

## CENTRAL RAILWAY MODEL & HISTORICAL ASSOCIATION, INC.

Volume 21, Number 12

December 2012

P. O. Box 128 Central, SC 29630

WEBSITE: www.crmha.org

MUSEUM &
MEETING SITE
108 Werner Street
Central, SC

**OFFICERS** 

President / CEO:
Dan Marett

**Vice Presidents:**Open Office
Joe Fitzpatrick (2<sup>nd</sup>)

**Stationmaster** Ralph Watson

Paymaster Bob Folsom

Webmaster Ed Welch

**Show Chair:** Jim Reece

Museum Curator: Jack Green

Editor & Producer: Robert M. Seel, AIA

Next Meeting: Dec 6, 2012 6:00 PM

Starting at the Central Railway Museum

ANNUAL CHRISTMAS DINNER

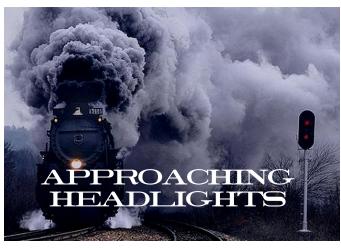


## CHANGES ARE APPROACHING

Changes are on the way in Central in the new year. For one, signals are changing. **Above**, Amtrak's Train 20, the northbound *Crescent*, knocks down the lights at Central on November 26, 2012. **Above: Photo by Rob Seel.** For another, the signals themselves will be changing – and in



this month's issue, Bruce Gathman tells us all about it! Left: Norfolk Southern SD70M No. 2640 slips its manifest freight beneath an iconic, Southern Railway signal bridge in Easley, SC. Soon, the local railscape will look more "nationalized" as NS makes governmentmandated updgrades to its control infrastructure. Photo by Bruce Gathman.



Upcoming Events for the

Central Railway Model & Historical Association
as well as Regional shows and events worth
mentioning

### PROGRAM SCHEDULE

December 6, 2012 **ANNUAL CHRISTMAS** 

DINNER & MEETING

**6:00 Libations** Central Railway Museum

**7:00 Dinner** Main Street Deli & Coffee

House, Central, SC

January 3, 2013 **Steamtown!** 

Ralph Watson

2013 Programs We are WIDE OPEN

# EVERY SATURDAY BEFORE CHRISTMAS

MUSEUM OPEN TO THE PUBLIC

DECEMBER 1, 2012 DECEMBER 8, 2012 DECEMBER 15, 2012 DECEMBER 22, 2012

COME RUN TRAINS!

## SCHEDULED EVENTS & SHOWS

### **December 1, 2012**

### Pickens, SC – Annual Open House

Howard Garner's Cascade Western Rail Road

244 Margaret Street

12:00 noon – until Howard gets tired

### Fountain Inn, SC – 2012 Christmas Model

**Train Display** (12' x 24' O-Scale)

#### **Transportation Museum of the World**

Fountain Inn History Center

Dec. 1 11:00 AM - 5:00 PMDec 2 1:00 PM - 5:00 PMDec  $5^{th} - 9^{th}$  5:30 PM - 9:30 PMDec  $12^{th} - 16^{th}$  5:30 PM - 9:30 PMAdults: \$5.00. Children (ages 2-12) \$3.00

Seniors (55 and up) and Active Military \$3.00 with ID

www.tmotw.org

### **December 8, 2012**

### **Greer, SC – Station 187** Open House

Operating layout and grilled sausages!

1097 Hwy. 101 S., Suite D16 Greer, SC 29651

12:00 noon – 4:00 PM www.station187.net

#### **December 8, 2012**

### Nashville, TN – Christmas TCA Train Show

Tennessee State Fairgrounds Show and operating layouts

9:00-4:00 Sat.

\$7.00 (for both days) / Under 13 Free

www.dixiedivisiontca.com

## Greenville & Western Railway

## December 8, 2012 ANNUAL SANTA

## EXPRESS

Cheddar



Honea Path 9:00 – 10:15

Belton 10:45 – 12:15

1:30 - 2:45

Williamston 3:15 – 4:15

Pelzer 4:45 – 6:15

### January 12, 2013

### Norcross, GA – Annual Train Show

Golden Spike Enterprises
North Atlanta Trade Center
10:00 – 4:00 \$7.00 / Under 12 Free
www.gserr.com

January 26 - 27, 2013

## Savannah, GA – 24<sup>th</sup> Annual Train Show

Coastal Rail Buffs
Armstrong Atlantic State University Sports Ctr.
10:00 – 5:00 Sat, 10:00 – 4:00 Sun
Adults \$5.00 / Seniors & Students \$4.00
Active Military & Under 12 w/ parents Free
www.coastalrailbuffs.org



## BACK TO THE OLD GRIND

LORAM rail grinder train set worked our area on November 7, 2012. Seen below, near MP519, four miles south of Clemson, the southbound grinder is on Track 1 to allow three freights to pass on Track 2. **Photo by Don Baldwin** 



## PATENTLY SPEAKING

## Submitted by Bruce Gathman

There are generally two parts to patent submissions: a written description of the invention and drawings (not to scale) that are keyed to this written description. Depending on the complexity of the invention more than one page of descriptions and/or drawings may be required to fully explain the merits of the design. You may find these descriptions online at—http://patft.uspto.gov/netahtml/PTO/pating.htm by entering the patent number in the "view patent" box.

#### PROPELLER DRIVEN RAILWAY VEHICLE

Roy T. Hurley, Saddle River, and William R. Litke, Franklin Lakes, N.J., assignors to Curtiss-Wright Corporation, a corporation of Delaware

Filed Dec. 22,1958, Ser. No. 782,062

3 Claims. (CI. 105—66)

This invention relates to railway vehicles and is particularly directed to a rail vehicle in which propulsion is provided by two power plants each including a combustion engine and a bladed aircraft-type air propeller driven thereby, there being one such power plant at each end of the rail vehicle.

For the purpose of this invention a "rail vehicle" is a vehicle designed for motion along railway tracks and may comprise either a plurality of car sections articulately connected together or only a single car.

An object of the present invention comprises the provision of a novel rail vehicle propulsion system in which said rail vehicle is propelled by a power plant at each end of the vehicle, the one pushing and the other pulling to propel the vehicle.

A still further object of the invention resides in the use of a novel internal combustion engine and air propeller power plant at each end of a rail vehicle, the direction of thrust of each power plant being reversible simply by reversing the pitch angle of the propeller blades and each power plant being capable of substantially the same performance and efficiency in either direction of travel.

Other objects of the invention will become apparent upon reading the annexed detailed description in connection with the drawing in which: FIG. 1 is a side elevation of a rail vehicle embodying the invention; FIG. 2 is an enlarged view of either power plant end of the rail vehicle of FIG. 1; FIG. 3 is a top view of FIG. 2; and FIG. 4 is a further enlarged schematic view of a portion of FIG. 2.

## PATENTLY SPEAKING

## Submitted by Bruce Gathman

There are generally two parts to patent submissions: a written description of the invention and drawings (not to scale) that are keyed to this written description. Depending on the complexity of the invention more than one page of descriptions and/or drawings may be required to fully explain the merits of the design. You may find these descriptions online at—http://patft.uspto.gov/netahtml/PTO/patimg.htm by entering the patent number in the "view patent" box.

Nov. 7, 1961

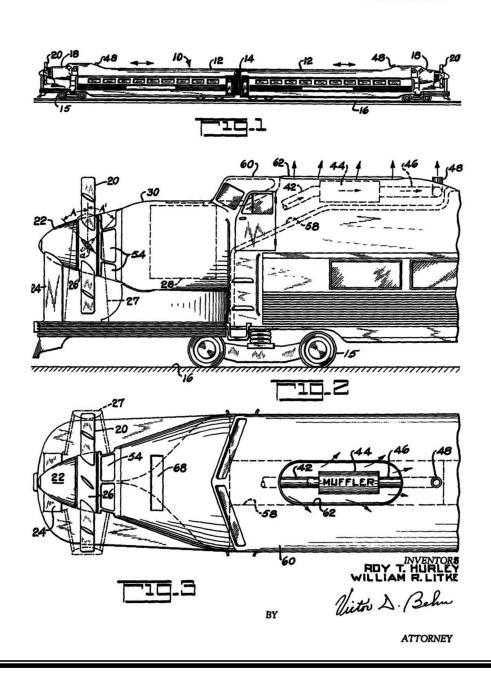
R. T. HURLEY ET AL

3,007,421

PROPELLER DRIVEN RAILWAY VEHICLE

Filed Dec. 22, 1958

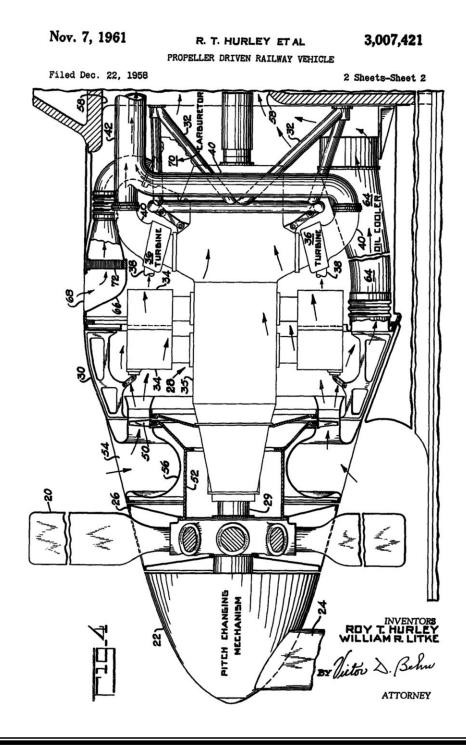
2 Sheets-Sheet 1

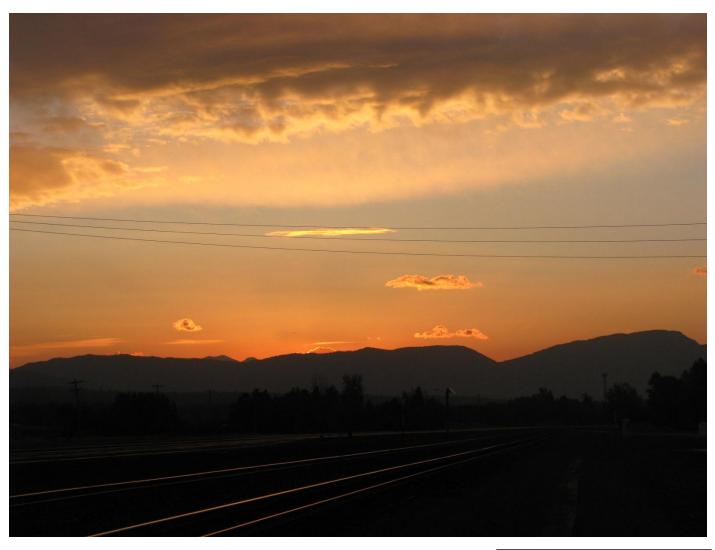


## PATENTLY SPEAKING

## Submitted by Bruce Gathman

There are generally two parts to patent submissions: a written description of the invention and drawings (not to scale) that are keyed to this written description. Depending on the complexity of the invention more than one page of descriptions and/or drawings may be required to fully explain the merits of the design. You may find these descriptions online at—http://patft.uspto.gov/netahtml/PTO/pating.htm by entering the patent number in the "view patent" box.







## MONTANA SUNRISE

**68**89

## PHOTOS BY HOWARD GARNER

While waiting for Amtrak's eastbound Empire Builder to depart Whitefish, Montana on September 10, 2012, Howard captured the sunrise shining up the ribbon rails. The top photo was taken at 7:26 AM, while the lower photo was taken less than fifteen minutes later at 7:43 AM. Whitefish is a crew change location.

CENTRAL CROSSINGS, the CRMHA Newsletter

December 2012 Page 7



## Darth Vader Cometh

Get Your Photos Now!

Story & Photos by Bruce Gathman





Now is the time to get photos of the old Southern Railroad signal system - especially the ones made in their own shops. They won't be around for much longer! Even the single mast light (in background, above) will get replaced with new, aluminum, towertype signals.

**Left:** Signal bridge awaiting installation at CP Hayward at MP 493.6 in Easley. The signal bridge comes completely wired and has a second level for future expansion.



The new **ATCS** signals, which are controlled by radio rather than buried wire lines, are affectionately known as "Darth Vader" signals for obvious reasons. All signals get the aluminum towers and the hooded targets.

What does all of this mean? Bruce has forwarded some information below, courtesy of the NRHS - Harrisburg Chapter. Apparently, the Spartanburg Chapter is already monitoring CSX's ATSC signals.~ ed.

#### What is ATCS?

ATCS is the Advanced Train Control System and is a form of "radio code line" now being used by the railroads. Previously, signal, switch and track indications and controls were done by way of the wayside copper wires. Later, railroads began using fiber optic cables for this purpose. However, there have been on-going reliability issues. Copper and fiber on poles is subject to wind, ice, lightning and other weather effects. Underground it's subject to lightning, washouts and backhoes. (Yes, lightning is still a problem underground)! One failure in one location could affect a dozen or more interlockings. To deal with this, ATCS radio code line was developed. By using digital UHF radio, ATCS eliminates the physical connectivity that hampered the signaling systems in the past.

#### How is ATCS Useful to Railroad Enthusiasts?

ATCS radio signals are NOT encrypted which makes them fair game for anyone with the right equipment to receive. Everyone asks the question, "Is this legal?" The answer is a definite YES! Just as there is no prohibition against receiving railroad voice communications, there is also no prohibition against receiving railroad ATCS signals. As a result, technically oriented railroad buffs formed yet another off-shoot of our hobby: ATCS Monitoring. If you have the right type of receiver and freeware software (written by Dave Houy), you can receive the ATCS radio signals and display the information on a computer screen in much the same way as it would appear on a railroad dispatcher's display.



The biggest limitation to receiving ATCS radio signals is that they are in the 900 MHz region. This makes them nearly line-of-sight. The signals are easily blocked by hills, buildings and even heavy vegetation. The railroads solve this problem by placing their equipment on high mountains and/or tall towers. Their high locations give them a clear, line-of-sight "view" in all directions for many, many miles. Most railfans don't have that advantage. As a result, the typical railfan only has ATCS radio reception for a few miles of railroad in any direction.

Railfans work around this problem by pooling their resources and tying their receivers together by way of the internet. The railroads have one site that covers many, many interlockings. Railroad buffs have many sites, each of which only covers only a few interlockings. However, when you combine the reception of a bunch of railfan sites together, you can begin to cover an entire rail line almost as effectively as the railroad's mountaintop location.

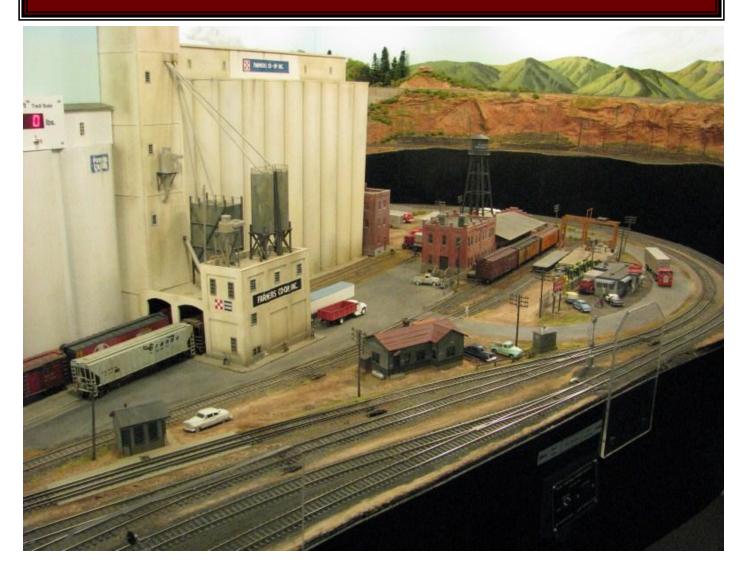


## RMSArchitecture Model Shop Rolls Out a Couple for the GRLW

By Rob Seel. In early November I finished a project that Steven Hawkins asked me to model for the Greenville & Western. The City of Belton had offered shelves in a display case at City Hall for local industries to promote their products, services, and community spirit. We built a 23" long diorama of the concrete bridge in Williamston, with ballasted track to display models of their GP9 No. 3751 and the Greenville Chapter NRHS caboose that they are using. The Proto 2000 locomotive was purchased as a used Western Maryland model and was stripped before being painted CNW Green. The Walthers caboose kit was also stripped, but modified by filling in windows and cutting new windows to match the real ones – including craft eyelets for the end porthole windows. Decals were printed by ELS Trains, using official graphic proofs provided by St. Clair signs in Taylors, SC, as well as my own on-site measurements. Decal sets are available from ELS Trains -- <a href="http://home.mindspring.com/~elstrains/">http://home.mindspring.com/~elstrains/</a> --and contain enough for one caboose and both of their GP9 units, the 3751 and 3752.

# Model Trains that Actually Take You Places!

BY HOWARD GARNER



Most of you are aware that I take off several times a year to parts unknown just to operate someone's model railroad. So what are these weekends and how do you find out about them and get an invitation to participate?

Many of the weekends are sponsored by the local NMRA-Operations Special Interest Group (OpSig) and these normally have open registration. Others are just a group of local operators that open their layouts once a year or every other year. These usually are invitation only. You need to know someone who knows someone. If you go, remember that you are there to operate, spectators are not allowed.

I attend both types.

In September I attended the Great Basin Getaway in the great Salt Lake City area.

It was announced last January on the Yahoo Group for operations. I submitted my name and was accepted.

Above: This is one end of the industrial area that Howard operated on Gary Peterson's Salt Lake Southern. Many times there is enough work to be done in a specific area that a local switcher is assigned to handle deliveries and shipments from way freights that pass through.

On the way out I stopped in Warrensburg, MO to operate on the GM&O of Jim Duncan. Jim and I have been friends for years and this was a good way to start a 2 1/2 week vacation.



One of the smaller yards and interchanges on the GM&O

After touring the northern Colorado and southern Wyoming mountains with stops to railfan the UP, I arrived in Salt Lake City for the Great Basin Getaway. This is a Thursday, Friday, Saturday schedule. Thursday was operations at the Salt Lake Southern (SLS) of Gary Peterson.

Gary's SLS layout used car cars for car movement and a full CTC panel for train control (**below**). I looked, but did not dispatch this layout.



Above: This is the main yard on the SLS. I was Number 2 to select my position. Andy Sperandeo was Number 1, and he took this job instead of me. (Andy and I both like yard jobs and have spared over them several times.)

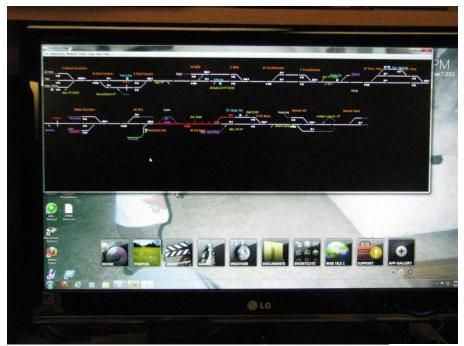
Because of distances involved, all sessions at the Great Basin Getaway are all-day sessions with a break for lunch.

Thursday evening was group dinner at a local steak house.



Friday was on to Lee Nicholas and his Utah Colorado Western. His layout was covered by *Model Railroader* in May, 1999 and *Great Model Railroads*, January 2005 among others. Here I caught the "chain gang" and ran whatever was next on the call board. This does get you over the entire railroad. Many ideas on scenery come from his layout.

Friday evening was open to tour other layouts. Or, if you were lucky (or a glutton for punishment), you could go to a wildcat operating session. I was one of six that just had to keep on operating. I spent the entire evening just sitting in a chair --



and looking at this dispatchers panel (**above**). Yes, I did dispatch one layout on this trip. This is the Colorado & Great Western of Jim Heoppner.

Saturday was to the Santa Fe of Ted York (**below**). Ted models the ATSF and Cajon Pass including the other roads using trackage rights. This layout is covered in the *Great Model Railroads*, January 2005, and *Model Railroad Planning*, January 2004

Here I worked as yard master for the first half and then on to the chain gang in the afternoon. Note that uphill track on the left is lighter colored, this is from all the sand need to get uphill.

Saturday evening was catered barbeque. Then, off to Glacier National Park and the trip home. I stopped for more railfanning and operations in Rockford, IL and Chicago, IL.

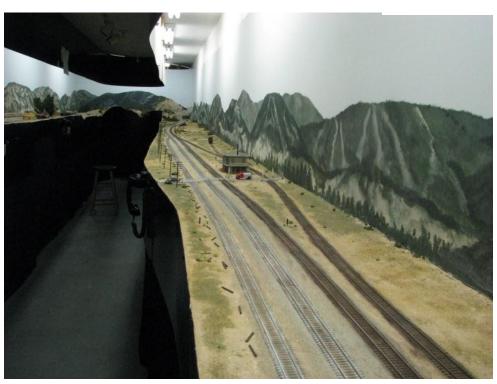
So are you qualified to make one of these trips? YES! Most attendees are experienced operators, but a few are new guys. It does help to have some basic knowledge of operations or attend with someone who will get

you started. The groups can run from 30 to about 100, from locations all over the country. It is not unusual for west coast operators to fly to the midwest for operations.

So where are some of these sessions? Locally we have the Saluda Rails weekend, The Carolina Rail Run and DixieRail in the Atlanta area. Others I have attended include SEMICHOPS (SouthEastMICHiganOPerationS), CIRROPS

(Central Indiana), SWOOPS (SouthWestOhioOps) Three Rivers (Fort Wayne), MinnOps (St Paul), River Rail (La Crosse), Rock Rail (Rockford), RockyOps (Denver north and south), Leigh/Susquehanna (eastern PA), TRAINing (Dallas), and at various NMRA meets. There are many others, but these are some that I have attended over the years. As you get to know other operators and are willing to travel, you will finagle other invitations.

Operations is a get way to meet others and make new friends.



CENTRAL CROSSINGS, the CRMHA Newsletter





Not only do Operations events provide opportunities to run other people's layouts, but they may also provide the chance to see layouts that have been published. Also, one can come away with scenery ideas. Howard is both, as seen in these two photos from Lee Nicholas' *Utah Colorado Western*. Being on the "chain gang" is a good way to see scenes that a yard worker might otherwise miss. **Photos above by Howard Garner.** 



**PASSING THE BATON** has a long tradition in railroading, most notably by exchanging locomotives. This ritual occurred for over 50 years in South Amboy, NJ, just as in this April 6, 1981 **photo above by Tom Beckett** (RRPictureArchives.net). Yes, that's an ex-Southern E8 from the *Crescent* fleet then working its retirement for NJ Transit on the North Jersey Coast Line (former New York & Long Branch). It seemed to me a fitting photo to mark the passing of the *Central Crossings* baton to **John JT Thorpe**, who has graciously stepped up to the challenges of taking this newsletter forward. Thank you, JT! I also (again) thank **Dennis Moriarty** who crafted the *CRM&HA Newsletter* for many years before me. And, thanks to the many of you who have helped to make *Central Crossings* what it has become over the last four years in fifty (!) issues. As we look ahead to fresh ideas and perspectives, I'm sure John will appreciate your continued support and submissions. Cheers!

Robert M. Seel, AIA