Sunrise Herald

April 2016 Volume 9, Number 4

Sunrise Division Officers

Superintendent……..…Steve Schweighofer
Asst. Superintendent……..…Bob Rothgery
Secretary……...……..Stewart Jones
Treasurer……..…Rich Flammini
Program Chair……..……Gary Myers
Division AP Chair……...…….David Bol
Youth Coordinator……...Ernee Edwards
Education Chair……..Stewart Jones
Modular Layout Chair……..……Don Francis

In the Herald

Next Meeting

Our next meeting will be Thursday, June 2, 2016 at Holy Love Lutheran Church, South Chambers Road at 7:15.

Upcoming Clinics for 2016

June – Using micro LEDs for Locomotives
July - TBA
August – Adding dimensions to around-the-wall layouts
September – Fast Clock Operation: everything you know about fast time is probably wrong
October – Regional Convention
November – Military railroads
December – Christmas treats and movie

Upcoming Tool Times for 2016

June – Magnetic Tools
July - TBA
August - TBA
September - TBA
October – Regional Convention
November - TBA
December - TBA

Upcoming Show 'n' Tell Themes for 2016

June – Bunk/Kitchen Work Cars
July - 1960 – 1969 Locomotives
August – Shops/Retail
September – RR Pump Houses
October – Regional Convention
November - Military
December – Water Craft//Boat/Ships

May Meeting Notes

Bob Rothgery, Assistant Superintendent opened the meeting at 7:25 with the steam whistle. There were 25 members present. We started

with our usual introductions: names, scale, prototypes modeled and any remarks anyone wished to make about their modeling.

Bob Rothgery, Assistant Superintendent conducted the May meeting

Gary Myers announced the new officers for the Region. The officers are:
President – Denny Krausman,
Vice President – Jeffery Weymouth,
Secretary – Jack Haptonstall,
Treasurer – Donald Francis.
The new directors are: Robert Allen, Blaine Holbrook, Greg Long.
Rich Flammini raised the question about whether we would like to have a Sunrise Division auction. A show of hands revealed that a few people were interested. Rich's proposal is included below. Dick Hunter brought in all new items for the swap table. He expressed hope that all items would disappear since he did not intend to bring them in again. There was to be a passenger train day at the Greely Freight Station Museum, May 15 with a variety of name trains running on exhibit. There will be a train show at the Forney Museum July 30 and 31. This will replace the November train show that has been cancelled this year. The show didn't generate enough revenue last year. (See the flyer below.)

May Tool Time

Larry Stephens presented tool time this month with a discussion about using double-sided tape. He showed a variety of products shown in the photo below

Some of his examples included:

1. Scotch double stick tape for adhering paper to plastic. This can be found in any stationary department.
2. Scotch double stick foam tape. This is a little thicker but will bond anything to anything.
3. Scotch removable poster tape. In addition to posters, this will bond any small, light items and projects.
4. Velcro tape. This has two sides that can be used to secure anything that needs to be removable, such as controls and cables. It can be found in hardware stores.
5. Fiberglass carpet tape. This is sold by Ace Hardware, # 58636. Its tacky surface will hold foam to any surface.
6. Cloth carpet tape. This is sold by Ace Hardware, # 54308. This is easy to cut and will attach many kinds of parts and projects.
7. Plastic carpet tape. This is sold by Ace Hardware, # 50196. This is transparent and useful for projects where you have a need to see through it.

8. 3M 9448A double coated tissue tape. This can be obtained from Amazon. This is super-strong and useful for large projects
9. Scotch ATG adhesive transfer tape, 924 clear. This is useful when a light, thin adhesive is required.
10. Contact cement can also be used to make your own foam tape. Apply a uniform coat of the cement to a glass surface, press the foam onto the cement to pick up a uniform coat. Remove it and let it dry for 15 minutes. Repeat with a second piece and when that is dry the two pieces can be stuck together

May Show and Tell

The May theme was wagons that drew six entries.

Dennis Hagen scratchbuilt these two S scale wagons. This photo was taken on his layout.

Dick Hunter brought in an HO scale stagecoach and a logging wagon

Bob Rothgery displayed a variety of HO scale wagons that are in use on his Elk Pass Railroad. Two are delivery wagons and the other three are freight wagons for different transport purposes.

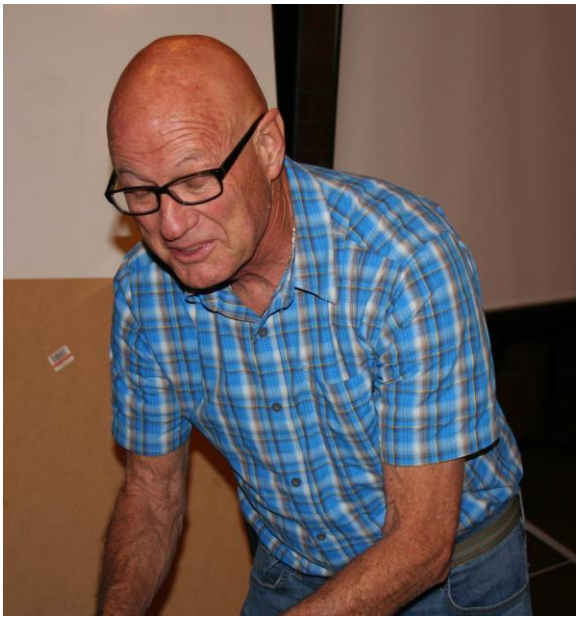
Steve Schweighofer displayed this N scale wagon that he described as a covered wagon. It also looks like a chuck wagon.

Paul Siebels brought in an HO scale livery stable module. The attendant is leading a horse out of the stable and will probably hitch him to the waiting wagon in front.

Larry Stephens thought this HO scale hay wagon was too big until he saw an actual wagon about the same size. This one probably will be pulled by a tractor.

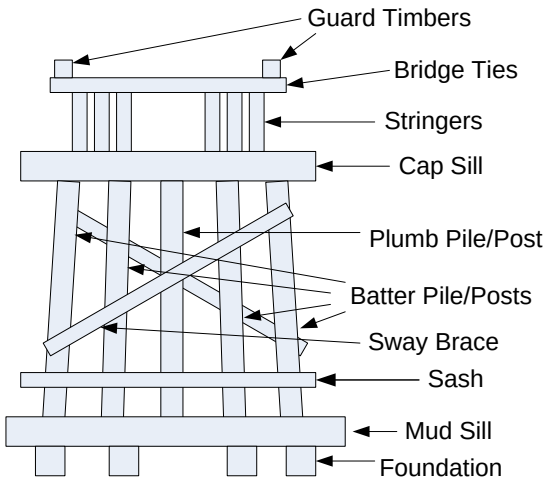
May Clinic

Gerry Glancy presented the May clinic on building timber trestles. We tried something different for the presentation this month. With Gary Myers as the cameraman, we took videos of the presentation that were projected onto a screen for better visibility by everyone. This approach was well received.



Gerry preparing for his clinic

Gerry began his talk by describing the three main structures of a trestle: deck, the bents and the abutments. He then sketched each of these structures on a whiteboard. In the diagram below, the deck consists of the stringers, bridge ties and guard timbers.



The deck is made from stringers arranged side-by-side with bridge ties secured on top. Stringers may be the length of the bent spacing on a curved trestle, or multiples of the spacing for a straight trestle. The diagram shows the stringers slightly spaced apart, but on a model

the spacing may be omitted. Placing three stringers under each rail is typical. They are positioned so that the center stringer is beneath the rail. Bridge ties are usually ten feet long and centered over the stringers. However every few bents there will be a pair of longer ties, 15 to 20 feet long. These will project to the side of the trestle to provide a platform for water barrels, but also provide a refuge for maintenance crews if they find themselves out in the middle of the trestle when a train approached. Railroads were adamant about full water barrels to provide water for extinguishing fires on the trestle. Fires could be caused by cinders and sparks from a locomotive (even diesels can emit these) or from badly overheated brakes or journals.

The bents are the support structurers for a timber trestle. Bents are typically spaced about 15 feet apart. The center post of each bent is called the plumb post because it is always vertical. It is called a post if it is positioned on top of a sill, but for short bents it may be driven directly into the ground using a pile driver. In this case it is called a plumb pile. The posts or piles on either side of the plumb post are called batter posts / piles because they are angled (that is battered) outward toward the bottom. The innermost posts typically have a one foot outward horizontal displacement at the bottom for every eight feet of vertical rise. The outermost posts typically have a one foot outward horizontal displacement at the bottom for every four feet of vertical rise. Bents made from pile posts are usually limited to 30 feet or less that is about the limit of the usable part of a tree trunk.

Construction crews often cut trees on-site when building a trestle if the timber was near-by. Taller bents had to be made from multiple short bents stacked one on top of another.

A cap sill will be placed on the top of each bent and a mud sill at the bottom. Contrary to assumptions, the mud sill does not sit on the ground. It would quickly disintegrate when saturated with water. Instead it sits on a foundation of concrete blocks, dressed stone, gravel or concrete footers. After a few years this foundation will soon be covered so that it is no longer apparent.

The first step in construction is to build the foundation benchwork for the trestle that will eventually be installed on the layout. Construct it from quality lumber that is not warped. Each vertical block will be the foundation for a bent. They should be placed approximately 15 feet apart, or the spacing of the bents, and the top surface should be absolutely level. Allow extra spacing for items that will pass under the trestle. In this case Gerry allowed for a track to pass beneath and the creek will flow beneath at the center. Here there will be double bents with a longer deck structure between the bents. They also need to follow the centerline of the final trestle. The photo below shows Gerry's foundation. Note that Gerry built the abutments right onto the end foundations that are at grade level.

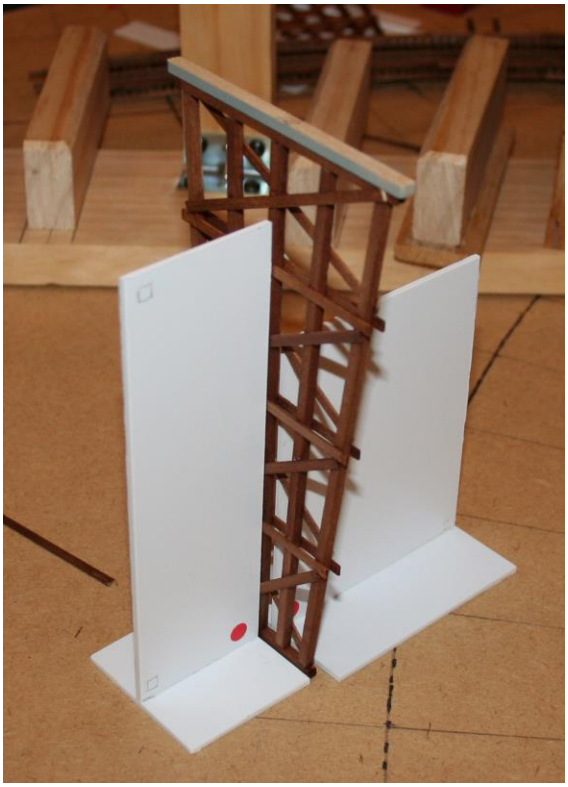
Also, omit the stringers in the area where other deck structures will be placed.

Now place the completed deck structure between the two end foundations. It should fit snugly against the abutments as in the photo below.

Notice that Gerry has erected a vertical strut centered beneath the deck to support the curved deck from falling. It has been cut precisely to match the track elevation.

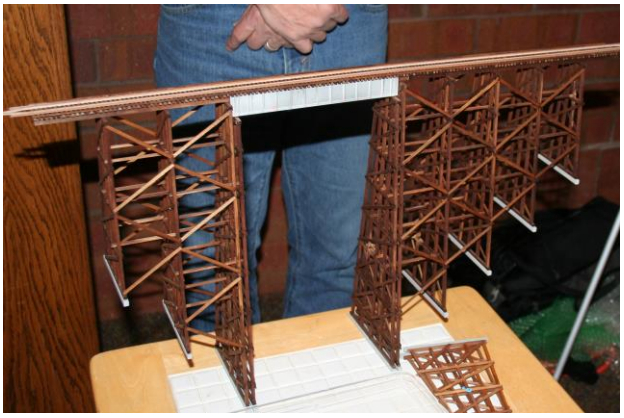
Now it is time to begin construction of the bents. Gerry constructed a bent template from sheet styrene (not shown) with styrene strips to locate and support each post correctly. For each bent measure the elevation from the foundation to the underside of the stringers. Shorten this height slightly. Gerry emphasized that it easier to shim a bent that is a little too short than to cut a bent down that is a little too long. Locate the cap sill at the top of the template so that it is centered over the plumb post. Before cementing the plumb and batter posts to the sill, dab the end of the post with a little Dullcoat. This will seal the grain and allow the cement to hold better. When dry, apply a little ACC with a micro brush to the end of the post and set it against the sill. The cement should set quickly. Repeat this process with the four batter posts but angle the ends so that they will mate squarely with the cap and mud sills. Next cement the sashes and sway braces in place with a spot of ACC. Turn the bent over and cement the sash(es) and sway brace(s). At one point Gerry did not get a sash horizontally aligned with its opposite, so he applied some ACC release (un-cure), from the green bottle to release the sash so he could reposition it.

When all bents have been assembled it is time to attach them to the bridge deck. Gerry's trestle and deck is on a 3.5% grade so the bents cannot be mounted square with the deck stringers. He used a T Bevel to set the correct angle so that each bent would be vertical with respect to the ground. He made two jigs to capture this angle, shown in the photo below. He used these jigs to hold each bent in position when he cemented them to the stringers.

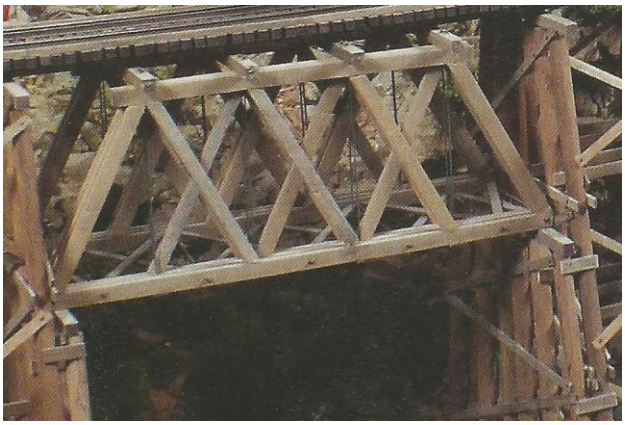


Where his trestle crossed the track beneath, he built a short steel deck girder bridge to span the gap. A second bent positioned against the original bent supports the deck girder bridge. The stringers are not included in this gap. Refer to the photo below and notice the double bents at this location. Where his trestle crosses the creek at the center he built a queen post truss that spans the double bents in a similar fashion. A photo of a similar span taken from *Model Railroader* appears below. Note that that the truss rests on half of a double bent and that the

deck stringers rest on the cross members of the truss.



A trestle with a steel deck girder in place. Note the double bents here. The shorter bents support the deck bridge and the longer bents the trestle stringers.



An example of a queen post truss from an article in *Model Railroader*.

Rocky Mountain Train Show Announcement

This show will be held at the Forney Museum in July in place of the November show. Details appear in the flyer on the next page.

Sunrise Division Auction Proposal

Rich Flammini presented this proposal as a new feature to add to the benefits NMRA membership provides.

What – Members would be able to dispose of a model railroad-related item that has some value, but is no longer needed or wanted. The auction would provide some funds that potentially might enable the seller to bid on some other item of interest or just walk away with cash

When – The sequence would require a participant to submit a brief written description of the item at a meeting the month before the auction. This would give everyone some idea of how many items would be up for auction and the time needed. Hopefully there would be enough participation that the auction could be done in place of a clinic. In order to promote it, the earliest would be the June meeting. The

decision for the meeting date would be done by the Activity Chair.
How – Participants would display their item on the auction table. In place of the usual Show and Tell, the participant would provide a description of their item limited to no more than two minutes, timed.
There are three potential structure options. Opening bids would be placed at $10 or more, which would be the minimum bid. If no opening bid was made the seller would withdraw the item. A prospective buyer could discuss an alternate price with the seller after adjournment of the meeting, if they chose to do so. An alternate approach would provide the opportunity for a separate lower priced auction, say $2, in conjunction with the $10 auction. This could be done as a "warmup" or as a "follow-up". Or a lower priced option could be done as a trial to see if the concept had interest among members. A suggestion is to do just the $10 auction as a proof of concept, and then expand it if successful. All transaction would be final and completed by cash or check immediately upon the winning bid being awarded. Only NMRA members could participate initially, although it could be opened to others in the future if it proved to be a benefit to members.
The opening bid is arbitrary and could be changed. By placing an opening bid of $10, the hope is that good items would be provided, yet priced where most members could afford to bid. There would also be items that would not likely appear on the swap table that would take away a revenue source for the Division. We could also consider charging a modest fee, say $1.00 for the Division if we are in need of additional revenue.

- Rich Flammini