



# The CRM&HA Newsletter

November/December 2001

Dennis Moriarty/Editor

Volume 10 Number 6

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

**Reminder: The Meetings have been changed to the First Thursday of the Month. November 1<sup>st</sup> and December 6<sup>th</sup>. The December Meeting will be a Christmas Party.**

## Editorial

By Dennis Moriarty

A big thanks to **Bob Hanson** who arranged and to all whom helped provide food etc. at our September picnic. It was fantastic.

Please **call Bob Hanson or Bill Hughes** if you can help with the train show on February 16, 2002 at the Seneca N.G. Armory, as all members will be needed to help make it a success. It was brought up at the last meeting that because of the September 11<sup>th</sup> attacks on the Pentagon and WTC all NGA's have been closed to the public. Since we are not sure if the Armory will be opened again in February a search for an alternate site is underway.

Please **call Howard Garner** at 878-4705 if there is anyway you can help with the SEC convention.

**Remember the nominations** for next year's officers will be at the November meeting and the election will be held at the December meeting. Contact Rob Seel if you are interested in running for office. This year the Club Engineer (President and CEO) and, HO and N scale Division Superintendents are up for election.

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

**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. Thank you!

**Thank you,** Rob Seel, Howard Garner, Ralph Milz, and Mike Moore for your contributions this month.

**Thank you!**

We wish to thank Clarence Harold of **Realty Executives** in Seneca for printing our newsletter at **no cost** to the club. 888-8225

## Christmas Party

**The December meeting** will be a **Christmas Party**.

Please bring a finger food to pass and if you would like to be in the gift exchange please bring a RR related gift or a RR White Elephant per person. Please wrap your gift. You may bring something other than finger food but if you do please provide paper plates, forks etc. with it. The meeting will be at the Central Library.

## CEO's Corner

By Rob Seel

**The following** is the first installment of a serial article that will appear in this newsletter over the next several issues. This series will consist of edited excerpts from the travelogue of my two-day, three-night journey to Washington, DC. In the spirit of the CRM&HA, I will only include the trains-related stuff here. However, if any of you would like to read the whole twenty-or-so page novella, including facts and opinions on national monuments, motel chains, eating in Italian delicatessens, and life in general from a traveler's perspective, then please let me know and I'll print it out for you. Or if you'd like, I can e-mail the story in "chapters." I hope you enjoy it!

### Rob Goes to Washington, Part 1

I am a Railfan. And a Model Railroader. And an Architect. A certified Microferroequinologist. On my own and as part of the CRM&HA I promote the model railroading hobby, discuss railroad history, promote public safety and respect for trains, support preservation efforts, and stop the car whenever I see crossing signals flash. Because of my interests I attended the Upstate Rail Summit 2000 last year in Greenville to learn more about commuter rail transportation in the Carolinas. It was at this morning conference that I learned more about ideas for regional transportation, including high-speed rail. "Sign me up, and let me know what I can do," I told a few key people there.

**About 2 months ago**, I received a letter from the Greater Greenville Chamber of Commerce to attend a

conference in Washington, DC in hopes of bringing high-speed passenger rail service to the Southeast. I was to accompany other business leaders from Greenville and similar groups from other southeastern cities from Hampton-Roads, VA to Birmingham, AL. We were to attend a morning conference, a luncheon seminar, a cocktail reception at Union Station, and visit with our Congressmen. This was to take place on Tuesday evening and Wednesday, September 25-26, 2001.

**In planning my trip** I spoke with our group's coordinator about who else would be going and how they plan to travel, and where they would be lodging. When he started talking about airline tickets from Greenville to Reagan National. I quickly, and a tad irately, asked, "Isn't anyone going to take THE TRAIN? You know, the Crescent that runs from New Orleans to New York stops in Greenville and Washington." Duh! Of course! If we are going to ask Congress to help pay for passenger trains, why not ride one up? So, I went to Amtrak's website and got my round-trip ticket. I even got a 30%-off, 30<sup>th</sup> Anniversary special fare: \$100.08 from Clemson to DC. I also found a Days Inn in South Alexandria, VA near the Huntington Metro station, and got a special business travelers' room rate of \$59 plus taxes.

**The very** same Friday I received my Amtrak tickets in the mail, I got a phone call from the Chamber of Commerce. It seems that the Greater Atlanta Chamber, who organized the events, made a mistake in scheduling the conference for the day Congress was scheduled to recess. When we were to be gathering in Washington, there would be no Congressmen there for us to talk to about the purpose of our trip! A flurry of last minute mending and rescheduling ensued, and I waited patiently (a-hem) for what was REALLY going to happen in two weeks. The next Monday I got word that the conference was rescheduled for the day before. Everything was to move "up" one day. I got on the phone and changed my motel reservation to the day BEFORE I was supposed to arrive. No problem, same rate. Amtrak, however, was less understanding and told me that they would change my travel dates, but I would have to pay the Conductor an additional \$30 once I got on board. I was not pleased with this. Particularly since this is an over-night train that is usually half-empty. There went my 30%-off discount. But at least I did not have a sleeping car reservation – who knows what THAT would have cost to change. As it was, to add the privilege of sleeping on a fold-down shelf in a roomette both ways would have added a whopping \$400 to my fare! And that was just for one person – me! If my family were to come along there would be no way we could afford to use Amtrak. It was then I realized that as long as there is no incentive for Amtrak to be competitive, the fares will be cost prohibitive. I stuck with my reserved coach seat —

which, by the way, means "a" seat on "the" train – not one specifically set aside for you.

**A few days passed**, and the Big Event was drawing nearer. Then, I got another voice-mail at the office from the Greenville Chamber. In light of the terrorist attacks of September 11, 2001 the conference was canceled. Sure, I understand that Congress has better things to do right now than to listen to us about train travel. Now would you think that Amtrak would be accommodating, since I was to be traveling in THEIR interest, and refund my fare for a possible future date? Nope! That 30<sup>th</sup> Anniversary fare was non-refundable, and I was stuck with it. So, I rescheduled my travel and motel room back to the original date and saved the \$30 surcharge. Days Inn? No problem, no extra charge. But Days Inn also knows that there is Econo Lodge across the street! Washington, DC is on security alert, the USA has declared war on terrorists everywhere, and I'm going site-seeing! If something bad happens to me, you can bet George Warrington (Amtrak president) is going to hear about it!

**On Tuesday, September 25<sup>th</sup>**, after working a somewhat full day at the office, I boarded the north-bound Crescent in Clemson around 10:20 PM — close enough to say "on time." I still couldn't believe I was doing this. I had been away by myself before, but usually to visit family or friends or to go to a conference with the office. But I had never been on an intercity train before in this country, and then to go sight seeing and stay in a motel by myself (since traveling Europe during graduate school) was a strange concept. Elaine and Julie were at home in bed, while our neighbor house-sat. Frances took me to the newly "restored" Clemson depot with its completely fictitious "circus" paint scheme, where I visited for a while with Jack Oker, the acting "stationmaster." My seat, #6 on car 25025, was an aisle seat next to an empty window seat with a pillow and a New Orleans newspaper. The card above the seat said this person was traveling all the way to New York City. The guy was, I guess, up in the lounge car because I barley saw him during the trip. But when I did see him, if you know anything about stereotypes, he appeared to be the definitive Jewish computer geek. We did not talk though — by the time we "met" I was already half asleep.

**The seats** in the coach were little different from airline seats in comfort, but maybe not as cushy. But, they were spaced about six feet back-to-back so there was plenty of leg room. I reclined the back as far as it would go, pulled up the leg rest and read some of the "Presidential Anecdotes" (by Paul F. Boller, Jr.) book that Frances had borrowed from her parents. The book has quirks and quips on each of our country's presidents from 1789 to 1981. I read about George Washington, John Adams, Ronald Reagan, and Jimmy Carter before switching over to Railpace News Magazine (a monthly focusing on Northeast railroad news). I got up and walked up the train to see what

was ahead, found the seedy lounge car with boisterous, smoking, "people" in a plastic and vinyl-lined snack bar environment. I moved on ahead and found the dining car, closed for the evening. I returned to my seat, got my toothbrush and tooth paste and "got ready for bed" in the washroom. I pulled out my travel pillow, and "went to bed" as we pulled out of the Spartanburg station around 11:45 PM.

**Sleeping on** the train is a lot easier when you can lie down. In Europe, most of the trains I rode had three seats facing 3 seats in closed compartments. If you were fortunate enough to be in a compartment alone or with one other, you could pull the seat out, the back would slide down, and you could lie on a flat, soft area the size of a twin bed. Not on this train. But somewhere in the middle of the night I noticed that my compu-geek neighbor had not yet returned to his seat and that other empty seats were available in our car. So, I helped myself to his window seat where I could at least stretch my legs out further and lean up against the side of the car. The train rocked gently as I drifted in and out of sleep, lifting up thanks for Norfolk Southern's use of continuous, welded rail. Each time we stopped I looked out the window, trying to figure out where we were. I had no watch (haven't worn one for years for not wanting to change batteries that only last three weeks), and none of the stations were marked with signs. The last station I remember was, I think, Greensboro, NC.

### **TextilExpress 2002 By Howard Garner**

The TextilExpress 2002 SER/NMRA convention is coming together very well.

**We have 25** prospective clinics presently lined up. Clinicians are coming from Canada, Maryland, Wisconsin, Ohio and many locations within the SouthEastern Region. Topics are from DCC, Computer Car Routing, Building Cars and Layouts, Track Cleaning, and Estate Dispersal. One of the clinics will be a preview for the national convention. Many other topics will also be covered.

**Eleven layouts** have committed to being open for tours. Several others may be available by convention time. The layouts range from G-scale live steam, 1:29 scale outdoor railroading, several HO, HO<sub>n3</sub> and others.

**Tour River Junction.** This is the area where all of Greenville's railroads met. See the remains of a switchback interchange track. The shops building of the Piedmont and Northern, a stub end yard (a model railroaders dream). This will be an extra fare tour and will require some walking. Wear some good walking shoes for this tour. We are looking at other thing to add to this tour.

**The Model Room.** Bring your models for display or for contest judging. All previous contest winners are encouraged to bring their winning models for display.

We would like to see what you are doing and to learn from what you have done. Don't forget the weathering contest/display. How close can you match the prototype? Check the last issues of the SouthErner for rules.

**The Train Show** will be in the convention hotel, the Hyatt-Regency. We have 10,000 sq. feet of space and have 1/3 of the tables already rented. The Train Show will be open to the public on Friday evening, Saturday and Sunday. Conventioneers will get in early on Friday.

**Don't forget the live jazz** band that will be playing for us on Friday evening. Just step outside the Hyatt to hear some fantastic music. Cross the street and find your evening meal. Everything from Fudruckers, to a brewpub, to the bordello. All serve great food.

**Non-rails** have not been forgotten. They will have their own room near all the activity. The non-rail chair is determined to make this the best possible convention for her fellow non-rails. We even have a clinic that all non-rails should attend, along will the rails. "Is eBay the Way – what to do the that collection you have inherited"

**The convention hotel is the Hyatt-Regency located in downtown Greenville, SC. All of our activities will take place under this one roof.**

The Clinic Rooms are just across the hall from the non-rail area and the Model room. The Train Show is at the opposite end of the main ballroom.

**Registration is now open.** Visit our web site at [www.TextilExpress.org](http://www.TextilExpress.org) for convention and hotel registration information, or write to TextilExpress 2002, PO Box 826, Pickens, SC 29671-0826. Updates are posted to the web site first.



### **Minutes of Regular Meeting September 20, 2001**

Instead of a meeting, a picnic was held at the Clemson RR Station. The Station has been moved from next to the tracks, to an area across the parking lot. Arlene Young who headed the project for the City of Clemson came and gave us a tour of the relocated Station. She also answered any questions. The Station can now be

seen from cars driving down hi-way 123. It was supposed to be painted as close as possible to its original colors. This was the last third Thursday get together as the meetings from now on will be on the first Thursday of the month. Bob Hanson made the arrangements for the picnic and everyone brought a dish to pass. Over 40 people attended and a good time was had by all.

*Respectfully Submitted,  
Dennis Moriarty Acting Stationmaster*



#### **Minutes of Regular Meeting October 4, 2001**

The meeting was opened by Rob Seel at 7:30 PM at the Pickens County Library in Central, SC. Minutes from the last regular meeting (August) were read and approved. A correction was noted for the July minutes: the October 6 Caboose Day was to be held in Winnsboro, SC, not Dillsboro, NC. Richard Nichols presented the treasurer's report. We have \$5,386.05 cash on hand as of October 4, 2001. Rob Seel mentioned that the website needs to be updated.

#### **Business in Process**

February Show: Bill Hughes said the Seneca National Guard Armory is under lock-down in the wake of the September 11 attacks, so we need a new location for our show. Richard Nichols said Seneca Middle School is a potential location. Bob Hanson will need to look into this possibility before we go ahead and schedule with them. There is a \$25/hour utility fee for the use of the building.

**TE2002: Howard and Steve** are in Asheville promoting the convention.

#### **New Business**

Upcoming programs: Nov.: Moriarty, Dec.: party, Jan.: Seel, Feb.: Farrell. The December meeting will include officer elections. Seel and Folsom volunteered to serve as the nominating committee.

**Rob Seel** mentioned the new "World's Greatest Hobby" campaign. This represents an effort by the modeling industry to involve more people in the hobby of model

trains. If anyone is interested in serving as part of a speaker's bureau to support this effort, please let Rob know.

**Rob Seel** also mentioned the possibility of using the old Central depot as a clubhouse since the city may no longer be using it. He will keep us posted on developments.

#### **Division Reports**

**N Scale:** The N division is beginning to grow. Two people have expressed interest in becoming involved in the division, one of whom recently joined the club.

**HO Scale:** Bob Folsom will be starting Saturday morning work sessions for the club's layout. Lots of work needs to be done (decals, scenery, painting, building cars, etc.), so come on out and lend a hand. This is a great opportunity to learn new skills as well. Bob also mentioned that a new control system was needed for the layout. The membership unanimously approved his request to spend up to \$386.05 on a new control system.

#### **Railfan Reports**

Michael Moore reported seeing a Burlington Northern Santa Fe locomotive (C-44-9W) on the Norfolk Southern mainline in Taylors. He also noted an increase in traffic on that line over the last three months. Bob Folsom related a train chase story from his trip to the Birmingham area with Steve Zonay. They got the van stuck in an old Southern rail yard! Rob Seel took a trip to Washington, DC on the *Crescent* recently. On the way, he saw a green Southern loco. See his article in the newsletter for more details.

**The meeting was adjourned** at 8:21 PM. The next meeting will be held at the regular time and place on November 1.

**After the meeting** we watched part of a video entitled "Running a Steam Locomotive."

*Respectfully Submitted, Michael Moore, Stationmaster*

#### **Roundhouse**

**Continued from an Article Submitted  
by Ralph Milz**

**Written and or Edited by Dennis Moriarty**

Ralph gave me an article from Michigan History magazine, which included a nice article about the roundhouse that was built at Greenfield Village in Dearborn, Michigan. In the last newsletter the rebuilding and construction of the roundhouse and a little about the village was discussed. The article goes on to discuss how the roundhouse was used in the late 1800's.

**Some of the** roundhouse machines that they were able to obtain are mentioned below. Most were built around 1915.

**The McCabe Flanger** which makes new or replacement parts is a 6,500-pound pneumatic operated machine that forms flat pieces of steel into flanges mainly used in boiler repair.

**The Morton Draw-Cut Shaper** which machines axle bearings. It is a 5-ton machine from the Chicago Short Line RR.

**The Niles Radial Arm Drill Press** can drill holes from 1 to 5 inches in diameter in ½ inch steel. Its 12 feet high and weighs 8 tons.

**The Niles Wheel Press** pushes wheels on and off axles and has a 400-ton capacity. Its 8 feet tall and 16 feet long.

**The Niles Driving Wheel Lathe** is used to resurface and turn locomotive wheels up to 79 inches in diameter. Its 21 feet long, 5 feet wide and 7 feet tall.

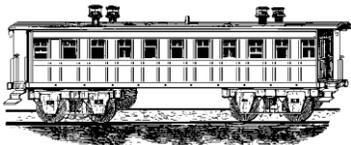
**The Betts-Bridgford Axle Turning Lathe** is used to resurface the turning surface on an axle. Its 20 feet long and weighs 10 tons.

**For railfans** and historians the roundhouse provides a chance to learn about an antique skill. The Greenfield Village RR staff has learned how to operate the antique machinery and to care for the villages antique RR equipment. The roundhouse is actually being used today on the village's equipment and visitors can watch or take instruction on ancient RR repair. You can even go in the pits under a 1902 4-4-2 Atlantic build by the American Locomotive Company for passenger service.

**The Greenfield Village Roundhouse** is used to repair and maintain the 4-4-2 Atlantic, the 4-4-0 Edison built in the late 1800s which is the engine that is used to haul visitors around the park, the Torch Lake which is out of service and undergoing repair, and a 1914 Baldwin which came from Michigan Alkali Co. and the Detroit & Mackinac RR. Many more locomotives and RR cars are indoors in the Henry Ford Museum next to the village.

**Outside the roundhouse** visitors may see engines being moved in and out of the building, tenders at the pipe-stand being filled with water, waste products from the firebox being dumped in the ash pit and rolling stock being cleaned on the wash track.

**If all goes well**, at the November meeting, I will show some video of a ride I took on the Edison around the village and video of RR equipment that I took in the Henry Ford Museum. Unfortunately I was there before the roundhouse was opened, but the roundtable where the roundhouse was built is clearly visible.



**Inside/Out  
Simple Electrical and Electronic  
Circuits for Model Trains  
Power Supplies  
By Dennis Moriarty**

**Experimenting** with simple electrical and or electronic circuits useful to the model RR hobbyist can add interest to the hobby. The circuits to be described in

this and future articles only require a small number of components. Many circuits for use with model trains can be found on the Internet, train magazines and from manuals from places like Radio Shack. In presenting a few examples of simple circuits maybe you will become interested in this phase of the hobby and learn the fun of experimenting with more than just running wire to the track or purchasing ready made components.

**All** of the required parts are available at Radio Shack or other electronic stores.

**I would recommend** that an inexpensive volt/ohm meter be purchased. I have seen them for sale at hardware stores, Radio Shack etc.. The meter can be used to check to see if variable voltage transformers have been set at the required voltage and for many other useful purposes such as continuity checking. I have used one to check across track to see where a power failure has occurred at a joint.

**Don't be afraid** to experiment. These articles will be about experimenting and designing your own circuits to accomplish your required application. Low voltage circuits are fairly safe to work with and if you use a power supply with a circuit breaker or fuse on the low voltage side, there is not much that can go wrong except for maybe the loss of an inexpensive part such as an LED light. (LED is a light emitting diode).

**First** we must discuss power for our circuits. This is the one exception to the low voltage statement above. Model train power supplies change the 110V-line voltage from the wall plug to a lower useful voltage for use with the train circuits. If you are not comfortable with working with the 110volts required to feed the power supply, this may be the one area where you may want to purchase ready made supplies that will be required for future circuits. Many power supplies that were made to allow mobile CB radios to work in the house are very useful. Old computer power supplies also are available. There is low voltage power available from our train controller, but this is variable voltage to control the train's speed and is not very useful for other circuits. However, many train controllers have accessory contacts that can be used. **A second train controller** is an excellent source of power. It can be set for the desired voltage and used as is or used in experiments to determine the proper voltage requirements for a more permanent power supply. Toy train controllers are available from old train sets, are inexpensive, and available at the local train stores. We will be using Direct Current (DC) voltage in most of the circuits. The accessory connection on toy transformers is usually Alternating Current (AC) and the variable voltage output connection is usually DC (except O gauge, which is AC).

**With that said** we will start in this article with a discussion about making our own power supplies for our circuits and trains.

**The AC voltage** from the wall plug is 110 Volts. We need several low DC voltages to run our trains and

operate our circuits. A transformer drops the voltage. A transformer is nothing more than two wire coils made with a different number of windings. As the AC current surges back and forth in two directions 60 times a second in the first winding, it creates a variable magnetic field, which surges back and forth 60 times a second in the second winding. The coils have different numbers of windings and the ratio of the number of wire turns on the coils determines the output voltage of the second coil. The second coil is sort of like a generator coil with a magnet being turned next to it by a gasoline motor. But in this case the magnet is the first coil with the surging AC current in it. Most of our circuits will require 18 volts or less so a step down transformer from 110 volts to 18 volts is a good choice to start with. If our power supply is going to be used to power trains, the transformer must be rated to handle the power that the trains require plus a safety factor. The power requirement for most of the electronic circuits is much less so a smaller transformer can be used. Transformers can be made but it is much better to buy them ready-made.

**The first circuit** we will discuss is called a rectifier circuit. Rectifier circuits change AC to DC. A rectifier circuit can be attached to the AC accessory connection of your train power supply so that it can be used it as another DC power source, or a rectifier can be attached to a transformer.

There are two main rectifier circuits, a half and a full wave. Diodes are used in rectifiers because they only allow current to flow in one direction.

As the AC surges back and forth in our transformer 60 times a second our rectifier only allows the voltage to go in one direction. The half wave rectifier therefore allows the voltage to pass through 30 times a second as it cuts off the return cycle. This becomes DC but it is surging in pulses 30 times a second. This circuit is useful when we want to build our own train speed controls. The little electric motors like to be bumped a little to make them run properly. A full wave rectifier allows the DC voltage to pass as the AC surges in both directions so the output is DC surging in pulses 60 times a second which is much smoother and the motors don't like it as much. The other electrical circuits that don't involve electric motors do like the smooth DC and work better with a full wave rectifier in the power supply.

**To help smooth** out the pulsing DC, capacitors can be added to the power supply circuit. Circuits to smooth out pulsing DC are called filters. Capacitors are metal plates separated by air or insulation material. One plate can be charged with a plus and the other with a

negative. When the voltage is removed it takes a little time for the plus and negative charges to dissipate and neutralize. If we put a voltmeter on a removed charged capacitor you can see the meter slowly go to zero as the capacitor discharges through the meter. The capacitor works a little like a battery, you charge it up and then you use the energy as it discharges. By adding one or two across our rectifier circuit the capacitors charge and discharge between pulses and really smooth out the DC. Remember most capacitors have a plus and minus side just like batteries, so be careful when wiring them in. Also, diodes only allow current to flow in one direction, so they must be installed in the proper orientation.

Both a typical ½ wave and full wave power supply are shown on page 7. Many other variations are possible. See the sources for information indicated in paragraph one. Remember safety first when working with 110volts and study the safety rules when working with higher voltages. Thin perforated insulation board is available at Radio Shack. The part leads can be bent through the holes and this holds the part firmly. Soldering can be done on the backside of the board.

**The electrical projects** will be continued in the next newsletter. Next will be voltage regulators, which attach to our power supply to give multiple regulated voltages from one supply. **Please see** page 7.

#### Trivia

**Many** modern RR companies print Calendars for the next year with nice pictures of their rolling stock. Visit their Internet sites to find out how to obtain one from your favorite RR.

#### Future Meeting Programs

**November:** Dennis Moriarty will bring train related videos he has taken at Greenfield Village Michigan and if time permits, steam at Milan, Michigan.

**December:** Christmas party and show and tell.

**January:** Rob Seel

**February:** Ted Ferrell

#### CMR&HA TRAIN CREW

Engineer and CEO: Rob Seel

General Division Super: Mac McMillin

Stationmaster: Mike Moore

Paymaster: Richard Nichols

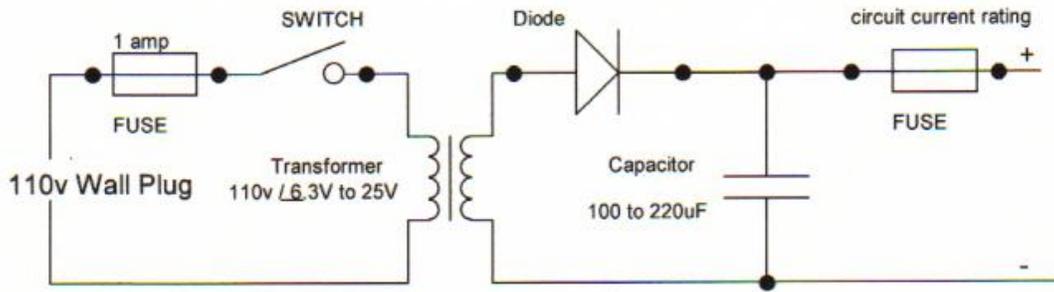
HO Division Super: Bob Folsom

Large Scale Division Super: Bob Hanson

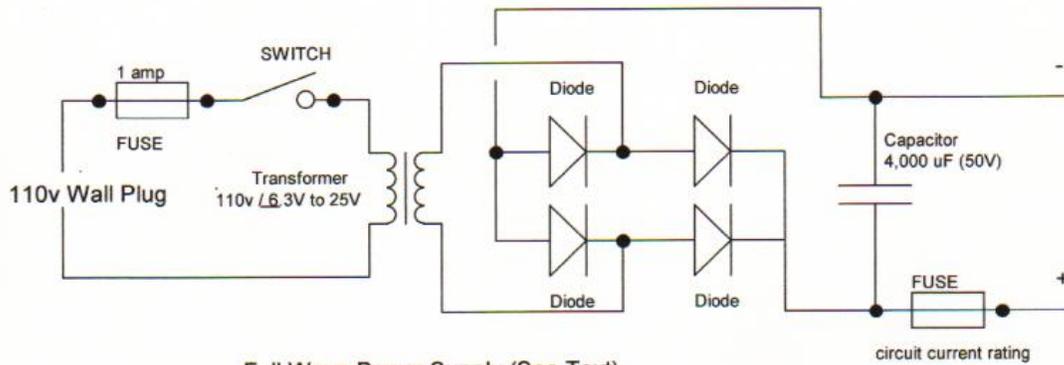
N Scale Division Super: Bill Hughes

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

**HTTP:\WWW.TextilExpress.org is the SER convention website.**



Half Wave Power Supply (See Text)



Full Wave Power Supply (See Text)



Cartoon from [WWW.toytrunkrailroad.com](http://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, P.O. Box 27, Central SC, 29630-0027. Phone (864) 261-3496

Signature \_\_\_\_\_

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**C.R.M.&H.A.**  
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**FIRST CLASS MAIL**

**ADDRESS CORRECTION REQUESTED**

