CABOOSE KIBITZER

**Former Rock Island Depot
Union Bank, Lincoln, Nebraska
Architects: Sinclair and Hille**
Photo: Bob Guenter, Feb. 1999

Mid-Continent Region Call Board

Switch List

Next Issue

As usual, a *Remembering: What and When* column by Charles R. Mischke, and—depending on the response from the new regional officers—an article about railroad depots by the outgoing editor of this magazine. The rest will be up to the aspiring authors in our audience.

The Covers

The photograph on the front cover is of a branch of the Union Bank located on "O" Street in Lincoln, Nebraska. The structure began life in the early 1920's as a depot of the Rock Island Railroad, and in its present 1993 reincarnation is a fine example of the adaptive reuse of a structure on the register of historical buildings. Because of that listing, the remodeling posed a unique problem for the architectural firm of Sinclair-Hille, who—in the humble opinion of the editor—did an excellent job of conversion.

The back cover features another former Rock Island depot, this one in Fairbury, Nebraska. According to a sign on the premises, once the remodeling is complete the building will serve as a railroad museum. The editorial in this issue suggests a worthwhile group project open to all readers of the *Kibitzer*.

A Special Thank You

Thumbing through the past seven issues of the *Caboose Kibitzer,* I came upon the names of the following contributors to the magazine. Their work was instrumental in getting this magazine back on schedule, and I offer them my sincerest declaration of appreciation. They are listed in order of first appearance, starting with the Fall 1997 issue. If I have overlooked anyone, I apologize.

Charles Buswell MMR, Richard E. Napper MMR, Richard P. Yungclas, Dr. Charles Mischke *, Wayne and Brian Porter, Dean Windsor, Gary and Glory Hemmingway, Marty Vaughn MMR, Patrick Lana, Al Sharp, Gene Tacey, Richard Lake, Al Gaddini, Earl E. Ford, Roger H. Ferris EdD, Tom Troughton MMR, Brad Joseph, Mark Malmkar, Rick C. Schoup MMR, Dennis O. Smith, R. "Bat Masterson, Lynn Schoening, Peter Grassi, Lloyd Larson, Keith Landis, Venita Lake and Bob Amsler.

* Several of these people have contributed on more than one occasion, but only Charles Mischke has a perfect record with major articles in every issue of the Kibitzer since I took over, and more on file for the next editor. Thanks Chuck.
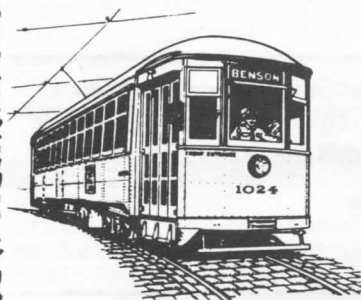
About Our Contributors
From the desk of the editor

The readers of the *Caboose Kibitzer* have become acquainted with the name **Mark Malmkar** by way of his fine series on passenger cars, another episode of which appears in this issue. The intent of this essay is to let you know something about this gentleman from western Nebraska which his articles could not do.
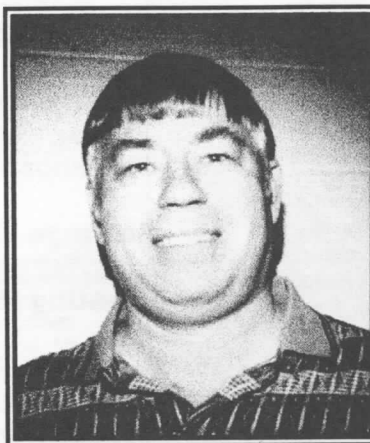
To start with, Mark is forty eight years old, and married to Chris, a Director of Nursing, who (in his words) "understands and supports his passion for trains."

Following graduation from the University of Nebraska—Lincoln, Mark taught Vocational Agriculture for 14 years, and between two of his teaching jobs managed a company that made farm equipment. He is currently employed as a tool and die maker for Ace Irrigation and Manufacturing of Kearney, Nebraska.

A longtime railfan, Mark can still conjure up memories of gray GP-7's hauling freight on a branch line in Perkins County. Typically, each consist towed a heavyweight combine which served as a caboose. Then there was the awesome sight of steam engines standing under the coaling tower at Ogallala! At the age of ten, Mark got to ride the *City of Denver* west out of Ogallala, where he ate breakfast "under glass" while sitting in the dome diner.

During high school, Mark was fortunate enough to get two round trips on the original *California Zephyr* between McCook and Omaha, from whence unnamed connecting trains took him to leadership conferences in Kansas City. On one of those trips, he and two friends were able to ride most of the distance to Kansas City in the cab of an E-8/9!

In more recent times, he has taken Amtrak trips to both coasts, as well as treating his daughter to a trip to Colorado as a birthday present. Ostensibly this latter trip was a way of encouraging her to become a railfan too, but one has to wonder whether Dad had an ulterior motive. Just whose present was it, Mark?

When it comes to model railroading, he presides over a freelance railroad in HO scale. Set in the Rockies, the rail line runs from Colorado Springs westward. According to Mark, his *Rocky Mountain Rocket* goes "through the Rockies, not just up to them!" And when he additionally declares that he has a special fondness for passenger trains, it comes as no surprise to any of our readers. □

Remembering: What and Why
by Charles Mischke

General Electric and its 44-tonner

The General Electric Company had a long history of building electric locomotives, and interurbans adopted their steeple-cab design in such numbers that the style was called the "G.E. Rubber Stamp" electric locomotive. Such engines were usually multiple-unit equipped so that a railroad could build a locomotive out of units to match the task at hand.
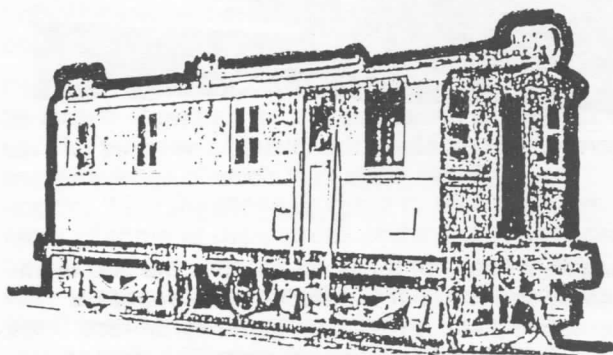
Reading No. 50

When ALCO and Ingersoll-Rand teamed with GE to design the first practical 300 hp 67 1/2 ton boxcab diesel, it was not surprising that GE developed m.u. equipment should the purchaser desire it. The first several engines were bought for freighthouse and street-running industrial switching with no intention of multiple-unit operation. They were equipped with blind (no train door) ends. Subsequent customers wanted the m.u. option—but not then—and opted for the train door ends. When it came time to add m.u. to already purchased models, 600 hp and 800 hp locomotives were available. Thus the original diesel was never m.u. equipped.

GE "Rubber Stamp" Steeple-cab Electric Locomotive

In 1940, when GE delivered its first 44-ton center cab diesel (CB&Q 9103), it had decided not to offer a M.U. option. GE was 70 units into production when an interurban line wanted to dieselize its freight trains and approached GE about m.u.-equipped 44-tonners. GE resisted. When SF&NV indicated they would go elsewhere, GE relented and built two engines. They then offered the m.u. option on future orders (to amortize its engineering costs). As a result, at least sixty-two 44-tonners of their total production of 385 locomotives were m.u. equipped at manufacture, or retrofitted. The SF&NV was so pleased with their two units that they ordered a third engine.
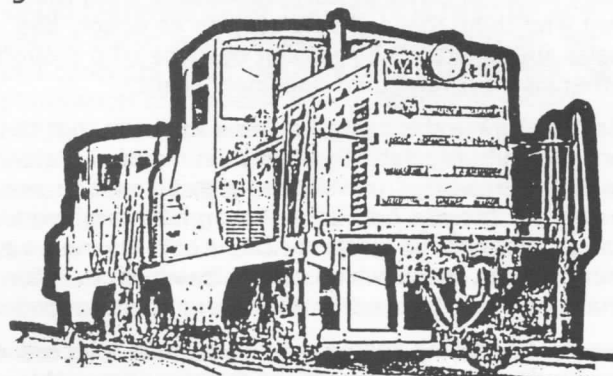
SF&NV Nos. 30 and 40 at Erie, Pennsylvania

Furthermore, this interest by ex-interurbans and short lines inspired the GE 70-tton diesel locomotive—with the m.u. option offered—which filled another market of 236 engines.
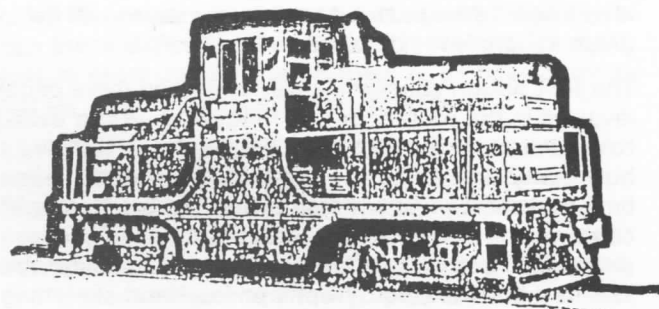
SF&NV No. 50

Closer to home, the Fort Dodge, Des Moines and Southern's four 44-tonners were m.u. equipped—the first two of 502 to 505 retrofitted by NYO&W in the late 1940s, and the last two originally equipped by GE. Additionally, the Fort Dodge Line had ten GE 70-tonners, all m.u., Nos. 401-411 (409 was used for parts).

It is always interesting to identify forks in the road: what preceded the turn, ponder the "why" of the particular turn, and its results. □

The Editor's Desk
by Bob Guenter

Well this is it: my final editorial in the *Caboose Kibitzer*! I have done my best (nauseatingly so in the minds of some readers) to remind both the membership and the MCoR administration (who may or may not be readers) that my agreed upon tenure in this job expires with this Summer 1999 issue, although I will continue to collect articles for the Fall magazine. I have been flattered by correspondence from those of you who think that I should stay on as editor, and have appreciated the restraint of those who thought otherwise but remained obligingly silent.

As it is, I gave the past two years my best shot but am now running out of gas, and—in my life outside model railroading—running out of excuses. You see, I have had to put a hold on some architectural work to the point where at least one client bothers me on a weekly basis. He shows no sensitivity whatsoever for mankind's innate need to play with miniature trains!

More intimidating still have been my wife's incessant demands that I take care of the maintenance problems that are beginning to plague our eighty year old house. She refuses to listen to my argument that the mark of good engineering is to have everything (in this case the house and its owners) fail at precisely the same time. Apparently she never understood the fundamental premise of that classic poem *The Wonderful One-horse Shay*.

These problems aside, I want to leave you and the new editor (whose identity is still being kept secret from all of us for some assumed surprise value) with an idea or two. I hope that these suggestions will be given serious consideration.

The first notion concerns a way of getting more people involved in the content of this magazine. When asked to submit something to the *Kibitzer*, I don't know how many times I have been told: a) "I don't have time to research and write an article" or b), "I simply can't write". Interestingly, at least a few of these professed "non-writers" have displayed considerable skill in the art of photography or freehand sketching.

But I may have found a way around this two-horned dilemma, and it goes like this: **A reader submits the seed of an idea—perhaps in the form of a photograph, sketch or offhand observation (accompanied by the briefest of background descriptions)— for use in a special "round robin" section of the magazine.** All readers will then be invited to add their two bits worth to that initial seed idea.

The follow-up contributions can be in the form of additional photographs or sketches—or for those with a talent for writing—historical information about the subject. It will be the (new) editor's responsibility to assemble these bits and pieces into an ongoing transcript open to all contributors. He or she will, of

course, provide proper attribution for each new offering. If everything goes as hoped, in time the magazine will have assembled a useful database, and made it available to the model railroading and railfans community. I will start the ball rolling by using the photograph reproduced on the front cover, and the abbreviated description on page three, as an example of how this "round robin" might work.
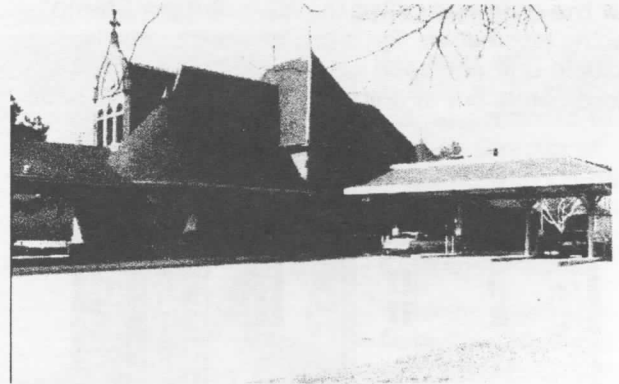
Imagine if you will, that said photo is the first in an ongoing series about the Rock Island depot (or alternatively about depots in general). In fact, if the new editor is willing, I will personally contribute a follow-up article for the Fall Issue of the *Kibitzer*: a short historical sketch about this building. It is an easy promise to keep since the architects, John Sinclair and Jim Hille, have graciously given me access to their considerable file on that structure!

Wouldn't it be great if someone familiar with the Fairbury depot came up with similar information about the proposed railroad museum illustrated on the back cover. I have been told that much of the work restoring the depot is being done by volunteer labor, and surely those guys have stories to tell. It has been my experience that construction personnel who worked on buildings I had designed were never reluctant to make editorial comment. The photo on the rear cover can serve as the seed for that subject (Fairbury depot, railroad museums, etc.).

With a little luck, we will soon have the Lincoln and Fairbury Chambers of Commerce underwriting the publication of the *Caboose Kibitzer* because of the

large number of railfans converging on the two cities to take pictures, make notes and get ideas for their basement pikes. If the University of Nebraska *Cornhuskers* don't have a better season, it would give their fans something to do in Lincoln or Fairbury on a cool Saturday afternoon this fall.

The next idea that I think is worth pursuing relates once again to people, but this time to the countless railfans who constitute the MCoR extended family. For starters, each model railroad or fan club in the region could have a group photograph taken of their membership for their archives. A copy of that photo would then be sent to the *Kibitzer* for inclusion in a specially created feature, *Model Railroaders You Should Know.* (I certainly hope that someone will come up with a better name).

Obviously, the club and each member would have to be clearly identified for the edification of the rest of us. The purpose of this effort would be to improve our knowledge of who's who in the Mid-Continent Region. I personally have come to recognize the faces of some of the patrons of the hobby who show up at meets in Omaha, Lincoln and Kansas City, but—being a shy person at heart—I know nothing about them. Armed with the photograph of club members, I could walk up to a person and ask if he or she isn't (for example) from Garden City, Kansas. It is a way of breaking the ice, and might save being slapped in the face.

I have always been notoriously bad at remembering names (just ask former students who sometimes surprise me at this or that professional meeting), but I can often remember their design work or where they sat in a design studio. It has something to do with the impact of visual versus auditory stimulation on my less than perfect memory. Added to this is the fact that my professional career has been focused on visual as opposed to other sensory input.

I am clearly not alone in this regard. Research suggests that this is a common phenomenon, and explains why many lecturers and most advertisers reinforce their message with graphic displays. It may also explain why "see?" and "do you see?" have become such an annoying part of everyday conversation, rather than the often more appropriate "hear?" or "do you hear?"

Back to the original point. Following up on these club photographs will surely enhance our relationships with one another, and improve communications within the region. Based on the response to date, the introduction of the *About Our Contributors* column—complete with its photo of the selected author—has been favorably received for similar reasons. I hope that future editors retain that series.

My next suggestion deals with a different point; one that gets to the heart of model railroading. That is who should be the most important beneficiaries of the hobby? Articles in the majority of model railroad magazines seem to focus on the replication of real-life prototypical practices, which is probably makes sense for the majority of adult enthusiasts.

Except for early schemes developed by Lionel, American Flyer and Marx, seldom have I seen pikes specifically tailored to the needs of young children. What a shame, since we probably lose a cadre of potential model railroaders when the pike in the basement is perceived to be Dad's private domain, and much too complicated and precious to leave in the hands of Junior and his grubby little playmates!

I would therefore argue that there is need for new thinking about layout design and construction. We need concepts which not only take into account the optimization of available space, economic factors and thematic concerns, but also schemes that incorporate features which will make the finished product user-friendly to children, beginners and the physically challenged. It would be admirable if this was a purely an altruistic matter, but in lieu of such unbridled compassion we could point to recent concerns about the future of the hobby.

In the past year I have run across an editorial or two lamenting the diminished interest in model railroading apparently being shown by the younger generation. If this is indeed true—and we oldsters want to reap the benefits that accrue with a larger purchasing population—then perhaps those of us in the NMRA should get busy and do something to attract those who have been short-changed by our current myopia.

How do we do this? Perhaps by actively soliciting input about these special needs using the same format suggested earlier for depots. What are some of the layout-viewing problems common to both children and to wheelchair-bound adults? And how can these difficulties be resolved? Waiting for the kids to grow up and the disabled to be healed should not be viewed as acceptable answers.

I bet that we could come up with several workable solutions to the problem if each of us sent in our favorite answer. As a result of our investigation, perhaps at the next major show we will find a video-equipped space set aside for the physically challenged and the small fry, complete with popcorn and a coke machine. As a bonus, a roving cameraman could move in on those parts of the layout that were specifically identified by his special audience!

Until then, I'll see you at the shows.
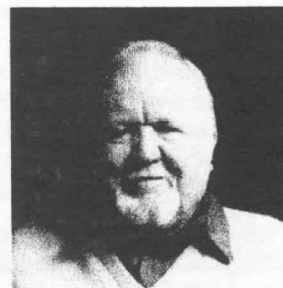
The Care and Feeding of New Locomotives

by Charles Mischke

We will use as an example Bachmann 44-and 70-tonner HO locomotives. A model locomotive is designed to have certain features, among which are:

- Market price
- Level of fidelity to prototype
- Level of performance expectation

The purchaser has a limited view of the designer's objectives. Among designers there is the old admonition, "Always turn the champagne corkscrew all the way in. The designer knows the size of the cork." Read and honor the directions enclosed in the kit. Current model locomotives are made well enough that the principal concerns are lubrication, wheel cleanliness, track cleanliness, and their maintenance.

Lubrication: The motor bearings are lubricated within the porous bushing (sintered bronze with voids which retain the lubricant). Apply the smallest drop of thin, plastic-compatible oil. Brushes are new and have to be worn in to get complete conjugate contact with the commutator. The full contact area is needed to reduce arcing at high loads. Oil is the enemy of commutator/brush function.

Plastic gears need a plastic-compatible grease. A grease is used to stay put and not spread out over everything. A grease wears out by its chain molecules being broken mechanically (and getting shorter and less viscous). The time to replace grease is when you find it spreading away from the gears and adhering elsewhere.

Locate a NMRA, MR, or other product review of your engine. Then execute the following steps:

(1) Remove the mechanism from the shell, place the mechanism on "blocks", clip on electrical leads, and test for freeness in **both** directions at a low voltage.

(2) Check factory lubrication (kit instruction will explain). If it is clearly missing on the gear train, use a little plastic-compatible grease.

(3) When lubrication is judged to be satisfactory, return chassis to blocks and run slowly in each direction for about one-half hour. Then increase the speed and repeat. We are putting some initial wear on the brushes, and distributing the grease over every nook and cranny of the contacting surfaces of the gear train. Watch the ammeter and see if the amperage is in line with the review reports. Clean the wheels at this point.

(4) Run the chassis free of train on your "test track" at varying speeds, checking amperage and smoothness.

(5) If all is satisfactory, and the frame does not restrict truck swivel, roll and pitch, try sharper and sharper curves, checking truck freedom and rail contact.

(6) Place couplers on the body shell, and body shell on the chassis. Adjust the couplers as necessary with a Kadee gauge.

(7) Perform the clearance check with body. Operate on all of your track. Identify the tight clearances and "adjust the world".

(8) With a couple of cars, check coupling and uncoupling everywhere the locomotive will go. Resist the urge to paint or weather the engine coupler. This couple has to work the best of all.

(9) Test on loop at increasing speeds with increasing train length, with an eye on the ammeter. When engine slips, is the amperage at or below the manufacturer's recommendation?

(10) If you are tempted to add weight, make sure that the engine slips at or below maximum amperage.

(11) If the locomotive is a diesel or straight electric to be used in multiple, try it with its natural friends. Starting with two engines about a foot apart, run them in both directions. If they essentially keep their distance for ten feet, they can be run together and the two will share the load equally. If they do not, then when coupled, one will be more heavily loaded than the other. Your ammeter will give you the total amperage and not warn you that one or the other is working hard. This is why the slip safety is so important. If you must run mismatched engines together, try slowing the fast one down by putting diodes in series with the motor. You will get a voltage drop on the motor of ¾ of a volt for each diode. By experiment find the right number, then put a second string of diodes parallel but oriented in the other direction. This will do the right thing in both directions.
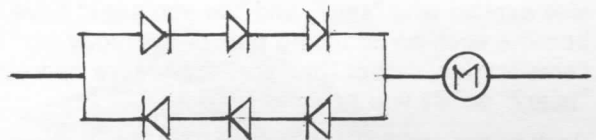
Eleven steps? Isn't this overkill? As the saying goes, "You can pay me now or you can pay me later." It is much easier to do these things up front, than spoil your fun later, when you have no choice.

Maintenance:

- Lube motor bearings and gear train annually
- Clean wheels more frequently
- Clean track even more often

As the plating wears off the wheel treads, the underlying metal--brass or nickel silver—offers more wheel/rail friction. While this makes the engine more surefooted, it raises the slipping amperage. Be sure to check the slipping amperage from time to time, and reduce weight if necessary.

Modifications: The time to make modifications is when the engine is new. There is always external detail to add, some of which can be done without the necessity of repainting the body. If you intend serious modification, begin with an undecorated kit. Bachmann's 44-tonner, for example, rides too high on its chassis. This can be corrected by making the chassis modifications described by Scott Whitney in the March 1997 issue of *Railroad Model Craftsman*.

Bachmann's 70-tonner is missing body detail: the four sandbox filler doors, and the accompanying sandbox base access plate. These are easily added. The grabirons for mounting the hood are missing. The under-the-cab-floor access at the cab rear has been omitted, and can be added. The usual individuality of prototype owners with horns, class lights, flag holders etc. can be accommodated.

Both engines suffer from too high a top speed, and by wiring the motors in series rather than in parallel, one can introduce the following improvements:

> Top speed is cut in half.
>
> Starting is smoother.
>
> The active arc of the rheostat (speed control) is doubled, allowing finer control.
>
> The headlights are brighter, especially at starting.

Note: R.B. Mitchell described how to do this in a well-illustrated article which appeared in the September 1993 issue of Model Railroading. Those wishing to modify their engines in this manner should refer to that article. ❑

How Military Specs Live Forever
From an anonymous source

- The U.S. standard railroad gauge (distance between the rails) is 4'- 8.5". That's an exceedingly odd number. Why was that gauge used?

- Because that's the way they built them in England, and US railroads were built by English expatriates.

- Why did the English people build them like that?

- Because the first rail lines were built by the same people who built the pre-railroad tramways, and that's the gauge they used.

- Why did they use that gauge then?

- Because the people who built the tramways used the same jigs and tools that they used for building wagons, which used that wheel spacing.

- Okay! Why did the wagons use that odd wheel spacing?

- Well if they tried to use any other spacing the wagons would break on some of the old, long distance roads, because that's the spacing of the old wheel ruts.

- So who built these old rutted roads?

- The first long distance roads in Europe were built by Imperial Rome for the benefit of their legions. The roads have been used ever since. And the ruts?

- The initial ruts, which everyone else had to match for fear of destroying their wagons, were made by Roman war chariots. Since the chariots *were* made for or by Imperial Rome, they were all alike in the matter of wheel spacing.

- Thus we have the answer to the original question. The United States standard railroad gauge of 4'- 8.5" derives from the original military specification for an Imperial Roman army war chariot.

- Military Specs and Bureaucracies live forever.

- So the next time you are handed a specification and wonder what horse's ass came up with it, you may be exactly right.

- The Imperial Roman chariots were made to be just wide enough to accommodate the back ends of two war horses!

Editor's Note: I first received a copy of the above essay from Professor Charles Mischke of Ames, Iowa (see photo below). That was subsequently followed by variations on the same theme from other readers who saw its potential for inclusion in the *Caboose Kibitzer*.

The House That CAD Built

by Tom Troughton

I've been scratch building model railroad structures for more than 25 years now, and until a few months ago I have been using traditional drafting instruments to create building plans. I acquired the Windows 95 version of CADRail—the Railroad Design Program from Sandia Software—at the 17th Narrow Gauge Convention held in Cincinnati last August. It has made designing, drawing and ultimately building structures much easier. In fact, work on my Sn3 ceased for a while as I was spending my evenings sitting at the computer learning to use the program. I felt it was an easy program to learn, once I received an upgrade CDROM from the company. It seems there was a glitch in their initial release that caused printer problems. When I alerted them to my troubles, they sent me their latest version as soon as they received my registration documents.

The majority of my scratch building projects are buildings and structures. I wanted to create exact scale drawings to use as cutting and gluing templates. Most of the Grandt Line doors and windows I use have a frame built into their back side. This frame is inserted into an opening cut into the wall of the building. Using an "S" scale rule, I measured the height and width of the frame, and recorded the dimensions in scale feet and inches.

These various casting dimensions were then used to create a "Library of Doors & Windows" in the CAD program. Each window with its "insert frame" dimension was entered into the library as a separate figure. Whenever I need a particular window, I call up the library and select the appropriate figure and "drag" it into the drawing with the mouse. It's final location is determined with a variety of commands within the CADRail program.
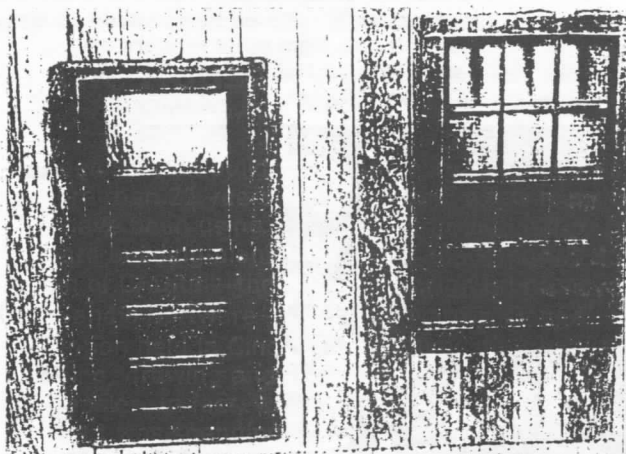
My most recent structure is a generic 20' wide by 30' deep false front wooden building that is home to the "Mountain Graphic", a newspaper published by Wm. Troughton. The Graphic, as it is called by the local residents of Tall Timber, Colorado, has been published since 1845. The building will eventually be situated among the random stone structures lining the graveled streets of Tall Timber, Colorado. The foothill community is the site of a helper facility of the Cimarron & Tall Timber Railroad, a division of the D &RGW. Actually, Wm. (Bill) Troughton, was my youngest brother who, in the mid 80s, owned and operated a small tee shirt printing company in Aspen, Colorado called Mountain Graphics. He died October 26,1989 while awaiting a heart transplant operation. His ashes were scattered over the mountains he loved that surround Aspen. This building is dedicated to him.
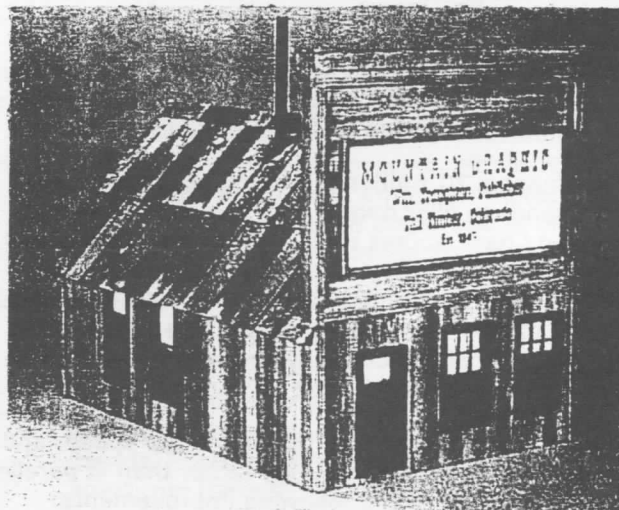
I used building dimensions from kits I have built and from standard building practices of the era. The doors were positioned so their thresholds were about 6 to 8" above ground level. Windows would be positioned so their sill would be approximately 24 to 36" above the floor. Walls were estimated to be about 10 ft. high. The front, rear, and both ends of the building were drawn with the CAD program and printed on index stock with my Canon Bubble Jet printer. The printouts were then glued to 1/8" thick untempered Masonite which served as my sub-structure. These elements were then cut out on my table saw following the printed lines as guides. I used a jig saw to cut the openings for the doors and windows. The actual Grandt Line castings were test fitted to make sure the openings were large enough. They would be attached later.

Front View   Rear View
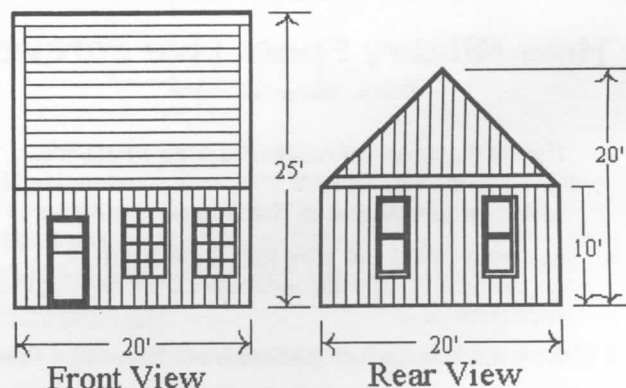
Since this was to be a wood paneled structure, I cut my strip wood from a plank of kiln dried basswood.

First, scale 12" square timbers were ripped on my shop saw. The square timbers were further ripped to scale 2 x 12" planks on a miniature saw. These strips were distressed with the teeth of a razor saw and stained with craft paints. I used a small patch of an old tee shirt, soaked in a barn red acrylic craft paint. These strips were allowed to dry before they were cut to length on a North West Short Line Chopper. I covered the Masonite sub-structure components, including all the door and window openings, before they were glued together. When the glue dried, the planks covering the door and window openings were carefully trimmed away with an X-acto knife.
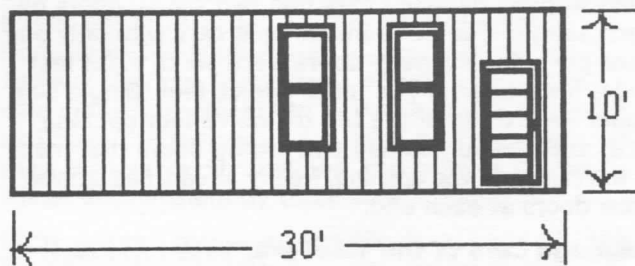
Right Side View
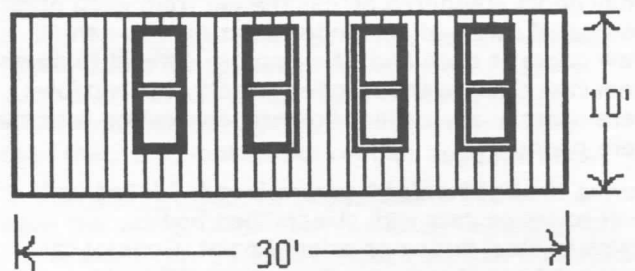
Left Side View

Before final installation of the doors and windows, I spray painted them with Krylon primer, then brush painted them with my craft paint. They were then dry brushed a dusty cream color.

Real glass from 35mm slide mounts was cut to size and glued to the frames with ACC. When the cement had hardened, the completed castings were installed, critically adjusted for squareness and secured in place with tiny dots of 5-minute epoxy cement.

I used the rear of the building as a guide to mark lines on the back side of the front wall unit. This line would be my gluing guide for a piece ofMasonite that I had cut to the same roof angle as the rear wall. It would be used as a roof support. The completed wall units were then glued together, making sure the corners were square. When dry, corner boards were added to complete the exterior detail. The sub-roof is made from 3/32" thick hard balsa wood. It was cut and attached to the building walls and the support behind the front wall with white Elmer's glue.

The actual roof covering was made from Campbell corrugated roofing material that I weathered in Archer's Etchant, available from Radio Shack.

Caution: *The etchant is caustic and can hurt you. Use plastic bowls and be sure to wear hand, arm, and eye protection while working in a well ventilated area.*

Before etching the metal, I painted one side of it with the Krylon primer. When it was dry, I cut it into scale 3' wide strips. These strips were then etched, about three at a time, in the etchant. When they started to "boil", they were removed with a pair of tweezers and placed in a bowl of clear water. If the etching wasn't complete, I put the piece back into the solution for more time. When all the pieces were etched, I gently rinsed them in clear water until all traces of the etchant had disappeared. I wanted to add an additional touch of weathering, so the pieces were dipped into a solution made by dissolving a steel wool pad in a bottle of vinegar. When dry, the effect is a nicely rusted piece of metal roofing.
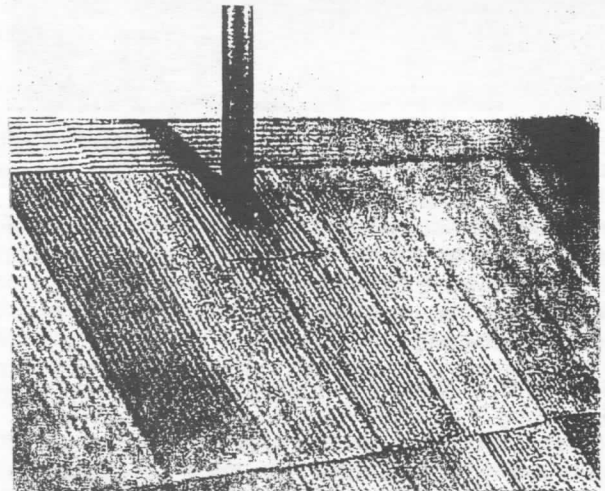
I usually make my roofs removable, but this time I secured the two roof panels to the side and end wall units with white glue. I made a gluing template from Masonite and fastened it into a predetermined position on the back side of the front wall unit. It provided a gluing surface for the roof panels at the front end of the structure. A support to help keep the stove pipe vertical was glued into position on the underside of one of the roof panels. A hole was then drilled through the roof panel and into the attached support block. A piece of brass tubing was cut and test fitted into the hole, but was not secured at this time.

The etched and weathered corrugated roof pieces were attached to the sub roof panel with Weldwood acrylic contact cement. This material is the color of milk and dries to an amber color. I painted one side of the roof and the painted side of the metal panels. When both were dry, they were carefully set into position, adjusted if necessary and pressed into place with my finger. This material is not as noxious as solvent-based contact cement and is a bit more forgiving. You can position panels around a bit before you start to pull up the dried adhesive. If that happens, merely reapply the cement to both surfaces and start over.

When both roof panels were covered, I cut thin pieces of the etched metal to make the cap. The pieces were

laid along the top seam, overlapping their ends and secured into position with the acrylic contact cement. The hole for the stove pipe was reamed open with a sharp X-acto knife. The brass tubing was colored with gun blueing solution and fastened into the previously drilled hole with 5-minute epoxy.

I created the sign on the computer with WordPerfect 8, adding color were necessary and adjusting its size until it "fit" appropriately on the front of the building. I made a support surface from several 2x12 planks and glued the sign to them. The entire structure was set on a plywood base to which I glued a piece of untempered *Masonite* to serve as a floor and to help secure the building in place.

Designing the "Mountain Graphic" building was fun and building it was made easier with the CADRail program. If you have access to a CAD program or have one of your own, why not give it a try for your next scratch-building project?

Editor's Note: The preceding article was published in the Winter 1998 issue of the RPO, the fine newsletter of the Gateway Division, NMRA. The material was provided on disk by the editors of that publication.

Baggage Cars
by Mark Malmkar

Early in the development of passenger trains there arose the need to haul passengers' baggage, including the suitcases that were needed on the trip. The railroads wanted to maximize the number of seats in the coaches, and did not want luggage scattered all over the cars. So baggage cars came into being.

Early baggage cars were not much more than box cars with sliding doors and no windows. As trains got faster and fancier, special cars were built with high speed wheels, better brakes and passenger equipment. Some baggage cars were painted and polished to match the sleeping cars. By the time of the steel limited trains, baggage cars bore little resemblance to box cars. (See Fig. 1).

Wooden Baggage Cars of the period 1870 to 1910 were generally as long as coaches. They had platforms each end until the 1890's. When coaches were fitted with vestibules, the platforms were usually removed from baggage cars. Passengers typically did not go into baggage cars, but each side door had a set of handrails and steps for the crew.

Cars of the era were often about sixty feet long, not including the platforms. Most were heated with a coal stove, which was sometimes supplemented with steam heat. In wooden cars it was easy to add or delete windows, so many variations can be seen in photos of the period. Often photographs of the same car—taken 10 to 15 years apart—show noticeably different window arrangements.

Most wooden baggage cars had two sliding doors on each side, but some railroads built cars with only one door per side. Baggage doors were six to eight feet wide, but some ranged up to twelve feet. Single side doors were often of the ten to twelve foot opening size, and sometimes had two sliding doors that met in the center of the opening. Nearly all cars had smaller crew doors at each end.

Baggage Cars of the steel era, 1910 to 1950, were usually seventy feet in length. Most had two doors on each side, however one was usually two to four feet wider than the other, with the large and small doors staggered across the car from each other. Most steel cars had no windows but did have small crew doors at each end. It was more difficult to do on steel cars than on the wooden variety, but windows were occasionally added. Sometimes existing windows were plated over.

During the **lightweight era,** railroads "dolled up" their baggage cars with streamlined bodies, stainless steel fluting or colorful paint. General car layout did not change much as most still had two sliding doors on each side. Windows in streamline baggage cars were rare. Due to their lighter weight, some streamline cars were lengthened to a full eighty-five feet, although seventy feet was standard. Most had four-wheel tricks, although some roads ordered heavy-duty cars with six-wheel trucks. Another detail frequently seen were streamline baggage cars with doors near the very end of the cars, instead of in the middle of the sides.

In the 1950's, the post office changed the way that mail rates were calculated, resulting in the volume of the car (measured in cubic feet) being more significant than how much weight was carried. This resulted in many railroads ordering large quantities of eighty-five foot cars that were rather plain looking, almost like big box cars.

The Missouri Pacific, for example, ordered over one hundred of these "boxcar" baggage cars. They had squared-off roofs and ends, and were used in streamlined trains. During the same year, the Union Pacific bought over one hundred additional baggage type cars which were outwardly similar to their existing fleet, thus keeping the "streamliner look" intact. These cars were often used to ship mail or express, but were commonly referred to as "baggage cars".

Express Cars

Over the years there were three basic types of express cars: 1) passenger car style, 2) box car style, and 3) refrigerator car style.

1) Passenger Car Style express cars were nearly identical to the standard baggage car. (See Fig. 1). In fact on most railroads the cars were exactly the same and interchangeable, and some cars carried both baggage and express. So why the different terms?

Express cars were generally reserved for express parcels, much like the things UPS hauls today. Express was often less than a full car load, moved on faster trains, and commanded a higher fee for hauling it. Companies like *Wells Fargo, Adams Express* and *Railway Express Agency* were private contractors who made agreements to gather express packages and have the railroads haul them on their trains. At their respective destinations, the express company would deliver them by truck or whatever.

Many railroad cars were specifically assigned to this service, and were painted and lettered for specific express agencies. In many cases the express agency would have its own employees ride the cars to sort and guard the packages.

In the wooden era these cars may have had more sliding doors for speedier loading and unloading. They also may have had more windows for the convenience of the agents riding the cars. Other than that, they looked like regular baggage cars.

In the heavyweight era baggage and express cars were the same. Often both materials were handled in the same car. Generally these cars had a heater, a toilet (water closet), washbasin and a desk for the agent. The toilets were usually in a corner but were unscreened. Brrrr!

During the lightweight era cars were used for both baggage and express. Many had plain exteriors and spartan interiors. Some had special markings that consisted of a five-inch diameter, five pointed star below the express car lettering. This star designated that the car was equipped for an "express messenger". I assume this meant that an agent or employee was inside the car, which was equipped with a heater, toilet, sink and desk for the purpose. Toilets on lightweight express cars were sometimes located in a separate enclosed cubicle or annex.

2) Box Car style express cars were just that: box cars. They had high-speed trucks, passenger style brakes, and steam lines for the heating system. These lines allowed steam to pass from the locomotive to the cars following the express cars. Often these cars were longer and had wider doors than regular box cars. Many times—especially in the streamliner era—they had special paint to match the train, or advertise a service. (See Fig. 2)

In the wooden era express cars were not common. Less than car load express shipments were handled out of the baggage car or caboose.

During the heavyweight era box express cars came into vogue. Many express boxes were handled in the second section of passenger trains, or in special mail trains. It became routine to see one or two of these cars per train. At Christmas time, one might see a half dozen cars per train, helping out Santa—and the postman—with the flood of Christmas cards.

By the streamline era these cars were beginning to decrease in number. Some railroads painted them to match their streamliners, while others left them pullman green or tuscan red which (in the view of many of us) ruined the looks of an otherwise identical consist. Invariably these cars had a unique number series to prevent mix-ups with regular box cars.

3) Refrigerated Express cars were specialty cars. They were usually assigned specific routes for specific customers and specific purposes. Examples might be: a) a milk car to pick up milk bound for a cheese factory in the city, or b) a fruit growers car with an order of ripe strawberries for a convention in New York City. Whenever customers needed speed and a cold car, the railroads provided a refrigerated express car (for a modest fee).

These cars and the type of service provided varied from one railroad to the next, but in general terms they were like any other refrigerator car, although they may have been longer and sported special roof lines and paint schemes. They had the mandatory high speed trucks and passenger brakes and steam lines. They also had their own number series.

During the wooden era these cars were rare. The New York Central and the Pennsylvania Railroads were probably the largest users. But for you wood car buffs, don't despair! Refrigerator cars remained wooden throughout the heavyweight and into the lightweight era. It was not until the 50's and 60's that steel sided refrigerator cars were used in passenger trains.

With this type of car—in any era—one should check out the industry, the clients and the purpose of the car before including it in a passenger train. There needed to be a good economic reason for its use. They were generally not included on trains such as the *20th Century Limited, City of San Francisco* or the *California Zephyr*. The exception to the rule would be the trains of the late 60's—prior to Amtrak—when the railroads would haul just about anything on their passenger trains. By 1968, for example, the Rock Island's Chicago to Los Angeles train, the *Golden State,* had more piggyback flats than coaches.

Mail Cars

Mail cars were of two types: Railway Post Offices (RPO) and the Storage Mail cars. The terms "postal cars" and "mail cars" were loosely used for both.

RPO These cars had facilities for sorting mail enroute. This meant that a crew of several men rode in the car to perform that very function. Special cancellation stamps were issued each route, and these are highly

collectible today. Special equipment inside the car included collapsible sorting trays and tables, racks for holding mail sacks in an open position, and pigeon hole letter cases in the wall. RPO cars even had slots in the side of the car so people could mail their letters at trackside. (See Fig. 6, 7 and 8).

Another feature unique to the RPO was the mail hook. These were hefty steel bars bent in the shape of an open hair pin that were located outside the side doors. (See Fig. 3 and 4). When they were swung out from the car they could snag a mail sack that had been suspended from a tall pole at trackside. This pole was called a "mail crane", and the snagging operation meant that the train did not have to slow down at secondary stations to collect the mail. When a mail car needed to deliver the mail at a small station "on the fly", a postal clerk merely leaned out the door of the RPO and threw the mail sack onto the platform. They had to have good timing, of course.

Mail trains were highly profitable to the railroads. The thing to remember is that the Post Office—not the railroads—determined which train schedules got the mail service. Departure times, speed and reliability determined how contracts were awarded, and competition was fierce. If two railroads ran between the same cities, usually only one would be awarded a contract.

RPO's came into existence early in the wooden era, and there were manned mail cars in the 1850's. Wooden RPO's were made in a variety of styles. Most had platforms at each end until the late 1890's, when they were removed. The majority had one or two side doors for the clerks to collect and deliver the sacks of mail, as well as end doors for going from car to car. These were well locked to prevent unlawful entry. There were usually three to six windows on each side.

At the beginning of the heavyweight era (in 1912 to be exact) the Post Office set up standards for RPO construction. These went into effect in 1915 for all cars in service. Many roads scrambled to build new cars, or remodel old cars to meet the code. The Post Office set the internal working standards for rail cars that were used to sort mail. The primary feature of these plans was the standardization of the length of the mail compartment at fifteen feet, thirty feet and sixty feet. (See Fig. 6, 7 and 8). The design was such that it took little shop work to convert from one size sorting compartment to another. The remaining space in the car was left as a baggage car to store sorted mail.

RPO's of the heavyweight era were sixty feet in length for a sixty foot compartment. (See Fig. 3). Some cars built by the Pennsylvania Railroad were seventy feet long and had a sixty foot compartment. The extra ten feet was a mail storage compartment. The thirty foot RPO compartment was usually combined with a forty foot baggage compartment. (See Fig. 4). This class—ARA class MB—was built in large numbers.

The fifteen foot RPO compartment was often combined with baggage, express or coach configurations, and coach compartments were used as smoking cars.

The short fifteen foot RPO's were used on short or light traffic runs, or even on commuter trains. An example would be the Holdrege, Nebraska to Sterling, Colorado Highline branch. Or the Lincoln to Kansas City division of the CB&Q.

RPO's of the lightweight era were of the same design as the steel heavyweights, only the codes were upgraded for the new materials of aluminum and stainless steel. Little change was made to the overall lengths and floor plans. During the streamline era, railroads ordered full eighty-five foot cars with RPO's in them. This left twenty-five feet of baggage space for a sixty foot RPO, or fifty-five feet of space for a thirty foot RPO. Fifteen foot RPO's were found in many lightweight cars in combination with baggage, coach and lounges.

By the time Amtrak started in 1971, the RPO's had departed the scene. In the mid 60's, the Post Office canceled most of the contracts with railroads in favor of truck and air transport. Mail cars lived out their remaining life as baggage cars or in MOW service. To my knowledge, Amtrak never operated working RPO's.

Mail Storage

Guess what: mail storage cars look like baggage cars! Are you confused? They normally had two sliding doors on each side, but no windows, toilet or desk.

Wooden Era   Mail storage cars were not common in the wooden era. Extra sacks of mail or heaps of packages were simply carried in regular baggage cars.

Heavyweight Era   During this period the Post Office began routing larger shipments of mail bound for large cities in separate locked cars. These cars looked like regular baggage cars but had no riders. In fact, once the car was loaded at a postal facility it was sealed until it reached its destination. For example, at a large post office in Chicago all the Los Angeles-bound mail was presorted, collected and bagged. These sacks were then loaded into a designated car bound for Los Angeles. It may have been only half full some days, while other days two cars were needed.

The car was then switched onto mail train UP#25 and left Chicago. After sailing through the likes of Omaha, Cheyenne, and Ogden—never having been opened—it arrives in Los Angeles. That was how the mail storage cars worked. They were also numbered in a separate series for easy identification.

Some railroads used forty foot high-speed box express cars to carry storage mail. One could never tell what was being hauled behind those seven foot Youngstown doors. Amtrak, in fact, has gotten into the mail storage service. Special *Platinum Mist*-colored box cars can be seen on some intercity trains these days. The *California Zephyr* is one. It has three such cars when it leaves Chicago westbound, one of which is dropped off in Denver. You can even send express packages across country via Amtrak— for a fee of course. (Talk about history repeating itself).

<u>Lightweight Era</u>   Mail storage cars were very common. Remember the Post Office changed mail rates in the 1950's, causing railroads to buy up hundreds of new baggage cars. Many of those cars were used in mail storage service. (If this doesn't ring a bell, back up to the opening page of this article and read it again).

Combination Cars

I have briefly mentioned several combinations of baggage, mail and express cars. The ARA class MB (baggage and mail) was a large class of combined cars. (See Fig. 4). Many railroads used these seventy feet long cars in both the heavyweight and lightweight era. But the largest class of combined cars was the ARA class BE (baggage and express). Thousands were built, and it soon became the standard combination car.

Another common combination was ARA class CA: baggage and passenger. They were also known as "combines" or baggage-coaches. These were half baggage and half coach, with one vestibule and one baggage door on each side They seated from 24 to 40 people, and during the wooden era many shortlines and branchlines had these cars on their roster. They were plentiful in the heavyweight era also; but alas. there were relatively few lightweight combines purchased. Amtrak *Superliners* had them, but that's another story.

Pullman used a lot of baggage combinations— ARA class CS. Known as *club cars, buffet cars, smoking cars* or *combines.* (See Fig. 5), they had a baggage compartment at one end with a single door on each side. The other end was fitted with 12 to 20 leather chairs and a buffet (small kitchen). Sometimes a barbershop and a shower were included, and these latter cars ran on the best limited trains in the country. They were equipped with ash trays, polished brass spittoons and, prior to prohibition, a liquor cabinet. Can you guess how they were used? (Hint: saloon on wheels).

Summary

Well, this has been a brief look at 150 years of "head end" cars. Just to mess up your mind, here is a quiz: Did railroads regularly run head end cars on the back of trains?   The answer: They certainly did, and the Missouri Pacific was one of those roads. Their *Colorado Eagle* streamliner between St. Louis and Denver ran "head end" cars at both ends, with the coaches and sleepers in the middle. They ran mail storage cars on the back between St. Louis and Kansas City, because it was easier to drop them off enroute that way. Now go out and model that arrangement, and see how many people tell you that you are doing it all wrong! ❑

Figure 2.   Express Car (Refrigerated Express Similar)
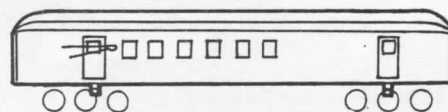
Figure 3.   Mail car (60 ft RPO):   Class MA
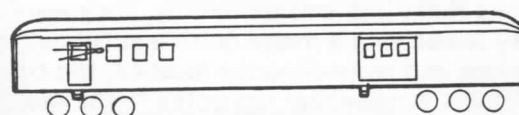
Figure 4.   Baggage and Mail (30 ft RPO): Class MB
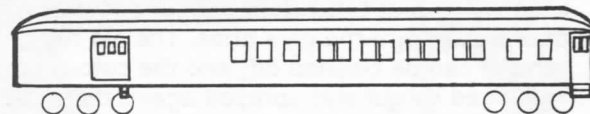
Figure 5.   Combination: Class CA or CS

Figure 6.   !5 foot RPO
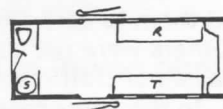
Figure 7.   30 foot RPO
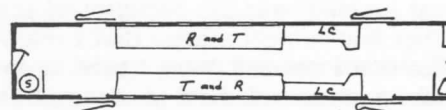
Figure 8.   60 foot RPO

Legend

R = mailbox racks
T = sorting table
S = stove
⚓ = baggage hook
△ = water closet

Figure 1. Baggage, Express or Mail Storage

Creating the Realistic Backdrops and Scenery That You Really Want!

by Dennis O. Smith

My *Deerbrook and Saltern Railway Company* layout is a continuation of the *Saltern* modules that I built in 1985. Before expanding my pike, I decided that the module approach was the most appropriate way for me to develop my entire layout, and this included its scenery.

The basic idea came to me while creating a backdrop for my first module in 1985. Because of my railroad's theme, I needed 1860 period buildings for both my module and its backdrop. To accomplish this, I 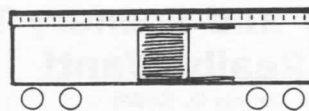copied old black and white photographs, and then colored them with colored pencils. They were then spray sealed with a matte finish and cut out. After checking and rechecking the location, the cut-out structures were rubber cemented to the sky-painted backdrop. The leakage of cement around the edges was easily removed by simply rubbing it off.

Another advantage of using rubber cement is the ease with which the cutout can be removed from the backdrop before the glue dries. The old rubber cement can be cleaned off, and the cutout reused. The glued cutout was sprayed again, then—as a final protection when moving the module—the whole backdrop was sealed with acrylic matte medium.

But now I had an entire layout to work on, and times had changed since my first backdrop. For one thing we now have access to color copiers! For period buildings I started by using color photographs of structures in restorations of the period. This worked well because I could have them scaled to the size needed, and I could have them reversed to account for shadows or photo angle. I again colored the cut edges so the white copy paper would not show.

For some buildings, I glued them to card stock before cutting them out. Others were cut out and then glued to one or two layers of craft foam sheets (foamboard) to add depth. In the latter case, I used a hot wire tool to cut the foam sheet(s), following the outline of the previously cutout building. Again the edges were colored to match the building's front.

The biggest problem was the background scene. I could neither find subject matter that I really wanted nor the size that I needed. Well, I took more photographs and also used old photographs that I had on hand. Pictures that I liked got sized and color copied. Then using a little imagination, and some trial and error, I removed the sky from the enlarged color copies. I trimmed each of them so they would match or blend with one another. Then I placed them against the pre-painted backdrop of the sky, and held them with small pieces of masking tape or in some cases propped them up with pencils and straight pins. This allowed me to stand back and look at the overall scenic view, and make changes and adjustments easily.

If the scene called for a structure, I would do the same thing with the building that I chose for the purpose. I would adjust the buildings or change them as I wished. Then, most importantly, I would live with this mock-up for a day or so; or even longer.

I then checked the backdrop with structures in place, and railroad cars set on the layout. If I liked what I saw, I would take a Polaroid-type photo and study it to see if additional adjustments or changes were needed. This photo showed me what was really there, and not what I thought I saw. It is an excellent way to check a scenic area.

I would now mark the sky board and background scenery pieces where the different paper items are to be located. Cleaning the work area and gluing the backdrop scene was the next task. As before, I cut out the scene, colored the edges, and sprayed the cut-out scenery piece. I found that this worked best if done before gluing it on the backdrop.

I tried gluing the small sections together before gluing them to the sky-painted back board. This created some problems because of the large size and length, and the drying time of the glue. The best and easiest way was to work with small section when applying them to the back board. You need to get them solidly glued to the backdrop. If not glued solidly in place, when you try to seal them they will blister or have raised bubbly areas. Yes, you definitely need to seal them! This will also make it easier to clean and protect your work.

The next step is to stand up the cutout buildings that seem right for the area. After marking where each building is to be located, start gluing them on one at a time. Remember, the vast majority of buildings have vertical lines. I found it good practice to check each building with a vertical level. This is the time to correct it before the glue dries. Then the fun real begins as you finish developing the whole scene, and have hidden the hard line between the table and the backboard. Good luck, and have fun creating your own custom-made scene for your railroad empire. □
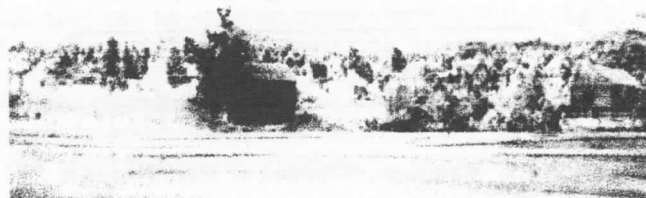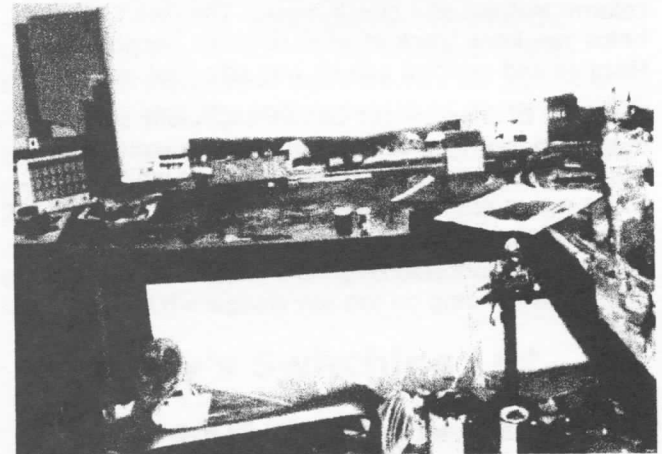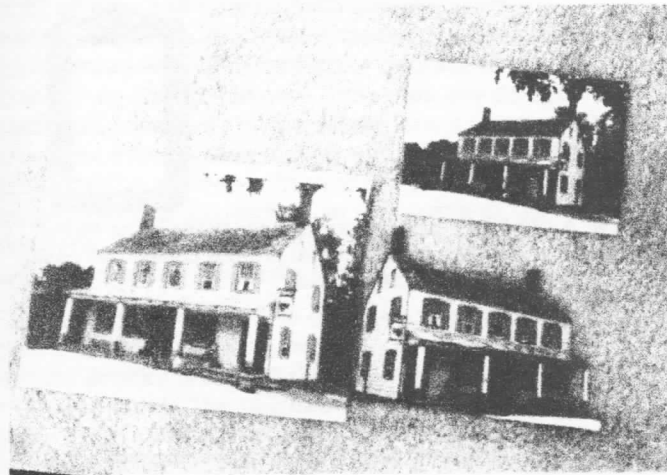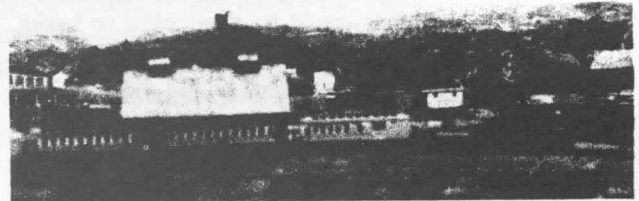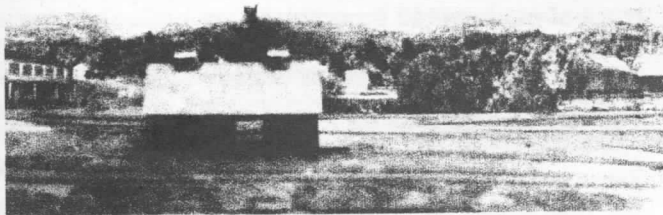
Various views taken during of the construction of backdrops.

DEERBROOK & SALTERN RAILWAY COMPANY

THE IRON ROAD

NEWS RELEASE

For immediate release...17 April 1999

Phase Two trackage connected to Phase one!

On **17 April 1999**, Phase Two Trackage was connected to the original Phase One (the HO benchwork of the Phase Two construction plan had been completed as of 6 June 1998). This addition includes the Owen Mill Station, and the interchange trackage with the *Central Western Mountain Valley* and other railroads. All major trackage wiring is completed, as well as the temporary trackage for the future Phase Three and the track switches for Phase Four. The addition has provided over thirty two extra square feet of layout to the growing *Deerbrook & Saltern Railway Company's* empire.

On the inaugural run, the train was delayed because of an overgrowth of foliage along the river track in the canyon. This overgrowth was caused by the earlier work of a scenery crew in that area. The basic scenery is now done, except for some detail work. The several mills, the lake and various rivers have been completed. The depot for Owen Mill is the major structure remaining to be constructed. Likewise, the upper half of the mountain in the vicinity of the mining operation remains to be done.

Work was delayed several months when my father was hospitalized. This was followed by an ongoing long-time recovery period. Then came an earlier than usual spring, and the need to tame the jungle growing outside the house.

Dennis O. Smith

Fun With Your Computer

by Al Gaddini

The computer can be a valuable tool for working on your model railroad. You can make your own forms and have fun doing it because you create them to fit your specific needs. The possibilities seem unlimited, but one of those forms could be used for trouble-shooting, while another could be dedicated to tasks that needed to be done.

The troubleshooting document would have a column for problems, and a column for detailing how the problem was solved. There would be two additional columns under a "completed " heading: one with space for checking **yes**, and another with a space for checking **no**. (A date can be used in the "*yes*" column instead of a check mark). The **"*no*"** column helps you keep track of what remains uncorrected. Margins and spacing can be any size that you prefer.

This kind of check sheet can be especially useful during operating sessions. One person would be assigned to keep track of malfunctions while the trains are in operation by making note of them in the "problems" column. A proposed solution could subsequently be recorded in the next column.

The second form to be discussed is the Task Sheet. This form encompasses any job that you need to do on your railroad. There would be a large column labeled "tasks", and—like the previous form—two columns, one with "**yes**" and one with "**no**". The "comp." heading once again stands for "completed". As before, the date can be used in the "yes" column instead of a check. This procedure helps you keep track of your overall progress on your railroad. The tasks could include anything from making trees to the maintenance of locomotives or rolling stock.

The two samples illustrated were done on a Mac computer using the *Claris Works* drawing program. You need a drawing program such as this to create the text frames. Each form was done on an $8\frac{1}{2}$" x11" sheet of paper with margins and spacing as desired.

Note: A clip board works very well for holding the forms during working sessions. Several printed copies can easily be held in place on such a board.   ☐

Midwest and West Model Railroad
Trouble shooting

Problem	Correction	Comp.	
		yes	no

Midwest and West Model Railroad

Tasks	Comp.	
	yes	no

Dispatcher's Desk
by Bob Amsler

I was reading some interesting letters that discussed the impact of real problems on a layout owner's operations. The general thread of the discussion focused on how the prototype railroad would respond to a similar event. What havoc would this unleash on the scheduled trains, the connections, and the yardmasters? All of this was interesting and I thought I would tell you about some of these "disasters".

A common event on any model railroad occurs when a train jumps the track. Instantly a car or cars leave the right of way and careen onto private property alongside the tracks. If this happened to the prototype, the railroad would immediately contact the local emergency services in case there was any dangerous materials involved. In the steam era a wreck train would be immediately called and dispatched to the scene of the accident. In modern times cranes and equipment are dispatched to the scene of the accident. The railroad may own the equipment or a local contractor may own the equipment.

The railroad then tries to clean up the mess. The first priority is securing hazardous materials. The second priority is to limit damages. If there are more than one track, the railroad will try to get the adjacent track clear as soon as possible so some freight can be moved. When this is completed, the cars are righted and placed on the track or a flat car for transport to the repair shop.

When we have a derailment, what do we do? Could we send out the wrecker? Can we call on a local crew to clean up the mess? How can we simulate this? How about pulling the track out of service. If any of the adjacent tracks are blocked pull them out of service too. Pull the tracks out of service for a realistic amount of time. (Dare I say make the engineer and conductor take a drug test?) You can even perform an investigation. After all, the owner will want to know why that train derailed.

What about the car with a truck that keeps causing the car to leave the rails or wobble excessively? Why not set it out at the next siding and report it to the dispatcher and yardmaster as in need of repair? That is what the prototype will do if a car is dangerous or has a hot box. If the car is lame, put it in a siding and let the next local pick it up. Give the car card to the yardmaster and let him know where the car is. (This is another good reason to name everything on your railroad.)

This will allow the owner of the layout to fix the car between operating sessions. The car can then be placed back on the siding and picked up by the local and brought back to the yard. Once it is in the yard, it can be placed on the RIP (Repair in Place) tracks. Leave the car there for a session and then route the car to its original destination.

What do you do when the car that the train pulls into the yard does not have a car card? Do like the prototype: put the car on a special track and have the yardmaster put out the word that a waybill is needed for a car. The prototype has yard clerks who would immediately call the central billing and clerk office to determine where the car was to go, what it carried, and its routing. A second waybill is then generated and placed in the car card. Then the car can be switched into the appropriate train.

Have a coupler come off during an operating session. The prototype carries knuckles but not drawbars. Treat the broken coupler like a broken drawbar on a car. Take the car out of the train, place it in a siding and give the paperwork to the yardmaster. He can leave the car there for the layout owner to repair and replace back at the siding. The yardmaster can treat the car just as he did the car with the hotbox described above.

If it breaks on the layout or causes problems, treat the problem like the prototype. This should work just fine as long as you have kept up on maintenance on your railroad and cars. If not, it could be a call to repair these items and put the railroad in top operating condition. Until the next time, may all the signals you see be green over red! □

Gary's Switching List
by Gary Hemmingway
MCoR Area Meet Chair

Jul 17-24, 1999: NORTHSTAR '99-NMRA NATIONAL CONVENTION. Minneapolis/St.Paul, MN. Information: Pat Walker, 1116 Randolph Avenue #16, St. Paul, MN 55105; Phone: (612) 6990-5245.

Aug 7-88, 1999: GATS. Tulsa Convention Center, Tulsa, OK, Admission $5, 11am-5pm both days.

Sep 11-12, 1999: SOUTH CENTRAL MODEL RR SHOW & MEET. Imperial Mall, 3001 W 12th St., Hastings, NE. Sat: 10am- 5pm, Sun: 12 noon-5pm. Tables $10. Information: Deb Blunt, 3001 W 12th St. Suite 36, Hastings NE 68901. Phone: (402) 463-3315.

Sep 25-26, 1999: GATS. Nebraska State Fair, Lincoln, NE. Admission $5, 11am-5pm both days.

Nov 27-28, 1999: GATS. Gateway Center, Collinsville, IL. (St. Louis Area). Admission: $5, 11am-5pm both days.

Dec 11-12, 1999: GATS. American Royal Complex, Kansas City, MO. Admission: $5, 11am-5pm both days.

Dec 18-19, 1999: GATS. Century II, Wichita, KS. Admission: $5, 11am-5 pm both days.

Mar 11-12, 2000: 13th ANNUAL AIR CAPITAL TRAIN SHOW & SWAP MEET. Information : PO Box 3245, Wichita, KS 67201-3245.

2000 NMRA NATIONAL CONVNENTION. San Jose, CA. Host: Pacific Coast Region, 21st Century Limited. Info: Bob Ferguson, Registrar, 530 Fig Tree Lane, Martinez, CA 95453, e-mail BobPCRCD@aol.com

2001 NMRA NATIONAL CONVENTION. St. Louis, MO. Host: Gateway Division MCoR. □

Pike Registry

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STANDARD RAILROAD OF THE SAN JUANS
Sn3, of course
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Shawnee, Kansas

RIO GOLARE SOUTHERN
STANDARD RAILROAD OF THE SAN JUANS
G
Tedy Bellos
Superintendant
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Collinsville, IL 62234
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Creve Coeur, MO 63141

Baker Creek & Sun Valley RR
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Manchester Mo 63021
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General Superintendent
Kansas Division
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Kansas City, KS 66112   913-299-2923

Loon Lake Railway & Navigation Co.   Sn3
Peter B. Smith
Receiver
4317 Mahogany Lane, Belleville, IL 62226
Tel. 618 277 5518   E-Mail: psmith@apci.net

Midwest and West Model Railroad
Headquarters:
9508 Buena Vista
Overland Park Ks 66207
913-341-9699
President - Al Gaddini

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127 South Jefferson
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THE HERITAGE LINE

**This space reserved for
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**This space reserved for
A l   B a i l e y**

**This space reserved
for Charles Buswell**

DEALER DIRECTORY

This roster was created for the benefit of members of the MCor Region. It identifies those clubs that are presently active in MCoR. Any group that wishes to be included in this listing should send the editor the club's name, contact address and scale interest.

Arkansas Valley Model RR Club (HO,HOn3, O 2rail, ON3, S, SN3, and large scale)
7 Chaparral Lane
Little Rock, AR 72212-3619

Big Bend Railroad Club (O)
8833 Big Bend Boulevard
Webster Groves, MO 63119

Capital City Model RR's (HO)
PO Box 243
Jefferson City, MO 65102

Claremore & Southern (HO)
3049 Clover Creek Drive
Claremore. OK 74017

Columbia Model RR's (HO) 410 Camelot Drive
Collinsville, IL 62234

E. Jackson City Mainliners(HO)
807A Main Street
Blue Springs, MO 64015

Gold Creek RR Co. (1/2")
8324 Hall
Lenexa, KS 66219

Kansas Area N-Trak (N)
2046 S. Elizabeth #1306,
Wichita, KS 67213

Kansas Central MRRC (HO),
530 E. 3rd Street
Hutchinson, KS 67501

KC O-Scale Modulars (O),
10334 Ash
Overland Park, KS 66207

Kansas City S Scalers (S, Sn3)
512 SE Douglas
Lee's Summit, MO 64063

Manhattan Area Rail Joiners (HO), 811 Osage
Manhattan, KS 66502

Missouri Northern RR Soc. Inc. (HO) PO Box 12591
North Kansas City, MO 64116

Modular HO Narrow Gauge Soc.
1120 Hawken Place
Webster Groves, MO 63119

Mo-Kan Railjoiners Inc (all)
14906 W 150th Street
Olathe, KS 66062

Nishna Valley MR Society (HO)
1303 8th Street
Harlan, IA 51537Northeast

Northeast Kansas Garden Railway Society (NEKAN-GRS)
1308 SW Caledon
Topeka, KS 66611-2412

Ozark Model RR Assoc. (all),
224 W. Commercial,
Springfield, MO 65803

Parsons Model RR Engineers (HO), Cherryvale Depot
Cherryvale, KS 67335

Quincy Society of Model Engineers (HO, HOn3)
Rt. 7, #9 Shady Acres
Quincy, IL 62301

Society of Model Engineers (HO), 5715 W. 81st Street
Prairie Village, KS 66208

Southern Illinois Train Club (HO,N,G), P.O. Box 1633
Marion, IL 62959-7833

SW Indiana Modular RR's (HO), 3107 W. Capitol
Little Rock, AR 72209

Tri-City Model R.R. Assoc. (HO, N) 607 South Shore Dr.
Hastings, NE 68901

Wichita MRRC (HO, HOn3)
PO Box 48082
Wichita, KS 67201

Advertising Rates

McoR invites you to consider the Caboose Kibitzer for your advertising. This magazine serves over 800 National Model Railroad Association members in our seven state area of Iowa, Nebraska, Kansas, Missouri, Illinois, Arkansas and Oklahoma.

Our commercial advertising rates are as follows:

Ad Size		Cost per year (4 issues)
9 1/2" x 7 1/4"	Full Page	**$120.00**
4 3/4" x 7 1/4"	Half Page	**70.00**
4 3/4" x 3 1/2"	Quarter Page	**38.00**
2 1/2" x 3 1/2"	Eighth Page	**22.00**
2" x 3 1/2"	Business Card	**15.00**

Dealer Directory:

1 3/8" x 2 3/8"	Business Card	**10.00**

Pike Registry Ads:

1 3/8" x 2 3/8"	Business Card	**5.00**

Single issue commercial ad rate is 35% of the yearly rate. Want ads are free to current MCoR members. They are subject to available space and acceptance at the discretion of the editor, and are limited to 25 words or less.

Ads need not be identical throughout the year. Prices listed above are for **camera-ready** copy. Design and 'typesetting' services are available on request at extra cost. **All inquiries and payments should be sent to the Advertising Manager : Gene Tacey, Box 485, Sutherland, Nebraska 69165. Make checks payable to the Mid-Continent Region.**

Advertising Index

The editorial staff hopes that our readers will make an effort to patronize establishments that advertise in the Caboose Kibitzer. It is in the best interest of all parties concerned, since the quality and availability of this publication is directly related to: 1) regional interest and participation in NMRA and MCoR, and 2) the level of commercial support which it receives in the form of advertisements.

Something to Think About

The Fall 1999 Issue of the Caboose Kibitzer will be under the direction of a new editor. Based on my own experience two years ago, he/she will need the cooperation of many MCoR members to get the first issue or two off and running. I will be able to provide some material that I have stashed away in my files, but much more is needed. Until a new mailing address is assigned, send your material to me at 714 South 33rd St., Lincoln, NE 68510. (Bob Guenter)

NMRA and/or Mid-Continent Region
Membership Application and/or Renewal Form

Name _____ **Phone** _____

Street Address _____

City, State and Zip Code _____

NMRA Member Number _____ **MCoR Member Number** _____

$_____ is enclosed for NMRA dues. New [ ] Renewal [ ] One year - $32.00 [ ]

Youth (under 20) - $21.00 [ ]   Family Member - $6.00 [ ]   Affiliate (no Bulletin) - $16.00   Sustaining - $64.00 [ ]

Please enclose NMRA renewal notice to facilitate transmittal to NMRA office.

Life Membership is at an actuarial rate based on age. Apply directly to the NMRA home office for life memberships.

$_____ is enclosed for MCoR dues. New [ ] Renewal [ ] One year - $6.00 [ ]

Two years - $12.00 [ ]   Life (under 60) - $120 [ ]   Retired Life - $60.00 [ ]   Family Member - $2.00 [ ]

Note: NMRA Life membership is required to become a life member of MCoR.

Please make out your remittance to: **Mid-Continent Region.**

Send your application or renewal to: **Robert Lenz, 907 Parkfield Terrace, Ballwin, MO 63011.**

Mid-Continent Region
3073 Meramar Court
St. Louis, Missouri 63129-5212

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