# THE ORDER BOARD

**A Publication Of The** 

**Cumberland Division SER-NMRA Inc** Tennessee Central Railway Museum Nashville Chapter NRHS

Vol. 23 Issue 8

#### **Donations**

Suzanne Deal- Miscellaneous HO model railroad items

Warren Hannas- \$100 cash

Tom Spiggle- \$120 cash for the TCRM Excursion Train Glass

Window Fund

#### 2004-2005 Schedule

Aug 14 Nsv Ntrak setup at Viola TN Founders Day Event

Aug 19 C Div/TCRM Thursday Night Meeting at TCRM

Sep 4-5 Day Out With Thomas at TCRM Nashville TN

Sep 10-19 Nsv Ntrak at Tennessee State Fair- Confirmed!

Sep 11-12 Day Out With Thomas at TCRM Nashville TN

Oct 2 Watertown Train Robbery Trip

Oct 9 Nsv-Watertown Mile-Long Yard Sale Trip

Oct 9 Cookeville-Watertown Mile-Long Yard Sale Trip

Oct 16 Cookeville Super Fall Foliage Trip I

Oct 23 Cookeville Super Fall Foliage Trip II

Nov 04-Jan 05 Nsv Ntrak at Adventure Science Center Nashville

Nov 11-14 Whistlestop Weekend Adventure Sci Ctr Nashville

Feb 12 Watertown Valentines Day Murder Mystery Trip

Feb 26 Watertown Mother Goose Fairyland Trip

Mar 19 Watertown Easter Bunny Trip I

Mar 26 Watertown Easter Bunny Trip II

Apr 9 Watertown Train Robbery Trip

Apr 23 Watertown Mile Long Yard Sale Trip

## **Day Out With Thomas – Publicity Needed!!**

Calling all members!! We need to continue our Day Out With Thomas 2004 publicity efforts at maximum output. Please take some of the posters and ticket order forms and distribute to any effective place you can. The following are excellent places to start-

Day Care Centers Summer Schools Hardware Stores Department Stores Toy Stores Fast Food Restaurants Churches Video Stores

**Drug Stores Grocery Stores** Mall Bulletin Boards Workplace Bulletin Boards Park Bulletin Boards

So far color photos accompanying DOWT articles have appeared in the Nashville City Paper and the Tennessee Magazine, Parents magazine. Also the NES Power Notes will carry a DOWT announcement. TV and radio announcements and commercials will be starting soon.

## **Program Notes**

August- Day Out With Thomas training/preparation for members with the DOWT area managers where members will be working. Please contact your area manager for the specific training location at TCRM.

## **August 2004 Meeting – No Host Committee**

Frank Holt has said he will have some food items available before the August 19 meeting. Quantities are limited, so it's first come, first served until the cupboard is bare.....

#### **New Members**

Nathan Walls & family, Nashville TN

Please make our new members welcome as they help make our organizations better.

## **Hobby Shop News**

Still available- the Cumberland Division Red Cabooseproduced HO scale 500 series & 7900 series TC Ry 40' box car kits- 2 different numbered cars for the 2 series (TC 501, 537, 7923 & 7942). These cars include NMRA RP25 metal wheelsets with narrow wheel treads and realistically tapered metal axles. Price for local delivery (no shipping involved) is \$16.50 each, \$64/set of 4. Mail-order price is \$17.50/car postpaid, \$68/set of 4 postpaid. Notice about these cars has appeared in the June 2004 Model Railroader; if you want your set before they get gone, be sure to stop by the hobby shop and buy your set. Stop in and see what new items are in stock and what manager Eddie J has added to the sale box....

## Nashville Ntrak News

By Tom Staggs

Nashville Ntrak is going to go to Viola for a one day set up this Saturday the 14th. This is an annual thing and makes the 12th time we have visited. They have a founders day and parade and we are right on the square every year. (Viola is so small their square is a triangle). We also received news this week that we are going to be at the Tennessee State Fair again this year. There was room found for a 55 x 30 layout. We will represent The TCRy for 10 days from September 10 - 19. All of you are invited to come out and run a train and have some fun! If you don't have any N scale we will supply it all.

## A Wedding!

Don Gage E-mailed that his daughter Maryanne L Gage is going to be married on 18 Dec 2004. Her betrothed is Leon Blaisdell of Hendersonville TN.

## **Locomotive Maintenance Series**

By Bob Swanner

Continuing in this issue of The Order Board is a series of articles on model railroad locomotive maintenance.

- 6- Making locos more sure footed
- 7- Athearn fix for keeping power to all remaining wheels
- 8- Headlight Installation
- 9- Making better electrical power paths for better operation

- 6 There are some 12-wheeled model diesel locomotives that stay on the rails like they are glued. Unfortunately some of their brethren are not so fortunate. All these model locos may be identical in all respects but one: staying on the rails. That's when I take action. When our model train operator identifies a loco with a chronic problem of plowing up cinders he informs me & it is summarily dispatched under bad ordered papers to the Swanner Locomotive Works, hereinafter being referred to as: SLW. Usually the loco derails where there is a track irregularity, hump of sorts, whether it be a turnout, curve, or just straight track. When the said loco encounters said hump the first pair of wheels makes it fine, but then its second pair is setting on the high spot & the first pair is hanging suspended in the air. It takes almost no force to cause the lead wheels to go sideways & leave the high iron for unauthorized parts unknown. The fix is to remove the center pair of wheels while assuring that all remaining wheels are powered. It would be very easy to remove the center axle & button everything up but then we'd have a former 12 wheeled loco, now 8 wheeled, with only 4 wheels powered. Not acceptable in most circles. The most common fix is to press the wheels from the center axle then reinstall the axle with its gear sans wheels. Now power is transferred to all remaining wheels (8) & the loco becomes much more sure footed since there is no center wheel there to raise the lead wheels off the rail. It would take very close inspection to determine whether center wheels are present or not. Each wheel set now has 50% more weight on it than previously, so power at the draw bar appears undiminished. Enjoy!
- 7- Should you wish to cause your 12-wheeled Athearn loco to become more surefooted by removing the center set of wheels you will encounter an additional set of problems. The wheels are assembled differently, so a different tack is required. The wheel layout is: wheel on a stub axle, brass bearing, plastic drive gear, brass bearing, wheel on a stub axle. The bearings set in notched metal power pick up strips attached to the truck frame. The wheel set retains the bearing because it is sandwiched between the wheel & drive gear. If the wheels are removed, there is nothing to retain the brass bearing in its position so it can slip out sideways allowing the drive gear to come out of mesh with the other gears. This is not considered a good thing by the dream team. Before you try putting in a solid metal truck axle to retain the drive gear, don't. I can assure you it will short out the loco because both sides of the electric power pick up are now electrically connected through the brass bearings & metal axle. Instead, let's use a plastic freight car axle. You're still not out of the woods yet. We still need something to sandwich the brass bearings in their proper orientation. I suggest a pair of plastic 33" freight car wheels. They are a lot smaller in diameter so lifting the lead wheels from the rails is not a problem. They do sandwich the bearing in its proper position as before, so all remaining wheels are powered & your loco is now much more surefooted with no discernible loss in tractive effort. That's almost like having your cake & still be able to eat it too.
- 8- There are occasions when we'd like for our flanged steeds to be more visible under less than brilliant lighting conditions. We call them headlights. The best light will be from the bulb being exposed with nothing in the way, like a plastic lens. If this is possible I push the bulb right into the headlight assembly itself; this is primarily referring to steamers. We'll figure something for diesels next. Finding the right sized bulb is not too likely so the next best thing is to mount a bulb that would be loose, then snug it into place. The easiest way I've found is to put a small piece of

shrink tubing around the light so it can be squeezed in. Sometimes the hole is still not right, like it is too tapered for my bulb to fit or there is casting flashing, so I drill it until I get a good snug fit. The shrink tubing makes it snug but it also cushions the bulb somewhat reducing the hazard of breakage.

Now for diesels, they have ditch lights, cab lights, lights nose mounted & lights mounted high. I've used constant lighting miniature 1.5 volt bulbs to good advantage because they fit in nicely. LEDs also fill the bill but whatever you use like that will need the voltage dropped to levels that operate the bulbs without causing a bright flash for a very short time. I have a 5K, 5000 ohm, variable resistor to calibrate what sized resistor I'd need. I set the power pack voltage on max & the resistor on max as well. With those settings the bulb should be off or at least very dim. Then I decrease the resistance until the bulb is at the brightness I want. Remember this: the brighter the light, the shorter the bulb life. Then with power off, I read the resistance still across the variable resistor with an ohmmeter. I take a resistor out of stock that matches & solder it in. Job complete.

I have tried different bulbs like 1.5 volt constant lighting, LEDs & halogen bulbs of different voltages. I really haven't found the perfect light but it's still worth trying for. I've put different power sources to operate the bulbs like 4 diodes, varying sized resistors, voltage regulators, I even have mounted a battery in the tender with a toggle switch under it so I can turn it on or off. All these possibilities have their up & down sides.

9- The "Making better electrical power paths for better operation" article will appear in the September 2004 meeting notice since it will not all fit in the remaining space of the August 2004 meeting notice