



The CRM&HA Newsletter

March/April 2002

Dennis Moriarty/Editor

Volume 11 Number 2

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

Headline: Bob Folsom Elected Engineer

Editorial

By Dennis Moriarty

Congratulations to Bob Folsom on being elected as Engineer (CEO and President) of the CRM&HA. Bob will also retain his position as HO Division Super.

Mike Moore indicated that he will be moving soon and will no longer be able to be the club's Stationmaster (secretary). Mike has done an outstanding job as Stationmaster and will sorely be missed. We will soon be asking for a volunteer to take over for the rest of Mike's term. If you are interested in being the new Stationmaster please call Bob Folsom. (654-8244)

This is a very busy year for the club with the train show and the convention. It has taken many people to accomplish what has been done and will require everyone's assistance to finish. The first major item for the entire membership will take place at the May meeting. Please attend this meeting as Howard Garner has a lot of projects for us to do that night including putting together the convention packets. We really need your help, many hands make quick work.

Please call Howard Garner at 878-4705 if there is any other way you can help with the SEC convention.

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, Curt Ehmann, Rob Seel, Bob Folsom and Mike Moore for your contributions this month.

Last Free Printing

We wish to thank Clarence Harold of Realty Executives in Seneca for printing our newsletter at **no cost** to the club for the last two or more years.

Clarence has sold his business and can no longer do our printing.

Our Paymaster, Richard Nichols has graciously volunteered to take over the printing of the news letter. This will save the club many dollars. Thank you Richard.

Reminder

Dues Due

Our Paymaster, Richard Nichols would like very much like to see your dues for 2002. Please attach the membership application on the last page of the newsletter with your dues. The mailing address is 301 Kingston Way, Anderson, SC, 29625 or hand them to Richard in person at a meeting. The 2002 roster of payed members will be put together in April and printed in the May/June Newsletter. The new mailing list for the newsletter will be made from the roster.

Club Layout Needs a New Home

Thanks to Bob Folsom the CRM&HA layout has had a home for many months and a warm place where it could be worked on. After the February train show the layout was moved to an outdoor storage facility as Bob needs the room in his house for his layout. If anyone has room in their basement or other part of their house, and would like to have the layout set up there so that it can be worked on and stored for the club between uses please let Bob Folsom know. (654-8244)

CEO's Corner

PRESIDENT'S REPORT

By Bob Folsom

It was a hard-fought campaign, but thanks to your support, I was successful in landing the presidency of the CRM&HA!

Our annual train show is already history. In three short months, we now face the greatest challenge in the history of CRM&HA. Hosting the Southeast Region (SER) of the National Model Railroad Association (NMRA) convention in Greenville is an unprecedented undertaking.

Personally, I am excited that we would have the opportunity to be part of something like this, and also confident that we are going to set a new level of what NMRA conventions can be like.

The degree of success of TEXTILE EXPRESS depends on every member of our club pulling together. So far, the advance planning has been done by just a few members of our club who have been to many of these conventions before and know what needs to be done. You have had reports from Howard Garner outlining the progress of preparations. Again, I am excited. We have met our goal in renting tables to hobby dealers, and there is a waiting list of more who would like to get in if they could. We have some great clinicians lined up. We have a great program for spouses. **All that we need now is YOU!** As we get closer to the convention, specific opportunities for you to help will be made known. I hope you will set aside some time over Memorial Day weekend (Friday, May 24 through Sunday morning, May 26) to take part in this convention.

You may not be a member of the NMRA. There are things you can do to help at the convention even if you are not a member. But there are other things needed to be done only by NMRA members. I was not a member of the NMRA ever until this event came up. But I joined last year just because of the TEXTILE EXPRESS. That's how important I regard this event. If I benefit in some way from joining the NMRA, that will be fine, but I will get far more satisfaction and greater remembrances just from having the satisfaction of looking back on being part of one of the best achievements of my life - making TEXTILE EXPRESS a success.

If you have not been very active in CRM&HA lately, please consider getting involved because of TEXTILE EXPRESS. If you haven't been able to get to club meetings, been too busy, or can't get out in the evenings, etc., you can still help. Give me a call (654-8244) if you are interested but have not been able to get to club meetings lately.

As you may know, Michael Moore is leaving the area to accept new job responsibilities. Thanks, Michael for the great job you have done as secretary. Unfortunately, there is no high-speed rail for you to ride back to Clemson to attend club meetings, so all we can do is to say "thank you, and best wishes in your life's endeavors". Please stay in touch. CRM&HA needs a new secretary. As I said to myself when I became president, "well, I was going to be there anyway, so why not?" I hope someone will step forward to accept this responsibility before I have to hit the phones and start giving people guilt trips.

The HO modular layout is now in storage. Since it represents most of the tangible assets of the club, it is a big factor financially (see HO report) and

certainly one of the most visible signs of the club's existence. Even though not everyone models HO or is interested in HO gauge trains, or has their own HO gauge layout, it is important that the club maintain this kind of visibility, which means that we need a place for it to reside. Also, it would be nice if we could have our own meeting place, even though the library has worked out very well. I addressed this issue more in the HO report, but let's all keep our eyes open for any possibilities of a permanent club HQ.

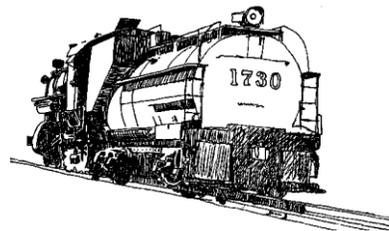
HO DIVISION REPORT By Bob Folsom

You will have a report about our annual show elsewhere in this newsletter. I am very pleased about how things went for the HO layout. Thanks to Ted Farrell, Dwayne, Joshua and Hannah Lusk, Paul Neyman and Pat Street, we got the layout loaded into the Ryder truck and on its way to the armory. Others joined in there to help set it up. The layout operated quite well during the show, and again, thanks to Pat, Paul, and Rob and Steve for bringing equipment to run during the show. I hope I haven't left anyone out so far.

After the show, virtually everyone pitched in to help take the layout apart and get it loaded back on the truck. We started dismantling it at 3:00 PM, and I think we were putting the padlock on the storage unit at around 4:30 PM!

Storage of the layout is going to be a big issue for the future. I was glad to host it during the past year, but construction of my own layout is now expanding into that area. Storage is costing \$45 a month, \$540 a year, etc. This is definitely a financial hemorrhage for CRM&HA. One solution that has been suggested is to let members host one or more modules if they have some space. You could use them to operate equipment on if you don't have a layout. We will discuss this at our next meeting. Also, be alert to any possibilities of a permanent home for the layout, or for club HQ. I am still working on Southern Wesleyan University, and lately, the Town of Central to find a home.

Once again, thanks to everyone for helping to make the HO layout part of our show be successful and be a pleasant experience!



2002 Train Show By Curt Ehmann

The 2002 Model Train Show was held on February 16th at the National Guard Armory in Seneca. This was our 6th Annual Show, and it was once again well received here in the Upstate. Admission fees were received from over 250 adults, and since children were admitted free, with their parents, the total attendance was estimated to be close to 400! The doors opened at 9:00 A.M. and closed at 3:00 P.M. and we had a steady flow of visitors throughout the day! They were first greeted by the club's track display, comparing the different model train track gauges, and then by a large counted cross stitch picture of Steam Railroad Engines, which got the attention of many of the women visitors.

Against one wall was the beautiful N Gauge layout of Mike Moore, shown for the first time at our shows. The 5 foot elevation of the display gave a more realistic view of the scenery and trains. Mike's wife acted as "Safety Officer" for his Point-to-Point Pike.

Near the back of the hall was our famous HO Gauge lay-out, which is continually up-graded and improved. Rob Seel and Bob Folsom took turns operating the layout, and Charter Member Pat Street was called back to assist, and to demonstrate the switching capabilities of the display.

One of the younger rail-fans, Preston Cooley, aged 10, brought his own favorite train, a Southern Pacific Daylight to the show and asked if they would please run it on the big HO layout. He was delighted, when they said, "Sure!" and when he had some switching problems, he was advised as to just what kind of couplers to get, and where he could find them.

Steve Zonay was able to sign up 18 Model Train Dealers to bring their wares to the show! Most of them were South Carolina dealers, but we also had 3 from Georgia, 1 from North Carolina, and one from Florida. Between them they managed to fill up 40 tables with all kinds of cars, engines, buildings, scenery, and materials, all necessary to build or improve home railroads. One of the dealers even brought a complete N-Scale layout, fully scened, with or without the rolling stock. Unfortunately it wasn't sold this time, but there were some very interested shoppers.

Treasurer Richard Nichols took turns, relieving Curt Ehmann at the admissions table, and at the Company Store, where Steve Zonay, Howard Garner, and Bob Folsom also assisted. Here they sold CRMHA T-shirts, and coffee mugs, as well as members' merchandise for a 10% commission. Bob Hanson, once again, managed the event, and did a great job! Not only did he lay out the room, but he rented extra tables, placed directional signs,

served coffee and donuts (while they lasted!) and helped take everything down again! Many thanks also to Pete Deloyne and Don Rumer, who helped set up and take down all those tables!

Pete Sheriff and her dad, Maurice Adams handled the clean-up, Pete noted that it was a lot easier to sweep the concrete floor of the hall, that to vacuum all that carpeting at our last facility! At the end of the day, we were able to leave the hall in good order for our National Guardsmen. Maybe we can come back again next year.

Minutes of Regular Meeting January 17, 2002

The meeting was opened at 7:32 PM with Mac McMillin presiding. Minutes from the previous meeting and the Treasurer's report were read and approved without amendment. We have \$5506.05 on hand. The deadline for the next newsletter is February 18. Richard Nichols has graciously offered to print the newsletter for us.

Business in Process

February 16 Show: The Seneca NGA is a "go" according to Bob Hanson. There will be a company store available with 10 percent of all sales going to the club. We need someone to keep the shop. Curt Ehmann and Richard Nichols volunteered to man the registration table. We will not be running a kitchen as we have had no one volunteer to help with that. Hanson is working on local publicity in newspapers, etc. We did not meet the publishers' deadline for an ad in the magazines. We need help in setting up AND tearing down the HO modular layout. (See Bob Folsom.) The armory will be open Friday night beginning at 6:00 PM for set-up and Saturday at 8:00 AM for final preparations. The show begins at 9:00 AM and ends at 3:00 PM. Admission is \$3.00.

TE2002: Howard Garner has been working on a flyer for the convention and it will be coming out soon. We need a "publicity person" in Greenville to cover the upstate media outlets (radio, TV, etc.). They will have about \$500.00 to work with. We also need help with registration and security. Helpers will be allowed to attend the show and clinics (exception: you must register and pay the extra fee to take the prototype tour). The Greenville NRHS chapter will be sponsoring a model contest. We have 62 dealers signed up so far.

New Business

The HO modular layout is in need of a new home after the February show. Bob Folsom has been kind enough to store it in his basement for some time now and we thank him for it.

The meeting was adjourned at 8:20 PM.

Respectfully submitted,

Michael Moore, Stationmaster

**Minutes of Regular Meeting
February 7, 2002**

Bob Folsom opened the meeting at 7:31 PM. Two guests and eleven members were present. Treasurer's report: \$5781.05 on hand. Twelve members have paid for their membership so far. Minutes were read and approved.

Business in Process

February 16 show: Bob Folsom: we need help to set up the HO modular layout on Friday night and then tear it down after the show on Saturday. We will be storing it after the show. Zonay: we have 39 tables rented (18 dealers-most from SC, some from NC, GA, FL). We need signs. Zonay and Folsom have some. Zonay distributed maps. We still need someone to mind the company store. We need cups and shirts as well.

TE2002: Howard Garner has been working on a special edition of the *Southerner*. The prototype tour: there will be motorcar tours! We will be offering a free room for a lucky registrant. Parking tags will be provided so you can leave to go on layout tours. We need to man the registration booth from Friday morning through Saturday morning. Need someone to help with logistics of auction (software possibly). Richard will try look into name tags. We will have a couple of work nights to stuff packets early in May. Pete Delorme volunteered to do the advertising stuff. 86 of 100 tables have been rented.

Club presidency: Bob Folsom was unanimously elected.

PO Box: Rob Seel said the PO said the already issued the keys to someone else. We need to get another one.

New Business

Greenburg or GATS will be in Greenville in August. We'll look into this later.

Upcoming shows: March: Moore, April: Delorme, May: work night June: Nichols.

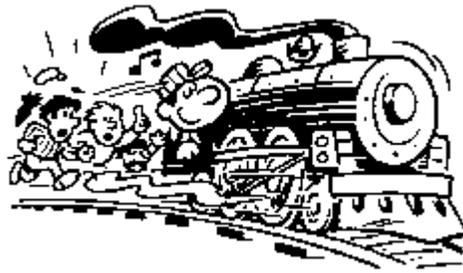
Division Reports

Greenville NRHS is sponsoring another motorcar excursion in GA and TN in March as well as summer excursions.

The meeting was adjourned at 8:30 PM. After the meeting, Ted Farrell showed us a video of his old layout.

Respectfully submitted,

Michael Moore, Stationmaster



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

PART 3

Inside Union Station was a bustle of people not unlike any busy city airport. The difference here, though, is that the atmosphere is more relaxed and the architecture is magnificent. Airports are notoriously stressful and not beautiful; if they are beautiful it's usually just an interior concern. Airport exteriors usually look like a bunch of mobile homes with big windows stacked along side of and on top of each other. Union Station, on the other hand, was built by the Pennsylvania and Baltimore & Ohio railroads in 1907 after the bathhouses of Rome. Taking their cues from the Roman influence of Washington's architecture, architects Daniel Burnham and Charles McKim, sculptor Augustus Saint-Gaudens, and landscaper Frederick Law Olmsted created a splendid yet massive Portal to the World beyond. The station was rehabilitated in 1988, and the result is one of Washington's best-kept secrets. The two main halls are sweeping, coffered barrel vaults punctuated with statues, mosaic tile, and light – accentuated with wrought iron, rich woodwork, and polished brass. I decided that the shadows and the brightness posed too much of a contrast for my camera to handle automatically, so I switched over to manual exposure, took my best guesses, and shot pictures. I will add that the photos came out rather nicely when I had them developed the following weekend! **I bid my farewell** to the palace that makes a traveler feel dignified and headed underground to catch a Metro train to Alexandria and my motel. Union Station is a sight to behold, but I must say that the DC Metro is also a prince among its peers. The entire system is efficient, convenient, and immaculate. I remember being impressed the only other time I rode the just-opened Metro with my Aunt Eulie (who lived in Alexandria while my Uncle Rob was stationed at Ft Belvoir) in the late 1970s. This time I was on my own, and the Metro is nearly 25 years old. As an architect I cannot help but be impressed with the Metro and its architecture. The subterranean stations are massive, coffered vaults – similar to Union Station, but flatter – with an overall dark feeling with very well designed lighting. You

seldom wait for more than five minutes for a train, but not as long during rush hours. The stations have LED display signs that flash information about stations where elevators are being repaired, which trains are delayed, how long the next train is, and when it will arrive in minutes. The platforms are designed with disabled patrons in mind: There is a two-foot-wide strip of raised-dot tile along side the two-foot-wide granite edge. The granite edge has flush-mounted lights that glow dimly but oscillate when a train is approaching. The trains themselves are clean, but the color scheme is Classic 70s: brown carpet, ivory walls, tangerine AND burnt orange seat cushions.

I purchased an all-day pass for \$5 and boarded the Red Line at Union Station. I rode two stops to Gallery Place, where I changed trains for the Yellow Line and a ten-minute ride to Huntington. Along the way we stopped at Pentagon Station. The driver announced, though, that only those with a Pentagon ID would be allowed out of the station for security reasons. Still, a few people got off and a few boarded. It is here that I'll say something in favor of DC commuters: They are courteous. When the train arrives at a station, the boarding passengers will wait to the sides of the car doors while those leaving the train pass by. Then, the boarding passengers proceed. I have been to so many places where the passengers fight to get past each other, but not here.

The train proceeded above ground and on to the station at Reagan National Airport. The station was still operating for commuters, but the airport itself had been shut down and closed since September 11th. It was a very unusual sight to see the airport completely deserted: no airplanes on the ground, no cars, no people – nothing except for one police car. I ironically remembered the reason why Dulles Airport was built: so that National could be closed to keep airliners away from the city. But so many Congressmen complained about the inconvenient travel distance from Dulles to DC that National remained open. Until now, for the time being.

We once again passed through Alexandria's King Street station. I gave my salute to the Washington Masonic Memorial (which happens to be one of my favorite buildings) as we proceeded on to Huntington station. We even passed several high-rise office buildings in Alexandria, including PBS and the Association of Old Crows. The building that gave me the best belly-laugh, however, was a building that looked like it belonged to the Army National Guard. It had a big, proud sign on it that read, "Department of Value Engineering." Now, the term "value engineering" is something of a four-letter word in the design profession, and is conversely a brownie points concept in the construction industry. It is supposed to mean

"finding alternative means for achieving the desired results in a more efficient and less costly manner." In actuality, "value engineering" means nothing more than poorer quality for less money. It should have been no surprise to me that the Department of Value Engineering has a building with standing water all over its flat roof with bitumen tar dripping over the edges.

The train eased into Huntington station, the end of the Yellow Line. I got off the train and stepped back in time to where I had boarded the Metro with Aunt Eulie some 25 years ago. The above-ground station is on the face of a hill above Alexandria. It has a large commuter parking lot, outdoor escalators, and a train platform cut into the hill. The flat roof is supported by triangle-buttressed, concrete frames with large, 1970s-style, circular holes punched through them. The place brought back memories, and it looked every bit as good now as it did then, only the trees were taller now.

I emerged into the clear, blue sunny outdoors not knowing where in the world I was, sort of. I had selected my hotel largely because of its proximity to a Metro stop. Not having a car, I wanted to be within walking distance of wherever I needed to go. The Days Inn was on US Route 1, 1600 Richmond Highway, approximately a fifteen-minute walk from the Metro. Well, here I am . . . Now where do I go? With both bags on my shoulders I headed for the small strip-shopping center across the deserted, 5-lane street to ask directions from the Indian lady working at the women's boutique. "Take a left at this traffic light here, and bear to right down the hill. When you get to the stop sign, go to the left toward the 7-11, and that will get you to Richmond Highway. Days Inn will be on your left."

I thanked the lady and stridently marched into an old, quiet neighborhood of small houses with fences along the sidewalk. In less than fifteen minutes I found the 7-11, and then my motel. Later on, I found a short-cut path from the neighboring apartment building through a city park to the station. But for now, the neighborhood stroll was very nice and peaceful.

Checking into the motel was a routine procedure. Margaret was working the desk today, an attractive black lady, about my age with a pleasant smile. She gave me the key card to my room, Number 225 – strangely similar to the number of the Amtrak coach I had just spent the night in. I opened the door to my room, literally dropped everything, and called Frances to leave my second message with my telephone number for the day. It was just after 11:30 AM by now, and the idea of taking a shower and a shave never seemed so good. I did not use up all of the hot water, but I would have felt no remorse if I had. It's amazing what a good shower will do to freshen a person up, even if it is with those

“water-saver” shower heads all the motels use. With a smooth-shaven face, brushed teeth, and fresh clothes I grabbed my camera/day bag and headed out for my assault on Washington!

But when you go traveling anywhere you always forget to pack something. No sooner had I toweled-off then I discovered what I had left at home this time. And by the end of the day I would have been personae non-grata for sure if I didn't find some deodorant before leaving. I went back to the front desk, smiled sheepishly at Margaret, and asked if she had a stash of essentials back there. YES! She gave me a small Sure stick, and I was off to the races.



Simple Electrical and Electronic Circuits for Model Trains Variable Voltage Regulators By Dennis Moriarty

In presenting a few examples of **simple** circuits I hope you will become interested in this phase of the hobby and learn the fun of experimenting with electrical circuits. All of the required parts are available at Radio Shack or other electronic stores. They also sell manuals about circuits, construction and safety when building circuits.

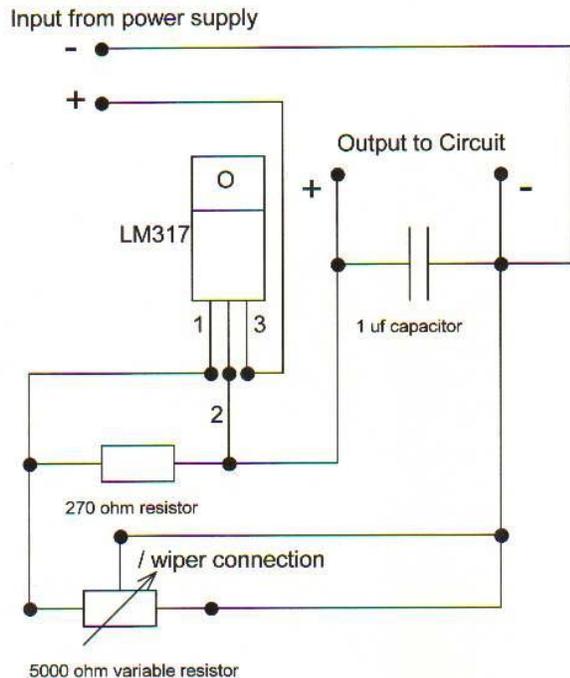
In the last newsletter the second article about simple circuits for model railroaders was about fixed voltage regulators. This article will continue with the power supply theme and discuss a way of obtaining variable voltages from a power supply and regulating the voltage so it stays relatively constant even though we put different power loads on the power supply.

This is possible by the use of another type of IC (Integrated Circuit) the LM 317 family of voltage regulator chips. Another chip with only 3 pins. To review, regulated means that the chip tries to hold the required voltage no matter what the load is (within the chips limits). They will work as long as the input voltage is higher than the output voltage. The input voltage to the chip should be about 3 volts higher than the highest output voltage desired. Just like the fixed voltage regulator IC chips the variable regulators generate heat because they are doing work (lowering voltage) and the chips should be provided with a heat sink (see the previous article).

A way to explain what the LM317regulator chip is and how it works is to **equate the electrical circuit to water**. The LM317 is like a control valve. A control valve uses air or hydraulics against a diaphragm which is attached to a piston in a water valve. The more air we put on the diaphragm the more the valve opens and more water goes through. To control the amount of water a sensor on the water valve outlet pipe measures the pressure of the water coming out of the valve and operates a air valve which controls the diaphragm. If the water pressure varies, more or less air is applied to the diaphragm until the desired pressure is reached. The air pressure can be adjusted to achieve any water pressure desired.

The LM317 works the same way only instead of a diaphragm a low voltage is applied to the chip (0-3volts) to tell it what the desired output voltage is. (1.2 to 37 volts). (In our case we usually will not exceed 15 volts). The trick is to tell the chip what the output voltage is doing so it can make adjustments. This is done by feeding back a voltage to the adjustment pin from the chip output. Since the adjustment pin wants to see 0-3 volts a voltage dropping resistor is installed from the output to the adjustment pin. In addition a resistor dividing circuit with a variable resistor is used so that the desired output voltage can be achieved by turning a knob. See the schematic drawing below. That's it. Very simple. This chip can be used to control train speed, produce any needed voltage in a bench power supply and for some other applications that will be presented in future articles.

The subject of resistor dividing circuits is interesting. A series of resistors can be placed across a power supply + and – terminals. To make it simple lets say it is a 12 volt power supply. If we measure the voltage across all the resistors from + to -, the voltage will be the same as the power supply, in this case 12 volts. If we measure the voltage from resistor to resistor the voltage will be proportional to the total resistance of the circuit. Lets say we put three 1000 ohm resistors across the output. In this case the total resistance is 3000 ohms. Since one resistor is 1/3rd of the total resistance the voltage across the resistor will be 1/3rd of the total voltage or 4 volts. Across two resistors 8 volts and so on. If a variable resistor is used the voltage to the sliding tap can be set to any voltage. The only problem with using this circuit to control trains is that the voltage changes with the amount of current load so the train will slow down as it goes up hill and speed up going down. Most inexpensive train controllers use voltage dividing circuits instead of the LM317 chip as they are cheaper to build.



Most of the VR chips look like the one in the circuit drawing. Some of the higher current chips look a little different but the pin designation can be obtained with the chip when it is purchased. In the LM317 chip pictured, pin #1 is the adjustment pin, pin #2 is the output and pin #3 is the input.

Below is a limited list of available voltage regulators and their current limitations.

A mA is 1/1000 of an amp, so 500 mA would be ½ amp and 1500 mA would be 1 ½ amps etc. An HO engine is usually less than an amp.

LM117 3-Terminal Adjustable Regulator 500 mA, 1500 mA

LM117HV 3-Terminal Adjustable 500 mA, 1500 mA

LM138 5 Amp Adjustable 5000 mA

LM150 3-Amp Adjustable

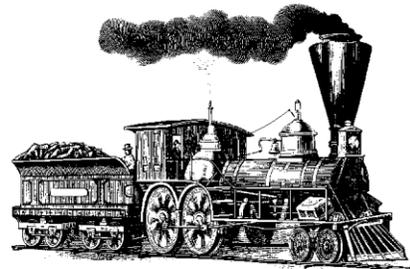
LM317 3-Terminal Adjustable Regulator 1000 mA, 1500 mA, 500 mA

LM317A 3-Terminal Adjustable 500 mA

LM317HV 3-Terminal Adjustable 500 mA

LM317L 3-Terminal Adjustable 100 mA

LM338 5 Amp Adjustable Regulator



Trivia

Its that time of year again. Remember to save your Crepe Myrtle, Nandena, and Oak Leaf Hydrangea cuttings for making trees on your layout.

Future Meeting Programs

March: Delorme

April: Moore

May: Garner

June: Nichols

CMR&HA TRAIN CREW

Engineer and CEO: Bob Folsom

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](http://central-railway.tripod.com) is the club website.

[HTTP://WWW.TextilExpress.org](http://WWW.TextilExpress.org) is the SER convention website.

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

