

# HOTBOX

"the Un-Magazine of Model Railroading"  
No. 190 August 1983

"Boy, Have I Got A Swell (Hic) Idea For  
Making Cork Roadbed"





# HOTBOX

**OFFICIAL PUBLICATION** • *Open 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:** Dee Gilbert  
Box 132  
Harrison, AL  
72602-0132

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 St.  
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.

I urge all members to continue helping with our membership drive. Remember if you recruit five (5) regular new members to the TAMR, we will present you with a free name badge or button. If you recruit ten (10) new regular members to the TAMR, we will automatically extend your membership a year. You can participate by placing TAMR brochures at shows or hobby shows or by writing those who expressed an interest in the TAMR in the past (we provide the names and application blanks). You can receive materials from our Pro-Mo Department by writing: Chris Brindamour, 10 Meadowland Drive, N. Kingstown, RI 02852. This drive ends on January 31st, 1984. Special grand prize to the member who recruits the most new members. Here is your chance to help yourself and the TAMR.

## PHOTO CONTEST

Once again, here are the rules for the HOTBOX's second annual photography contest:

- 1) The contest will be divided into two sections, model and prototype.
- 2) Only glossy black & white prints measuring at least 5x7 inches and no larger than 8x10 inches will be accepted.
- 3) A description of the subject plus a brief description of the photography techniques used must accompany each photo submitted.
- 4) Each participant is limited to a maximum of three (3) entries in any combination of model or prototype photos.
- 5) All participants must be TAMR members in good standing.
- 6) Awards will be presented to the first, second and third place winners in each section. If volume in a particular section does not justify three awards, less will be awarded. Winning entries will be published in the HOTBOX as space permits.
- 7) Judging will be performed by the HOTBOX staff and the decision of the judges is final.
- 8) HOTBOX staff members are prohibited from entering this contest.
- 9) Photos will be returned provided sufficient postage and a sufficient size envelope accompanies them.
- 10) All entries are to be submitted to the HOTBOX Editor and must be received no later than September 30, 1983.

## Extra Board

All the news that fits, we print:

### MEMBERSHIP By Dee Gilbert

Total TAMR Membership (8-15-83): 150

Breakdown as follows:

Region	Number	Percentage
Canadian	5	3.3
Central	50	33.3
International	5	3.3
Northeastern	49	32.7
Southern	17	11.4
Western	24	16.0

TAMR Welcomes these New Members!

Robert Yoder, Atlanta, GA  
 W.R. Lutter, Union, NJ  
 Ben Seibert, Grant Park, IL  
 Colin P. King, Cape Coral, FL  
 Richard Radich, Green Bay, WI  
 John Fritschie, Layton, UT  
 Jeff Wertz, Bowie, MD  
 Michael Piepenburg, Alexandria, VA  
 David Hutchinson III, Lincoln, NE  
 Lee Coley, Demopolis, AL

Also, welcome back these old-timers!

Greg Dahl, St. Paul, MN  
 Pat Limbach, Columbus, IN  
 Michael Patrick, Newport News, VA

## JOKE OF THE MONTH CLUB

Michael Barth sent the following rib-splitter:

During a visit to his grandmother's, little Roy noticed she lived near the RR yards. When he saw a train switching back and forth, he exclaimed: "The train can't find anywhere to park!"

# CRUMMY NEWS



BY MARK KASZNIAK, EDITOR

## STORYTELLERS

If you watch any television at all, you have undoubtedly seen commercials for Kodak film. Through the magic of sight and sound, the Great Yellow Father (as Kodak is affectionately known to photographers) tries to convince you that "every picture tells a story." Thus for this reason alone, you should always have plenty of film on hand.

I have no quarrel with this philosophy. Kodak is probably right. Photographic images convey not only information, but also emotion. In fact, most photographers knock themselves out trying to give their photographs a strong emotional appeal. Why? Those photographs that tug at your heart are the ones that are remembered. Each of us sees millions of photographs in a lifetime and thus can not possibly remember them all. Only those that bring out an emotion are likely to be remembered. One problem with this is we begin to judge photographs solely on emotional appeal. We forget those that bring out no emotion and lose the information that they contain.

The reason I bring this up is that like most modelers and railfans, I have a certain number of railroad books. Many of these are of the photo essay type which contain little text other than caption material. When you first look through such a book, you judge the photographs on emotional appeal. Further looking is required to get at the information. For instance, a railfan may be looking for scenic mainline locations to catch trains or ideas to vary his own railroad photography. A modeler can gain much information on equipment, operations and a host of other things.

If a modeler is looking for detailing ideas to make his model railroad more realistic, these books are most useful. I went through a couple of my rail books

and came up with the following list of ideas for making my own pike more realistic:

Almost every layout has at least one busy junction or crossing that will justify an interlocking tower. Now most modelers install the tower, but usually forget one essential item--the tower operator's car. After all, he/she has to get to work somehow.

Unlike our models, maintaining the right-of-way on the prototype is a full time job. How about spotting some new ties in an area where the current ones need replacing? A little work with a knife can make the ties look like they need to be replaced without hampering your operations. Add some gandy dancers if you want, but the ties along the mainline will be more than enough to suggest the work that has to be done. The same principle can apply for rail that needs replacing. Perhaps your railroad is busy converting to welded rail?

If you still operate in the steam era or with heavyweight, steam-heated passenger cars, you better figure out a way to add a steam line to your coach yard.

Every railfan knows that engine terminals can be very frustrating. All the rare or interesting power is usually sitting behind the ordinary stuff or obstructed by a pole. Keep this in mind when you design and construct yours. Got a turntable in that engine facility? Have you run the necessary electrical connection between it and the roundhouse so it can be powered?

Although the steam locomotive may be long gone on your railroad, that doesn't mean you can't still have a few memories. A concrete coaling tower that is too much trouble to tear down can aptly illustrate that steam once ruled your rails.

Out in the country, auto roads tend to parallel railroad lines. That is, of course, till you reach some obstruction. Then the auto road will normally go around or over while the railroad goes through via a tunnel or cut.

If you are proud of your passenger service, how about a couple of units permanently assigned to those trains? You can even paint the name of the train on the unit's nose.

Not enough room for a station? How about just a sign to identify the location for your train crews.

At the passenger station, step stools for disembarking and boarding passengers with your railroad's logo on them. Place your railroad's logo on the stations too to help identify them. Or if you are modeling the current era, don't forget the Amtrak sign!

# On Slow Speed Operatin' Shuntin' and Da Prototype

By Stephen Garland

I was over to a friend's house the other day helping him operate his layout. His brother and I (the two of us) was doin' some switchin' in the main yard with a wee switcher I had brought over. Now this switcher had good gear reduction, real good, so much so that at full throttle, the little thing would be moving at only about 10 scale miles per hour. It, like the rest of the equipment, had them %\$#@!!! horn-hook couplers. The only difference was that the switcher had STRONG coupler springs. This lead to an immediate problem. No, there weren't any derailments (such things aren't allowed to occur on my friend's layout), but to get the loco to couple up to any other car, you had to ram the other car. Well sir, that was fine with us and so we had to ram all the cars we had to couple up to. Then things went wrong.

My friend came back with a train from further up the line. Following with layout regulations, we started to break the train into groups of cars. Of course, to do this we had to ram the cars. Fine, sez we and we started to ram the cars. Following shrieks of anguish from my friend, shunting ground to a screeching halt. A debate ensued about the shunting procedure we were using and soon after the battlelines were drawn between the yard crew and the railroad owner.

We (being the yard crew) argued that there was no other way to do shunting with that loco or any other for that matter, especially when we were working under the curse of fast time. The owner (my friend) countered with the profound statement that switching should be done VERY slowly, coupling should be done gently and prototypically to make model railroading more realistic. He said that prototype railroads do switching this way.

After a few moments the debate became quite heated (I recall something being said about someone's mother). After a visit to the emergency department of one of the local hospitals, we took the advice of the doctor on duty and went to observe the switching operations of the local railway.

Once we had won the war for street space with the dragons that man calls automobiles, we were riding our bikes through town and ended our adventure with the automobile at a road bridge overlooking the railway yard. We stayed there about an hour, in the freezing cold, waiting for something, anything, to happen. A few minutes later, a light turned on at the far end of the yard and with a great cloud of blue smoke, a switcher appeared racing up track #1. Finally, we would have our argument settled.

At that moment, the switcher, #932, disappeared under the bridge. Soon it reappeared on another track heading for a string of cars. This would be the deciding moment. Slowly and gently, number 932 coupled up to the cars.

"Aha!" sez my friend, "dey do do switching slowly and gently!!"

As we were preparing to leave, our heads hung in defeat, there was a loud roar, booming, screeching and clinking. When the blue smoke had cleared, there was #932 about a mile up the track racing along pulling her cars behind. Suddenly #932 stopped. There was a continous banging like thunder as the slack between the couplers disappeared. Once again, with a screech, #932 came running into the yard pushing all her cars ahead of her. Again #932 stopped, with such jolt that the car roofs were shaking.

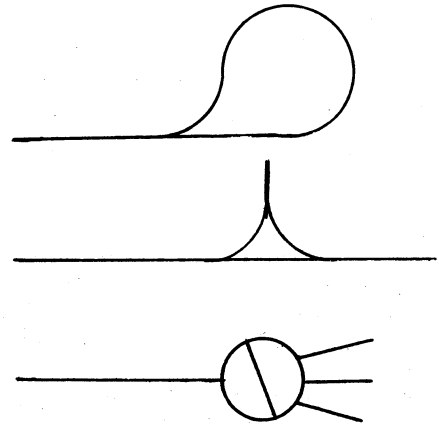
"Aha!", sez we, "Gentle, eh?" We then left for my friend's house and more "prototypical" operations.

What's the moral of this story? Don't go overboard with slow speed operation, even the prototypes have to hit the couplers hard on occasion to achieve their operations. In the yards, switchers don't always move slowly. Just watch a real switcher at work sometime. Most switchers, even the best ones, can't move much slower than six miles per hour, so why should yours? Remember, slow and gentle isn't always realistic!

# Wiring For: RETURN LOOPS

# WYES

# TURN TABLES



By the HOTBOX Staff

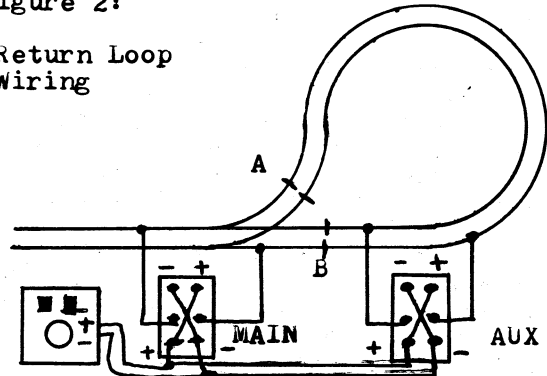
Certain trackage arrangements on your model railroad will require special electrical wiring to allow you to operate trains properly. This article will show you how to wire trackage arrangements known as "turning tracks." A "turning track" by definition is any arrangement of trackage that will allow you to turn a train end for end. The most typical turning tracks found on model railroads are return loops, wyes and turntables.

Seeing as many modelers have problems when it comes to wiring return loops, we will start with them first. Figure 1 clearly illustrates the electrical problem we run into when trying to wire a return loop. At point A, we have a polarity mismatch causing a short circuit. If insulated rail joiners are installed at point A (both rails, remember), the short will disappear, but your engine will stall as it tries to cross over them.

in addition to the block control outlined in last month's article. The reversing

Figure 2:

Return Loop Wiring



switches are simply DPDT switches with the wires crisscrossed at the opposite end in order to change the polarity.

Here is how the return loop wiring works: Let's suppose your train is on the mainline running towards the loop with the track switch set for straight through running. When your train is fully in the loop, you flip the track switch and then the MAIN reversing switch. This will allow your train to run back out on to the mainline in the opposite direction without stalling. If the track switch was set for the curved portion as your train entered the loop, you would first have to flip the AUX reversing switch to correct the polarity of the return loop with the mainline and then once your train was in the loop, flip the track switch and the MAIN reversing switch.

This then brings up an important question: How do you know that the return loop is set for the proper polarity as your train enters it? There are two ways to solve this. First, you can memorize the electrical switch position in relation to the track switch position. For instance, if the track switch for the return loop is set for straight through running then the AUX reversing switch must be pointing

Figure 1:

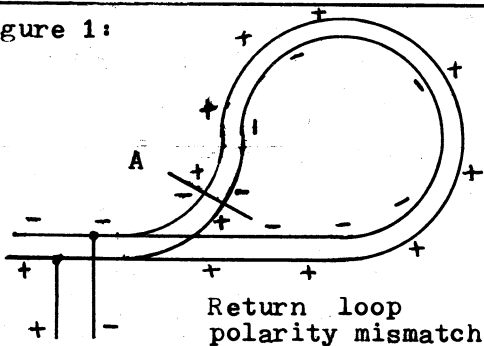
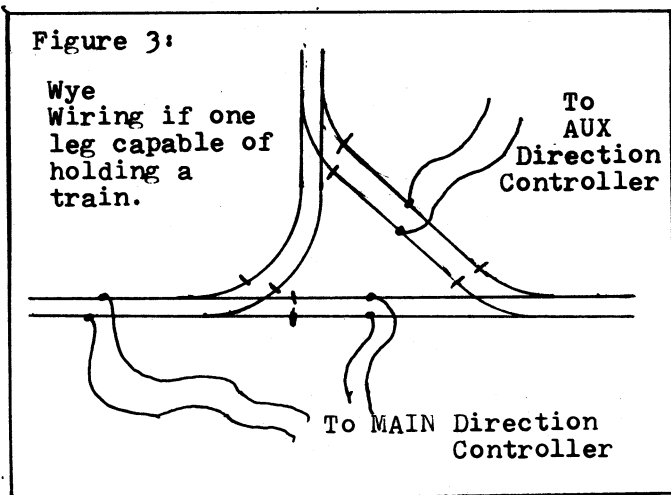


Figure 2 shows how this problem can be corrected. You will notice that the turning portion of the loop has been electrically isolated from the rest of the mainline by inserting insulated rail joiners at points A and B. Furthermore, we have installed two reversing switches, one labeled MAIN and the other AUX. These reversing switches are important because if your layout has turning tracks, you need to establish direction control in

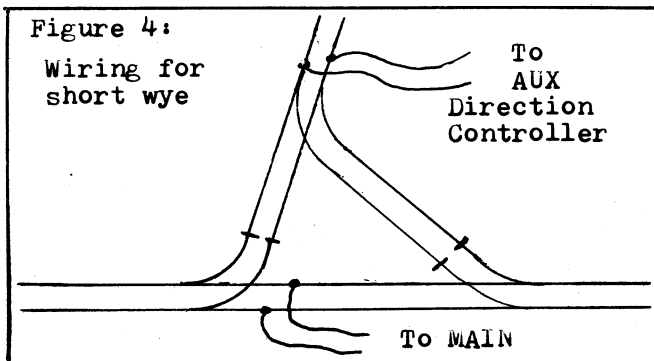
up. If the switch is set for the curved route, the switch must be down. The second solution is to install a light across one of the rail gaps at both points A and B. This light should be mounted in the control panel and display a red bulb. This is because if the lamp is lit for the direction that the train is entering the loop, the polarity is mismatched and the AUX reversing switch needs to be flipped. Seeing as this bulb operates off of your track power, it should be rated accordingly. An 18 volt bulb would probably be most appropriate as it could then stand a short circuit or running at full throttle.

Another question you may be asking is how do these reversing switches tie in with the block switches mentioned in the previous article? Well, the MAIN reversing switch should be installed before the block toggles and wiring for the block toggles should start at the MAIN reversing switch. All turning tracks, however, should be wired from the AUX reversing switch. Thus the chain of command in reversing switches is something like this: The direction control switch on your power pack is to be considered to be the engineer's forward and reverse switch. The MAIN direction control switch sets the direction on the mainline, such as East or West. The AUX direction control switch sets the direction in the turning tracks, such as normal or reverse. This may sound a little complicated, but once you get used to it, it becomes pretty straightforward. In actual train running, the direction control on your power pack is used for switching moves while the MAIN and AUX direction switches are only used when you encounter a turning track.

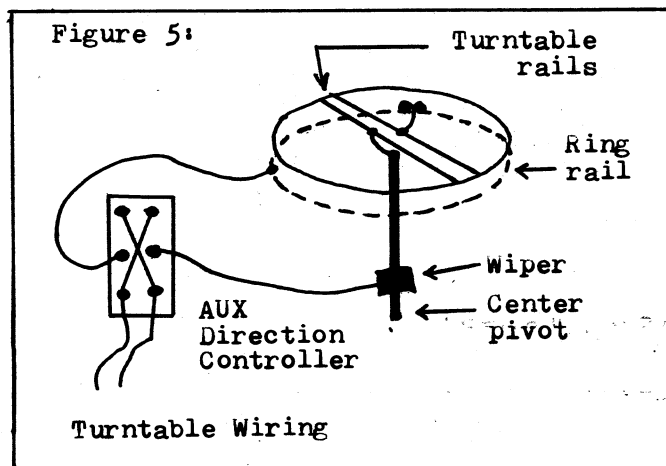
Wyes are another form of turning track that must be specially wired. If you have a long wye track capable of holding a train on one of its legs, you can wire it as shown in figure 3.



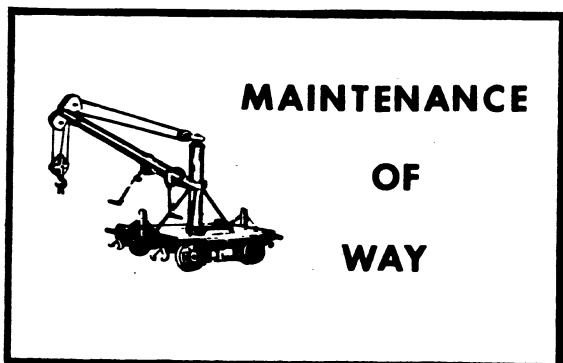
many modelers, however, use a short wye near a yard or passenger terminal to turn locomotives or a few passenger cars. The wiring arrangement shown in figure 4 is most useful for this type of wye.



Wiring for your turntable can be done off the AUX direction controller or a separate turntable direction controller. Such a controller should have a center-off feature to make sure any powered equipment doesn't suddenly leave while the turntable is in operation should you happen to bump your throttle. Power is usually fed to the rails of the turntable by the center pivot and the ring rail. Figure 5 shows one method of wiring.



The most important wiring feature to grasp about turning tracks is that they must have separate direction controllers from your mainline tracks. Thus when your train or engine is occupied in the turning track, you can reverse the mainline direction and continue operating without a hitch. Therefore, when you are planning the wiring for your layout and establishing block boundaries, it is extremely important to locate any turning tracks and install the special wiring that is needed to make them work properly. Sometimes they are not all that easy to locate in a particular trackplan, especially with oval layouts, but do attempt to find them and install appropriate wiring.



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 TAM or the MOTOX. Please submit reviews to the MOTOX Editor.

Superliner Coaches, Con-Cor, N scale, JMC, 1025 Industrial Drive, Bensenville, IL 60106-1297. \$8.98 each.

Even while staring through my hobby dealer's glass display case and the plastic boxes with in which they were wrapped, these cars still looked inviting. One of the first things I noticed was how clean, clear and intricately the word "Superliner" was printed out.

As soon as these coaches hit the rails on my pike, they looked very neat. Comparing them to the photos printed in MR, I found all the details seemed to be reproduced except for the brake-light system. This is a set of three lamps--amber, green and white--which are placed on each side of the car by the doors and are visible to the engine crew. These lights monitor the brake system on each car, independent of all other cars, allowing the crew to see what the brake system is doing on each car.

The next difference I noted was in the trucks. Con-Cor used their standard 4 wheel passenger truck which does not have the particular details of the Superliner air-suspension shock system. The attachment of the trucks to the body is with a split plastic pin. There is ample play to allow transversing rough track and switches. However, I found that on well-worn switches and rougher track that the trucks tend to bind against the skirting. I trimmed the truck frames back in these areas and the little bit removed isn't noticeable. Let me warn you that my layout is not the rule in determining track roughness and you may or may not encounter the same problem. The minimum curve radius these cars will negotiate is about seven and a half inches although they do look pretty ridiculous on curves this sharp.

The cars are equipped with standard Rapido style couplers and they couple up pretty close. For those using Kadee couplers, I don't recommend the 4-wheel

truck conversions, but instead use the #1128 coupler conversion on the car that will be coupled to the rear of your F40PH and the #1129 conversions for the rest of the cars. For a train that will not be switched out and will be operated on trackage where the curves are greater than 11 inch radius, you can use the #1128 conversion throughout and bring the cars up real close. Be warned that backing moves will probably cause the diaphragms to rub against one another and tend to cause derailments on backward switching moves.

A metal weight is attached to the underside of the bodies and runs almost the full length of the car. This keeps the cars' center of gravity as close to the rails as possible and aids them in staying upright when derailed. Roofs are attached to the body in a manner that I have yet to figure out. The window glazing is clear and easy to see through. Since the cars have no interiors, they look a bit empty. Con-Cor should either market a separate interior detail kit (after telling us how to get at the car's interior) or switch to tinted glazing as on the prototype.

The cars are not numbered making it easy for the modeler to do it himself and thus avoid the problem of two cars with matching numbers. A stock Model Power F40PH diesel should be able to handle 6 to 8 of these cars on a level layout or one with grades not exceeding 2.5%. This would translate into a medium distance run on Amtrak as a single F40PH rarely handles more than 6 or 8 Superliner cars. With two powered units and 10 to 12 cars, you can easily model Amtrak's long distance trains such as the Empire Builder or the newly routed California Zephyr.  
--Dee Gilbert

**ON THE  
POINT:**

Believe it or not, the idea for this month's cover drawing actually started as a discussion of the merits of cork roadbed versus Homasote in layout building. The Associate Editor was arguing the case for the cork while your Editor opted for the Homasote. Needless to say, this discussion would have been forgotten long ago had we not come down with a case of the "sillies." Some mutual brainstorming lead to the caption and Scott Sackett was kind enough to come up with the drawing. Wonder what will come of our next discussion?

## MARKERS:

### ARRIVING NEXT ISSUE:

Dean Moody tells us how he developed his award winning pike that took an Honorable Mention in Life-Like's Model Railroad contest last year. Our "Techniques You Should Know" series continues and this time we'll be showing you switch machine wiring and diode matrixes. All this, plus some additional product reviews, will be coming your way in the Back-To-School Special of the "Un-Magazine of Model Railroading."

Remember: The number that appears after your name on your address label is the last issue of the HOTBOX you are entitled under your current subscription. A renewal notice will be enclosed with that issue to facilitate your renewal. Please renew promptly to help the TAMR save money on additional renewal reminders and to avoid missing any issues of the HOTBOX.

**TAMR HOTBOX, "the Un-Magazine of Model Railroading"**  
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