When I planned to illuminate the interior of a US Army Transportation Corps (USATC) Guard/Conductor (caboose) car, I discovered that prices for ready to install commercial systems typically exceed $20.00, and that the interior of the caboose is too small to accommodate all components of such devices.

Being frugal, and very determined to light up that model, I inquired among friends and acquaintances as to how I could achieve my goal. Upon asking Jim Petro, NMRA, Reno, NV for information, he immediately sketched and handed me a drawing of a circuit which would most likely suit my purpose.

Returning home to Paradise, CA, I attempted to obtain the necessary components from nearby vendors. However two critical items, the LED’s and the latching magnetic reed switches, were not available. I turned to Phillip Simpson, NMRA, Paradise for information on possible sources. He at once, without hesitation, offered to obtain these items for me. Within less than 10 days he presented them to me.

**CURRENT PICK-UP WIPERS**

Hereupon I started to construct some current pick-up wipers utilizing #2 screws, nuts and .020” phosphor bronze wire. The picture below depicts these items installed on a refrigerated car.
**Sierra Division Callboard**

*PCR business or questions:*

**PCR President**
Pat LaTorres
duhnrwd@pacbell.net
(530) 317-7456

**Director, Sierra Division**
Mel Jones
papamel@sbcglobal.net
(775) 815-0486

_Sierra Division business, questions, or to volunteer to give a clinic, for membership problems:*

**Superintendent**
Jim Collins
jimcol@charter.net
(209) 566-0935

**Contest Chairperson**
Gary Ray
gerber1926@gmail.com
(530) 873-0626

**Membership Chairperson**
RJ Myers
(775) 772-7531
rja2reno.com

**To volunteer your layout for a tour or “Timetable” entries:**

**Chief Clerk**
James Firehock
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(916) 505-9692

**Paymaster**
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**SHORT LINE Editor**
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**Membership Chairperson**
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rja2reno.com

**For Golden Spike or NMRA AP Certificate questions:**

**Achievement Program**
Dave Bayless
(530) 887-8880

**Webmaster**
Gus Campagna
gus@campagna.com
(707) 664-8466

**SHORT LINE** is published quarterly by the Sierra Division of the Pacific Coast Region of the National Association. Material may be reprinted with permission.

Articles, photos, tips, or ideas are heartily encouraged and will be enthusiastically accepted! The preferred format would be in Rich Text Format (RTF), with photos as JPEGs, but we will accept any format (from a PC or Mac, MS Word, Simple Text, typed, or handwritten). Send it to your editor by regular mail to **SHORT LINE**, 2260 Cherry Glenn Ct., Chico, CA 95926 or by email to:
chipmeriam@comcast.net If e-mailing put EDITOR in the subject line.

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**From the Superintendent**

**Flailex**

For those of you who may be under the mistaken impression that a Superintendent is somehow omnipotent or even just highly intelligent and never makes mistakes, the recent flailex (that’s a highly technical military term) should dissuade you of that opinion, at least with regard to me. I do apologize to everyone for the confusion over the date of the next meet. The location, of course, was always pretty much a given—Modesto—but I messed up on the church schedule so that the original date had to be changed. Unfortunately, I picked May 16 without thinking and was immediately reminded that this would be during the PCR Convention in Newark. So, after duly checking and making the proper arrangements, the meet now—for sure—will be held on May 2, meeting first at Tom Milam’s place and then, after a lunch break, at Sovereign Grace Baptist Church.

We have a special treat, at least in my opinion, as the meet will open with a layout tour of Tom Milam’s layout in Modesto. His address is 712 Kazimir Ct., Modesto, CA, 95351. We will meet there first at 10am and have two hours to tour the layout, ask questions, and see some operation. Tom is a former Sierra Division Superintendent and his layout has been part of the tour for both regional and national conventions so, if you’ve never seen it before (like me) it should be quite a treat.

The layout will be open for our tour from 10am to 12 noon. After that we’ll take a lunch break and meet at Sovereign Grace Baptist Church from 1–4pm. We have a couple of good clinics lined up: one on scratch building a structure by Chip Meriam and the other on making a simple static grass applicator from an electronic flyswatter by yours truly. Plus, of course, our contests, a short business meeting, and then the raffle. Don’t forget if you have a project in work or recently completed you’re also welcome to bring for “show and tell.” Should be a fun and interesting day. Hope you all can make it.

Let’s all give Chip Meriam a hearty welcome aboard and a big thank you for taking on the responsibility of Newsletter Editor. And in the same breath, an even bigger thank you with a strong round of applause for the terrific job done by Gary Ray, the outgoing editor. Gary has produced not only the print version but also the longer digital color version. They have both been works of art and your efforts these past years are truly appreciated, Gary. Gary’s not leaving us, by the way, he’ll still be the Contest Chair and help out in other ways.

We have two conventions coming up soon – the PCR Convention and the National Convention. The PCR Convention will be May 13–17 at the Hilton Hotel Newark-Fremont. If you’ve not signed up yet, I highly recommend doing so. There is always something new to learn and see. The convention is being hosted by the Coast Division and they have a lot of

*See Super—page 4*
I am excited to announce that I have found a new editor, Chip Meriam, to take over producing the Short Line. As my time as editor was entering its fifth year, I’ve had some family changes that have resulted in my not being able to report on multi-day conventions that I have really enjoyed doing as editor. In addition, more time at home is being devoted to family care. I’ve been an NMRA member for over thirty years, but not really active in Division events until my retirement six years ago. My wife and I went to many national conventions in the 80’s and 90’s, but as our family grew we found other priorities. Coming to four meetings a year is a great way to meet new friends and learn from others. Often, some of us carpool to various events.

One of my goals when I became editor was to take the Short Line into a digital publication to save printing costs and enhance the newsletter. Currently only 81 of 264 division members subscribe to the digital edition after several years of encouraging members to switch. Often my coverage in the digital edition had more PCR and layout tour coverage on the additional 20 pages. Only a couple of times did I put “how to” articles in the digital edition. It takes several days to prepare the extra 20 pages that only 80 people are reading, so I will suggest to Chip that perhaps both editions should be the same layout. Please support Chip by sending him lots of articles.

I really appreciate all the friends and fellow hobbyists that I have met as editor and as a regular Division participant and will continue on as Contest Chair. I hope to see more new faces at the upcoming meets as we move around our large geographic area: May will be in Modesto, August in Reno, and October in Chico. Hope to see you there.

Gary

“Hopefully someone will be willing to step forward to eventually become editor of the Short Line.”

So read the plea from Gary Ray in the February Edition.

Gary has been at the helm of this divisional herald for the past five years and has been doing a bang-up job. He has taken a little one page info sheet and developed it into a digital publication worthy of standing shoulder to shoulder with any other divisional newsletter in the NMRA. We owe Gary our gratitude and congratulations on a job well done. Gary, on behalf of the Sierra Division Membership, THANK YOU!

With that, Gary will be turning the reins over to me as of, well, a few months ago. Gary and I have worked together to get this issue out. I tackled the editing and layout, and Gary took care of printing and mailing the printed version as well as posting the digital version on the internet. By the time the next edition comes out, I hope to be able to handle the printing, mailing, and web posting also. Then Gary will be free to devote more of his time to family care, as he noted in his message.

I come to you from the humble beginnings of a toddler who spotted the similarity of the wheels of a Southern Pacific freight train to those of his older brother’s Lionel Electric Train. My fascination with railroads, big and small, has lingered ever since. I’ve spent most of my days in Chico, CA. I worked in a family owned retail business for about seventeen years until the operation closed its doors for the last time in 1986. A brief hiatus from the daily work routine allowed me an opportunity to complete a college degree I had started fourteen years earlier. I have been in the real estate appraisal profession for the past twenty six years and currently work as a Senior Property Appraiser for the Glenn County Assessor’s Office. I first joined the NMRA in 1992 and have remained active since 2000.

When I read of Gary’s desire to find a replacement I thought of two things: First, I wanted to become more active in the NMRA – particularly at the local level. This would be just the ticket and motivation for me to do exactly that. Second, I wanted something like this to do when I retire in a few years. Again, just the ticket.

I look forward to producing many more issues of the Short Line and the camaraderie ahead as an active participant in the Sierra Division.

I’ll see you in Modesto on May 2.

Chip Meriam, TNNG (the new newsletter guy)
terrific layouts in their division, many of which will be on the tours and some will be available for operation. For more information visit the website: http://www.pcrnmra.org/conv2015/index.html. The National Convention comes to the west coast only every few years. This year it’s being held in Portland, OR – a hop, skip, and a jump up the coast—so to speak—on August 23–29. It is always heavily attended because there is so much to see, learn, and do. For more information and to register visit the website: http://www.nmra2015portland.org/.

Once the PCR Convention in Newark ends, we need to already be at work on the next one which we, Sierra Division, are hosting. This cannot be done without support and help from all members. Please contact Scott McAllister (scooter923@att.net) or myself (jimcol@charter.net) if you need more info or wish to volunteer to help. Scott has already got the convention site setup and the contract is signed – it will be held at the Doubletree Hotel in Modesto from April 20–24, 2016. The theme is “Taking It to the Streets.” Scott will be putting out more information in the near future.

Looks like it’s going to be a busy, model railroading spring/summer. Good, that’s what we like, right? See all in Modesto.

**Lighting** FROM PAGE 1

I have previously made, and am now using this type of current pick-up wipers with numerous applications for sound and other type lighting systems on two axle cars. I found it to be highly reliable and certainly inexpensive

I then constructed a prototype circuit board using Jim’s design. This drawing represents my interpretation of Jim’s sketch.

I successfully tested this circuit using a short length of the LED strip which Phillip had obtained for me. Unfortunately, this circuit board proved to be too large for the small USATC caboose cabin. Ultimately, however, I did install same into a German caboose.

This is a picture of the circuit board which I had constructed:

The dimensions are: 1.47” length X .87” width X .74” height. Someone more experienced in electronics might be able to reduce the size of this assembly.

This is a short length of the light strip containing 300 LED’s which I use. It is furnished in coil form and it can be cut to any desired length. The strip is 8 mm wide. It features an adhesive backing which is protected by a peel-off paper strip. Except for about 50 LED’s used already, the track powered lighting circuit board did light-up the entire coil of the remaining 250 LEDs!!!

Towards the end of my report I will present a complete bill of materials, sources and prices.

Being unable to install the track current powered circuit board into the USATC caboose cabin, I connected same to a short length of the LED strip and mounted it in this larger German Federal Railroad (DB) caboose.
I noted that the LED strips require 12 volt direct current. Discovering in my scrap box a totally defective wireless garage door opener, which also had been powered by 12 VDC from “A23” batteries, I decided to salvage its battery holder and use it in lighting the caboose. Testing a short LED strip with an “A23” battery proved to be successful. Reducing the size of the plate on which the battery holder is mounted allowed this assembly to be installed in the USATC caboose. In order to be able to control this circuit, I also installed a magnetic latching reed switch, which very effectively turns the lights on or off. An important caution: the switch is contained in a miniature GLASS VIAL and, therefore, must be handled extremely CAREFULLY!!!!!!

I presume that it will be a long time before the three tiny LED’s will exhaust the “A 23” battery.

Since the “A23” batteries have the same diameter as “AAA” batteries but are shorter, “AAA” battery holders that have been reduced in length are also suitable for “A23” batteries.

THE BILL OF MATERIALS

Radio Shack 276-0268  Single wave bridge rectifier  $1.49
Radio Shack 271-1118 1Kohm 1/2 watt resistor—5 pack 1.49
Radio Shack 272-1030 470uF electrolytic capacitor 1.49
Radio Shack 276-150 Circuit Board  2.49
Any Store  A23 battery  $5.00 +/-
Hardware or Hobby Stores .020 phosphor bronze wire or similar (prices vary)
E-bay  LED strip - one coil of 300 (!)  $5.99
http://www.ebay.com/itm/201212942609?_trksid=p2060778.m2749.12649&ssPageName=STRK%3AMEBIDX%3AIT
E-bay  Magnetic reed switch (10 pack)  $22.00  Since I purchased mine, the price was increased by 130 per cent to the one shown above.


Editor’s Note: this offering has expired on eBay but the following link appears to be a new listing for the same item:
http://www.ebay.com/itm/Latching-Reed-Switches-lot-of-ten-10/231506167297?_trksid=p2047675.c100011.m1850&_trkparms=aid%3D222007%26algo%3DSIC.MBE%26ao%3D1%26asc%3D20140602152332%26meid%3D9ea0f869797d4507b0fa12d624074085%26pid%3D100011%26rk%3D1%26rkt%3D1%26sd%3D231446029150
CONCLUDING REMARKS:

I am pleased with these circuits - especially since they represent a low cost alternative to the expensive commercial products. They provide means to illuminate HO scale odd sized or shaped cars, and perhaps even illuminate some N scale models. These systems introduce us to some new dimensions in our great hobby by giving us lower cost illumination capabilities here-tofore not envisioned.

I hasten to suggest that some Maerklinist might investigate a track powered circuit for possible use on digital alternating current layouts, since such a type of circuit utilizes a rectifier and it is not polarity sensitive on digital direct current layouts. Additionally either track or battery circuits would also be an ideal inexpensive means to provide lighting of structures and, perhaps, even some stationary vehicles.

Finally, I very much appreciate the immediate responses to my mere inquiries of Jim Petro and Phillip Simpson by providing me with unsolicited and most welcome helpful assistance. The outcome of this undertaking is proof of Gary Ray’s proclamation in the NMRA Sierra Division News Brief:

Model Railroading is the “WORLD’S GREATEST HOBBY”

Klaus G. Keil
Sacramento Chapter
European Train Enthusiasts
The Op Session ran from about 9:30 until Noon, after which we joined the society members for a barbecued hot dog and hamburger lunch. Our express thanks to the cooks and the club for providing that!

We reconvened at the First Christian Church for an afternoon session featuring a modeling contest, a photo contest, a show-and-tell, a short business meeting, and Scott Inman’s superb presentation on the California Sugar Beet industry, the railroads that served it, and modeling tips for the unique Southern Pacific sugar beet gons.

The Modeling Contest Winner

Jim Collins, Superintendent, Gives an Answer

About 25 to 30 In Attendance

THE MODELING CONTEST WINNER

JIM COLLINS - CATEGORY: WEATHERED LOCOMOTIVES
THE PHOTO CONTEST WINNERS

CATEGORY: FAVORITE RAILROAD PHOTOS

First Place - Phill Simpson

Second Place - Phill Simpson

Third Place Tie - Gary Ray

Third Place Tie - Chip Meriam
# PCR/NMRA
## The Club Car 2015
### PCR Convention
Newark/Fremont Hilton  
39900 Balentine Drive  
Newark, CA  
May 13-17, 2015

### Please Print

**Registration Form**

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### Registration Type (Please check one)

- [ ] Model Railroader
- [ ] Non-Rail

### NMRA Region or Club Affiliation

### Available to Volunteer on

- [ ] Wednesday
- [ ] Thursday
- [ ] Friday
- [ ] Saturday
- [ ] Sunday

### Times:

### I can help more. Have a Volunteer Coordinator contact me

### Primary Scales and Interests

- [ ] HO
- [ ] N
- [ ] Z
- [ ] S
- [ ] O
- [ ] G
- [ ] Narrow Gauge
- [ ] Other:

### ADDITIONAL REGISTRANT LIVING AT SAME ADDRESS (Use another form if more than one)

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### Available to Volunteer on

- [ ] Wednesday
- [ ] Thursday
- [ ] Friday
- [ ] Saturday
- [ ] Sunday

### Times:

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### Primary Scales and Interests

- [ ] HO
- [ ] N
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- [ ] Narrow Gauge
- [ ] Other:

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### Lawrence Livermore National Laboratory Tour – U.S. Citizens, by April 24

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### Lawrence Livermore National Laboratory Tour – NON-U.S. Citizens, by March 16

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### Payment by

- [ ] Check**
- [ ] Cash (Use website for credit card or PayPal)

**Make checks payable to: “PCR The Club Car”  
No Refunds After April 22, 2015**

TOTAL

©2015-Registration-Form v1.6.docx
SIERRA DIVISION
Next Meeting: Saturday, May 2
1st Stop: 10:00 to 12:00
Tom Milam
712 Kazmir Court
Modesto, CA
(see maps below)

2nd Stop: 1:00 to 4:00
Sovereign Grace Baptist Church
2766 N. Dakota
Modesto, CA

June 10 for the July issue
Sept 10 for the October issue
Dec. 10 for the January issue
March 10 for the April Issue

Next Meeting: Saturday, May 2
1st Stop: 10:00 to 12:00
Tom Milam
712 Kazmir Court
Modesto, CA
(see maps below)

2nd Stop: 1:00 to 4:00
Sovereign Grace Baptist Church
2766 N. Dakota
Modesto, CA

May 2 Contests
MODELING ~ Non-Revenue Cars
PHOTOS #1 ~ Black & White Prototype
Photos need to be at least 5” x 7” but not over 8” x 12”.

May 2 Afternoon Presentations

Scratchbuilding a Municipal Water Co. Pump House
Presented by Chip Meriam

Fly Swatters? - Nope, Static Grass Applicators
Presented by Jim Collins
(photo courtesy of Model Railroad Hobbyist)
www.model-railroad-hobbyist.com
This is the second part of the Northern Nevada Railroad Tour coverage. The first part appeared in the February, 2015 issue of Short Line.

Again, many thanks go to Jim Petro for again organizing the tours. The two day event is sponsored by the Sierra Division.

Many thanks to all those who opened their homes for the tours. Parts of the layout descriptions are borrowed from the tour guide. Next fall, consider a trip to Reno to view the many great layouts and the Nevada State Railroad Museum.

Jim’s HO layout is completely finished in it’s own room with an adjoining workspace. There are lots of trains running on this layout that depicts the Reno and Feather River Canyon local.
Bob Norwich

Bob’s fictional On30 layout has over 50 buildings in the half of the finished part of the layout. This post war Nevada town has fallen on hard times. It uses DCC and is 18’x24’. Bob moved to this new location only a year ago.

The amount of detail in the scenes is wonderful. It’s easy to spend a lot of time admiring Bob’s completed scenes.
Klaus Keil, this month’s featured author takes a closer look at Bob’s craftsmanship.
Jim Petro

Jim is recreating the Denver and Rio Grande in Denver featuring the Joint Line south towards Pueblo and the climb into the Rocky Mountains. It features a large yard and passenger station with named trains of the 50’s. Jim is always busy adding new structures.

Car card operations nights are held regularly. The layout is controlled by Digitrax DCC.

Jim is the person we have to thank for organizing the Northern Nevada Railroad Tours the last several years.
Jim Price

Jim’s layout is in three rooms that will eventually depict the Southern Pacific from Oakland to Reno. Much of the work in Oakland is done, with a separate room housing the Oakland Mole. The layout uses NCE DCC. Jim handlays his switches to meet the situation.

Jim has the best of two worlds, off time he works on the layout and work time he is behind the throttle of a UP loco. He designed the layout as a teen, long before he built the house where it is located. I have done my best to photograph the track plan with each drawing being several feet long. (see ladder in center of room below) Eventually the layout will be double decked.
LOWER LEVEL—MAIN ROOM  Benchwork has not yet been built for the center island.

FUTURE UPPER LEVEL—MAIN ROOM
Paul Martinovich

Paul’s N-scale layout is highly detailed. It depicts Eastern California railroading in the 1950’s. Paul also has some highly detailed scratch-built and modified cars on the layout. Both steam and diesel power from Southern Pacific and Western Pacific travel WP’s Route, including Reno and Portola.

(Note: The author was so excited about photographing this layout that he forgot to snap a photo of the builder. Sorry, Paul!)
Patrick Mobley

Patrick’s N scale Great Basin and Sierra models the high Nevada Desert, Sierra Nevada mountains, and the California foothills in the early 20th century to the transition era. The layout is about 20’ x 20’. One section has a large canyon with tall trestles based loosely on the Feather River Canyon. Control is with NCE DCC. There is a working stamp mill. Many structures have parts made on Patrick’s CNC mill.
Aztec Manufacturing Co.
John Claudino

Take a look at all the sophisticated machinery that John uses to make those N scale loco frames and the N to G scale track cleaning cars.
Carson City Railroad Association

The club layout is located in Mills Park and welcomes new members. They have a medium-size HO and HOn3 layout wired for DC and DCC. They also operate the 2 foot gauge train in Mills Park for rides. They get to use the clubhouse as long as they operate the ride. Here’s your chance to be an engineer. Many thanks to Doug Hutchinson (right) for being my tour guide.