

## Sunrise Division Officers

Superintendent.....William Boorman  
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 Division AP Chair.....Bob Rothgery  
 Youth Coordinator.....Ernee Edwards  
 Education Chair.....Stewart Jones  
 Modular Layout Chair.....Larry Stephens  
 Herald Editor.....Bob Hochstetter

## In the Herald

Layout of the Month.....	1
February Meeting Notes.....	2
Next Meeting.....	2
URL of the Month.....	2
Upcoming Clinic.....	2
Upcoming Tool Time.....	2
Upcoming Show 'n' Tell Theme for 2022 .....	2
Announcements.....	2
Module Report.....	3
Show 'n' Tell.....	4-6
Tool Time.....	6
Clinic.....	6-7
Coming Events.....	8-9
For Sale Page.....	10

## Layout of the Month

This month's photographs are from Tom Wilcox's beautiful outdoor layout.



## January Meeting Notes

Signing in to the hybrid meeting began about 6:45 p.m. on February 3, 2022. The meeting began at 7:03 p.m. with 14 participants in attendance at the church and 6 attending via Zoom. The meeting began with Announcements followed by Tool Time, Show 'n' Tell, and the Clinic, all of which are reported on in greater detail in this edition. The meeting concluded at 9:05 p.m.

## Next Meeting

The next meeting will be Thursday, March 3, 2022 in person at Holy Love Lutheran Church, 4210 S Chambers Road, Aurora, Colorado. Mask wearing is required for all attendees. The meeting will start at 7:00 p.m. The meeting will also be streamed on Zoom.

## URL of the Month

German railways in the Rhine valley  
<https://www.youtube.com/watch?v=9MRabXf2gWs>

## Upcoming Clinic

Planning and Constructing the Trinidad & Raton Pass-Glenn Gibson

## Upcoming Tool Time

Work Cart-Gary Myers

## Upcoming Show 'n' Tell Themes for 2022

**March**-1930's Era  
**April**-April Fools  
**May**-Kitbash Project  
**June**-1940's Era  
**July**-Prototype Project  
**August**-1970's Era  
**September**-Mining  
**October**-Steam  
**November**-2000's Era  
**December**-Holiday Theme

## Announcements

In an attempt to reduce problems, we continue to ask that Show 'n' Tell photos, clinic presentations, and Tool Time photos be taken before the meeting and sent to Gary Myers ([garymyers06@comcast.net](mailto:garymyers06@comcast.net)) for presentation at the meeting and to me for inclusion in the Sunrise Herald ([rlhoch422@gmail.com](mailto:rlhoch422@gmail.com)).

The Rocky Mountain Region Callboard email notifications may not have gone out properly. If you did not get a notification, the Winter Callboard may be accessed at <https://sites.google.com/view/callboardwinteredition2022>

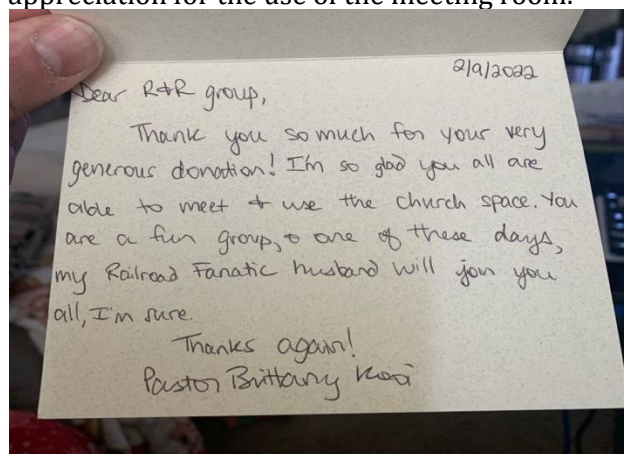
Rocky Mountain Train Show, April 2<sup>nd</sup> and 3<sup>rd</sup> at the National Western Complex. This show will be co-sponsored by the Rocky Mountain Region of the NMRA. Load-in will begin on Thursday March 31<sup>st</sup>. The Division's modules will once again be part of the Junior Engineer program.

Gary announced that Cheyenne will again host the Cheyenne Heritage Days mini-convention. The Division has started negotiations regarding participating in the Sherman Hills Train Show, May 14 and 15, 2022. Additionally, the UP Historical Society will be meeting in Cheyenne at the same time.

The Foothills Society of Model Railroaders swap meets have resumed at Green Mountain Presbyterian Church, 12900 W. Alameda Pkwy, Lakewood, CO

Work continues on the modules every Saturday from 10:00 am to 2:00 pm, weather permitting. A work schedule has been created for upcoming Saturdays.

The Sunrise Division received a thank you note from the pastor of Holy Love Lutheran Church for our annual donation which is given in appreciation for the use of the meeting room.





## Module Report

Module update—Larry Stephens showed slides of the track work repairs and building repairs that have been done to the modules. He also told us that the new axle for the module trailer has been delivered but has not been installed yet.



The main curves by the power plant have been removed to address the kinks in the track and to get a more uniform curvature.



The track going to the power plant was removed and reinstalled.



The station was removed along with its associated track and plaster.



Adam Crews repaired the station and will be redoing the platform.





## Show 'n' Tell

February's Show 'n' Tell subject was Diesels.



Bill Johnson presented his model of the Union Pacific M-10005, the City of Denver which went into service in June 1936.



Dennis Hagen took an old HO scale Atlas RS-3 and regauged the trucks to make it run on Sn3 track. Then he simply threw away the diesel shell and scratch built the doodlebug shell from styrene and attached it to the diesel chassis. Even though it is no longer a diesel locomotive he thought that it might make an interesting diesel into a non-diesel conversion project to briefly describe.



Grant Harrison showed this in progress Hobbytown of Boston Alco FA2 kit that he recently purchased. He said that he still has a little bit of bodywork to finish and that he has to decide which paint scheme to apply but that this has been a fun kit to work on.



Gary Myers showed these two D&RGW diesels. He said that EMD built F7s in A-B-B-A sets between 1949 and 1952 for the D&RGW. The sets were numbered 3digit-A,-B,-C,-D. They were originally painted in this black and yellow livery. Beginning in 1950, 4 digits replaced the alpha-numeric scheme, so that 5551-5554 replaced 555-A to 555-D. Then starting in late 1952, the more familiar Grande Gold with 4-stripe livery began replacing the black & yellow livery.



Rich Flammini showed this prime mover being delivered on a flat car. He wrote "The Grand Trunk Western shop crew is excited to see the arrival of a remanufactured EMD 567 diesel engine. F3 #9027 will be back online soon."



Larry Stephens showed his six engine Black Widow set. It consists of two Trainmasters, one SD9 and three GP9s in three sets of two, with one being powered and the other a dummy in which the speaker is located.



This close-up picture shows the painted handrails, the addition of a small round tank to the left underframe (which Athearn had omitted) and piping added to the air tanks. The trucks were weathered to indicate usage and to highlight details. Lastly, Larry had to remove the casting ridge from fuel tank.



Stu Jones showed his Boreas and Saguache Railroad RS3. He stated that the ALCO RS3 is a 1,600 hp. locomotive that was manufactured by the American Locomotive Company (ALCO) and ALCO's subsidiary Montreal Locomotive Works (MLW) from May 1950 to August 1956. It has a single, 12 cylinder, model 244 prime mover. 1,418 were produced: 1,265 for American railroads, 98 for Canadian railroads, 48 for Brazilian railroads and 7 for Mexican railroads.

RS-3s served for many years and some are still in active use in 2022 despite their advanced age. A

number were rebuilt into RS3ms due to the unreliability of their ALCO 244 prime movers.

This model performs switching duties on his Boreas and Saguache Railroad. At some time the front and rear handrails broke off and Stu replaced them with rails made from brass wire soldered together (but not yet painted.) The Rio Grande owned many RS3s, often using them as main line power. Stu said that he has (somewhere) a photo of four RS3s hauling a main line freight between Steamboat Springs and Bond, Colorado.



Adam Crews showed these two Athearn Blue Box models of Amtrak AMD-103s that he upgraded and modified to P42s. The rear molded on side vents were cut out and replaced. Various Details Associates' and Details West's parts were added to the models including the under frame piping and front and rear hoses. Microscale Decals were applied for the current paint scheme.

Originally DC only, Adam installed DCC ESU Loksound decoders in them and added new LED lighting. He added engineer figures to the cabs. He said that these will become shelf displays as the newer Genesis models that he has run so



much better. But since he put so much work into them, it would be a shame not to have them displayed.



Bob Hochstetter showed this lash-up which illustrates some of the first and last road freight diesels painted in the Missouri Pacific Railroad's *Eagle* paint scheme.

The FT # 510 was a two-unit, drawbar connected, 2,700 horsepower locomotive produced by EMD in 1945. The Missouri Pacific rostered 12 sets of these drawbar connected locomotives. The N-scale model depicted is from InterMountain Railway Company.

The GP 18 #4802 was a 1,800 horsepower locomotive produced by EMD in 1960 and which was retired in 1984. The Missouri Pacific rostered 26 of these high nose locomotives. The N-scale model shown here is from Life-Like trains.



William Boorman showed this Atlas S2. No description was submitted for publication.



Dave Clifford showed a picture of his locomotive collection. No picture or description was submitted for publication.

## Tool Time

The Tool Time presentation was postponed until the March meeting.

## Clinic

### Coking and D&RGW 3<sup>rd</sup> Division Mining Operations

Gary Myers presented the first half of his clinic on smelters, coal and coke. The photographs that accompanied the presentation have been removed due to copyright restrictions. The commentary portion of the clinic is presented here.

### Smelters, Coal and Coke

Author: Gary Myers  
Sunrise Division  
President, Scenic Line Modelers, Inc.

(Updated 2/2/22)



### MINING OPERATIONS

- Early Smelters
  - The Reverberatory Furnace
- Coal & Coking
- Other Mining & Coking Examples
- 3<sup>rd</sup> Division Coal Operations
  - Crested Butte CF&I Big Mine Operations
  - Limestone Mining/Quarry
  - Barrel Operations
- Making Removable Loads



### Early Smelters

- Major early gold and silver strikes in Colorado began in 1859
  - Most early gold seekers found free gold in the surface layers, mostly in the sand and gravel of streams.
  - After extracting that source, miners began to dig deeper.
  - Silver and gold was found in complex chemical compounds in sulphate ores, which required smelting processes to separate the metals.
- In 1870, the Denver & Pacific became the first railroad to reach Denver
- Smelters were a major part of mining area development, and were in operation by 1870 before the arrival of the railroads
  - Many years of trial and error and study was required to extract the precious metals from the ores.
  - Different metal compounds required different smelting techniques.



## Salida Smelter

- **Smeltertown** -
  - One mile outside of Salida
  - Home of the Ohio-Colorado Smelting and Refining Company.
  - Employed 500 people until World War I
  - Many of the employees were Greek and Italian immigrants
  - Smeltertown closed in 1920



## Reverberatory Process

- Finely concentrated and crushed ore is mixed with flux
  - Proper proportioning between ore and flux were critical
- Mix is spread on the hearth
- Fire is lit in a firebox at one end of the furnace
  - The flame passes over the charge on its way to the flue.
- The charge is heated by a combination of direct radiation from the flame, heat reflected (or reverberated, in nineteenth century terminology) and focused by the vaulted roof, and radiation from heat stored in the masonry.
  - Negligible chemical reactions occur between the charge and the combustion gases
  - Reactions in a reverberatory furnace are principally between ore and flux



## Reverberatory Process

- After 24 hours, the fire was drawn and the matte and slag were tapped from separate openings at different levels on the side of the furnace
- After any necessary repairs were made to the furnace, a new charge was shoveled in and the cycle repeated
- Alternately heating and cooling a masonry structure is very damaging
  - A high proportion of down-time
  - Constantly needing repairs to minor or major damage brought about by thermal expansion and contraction
  - Corrosion of brickwork by matte and slag, or even fusion of the bricks
- Skilled bricklayers and good quality firebricks were crucial to the durability and efficiency of a reverberatory furnace



## Coal and Coke

- Smelters required coke low in impurities such as sulphur, phosphorus and silica, to decrease ash content in the final product.
- Colorado coking coal often required screening and washing to decrease impurities.
  - Coal was hauled from the mine to the washery and dumped into bins
  - Conveyor belts carried the coal to the top of the washery where it was crushed
  - It was then sorted and dropped through screening jigs that washed different size lumps.
    - Washing eliminated shale and organic matter.
  - The coal was drained and crushed again to particles (size of cornmeal) and called slack coal.
  - Slack coal was loaded into larries for transport to coke ovens.



## Redstone

- In the early 1890s, the Colorado Fuel and Iron Company proceeded with plans to meet the demand for coke to serve smelters in the Redstone region.
- A model coke manufacturing plant was created in Redstone on level land west of the Crystal River.
- In the fall of 1899, masons from Denver began building the first hundred coke ovens in long banks of two rows.
- By the close of 1903, they had erected a full complement of **249** ovens.



## Layout and Design Operations Weekend 2022

**March 18<sup>th</sup>, 19<sup>th</sup>, and 20<sup>th</sup>**

**Presented by:**

## The Indian Nations Division of the NMRA

*Three operating sessions. Choose from 16 great layouts -  
Friday and Saturday Evenings and Sunday Morning*

**Guest speakers on Saturday from 8:15 a.m. to 4:00 p.m.**

**Doug Tagsold, Rich Gibson, Eric Hansmann, and Richard Frazier**

Registration and sign in from 7:30 to 8:00 a.m. at the Akdar Shrine Center

### Catered Lunch will be Served

Track plan consulting available during the lunch period.

Visit <https://tulsanmra.org> for more information and signup.

Registration Fee: \$40.00 (No change since 2017!)

### Akdar Shrine Center

**2808 S Sheridan Road, Tulsa, OK 74129**



**LAYOUT DESIGN AND  
OPERATIONS WEEKEND  
TULSA, OK**



# RockyOp North

## Welcome to RockyOp 2022

RockyOp 2022 is in the final stages of planning. It will be held on layouts in the Denver area ("RockyOp North"). We have selected the dates of April 29-May 1 (Friday through Sunday), so reserve those dates on your calendar. We expect that those who participate will find some favorite layouts returning, some new layouts, some that have been on hiatus for a few years, and some that have been rebuilt. This is not your 2019 RockyOp! We are working on reserving a block of hotel rooms close to the center of activity. More details will be coming in the next few months.

RockyOp 2022 is not a sure thing as Covid-19 is still a problem. It could be cancelled, depending upon what happens with getting the spread under control. The current agreement is that layout owners will decide individually what precautions (if any) will be required to operate. That information will be provided on the layout descriptions to assist you in deciding which layouts to operate on.



## RockyOp 2022 Important Dates

- January 24, 2022: open up RockyOp for registrations
- April 2, 2022: cut off date for registrations
- April 29-May 1, 2022: RockyOp 2022: Operations weekend

## What's New on RockyOp

- November 21, 2021: announced the dates for RockyOp 2022
- January 19, 2022: updated details
- January 24, 2022: opened up registrations

Be sure to check here for the latest updates to this site!

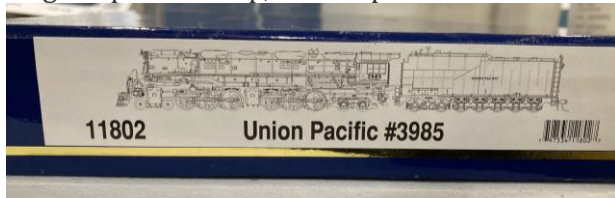
## 2022 Layouts

- A&O RR
- AT&SF, Colorado Division
- BNSF Fall River Division
- Chicago & North Western
- CSX Willard Subdivision
- DRGW - Gunnison Division
- Franklin Southern - Murphy Subdivision
- Great Northwestern Railway
- Hitop Branch Secondary
- Los Pinos & Lake City Railroad
- Maine Central - Rockland Branch
- Pueblo Switching
- Rocky Mountain Line
- Seattle Terminal District Railroad
- Wahsatch & Union Pacific

**FOR SALE-- N scale items (10% OF THE SALE OF THESE ITEMS WILL GO TO THE SUNRISE DIVISION)**

"I am selling these N Scale items for the widow of a friend. My friend never built a layout, was a collector and has had these items stored in boxes, not even displaying them. Unless noted otherwise, they are believed to be new and never run." If interested email [lbuyck@comcast.net](mailto:lbuyck@comcast.net).

Item 1: Challenger 4-6-6-4 by Athearn, UP #3985. It is DCC with sound and can be run in DC mode. With it is a wireless hand held throttle for use in DC mode. Speed, direction of travel and sounds can be controlled with this walk around throttle in DC mode. Sorry about the photo of the locomotive in the box, it is still in its original plastic wrap, never opened. \$400.00



Item 2: E8 A Unit #930 and E8 B Unit #930B set by Walthers. There is no indication on the packaging that it is DCC or even DCC Ready. I also could not find any catalog info. Therefore, they are assumed to be DC ONLY. They have never been unwrapped. \$220.00



Item 3: GE AC4400CW Normal Cab w/ High Number Boards by Kato, DC. The package is not sealed. I did open the package and did a quick inspection of the item. It appears to be new and never run. \$125.00



Item 4: EMD SD70M w/ Flared Radiator by Kato, DC. The package is not sealed. I did open the package and did a quick inspection of the item. It appears to be new and never run. \$125.00

