

# GRAND CANYON MODEL RAILROADERS MAIN LINE

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## **PRESIDENT'S MESSAGE** by Bill East

The "O" gauge set up by Dallas Dixon was our layout of the month due to problems in getting the "O" gauge modules at the meeting that month. Thanks Dallas for pinch hitting in May. We had a guest there at our May meet, Don Cammer. We showed off our military trains for the theme of this month's show and tell. John Draftz showed his HO military train and I showed an "S" gauge Pennsylvania flat car with two Sherman tanks as they were put out by ACF of Bowids, PA. The meet ended with an auction.

A motion was made to change the February Train Meet to the Tom Stange Train Meet. The decision was made to keep the old meet name and make a Tom Stange award to be given out at the Christmas Party for member of the year. On another memorial matter, David Brown was selected to gather names for the Bill Schulte memorial plaque on the trailer.

At the June meet, the theme will be the American Flag. So bring in you trains with the American Flag on them and share them with the club. We will have our normal 4th of July hot dogs and chips. Dale Downing has requested that we not serve apple pie due to the mess.

I look forward to all of you being at our June meet on the 25th.

Keep those trains running

## CALENDAR

GCMR meets are held at 9:00am in the Parish Hall of Our Saviour's Lutheran Church at 1212 E Glendale Avenue in Phoenix, located on the north side of Glendale, just east of the traffic light at 12th St. It is easily reached off the Glendale Exit of either I-17 or SR 51. Go east from I-17 or west from SR 51 to 12th Street.

June 26 - GCMR Meeting - Our Saviour's Lutheran Church July 24 - GCMR Meeting - Our Saviour's Lutheran Church August 28 - GCMR Meeting - Our Saviour's Lutheran Church

#### OTHER TRAIN EVENTS

July 24 - In The Heat Swap Meet - Phoenix 9:00am -1:00pm North Phoenix Baptist Church located at Central Ave. and Bethany Home Rd. August 14 - Prescott - Beat the Heat swap meet and layout tours.



May meeting: talk'in bout trains

## MAY MEETING NOTES

+ The Board felt that the swap meet name should not change as suggested in a previous GCMR meeting. Tom Stange and others will be honored internally such as on the plaque on the trailer. Names suggested for this internal honor are:

- a. Tom Stange
- b. Millard Smith
- c. Frank Koenig

There was a discussion of who should be honored and what the criterion should be to have such an honor

Bill East nominated Dave Brown to collect the names. He accepted.

Ken Barnes suggested that the trailer memorial be restricted to club members whose membership dates from Bill Shulte's death. Motion was made to that effect and passed.

+ Next month will be Hot Dogs, soda and chips. Dale Downey asked that we forgo the apple pie due to the lack of interest in past years and the mess associated.

+ Dave Brown brought up that the O gauge module group is not as dedicated to the module as the S gauger's. Many comments from the group on the issue. John Drafts asked the O gauge group to meet after the meeting.



Olive and goodies (Bob too!)

#### New Business:

+ Bill East announced that the trailer will be set up at one of the summer monthly meetings to see what the members have done to improve the layout. Providing power to the trailer at a meeting would require long extension cords or a generator. The trailer has been modified to fit a standard garage opening. + Our guest, Don Gorman, shared his train background and joy of model trains.

#### Show and Tell:

+ John Draftz shared an HO set that he purchased in San Francisco and how he was able to get it back on a plane.

+ Bill East shared an S gauge flat car from the 1940-41 era reproduced by S-Helpers.

+ Bob Dennison shared that he saw the prototype of Bill's car in action as trainloads of these cars moved through Ohio during WWII.

+ Paul Boston shared the automated loop that is the prototype for the new P&P public loop that will be included in the new model railroad building at McCormick Stillman RR Park. Opening is projected at Rail Fair on October 9 and 10, 2010.

An auction followed the regular meeting

## WORKING THE MAGIC

by Paul Boston

Making things work without those darned track contacts

Ordinary things like crossing signals, signalman accessories, watchtowers, etc. have been produced for more than half a century and more are being introduced all the time. Since these things were designed for kids, the instructions were clear on how

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**Board of Directors** 

to connect the wires, but lacking in giving the kids an understanding of what's going on inside the accessory itself. Because we are all just kids at heart a little understanding would guarantee more fun with your train layouts.

Every electrical device needs two wires to make it operate. If you want to turn it on and off conveniently a switch is just the ticket. All you need to do is cut one of the two wires and attach the two poles of the switch to the two cut ends of the wires. Can you imagine the number of people who don't know that? I am always amazed!

On our transformers there are usually two types of power available. One that can vary in voltage is used to power the train, the other is a fixed voltage meant for accessories. The interesting thing is that the necessary second wire to everything is common to both the power and accessory power posts on the transformer. That means that if you run one wire from an accessory to the accessory post, the other wire can come from the outer rail of the track, assuming you have wired the track in the usual procedure. Of course that would mean that the accessory would be always on whenever the transformer is on, or just plugged in on many transformers. Not a real desirable result for a crossing gate.

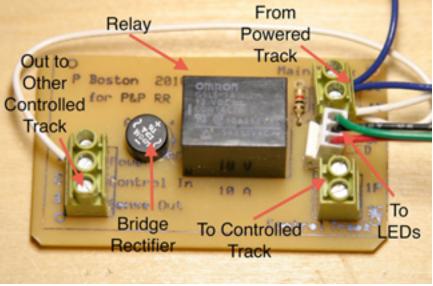
However, there is a really neat way to make an invisible switch. The track itself can become a switch that is activated by the passing train. All that is needed is to make the two outer rails electrically isolated from each other, connect the isolated rail to the accessory, and allow the train wheels to be the switch by conducting the electricity from the outer rail that *is* connected to the transformer to the isolated rail. Metal wheels and axles are excellent conductors, but plastic wheels are not, so the switch trick won't work on cars that have plastic wheels (some Thomas cars have plastic wheel sets).

Here's how to make the isolated rail sections. Start by getting some non conducting track pins for one of the outer rails and insert one in each end of *one* of the outer rails of the section to be isolated. For track like Gargraves that has plastic or wood ties isolating the outer rails from each other is easy since the outer rails are already electrically isolated from each other by the ties. Newer Lionel and MTH track uses strips of metal under the roadbed to tie the outer tracks together, so isolating is just a matter of removing or cutting these connecting strips. Older Lionel type tubular track is a little more difficult but just make one outer rail isolated by bending the rail securing tabs slightly and fitting in a piece of matchbook cover between the rail and the metal tie, then crimp the securing tabs back in place. (Whenever I scrap a piece of track that is too rusted to use, I always save the third rail insulators which can then also be used in projects like this. Just remember that O and 027 insulators are different in size - Ed) Then simply run a wire from the isolated track section to the action accessories second pin. (Remember that you have connected the first pin to the accessory terminal on the transformer.) Now when a train passes the wheels will complete the circuit and switch on the accessory, and it will turn off when the train leaves the isolated section.

Many older action accessories, such as the Lionel semaphore, used a solenoid (electro-magnet) to move something and a spring to send it back to the start position. These accessories perform quite nicely as described above, but other newer accessories may use a motor to move the watchman out of his building. These would leave the guy outside whenever power is removed after the train passes, so a third wire is needed to connect the always-live outer rail to the accessory. That way when the train passes the motor can run to get the guy back inside. Look for the three connections in these devices, and read the instructions since the connectors are often numbered but seldom labeled with their function.

#### Two Trains - One Track

The O gauge demonstration at the May GCMR meeting was provided by Dallas Dixon, Bill Rodgers, and Paul Boston. The purpose was to test a method of running two trains of different speeds on the same track unattended, without "events" (train wrecks!).



Through the magic of three rail, the power to the two trains was turned on and off by using an isolated outer rail section on one side of an oval to control the power to the other side, and vice versa. This magic of three rail is one of the best and most overlooked features of the three rail system.

But before you run out to do this there are a few things to consider. First the engines chosen must have a forward-only lockout feature that allows the loco to run only in the forward direction. Engines with reverse units will cycle their direction when the power is turned off and on, as we will do that, and that will result in "events".

Second, engines with flywheels sill coast to a gradual and rather realistic stop. This will dictate the length of the control section (block). Even moderate length trains will require two or more feet to stop if running at reasonably slow speeds (not Lionel Speed!)

If you are still with me after reading that your engines won't back up, ever, on this loop, here is how it works.

A loop of track is divided into four sections A,B,C, and D using isolation pins in the center rail and one outer rail. The outer rail with the isolation pins will be electrically isolated from the other outer rail. Sections A and C are connected to the variable voltage post on the transformer. Sections B and D are "dead" sections that are powered only when their relay is turned on. Near each isolated section an electrical relay is used to turn the track power on and off. The relay is just a switch that is closed by an electromagnet when it is powered on.

A train in section A turns on the relay that controls section B and any train in that section proceeds. Turning on the relay transfers power from the adjacent always-on track block to the controlled block. Similarly section C controls D. The faster train always arrives when a section is dead and is forced to wait until the slower train chugs into the control section and restores the fast train's power. Sometimes it takes a couple of loops for the fast train to get stopped by the dead section.

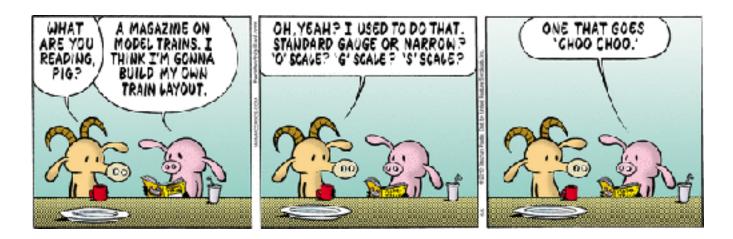
The method is outlined in Peter Riddle's paperback book, <u>Wiring Your Lionel Layout</u>, Vol. 2: Intermediate <u>Techniques</u> and requires only a moderate amount of electrical experience to construct such a system.



Good stuff (oh, and the trains too!)

### A COUPLE OF NOTES FROM JOHN HORVATH

I mention my mostly train and toy train YOUTUBE site for any of us that may have an interest in the video end of our hobby. It is www.youtube.com/user/gjhgjh. Please do visit and comment. There are Hi-railers on UTube. Two of my videos are of my current floor layout. I plan to do at least one more video of my current version of POO RR, a traditional floor layout, before disassembling. Maybe publish the link to my YOUTUBE in an upcoming newsletter?



(John, send it when ready. Actually this is a great idea, several of us post videos of trains or layouts on UTube. How about emailing the editor any you have put up or a favorite of yours. We'll do a future article on them - ED)

Our club has a website. I do not know who is its Handler / Creator. but you can go to it at: www.gcmrr.org . This site advertises our Armory train meet. How about using this site with monthly meeting information?

## FROM BILL RODGERS

Thought you might enjoy this picture of our "new" Treasurer. Bob Prehara had shoulder surgery so he had his assistant help.



The other pic is a test track with automatic controls we setup to run two trains on the same track, the trains never ran into each other, so it worked good. Paul Boston made the control boards and I made the hookup, I think we work well together!





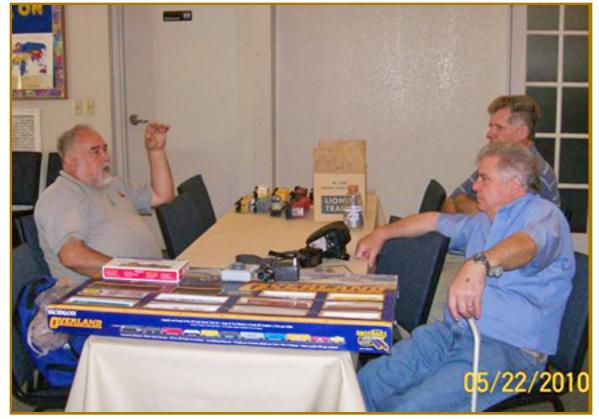
Model Railroading History: From August, 1951. It looks like model railroad companies were experimenting a bit with come on's back then. So, would this sell you Atlas track, especially if it is "curvable"?

Please note: Dallas Dixon's email address is incorrect in the membership list. It should be: wddmgi@aol.com

#### WINNERS!

Lionel NY NH & H Boxcar	Bill East
Lionel Starter Box car	Jack Eaton
Lionel UP flatcar w load	Ken Barnes
Lionel UP Tank car	David Wildman
Lionel Gondola	Olivia Prehara
Horseshoe Curve photo	Bill Rodgers
Mystery Raffle	Bob Dennison
\$50 Drawing	Bill Rodgers

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The monthly GCMR meetings let folks enjoy the company of their fellow hobbiests, maybe pick up a train item or win one. Here in Wayne Ross's photo, Dave Brown and Brian Jewell chat with visitor, Don Cammer. Have you been to a meeting recently?