



Sunrise Herald

March 2014 Volume 7, Number 3

Sunrise Division Officers

Superintendent.....Steve Schweighofer
Asst. Superintendent.....Frank Germo
Secretary.....Stewart Jones
Treasurer.....Bill Johnson
Program Chair.....Gary Myers

In the Herald

Notes from the Secretary.....	1
Next Meeting.....	1
Upcoming Clinics.....	1
Upcoming Tool Times.....	1
Show and Tell Themes.....	1
March Meeting Notes.....	2
March Show and Tell.....	2
March Tool Time.....	2
March Clinic.....	4
Module Report.....	5
Denver Union Terminal Update.....	5
Supporting Model Railroad Clubs.....	7
NMRA Achievement Program Awards.....	7

Notes from the Secretary

We continue with our series of NMRA Achievement Program requirements. We hope that it will inspire many of you to begin working on one or more AP awards along the way toward becoming a Master Model Railroader. Note that we are planning clinics and tool time in advance, but we still have only the first half of the year covered. If any of you have special skills or interests you would like to present to the group

please step up. We would like to hear your expertise.

Next Meeting

Our next meeting will be Thursday, April 3, at Holy Love Lutheran Church, South Chambers Road, and we hope to see you there. For our April meeting we have planned:

Opening Video:

Tool Time: Layout Planning Tool – Jim Laird

Show ‘N’ Tell: Sheep

Clinic: Basic Layout Wiring – Stewart Jones

Upcoming Clinics for 2014

May: Layout Tours: Stewart Jones, John Griffith, Bob Rothgery, Dennis Hagen
June: World War II Railroading – Ernee Edwards
July: Open

Upcoming Tool Times for 2014

June: Inexpensive Drilling – Dennis Hagen
July: Parts Storage – Gary Myers

Show ‘n’ Tell Themes for 2014

Apr 3 - Sheep

May 1 - No Meeting, Offsite Layout or Museum Tour instead
Jun 5 - Steam/Diesel MOW
Jul 3 - Naked Ladies
Aug 7- Residential Structures
Sep 4 - Agriculture
Oct 2 - Sports
Nov 6 - Mail
Dec 4 - Switcher Engines

March Meeting Notes

Steve Schweighofer opened the meeting promptly at 7:15 with introductions. There were 25 members present. Gary Myers made a request for clinic topics and presenters. Rich Flammini made a pitch for a model railroad museum in Phoenix. They have a fairly complete O scale layout and an HO scale layout that needs a lot of work for those of you who don't mind commuting to Phoenix. There were no further announcements so we proceeded immediately to Tool Time. After Tool Time we had Show and Tell. This month's theme was Gas Stations. Most entries were photos of unusual fueling stations with one actual model. Following a short break, Dick Hunter presented an hour-long video produced by Woodland Scenics describing how to build a layout using their Terrain System materials. Following the video we adjourned for pie and coffee.

March Tool Time



Bob Hochstetter described Resistance Soldering. This technique uses a low voltage transformer and several kinds of electrical probes to create heat between them. The probes are placed against the materials to be soldered, the solder is positioned, and when a foot pedal is depressed the parts are instantly heated to produce a good solder joint. This method is much faster than using conventional soldering irons, but the cost of the equipment remains its primary drawback. He stated that there are only two manufacturers of resistance soldering equipment, PBL and American Beauty. Micro-Mark carries the American Beauty line with about five different wattage ratings and a range of prices. They also sell their own brand at a considerably lower price.

March Show 'n' Tell



Frank Germo brought in this N scale module containing a gas station.



John Kerbaugh showed this photo of a Texaco gas station on his HO scale layout

Ernee Edwards brought a selection of photos of prototype service stations. The period must have been shortly after the end of World War II. Depending on your era, these photos might provide some inspiration.



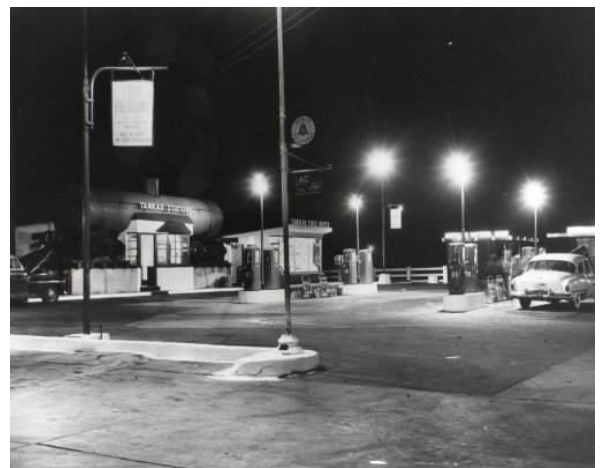
This station featured a B-17



Another airplane motif



The pumps are long gone, but the “fuselage” appears to have been the business office



This Tankar station was in Portsmouth, Virginia. A retired tank car provides the fuel storage



Here is another Tankar design



This is Ernee's model of a Tanker station. I'm not sure how OSHA would view a fuel tank right overhead today.

March Clinic

Dick Hunter presented the clinic describing how to create a layout using Woodland Scenics materials.



Woodland Scenics has produced an excellent video describing how to build a layout quickly using their SubTerrain System materials. These materials provide a variety of foam and support products that can be assembled much faster than conventional materials and methods. These materials include risers, glue gun and glue sticks, form tack glue, plaster cloth and foam putty and hot wire foam cutters for shaping foam. The video outlined a five-step process.

1. Begin with plywood board and a

trackplan to fit the board. Lay actual track on the board and secure with foam nails. Once the track is located, mark its location with a marking pen, then remove the track.

2. Install risers over the track locations and secure with hot glue. Risers are available in 1/2, 1, 2 and 4-inch heights. Grade risers also come in 2% and 4% grades. Fill in gaps with scrap foam. Mark wiring locations now.

3. Install vertical foam profile boards (available from Woodland Scenics) around the perimeter of the layout and shape with a hot wire cutter. Mistakes can easily be corrected with scrap foam and hot glue. Cut holes in the profile boards to allow access to hidden tracks. Install the wiring at this time.

4. Woodland Scenics sells foam sheet boards in 1, 2, 3 and 4-inch thicknesses. Shape and install these around the track risers to provide terrain at the appropriate level. Use scrap risers to raise the terrain sheets where necessary. Shape and glue lateral profile foam boards to the perimeter profile boards to form the base for hills and mountains. Woodland Scenics sells a heavy-duty "newsprint" that can be wadded and placed between the lateral profile boards to shape the terrain. Now cover all areas of the layout with plaster cloth. After wetting, this cloth has a smooth and bumpy side; lay it so that the bumpy side is up to allow you to smooth it once the cloth is wet and in place.

5. Before laying the track install the ballast board material which can be glued directly to the plaster. Once that is in place, re-lay the track, secure it to the roadbed and solder the wiring in place. Make a final running check to ensure that your trains will operate smoothly. Except for detailing, your layout is now complete, and it took less than an hour??? (Well, it did in the video!)

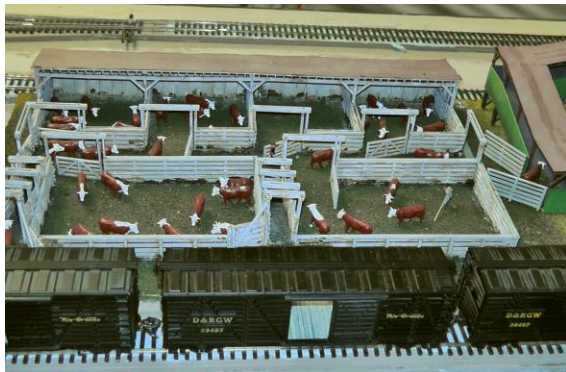
Woodland Scenics also sells paving tape that can

be laid along the edges of roadways. Once in place paving plaster can be spread between the tape edges to form a smooth roadway. Final detailing includes ballasting the track, painting the landforms, applying various turf and foliage materials and adding structures.

Dick distributed Woodland Scenics brochures that describe the materials that were used in the video. If you missed the meeting and would like the brochure, I suspect some will be available at our next meeting.

Module Report

March 1st and 2nd was the Spring Rocky Mountain Toy Train Show at the Denver Merchandise Mart where we exhibited our modular layout again. Because of the cold weather and the short time span since the last show, we had little time to make improvements. Most of what we accomplished was adding new buildings.



Cattle pens for the meat-packing plant salvaged from the old modular layout



A town is being organized on Modules 4, 5 and

6



Two F7 units lead a hotshot freight over the river



An 0-6-0 smokes up the truss bridge across the river

Denver Union Station Update

On March 19, your editor was able to join a tour of the new Denver Union Station facilities. This

project is nearing completion on-time and on-budget. The station will not generally be open to the public until July, but AMTRAK is already using the station. Here are a few glimpses of what is in progress and what has been completed.



Tracks 1 and 2, immediately northwest of the terminal. Track 3 stub-ends next to track 2 in the distance. These tracks will be dedicated to the line running to DIA. The overhead electric lines have not been installed yet, but this line is not scheduled to open until 2016. The overhead canopies replicate the roof at DIA.



Tracks 4 and 5 are dedicated to AMTRAK and are just to the northwest of tracks 1-3. These tracks are already in use. Note that these tracks are also at a different level than the RTD tracks to the right. To access the

station itself, passengers may walk to the 16th Street end of the platform and around or they may take the elevators seen in the distance to the lower level (which is the bus station) and cross over to the station where elevators or escalators will bring them back up to street level. Tracks 6, 7, and 8, to the far left will be dedicated to future commuter traffic and are not in service yet.



Two views of the interior of Union Station. The old wooden benches will not reappear. Instead it will be furnished with comfortable seating, much like a plush hotel lobby. There will be a bar along the far wall that will feature Colorado craft beers. This design is intended to give

travelers a great impression of Denver as they depart the train from DIA. The two wings of the station are being converted into hotel rooms on the second and third floors that will be operated by the Oxford Hotel. The first floor will be commercial space with a number of restaurants.

Supporting Model Railroad Clubs

(This item was provided by a railroad club in San Diego)

Sat Mar 1, 2014 11:58 am (PST)

Dan, et al:

Here in San Diego we do several things to support local clubs. Here are some examples: We have meets and/or layout tours at their locations, or invite modular clubs to display at a non-aligned venue; We provide a link to the club web page (if they have one) in our quarterly Division publication, The Mail Hook; We list upcoming club activities in the Calendar of Events pages in The Mail Hook, with any applicable admission charges, hours, and contact information for readers to find out more about the event; We solicit input from clubs for the Club Car section of The Mail Hook, where clubs can talk about what they're doing; and We occasionally re-publish articles from club newsletters, with credit, in The Mail Hook. All these things increase a club's exposure, at no cost to them. In return, we get an occasional venue for meets, more participation by club members in Division activities, and sometimes new NMRA members from non-100% clubs.

Gary Robinson
Editor, The Mail Hook

The NMRA Achievement Program Award

Model Railroad Engineer - Civil

The requirements for Model Railroad Engineer - Civil may look long and complicated, but they really are not. The reason that they are so long is to offer you more options for meeting the requirements.

Remember - don't read more into the requirements than is there.

To qualify for the Model Railroad Engineer - Civil certificate:

1. Prepare one original scale drawing of a model railroad track plan, identifying overall size, scale, track elevations, curve radii, and turnout sizes.

Before you start drawing your layout plan, look at requirements B & C to see what features you are going to want to incorporate in your track plan.

Remember: you do not need to build everything on this plan, just the minimum required part of it. The plan should be neat and legible, but it does not have to be in ink.

You should also consider the requirements for Model Railroad Engineer - Electrical, and Chief Dispatcher when planning your layout - it is much easier to include the requirements in the planning stage than to go back and add them later.

This plan must include:

- A. Adequate terminal facilities for handling freight and/or passenger cars

This will vary, depending on the nature of your layout. Keep in mind that a railroad needs to have a reason to exist, other than to provide modelers and railfans something to look at! There needs to be someone that will pay for it to haul something from one place to another, be it lumber, coal, fruit, passengers, etc. (and usually more than one thing). Your plan and your layout should reflect this. Remember, you don't necessarily have to build these facilities, just include them in your plan. This is to show that you know what the design of a logical terminal facility would look like.

- B. Adequate terminal facilities for storage and service of motive power

This doesn't mean you need a turntable with a twenty stall roundhouse. For a small operation, a simple engine house with a fueling track may be sufficient. It should be consistent with the theme of the rest of your plan. Again, remember that you don't necessarily have to build these facilities, just show that you know how to plan one.

- C. A minimum of one mainline passing siding

- D. Four switching locations, not counting yards, interchanges, wyes, and reversing loops

These would typically be spurs for setting out or picking up cars. Again, each one should have a purpose.

- E. Provision for turning motive power (*except for switchbacks, trolley lines, etc.*)

A turntable, wye, or reverse loop, which actually changes the way that the motive power faces. Not just a loop of track that sends it back through the scene in a different direction on another track.

- F. Provision for simultaneous operation of at least two mainline trains in either direction.

Remember, you don't have to actually build this, just show it on the plan.

2. Construct and demonstrate the satisfactory operation of a completed section of the model railroad and track work described in #1. Containing at least 25 linear feet in Z, N, or TT scale,

or 50 linear feet in HO or S scale, or seventy five linear feet in O scale, or 100 linear feet in G or #1 scale, or other scales in proportional relationship to HO scale, with appropriate ballast, drainage facilities, and roadbed profile, which may contain spurs, yards, etc.

Notice that last part - 50 feet of track, not 50 feet of main line - all operational track counts. While there is some element of scenery (appearance) to the track work and ballasting, the greatest number of points come from Construction and Conformity. In other words, what you need to show is that you know how to build track following prototype practice.

The track work must have examples of six of the following features:

- Passing Siding
- Spur
- Crossover

A crossover is a diagonal track connecting two parallel tracks.

- Reversing Loop
- Wye
- Simple Ladder

A ladder should have a minimum of 3 tracks

- Compound Ladder
- Turntable

- Transfer Table
- Super Elevation

Banking the track and roadbed on a curve.

- Simple Overhead Wire - *A single overhead wire (such as on a trolley system)*
- Compound Overhead Wire (catenary)

One wire which carries the power, with another wire above to support it (such as on high-speed electrical lines)

- Scale Track

A track with a scale for weighing cars.

- Cog Railway Track
- Coal Dump Track

Could also be for dumping something besides coal

- Ash Pit
- Service Pit Track
- Grade Elevation

This is a lot simpler than it sounds: it's any change in the slope of the track, like at the top or bottom of a hill. It's to show that you can make the transition smoothly between grades.

- Other _____

3. Construct for Merit Judging, scratch built scale models of any three

of the following, and demonstrate their satisfactory operation:

- Turnout point or stub
- Crossover
- Double Crossover
- Single Slip Switch
- Double Slip Switch
- Crossing
- Gauntlet Track
- Gauntlet Turnout
- Dual Gauge Turnout
- Gauge Separation Turnout: Narrow gauge splitting off from dual gauge.
- Double Junction Turnout

One set of parallel tracks diverges from another.

- Three-Way Turnout
- Spring Switch
- Operating Switch in Overhead Wire
- Other _____

Commercial frogs are not permitted to be used in any of these items. These models may be built and demonstrated as part of the layout or separately.

Remember that these items do not need to be part of your layout - they don't even need to be the same scale or gauge. They don't even need to be part of a layout at all. You can build them on separate pieces of wood. They just have to be big enough and with enough track on

either side to "...demonstrate their satisfactory operation. " This means that a unit of motive power must be able to travel through them (along all the possible routes) under its own power.

It is **NOT** sufficient to push or pull a car through by hand.

4. You must win a Merit Award (at least 87.5 points) with the items in section 3 above.

Notice that you only have to win a Merit Award with the items in section 3 - the trackwork items in section 2 don't have to be judged at all, except to demonstrate that they work. They must be available for examination by the judges, however.

5. You must submit a Statement of Qualification (SOQ - available from the Regional AP Manager) which includes the following:

- Attachment to the SOQ showing the track plan required in Section 1 above. The attachment should include:
 - Identification of all scratch built features
 - All commercial components used
 - Materials used in building the model

(This is just a list of what was used - you don 't have to try and figure out how much)

- Description of the track work features, methods of construction and identification of commercial components used in Section 3.
- Verification of the Merit Awards

(Photocopies of the certificates or signed judging forms.)

- Witness Certification showing that each of the above models meets all applicable NMRA standards.

Further Information

Contact National Achievement Program General Manager, Paul Richardson, MMR achiev@hq.nmra.org, or your Region or Division Achievement Program Manager for more information.

Also refer to the article "Achievement Program Skills and Service Awards", NMRA Bulletin, September 1992.

Forms available for this category:

- SOQ Form: (PDF)
- Record and Validation form: (PDF)
- Judging Form: (PDF)