



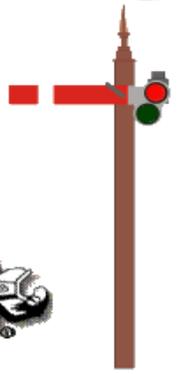
The Semaphore, The Official Publication of Land-O-Sky, Division 15, Southeastern Region, NMRA



The Semaphore

LAND-O-SKY
DIVISION 15, SOUTHEASTERN REGION
NATIONAL MODEL RAILROAD ASSOCIATION
AND
WNC MODEL RAILROADERS, INC.

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September 2007

Our next meeting is on Thursday, September 6th, at 7:00 p.m.

Send comments about and contributions to this newsletter to chsmoke@bellsouth.net.
Please keep us informed of changes in your address, phone number or email address.



The end of the steam era for the Southern Railway. See page 2 for details.



The end of the steam era for the Southern Railway

BY CLINTON SMOKE

Editor's note: Inspired by Tom Sink's interesting and informative presentation at our August meeting, we researched Southern's history for more on the last days of steam. Here is what we found.

The Southern Railway was an early convert to diesel power. The transition started in the late 1930s. While the economic challenges of that decade faced all of the railroads, Southern had cash and was desperate for new power. They had not purchased a new steam engine since 1927 and much of their power consisted of World War I era USRA 2-8-2s and similar equipment.

Southern first experimented with diesels in 1939, starting with passenger trains. Several two-car trains were assembled using older coaches pulled by an 80-foot power car propelled by an 800-horsepower diesel engine. (GM's RDC vehicles would not appear for another 10 years.) Finding success with these trains, Southern took a significant step and purchased EMD diesels for several of their highly-visible passenger trains, namely *The Southerner* and *The Tennessean*, and Alco units for *The Ponce de Leon*, a Chicago-to-Florida train. After these orders were filled, wartime restrictions on diesel engine production halted this project for several years.

At the same time, Southern also started to convert the power used in several yards. In 1940, Southern placed several diesel switchers in service. While wartime restrictions limited the production of road engines, these restrictions did not apply to switch engines: Southern took advantage of this opportunity ordering 24 more switchers. They spread the order to include products from EMD, Alco, Baldwin and General Electric. These efforts were successful and within a period of just over a year, Southern placed 50 diesel switchers in service, replacing an ancient fleet of 0-6-0s.

In spite of the wartime restriction of diesel power, EMD was able to produce some road engines, and Southern got a share of that production. Between 1941 and 1945, Southern received some 60 EMD FT road engines. These were well matched to Southern needs, and proved valuable in hauling freight during the hostilities.

Following the close of World War II, the major locomotive manufacturers able to get back into the business of making railroad locomotives and many railroads were ready to buy. Southern had already seen what diesels could do, and was eager to buy more diesel power. The first order was for 12 new EMD E7's for their passenger trains. More purchases followed. By 1948, 300 diesel engines made up a third of Southern's locomotive roster. But these engines were earning their keep: 50 percent of all Southern freight trains and 60 percent of Southern passenger trains were pulled by diesel engines.

Continuing into the early 1950s, Southern purchased more diesel power, adding some 300 diesels to their locomotive roster. Meanwhile, steam power was being retired. The economies of the diesel were clearly apparent, and Southern was making the change over as fast as they could. Southern management was looking for ways to improve efficiency and reduce costs. Rising labor costs was a major factor. The conversion was accomplished in a very logical manner, systematically eliminating the need for many of the facilities needed to support steam operations.

By the end of 1952, the steam locomotive roster was down to 200 engines. They were not getting much work, for by that time 90 percent of Southern's freight trains and nearly all of their passenger trains were pulled by diesel power. Additional purchases of diesel equipment and schedule adjustments speeded the process. On June 17, 1953, the last scheduled steam-powered train pulled into Chattanooga marking the end of steam for Southern. {This is the scene shown on page 1. In the center is steam engine #6330, flanked by the *Best Friend of Charleston* and Southern F-3 (later designated as an F-7) #4157.}



NEWS FOR MEMBERS



At our August meeting, **Superintendent Fred Coleman** received his first AP certificate, this one for Association Volunteer. **Fred Coleman** presented **Assistant Superintendent Robert Bell** a plaque denoting his receipt of the prestigious *Michael L. Callahan Award* for his contest entry at the 2007 SER Conference in Cartersville. Congratulations to both!

COMMENTS FROM SUPERINTENDENT FRED COLEMAN

In September, **Frank Pearsall** presents a program on insurance maps for those with prototype interests.

Don Keck at Lake Junaluska is about to get organized enough to have a work schedule to change some trackage on the layout they have installed in the Terrace Hotel as well as a good bit of work to refurbish the scenery. To get more information call Don Keck at 828-456-4178 or Gene Barrett at 828-627-6011. They would really appreciate any and all help.

The layout (6'X12') we had donated to the Club to be used for a raffle prize at our December Train Show will need a little work sprucing up the scenery and structures. I have been going through the engines and rolling stock to get two trains to run on the layout that will go with it. Anyone interested please contact me at 828-699-0983.

At the December show we will have a contest room for those that are interested in entering rolling stock, engines, structures, or photos. We have had several people show interest and if you have not entered before, this would be a great opportunity to find out what to do, or not do. We also have coming up a clinic on how to write up an entry in the next month or so.

September is renewal month for membership. Please bring your dues money to the meeting.

The Apple Valley RR will be open on Saturday and Sunday of Labor Day weekend. See page 4 for info.

The Great Smokey Mountain RR has their annual Railfest in conjunction with Bryson City's Fire-

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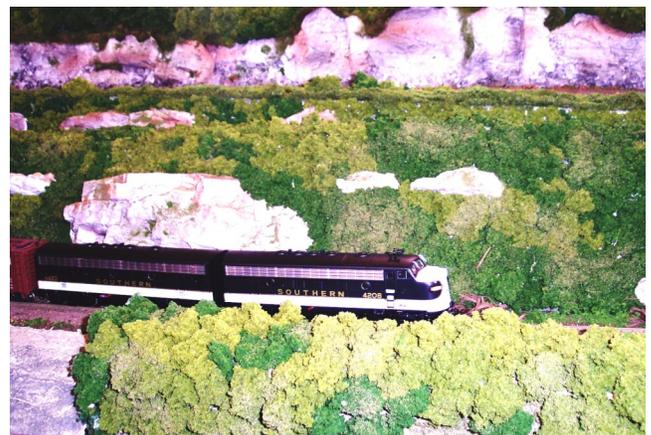


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September 2007

man's Days starting on Friday, September 14th and going through Sunday, the 16th. Fireman's Day and Mountain Craft Fair are Saturday and Sunday events. Go to www.gsmr.com for more info.

In October there are five events going on; two are ours. We have layout tours October 6 at Hendersonville and October 20 at Hickory. We'll need help at both events. Also on October 20, Tim Wagner and friends are showing a G-scale layout at Black Mountain. They could use our help. The French Broad Empire Train Show and Narrow Trak 07 are on Oct 12 and 13. Your participation is urged at all of these events.



Progress at the Apple Valley Model Railroad Club's new layout. Work continues this summer on. At left we see AVMRC member Doug Maroldi adding scenery to one of the mountains on the layout. At right we see the results.

The layout will be open to the public on Saturday and Sunday of Labor Day weekend from 10 a.m. until 4 p.m.

DUES ARE DUE!



BE PREPARED TO PAY DUES AT OUR NEXT MEETING!

(Please mail them in if you are not coming.)

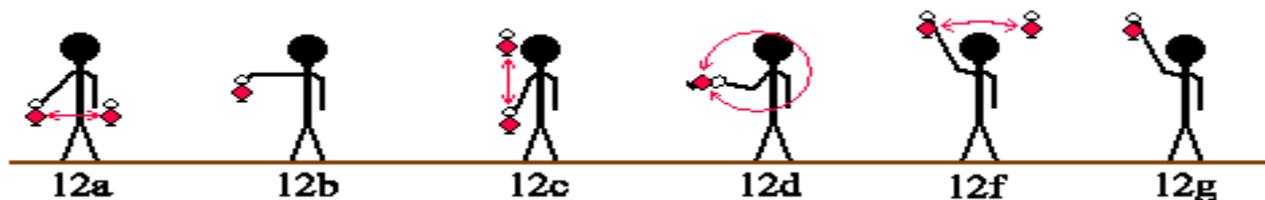


USING STANDARD TRAIN SIGNALS

By Maurice Lewman

Before radios, each train was like an island. Once you had permission to leave a point, the crew operated as a unit, separate from other trains except by train orders or signal indication. If trouble developed it was taken care of on the spot. Whatever was necessary to fix the problem was done. If a telephone was near, we notified the dispatcher of the problem.

When railroading started, the crew could speak to each other about train operation. But as trains grew in length, it became apparent that the ground man was going to do a lot of walking to get instructions. Hand signals were the next move. This worked fine and when trains started running at night, day signals had to be converted to a light, to give the same indication as a day indication. They finally had six standard hand and light signals. Of course there are many signals besides these that the men on each railroad developed for their particular needs. Here are the six standard signals



Rule 12a, stop. [Swung horizontally at right angle to the track.] This is sometimes called a swing down. The reason for that name is the brakeman is going from a reduced speed hand signal, (or the word “easy” if the fireman was relaying the signal to the engineer), to the hand stop signal.

Rule 12b, reduced speed. [Held horizontally at arms length.] This signal is used previous to the stop signal 12a. It also is used if the engine was shoving cars and the brakeman wanted to slow down approaching a road crossing or any reason to slow the movement down, usually followed by a proceed signal if the way was clear. As already quoted, this was usually called out as “easy.” The “easy” signal was given based on the cuts speed and distance from the car or place you wanted to stop. A few brakemen could judge speed and distance as a fine art. If you followed their signals you could couple to a car or another cut with a passenger-train coupling (that means gently.)

Rule 12c, proceed. [Raised and lowered vertically. A smaller, slower motion signals a slower speed.] I call this the bye-bye signal. Giving this was like waving goodbye to someone. The farther you were from the engine the larger this or any signal had to be. If you were at the rear of the engine it meant go ahead, in relation to the direction the engine was headed. If you were in front and you waved bye bye, that meant come ahead per the direction of the engine.

Rule 12d, back. [Swung vertically in a circle, at right angle to the track. A decreasing arc and slower motion signals a slower speed.] Back was like proceed. It was determined by forward or backward on the unit where the engineer was located. This signal was given in a circle, small close, larger far away. If the brakeman was some distance away, say sixty car lengths, in daylight he would pick up a piece of scrap paper, if in car shadows and give a signal. To make a move a short distance, the signal would be given in a large circle but slowly. This determined

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speed and distance to the move. A circle at a speed between slow and fast would naturally be for a normal switching speed move. Each brakeman's signals were like a written signature. You could tell who was giving the signal by the way the signal was given.

Rule e, not used now because the length of trains voided its use. It was a train-parted signal

Rule f, apply airbrakes. [Swung horizontally above the head, when train is standing.] It is used in air brake tests. The hand or light swung horizontally above the head tells the engineer to apply the brakes. This is in the yards or on the road.

Rule g, release air brakes. [Held at arm's length above the head, when train is standing.] Notice this is a small g. The hand or light held above the head tells the engineer to release the brakes.

Rule h. I will have to make it seven rules instead of six. Rule h states, **any object waved on or near the track is a signal to stop.** Also included (as hand signals) is the proper use of flares.

There were many variations of these signals. Most of the time, the stop signal was given as described in the text. Sometimes the brakeman might misjudge speed or distance. As he realizes this he will give an excited stop. If it is going to be a real hard coupling, the trainman would swing down, leap from the car and give a panic stop with both arms. In the engine cab, you braced yourself and told the fireman to "Hang on, he is trying to fly." You adapt to each crew's way of giving signals. Hand signals were part of the fireman's training.

While I was still working, the radio traffic would be very heavy. We had two channels and they would be so busy that sometimes we would have to wait until they slowed down to be able to talk to the dispatcher or yardmaster to make our moves. After we had permission and the radio traffic was still heavy, I would get the trainman's attention and we would work by hand signals until the radio traffic slowed down. Hand signals were basically safer than radio and less time consuming in busy radio conditions. I know this is going to spark an argument, but remember what I said about each crew being an island. With hand signals each crew was isolated from other crews. With the radio all crews are in a mix. When radio traffic is low things are okay but as traffic increases, safety becomes a problem to deal with.

As I started to write this, I thought, "Would it be interesting to anyone?" About this time a friend asked me how we communicated before radios. I hope this helps the younger generation understand why there were four and five men on the crews and a caboose on the end of the train.

Editor's note: Could use these hand signals while operating our trains at operating sessions?