own couch.

Visit www.nmra.org and go to the Kalmbach Memorial Library page for a complete listing. Or call the Library at 423-894-8144.



We make it even **more fun.**

Then, get that popcorn ready.

www.nmra.org

TOTOTRAINS,LLC

SPECIALIZING IN EUROPEAN TRAINS
MÄRKLIN/TRIX/LGB/ROCO/FLEISCHMANN

EVERY DAY DISCOUNTS ON
WALTHERS CATALOG ITEMS: 20%-35%

HOURS: WED-SAT: 10.00AM-4.00PM

OR BY APPOINTMENT

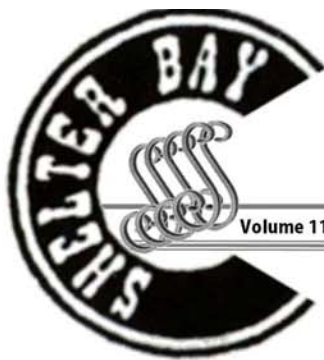
785-766-0467

WWW.TOTOTRAINS.COM

INFO@TOTOTRAINS.COM

1031 VERMONT STREET, SUITE A
LAWRENCE, KS 66044





Shelter Bay Evening Star ★

Volume 11 Issue 2

WEDNESDAY, OCTOBER 10, 1928

... a supplement to the Black Rock Chronicle ...

The Editor has learned ...

Shelter Bay Railroad "wide gauge" has been getting construction help from the Hale "gang of 2". Now, no report as if the "gang of 2" are productively working or if the "gang" is doing good quality work. Pat may be able to use that 10 man crew Marty Vaughn sent to Black Rock ... woops! HO Scale! That won't work!... As you may remember the Harriman management seems to have trouble with contracting, demonstrated by the SBR vs. Ferris Contracting debacle!

Benchwork is done!



We will watch for clues to any news flashes if a feud erupts.

Be it as it is, SBR progress has "cleared the land, laid the track and is making rock". No trees. No grass. No bridges. No birds. **NO People!** ... SBR is praying that "they will come" in "if in you build it"! That theory is akin to wire screen holding water.

Be careful if you see any of those SBR Bonds for sale. They could be what the industry calls "junk bonds". Bridge construction is expensive!!!

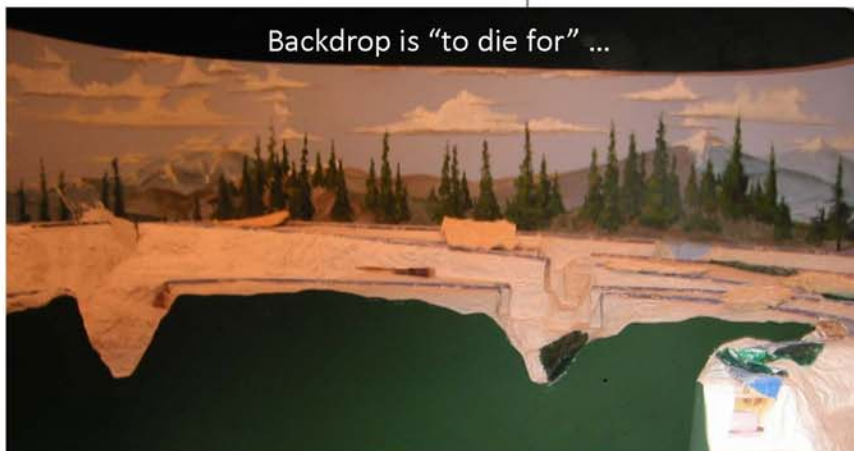


What looks good to you and me will not usually be acceptable to Harriman. Mgmt. Pat does have high standards and his expectations usually far exceed the written word of the agreement.

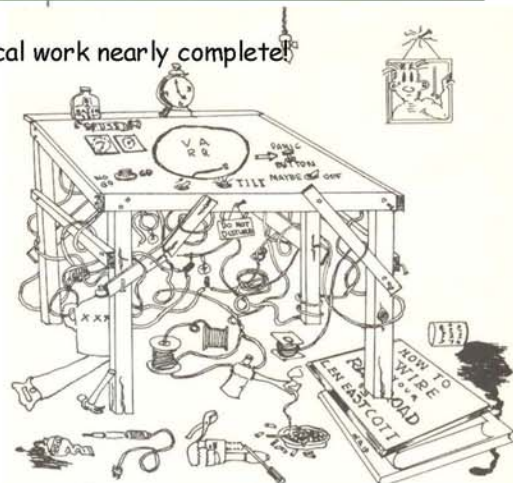


Scenery in progress ...

Backdrop is "to die for" ...



Electrical work nearly complete!



*Cartoons are copied from old NMRA Bulletins 1967



TURKEY CREEK DIVISION
4954 Marsh Avenue
Kansas City, MO 64129-2111



FIRST CLASS MAIL
ADDRESS SERVICE REQUESTED 4955

mcor-nmra.org/divisions/turkeycreek/

Your NMRA membership entitles you to these benefits:

Kalmbach Memorial Library

One of the world's largest "railroads-only" libraries. Contains prototype and modeling books and magazines, out-of-production kit instructions, and more.

- www.nmra.org/library
- Call: 423-892-2846
- Fax: 423-899-4869

Email Brent Lambert: lib@hq.nmra.org

NMRA Online Archives

Over 10,000 photographs, slides, plans, drawings, erection elevations, paint schemes, and more, with additional scans being added all the time. High resolution files are available for download at a discount to members.

www.nmra.org, click "Online Archives" button

"Members-Only" website

This portion of www.nmra.org contains content exclusively for NMRA members, including reprints of Region and Division newsletter articles, newly updated Data Sheets, reprints of articles from classic NMRA magazines, downloadable calendar photographs and screensavers, and much more. This area is constantly being updated so check back often!

www.nmra.org, click on "Members Only"

NMRA Company Store

The NMRA's Company Store offers many items, from apparel to mugs to gauges, available only to NMRA members.

www.nmra.org, choose "online store", then "Members-Only Company Store"

TURKEY CREEK DIVISION MEETING

Turkey Creek Division Meetings and Events for 2011

All meeting for this year will be held at

Johnson Country Northeast Offices

6000 Lamar, Mission, KS

Calendar of events for 2011

October 25 Meeting

November 22 Meeting

December 13 Holiday Party (Second Tuesday)

