



The CRM&HA Newsletter

July/August 2002 Dennis Moriarty/Editor Volume 11 Number 4

Meetings are held at 7:30 PM on the 1st Thursday of the month at the Central SC Library

Headline: Our Picnic will be July 6th. There will not be a meeting at the Library in July. See the details below!

Picnic

Since the first Thursday in July is on the 4th, it was decided to **cancel the July meeting at the Library** and have our annual picnic instead. **Bob Folsom** graciously offered his home for the picnic on **July 6th**. The picnic will be potluck and will start at **10:00 AM** so that we can have a short meeting, and operate trains on Bob's layout. Please **RSVP**, bring your spouse or significant other, **lawn chairs and a dish to pass**. The picnic originally scheduled in September will be a regular meeting at the Library.

Bob's house is a little over a mile north of Hi-way 123. Go north on College Ave. out of Clemson. Just after you cross the bridge over lake Hartwell and the 12 mile recreation area, turn right on Santee Trail. Bob's is the third house past a stop sign. The number is 105 Santee Trail and is on the left side of the street. Bob's phone # is 654-8244 or E-mail RJFOLSOM@INNOVA.NET.

Please RSVP per the **PRESIDENT'S REPORT** in the newsletter with your meat selection and **so that Bob will know the number of people coming.**

Editorial By Dennis Moriarty

Since the last newsletter Donald Rumer has accepted the job of Station Master (club secretary). Welcome Donald. Don is already doing a fine job, see his meeting minutes in this newsletter.

The **TextilExpress** has reached its station. Dropped off its passengers and chugged off. Over 200 people attended the convention and many more the train show. Our club did a great job sponsoring the show and

allowing home layout tours. About 65 people showed up at my layout alone. Our club should be getting back to normal after an extraordinary year hosting two train shows and a convention.

As most of you know I have been writing a series of articles in this newsletter called "Inside Out" about layout construction and lately on electrical circuits for model railroads. Mainly HO scale. Since we have many new members a review of some of the information from past articles is included in this newsletter. The electrical series will continue in a future newsletter.

We really need more articles. Thank Rob Seel for his hard work in writing about his trip to Washington. We need more articles like Robs to make our newsletter great. I know that many of you have had experiences working on the railroads, taking trips like Robs by rail, Raifanning and modeling. Some of you know a lot about the history of the railroads in the southeast. Even if you feel that you can't write as well as Rob (I know he is a tough act to follow), please submit an article. I am sure all of us would be interested in what you have to say. **Also**, consider writing a handout when you give a presentation. The handout can be included in the newsletter so that those that missed the meeting can enjoy your information.

Please support the newsletter by submitting articles, news and or information. If you don't wish to write please give me a phone call. E-Mail, copy on disk and written contributions are most appreciated. My address is Dennis Moriarty, 519 Beacon Shores Drive, Seneca, SC 29672. Phone 864-888-2332. E-Mail MQK @ carol.net.

If you received a snail mail issue of the newsletter and have an E-Mail address, please send your E-Mail address to me.

Thank you! Bob Folsom, Don Rumer, and Rob Seel for your newsletter contributions this month.

Club Layout Needs a New Home

The layout was moved to an outdoor storage facility. If anyone has room in their basement or other part of their house for all or part of the layout, and would be willing to have the layout set up or stored there between uses please let Bob Folsom know. (654-8244)



CEO's Corner PRESIDENT'S REPORT By Bob Folsom (also HO Division Super)

We did it! CRM&HA organized a great NMRA convention. Thanks to you, our membership, everything went well. I hope you will always regard this event as a great achievement and highlight of your remembrances.

A lot of our meeting time was spent preparing for TextilExpress. I know that this was not always that much fun, but I felt very strongly that our entire membership should feel like they had a part in preparing for this convention.

Now, we can settle down and have more time to enjoy the interesting programs that each of us has the opportunity to present. Also, we have some left over railroad equipment and prizes that we will raffle off at each meeting.

One aspect of the convention that really impressed me was the home layout tour. I had committed myself to having an operating layout for this show two years ago when we decided to host it. The scope of this layout changed just like the odds at a horse race as we got closer to Memorial Day Weekend 2002! What was on display that weekend was a lot less than I had originally planned, but I was overwhelmed by the number of visitors. It suddenly occurred to me that part of the fun of creating something like a model railroad is having someone else see it and be interested in it.

For that reason, I suggested to the club at our June meeting that we consider having home layout tours as a regular part of our yearly club activities. At the same time, we found out that the library would not be open for us to hold our July 4 meeting (not to mention that July 4 would not be a good day to have a club meeting), so I offered the option of solving two problems at once; have a home layout tour combined with our next meeting. As it turns out, we are going to

take care of three things simultaneously.

Please mark Saturday, July 6th on your calendar.

That will be the date of our July meeting (10:00 AM), the first of our home layout tours (an operating session right after the business meeting), and our annual picnic (after the operating session). We will be pleased to offer chicken, ribs, or hamburgers, (and beverages) but you need to RSVP your choices (although you can have all three if you want). Spouses are invited. Please bring a snack, salad, or dessert. Anyone who wishes to actually eat outside can do so, but there will be plenty of room on the porch for everyone.

Please refer to the directions in this newsletter or call me for directions 654-8244. **Call me anyway to RSVP! Chuck Laffoon offered** to have his O gauge layout open but during a cooler season. If you would be willing to open your layout (or display) to a club visit, please let me know.

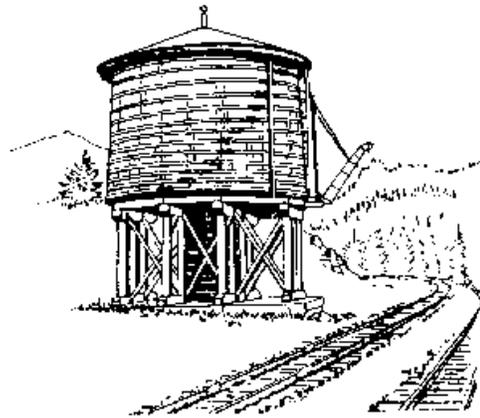


HO DIVISION REPORT By Bob Folsom

There is not much to say right now. The layout is in storage in unit 510 of Frantom Storage on Old Clemson Highway between Clemson and Seneca.

There is some leftover donated HO equipment that did not sell at the train show. If we don't give it away at club meeting raffles, perhaps it should become part of the club equipment roster.

Southern Wesleyan University is again hosting participants in the Big League World Series in early August. Last year, we set up the HO layout for an entire week in the cafeteria at SWU. I will put that idea on the agenda at our next meeting for your consideration.



CRM&HA Minutes May 3, 2002 MEETING

The meeting was called to order by CEO Bob Folsom at 7:30pm. Reports were dispensed with because of the volume of work to be completed at this meeting. A

guest, Ellis Grant, described his interest in riding operating railroads in North America. Don Rumer was nominated for the position of Stationmaster. As there were no other nominations, his election to the office was seconded and approved.

The assignment of programs for the next three months were:

June – John Cadmus

July – Richard Nichols

August - Michael Childress

The September meeting will be a picnic. A sign-up list was passed around for members to select times to volunteer at the upcoming NMRA TextilExpress regional conference.

TextilExpress 2002 Update

Howard Garner gave an updated report on the status of the TextilExpress. Volunteers from CRM&HA will be provided with tags to be utilized for free parking at the hotel lot. The tags will have to be shared by volunteers at different times. The schedule for the TextilExpress is as follows:

Train Show:

Friday, May 24: open to attendees only from 2PM until 5PM; open to all from 5PM until 8PM

Saturday, May 25: open to everyone from 10PM until 5PM

Sunday, May 26: open to everyone from 11PM until 3PM

Clinics:

Friday from 1:30PM until 10PM

Saturday from 9AM until 12N

Tour:

Saturday: buses depart at 8:30PM and return around 12N

Banquet:

Saturday at 6PM Happy hour

Saturday at 7PM Dinner

Open houses will start at 12:30 on Saturday. Slides will be presented at 10pm Friday and the Board of Directors will meet later in the evening. Breakfast will be available Sunday morning followed by a business meeting. Some layouts will be available on Sunday.

After Howard's report members took a brief break and spent the remainder of the evening stuffing envelopes to be provided to TextilExpress attendees at registration.

Respectfully submitted,

Donald Rumer, Stationmaster

CRM&HA Minutes

June 7, 2002

CEO Bob Folsom opened the meeting at 7:30 PM. Eleven members and one guest were in attendance. The minutes from the last meeting were read and approved as well as the Treasurer's report. Cash on hand as of June 6 was \$6616.35. An updated

member's list was distributed to those in attendance. Dennis will need input by June 12 for the July newsletter. Some discussion ensued over the present Website. An item will be put on a future agenda to discuss improvement to the website.

Business in Progress

Howard provided a summary of the recent NMRA TextilExpress 2002 event. Approximately \$24,000 of income was generated from the event. He estimates that finally accounting will show a club profit of around \$1500. Two hundred registered for the TextilExpress and about 1200 people went through the door to visit the train show. Forty dealers were present and all seemed happy over the arrangements. Publicity included articles in the Greer newspaper and the Greenville News. Howard and Steve received a hand for their efforts toward the success of this project.

Numerous comments were received praising the model displays, hosting, tour, hotel assistance and banquet dinner. Some attendees were impressed by the city of Greenville. NMRA considered this to be as good a convention as they have had for many years. Our CEO, Bob Folsom, considered this to be a high point for CRM&HA.

The Club is still looking for better arrangements in storing our HO layout. One consideration may be separating modules for storage by members.

New Business

Bob Folsom suggested that home layout visits be incorporated in some of our future activities and meetings. Following up on this, the Club voted to cancel the annual picnic originally scheduled for September. Instead, the picnic will be held on July 6 (the normal meeting night fell on the July 4 holiday) at Bob Folsom's home. After the formal meeting, members will have an opportunity to see Bob's layout and have a picnic. Richard Nichols presentation will now be scheduled for September. Clark Reed will be scheduled for November.

Division Reports

No reports this month.

Railfan Reports

Bob Folsom reported on his attendance at a CTTA convention in Austin. He took photographs of an Amtrak passenger train crossing the Colorado River.

Several members mentioned seeing "foreign" locomotives including BNSF on NS tracks. Apparently they are under loan. A military train on NS tracks was recently observed. Heavy equipment associated with the replacement of ties and upgrade of NS tracks was described.

Hobby News

Mac McMillin brought in for display a Marx NYC passenger train pulled by a Pacific steam locomotive.

Adjournment

The formal part of the meeting adjourned at 8:15 PM. Left over T-shirts and cups were available to members

during break time. A raffle was held for a left over door prize.

Program

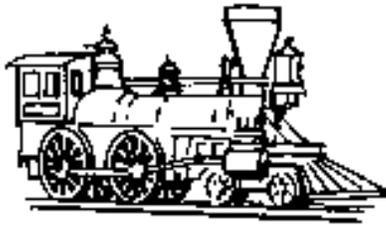
John Cadmus introduced our guest Dave Higgins. Dave, a retired vice president and general manager of Morrison Knudsen, gave a presentation on the work that company had done on the restoration and refurbishing of locomotives and transit cars for large city transit systems in America. The program ended at 9 PM.

Next Meeting

A Picnic will be held at Bob Folsom's home on July 6th (Saturday) at 10 am. Directions will be provided. Spouses are invited. Please bring something to share: desert, salad or snack.

Respectfully submitted,

Donald Rumer, Stationmaster



Rob Goes to Washington
A Travel Journal, September 25 - 28, 2001
Final Chapters
By Rob Seel

The afternoon rush hours had been in progress for about fifteen minutes when I boarded the train back to Union Station. Again, I was impressed by how efficiently the system ran. The trains were so frequent that everyone in the station was calm and courteous. Quick as a wink, I was back in the great terminal with about two hours to spare. Across the street, in the Postal Museum building, I saw a large banner sign proclaiming this corner as the home of the Capitol City Brewery. I'm there! And at the right time, too. Why restaurants have a Happy Hour for three hours from 4 until 7 has always puzzled me – but I was there during a very happy hour when the house beers all sell for \$2.75 per pint and the bar appetizers are half price. I pulled up to a corner of the bar to rest my protesting, screaming feet and ordered chips and salsa with a pint of the house stout. Chips and salsa is probably my favorite all-purpose snack, whatever the variety. I do prefer the fresh chips and smooth salsa of Mexican restaurants over the bag chips and chunky salsas of other places, though. I've even been to one similar restaurant that had a sweet salsa with carrots in the mix. But Capitol City serves a generic, chunky, medium salsa with a large platter piled high with red, white, and blue corn chips. That calls for another beer! I ordered a pint of the porter this time while I watched

the sports news on the overhead TV and dove into my mountain of chips. I was tempted to order dinner too, but I wanted to save that meal for the Crescent later. I pulled out my copy of Morley's book and read a chapter or two.

I still had plenty of time to burn when I left the brewery and bought three touristy T-shirts for \$10 from the street vendor outside. There I go again – buying stuff for the family, and buying stuffing for myself. For the next hour or so I thought of killing time by prowling the train platforms and hoping to catch one of those Acela trains on the move. Sure enough, there was one about to depart for New York City. But then I had an idea — being that it's still light out, why not take a look around the terminal entrance yards? Back to the Metro! Only this time, I headed northwest, out of town, and yes, up and over the entrance yard. I got off at the first station I came to and rode back again, my face plastered to the window all the way. There was so much to see, that when I returned to Union Station I got back on board the Metro and did it again – all the while trying not to drool on the floor as I saw locomotives and passenger cars I had only seen in magazine pictures. It is difficult to take photographs through a train window, however, mostly due to glare. Besides, the sun was setting and the daylight was growing dim. Dusk is a great time to watch trains because while you can still see the trains and colors clearly, the running lights are burning bright, and sometimes you can even see the electric locomotives spark the catenary.

I tucked my day pass into my wallet for the last time and went back inside the humongous barrel vault that is Union Station. I looked inside a few of the shops there, but not seeing anything of interest I moved on to the Borders Bookstore at the end of the terminal. I found a few interesting books to flip through until it was finally time to close this chapter of my vacation and head for my train. I stopped back by the baggage room to pick up my bag, and then found the correct waiting area. I sat in one of the few remaining empty seats, and I could tell already that this train was going to be full. Even so, we boarded the train at 7:15 for a 7:25 scheduled departure.

XI

Now, remember when I mentioned earlier that the Crescent is an all-reserved train, and just what "reserved" actually means? This is when I learned that for myself. Not only was our group here a good size, but the train was rather full already. The lack of empty seats caused many of us to frustrate the Conductor who wanted to seat people in certain cars according to their destination. Many stops along the way are at small stations, like Clemson's, so the stopping points on the train are designated ahead of time — supposedly. I hooked up with two students traveling to Clemson to visit friends and a few others going to Greenville and Spartanburg so that we should at least end up in the same car, even if it was two full coaches

ahead of where the Conductor wanted us. We were all guaranteed “a” seat, so find “a” seat we did. So there! I sat down in aisle seat #31 next to Jennifer, a sophomore at Villanova with an undecided major, on her way to visit the University of Virginia in Charlottesville. I was very happy to know this, because that meant I would have a window seat, if not both seats, by 10:00 or so. The two students going to Clemson were across the aisle, so our buddy system was holding together. Perfect. I looked up and noticed the car number on the door: 25025 -- the same car I rode in going up.

At 7:30 we slipped from dusk into the darkness of the tunnel to the other side of the Capitol, and then back out again. The Capitol dome was lit up, as were the Jefferson Memorial and the Washington Monument with its piercing, red aircraft warning lights at the top – intensely glowing like a pair of eyes in the darkness of a cheap horror movie. We soon pulled into the station at Alexandria, where I noticed that the Washington Masonic Memorial was not lit as I remember seeing it in the past. Come to think of it, the memorial wasn’t lit the night before either. I wondered if it was a security precaution or just lack of funds to pay the power bill and replace lamps. Either way, it was sad to know of such a striking building hiding in the dark.

After about fifteen minutes on the way to Manassas, the last call for dinner was announced. I made my way forward through the awful café car to the dining car, where I was seated with two black ladies looking over the menu. I sat next to Phyllis, an older lady perhaps in her mid-fifties from Staten Island. She was traveling to Atlanta, but ultimately to Americus, GA. Jackie sat across from us, a wiry 31 year-old single mother on her way home to Tuskegee, AL, returning from a wedding in New York. Jackie could have passed for 22 years of age easily, but you’d have a hard time convincing her of that. Believe me – Phyllis and I tried without much success.

The menu appeared to have about eight different options ranging in price from \$10 - 16. The only problem was that the chicken dishes were not available because they had no chicken on board that night. They were serving turkey instead. I ordered Virginia ham with an exotic-sounding orange-raisin glaze. Jackie requested turkey, and Phyllis ordered T-bone steak. Phyllis was really concerned about being able to sleep that night, so she decided to order hot tea instead of a Coke. But when she got her tea and proceeded to pour four or five sugar packs into her cup, I realized I had the perfect opportunity for an “ice breaker” that I couldn’t pass up. I turned in my seat toward Phyllis, squared my shoulders up, and said, “Now let me get this straight . . .”

“Yes?,” Phyllis replied with an “I-know-what-you’re-going-to-say,” embarrassed smirk on her face. Jackie started to giggle.

“You wanted to make sure you could sleep tonight, right?”

“Uh . . . Yes . . .” I didn’t know black people could blush before.

“So you are drinking a cup of caffeinated, tea-flavored sugar instead of a Coke?”

Jackie busted-out laughing. So did Phyllis, as she raised her cup to her lips and winked at me. “Yup! Cheers!”

I smiled broadly and raised my water glass. “That’s what I thought, ha, ha.”

Our salads arrived, appearing to be pre-packaged iceberg lettuce with tomato wedges along with a basket of foil packets of Kraft dressings and croutons.

Mmmmmm- “Creamy French.” Soon after, our main course arrived with side dishes of peppered corn, curried mashed potatoes, and sweet rolls. Phyllis seemed to enjoy her T-bone, but I was disappointed in the ham which was thin and rather bland. The glaze also had enough cornstarch in it to resemble Jell-O, and it was actually thicker than the ham it was smothering. Jackie, however, hit the jackpot with her substitute menu item of a full turkey dinner with all the fixin’s, including Stove-Top stuffing. Already I was looking forward to breakfast in the morning. But when the waiter told us that the apple pie was baked here on the train, I knew I could not resist a piece for desert.

Apple pie of any kind is a serious weakness of mine, and this pie went straight for the prize. I ordered it straight, without ice cream, because I’m a bit of a purist when it comes to sampling an apple pie for the first time. But naturally, I enjoyed that wonderful pie with a two-cup carafe of awesome Amtrak coffee.

We laid dinner to rest, and I went back to my seat in car 25025. Jennifer was half asleep, listening to Dave Matthews on her CD player. I dug out the Presidential Anecdotes book and sat down to read about Thomas Jefferson, James Madison, and Gerald Ford. Jennifer and I chatted occasionally until we pulled into Charlottesville station and she left. I then took the opportunity to recline both seats, raise both leg rests, and spread myself out across both seats after being a good boy and washing up first. I wedged my travel pillow along with the Amtrak / government issue wafer pillow into the corner between the side of the car and the seat back. Falling asleep was very easy to do this time, as I was flat-out tired. I cannot say that I slept straight through the night, but I guess I did sleep pretty well. In fact, if I ever have trouble falling asleep at home I just imagine myself back on the night trains I rode in Europe – the sounds of the rails and the gentle, back and forth rocking of the car lulls me to sleep every time.

XII

At one point in the night I woke up and looked out of my window and gazed upon downtown Charlotte, twinkling like “billions and billions” of stars. What a site! There was still dim lighting inside the car, so I could not make

out the building profiles. All I could see were glowing windows EVERYWHERE. I guess I missed seeing Charlotte on the way up, but I'm glad I saw it at least once, surreal as it seemed. I easily nodded off again and woke again pulling into Spartanburg. Then I decided it would be wise to start being alert and prepare for breakfast, which was to begin at 6:30, or as we would leave Greenville. I know that would be cutting time close for me, but I just had to have more of that coffee.

Friday morning, September 28, 2001. I hit the diner as soon as we were approaching Greenville and sat at a table across from Marianne, a college professor from College Park, MD heading for Atlanta. Again, I ordered the same turkey sausage and biscuits with coffee I had enjoyed on the trip up the other day. I managed to finish eating in time to finish gathering up my bags as we breezed through Central and into Clemson about 20 minutes behind the scheduled time of 7:18 AM. In other words, right on time!

Of the three of us getting off at Clemson I was the first out the door. Frances was there to meet me with Elaine and Julie too, as they were on the way to school. My feet hit the pavement, as I was swarmed by two very excited little girls who had not seen their daddy in what seemed like more than two days. "You're limping?" Frances asked.

"Yeah, I kinda blew my feet out," I replied.

"Well? Tell me all about it!"

Well, if you really want the whole story, it all started when my grandfather bought me an electric train set when I was about 4 years-old . . .



**The following came on the Internet.
Maybe you have seen it before but it is worth
repeating.** (Ed.)

Ever wonder where engineering specifications come from? (New info -interesting twist!)

The U.S. standard railroad gauge (distance between the rails) is 4 feet, 8.5 inches, an exceedingly odd number. Why was that gauge used? Because that's the way they built them in England, and the English built the first US railroads.

Why did the English build them like that? Because the first rail lines were built by the people who built the pre-railroad tramways, and that is the gauge they used.

Why did they use that particular gauge then? Because the people who built the tramways used the same jigs and tools that they used for building wagons, which

used the same wheel spacing.

Okay! Why did the wagons have that particular odd wheel spacing? Well, if they tried to use any other spacing, the wagon wheels would break on the old, long distance roads in England, because that's the spacing of the wheel ruts in the granite sets.

So, who built those old rutted roads? Imperial Rome built the first long distance roads in Europe (and England) for their legions. The roads have been used ever since. And the ruts in the roads? Roman war chariots formed the initial ruts, which everyone else had to match for fear of destroying their wagon wheels. Since the chariots were made for (or by) Imperial Rome, they all had the same wheel spacing.

The United States standard railroad gauge of 4 feet, 8.5 inches is derived from the specification for an Imperial Roman war chariot.

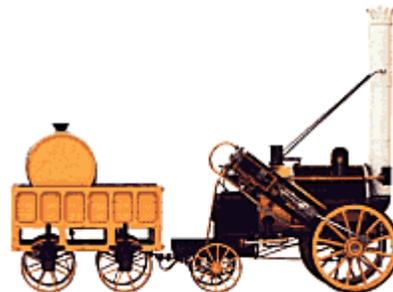
Specifications and Bureaucracies live forever. The Imperial Roman war chariots were made just wide enough to accommodate the back ends of two war-horses. Now let's cut to the present... The Space Shuttle, sitting on its launch pad, has two booster rockets attached to the sides of the main fuel tank. These are solid rocket boosters or SRBs.

A company builds SRBs at its factory in Utah. The engineers who designed the SRBs wanted to make them a bit fatter, but the SRBs had to be shipped by train from the factory to the launch site. The railroad line from the factory has to run through a tunnel in the mountains around Chattanooga, TN. The SRBs had to fit through that tunnel, which is slightly wider than the railroad track and the railroad track is about as wide as two horses' behinds.

So....a major design feature of the world's most advanced transportation system was determined two thousand years ago by a horse's ass.

Speaking of Space (Ed.)

The new space station has the first railroad tracks in space. At present there are 43 feet of track to support the wheeled robotic arm platform that is part flatcar and part locomotive. They plan to add additional track when the station is expanded until the tracks are 360 feet long. This will be the longest manmade item in space. The locomotive is powered by a 1/100 hp electric motor and has a top speed of 1 inch per second.



Inside/Out
Some Information from Past Articles
By Dennis Moriarty

1. **Current Sensor control** of crossing gates and trains was discussed in the January/February 2000 newsletter. It is too long to rewrite here but if you e-mail me I will send you the article.
2. **Ceiling tile**, the kind used for drop ceilings in basements etc. can be used for terracing such as a river bank or quarry walls. Simply break pieces off as needed and fasten in place with hot glue. Stagger each layer back to get the terraced look. Finish with drywall compound. Some wood framing will be required for support.
3. **Working with Hydrocal Plaster.** Hydrocal sets up in five to 10 minutes, which makes it easy to build with, as the base is established rapidly. It also means that you can only mix a little at a time. Paper towels dipped in a mixture of Hydrocal and water spread over crumpled paper will represent mountains or irregular terrain. I find that putting the dry Hydrocal in a five gallon pail with a cover and setting it next to a five gallon pail partially filled with water makes the job go faster. I put the two pails in an old wagon. An old cardboard box is a good worktable as it is easy to move around and can be thrown away after it is messed up with spilled Hydrocal mixture. I mix in a plastic tub, the kind that are issued to patients in hospitals. It has high sides and is wider than the paper towels are wide. Use two plastic small yellow "I Can't Believe it's Not Butter" containers. One in the Hydrocal and one in the water. Mix one to one putting in the Hydrocal in first and then the water. Mix as fast as possible with a 6-inch putty knife. The mixture is too wet at this point but the paper towels pull a lot of water out. First dip one towel into the mixture and push to one side. Then put an additional towel in and push to the other side. Insert a third towel and at this point the mixture is just right so apply to the layout. Next go back and redip in the mixture and apply the other two towels. There is now enough mixture for one more towel but it is too dry. Therefore, soak half the towel in water, dip into the remaining mixture and sop up as much as you can and apply this towel to the layout. Now you can repeat the procedure over and over until completed. After it is hard you can smooth it out or rough it up with drywall compound, which sets slowly. Be sure to wear Laytex gloves.
4. **Lakes** can be made a number of ways but since lakes are flat, I think the easiest way is to put the lake on a flat surface such as a piece of drywall. A thin layer of drywall compound is then spread over the surface and worked to form waves, ripples etc. This is then painted by blending several colors of spray paint applied while each is still wet. A dark color in the middle, such as black looks like deep water. This is surrounded with a dark blue, then green and then light brown at the shore. The colors are all blended into one another as you progress to the shoreline. Odd color shapes will indicate an irregular lake bottom. After the paint is dry, several coats of a clear water base high gloss coating are sprayed over the top to give it the feeling of depth and a high gloss. A very thin layer of sand and debris can be put along the shore line and sprayed with the clear coat. Rivers are made the same way except the river bottom is not flat and can drop fast at rapids and water falls.
5. **Wire Ways:** Before adding the scenery, plastic rain gutter can be hung about one inch below the support deck by short scraps of wood screwed to the support deck and down to the gutter. The gutter under the layout is to lay the wires in from the layout to the cab area. If the gutter is stopped about six inches short at the corners the wires can be curved from one gutter to the next through the air with no support problems. Also if all or most of the wiring is done before adding scenery you will not have to do much crawling under the layout, as everything can be reached from the top. The track can be wired and tried out. If any corrections are required it is a lot easier to do if the scenery doesn't have to be moved and reworked.
6. **Roads** are a problem because they are never flat and therefore are difficult to model. Drywall compound works well for making concrete or asphalt roads. Strips of wood or wire can be placed running down the center of the road to act as a guide for a putty knife. This will hold the putty knife up at the center and maintain a constant slope to the outside edge of the road. Expansion joints are typically 20 feet apart and can be scratched in with a knife after the drywall compound has set up.
7. **Waterfalls** are fun to make and products from a home center will do the job. For straight drops I like to start with hot glue. Many strings can be dropped over the ledge to act as a base for other products. The hot glue can be controlled with the trigger to come out of the gun slowly enough so that it will set up on the way down and not end up as a puddle at the bottom. The problem with hot glue is that it is not clear and a little dull on the surface. Some silicon caulking is quite clear and can be dribbled over the hot glue to add more realism but it must be done in small amounts or its own weight will make it droop. The best product I have found for the finish layer and for puddles etc. is called Goop. Not the cleaner, but the glue. It dries clear and is very thick so it works well in waterfalls and steep rapids. After all this is applied a little cotton is pulled apart and sprayed with

lacquer to look like spray at the bottom. Don't be afraid to highlight the fall with white paint.

8. **I personally feel** that 3/4 inch thick plywood covered with commercially manufactured cork road bed is the best choice for track road beds. Railroad track can be attached to one or more 4'x8' or smaller sheets of plywood but that is uninteresting because in real life track goes up and down. It is better to cut the plywood into 3 inch or wider strips and attach them to vertical furring strips that can be raised and lowered to the proper slope and elevation and then screwed with drywall screws to a substructure. Attach the strips end to end by gluing and screwing 3 inch x 3 inch blocks of plywood under the joints. These strips can span 16 to 24 inches between supports. Use wider strips for two or more tracks. Curves can be cut directly out of a large sheet of plywood, but that is wasteful as it generates a lot of scrap. A better method is to use a miter saw and cut segments for curves out of the 3 inch or wider strips. The 3 inch wide strips will work up to about 23 inch radius curves. Use 4 inch or wider strips for very large curves or use more segments. **An easy way of cutting segments is to take the strips and cut the ends 15 degrees. Putting 4 of the segments together will make a 90 degree segmented curve.** The track can be curved evenly over the segments. The following segment lengths will generate the radius curves noted. You can interpolate to get other radiuses.

Track Radius	Wood Segment Length (long side of segment between 15 degree cuts)
18 inches	9.64 inches
20	10.72
22	11.79
24	12.86
26	13.93
28	15.00
30	16.07
32	17.14
34	18.21
36	19.28

When making segments for two or more tracks, use the outside track radius for the proper dimension. After sawing a 15 degree cut, the **unused piece** will have a 15 degree cut already on it. Simply turn the strip over and saw the other end and there will be no scrap. Using this method a 4x8 sheet of plywood will generate almost 128 feet of 3 inch wide

road bed, so there is no need to skimp with thinner sheets of plywood.

After assembly, simply glue the cork road bed to the plywood with white glue. The track can be attached with nails but a **very small** hammer must be used to keep the nails from bending.

Tip

Include a few sticks from nandena or crepe myrtle to represent dead trees or bushes on your layout.

Hint

When using ground foam for grassy areas on the layout, use more than one color ground foam. Dark green, light green, yellow (weed), and iron ore (red for flowers or rust stains) make the scene much more realistic.

Future Meeting Programs

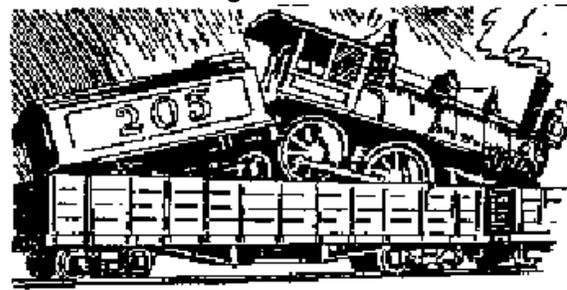
- July:** Picnic at Bob Folsom's house.
- August:** Michael Childress
- September:** Richard Nichols
- October:** Volunteer needed.
- November:** Clark Reed
- December:** Christmas Party

CMR&HA TRAIN CREW

- Engineer and CEO:** Bob Folsom
- General Division Super:** Mac McMillin
- Stationmaster:** Don Rumer
- Paymaster:** Richard Nichols
- HO Division Super:** Bob Folsom
- Large Scale Division Super:** Bob Hanson
- N Scale Division Super:** Bill Hughes

HTTP:\\central-railway.tripod.com is the club website.

Drive Safely At Crossings, You Might Damage a Steam Engine With Your Car!!





Membership Roster April 16, 2002

Name	Address	Mem#	Scale	Telephone
-- Address removed for web publication --				

Cartoon from WWW.toytrunkrailroad.com



**Central Railway Model & Historical Association
Membership Application**

Name: _____ **Member #** _____

Address: _____ **Phone:** _____

City: _____ **State:** _____

E-Mail Address: _____

1. Declared Interest Group: HO N General (Circle one)
2. Other Railroad Interests: Modeling Collecting Railfanning History
Other? _____
3. Modeling Scale: Z N HO S SN3 O G (Circle yours)
4. Railroad Memberships: NMRA NRHS Other? _____
5. Do you have a home lay-out? Y N Open to Visitors? Y N
6. I can help the Association by:
 - () Working on one of the modular projects
 - () Helping with set-up and operation of lay-outs at shows.
 - () Organizing an excursion to a show or museum.
 - () Serving on a committee (i.e. Audit, Publicity, etc.)
 - () Serving as Officer or Director.
 - () Preparing a short program for monthly meeting.
 - () Other: _____

7. Please record my membership in the Association for 2000. Enclosed is my (check) or (cash) in the amount of \$20.00, Send to: Treasurer, CRM&HA, 301 Kingston Way, Anderson, SC, 29625. Phone (864) 261- 3496

Signature _____

C.R.M.&H.A.

Dennis Moriarty, Editor
519 Beacon Shores Drive
Seneca, SC 29672

FIRST CLASS MAIL

ADDRESS CORRECTION REQUESTED

