

# HOTBOX

"the Un-Magazine of Model Railroading"

No. 170

November - December 1981







# HOTBOX

**OFFICIAL PUBLICATION • Twin Association of Model Railroading**

Issued every month with an additional special mailing of a Directory of Membership during the summer.

Annual dues for the TAMR are as follows:

**REGULAR:** (under 21 years of age) \$10.00

**ASSOCIATE:** (21 years of age and up) \$9.50

**SUSTAINING:** (both Regular & Associate) \$15.00

Please address all membership applications, renewals, address changes and complaints of non-receipt of the TAMR HOTBOX to the TAMR Secretary.

**TAMR Secretary:** Gerry Dobey  
145 E. Kenilworth Ave.  
Villa Park, IL 60181

All other HOTBOX business, except where specifically noted, is handled by the Editor. Please address all comments to the Editor.

**HOTBOX Editor:** Mark Kaszniak  
4818 W. George Street  
Chicago, IL 60641

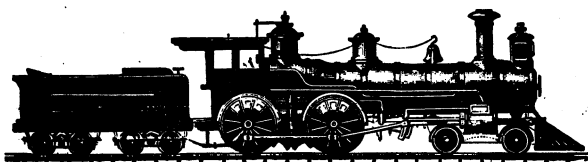
**DEADLINES:** The TAMR HOTBOX welcomes articles, photographs and artwork pertaining to model and/or prototype railroad subjects. All material for publication must be submitted 30 days before the month of publication. The TAMR HOTBOX assumes that all material is submitted for the mutual benefit and enjoyment of the hobby by the membership and thus no payment will be made upon publication.

## Notice of Change in Dues & Publication Rate

- 1) As of July 1, 1981, dues for the various classes of TAMR membership shall be as listed above.
- 2) All those who renew or join on or after July 1, 1981 will be required to pay the increased rate and will then be entitled to receive twelve (12) issues of the TAMR HOTBOX.
- 3) The TAMR HOTBOX will switch over to a monthly publication at the beginning of 1982. This will give the TAMR time to amass funds; change its prospectus literature; gather articles for future publication; revise mailing lists and establish new publishing and mailing procedures for the monthly schedule.
- 4) The remaining 1981 HOTBOXs--with the exception of the November/December 1981 issue--will be limited to twelve (12) pages in order to prevent either a drain on the TAMR's finances or the HOTBOX's article supply.
- 5) Starting in 1982, each HOTBOX will then be a minimum of twelve (12) pages unless membership figures and/or financial considerations warrant otherwise.

--Approved by TAMR Executive Board  
June 6, 1981

**REMINDER:** Contest deadline for both the pass and photo contests is December 1, 1981. All entries must be received by that date to participate. See the last HOTBOX for rules and additional information



## INTERCHANGE

If you have something to buy, sell or trade, use the INTERCHANGE to get results. Your ad is seen by all TAMR members. Rate: 10¢ per column line (35 spaces), name and address printed free. Send all ads to the HOTBOX Editor who is temporarily handling all advertising.

**SPECIALS:** Local hobby shop went out of business and I picked up many RR items at 50% to 80% off normal retail price. Such as power packs, track, engines, structures, kits (both plastic and craftsman), rolling stock and other misc. items. HO and N scales. All items new and never used. Will sell at cost plus shipping. First come--first served. Send SSAE to me for long list: Steven Masih, 1525 9th Ave. SE, St. Cloud, MN 56301.

**WANTED:** Back issues of Passenger Train Journal. Must be in good condition. Send list, prices to: George Fletcher, 80 Greenport Ave., Medford, NY 11763.

**FOR SALE:** HO Collection of Santa Fe, NYC, PRR, Milwaukee, Southern, B&O, CN, CPR, private company road name locomotives and freight cars. Specify road name list required. John Chambers, 2039 Ogilvie Road, Ottawa, Ontario, CANADA K1J 7P1

**INTERESTED NARROW GAUGE & LOGGING FANS AND/OR RAILROAD HISTORIANS**

The Narrow Gauge & Logging Division is rolling! If you are interested in the model or the prototype of narrow gauge and/or logging then the NG&L is for you. A membership (\$3.25 a year) includes six issues of our ever expanding newsletter, LINK & PIN NEWS. For additional membership info or a sample issue of the L&P (send 60¢) contact: Claude Morelli, NG&L Division, 2236 Dietz Place NW, Albuquerque, NM 87107

Join the Western Region of the TAMR. Dues are only \$3.00 a year and you'll receive a subscription to our newsletter, the DAYLIGHT. Write: Tom Gasior, 11800 Pheasant Lane, Hopkins, MN 55343 for more information.

# CRUMMY NEWS



BY MARK KASZNIK, EDITOR

TAMR Tradition dictates that I abandon all those thought provoking editorial ideas buzzing around in my brain and instead devote my last column of the year to the presentation of some Christmas Gifts to deserving TAMR members that are not too badly needed. Far be it with me to fight with a TAMR tradition, especially one as old and established as this one. So in a grand, and maybe even glorious manner, I present the 7th annual edition of the HOTBOX Editor's Christmas Gifts:

Ken Keels, TAMR President: A rotary lawn mower so you can keep back the brush on the Saugus & Pacific.

Greg Dahl, TAMR Auditor: A two week, all expense paid, trip to Dayton's Bluff to see every BN SD40-2 ever built.

Gerry Dobey, TAMR Secretary: That enlarger you've been hankering about for the last year. I was lucky in getting a great deal at Vermande's discount camera supply store.

Rich Hoker, TAMR Treasurer: A computer so that you can figure out the long range financial solvency of the TAMR to the sixth decimal.

Dee Gilbert, MSC Chairman and recent papa: A model of Roosevelt Road bridge for the layout made out of pizza.

Dave Ellett, pass exchange column: An N scale working model of Gen. Sherman and Yankee troops so you can recreate Sherman's famous march to the sea on the CS&A RR.

November/December 1981

Talmadge Carr, SR Rep: A warm jacket and umbrella as it seems every time you come to Chicago it's cold and rainy.

Roger Arnold, WR Rep: A tape recording of IHBEO-6-0's for your collection

Jim Kobrinetz, Associate Editor: A device that will allow you to stop time so you can prepare all the drawings for the HOTBOX by the deadlines I've set.

Mike & Mary Lucas, IR Reps: A year's supply of American postmens' legs to keep the Grizzlies happy in 1982.

Tom Gasior, 1981 Convention "Organizer": a copy of the recently released pamphlet: "How to Hold A Successful TAMR National Convention While recuperating From A Severe Illness."

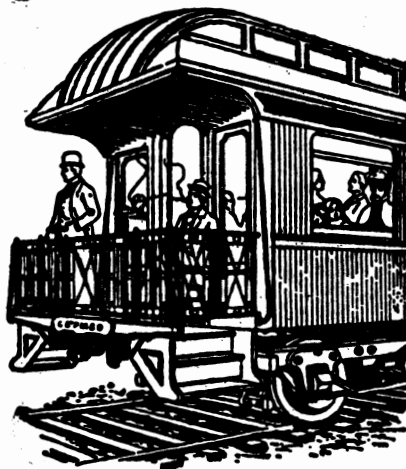
Dan Carroll, WR Member: A pinball machine from Denver Union Station.

Ed Moran, noted Chicago railfan: Beam's regal china train set with all the decanters filled to the brim with Molssens.

Tim Vermande, column author: A map of the Chicago area so you won't get lost if you ever decide to venture West again.

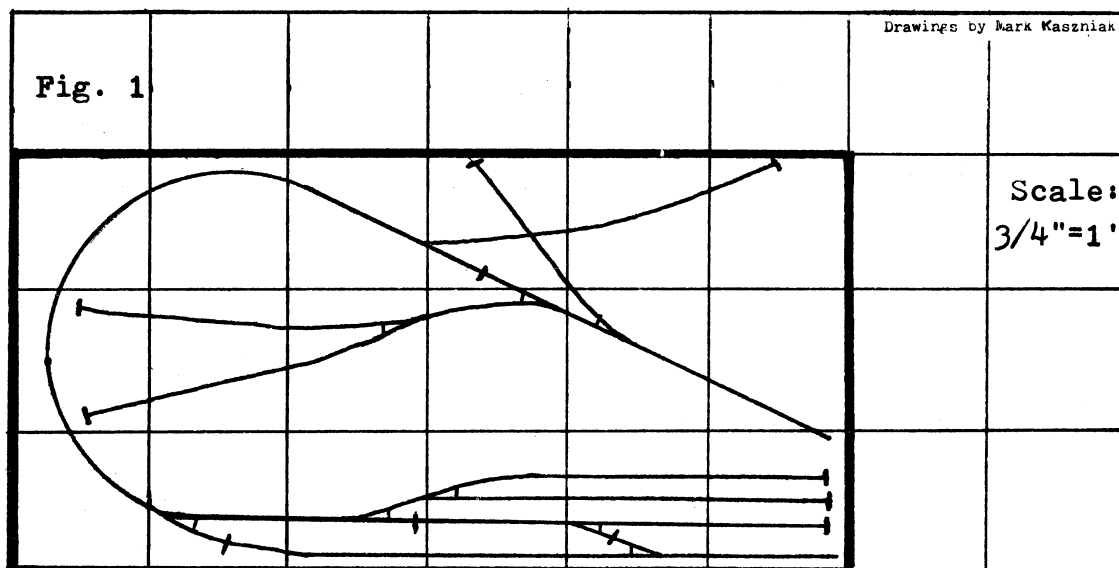
## Day Time Travel Made Comfortable

Don't you wish you could see your local Amtrak agent for additional details?



Parlor Cars with Cafe Service, Observation and Smoking Rooms.

# A MODIFIED TRACKPLAN



If you only have a limited amount of space, developing a trackplan for your model railroad can be quite a chore. Of course, you'll want everything, but soon learn that only a few of your favorite features can be included. What features are important to a small trackplan? Although different modelers held different opinions on this matter, the better small trackplans have the following in common: (1) a provision (i.e. loop, return loops) for continuous running and (2) one or more interesting "terminals" that include either a yard, switching district or both. How then do you go about developing such a plan for your limited space?

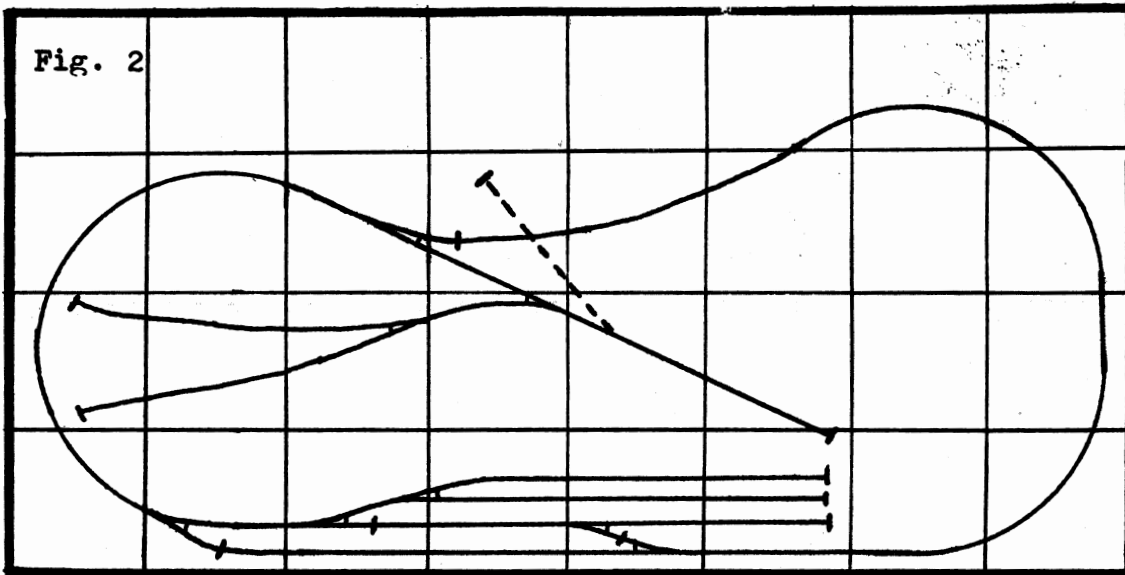
One of the easiest ways is to consult a couple of the many trackplan books on the market and find a plan that suits your needs and space. Yet it is unlikely that you will find a plan that has everything (or even most things) that you want to incorporate. What do you do then? Simply combine elements from two or more different plans to create your own unique plan. There's nothing wrong in this; in fact, most trackplan

books encourage you to do so. As an example, here's how I combined elements from two different plans to create a new one.

Figure #1 shows plan number eleven from Kalmbach's 101 Trackplans For Model Railroaders. This plan features a yard, switching district and point to point operation in a 3x6 foot space. As it goes, the plan is good for the available space, but suppose you have a 4x8 foot space available for layout building. Obviously, you can now expand the plan to include more diversified operations.

Since the original plan lacks a continuous running provision, let's add a loop from the spur in the upper right-hand corner down to the mainline by the yard (see fig. 2). I also choose to eliminate the crossing to make construction easier, but this step is optional. Then we could add an additional passing track inside part of our new loop so that two trains can be run at the same time, but a plan of this small size doesn't really lend itself to multiple train operation  
(cont'd next page)

Fig. 2



due to the fact that the mainline is rather short. Besides, we still have that 1x6 foot chunk of space on the upper left to take care of. Again, we could expand the plan width-wise for a longer run, but then overall operations on this pike will become dull with so few switching possibilities.

Perhaps we could pack some interesting switching into that 1x6 foot space which will give the local wayfreight something more to do? I envision the area as a busy industrial section sort of like the East Skrinny district I read about in MODEL RAILROADER (June 1975) awhile back. The area could then accomodate a number of industries plus an interchange

with another railroad. This not only allows the local extra switching opportunities, but you can also simulate an actual interchange with another railroad, thus justifying the existence of your own road (see fig. 3)

The final result is a 4x8 foot layout with a small, but verstile, yard, interchange, 7 to 9 industries--all with trailing point switches for ease in switching--and a loop for continuous running.

You will also be able to run two trains performing different functions. For instance, the local can be dispatched to switch the numerous industrial sidings while the yard goat is making up another train. Try modifying a couple of plans to see what you come up with.

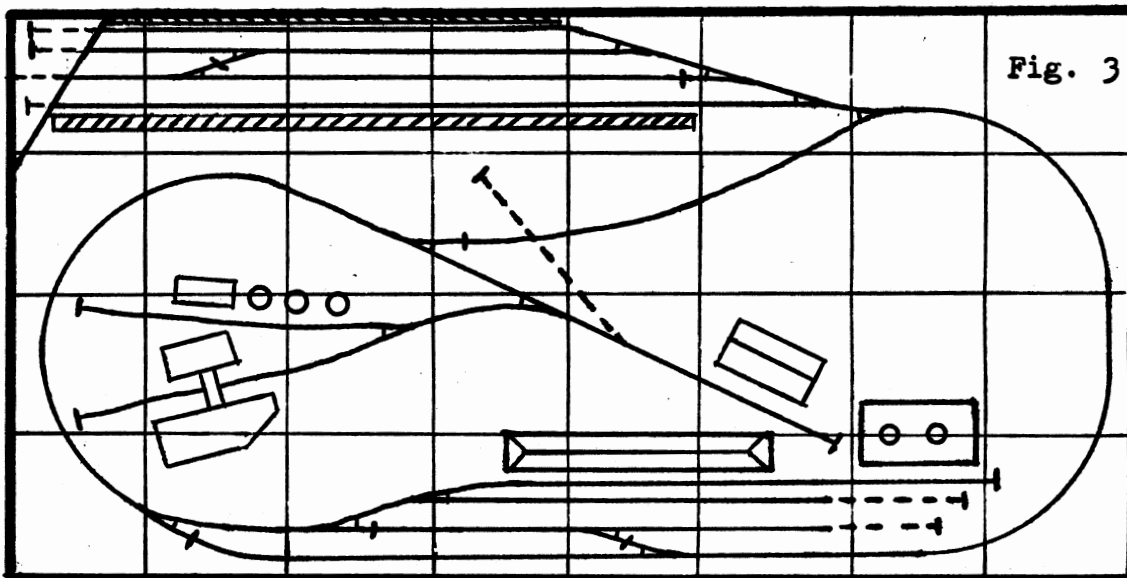


Fig. 3

# Improving Athearn Loco Performance

Due to our limited budgets, most of us can't afford brass locomotives with their smooth running cam motors, so we turn to AHM, Atlas and Athearn products for our motive power needs. This article deals with improving the performance of Athearn locomotives. Please note that the impetus for this article came after attending a clinic held at a Los Angeles Division meet of the NMRA.

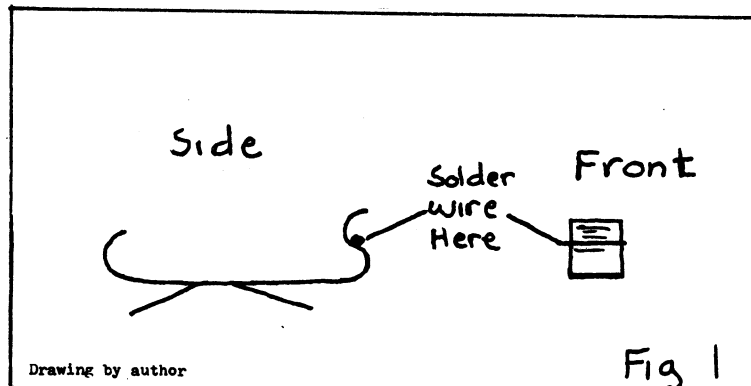
Here are the items you'll need in addition to the locomotive(s) you want to improve: track cleaner, small screw driver, razor blade, soldering iron, solder, a foot of small stranded insulated wire, a moto tool (and goggles), a 2-56 x 1/4" screw, a drill for the screw and a tap if it is not self-tapping, some small washers.

Start by removing the body shell. Next remove the connector clip, insert a small screwdriver into the worm housing and proceed to remove it. Now remove the worm gear being careful not to lose any of the pieces. Pull out the slotted coupling and the trucks should drop out. Set them aside for now.

Remove the motor by leaning the motor to the side of the frame. Notice the "play" in the motor (it slides back and forth). This movement is hard on the motor mechanism and generates a lot of noise. In order to correct this, pull off the flywheel at the commutator end. Next SLOWLY remove the clip on the motor being careful not to lose the brushes or springs. After removing the motor case, place one or two washers on the armature and then check it by replacing the case. There should be a little "play" in the motor, but not as much as before.

Now's the time to clean the motor commutator and brushes using a pencil eraser or an abrasive track cleaner. After removing the dirt, reassemble the motor. Then solder one inch of

wire to the bottom clip (see fig. one).



We now turn our attention to the trucks that were set aside before. Remove the two gear box clips that hold the trucks together and gently pull the trucks apart, then remove the wheels and gears. Gently pull both wheels from the axle on all your wheelsets. Prepare a hot water and soap bath for the plastic parts and truck side frames. Allow them to soak in order to remove any oil deposits.

Place a wheel, sans axle, in the chuck of your moto-tool and tighten it up. Put on your goggles and turn the tool on. While the tool is running, apply the abrasive track cleaner to the wheel to shine up the wheel thread. Perform this procedure on each wheel. Reassemble the wheels and axles, making sure that they are in gauge.

Your plastic parts can now be removed from the water and soap bath and cleaned with a old toothbrush. Rinse them thoroughly and let them dry.

While the parts are drying, turn your attention back to the frame. You can remove the light bracket and bulb if you wish to install a constant-lighting unit. To do this, gently pull up on the bracket, this will permanently remove it.

Now drill a hole (the size of the screw) in the frame near the

(cont'd next page)

## LOCO IMPROVEMENTS (Cont'd)

motor and tap the hole, if your screw isn't self-tapping (see fig. 2)

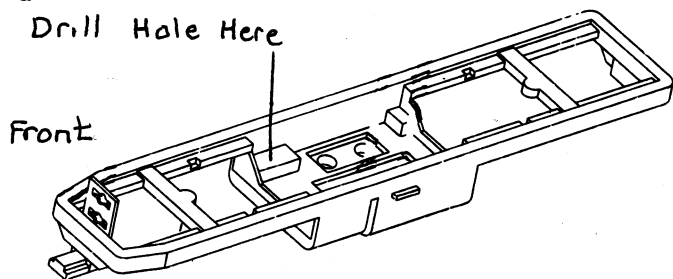
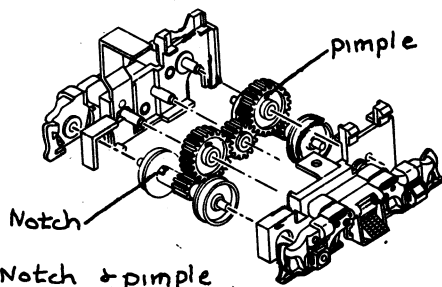


Fig 2

Clean the area around the hole so that it is shiny. Place the screw into the frame.

Reassemble the trucks. Note the pimple on the gear (see fig. 3) should be up on all gears and the notch in the axle should also be up. This improves performance and lessens the noise emitted. After the trucks are assembled, clean the metal contacts on the trucks and the frame. Replace the motor on its mounting pads and put the trucks in their proper places.

Take 5 inches of wire and remove one inch of insulation from the middle of the wire. Solder the middle of the wire to the upper clip (remove the clip to make soldering easier). Bare the ends of the wire and solder them to the metal contacts sticking up from the trucks. Then connect the wire from the bottom clip to the screw that's mounted in the frame.



The Notch & pimple  
Should be on the top as shown

Fig 3

Reassemble the worm gear, replace the flywheel and its coupling and put everything back in its proper place. Add a touch of lubricant to the gears and replace the worm drive cover.

Oil the motor-shaft connections sparingly and replace the body shell.

Your locomotive now has a better electrical contact system which will show up in the operating performance on your layout. In addition, the engine has also had a thorough cleaning. If you adopt a regular maintenance schedule for your motive power, it'll be easier to operate your layout when you desire and the end result will be fewer table-thumping sessions!

## TRAIN ORDERS



TRAIN ORDERS is a letters column in the TAMR HOTBOX where you can express your views on the TAMR, its publications and its officers. All letters for this column should be sent to the Editor of the TAMR HOTBOX.

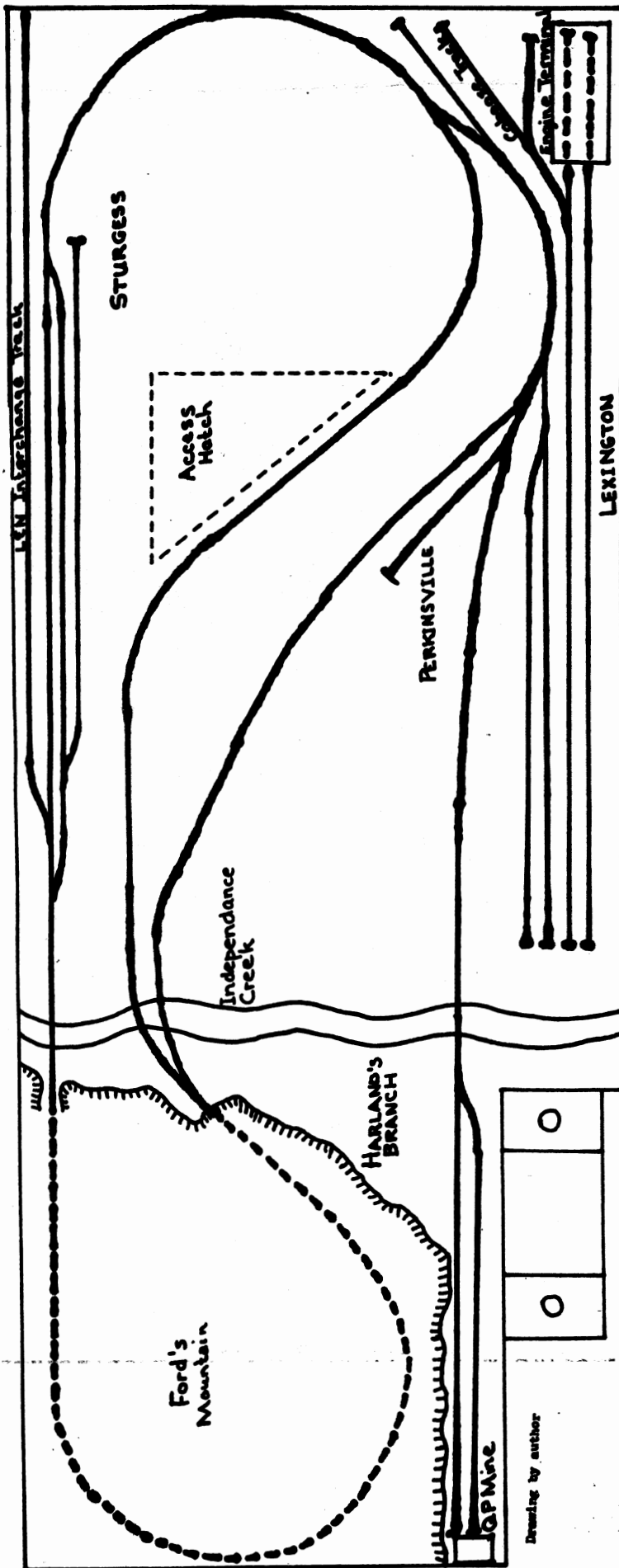
### No MR, But Still Necessary

I have to take exception to Scott William's comments printed in HOTBOX #167. Perhaps there are some in the TAMR who expect too much out of it. I like the HOTBOX, although I realize that it is no MODEL RAILROADER. It gives us teens a place to show off our layouts and ideas to our peers. Yet to keep the HOTBOX good, we need everyone to contribute something.

I'm happy that the HOTBOX is going monthly beginning next month, but isn't it a shame only a quarter of us bothered to vote on this important decision?

--Pat Limback  
Columbus, IN

(ED: Voter apathy isn't only a problem in the TAMR, many organizations devoted to model or prototype railroading have similar problems when election time rolls around. I wish I knew what caused this apathy. Perhaps everyone is having so much fun with their hobby, they forget to vote?)



BLUE GRASS EASTERN R.R.  
 Scale of Plan: 2cm = 1 ft.  
 Minimum Radius: 18"  
 H.O. Gauge  
 13ft X 5ft.



Layout: Don Leitch

# Blue Grass

My Blue Grass Eastern is an example of how you can model a prototype railroad, but still use some of your own ideas. When I began constructing my HO railroad back in February of 1980, I wanted to pattern it after the Chesapeake & Ohio RR of which I'm a fan. I could have chosen the area around my home as a setting, but the local scenery is unrealistic. So instead, I chose northeastern Kentucky in the mid-1920's as my setting.

The problem with modeling the C&O, or any prototype for that matter, is that you find yourself restricted to certain types of equipment. I wanted the freedom to use certain types of equipment that the C&O never had or didn't have during that time period. I solved this problem by creating the Blue Grass Eastern RR, a subsidiary of the Chesapeake & Ohio.

My BGE owns the prototype C&O tracks between Lexington and Ashland, KY; however, I'm only modeling the section from Lexington to Preston, KY. As I said before, I wanted to pattern the railroad after the C&O and I feel that I've accomplished that because eighty percent of the motive power is C&O with the rest being BGE and the C&O's sister, the Baltimore & Ohio RR. I like this method of freelancing since it leaves room for creativity, but also is believable.

The trackplan of the BGE (preceding page) is based on the "Marquette and Independence" from the Kalmbach book, Small Railroads You can Model. Yet I have made modifications to suit my own needs. The trackwork is Atlas flex-track along with Atlas switches and switch machines. All I have to do is put on my special model realism glasses and lo and behold, all those switch machines disappear from sight!

The motive power in use at the present are Atlas GP40 and SD35 along with Athearn GP9, GP35 and a pair of SW1500's. So far, all of these units have given me many hours of trouble

# Eastern RR

free operation with no major service problems.

The largest customer on the BGE is the P. Roger's Coal Company's Q.P. mine in Harland's branch. Yet we shouldn't forget our other customers: Baggley's Box Co., and Rose's machine shop. In the future, more industries will be locating along the BGE's mainline. In addition, to this local revenue, the BGE also handles interchange traffic. The Louisville & Nashville crosses and interchanges with the BGE at Sturgess and the Southern Ry shares the BGE's Lexington yard. These interchanges haven't proven to be the busiest points on the BGE and if your railroad doesn't have any interchanges with other roads, you're losing out on a great deal of business.

As much as anything else in the hobby, I enjoy good operation. Thus when I operate, I make use of situation cards, train orders and a card order system for distributing freight cars. This helps to give the operators of the BGE a feeling that they are operating a real train with cars destined for factories in near and distant towns.

My plans for the future include establishing a passenger train operation and maybe some sort of walkaround control. At the moment, scenery is being added. However, I made sure that all the bugs were out of the trackwork so I wouldn't have to rip out both faulty trackwork and scenery. I suggest that other modelers wait a little before starting scenery so you have a chance to catch any problems that may come up--before they become buried inside a mountain.

The Blue Grass Eastern isn't as large as some other railroads, but I'm still looking forward to many hours of enjoyment working and operating on it. Big isn't always better when it comes to model railroading. Having fun is what's really important.

# The Modular Concept: 3

## Modular Benchwork

Paul Ingraham

The design of modular benchwork must take into account the practical considerations of portability and compatibility with other modules. These considerations include size, weight, set up and method of joining modules together.

**SIZE** - The size and shape of a module is determined by the concept to be expressed and need not be rigidly set by the specifications. But sometimes a practical size will not be large enough to contain all the elements of the scene. The answer is NOT to build a bigger module, but rather to break the plan down into sections that are of manageable size. And how big is that? That will vary somewhat with the means of transport, the availability of help and access to the spaces where the module is stored and used. But one set of dimensions does keep showing up and that is the size of the rear seat of the average compact car, the most common means of transport used to move modules around. Those dimensions are 100cm x 50cm, or about 40" x 20". If you adopt this as your maximum construction size, you'll have few problems with transport, weight or set up. Larger scenes can be modeled in multiples of this size, arranged as required.

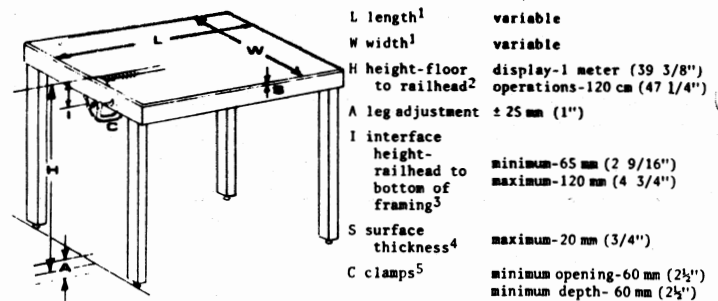
**WEIGHT** - Much can be done to reduce weight in a module. Use lightweight wood framing - pine or redwood instead of fir - for a start. Use diaphragm construction to provide rigidity and eliminate the extra weight that would result from L-girder construction. Make your scenery from foam instead of plaster. This not only cuts weight but reduces the possibility of cracking when the module is moved.

**SET UP** - Nothing is more frustrating at a meet than having to spend half an hour just getting your module put together. Most of this irritation can be eliminated by designing in quick set up. Use self-contained folding legs that eliminate the need for bolt-on legs. And be sure that EVERY module has legs that can support it solidly on its own. Being able to adjust the leg height is essential in order to compensate for uneven floors and to get all the modules to the same height.

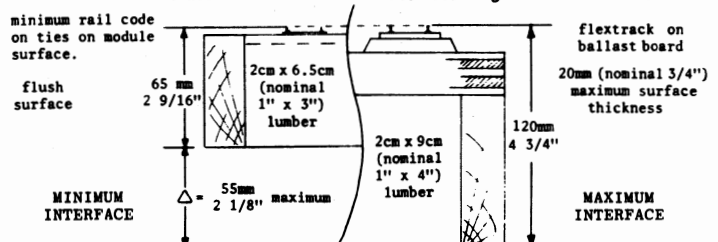
**JOINING MODULES TOGETHER** - In a completely flexible modular system the means of connecting the modules together must allow for different module shapes and sizes, track plans and reversibility. The simplest, most versatile connection is to use C clamps across the interface framing at each interface. This permits small adjustments to be made both vertically and laterally for precise alignment of the track.

Modular benchwork is really very simple, then. But it must be made just as carefully as that of a permanent layout. Good quality, kiln-dried lumber should be used. Framing members should be set in squarely. Joints should be glued and screwed. Whatever can be done to keep quality up and weight and size of each unit down will make for greater enjoyment by everyone concerned - especially you! Shown here is an exploded drawing of a typical module. Note the diaphragm construction. Also given are the benchwork dimensions recommended in the Modular Coordinator's Report. More detailed notes on benchwork can be found in that report which is available from me for \$5.00, postpaid.

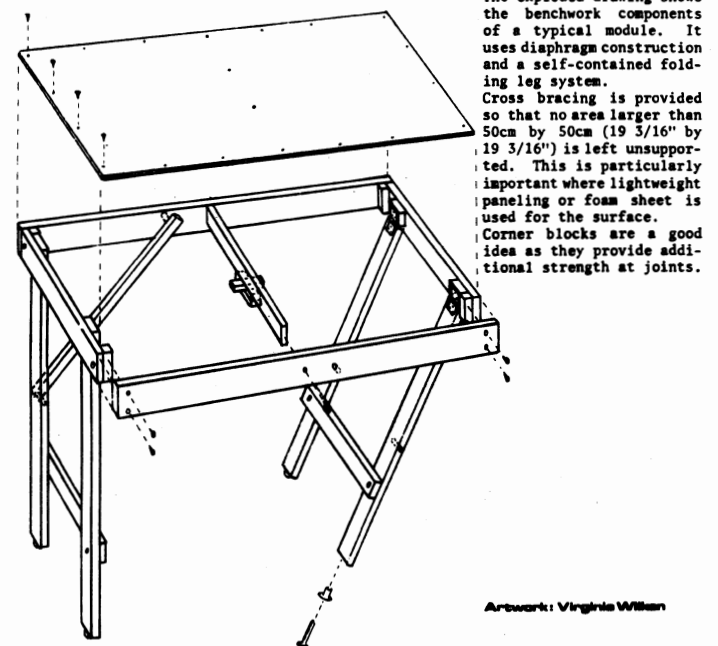
Paul Ingraham, 3304 Maybelle Way, No. 1, Oakland, CA 94619



- 1 These dimensions, together with the shape of the module, are determined by the requirements of the trackplan and other elements of the scene to be modeled.
- 2 For set ups where the viewers will include children, the display height is preferred. Where the layout will be accessible only to adult operators, the higher operations height will be less tiring. Leg systems can be designed to function at both heights or alternate sets provided.
- 3 Framework members to be minimum finished size 2 cm by 6.5 cm (nominal 1" x 3") lumber. This is the smallest size providing necessary strength and rigidity. Maximum finished dimension is 2 cm by 9 cm (nominal 1" x 4") lumber. Keeping within these dimensions will maintain dimension "I" and assure units can be clamped together. Add the total dimension of framing + surface "S" + ballast board + tie thickness + rail code BEFORE construction begins to be certain "I" is not exceeded. See the interface diagram for clarification.



- 4 To insure adequate clamping surface at interfaces this dimension must not be exceeded. A surface of 8 mm finished thickness (nominal 3/8") material is adequate. A maximum 20 mm thickness (nominal 3/4") may be used.
- 5 One clamping interface is needed. The area of the framing directly beneath each through track should be kept clear of electrical components so that clamps can be placed there for set up.



## TEEN MODULATION:

By Paul Ingraham

Keep in mind that the system shown above is only ONE way modules can be built. You should design your own module in a way that works for you-- and that can be anything from cardboard (yes, it can work!) to welded steel. L-girder and cookie-cutter support is also acceptable. So, be creative. Use what works for you!

## "Camera Ready" Decal Art\*

**\*OR Please Ma, I'd Rather Do It Myself!**

Breathes there a railnut with a soul so dead who never to himself has said: "Gee, I'd sure like to have my own decals!"? Many of us, having given our pikes the greatest name in the world and have gone on to design the greatest herald ever formed in the mind of man, envision all our rolling stock carrying that banner. Not to mention the possibility of entering that fascinating world of "car exchange."

So, I wrote several commercial decal vendors for prices...getting quotes for road name, slogan and numbers...choice of colors, at whatever the price...but no problem--pick your size, color and type style...and they make it. BUT... if you want a herald reproduced, then you must send in a sketch, "camera ready" for reproduction, remembering light colors are printed first, darker last, show register marks, etc, etc, etc! Your costs are based on the number of colors in your final design and there is always an offer to quote you the price of "our preparation for artwork."

If you submit your sketch for preparation by the vendor, be SURE to get a quote from more than one resource. I have been quoted a differential of thirty dollars on artwork for the same herald! Thus it is obviously much less expensive if you can provide your own artwork. The following is information needed if you decide to do your own and can follow the necessary instructions. I assume you can draw, or have a talented friend who can help out, so we'll go from there.

1) Artwork must be on WHITE paper of good quality--tracing paper, vellum or transtex. Do not attempt to use bond typing paper, it's absorbency ratio is too high. NEVER use ballpoint or felt tip pens. USE India or Artists' Black inks and an Artists' ink pen.

2) ALL drawings should be made oversize. Twice the final size is recommended by most decal manufacturers (200%), although many will accept up to 300% oversize. Most heralds contain some writing. It is very difficult to draw letters and numbers by hand, even with a lettering guide. Remember that you are working oversize on your drawing. Thick lines tend to thin out when the art is reduced and thin lines have the tendency to disappear entirely. If lettering is required on your herald, make a trip to your stationers and purchase dry transfer sheets of the type you'll need. Then apply them where needed very carefully. Remember, with the camera, what you see is what you get. The important thing to remember about "camera ready" decal art is that nothing more has to be done before making a reduced positive, or negative, for printing.

3) For each color used, you will be providing separate artwork. These are known as "color separations." First, make a complete drawing of your herald in oversize, exactly as you want it to look on your rolling stock. Use actual colors to make it easier, but use artists' India inks. This way the printer could use your own sketch for his own color separations if (heaven forbid) he is unhappy with yours. To this finished drawing add "register marks." These are simple crosses, (x), placed in each corner of the drawing.

4) Secure your completed color sketch to a smooth working surface, glass is ideal. Use masking tape. Now lay tracing paper over your sketch and fasten it down with tape. Use paper twice the size of your master sketch so there'll be room for any marginal notes if needed. Next, duplicate the register marks exactly onto the tracing paper you are using. This will be your first color separation. If you have a three color herald, you would have a tracing sheet for each color. Each sheet contains only the portions of  
(cont'd next page)



## Camera Ready Decal Art (cont'd from last page)

your herald that contain that particular color. Thus when you line up all the separations by their register marks, your herald should look like your completed version. For example, suppose your herald consists of a red square surrounded by a black border. Your first separation would contain only those portions of the herald that are red. In addition, the separation should be made slightly larger than the original red square, but smaller than the outside dimension of the black border. This is done because printers do printer lighter colors first and black last. Making the red slightly larger than its original size will take care of any register imperfections that may occur. The main advantage to working oversize is that it is easier to separate colors and slight imperfections do not show up on the reduced copy. Besides, a reduced copy is usually sharper than one that was made to its intended size.

5) If you use dry transfers, be sure to burnish the letters down for proper adhesion. Otherwise, the camera may smear the image and shadows will show. Follow the instructions on your package of dry transfers as to their proper use and application.

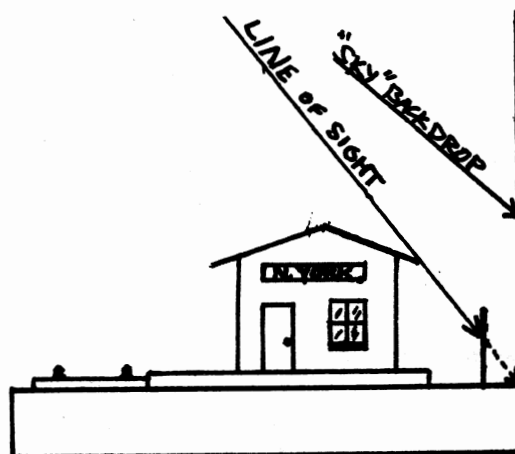
6) I suggest you first send a rough color sketch to your printer. Get his opinion and suggestions. If he cares, he'll reply. If he's "too busy", get another printer! Also, don't get carried away with color. One, or two, colors used effectively may look better than four. Unless, of course, your railroad is named the Rainbow Valley and you have to have a rainbow on the sides of your rolling stock. In that case, all I can say is good luck.

One last word, custom decals are expensive. So be certain before you go to press that you really like your scheme and herald. Remember, the extra care you take in preparation will pay off handsomely in both the finished product and the cost. In the end you can say: "Look Ma, I did it myself!"



Do you have any helpful hints for making your model railroad look more realistic that don't take a lot of time or money? If you do, consider submitting them to the HELPERS column. All items are to be sent to the HOTBOX Editor

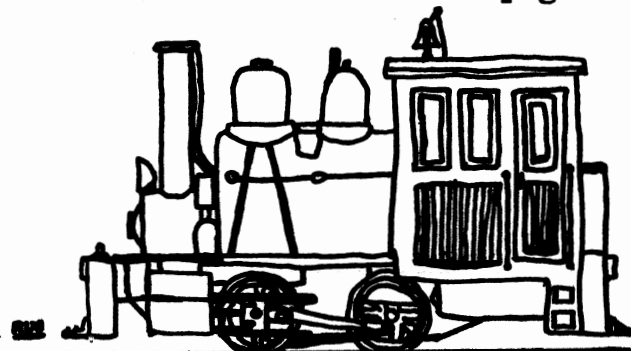
### Hiding The Edge



One way to disguise a table edge behind a building where there is no space for a ridge or thick clumps of bushes is to put up a fence. The fence should be of the tall, solid type and should be positioned a little bit in front of the edge of the table and the backdrop (see drawing) to create the illusion of continuing terrain.

--Frank Rudowski

HELPERS continued on next page



TAMR HOTBOX

### Loco Maintenance Tips

Most modelers have numerous locomotives and sooner or later they are going to need some periodic maintenance. Here are some tips on what to look for when cleaning time comes around:

(1) The most common problem is dirty track. There is a good chance if you clean the track, the locomotive will run better. So get out the old track cleaner and get to work.

(2) Another common problem is dirty wheels. To clean them, connect wires from the power pack to the motor leads directly and run the unit at slow speed. With the wheels turning, dip a pipe cleaner into some nail polish remover and touch this to the wheels. This will clean them.

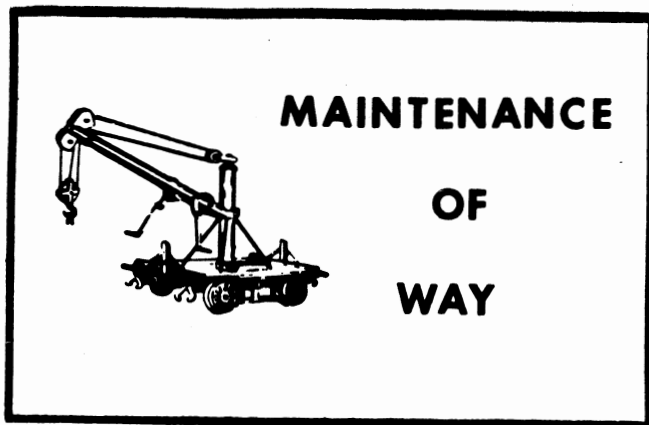
(3) If the locomotive still doesn't run smoothly, check for dirt (or hairs) between the wheel and the truck frame or in the driving gears. Don't be afraid to partially disassemble your locomotive to get at places you can't reach. They go back together rather easily.

(4) Add lubrication if needed. I use Labelle 108 on the motor bearings and Labelle 106 with teflon on the gears. Make sure the lubricants you buy are plastic compatible. The gears should have a thin coating of grease and only one drop of oil on each motor bearing.

(5) If your locomotive still runs poorly, check for binding gears. Remove the worm gear and sideframes and turn the gears with your finger. Check for binding, misalignment or small burrs. Also check the commutator slots for excess buildup of dirt or oil.

If you haven't found the problem by now, you may have a weak motor. It must be desirable to replace it with a new one. Replacements are cheap and may proven to be the solution you're looking for. I hope these tips have helped you solve some problems with your locomotive fleet.

--John Venice



M of W is a product review column written by our members on model railroading and railfanning items that may be of interest to you. All the opinions presented are those of the reviewer and are not necessarily those of the TAMM or the HOTBOX. Please submit reviews to the HOTBOX Editor.

G.E. 44 ton diesel switcher; Keystone Locomotive Works, 159 Wheatly Ave., Northumberland, PA 17857 \$79.95

The GE 44 ton diesel is Keystone's first powered engine kit although their fine Shays and other castings have been around for some time. For this kit, Keystone teamed up with Grandt Line and Northwest Short Line. Brass etchings for the superstructure were made by Photo Mill. Grandt Line designed and produced the gearboxes which are made of self-lubricating delrin and are very strong. NWSL made the brass gears and wheelsets and provided a Sagmi motor for power.

There are no plastic parts in places where problems could arise if they were used, like in gears. This kit was originally designed to compete directly with imported brass while keeping the price low and overall quality high. Detailed instructions are provided and include everything you need to know about assembling the kit and getting the best performance from the engine.

Break-in time was recommended at 30 minutes in each direction although I found that the more you run the engine, the quieter and smoother it gets. When you first start the engine, the noise from the gears will probably annoy you. However, after about 15 minutes of running time, the gears get seated and you'll hardly notice it running. Thus no fiddling with the drive train is necessary if you follow the proper break-in procedure.

(cont'd page 14)

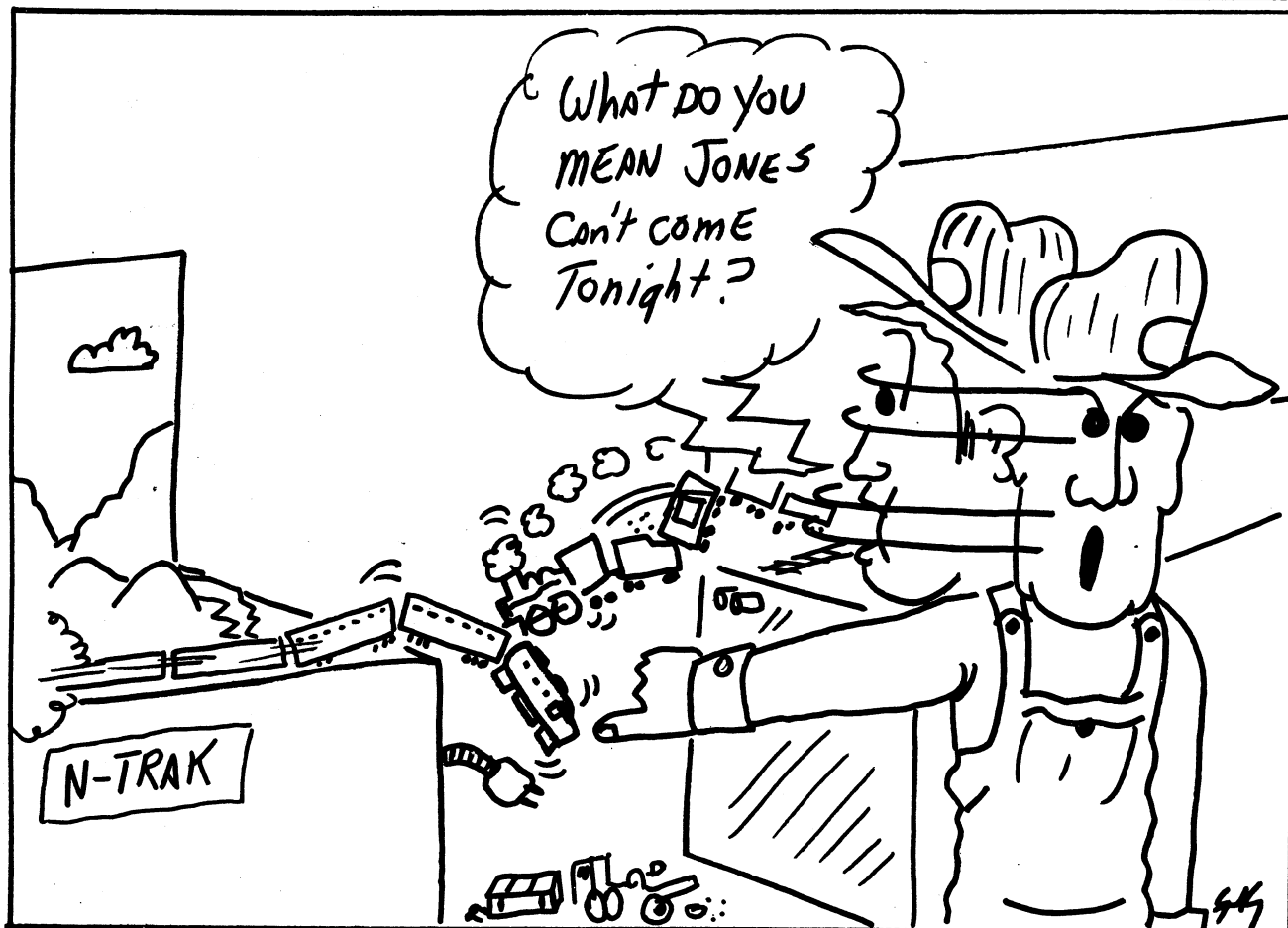
## Maintenance of Way (cont'd)

The superstructure goes together in about an hour's working time which means you can break in the drive train on a circle of track while you build the rest of the model. The cab is made out of white metal castings as are the radiators, pilots and other details. The main part of the hood is prestamped and etched brass. Just two bends are needed to form the hood and these are easily accomplished because the brass is a little thinner in the area where the bends are to be made. Everything goes together with only one glue; ACC. KIW recommends either Hot Stuff or Dixon.

Handrails must be hand bent and this procedure takes an additional hour of time. The coupler pockets are made to accept Kadee #7's, but it should be easy to put just about anything in.

The engine can be adapted to two different styles called Phase II and Phase IV (Phase III is identical on the outside to Phase II) and the difference between the two is in the type of ventilator hatches on the top of the hood. Both styles are provided in the kit. By adding extra detail parts--such as those offered by Details West or Detail Associates--you will be able to model any 44-tonner that was ever in use.

Overall, the engine is a quality product made for the diesel perfectionist and would be an ideal kit for the modeler who wants a GOOD product for a change. The drive train runs very smoothly and has VERY good traction. The unit itself is ideally suited to small yards, transfer runs and as the overall workhorse of a shortline.



When Scott Sackett saw our new module column, he couldn't resist poking fun at some of the unique mishaps this type of modeling offers.



# At Trackside



AT TRACKSIDE is a column that explores the hobbies of rail photography (for modeling purposes or preservation) & railfanning. Please address all comments and questions on this column to: Tim Vermande, 51528 Pond Street, South Bend, IN 46637.

## AND THEN THERE'S SNOW

Well, it's here and it's going to stay for a little while. Those of you in Texas have no idea what I'm talking about, but up a little father north it's called snow. Now, if you're like a lot of people, you gave up on photography a long time ago and are just hibernating until its gets a little warmer, like above zero. Then again perhaps you've glanced at the latest issue of TRAINS and realized there is a ton of potential drama to winter train photography.

Mind you, hibernating isn't all that bad. It's a good time to catch up: read a little, sort out the collection, get a little modeling done and so on. However, if you want a shot of a plow train, there's only one time during the year you're going to get it. Guess when?

The first, and most important, step in preparing for winter photography is yourself. Start at the bottom. Boots are nice; they keep your feet dry, warm and generally hold better on ice than shoes. If you have the bucks, fireman's or hunter's boots are good buys. Both are well-insulated, but usually have to be worn without shoes, which is not a big drawback. Both are also taller than your old galoshes allowing you to transverse deeper snow banks. Under the boots, wear a couple of pairs of thick wool socks.

Most of us have good insulated winter coats, but one with a hood is better because once the wind chill

reaches  $-25^{\circ}\text{F}$ , flesh freezes upon exposure. That includes your neck, usually that exposed space between your collar and the bottom of your hat. Yet pants are where we generally fail, your jeans won't keep you warm in cold temperatures. Long johns, two pairs of jeans or fireman's bunker pants (as in red suspenders) are preferred here. Gloves and scarf are the final touches. I prefer medium weight wool set inside mittens or thermal gloves. Gloves are essential as your fingers will freeze to the camera if it gets too cold. The best technique involves removing the outer pair of gloves while shooting. Here's where those mitten straps from your early school days can come in handy, that is if your prone to leaving your gloves behind.

Now that your body is ready, how about your camera? First, you'll probably find your meter frozen to death which is probably just as well because most reflected averaging meters are miserable in snow. Use an incident meter if possible. If you must use your camera's meter, open up about 2 f-stops if you're reading snow, hope or bracket your shots. Most camera batteries don't work well at low temperatures, so it's handy to keep a spare in a warm pocket. If you keep a record of your exposures, you'll find them comparable for sky conditions when you get good results.

The cold may also slow down your shutter, but alas every camera is different and is effected differently. This brings up another recommendation. Start with black & white film which has more latitude and less likely to break. Yet all films will break, or leave static marks, if you're not careful. Wind your film slowly both ways.

Condensation is also a big problem in cold weather because of its possible corrosion effects. Therefore, when you take your camera into warmer temperatures, place it in a sealed plastic bag--to keep moisture out--and let it remain there until it reaches the warmer temperature.

With you and your camera ready, go out and hit the world. By using your common sense, snow photography can be fun.

**ON THE  
POINT:**

As you can see, it was a big event in Garrett, IN on June 20, 1981 when the Safety Express pulled by C&O #614 (a 4-8-4 "Greenbrier") stopped in for a brief visit. Some people came out of a sense of nostalgia, others because they had never seen an operating steam engine. Relatively few came for the message that the Chessie was trying to get across--namely the importance of grade crossing safety. Nevertheless, the officers and officials of the TAMR, plus those of us on the HOTBOX Staff, want to take a cue from the Chessie System in wishing you a happy, joyous and SAFE holiday season.

Photograph by Mark Kaszniak

## MARKERS:

**ARRIVING NEXT ISSUE:** Reports from our officers on the state of the TAMR. Our former President, Jeff Wilke, introduces us to his Midway Northern and the votes have been tabulated on the 1981 contests so we'll be bringing you the winners. All this, our usual columns plus a nomination form will be coming your way in the first monthly issue of the Un-Magazine of Model Railroading. Be sure not to miss it!

**TAMR HOTBOX, "the Un-Magazine of Model Railroading"**  
145 E. Kenilworth Ave.  
Villa Park, IL 60181



Issued 12-22-81

**FIRST CLASS MAIL**

