

Rochester Model Rails

Dedicated to Quality Model Railroading

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It's the summer of 1977, and fresh power sets are ready to roll at Dante, VA., on the HO scale model railroad of Nate Stone, in Savannah, GA. Photo by Nate Stone.

Ned Stone's Clinchfield Northern Railroad by Nate Stone

RTV Mold Making and Resin Casting – Conclusion by Bill Estes

Building a 1:87 Scale Sawmill - Part 27 – The Logging Caboose by Richard Senges

The Clinchfield Northern Railroad – Part I

by Nate Stone

Introduction: The Clinchfield Northern Railroad is based on the topography its namesake was built to conquer – the Appalachian Range. Primary features of the scenes include kudzu-choked cuts and fills, the Loops of the frontal assault, the backwoods hollers of the mountains and the endless string of bridges and tunnels engineered to get the trains through.



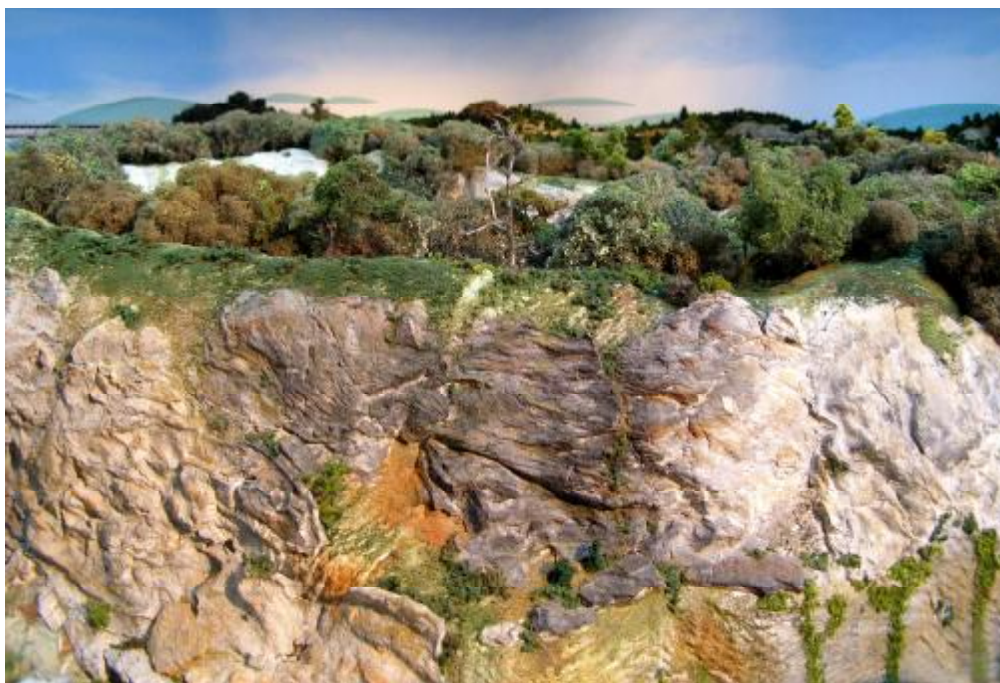
Operations: Rail activities flow in true Clinchfield style. Trains move over the line as dictated by schedule, priority, dispatcher instruction and traffic density. During formal operating sessions, trains are dispatched with loco and car cards. Crews sign up for trains on a sign-up sheet and follow printed and/or dispatcher's special instructions.

Casual running sessions at other times permit train crews to operate freely over the mainline, with coordinated meets at sidings. Enjoyment is the primary objective of this railroad. A supportive, learning and entertaining environment is cultivated here.

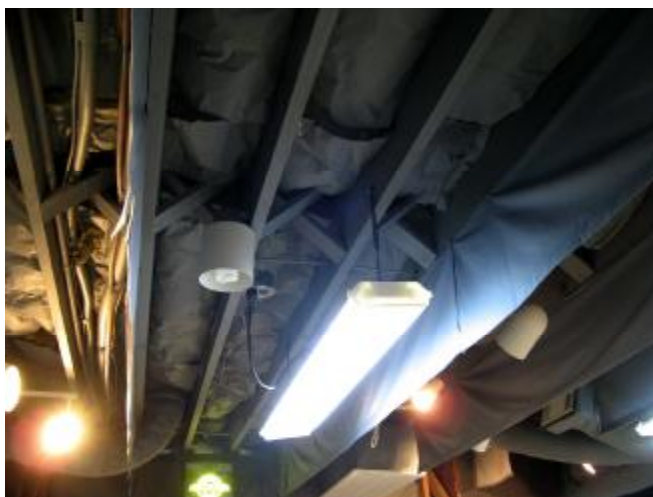


The Railroad: The Clinchfield Northern is a point-to-point representation of portions of the prototype between Spartanburg, SC and Elkhorn City, KY. Design elements of the 275-mile line have been modeled to provide scenic enjoyment as well as operational challenges. Division point yards are at Bostic, NC and Dante, VA. Staging areas are at Beaumont Yard (Spartanburg), Brice/Belmont power plants, Boody, VA and Elkhorn City.

Two additional branch lines are being modeled. The Fremont Branch (operational) taps the coalfields and a major processing plant off the mainline in western Virginia. The Pinoca Branch (under construction) represents the Seaboard Airline (now CSX Charlotte Sub) connection at Bostic, NC that heads east and interchanges with the Southern (and successor Norfolk Southern) near Charlotte, NC. Though the Pinoca Branch is incomplete, its spur is long enough to hold a train for staging.



The Train Room: The building structure is 12" Concrete Masonry Unit grouted solid with No. 5 rebar and horizontal joint reinforcement. Overhead, 2x12 joists are spaced 12" on center (see image at right) to provide a clear column-free space for the layout. Flooring is sheet vinyl over concrete slab. A light floor color is used to brighten the rooms and facilitate location of small parts that might fall.



Layout Support: Bench work is a combination of open grid, cantilever support beams on wall studs, and flying studs that are suspended from the sole plates at the top of the basement walls. Sturdily sway-braced 2 x 4 legs support freestanding sections of the layout.

Scenery is built using the hard shell method. A thin layer of *Hydrocal* plaster-soaked paper towels is draped over a framework of wood stringers and plastic mesh. Plaster castings lifted from natural rocks add visual interest. Trees are built from lichens, hydrangea and other natural armatures, ground foam and other materials. Though most of the layout represents the isolation of Appalachia, bridges, buildings and the heavily ballasted right-of-way feed the scene. The yards, sidings and junctions balance the remoteness of the mainline.

Room lighting is established at three levels. *GE Chroma 75* tubes provide fluorescent task-level lighting for construction and operation. Accent-level lighting is added with an assortment of track-mounted incandescent and fluorescent spot and flood lamps. Scene lighting, which doubles as aisle lighting for night operations, is located behind valances on the upper decks. A 100-amp sub-panel provides power for the layout and lighting.



Next Issue – Part II

Track Plan, Layout Control & a Unique Pop-Up

RTV Mold Making and Resin Casting – Conclusion

by Bill Estes

The Castings

Every mold will require different quantities of resin. You can measure a mold by filling with water and carefully pouring into a graduated container. Casting material is a two-part resin plastic. All the kits currently on the market require equal parts of resin and catalyst. THIS IS CRITICAL. If you use too little of either, the casting will not cure properly. *Alumilite* “A” is a clear liquid; “B” is a brownish material that separates into 2 different densities, the user must shake to get a uniform color, but without introducing air bubbles.

Cups with graduated marks are convenient for measuring and mixing. Wooden craft sticks make good mixing tools. The materials should be mixed until a uniform color is obtained, but no more than 60 seconds. I have found a cheap timer to be helpful for this.

The mold must be absolutely dry before casting. Pour the mixture into the mold, again avoiding any bubbles that could ruin your casting. I pour level full, but some modelers prefer to use clear plastic or glass to obtain a flat surface. In 3 to 5 minutes you will see a whitish cloud appear in the center of the casting. This indicates the chemical change in the material. Do not touch the casting, as the cure is just starting. The cloud expands, until the entire casting is a light tan color. Large volume castings cure more rapidly than small volumes; the heat is contained in the casting, which hastens the process. After 10 to 12 minutes, the cast part may be removed.

After 6 or 8 castings allow the mold to cool; this will extend mold life. The castings should set for a day. Wash the parts in warm, soapy water; rinse with warm fresh water, and allow to air dry. You may paint or color with your favorite methods.

Congratulations, you are now on your way to producing all the identical parts you need for your very own layout.



Here are some various castings after paint has been applied.

Magazine References

The Basics of Resin Casting
Dallas Mallerich III
Railroad Model Craftsman
April, May & June 2001

Making More than One
Tom Piccirillo
Model Railroader
May 2002

Introduction to Resin Casting
John Griffith
Scale Rails
January 2006

Making the Scene with RTV
Art Fahie
N Scale Railroading
March thru July 2001

Local Sources

Alumilite
Dan's Crafts and Things
352 Empire Blvd
Rochester, NY

Mail Order Sources

Micro-Mark
340 Snyder Avenue
Berkeley Heights, NJ 07922
www.micromark.com

Alumilite Corporation
315 E. North Street
Kalamazoo, MI 49007
www.alumilite.com

Building a Large 1:87 Scale Sawmill I

Part 27 – The Logging Caboose

by Richard Senges

In Part 26 of the Sawmill Series we discussed the construction of the Dead Rolls. This issue we will look at the Logging Caboose. The next few issues will discuss logging railcars and then we will return to the sawmill complex.

Back when I first got involved (1970s) in HO model railroading, my first model railcar was the *Kadee* Logging Caboose. At that time the Logging Caboose was all wood but had no interior detail.

As I am now working on the sixth National Model Railroad Association Achievement Program, specifically “Cars”, upgrading the Caboose to NMRA Merit standards seemed a possibility.

With that in mind a full scratch built (fabricated) interior was considered and then implemented.

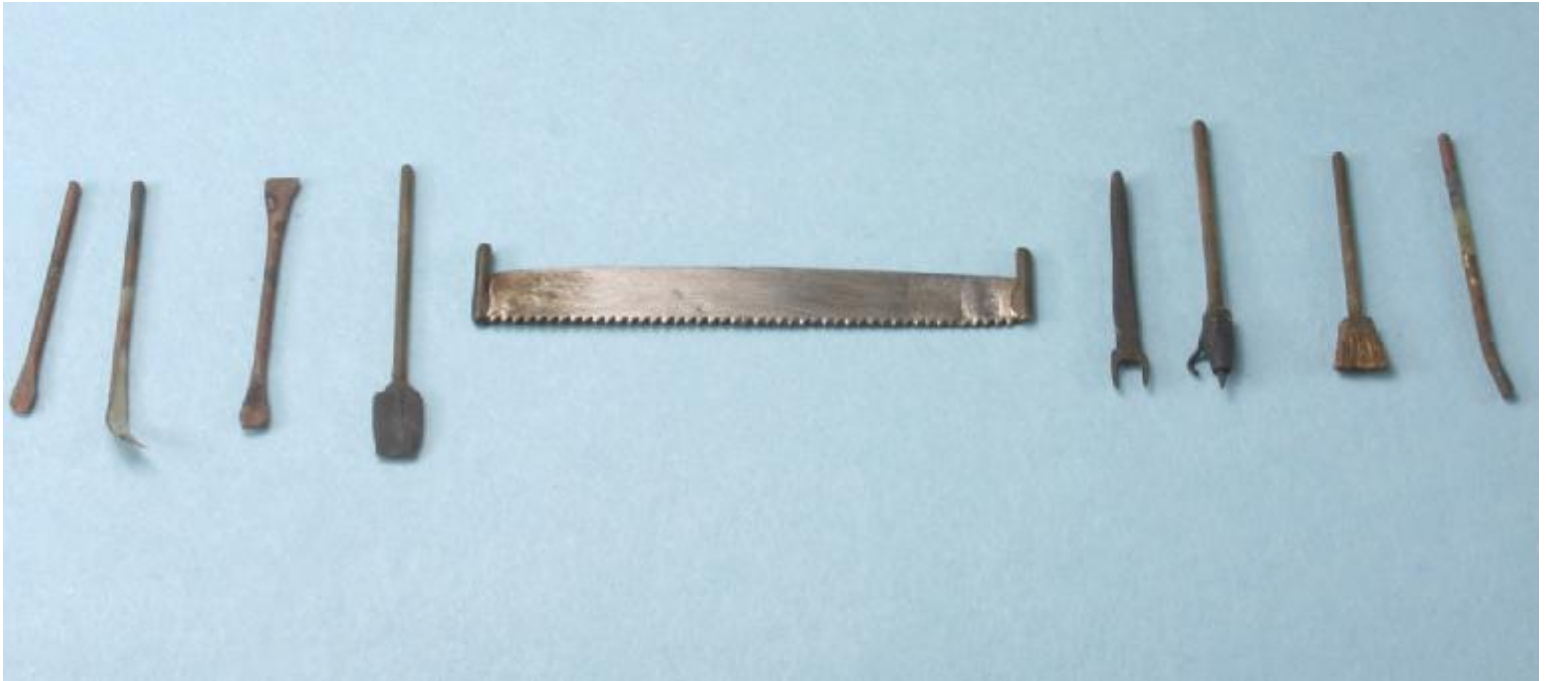
The image to the right shows the board by board wood interior. *Mount Albert Scale Lumber* purchased from *Hunterline* in Canada was used. Each of the 141 interior pieces was distressed and stained using a *SierraWest* suggested mixture of dyes.



Above: Original *Kadee* caboose model with added interior wood, without detailed interior parts.

A set of logging tools (see below) were fabricated including a real saw (it actually cuts wood) and a peeve. The saw was made from a *Zona* saw by cutting the saw in half, cutting to length, and then soldering on handles using brass rod. The handles were painted brown and the whole saw weathered with weathering powders from Joel Bragdon in California.

A shovel, a broom and some miscellaneous logging tools were also fabricated. See below.



Right:

Fabricated work bench including a fabricated bucket, oil an, and axe.

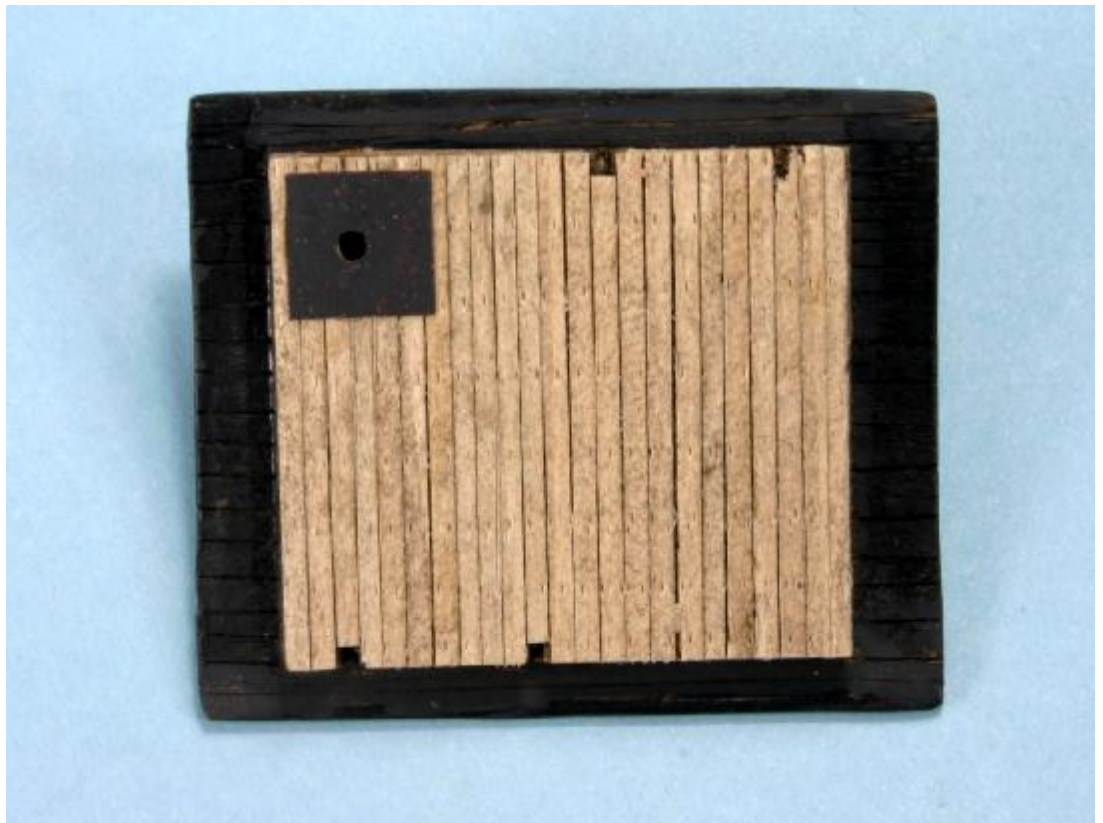




Above: Fabricated parts - metal plate for under the stove, coiled cable (real cable) fire wood, cable loop, large coiled cable, and metal plate for ceiling over the stove.

Right:

Image showing the roof wood interior of the caboose and the metal plate over the stove.



Below: The interior details of the finished Logging Caboose.....



A detailed listing of all the Caboose Parts showing the Commercial Parts and the Fabricated Parts is shown on Page 11.

Logging Caboose Parts

Commercial Parts

- Truck (1)
- Couplers (2)
- Body (1)
- Roof (1)
- Roof stack (1)
- Grab irons (5)
- Steps (2)
- Doors (2)
- Windows (2)
- Stove with pipe (1)
- Break wheel (1)
- Chain (1)
- Dry Transfer (1)
- Total 21**

Total Parts = 210
90% Fabricated Parts

Fabricated Parts

- Wood floor (22)
- Wood wall – front (28)
- Wood wall - back (28)
- Wood wall – right (16)
- Wood wall – left (16)
- Wood ceiling (23)
- Door trim (8)
- Plastic glazing (4)
- Firewood (10)
- Saws (2)
- Tools (10)
- Oil can (1)
- Bucket (1)
- Work bench (15)
- Cables (3)
- Stove plates (2)
- Total 189**

Potential Future Articles

The Santa Fe CF – 7

Tortoise Installation Made Easy

Doctor Dick

NMRA LSD Summer Picnic

NEXT ISSUE

**Building a Large
Sawmill/Pond Complex
Part 28 – The Log Car**

**Painting Backdrops
with Amy Colburn
Pat I**

**Nate Stone’s HO Scale Model RR
– Part II**

Rochester Model Rails
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