



# Division Points

Indian Nations Division of the National Model Railroad Association

[www.tulsanmra.org](http://www.tulsanmra.org)

Issue No. 70

September 2023

**NEXT MEETING:**

September 16th

**SHOW AND TELL:**

Cabooses

**PRESENTATIONS:**

Steve Gillett - Passenger car operations



**From the Superintendent**

(Guest Editorial...Assistant Superintendent)

The IND-NMRA September meeting will be this Saturday, September 16 at Hardesty Library, 8316 E. 93rd Street, Tulsa starting at 9:30 AM.

Steve Gillett will give the presentation he made at the national convention in Dallas on passenger car operations.

Bring a model you have recently built or one under construction to show. Or if you have made progress on your railroad, take digital photos of it and put them on a flash drive in jpg format (the most common format) and we will project them.

Steve will also bring us up to date on our upcoming operating event, Tulsa Line.

See you Saturday!

*Dave Steensland*




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# ALL ABOARD!

## *UPCOMING EVENTS IN OUR REGION...*

### **Ozarks Model Railroad Association**

Train show  
 SEPTEMBER 23, 2023  
 9am-3pm  
 Ozark Empire Fairgrounds  
 Springfield, MO.

<http://www.omraspringfield.org>

### **Toy Train Show TTOS—Sooner Division**

October 14  
 9am-3pm  
 Grady County Fairgrounds  
 Chickasha, OK

[www.ttos-soonerdiv.org](http://www.ttos-soonerdiv.org)

### **Wichita Toy Train Club & Museum 29th Annual Model Train Show**

October 28th, 2023 (Sat) 9am - 5pm  
 October 29th, 2023 (Sun) 10:m - 3pm  
 Cessna Activity Center

<http://www.wichitatomytrainmuseum.org>

### **46th Annual OKC Train Show**

November 4 from 9:00 am - 5:00 pm  
 November 5 from 10:00 am - 4:00 pm  
 The Pavilion

Oklahoma State Fairgrounds  
<https://www.okctrainshow.com/>

## 2023 MEETINGS

Meetings are from 9:30 to 12:30

**September 16, 2023 - Cabooses**

**November 18, 2023 - Structures/Dioramas  
Hardesty Library**

8316 E. 93rd St.

(Just East of Memorial on 93rd St.)

John W Barriger III Photo



*Cover Photo: Former UP GP*

## INDIAN NATIONS

### OFFICERS

#### Superintendent

Steve Davis

#### Assistant Superintendent

Dave Steensland

#### Director

Raymond Brunner

#### Paymaster

Raymond Brunner

#### Achievement Program

Ed Bommer, MMR

#### Division Points Editor

Dave Salamon

## Local Model Railroad Organizations and Shops

#### Indian Nations Division of the NMRA

[www.tulsanmra.org](http://www.tulsanmra.org)

Allan Roecker  
(918)886-5732

#### Green Country Model Railroad Association

John Carter

Phone: (316)250-5874

[GCMRA.org](http://GCMRA.org)

<https://www.facebook.com/Green-Country-Model-Railroaders-Association-162356590476356/>

Saturday's & Tuesday's - 9:00AM to Noon.

5626D West Skelly Drive  
Tulsa OK 74102

#### North Eastern Oklahoma N Scalers (NEONS)

[www.tulsa-neons.com](http://www.tulsa-neons.com)

Richard Fisher  
918-298-4800

#### Tulsa Garden Railroad Club

[www.tulsagardenrailroadclub.org](http://www.tulsagardenrailroadclub.org)

Donnie Shirey  
918-361-1760

#### Oklahoma Narrow Gauge

[www.okng.org](http://www.okng.org)

Randy Smith

#### North Eastern Oklahoma Live Steamers

<https://www.facebook.com/groups/1152224404840942>

Dave Salamon  
(918)607-2793

#### Toy Train Operating Society—Sooner Division

<http://www.ttos-soonerdiv.org/>

#### Challenger N scale Hobbies

8753 S Lewis Ave, Tulsa, OK 74137  
(918) 298-4800

#### Top Shelf Models

119 S Main St, Owasso, OK 74055  
918-274-0433

#### Reindeer Pass Railroad

<http://www.reindeerpass.com/>

10919 N 173rd E Ave, Owasso, OK 74055  
(918) 361-6084

#### HobbyTown USA

<https://www.hobbytown.com/tulsa-ok/174>

6808 S Memorial Dr #116, Tulsa, OK 74133  
(918) 307-2000



**H**ow many times have you driven by the Fairgrounds and thought that little prairie would be a perfect engine for restoring and pulling passengers....

WELL...Big things have been developing as of late within the OHRA ( Oklahoma Heritage Railway Association) Tulsa County and the Fairgrounds have granted permission to begin preliminary inspections and minor servicing of Dierks Lumber No. 207 at the Tulsa Fairgrounds, in hopes of pursuing an operational restoration. We are currently in search of property in and around Tulsa to establish a shop site, a museum, and small yard to hold our future acquisitions. Keep a lookout in the near future for a website, and ways you can donate and support our efforts to bring STEAM back to the State of Oklahoma!





## May 2023 Meeting

### Steve Shelton - New Layout, DCC selection, and using an elevator instead of a helix.



Steve shared with us his journey in the hobby and bringing us up to date on his current layout, all aboard!

I have been around the group since 1987. Back when Green Country had their layout in Kensington Mall. I was introduced to everyone else by Rich Montesano in 1991 when I had a claim on his house. I walked into one of the most detailed layout that I had ever seen. His layout went from the living room into the dining area and then out into a double car garage. This was before he built the 800sf building. He is responsible for me getting into operations, he introduced me to most of the other area modelers. Before that I was a lone wolf as far as building a layout. Because of Rich, we traveled to ProRail three times operated on the layouts in KC, St Louis, DFW, Arkansas and other areas.

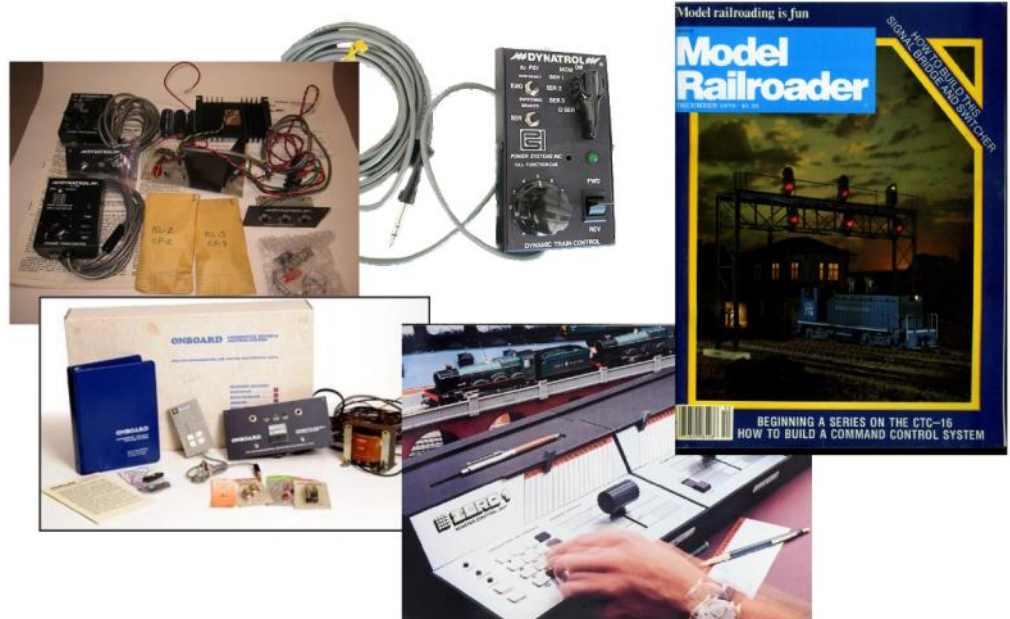
I was in charge of the division monthly meetings for one year and helped with the division for several years in other capacities. I drove in some of the first screws on several of the guys layouts that are still in this group today. By 1996 we had started a round robin work session in which about 7 layouts were being built at the time. Each week we would take turns working on the others layouts. In fact, in 1996 of July I tore down my 8th layout and in August started the bench work of my ninth layout. I was going to be ready for the KC group coming down to operate on our layouts in the first of November. And with the help of our round robin group my layout was operational running through three rooms in my upstairs.

But things change and by 2003 Cindy and I had our first and only child, Eli. I tore down the layout to make room for him. When Rich passed away a great deal of zeal and zest for the hobby was torn away and to be frank my life had changed with Eli.

As a kid I was always interested in electronics. I built a CB (citizens band) base station with the help of a friends dad. By 10 grade in 1978 I was already into computers. During that time punch cards were still around but by 1980 personal computers were in full swing. I was hooked and have been ever since by 1991 I had a computer store in Tulsa selling Atari and Amiga computers. This was on the side of the regular job as a prop-

## May 2023 Meeting (cont'd)

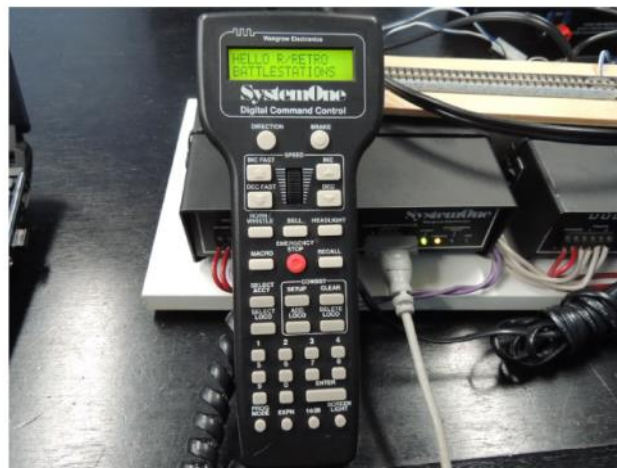
When carrier control systems came out in the late 1970 I was on board. I had begun to buy equipment and chips to build Keith Gueterriz ctc16 system that was published in Model Railroader. My friend's dad was so excited he was going to help us put this in action. Hornsby changed things however, when they brought the Zero One system to the US. That year for Christmas my par-



ents went crazy and bought the control system along with attached throttles and one corded throttle along with receivers for all my trains. With the first carrier control system and went from it a couple years later to Keller Onboard and then finally to Dynatrol. I used it until I built my first layout after I was married. It was a simple system with wonderful throttles. You were still limited with the number of engines on the layout and every now and then there was a runaway due to interference. Then along came Rich Montesano. He became the System One DCC dealer for Wangrow. I immediately bought the system, decoders and multiple throttles. I dove into DCC and began helping others take advantage of not having blocks, not having all the wiring the involved in the block system and the future of our hobby. I still have my System One but it wasn't long until Don Wangrow passed away and the designer of the system, Jim Scorse opened NCE.

## DCC Systems

- Wangrow System One
  - Rich Montesano - Dealer
  - Dove In all the way
  - Don Wangrow Passed away
  - Jim Scorse Designer



## May 2023 Meeting (cont'd)

I moved to NCE. I have a huge amount of decoders, two NCE systems, AIU, block detectors, etc. I began making training videos about DCC for NCE and KAM Industries. KAM Industries took me further into DCC by getting tied into the Lenz and Digitrax systems. Anyway you get the picture I was a guy you could call and I could help get your system up and running

### DCC

- NCE Power Pro
  - Added to the to System One
  - Replaced
  - First system that I added computer
  - Complete system
  - Slow bus



### DCC

- Lenz DCC
  - Received it with 100 and 90 systems
  - Awesome system
  - NMRA standards based on Lenz
  - Hard to find product at the time



## May 2023 Meeting (cont'd)

### DCC

- Digitrax
  - Second System computer
  - System very nice and smooth
  - proprietary Bus very robust
  - Throttles



### DCC

- ESU CabControl
  - 7 amp system
  - Complete System
  - Terrific sound decoders
  - One of my favorites
  - Android based system
  - Throttle slow
  - Railcom



### DCC

- Roco Z21
  - Complete system
  - Multiple ports
  - WI-FI integration
  - Sniffer Bus fo old systems
  - Tablet and phone app
  - Only 3 amp
  - Railcom





## May 2023 Meeting (cont'd)

### DCC

- TCS CS-105
  - LCC System
  - Wonderful throttles
  - WI-FI
  - Railcom
  - Lacking computer interface



### Selecting a DCC system

### DCC Selection

- “It doesn’t matter what DCC system you own, so long as you are running a DCC system”. Jim Senese
- Block system
- DCC
  - Expensive
  - Decoders in all things
  - Can be frustrating
  - Operations

I have operated on block systems before, and there is no offense intended if you have one, I always shorted the system and shut down the layout. Don’t get me wrong you can do that with a DCC system but I had a hard time with block system and it seemed to break the flow of movement when I used them as I was always looking what button powered the block. DCC lets you break free from that. Some say if you have a small layout or a shelf layout that DCC is over kill and you have to install decoders into the engines is such a pain. There are things you have to do in DCC such as the decoders and yes it can get expensive to outfit an entire layout with decoders, but once they are in it opens doors that were not there before.

## May 2023 Meeting (cont'd)

Some things you need to look at when deciding on what system.

The main thing is what do you want to do with the layout and selecting a DCC to fit that need

⇒ Size of the layout

- How many zones or blocks ?
- How many engines will be used on the layout ?
- Power consumption ?

⇒ Accessories available for the systems

- Most systems allow you to interchange the accessories with each other
- Specific features :
  - Throttles Wired
    - Wireless Radio
    - WiFi
    - Proprietary
  - Power districts

⇒ Architecture of the system

- Bus
- WiFi
- Expandability – adding too many items (power)

⇒ Scalability

- Computer interface
- Sniffer bus
- Automation

⇒ Customer Service

- Warranty
- Repairability



## May 2023 Meeting (cont'd)

### The Layout

I built my first layout when I was 12 and by the time I went to college I had built 5 different layouts in size from 4 x 8 to 12 x 12 to a garage layout. I have loved this hobby for a long time. And now I am starting on a shelf layout, double decked, in a 12 x 20 building that I built to put my office in. But I never got around to that. The building sat for several years and 2019 I started model building again as a result of hand surgery. I had torn the ligaments in my left thumb after I rip my thumb backwards. I used building models as my rehab and as a result the fire for the hobby was re ignited. COVID hit in 2020 and within 3 months I had all the benchwork for a N Scale layout. But after a year of buying equipment and starting several times. I switched back to HO and tore out plans for a helix with N Scale.



I want to have two levels on the layout with mountains in Southern California on the top and the Port of Los Angeles / Port of Long Beach on the lower level. But how was I going to get the trains down or up between the levels without a helix. The helix in HO scale was going to take at least a 5' x 5' area and in a room 12 x 20 that is a lot real estate. Even before

I started back into the hobby in 2019 I was contemplating on how to achieve the task. Dave Steensland and I talked about the process. Dave had said the best thing is to run the track around the back portion of the layout and let it climb or descend. The problem with that was I would climb 19.5" between the two levels. What that meant I would



build a helix around the edge of the room. I did not think I could design something that would incorporate that.



## May 2023 Meeting (cont'd)



### **The Elevator**

Then around 2019 I was unloading groceries out of the back of our 2015 Ford Edge. I pushed the button on my fob and the back tail gate started to lift. I was staring in disbelief as I watched the linear actuator lifting the hatch. I had my solution.

I do computer work for several clients and one of the clients are Sheet Metal Union local 270. I contacted one of the contractors and asked him to bend and roll me the metal deck of the elevator. It was done in two, 6' long by 4" wide by 3" tall aluminum squarish tube. I connected the two sections with steel plates and then on top I ripped a 1x 12' long so I could attach track to it.

I had my base so I started looking at others that have elevators.

Dave Salamon has a hand powered lift. He also showed me a lift that Dick Roberts built, a modeler in California that is using a modified garage door opener to lift his elevator. I contacted him and he sent me a video and some ideas of how I could adapt his design to mine. But since the lift will be behind the removable backdrop the hand operated would not work and lifting the 12 ft long elevator was hard. The modified garage door opener would have worked but it took up so much room away from the wall.

So I moved on with my idea. I needed some type of guide for the deck to slide up and down the wall.





## May 2023 Meeting (cont'd)

### Elevator Deck

#### Step One

I put four drawer slides on the wall. I modified the drawer slides and attached one side a "L" bracket to the slide and one side to the underside of the deck of the square tube. I tested the lift capability of the deck at that time and it tracked well. The problem was it was long and heavy so portion of the deck was bowing and I could barely lift it all the way up. The second problem was when the drawer slide was all the way out the weight of the deck caused it rock back and forth.



## May 2023 Meeting (cont'd)

### Elevator Deck

#### Step Two

I bought two 21" linear actuators. Each actuator can lift 245lbs by itself

I put two linear actuators four feet from the center of the deck. I fired them up and it lifted flawlessly.



The problem then was back to the issue of the full extension of the drawer slide allowed the deck to sway in and out, not as much as before but still I could not have that happen with a train on the deck or making sure it lined up with the track on top. I needed to attach the deck to the wall but still allow it to move up and down.



## May 2023 Meeting (cont'd)

### Elevator Deck

#### Step Three

I then put two more matching actuators and attached them to the ends of the deck. I bought a 10 amp power supply and double pole double throw momentary switch. I ran the lift I was amazed how smooth the lift was. But at full extension there still was an issue. The drawer slides were allowing a minor amount of sway.



## May 2023 Meeting (cont'd)

### Elevator Deck

#### Step Four

I was about to move forward with results of step three and build a receiving bracket on the top level that would make the deck go into a slotted area. But I was worried about the alignment of the track. It had to be perfect every time. I tested the lift and 4 out of 5 times the deck arrived at the same spot. However, on the fifth lift it was off by a 1/16" of inch. The track was not aligned. I was a little dejected thinking "helix here I come" and my track plan was going to have to change.

I was watching a video on YouTube and a guy was building a DIY drill press. He had a manufactured (from a C and C machine) rail system that he attached the drill to that allowed a true up and down motion without play. I did a search immediately and found a restaurant supply warehouse in the UK made a system that I saw on the video. After some more research I found the sliding rail system was available here in the US through Vevor. I immediately ordered a set of rails. I built a jig and attached a

"L" bracket and mounted the rail system on the wall within two hours after receiving the rail system. I left two drawer slides attached to the deck to help with the guiding of the deck. I was so happy to see that with the sliding rails and the drawer slides and the four actuators there was no movement left or right, back or forth only up and down. The deck arrived at the same place each time.

#### Step Five

The only problem I had was with the sliding rails and the attached slide and my modified "L" bracket system the deck took up an additional 2" on the layout. Once, I add the removable back drop and supports for it, the system was going to take away one of the tracks on the narrow shelf portion of the layout. So last week I ordered two more sliding rails. I removed the drawer slides and I have begun redesigning the "L" that attaches to the slide on the rail.

This is a work in progress and I hope to have all this completed within a month that will allow me to build the layout around the elevator. This project has been almost a 2 year project. To be honest my first thoughts of doing this started 5-6 years ago. When I thought I was going N scale the helix was ok to install. But I decided to continue with HO scale in 2020 the elevator came back.

I will keep you up to date and hopefully by the time or next meeting this fall the upper deck and elevator will be installed on the south side of the layout.



## May 2023 Meeting

### Discussing Antiques and Collectibles - Marc Montray

Marc talked to us by sharing some of his antiques and collectibles. He started out asking questions what is an antique? What is a collectable? Can an item be an antique and collectable?

Marc using his vast knowledge (especially of one with the initials AT&SF Ry/RR, but he knows the Frisco, MKT and many others) along with models too! Marc kept us all engaged in the presentation and getting input from us. Told of some of his adventures attending railroad auctions and seeing stuff go for crazy hi prices, maybe just due to initials Ry instead of RR, or other items you'd think might bring in a pretty penny and go for cheap...do your research...



Marc is a great resource and if you ever have a question on something you might have, he'd love to discuss it with you. Tell him I sent you!



## May 2023 Meeting

### Jon Pansius - Handling Empty Car Orders and his car card and waybill based car routing system.

Many local model railroads use four cycle 'waybills' for car routing, and this can become repetitive or random movements without reason.

Others use a more prototypical waybill that contains information based on prototype waybills, these also contain information not necessary for routing of the car and may not be clear to some operators.

I use a two cycle routing for inbound loads on my Tulsa Junction Railroad, which works great since my railroad has no through traffic.

Empties must be returned to the home road or intercept (or confiscate the empty to loaded at an industry on your railroad. On the prototype this process starts with a shipper given the railroad agent a car order stating capacity and number of cars required the commodity to be ship, the route and destination and limitations.

The Agent or clerk would try and find a car(s) suitable for filling the car order determined by:

- Type and class of car
- Capacity of car in length, width and door opening
- Grade of car and its suitability for the commodity to shipped, and
- The requested route to the consignee

### **Car Grades**

Before an empty car would be made available for loading it had to be inspected. Usually it would be put to the side somewhere and blue flagged while inspector determines the condition and what commodities it was suitable for. Each railroad had their one grading system and it could get very complicated. Example the Santa Fe has 14 grades of box cars and 8 grades of refrigerator cars. I obtained a grading manual from the Frisco from 1924 which had a similar system and that is what I use.

The manual had three grades for box cars (A,B, C), one for refrigerator cars (D), one for gondolas and 'coal cars' E and F grade for special load requiring flat cars, stockcars, automobile box-cars, tanks cars, meat reefers and the like or which needed special handling or loading.





## May 2023 Meeting (cont'd)

A class B car had to be weathertight and free of leaks, and the floor and lining had to be serviceable and free of nails, but the lining did not need to be tight. It could be used for cement and plaster, some food products (in season) such as apples, potatoes, cabbage and pecans, salt, ore, hay and straw, packaged goods, merchandise and so forth, anything requiring protection from the weather but not requiring a first class car.

A class C car was restricted to rough freight not requiring much protection from the weather, such as brick, boilers, hides, rough lumber, or molasses or oil or vinegar in barrels.

Class D cars were those cars suitable for refrigeration. A reefer in otherwise good condition but not suitable for refrigerated service could be carded as a B car suitable for merchandise or packaged goods, or food products not requiring refrigeration under current weather conditions (it could still be suitable for ventilated service or maybe insulated service). The commodity or commodities for which the car was suitable was written on the card if was to be carded as class D.

Class E cars had to be able to handle chatts, coal, gravel, crushed rock or sand without leakage. If not, they could be carded for certain class F commodities such as poles, posts, pipe or cut stone.

<p style="text-align: center;">ST. L.-S. F. RY. CO.</p> <p style="text-align: center; font-size: 2em; color: red; font-weight: bold;">O. K.</p> <p style="text-align: center;">FOR Grain, Sugar, Flour, Meal, Cotton Seed, Sacked Feed and Other Commodities of a Similar Nature.</p> <p>Car No. .... Initials .....</p> <p>Inspected by ..... At .....</p> <p style="text-align: center;">Date.....19....</p>	<p style="text-align: center;">ST. L.-S. F. RY. CO.</p> <p style="text-align: center; font-size: 2em; color: red; font-weight: bold;">O. K.</p> <p style="text-align: center;">FOR Cement, Plaster, Hay, Merchandise and Other Commodities of a Similar Nature.</p> <p>Car No. .... Initials .....</p> <p>Inspected by ..... At .....</p> <p style="text-align: center;">Date.....19....</p>
<p style="text-align: center;">ST. L.-S. F. RY. CO.</p> <p style="text-align: center; font-size: 2em; color: red; font-weight: bold;">O. K.</p> <p style="text-align: center;">FOR ROUGH FREIGHT.</p> <p>Car No. .... Initials .....</p> <p>Inspected by ..... At .....</p> <p style="text-align: center;">Date.....19....</p>	<p style="text-align: center;">ST. L.-S. F. RY. CO.</p> <p style="text-align: center; font-size: 2em; color: red; font-weight: bold;">O. K.</p> <p style="text-align: center;">FOR REFRIGERATOR CAR.  (COMMODITY)</p> <p>Car No. .... Initials .....</p> <p>Inspected by ..... At .....</p> <p style="text-align: center;">Date.....19....</p>
<p style="text-align: center;">ST. L.-S. F. RY. CO.</p> <p style="text-align: center; font-size: 2em; color: red; font-weight: bold;">O. K.</p> <p style="text-align: center;">FOR LOADING COAL, SAND, GRAVEL, CHATTS.</p> <p>Car No. .... Initials .....</p> <p>Inspected by ..... At .....</p> <p style="text-align: center;">Date.....19....</p>	<p style="text-align: center;">ST. L.-S. F. RY. CO.</p> <p style="text-align: center; font-size: 2em; color: red; font-weight: bold;">O. K.</p> <p style="text-align: center;">FOR  (Commodity Which Under Local Instructions Require Special Inspection of Car.)</p> <p>Car No. .... Initials .....</p> <p>Inspected by ..... At .....</p> <p style="text-align: center;">Date.....19....</p>

COMMODITY	CLASS
Agricultural implements .....	C
Alfalfa meal .....	A
Apples, bulk, boxed, and barreled .....	B                      D
	if box car    if refrgr.
Autos .....	F
Blasting powder .....	A
Boilers .....	C
Boots and shoes .....	B
Bottles, bulk .....	F
Box shooks .....	B
Bran .....	A
Brick .....	C
Broom Corn .....	B
Butter .....	D
Cabbage .....	B                      D
	if box car    if refrgr.
Canned Goods .....	B
Cans, tin .....	B
Cantaloupes .....	D
Casing, oil well .....	C
Cast iron pipe .....	C
Cement .....	B
Chatts .....	E
Cheese .....	D
Cigarettes, tobacco, snuff .....	A
Coal .....	E
Coffee .....	A
Coke .....	F
Concrete pipe .....	C
Cooperage stock .....	B
Cord wood .....	C
Cotton .....	B
Cotton seed .....	A
Cotton seed meal .....	A
Crackers .....	B
Crude oil .....	F
Crushed rock .....	E
Dried fruits .....	A
Dynamite .....	A
Eggs .....	D
Electrical machinery .....	B
Feed .....	A
Fertilizer, mfgd. ....	B
Flooring .....	B



## May 2023 Meeting (cont'd)

Class F included cars for stock loading, automobiles, commodities moving on flatcars, plate glass, commodities moving in tank cars, cars requiring ventilated or insulated service, and meat loading. The type of car requested was usually noted on the customer's car order. A special inspection was often necessary since the suitability of the car for the load depended on the specific requirements of the customer. Various "special" cars could be used for certain types of general service. An automobile boxcar was often used as any other boxcar and could be carded for such. Stockcars could be used for certain types of Class C commodities like brick or rough lumber, or if clean, in certain types of ventilated produce service, particularly watermelons. The car order will have to be very specific about the sort of car requested.

Cars of a higher grade than requested could be used, but the railroad tried to avoid that since the car might have to be reconditioned after that load to restore it to its previous grade.

COMMODITY	CLASS
Flour—other mill products.....	A
Fresh fruits and vegetables.....	D
Fresh Meat and P. H. P.....	F
Fruit jars.....	B
Furniture.....	F
Gasoline.....	F
Glass, plate.....	F
Glass, window.....	B
Glassware.....	B
Grain.....	A
Grape Fruit.....	D
Grapes.....	D
Gravel.....	E
Handles.....	B
Hay.....	B
Heading.....	B
Hides.....	C
Horse Shoes.....	B
Household Goods.....	B
Ice.....	F
Lard.....	D
Lead, pig.....	C
Lead, sublimed.....	B
Lime in barrels.....	B
Lime in bulk.....	A
Live Stock.....	F
Lumber, finished.....	B
Lumber, rough.....	C
Machinery, electrical.....	B
Machinery, mining.....	B
Manure.....	C
Marble.....	F
Matches.....	B
Merchandise.....	B
Mine props.....	C
Molasses, barrels.....	C
Molasses, cases.....	B
Moveables, emigrant.....	B
Nails.....	B
Naptha.....	F
Nursery stock.....	B
Oil in barrels.....	C
Oranges.....	D

if box car      if refr.      D

COMMODITY	CLASS
Ore, Zinc.....	B
Peaches, fresh.....	D
Pecans.....	B
Pig iron.....	F
Plaster.....	B
Poles, telegraph.....	F
Potatoes.....	B—D—F
Poultry, dressed.....	D
Poultry, live.....	F
Radiators, steam.....	C
Rail, steel and iron.....	C
Rice.....	A
Rock, crushed.....	E
Salt.....	A
Sand.....	E
Sash and doors.....	B
Scrap iron.....	C
Sewer pipe.....	C
Sheet iron.....	B
Shingles.....	B
Show cases.....	B
Soap.....	B
Spelter.....	C
Spokes.....	B
Staves.....	B
Stone.....	F
Stove pipe.....	B
Stoves and ranges.....	B
Straw.....	B
Strawberries.....	D
Sugar.....	A
Ties, hay bale.....	B
Ties, railroad.....	C
Tile, drain, bldg., roofing.....	C
Tripoli.....	B
Vegetables and fresh fruits.....	D
Vinegar, barrels.....	C
Vinegar, bottles.....	B
Watermelons.....	F
Wool.....	B

account different  
classes cars used

## May 2023 Meeting (cont'd)

### CAR SERVICE RULES

The ARA (later AAR) established certain rules generally directing cars on a foreign road to be routed back towards the the car's home road. These rules were usually followed, but were often winked at when there was a car shortage or a customer needed an empty car in a hurry. Shippers "appropriating" empty cars could care less.

In 1949, the car service rules were as follows:

**Rule 1:** Home cars shall not be used for the movement of traffic beyond the limits of the home road when the use of other suitable cars under these rules is practical.

In other words, try to send the foreign road cars (for which the home road is paying car hire and perdiem) back home, or at least off the home road, and keep as many home road cars as possible close to home.

**Rule No. 2:** Foreign cars at home on a direct connection must be forwarded to the home road loaded or empty. If empty at other than junction points with the home road, cars under this rule may be:

- (a) loaded via any route so that the home road will participate in the freight rate;
- (b)(1) moved locally in the direction of the home road;
- (b)(2) when located in other than the home district or a district contiguous thereto, loaded via any route to a destination within or in the direction of the home district or to a destination within a district contiguous thereto;
- (c) moved locally in an opposite direction from the home road, if to be loaded for delivery on or movement via the home road.

This rule seeks to get the loaded cars back to or over the home road, if it connects with your railroad, or at least in its direction, so that the home road either gets the car back or revenue from the freight charges.

**Rule 3:** Foreign cars at home on other than direct connections must be forwarded to the home road loaded or empty. Under this rule, cars may be:

- (a) loaded via any route so that the home road will participate in the freight rate;
- (b) loaded in the direction of the home road; or
- (c) moved locally in the opposite direction from the home road if to be loaded for delivery on or movement via the home road, or to a point in the direction of the home road, beyond the road on which the cars are located.



## May 2023 Meeting (cont'd)

Empties could be returned to the road that delivered the cars to your railroad.

Remember, if cars are not loaded and remain empty, they should be returned via the reverse of the route over which the cars were delivered, or if there is a direct connection with the home road, to the closest interchange with the home road.

Once a car is selected, an empty car bill was issued directing delivery of the car to a customer or a station agent for loading, or empty to an appropriate interchange for return of the car to the home road.

J-62-48 SOUTHERN PACIFIC COMPANY Form 1304	J-62-48 Southern Pacific Company Form 1304				
<b>EMPTY CAR BILL</b>	<b>EMPTY CAR BILL</b>				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">CAR INITIAL <i>SP</i></td> <td style="width: 50%; text-align: center;">CAR NUMBER <i>14481</i></td> </tr> </table>	CAR INITIAL <i>SP</i>	CAR NUMBER <i>14481</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">CAR INITIAL <i>CGW</i></td> <td style="width: 50%; text-align: center;">CAR NUMBER <i>89498</i></td> </tr> </table>	CAR INITIAL <i>CGW</i>	CAR NUMBER <i>89498</i>
CAR INITIAL <i>SP</i>	CAR NUMBER <i>14481</i>				
CAR INITIAL <i>CGW</i>	CAR NUMBER <i>89498</i>				
<b>FOR HOME</b>	<b>FOR HOME</b>				
Billed from _____	Billed from _____				
To or Via _____ R.R.	To or Via _____ R.R.				
<b>FOR LOADING</b>	<b>FOR LOADING</b>				
Billed from <i>LOS ANGELES</i>	Billed from <i>WEST OAKLAND YARD</i>				
To <i>BALLARD CAL</i>	To <i>BALLARD CAL</i>				
Shipper _____ Spot _____	Shipper _____ Spot _____				
INSTRUCTIONS – This form must accompany all empty foreign cars, and System empty cars intended for loading, and must be used in billing private line cars under General Order Ten.	INSTRUCTIONS – This form must accompany all empty foreign cars, and System empty cars intended for loading, and must be used in billing private line cars under General Order Ten.				



## May 2023 Meeting (cont'd)

Form 4205  
148 100M  
2/10/48

**READING COMPANY  
CAR TICKET**

INITIALS Rdg CAR NUMBER 115352  
Box

Kind of Car \_\_\_\_\_  
Suitable for \_\_\_\_\_ Loading  
Inspected at \_\_\_\_\_

To \_\_\_\_\_  
Via \_\_\_\_\_

For delivery to 5517 SUNBURY, PA. R. R.  
APR 4 1968

**EMPTY CAR**

Weight of Car for Engine Rating \_\_\_\_\_ Tons of 2000 lbs.

From NEWBERRY JOCT. PA.

Consigned to \_\_\_\_\_

Final Destination \_\_\_\_\_

To load in \_\_\_\_\_

Order of \_\_\_\_\_

19 \_\_\_\_\_ Home Route No. \_\_\_\_\_  
Agent \_\_\_\_\_

RECEIVED  
FEB 28 1968  
NEWBERRY JOCT. PA.

Samples of bills used to move empty cars.

Note space for recording the condition class and suitability of the car in the top half, which is for moving the car to a customer for loading.

The bottom half is for returning an empty to the car's home road.

From Tony Thompson's blog

C&O FORM CF-72B  
Rev. 11-59  
Made in U. S. A.

**The Chesapeake and Ohio Railway Co.  
EMPTY CAR BILL**

INITIAL NUMBER KIND

Clean Out  D-Class  
 A-Class  Single Door  
 B-Class  Double Door  
 C-Class  Ft. Car Length

Station Classified \_\_\_\_\_ Date \_\_\_\_\_  
Remarks \_\_\_\_\_  
Billed from \_\_\_\_\_ Date \_\_\_\_\_  
Billed to \_\_\_\_\_ Date \_\_\_\_\_  
Order of \_\_\_\_\_ Date \_\_\_\_\_

**HOME ROUTE CARD**

INITIAL NUMBER KIND  
NKP 85228 B.  
(Fill out junction point where received)

RECD. FROM EL RR  
9235 E BUFFALO, NY  
AT \_\_\_\_\_ DATE 5/23

SIGNED \_\_\_\_\_ TITLE \_\_\_\_\_

To dispose of car, if road received from is not proper route or if original card is lost or misplaced secure home route from proper source and fill in space below crossing out item above.

ROAD STATION AUTHORITY

BILLED FROM \_\_\_\_\_ Date \_\_\_\_\_  
SIGNED \_\_\_\_\_ TITLE \_\_\_\_\_  
DO NOT USE THIS FORM FOR SPECIALLY EQUIPPED CARS

An example of empty car selection.

A good rule of thumb is to select an empty for loading using these preferences:

- 1st: Use a car owned by the destination railroad;
- 2nd: Use a car owned by a railroad in the route which directly connects with the destination railroad;
- 3rd: Use a car owned by the previous railroad in the route, and so forth;
- Last: Use a car owned by the railroad originating the shipment.

Note that some railroads were part of a system or "Lines", and a car of one railroad in the system was treated the same as a car of another railroad in the system.

New York Central: NYC=CCC&StL=P&E=MC

Missouri Pacific: MP=IGN=NO&GN

Union Pacific: UP=OSL=OWR&N

Southern Pacific: SP=T&NO

Example: Frisco (SL-SF) originates a load to be routed via St. Louis to the CCC&StL (NYC), then to the B&O, then to the Reading, then to the CNJ. The best picks for loading are first a CNJ car, then RDG, then B&O, then New York Central System, then Frisco.



## May 2023 Meeting (cont'd)

### A PHILOSOPHICAL DETOUR

I like to keep paperwork relatively simple and clear, with all information on one piece of paper or in one packet. No fumbling with multiple pieces of paper for each car.

Function over form. Maximize the number of functions, whether moving cars or making decisions or whatever provides action on the layout or in the operators' brains, and provide all of the information needed for each function in one place.

Keep the car routing cards for car routing, functions incidental to the car routing (but still requiring or governing intermediate car movements, such as weighing cars, or cleanout or inspection) can be covered by instruction cards to be inserted in the car card over the car routing card.

Try to use prototype terminology.

### STARTING THE PROCESS

The process on my railroad starts with gathering up of the empty car orders. These are made as the first cycle of a three cycle waybill: first the empty car order, then the route to the customer with any other instructions, then the route of the loaded car with any further instructions.

The empty car order itself is spelled out on one end of the car routing card. By making it part of the car routing card, it ensures that the correct route of the car is always with the car order and that the ordered car will not be misrouted. This specifically describes the car requested by the customer and what route it will take. It has all of the information that would be on the car card of the car selected.

Format:

#### EMPTY CAR ORDER

Car Class (XM, etc.)    Capacity (in length, weight, etc.)  
 "Grade" of car        Commodity to be shipped  
 Requested by what customer  
 Route of loaded car, eg. SL-SF>T&P or AT&SF>NKP>DL&W  
 Special instructions or requirements, eg. cleaning

Compare the information on the empty car order with the car cards of the empty cars you are considering, see which match the order, and pick out the car that best complies with the Car Service Rules.



# May 2023 Meeting (cont'd)

The empty car order

To deliver, turn card around for route to customer

Flip over for the route of the load

EMPTY CAR ORDER  
 FM 41+ft. 50ton  
 Grade F for oil tanks  
 Reg'd by National Tank  
 Route: SL-SF > TBP

To: NEWBLOCK  
 Consignee: NATIONAL TANK  
 Spot Track 2 in Steel Tank Shop  
 Empty for loading

To: TULSA COMM'L DIST.  
 Consignee: R.X. BYRNE  
 STEEL  
 Spot on Track 3, plant switcher  
 Empty for loading

EMPTY CAR ORDER  
 FM, GA or GM 40ft 40ton  
 Grade F for separators  
 Requested by R.X. Byrne Steel  
 Route SL-SF > AT&SF

To: AT&SF interch.  
 Contents: casing pipe  
 To Be Weighed At  
 Newblock Yard

Insert a weigh ticket over this, to be removed after weighing

EMPTY CAR ORDER  
 GK, GD or GS 40ft 50ton  
 Grade E for scrap  
 Reg'd by Montesano S.M.  
 Rte: M-K-T > UP West

To: LAKE STATION  
 Consignee: MONTESANO  
 SCRAP METAL  
 Empty for loading scrap

EMPTY CAR ORDER  
 XM or XA 40ft. 40ton  
 Grade B for machinery  
 Reg'd by Cooper Winch  
 Route AT&SF > CDS

To: LAKE STATION  
 Consignee: COOPER WINCH  
 Empty for loading  
 Spot at assembly bldg.

EMPTY CAR ORDER  
 XM or XA 40 ton  
 Grade B for waste paper  
 Reg'd by Lawyers Waste Paper  
 Route SL-SF > NYC

To: TULSA COMM'L DIST.  
 Consignee: LAWYERS WASTE PAPER  
 Empty for loading

EMPTY CAR ORDER  
 XM 40 ft. 40ton  
 Grade B cottonseed hulls  
 Reg'd by Chickasha C.O.  
 Route: SL-SF > PRR  
 CLEAN before loading

To: LAKE STATION  
 Consignee: CHICKASHA  
 COTTON OIL  
 Spot on elevator track, hull load  
 Empty for hull loading

## May 2023 Meeting (cont'd)

Remember that cars in assigned service or cars owned by non-railroad private companies cannot be intercepted for loading, and need to be returned to the owner or home road, or as otherwise instructed (often on a placard or stencil on the side of the car).

During the staging process, go to each station or switching district on the layout with the empty car orders for that station or district, and as station agent determine what orders might be filled with empty cars already there. These cars can receive a respot insert "Switch This Car from \_\_\_\_\_ to \_\_\_\_\_" instructing the train crew where to deliver that car as part of its switching. You can allow for some customers to appropriate cars that are already at that industry, though that may also require respot from one track to another. All other empty cars that are eligible for interception should receive a hold insert "Hold This Car At \_\_\_\_\_, Inspect for Loading" instructing the train crew to pick up that car and take it to that location or yard, and instructing the yard crew to set that car aside with blue flags for inspection. Take any unfilled car orders back to the yard.

If there are empty car orders that have not been filled for a while, you can also look for candidates in the staging yard for the car distributor to send your way. Use the same "hold" card insert for routing.

Also at this time, look over the cars that had been set aside for inspection in the previous session, to see what cars might match the orders left over from the reviews by the station agents or are otherwise in the yard card boxes.

The inspection process in the yard can also be done by the "agent" (usually the owner) or the yardmaster during the operating session as additional cars are set aside as trains or switch runs come in. Remove the inspection card for the candidate car, and look at the return route portion of the car routing card to see if there are any further restrictions on the car's suitability because of the load it had previously handled. To provide for additional contingency, you might have inspection results on the back. If everything checks out and the car is suitable for the load, remove the return route card. If the car needs to be cleaned, insert the car order into the car card with an instruction insert directing the yard crew to switch the car to the cleanout track.

Once the car is ready to be switched onto the train or switch run that will deliver the empty, turn the car order around to show the route of the delivery of the empty, and insert any further instructions as directed by the empty car order.

There may be various instructions to switch a car around an industry before, during or after loading or unloading. One example would be a car moving under a milling in transit bill. I would use an instruction on top directing that the car carrying the inbound grain be spotted at the inspection spot, and then use a 4-cycle car routing card for the rest of the process: switch to unloading track, then to cleanout track, then loading spot for the milled product, then the route of the outbound load.

That's how it is done on the Tulsa Junction! Feel free to develop your own system using the features that appeal to you or which suite your prototype.

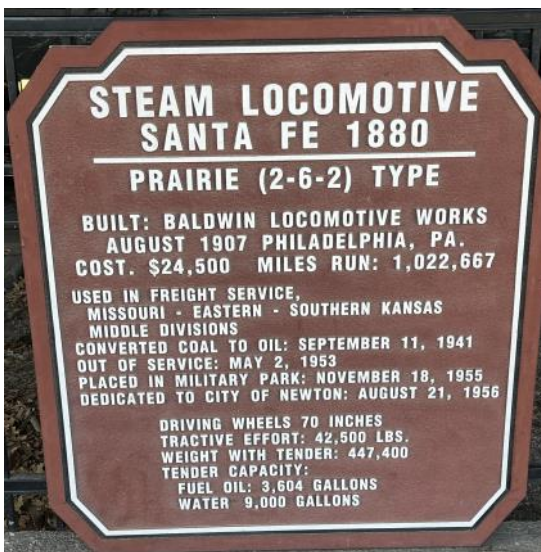
Why go to all this?

- Introduces an additional element of a transportation process into the operating session.
- I gives the yardmaster something else to think about.
- It cycles cars within the layout without everything going off into staging and avoids 'ping-pong' routing.
- It adds elements of contingency to the operations.



## Newton, Kansas - Dave Salamon

Becky and I took a drive and we were going through Newton, Kansas. Knowing it had a rich history in rail-roading went down to the tracks. Found a 2-6-2 on display, and the covering over the engine was flanked by sections of the old butterfly awnings from the passenger tracks, pretty cool touch.





## Newton, Kansas - Dave Salamon

The Depot is still served by Amtrak, back in the day it there was a Harvey House located there too.



There is a turntable, engine servicing facilities, a small engine house, a freight yard, and a grain elevator that still has 2 of the original 4 tracks going into it. There is a trackmobile type vehicle that serves the elevator.

In the yard was this old Slug (Ex UP GP9 267 built 1954 Sold to ATSF, 13 March 1981, rebuilt to ATSF yard slug 103, completed on 14 September 1981. Renumbered/relettered: BNSF 3952 27Feb00/14Sep00. Yard slug renumbered into the GN series to avoid conflict with GEVOs )



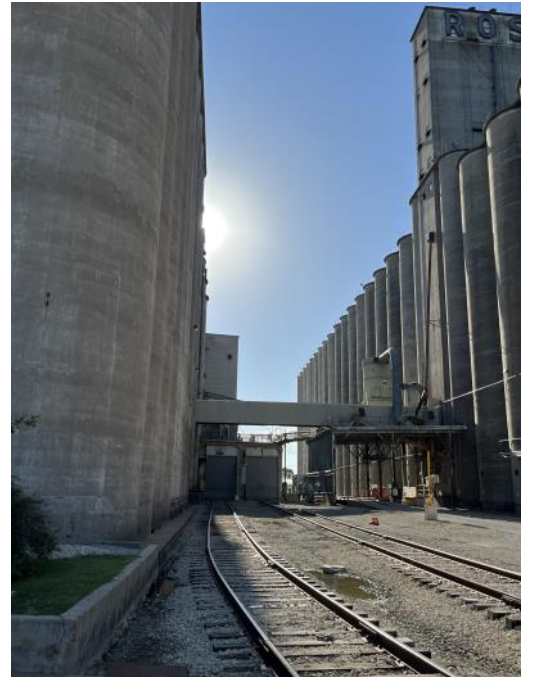
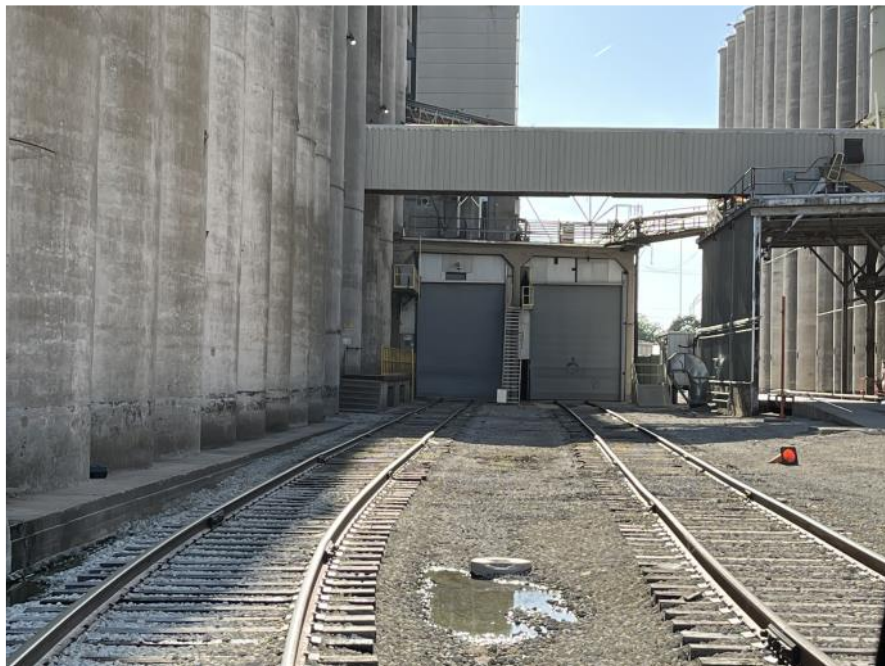


Newton, Kansas - Dave Salamon





# Newton, Kansas - Dave Salamon





# Newton, Kansas - Dave Salamon





# Newton, Kansas - Dave Salamon





## Newton, Kansas - Dave Salamon

So what is the story with this yard slug, especially with the marking GN.

I assumed it was a former Great Northern engine...WRONG! The engine started life as a GP9 for the UP number 255, delivered in August 1956, S/N 19780. In June 1980 it was so to the ATSF. On 13 March 1981 went to Cleburne TX to be rebuilt into ATSF yard Slug 102, completed on 31 July 1981.

BNSF (and UP) now have such large locomotive fleets that the numbers from 1 to 9999 are no longer enough, and the computers will not accept 5 digit numbers, so different reporting marks are now used. UPY includes switch engines on the UP, GN is used by BNSF to clear BNSF number series so new units can be in sequential blocks.



### [So what is a slug? \(from Wikipedia...so you know it is correct :\)](#)

In railroading, a slug is a version of a diesel-electric locomotive which lacks a prime mover, and often a cab. It derives the electrical power needed to operate its traction motors and motor controls from a fully-powered mother locomotive. When coupled together it takes advantage of the excess current that the mother's diesel-electric locomotive produces at low speed, providing additional horsepower and braking at such operation without the expense of a full locomotive.

A slug is distinct from a B-unit, which has both a prime mover and traction motors but no cab. A slug may retain an operator's cab to allow engineers to operate a train with the slug in the lead, or may have the cab and much of the body removed to save space and allow the operator in the mother better rear visibility.



# WHAT'S NEW ON YOUR LAYOUT????

(Please email Dave Salamon—[drs\\_rr@yahoo.com](mailto:drs_rr@yahoo.com) with any layout updates or projects you'd like to share with the members)



Dale Baker extend the SKOL from the Port of Catoosa to Owasso! Down the hall and to the right...



# WHAT'S NEW ON YOUR LAYOUT????

(Please email Dave Salamon—[drs\\_rr@yahoo.com](mailto:drs_rr@yahoo.com) with any layout updates or projects you'd like to share with the members)



Jay Hasting's is building a new HO layout - Southern Kansas Division





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Check  Credit card

Credit Card # \_\_\_\_\_

Expiration \_\_\_\_\_ Security Code \_\_\_\_\_

Signature \_\_\_\_\_

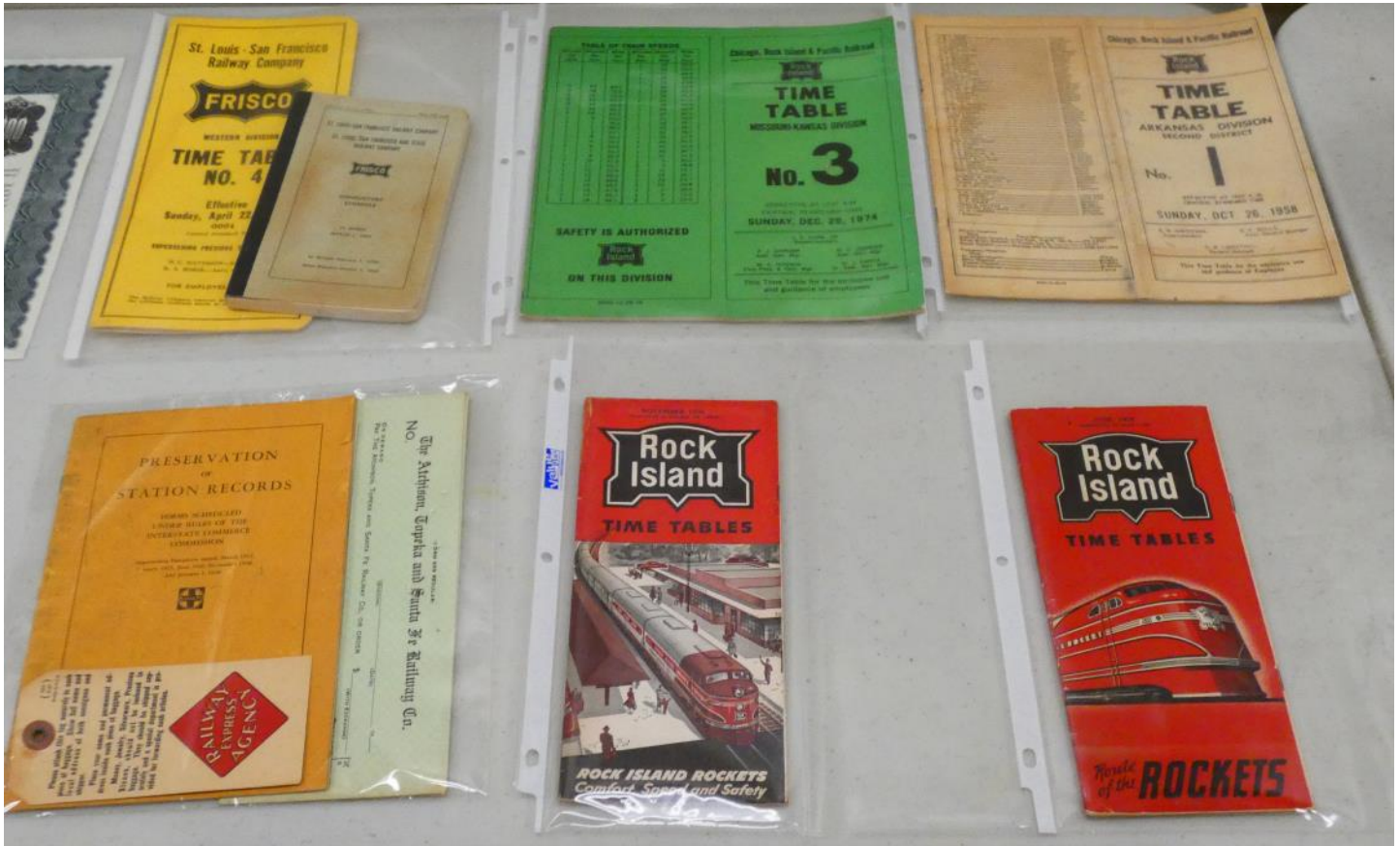


**So much bang.  
So few bucks.**

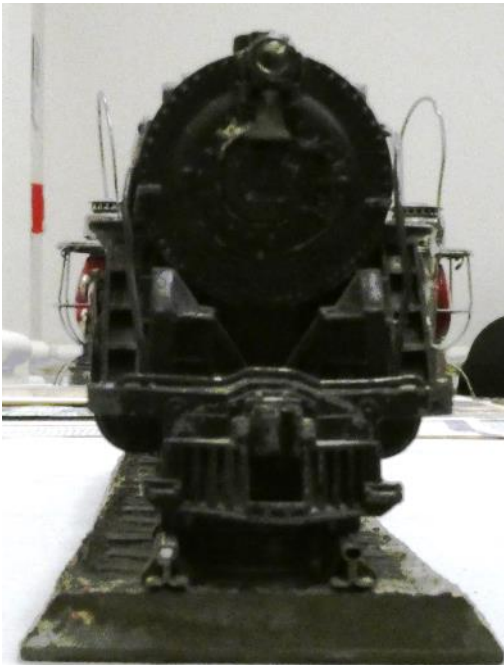
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# SHOW AND TELL



# SHOW AND TELL



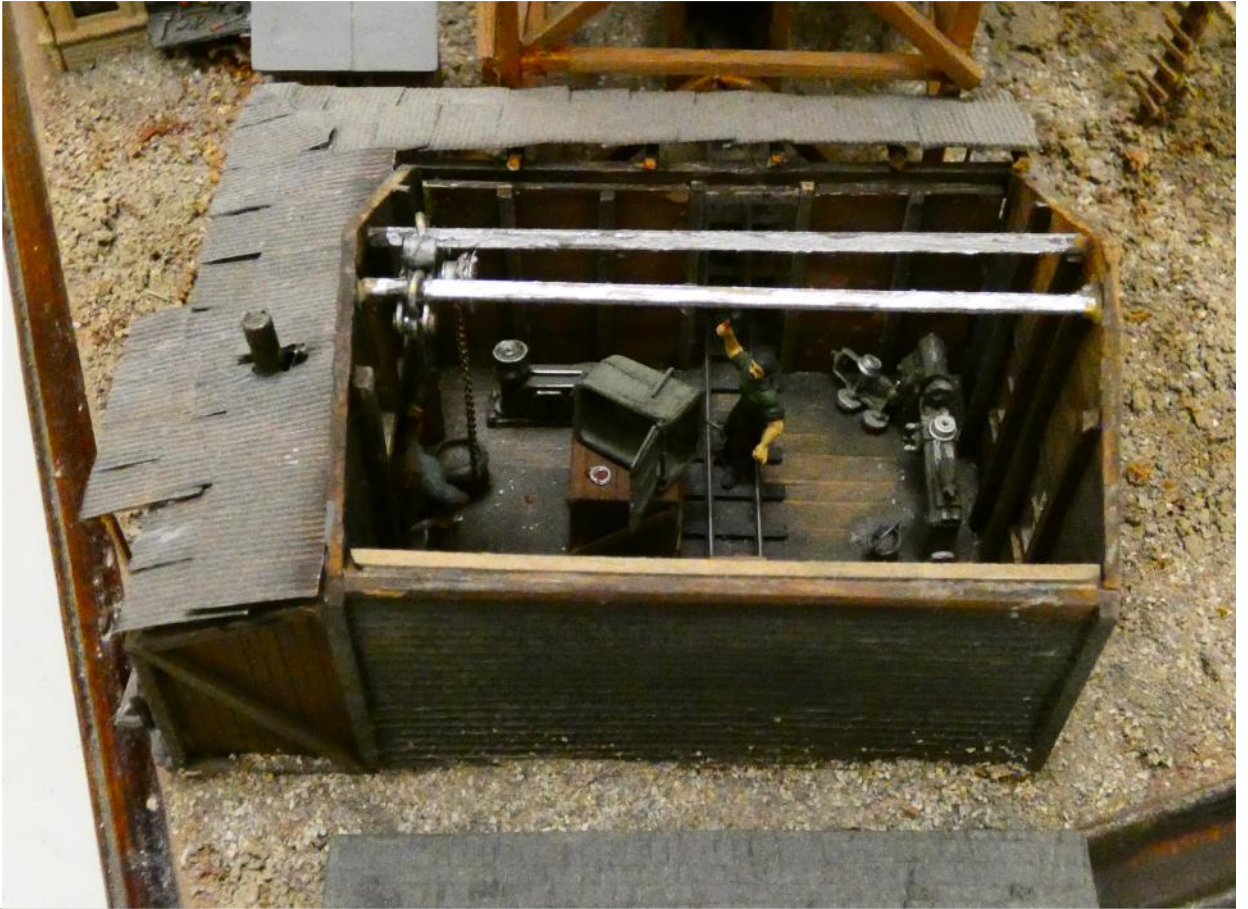


# SHOW AND TELL





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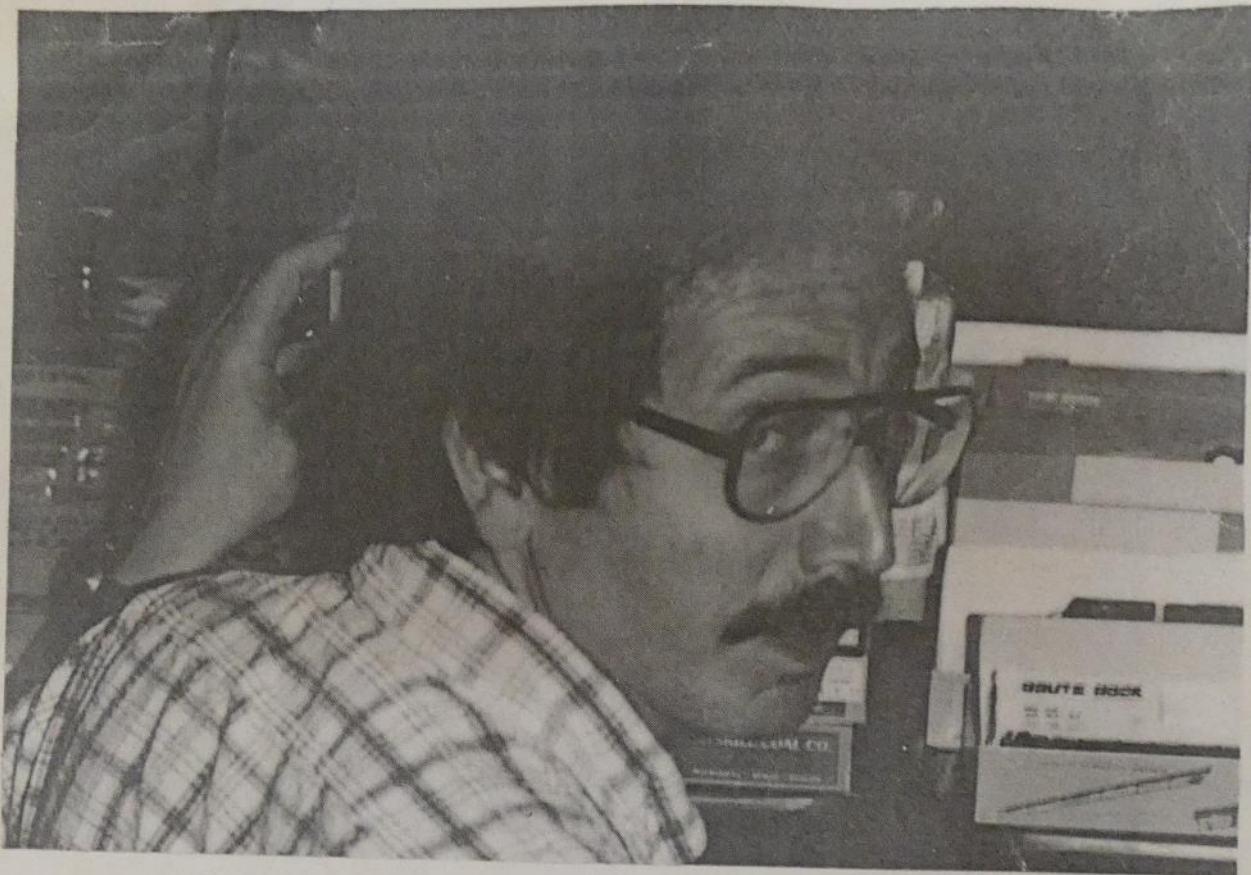
# SHOW AND TELL





## *From the Archives...*

# Let The Seller Beware!



Model Railroader  
Type "A"  
Known Fondler  
of T-M Cars





*Stretching them out on the Albuquerque sub. on Michael Tomei s layout. Photo by Jay Hastings*

Indian Nations Division  
Dave Salamon  
17924 E. 92nd Street North  
Owasso, OK 74055

