



HOTBOX

"the Un-Magazine of Model Railroading"

January 1982

No. 171



First Place , Prototype : D. Schauer

MORE

CONTEST WINNERS INSIDE



HOTBOX

OFFICIAL PUBLICATION • Train 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.

From Our President's Pen

It is the beginning of a new year and new growth for the TAMR. A number of things have happened in the last few months worth mentioning:

- 1) If you haven't heard, we have created an annual photo contest that will be held in the HOTBOX. Here's your chance to show off your photographic expertise and although it is too late to participate in the 1981 contest, keep a watch out for the announcement of the 1982 contest later this year.
- 2) Also, as you all probably already know, the HOTBOX is going to be issued monthly beginning with this issue. So if you haven't submitted an article yet, do so now. We need articles now more than ever before to support the HOTBOX on a monthly basis.
- 3) The TAMR has elected to become a Special Interest Group (SIG) of the National Model Railroad Association (NMRA). The NMRA is the leading model railroad association in our hobby and has worked hard to develop

standards that are adhered to by the manufacturers of model railroad items. The NMRA has asked the TAMR to help out with teen programs at NMRA national and regional conventions. I guess they realized that their pizza and swim party just isn't working with teen model railroaders. This basically means that the TAMR will co-sponsor railroad oriented activities at NMRA national conventions and possibly some of the larger regional ones. TAMR members do not have to become NMRA members (and visa-versa) to participate in the SIG program.

I see two major advantages to our participation in the SIG program: (1) Promotion and publicity for the TAMR in the NMRA BULLETIN and related NMRA promotional campaigns and (2) the ability to obtain space at NMRA conventions for teen related programs sponsored by the TAMR. I will keep you informed on further developments as they are worked out between the two associations.

However, let me stress here that the TAMR will continue to remain a totally independent association and we are free to develop our own convention program aside from our joint efforts with the NMRA.

All of these innovations should lead to increasing the size and public recognition of the TAMR. Up till now, very few people have heard of our association. With these new programs and increased promotion, we will be able to attract more members to the TAMR. Right now, we are slowly growing and with your help and ideas can continue.

--Ken Keels, TAMR President

MSC ANSWER MAN

Have a question on modeling or railroads in general? If so, the TAMR's Member Services Committee can help you find the answers. For help, contact the "answer man:" Dee Gilbert, MSC Chairman, Box 132 Harrison, AR 72601-0005. Don't delay the answer you seek may only be a letter away.

WRITE TODAY!

TAMR HOTBOX

SIgnificant Issues

The program that the TAMR is involving itself in is the NMRA's Special Interest Group program. Special Interest Groups (or SIGs for short) are divided into two types: inter-NMRA groups and independent organizations. The TAMR naturally belongs to the latter.

However, participation in the SIG program does come with a couple of NMRA strings attached. First, we have to arrange SIG events with individual convention chairmen. This means following their deadlines and their rules. Secondly, TAMR members who do not possess NMRA memberships will probably be prohibited from attending all the "fun" things associated with an NMRA National Convention and will be restricted to the TAMR's events. Thirdly, the NMRA wants us to help them with their teen program. Those of you who are NMRA members know that their current teen program has little, if anything, to do with model railroading. Thus the NMRA wants us to step in and arrange teen contests, modular groupings and speciality clinics in order to promote modeling among teenagers. If we are unable to do this, the NMRA has indicated that they will

(cont'd next page)

set up an NMRA teen SIG to handle the matter. If the SIG catches on, it would compete directly with the TAMR--a situation that both associations want to avoid.

Then there are the effects on our own fumbling convention program. As poorly planned and executed as some (not ALL) of our conventions were, they had one thing going for them--they were inexpensive to attend. The main reason for this is that they were attended by small groups of members who could stay at fellow TAMR members' homes during the convention. Nearly all NMRA conventions are held in large motel/hotel chains with appropriate meeting facilities. The TAMR will now have to work out ways of accomodating a number of members to a motel room and/or utilize local area members' homes in order to keep the costs down. This is a vital area as the NMRA Nationals currently run some five days and while I don't think the TAMR could develop a companion five day program, we should be able to work out a two or three day affair. Then too, the NMRA arranges club/individual layout and prototype tours plus the traditional banquet with their conventions. There is no reason for the TAMR to arrange similar events if a package deal (and price) can be arranged with the NMRA. Since these events are based out of the convention center and use chartered buses for transportation, I can see no reason why TAMR members can't be accomodated provided we pay our fair share of the costs.

Finally, the big question to confront: Should the TAMR hold its annual national convention in conjunction with the NMRA's? There are advantages and disadvantages in doing this. On the plus side is that the NMRA will provide the necessary meeting space for clinics, contests and alike and will probably help us book rooms for those attending the convention. On the minus side, we will still have to plan everything ourselves. Now everyone I know who has attended an NMRA convention (especially the national ones) doesn't want to miss out on all the "fun." No one really wants to do all the planning and then stick around

behind the scenes in order to make sure everything goes OK while everyone else is enjoying themselves. The NMRA has a dedicated lot of volunteers who give up their personal "fun" time to assure that others have some. Do we have the equivalent volunteers in the TAMR? Are you willing to give the necessary time to planning and running an event that you probably won't be able to participate in? I know that if you try to plan and have fun, there will be a lot of disappointed people at the end. On top of that, we can't ignore the possibilities for promoting the TAMR at these conventions. Often the NMRA or MRA holds an open-to-the-public model railroad exhibition along with the convention. Do you want to sit in a booth all day giving out literature on and answering questions about the TAMR when you could be enjoying the show?

Sacrifices must be made if the NMRA and others involved in model railroading are going to take us seriously. It's bad enough that we already have the reputation of a bunch of kids playing with their choo-choos. We now have to work to change that image. As a SIG, we can do that. We can show both adult modelers and the general public that we do more than just "play with trains." We can show them that we too can build model railroads that work and models that win contests. That we too can construct modular groupings that run and that our members can behave like mature individuals at conventions.

If you have any opinions on this matter, write to the President or myself. The Executive Board must make some initial decisions regarding the TAMR's involvement in the SIG program. We need to know what you think about this program. I hope to print a sampling of the opinions generated in an upcoming issue. Oh yes, the 1982 NMRA National Convention will be held in Washington DC on July 13 18th. Will we be ready to participate?

The Modular Concept: 4

Modular Trackwork

Paul Ingraham

A basic premise of the modular concept is that it permits modelers to join their work together and actively share in the operation of a model railway. This means that rolling stock of many styles and prototypes, manufactured to many standards, will be sharing the rails on all modules.

GENERAL TRACKWORK STANDARDS must therefore be drawn to permit the use of as wide a range of equipment as possible. Trackwork must be constructed with as much care as on the modeler's home layout and be properly gauged, free of kinks, and accessible for maintenance and cleaning. Rail code should accommodate all commonly available equipment in the scale and experience has shown that, for best appearance and reliability. Only nickel silver rail should be used. Minimum curve radii, turnout sizes and clearances need to be defined. Where multiple parallel through tracks are used, the centerline spacing must be specified. Generally, NMRA standards, recommended practices and data can be adopted for these specifications.

CONNECTOR TRACKS: Unique to modular construction is the problems of carrying the through tracks across module interfaces. The joints must provide smooth, reliable running. At the same time construction must provide protection of the track ends from damage and allow for some lateral adjustment and the possible transition from one type of track or rail code to another. All these criteria are easily met through the use of drop in connector tracks which can be made from a section of flextrack cut to length, or, in some scales, by the use of a piece of sectional track. Special connector tracks to make transitions between different rail codes on adjacent modules can be easily constructed. Rail joiners are slid fully onto the rail ends of the connector tracks which are then dropped in place across the interfaces. The rail joiners are then slid into place across the rail joints, completing the connection. The exceptions to this method are systems such as Marklin or Lionel which use tubular rail. Here a drop in section can still be used, but interface setbacks must be cut much more accurately and the connector track must be inserted as the modules are clamped together.

HOW MANY TRACKS? Prototypically, most railways are single or double track and this is adequate for modular operations as well. Having more than two through tracks on a module takes up a lot of valuable scenic space and results in a crowded, cluttered look. Visually, the illusion of length, something always sought in a model railway, is greatly decreased with the addition of more through tracks.

WHERE DO INTERFACES GO? All tracks crossing the interfaces should do so at a right angle (90°). But there is no need to specify which sides of the modules or at what point on the side the track must cross the interface. That location is determined by the concept the modeler wishes to express. The only limitation should be to provide a safety margin to prevent derailed equipment from falling off the module. This is the side setback shown in the specifications and is equal to the maximum clearance gauge height for the scale modeled. Basic trackwork and interface specifications for standard gauge track in the three major scales are shown here. These follow the recommendations in the Modular Coordinator's Report. Further details and specifications for other scales and gauges can be found in the report, available from me for \$5.00, postpaid.

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

CLEARANCES: Fixed structure clearances should follow NMRA Standard S-7.

SMOOTHNESS: All track should be free of kinks and the vertical alignment of the railhead should not vary more than 1/4" (1 in 200). A metal rule, stood on edge along the railhead, can be used to check this dimension.

BALLAST BOARD: Use of wood or cork profiled ballast board on through track will help dampen noise and facilitate the cutting of the ballast board relief.

RAIL JOINERS: Where an ungapped rail section exceeds 500mm (19 3/16") in length, metal rail joiners within the section should NOT be soldered across rail joints. This will allow for expansion and contraction of the rail. The joiner may be soldered at ONE END ONLY to prevent slippage and assure the electrical conductivity across the joint. A flexible wire jumper may be used around the joint to reinforce the electrical path.

MINIMUM RAIL CODE: All rail to be NICKEL SILVER only.

O Scale: Code 125, flextrack or handlaid and spiked

HO Scale: Code 100, flextrack or handlaid and spiked

N Scale: Code 55 or 70, unspiked (rail soldered to printed circuit board ties or bonded with glue to wood ties), or Code 70 flextrack.

MINIMUM MAINLINE CURVE RADIUS: Scale reduction of a 20 degree curve

	millimetres	inches
O Scale:	1830	72
HO Scale:	1000	39 1/4
N Scale:	550	21 3/4

MINIMUM TURNOUT SIZE: All scales, Standard Gauge Track

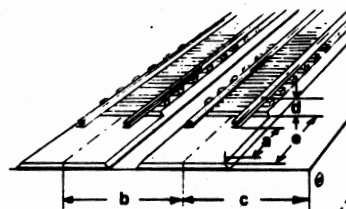
Mainline Crossovers: #6, with #8 recommended for passenger equipment
Other Trackage: #4

CONNECTOR TRACKS: To provide smooth lateral transition where modules may not align perfectly, a connector track length of at least 18 scale metres (60+ scale feet) is designated. Where available, a standard track section near this dimension has been selected and its length used to determine the connector track and rail setback dimensions.

O Scale: Rivarossi #7900 track section or code 125 flextrack cut to 400mm (15 3/4") length.

HO Scale: Atlas #150 track section or code 100 flextrack cut to 229mm (9") length.

N Scale: Atlas #2501 track section or code 80 flextrack cut to 124mm (4 7/8") length.



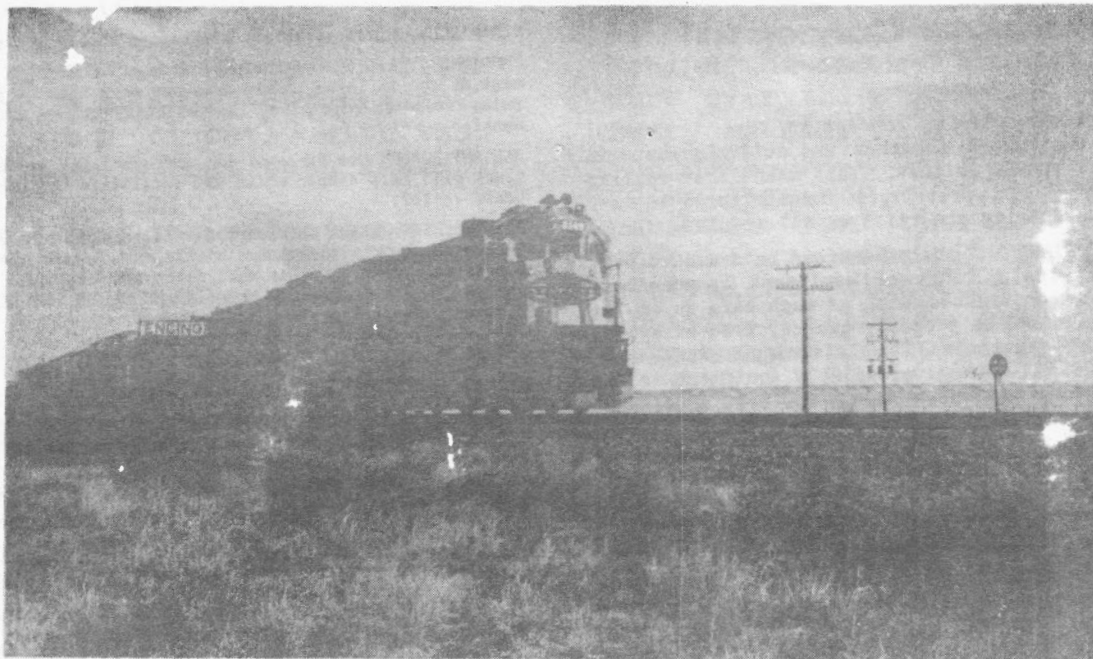
	O Scale		HO Scale		N Scale	
	mm	ins	mm	ins	mm	ins
a Rail Setback	200.0	7 7/8	114.5	4 1/2	63.0	2 15/32
b Parallel Track Centerlines	100.0	4	50.0	2	30.0	1 3/16
c Side Setback - Minimum	140.0	5 1/2	75.0	3	50.0	2
d Ballast Board Relief - Railhead to Bottom of Cutout *	8.0	5/16	6.0	1/4	6.0	1/4
e Ballast Board Setback	210.0	8 1/4	125.0	5	69.0	2 3/4

* The Ballast Board Relief allows for vertical mismatches in adjoining module roadbed, construction of transition rail code connector tracks, connector tracks with magnetic uncoupling ramps built in and ballasting of connector tracks with a base ballast retainer plate under the ties.

Teen Modulation:

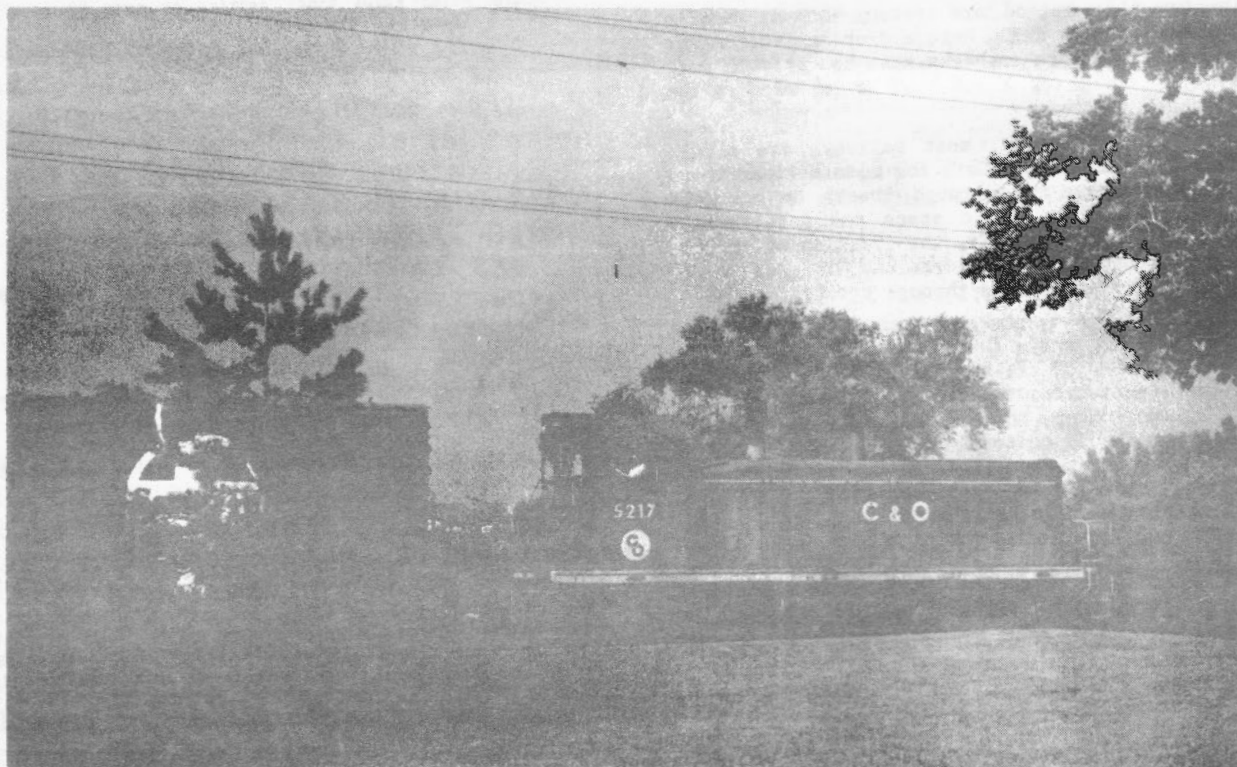
By Paul Ingraham

This system allows for practically any track arrangement you want. You can have single track, double track or tracks all the way across. You could even build a single ended module! The TAMR system, to be introduced following this series, will bring you a somewhat more rigid set of trackwork specifications, but you can use the system described here if you prefer and it will be compatible.



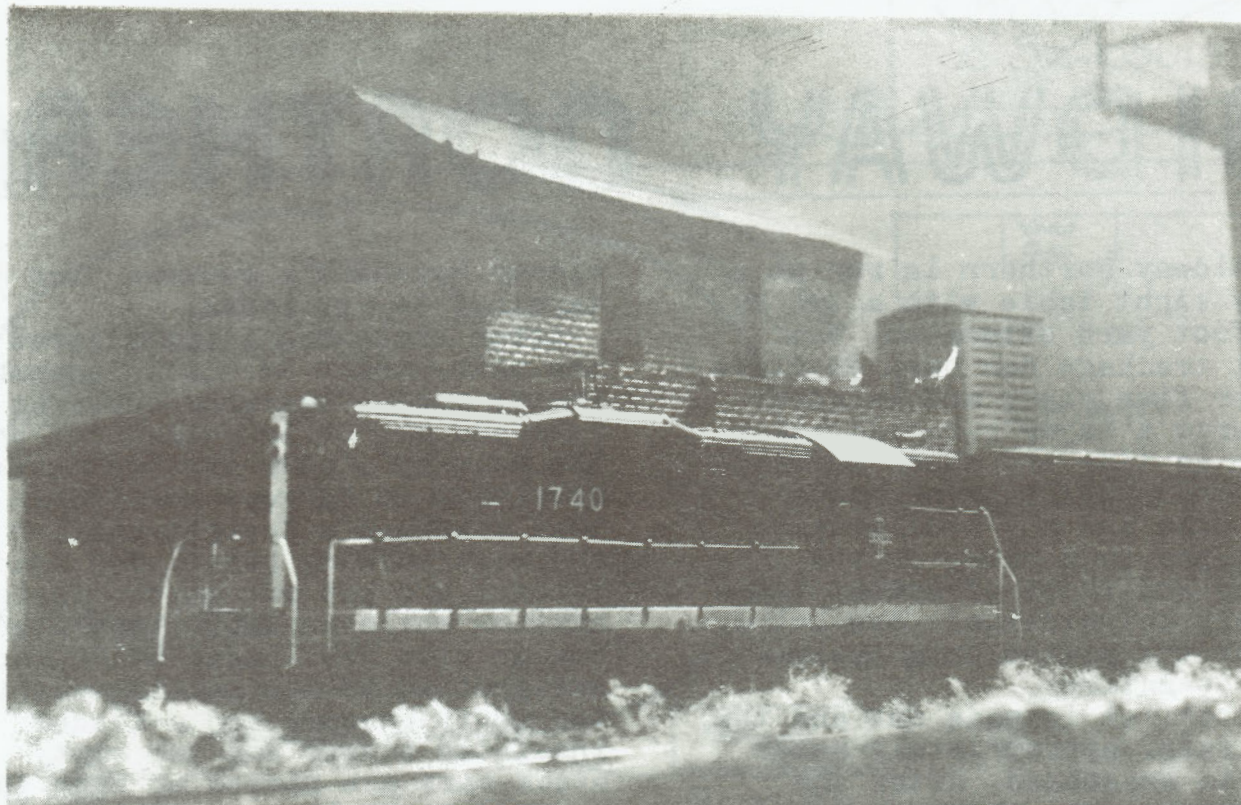
Second Place, Prototype: Claude Morelli

Claude garners second place in the prototype division with this shot of a westbound Santa Fe TOFC freight at Encino, NM on November 8, 1981. The lead unit, #8149, is a U33C followed by an SD26, U33C and SD45. The photo was taken on Kodak Panatomic-X film with the camera set at 250th of a second around f.11. For his efforts, Claude receives a certificate and a half year's worth of free advertising in the HOTBOX.



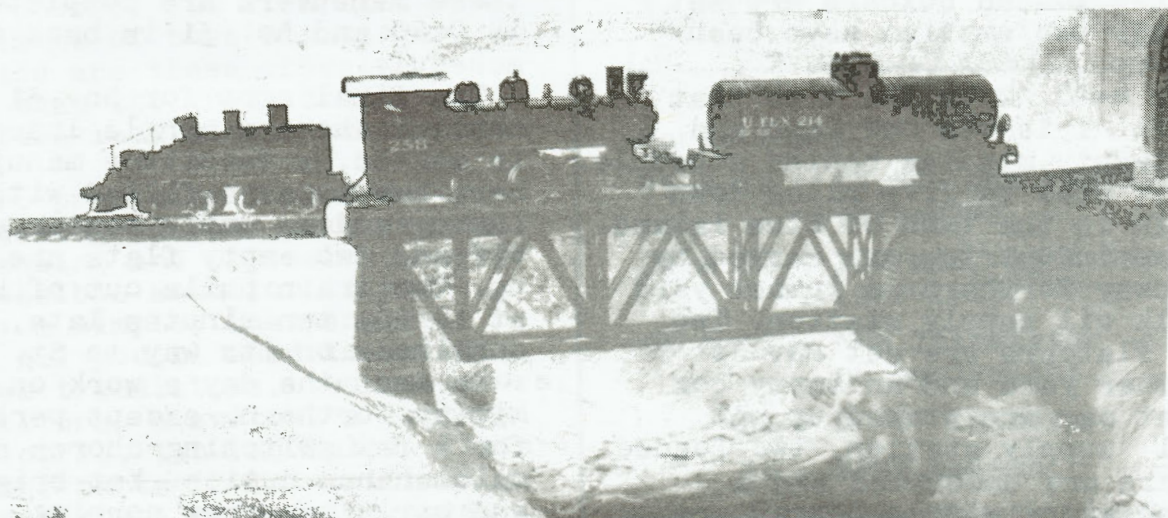
Third Place, Prototype: Timothy Vermande

Our AT TRACKSIDE column writer figured that since he wasn't designated a member of the HOTBOX Staff, he would enter our photo contest. It was a good thing he did too because we liked his shot of C&O #5217 so much that we awarded him third place in the prototype division. For his efforts, Tim receives a certificate and a free ad in the HOTBOX.



First Place, Model: Andy Taylor

The judges were really impressed with this fine shot by Andy of a Boston & Maine GP9 setting out a boxcar at the North Shore Seafood Company. The GP9 is an Athearn GP7, the boxcar is an Athearn Railbox version and the building was kitbashed from an article that appeared in MODEL RAILROADER magazine. Andy took the shot with his Canon AE1 set at f.22 and exposed the scene for four seconds with a close-up lenses attached to the normal lense of the camera. For his superb efforts, Andy receives a certificate and a free one year subscription to the HOTBOX.



Second Place, Model: Gerry Dobey

Apparently our Secretary also knows a good thing when he sees one and by entering our contest he garnered a second place in the model division. His efforts were rewarded with a certificate and a half year's worth of free advertising in the HOTBOX. Due to the limited number of entries in the model division, only two awards were given.

MIDWAY

NORTHERN

The Midway Northern is run on a five by eight table with a two by three foot yard extension. The present trackage has been in place for over five years and is about to undergo a major rehabilitation as soon as time and funds permit. The trains stop in seven towns on the pike and any similarities between the town names on the railroad and those of actual towns is purely coincidental. Now let's overlook the action on a typical day of operation:

A switchlist is made out and the first train, appropriately named No. 1, is assembled. After the cars have been blocked, the nine car train is pulled out of the yard by an Illinois Central Gulf GP35. It is 3:10 AM when we get clearance onto the mainline and head south to Oak Lawn, a brief five mile journey.

At Oak Lawn, two empty insulated boxcars are set out and two empty covered hoppers are picked up at a small local brewery. Also located on the same siding is a warehouse where two loaded boxcars are set out after two empties have been picked up.

It is 4:30 AM by the time that train No. 1 leaves Oak Lawn and it is twenty minutes behind schedule. The next stop is five miles down the main in the town of Blue Island. Here two industries are served by the Midway Northern: a lumber yard and bulk oil supply station. Two loaded flatcars are set out at the lumber yard and an empty box and flat car are picked up. At the oil supply station, two loaded tank cars are uncoupled and a tank car along with a boxcar are retrieved. When all the switching is done, it is 5:40, still ten minutes behind schedule. The train then proceeds non-stop to the

Midway Northern's southwestern terminus in St. Louis.

After train No. 1 has cleared the main, train No. 51 is assembled in the yard. Clearance comes at 7:00 and No. 51 is rolled out onto the main by a U30B for its eleven mile trip to Harvey. Located in that town are a freight station and meat packing plant. Two loaded boxcars are set out at the freight station while an empty insulated boxcar plus two loaded stock cars are spotted at the packing plant. Two empty boxcars and a loaded insulated boxcar and two empty stock cars are picked up from the respective businesses. The train is underway again by 8:10, ten minutes behind schedule. Next stop is the city of Steger some seven miles down the line and home of a scrap yard and a pipe yard. Two gondolas loaded with scrap are dropped off while two empties are picked up. At the pipe yard, a loaded gondola and a flatcar are distributed while two empty flats are coupled on to the train. When these maneuvers are completed, it is 9:00 and No. 51 is back on schedule.

The final stop for No. 51 is Beecher where a single industry is served, a furniture manufacturer. Here two boxcars filled with lumber and an empty boxcar are set off and two empty flats are picked up. The train pulls out of Beecher at 10:00, ten minutes late, and continues on its way to St. Louis.

So ends the day's work on the Midway Northern, except perhaps for a few switching chores and maintenance duties. Yet bright and early tomorrow morning, the rails will once again be humming. (See trackplan next page)

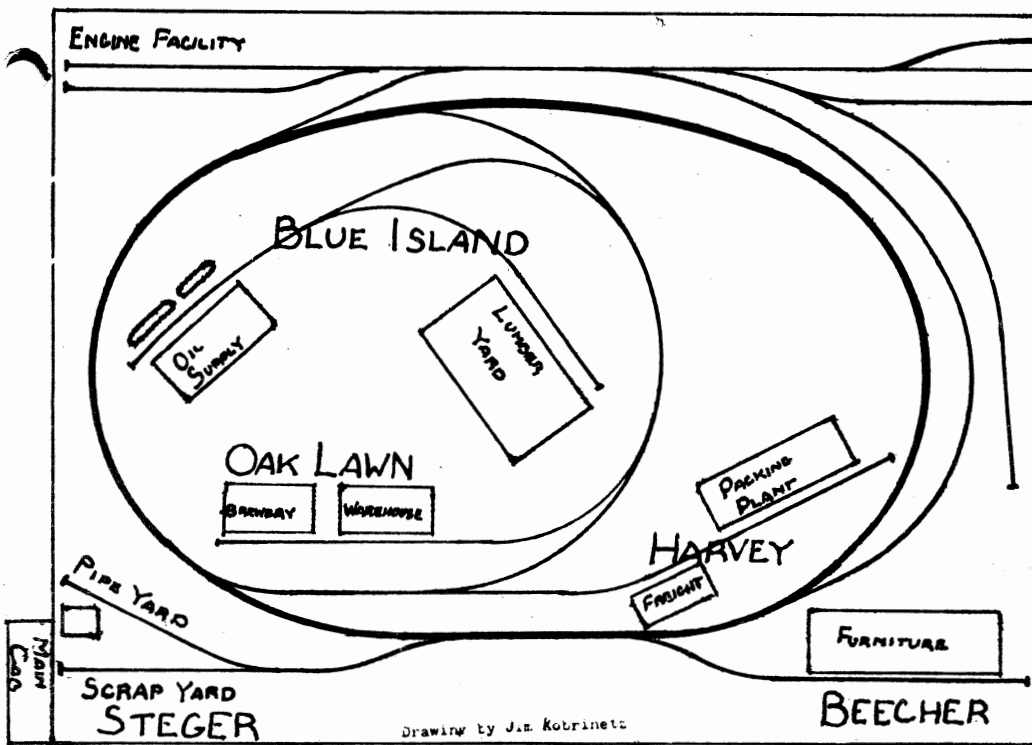
CHICAGO
& ST. LOUIS

ENGINE FACILITY

YARD
CAR

MIDWAY
NORTHERN
TRACKPLAN

Not to Scale



Drawing by J.E. Kobrinets

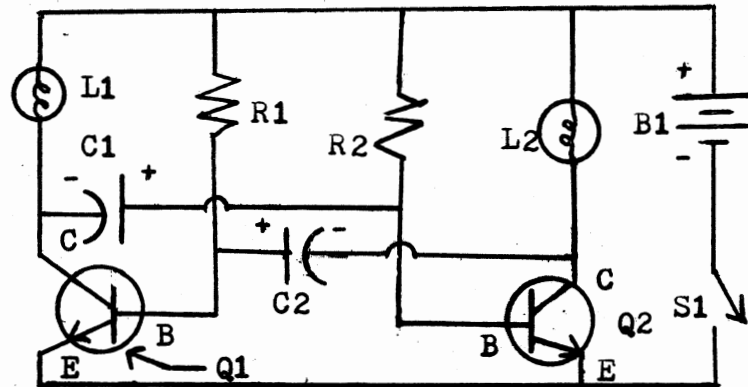
Electronics: Tim Winkler

CROSSING FLASHER

At every busy grade crossing, you will find one of these protective sentinels warning motorists and pedestrians of the imminent arrival of a train. The blinking red lights are almost hypnotic, but clearly convey their message of possible danger. So commonplace are these crossing flashers that the grade crossings on your pike look almost naked without them.

However, providing flashers for every crossing on your pike can be time consuming and expensive. Here is one possible solution to your problems: a simple, inexpensive circuit. All you'll need to build it are two transistors, two resistors, two capacitors, a switch, a battery and, of course, two red bulbs. Placement of the parts is not critical and the accompanying drawing shows one possible arrangement. Light bulb output is about 5 volts, so choose your bulbs accordingly. "Grain-o-wheat" or "Pea" bulbs that are painted red can be used.

January 1982



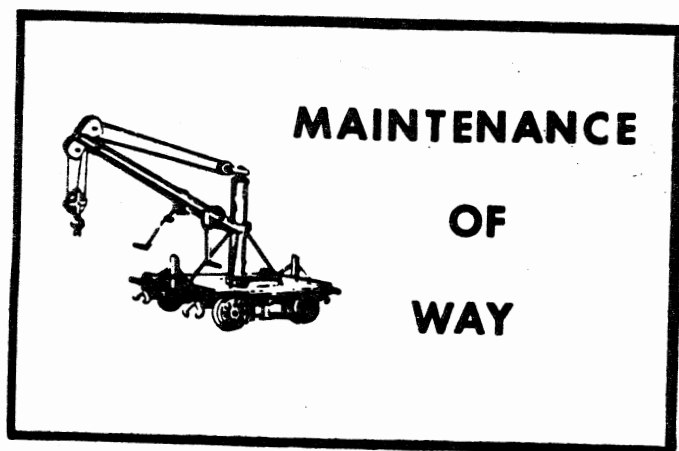
Drawing by Mark Kautzma

Parts List:

- R1 & R2 - 10,000 ohm resistor (271-034)
- C1 & C2 - 100 mfd, 15 V Capacitor (272-1025)
- Q1 & Q2 - NPN Transistor (276-2016) or equivalent
- B1 - 6 VDC battery
- S1 - SPST switch

Numbers in parenthesis are Radio Shack catalog numbers.

The crossing is not automatic, so a watchman will be needed for each crossing, unless you develop an alternative switch arrangement.



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.

D&RGW/RGS HON3 Short Caboose Kit
E&B Valley Railroad Co., 18 Lorenz
Drive, Valhalla, NY 10595.
About \$18.95

This model by E&B Valley is a fairly accurate representation of the short caboose type built in large numbers for the Denver & Rio Grande narrow gauge. Some of these cabooses in later years found their way to the Rio Grande Southern.

The kit is a bit unusual in that it is "pre-kitbashed." The sides, roof and underframe are from E&B Valley's RGS 0404 caboose kit, cut into two or three pieces which are glued together to form the short caboose. Thus the kit is a slightly modified 0404 kit.

The contents of the kit surprised me. The parts were formed of soft styrene which makes for easier cutting and gluing. What I wasn't expecting was the fact that everything was formed from styrene, including the delicate handrails and turnbuckles. In fact, these parts are so delicate that I recommend coating them with Testor's liquid cement for protection. As an added plus, the trucks are also supplied with the kit.

The kit contains five sheets of instructions. They are for the most part from the RGS 0404 kit, but included is a page explaining how to fit the kitbashed parts to form the roof, sides and underframe. The rest involves constructing the caboose along the lines of the 0404. Don't be confused by references to

illustrations and diagrams--they are for the 0404 kit and do not pertain to this one. Two pages of instruction pertain to the step by step order of assembly which proceeds as follows: roof, underframe, sides and ends. The instructions were easy to follow and I encountered no problems. Another sheet provides instructions and pictures for the truck assembly. The last sheet is used for parts identification. Contained is a checklist for all parts as well as photographs for easy identification. If any parts are missing, E&B Valley has an address you can write for replacements free of charge.

My only complaint about the kit is that I feel the sideframes were not molded as well as the other parts. The detail on the journal boxes and leaf springs was poor and not up to par with the rest of the kit. Hopefully steps will be taken to increase the quality of these castings. The trucks went together well, although application of the brake shoes was quite difficult. If you're not picky about the authenticity of the trucks, I suggest you purchase a pair of Grandt Line's narrow gauge trucks. These trucks come assembled with all the brake detail molded on and have excellent tracking properties.

I made a few minor changes in the kit which I think improve its overall appearance. I was not satisfied with the brake wheels supplied; they were big and thick, looking more like car tires giving the caboose a toy train look. The truss rod turnbuckles were a bit large as well. Since I strive for realism, I decided to replace these parts. For the brake wheels, I used Grandt Line D&RGW brake wheels which I glued with ACC on .013 brass wire shafts. Grandt Line's D&RGW turnbuckles on monofilament line were used for the truss rods. I also modified the end ladders, which were also a bit thick, by carefully sanding them to a smaller thickness.

I airbrushed the caboose with Floquil's Tuscan Red and will letter it

(cont'd on page 11)

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.

Traction Faction

I am interested in forming a traction division of some sort in the TAMR. The division would deal with information about trolleys, subways and mass transit. Modelers and railfans are welcome to share views, photos and modeling ideas. Interested persons should contact: Christopher Anderson, Emerald Lane, Mahopae, New York 10541.

Module Supporter

I am glad to see the Modular Concept series grace the pages of the TAMR HOTBOX. I used to think that modules couldn't take the place of building a permanent layout until space limitations and inactivity on my own layout changed my mind. Now I am planning to build a module to display my models as well as to communicate my interest in modeling to my friends and other interested persons. So you can bet that I'll be following the series very closely for future developments.

--Frank Martin
Hermiston, OR

THERE'S STILL TIME

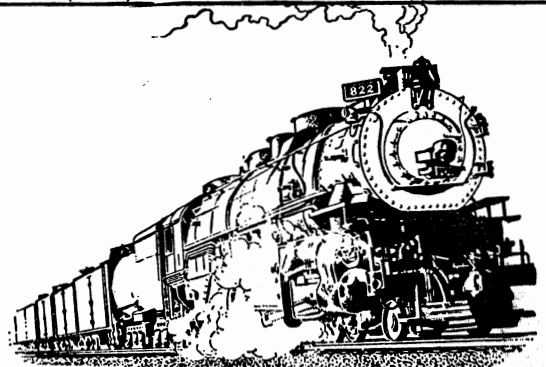
On account of the relatively few passes received by the deadline for our Pass Contest, the judges have decided to extend it until 2-6-82. So get your passes into Dave Ellett (4277 19th Place SW, Naples, FL 33999) if you want to participate in this contest. Nifty prizes are to be awarded the winners and to the losers, well, better luck next year. See the Sept/Oct 1981 HOTBOX for contest rules and enter your passes today.

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.

WANTED: Atlas HO SD35 Chessie body shell. Good condition. Write: Don Leitch, 1840 Forest Drive, Sarnia, Ontario, CANADA N7T 7H6.

FOR SALE: Various HO RR supplies and accessories. New and used. For free price list, write: Don Leitch, 1840 Forest Drive, Sarnia, Ontario, CANADA N7T 7H6.



HELP keep the TAMR steaming in 1982, renew your membership today!

Maintenance of Way (Cont'd from 10)

for my Alchesay & White Mountain RR. If you want to paint the handrails white like the prototype, I suggest you paint them separately and then glue them on to the caboose. Adding a little weight inside the caboose to improve tracking would also be a good idea.

The E&B Valley short caboose was a fun kit to build. The instructions were well written, making for an easy assembly. Anyone who has put together a few plastic models should have no trouble with this kit. The price seems a bit high, but I think the results were worth it. This kit would be ideal for someone beginning in HO_{n3} or HO_{n2½} narrow gauge as well as a welcome addition to any narrow gauge pike. It certainly is for the Alchesay train crews who often climb aboard the caboose on those cold morning runs for a hot cup of coffee off the caboose stove.

--Mark Miter

**ON THE
POINT:**

Here is the first place winner of our 1981 photography contest in the prototype division. David C. Schauer captured the coveted prize with his shot of a BN taconite train pulled by three husky GP38-2's at Dewey, WI on September 7, 1980. Dave used a Nikon camera with an 80-200 zoom and Kodak Plus-X pan film to record this classic railfan shot. For his efforts, he was awarded a certificate and a free one year subscription to the TAMR HOTBOX. Additional contest winners appear in the centerspread of this issue.

MARKERS:

ARRIVING NEXT ISSUE: Dave Schauer narrates the tale of the Duluth, Winnepeg & Pacific RR. Learn about its operations as a bridge route between the U.S. and Canada, plus its terminal operations in the Duluth, MN area. In addition, the article will include special sections for the railfan and modeler and plenty of photos of the "Peg's" operations. All of this, plus our usual columns, will be coming your way in the February issue of the "Un-Magazine of Model Railroading."

TAMR HOTBOX, "the Un-Magazine of Model Railroading"
CHANGE OF ADDRESS
VIA MAIL
MOVE COMPLETE



CHANGE OF ADDRESS
VIA MAIL
MOVE COMPLETE

FIRST CLASS MAIL

