THE RESOURCE NEWS, REVIEWS, INFORMATION TO USE August/September 2020 Volume 6 No. 6 SCALE **6 YEARS STRONG!** Pocahontas Coal Company Scene Around the Layout **New Tracks and the Wild West** Alleghany, VA Signaling Project Using an Arduino

Shows, Meets and so much more...



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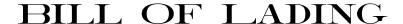
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Welcome to the online S Scale Resource magazine. The magazine is presented in an easy to use format. The blue bar above the magazine has commands for previewing all the pages, advancing the pages forward or back, searching to go to a specific page, enlarging pages, printing pages, enlarging the view to full screen, and downloading a copy to your computer.

Front Cover Photo

A scene from Luther Stephens' Pocahontas Coal Company



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The Model Railroad Resource, LLC publishes *The O Scale Resource* and *The S Scale Resource*. Be sure to look at both of our magazines. There are many articles in our magazines that are not scale specific and will be of interest to you. Click the magazine title in this announcement to see the magazine.

From the Publisher's Desk



Well the unfortunate happened... we canceled the O&S Scale Midwest Show for this year. We did not want to do this; in fact, we sold more dealer tables than ever and not one vendor canceled. It was simply that we could not get enough attendee pre-registrations to make it fair to those dealers. We were hoping the hysteria would have died down by now and the fact that we were taking numerous safety precautions, but it was not meant to be.

Another issue which just caused the 2020 Harrisburg Narrow O Summer Meet to cancel is a government mandate that can come down without warning at anytime and end a show. Some states are more heavy handed than others, but can you imagine if you are putting on a show taking all precautions and have a "no gathering over 20 people" come down from the Governor or even a Mayor a day before your show opens?

Refunds for the O & S Scale Midwest Show have all been issued. If you made a hotel reservation, you will need to cancel that. Once we have a signed contract for next year we'll announce the dates.

Here in the Midwest, the dog days of summer are upon us. We have had some extremely oppressive heat and humidity. What better place to cool down than in the basement working on the layout? OK, I know not everyone has a basement, but you get the idea. Try to do something each day, even if it 10 minutes of modeling. Now, Amy will choke when she proofs this because I have not been doing any modeling in a month. I can't even follow my own advice. I will get back in the mood and start modeling, I promise.

We have a lot of neat stuff this month for our readers:

Luther Stephens shows us how he built his Pocahontas Coal Company.

J Chris Rooney's article on the Alleghany, Virginia Signaling Project give us some history of the Alleghany Cabin and how he built and signaled the scene on his railroad using Arduino technology, and he includes the code for the Arduino.

New Tracks looks at the history of the Old West and people who model it.

If you are working on, or even planning a project, please let us know. Drop us an Email here and tell us what you are working on.

We continue to request articles that will appeal to scale S projects. Now these can be anything from a kit or scratch build, scenery, wiring/DCC, or most anything else. I see some great work on Facebook and I don't have an issue turning some of those into articles. Not everyone is on Facebook or know about private blogs. So let me know what you are working on, and we'll be happy to print your projects, as well as, publicize your Facebook page or blog.

Happy Reading & Happy Modeling,

Dan Dawdy

NEWS YOU CAN USE

Jim King of Smoky Mountain Model Works has announced a new car in production. Milwaukee Road "Ribside" 40 ft Boxcars in (2) styles (Couplers & decals included).





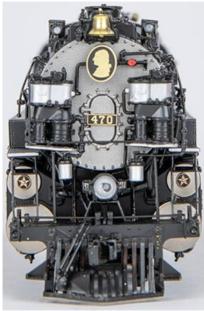
The 40-ton trucks will be sold separately and should be available prior to shipping of the box car kit (trucks are \$32 a pair). The full-rib body will be produced first, followed closely by the short-rib.

See their Website for more details.



Daniel J. Navarre from River Raisin Models announces that the production models are being assembled and painted now.

The Models will be powered by a Maxon Swiss Motor. They will be available in DC or Factory Installed Loksound DCC. We are working with Boo Rim Precision on a schedule for these models to be here prior to the end of 2019. Each version will be



produced in a very limited quantity. Reserve yours now to assure you will get yours. Some customers missed out on their favorite version in the last project (Early Berkshires) because they waited too long and our quantities were set with the builder and it could not be changed. This is a unique opportunity that we have negotiated with Boo Rim Precision to offer both

the SP and C&O Pacifics in one project.

RRM-SP2479 – Regular Boiler with 120-C-8 Tender. Black Paint Scheme. Late Lettering.

RRM-SP2482 – Skyline Boiler with 120-C-5 Tender, Black Paint Scheme, Late Lettering.

RRM-SP2484 – Skyline Boiler, Streamlining, with 120-C-3 Tender, Daylight Paint Scheme, Early Lines Lettering. Circa Prior to 1943.

RRM-SP2484.1 – Skyline Boiler, Streamlining, with 120-C-5Tender, BlackPaint Scheme, Late Lettering. Circa 1947.

RRM-SP2487 – Regular Boiler with 120-C-8 Tender, Black Paint Scheme, Early Lines Lettering. Circa 1946.

RRM-SP2487.1 – Regular Boiler with 120-C-8 Tender, Black Paint Scheme, Late "SOUTHERN PACIFIC" Lettering. Circa 1947.







Also extra tenders will be available. See their Website for more details.



2021 NASG Convention is announced for Buffalo, NY.

The 2021 NASG CanAm Convention will be held in Buffalo NY, August 3-7 at the Buffalo Marriott Niagara in nearby Amherst. The city of Buffalo has undergone a stunning revival in recent years with its downtown Art Deco architecture, its lakeside setting, and its extensive rail facilities. Mark it on your calendar as a "must-attend" and watch for further details in future issues of *The S Scale Resource*.

"Southern Pacific P-10 and Chesapeake & Ohio F-17, F-19 4-6-2 Pacific Project" In S Scale Brass!



Pilot models shownDelivery of the production models is planned for later this summer.

These classic locomotives will be built in very limited quantities. The SP P-10's will be built in four versions: regular boiler, skyline boiler, Daylight Paint scheme with full streamlining, and with early and late lettering. The C&O F-17 will be built in three versions and all five of the F-19's will be offered. These classic locomotives powered the famous

The George Washington Sportsman, and the Fast Flying Virginian passenger trains.



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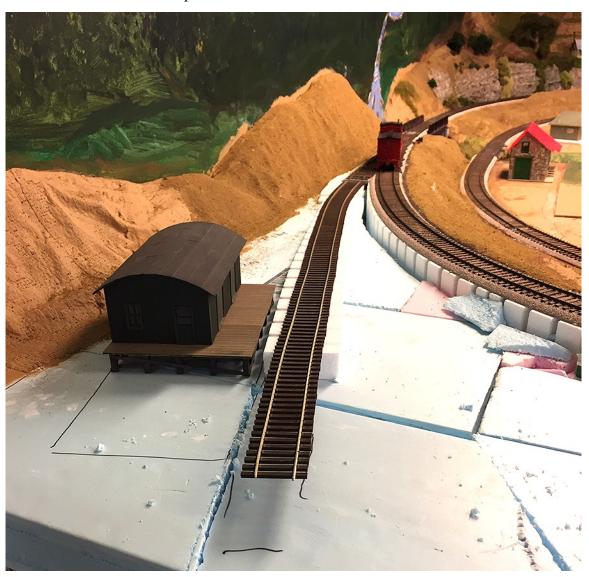




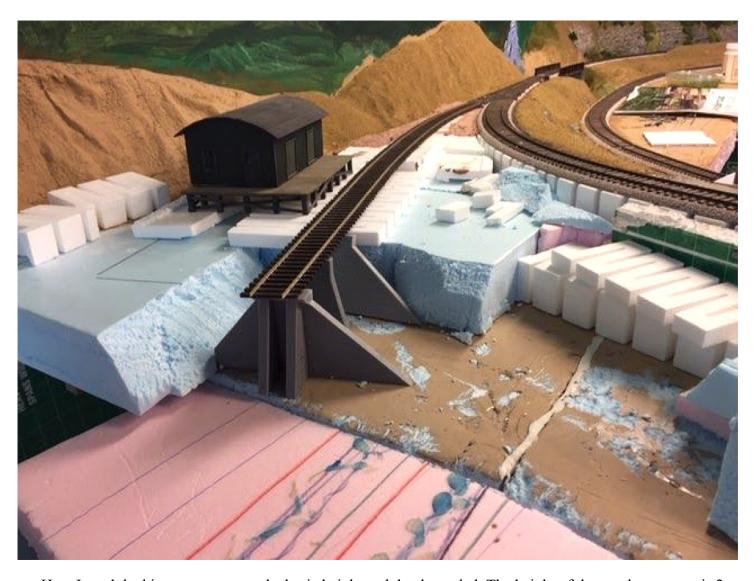
Pocahontas Coal Company

By Luther Stephens

I met Jeff Madden during an Sn3 convention in St Louis in 2002. He was a former employee of MR the magazine and was an HO layout builder. He had done an article for MR about his creation of a retail fuel dealer in the mid 80's and I had always loved the structure and story, based on a business in Martinsburg WV. I had saved the magazine as it was something I wanted to build for myself. I thought it would be a great structure for our common friend, Bill Wade of BTS. Jeff agreed, so I sent Bill a package of the drawings and other pertinent material. Bill agreed to add it to his company and called it Pocahontas Coal Company. It is still listed as under development. I had reserved a spot in my current and last layout (at 80, I can say that), but cannot wait any longer so here is what I did with the space and an East/West models coal trestle kit.



I all ready had the siding in place and had the building from a Lehigh Valley Models Fuel Depot kit. Since the track level was set, I had to figure out what and how much blue "dirt" had to be removed. As I dug, I thought I should get the kit and build it. So I did.



Here I used the kit supports to get the basic height and depth needed. The height of the trestle supports is 2 and 9/16ths. Add the thickness of the trestle, about ½ inch. (See my description about how I built the trestle).



After building the coal trestle, I could determine the depth of the ground under it. The height of the trestle supports is 2 and 9/16ths and the trestle is 9/16ths to the top of the rail. The trestle is designed to spike rail on the tie deck. Not having the patience to do that, I cut away some of the ties on a piece of flex track and glued it to the deck. Note that I did not follow the very clear instructions in the kit.

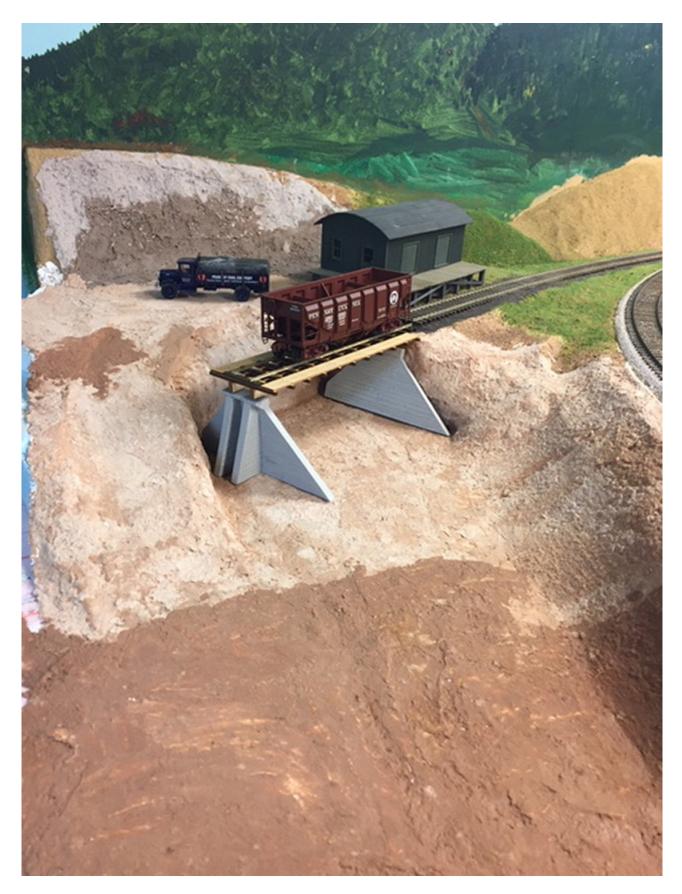
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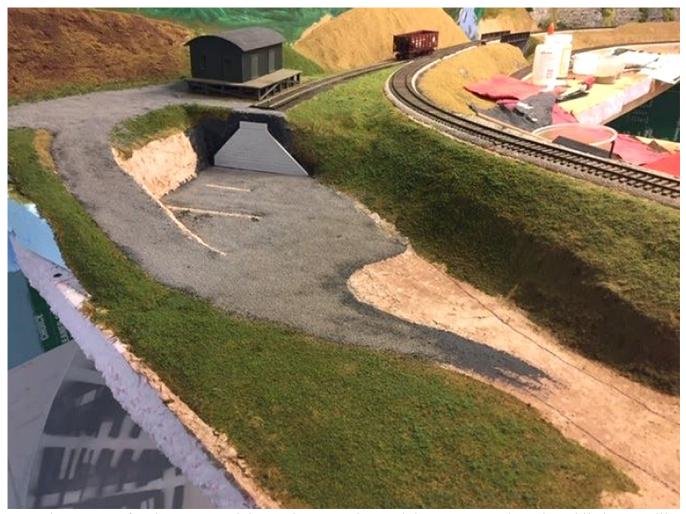
I also had to consider a roadway to get to the building from below. I used a straight truck and drove it around to get a feel for the scene. I cut the foam with a steak knife I "borrowed" from the kitchen and a wire foam cutter. Both tools worked well and I cleaned up the dirt with a vacuum as I went along. I added some of the back side scenic materials, plaster cloth and some Sculptamold. I added some brown craft paint to the Sculptamold.



I covered the blue foam with plaster cloth then added Sculptamold to do the final shaping. I added paint to the mix before applying, using a 1" plastic scraper and a small pallet knife as needed.



Getting close to doing the finish work. With the trestle set in place, the final fitting can be done. Next will be defining the roadway and adding the crushed stone, followed by grass. I didn't think about the scale, but was able to get it in without problems.



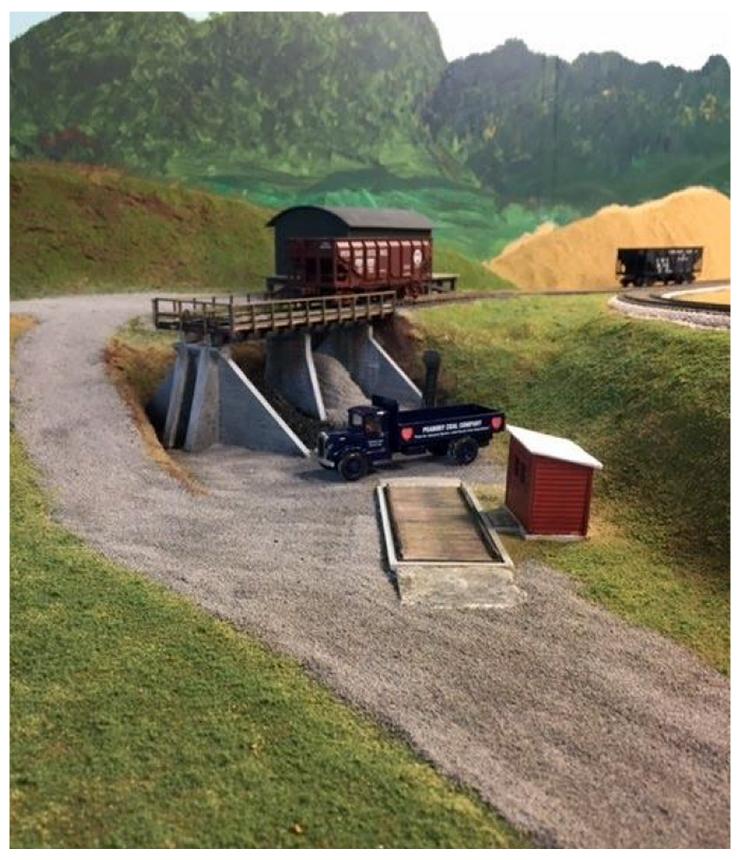
Using gray craft paint, I covered the road areas and spread the stone over the paint while it was still wet. Then did the grass areas the same way. Woodland scenic cement was lightly sprayed over the ground cover to fix it.



I'm getting excited now, but still have to do the scale house and platform. The John Hall kit I had in my stash fit the spot nicely.

(East/West has added a scale house to his kit line.)

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The scale house platform is wood individual boards with a styrene frame. I added plaster ramps on each end of the platform. The trestle is not glued to the supports, this will all be dismantled some day and my nephew will appreciate that.



I shaped scrap foam to make a base for the piles of stone and coal. Being careful with the glue I covered the foam then poured the materials over them. Woodland scenic cement was lightly sprayed over the ground cover to fix it.



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I will, as the mood strikes, add some details to the scene. I built the scene so that it could be removed from the layout without too much damage. The trestle is not glued to the supports and the flex track is not glued down. The conveyor is a Lehigh Valley kit, built by my brother.

I really enjoyed putting this scene together. The trestle kit was fun to build, and I shared my experience with Al the owner of East/West. He appreciated the feedback. His website has a photo as well, and his instructions are available.



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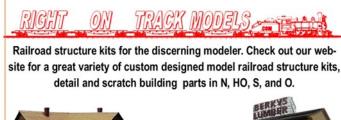
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ALLEGHANY VA SIGNALING

By J Chris Rooney PROJECT

Alleghany Cabin (tower) lies 29 miles west of Clifton Forge VA and 51 miles east of Hinton WV, at the summit of the Alleghany Mountains. During the steam era, helpers were stationed at Hinton WV and were turned on the turntable at Alleghany to return to Hinton. Alleghany was a busy place with 30 - 40 train movements a day, and in 1936, a new tower incorporating all the latest technology replaced the older manually operated tower. In the new arrangement, turnouts at Alleghany were operated by electro-pneumatic switch machines (hence the plumbing seen in earlier photos of the cabin). Low-voltage electric switch machines were used at Tuckahoe, East Alleghany and Jerry's Run forming a five-mile-long CTC installation with the panel and plan board located in the Alleghany tower.[1]

Inside the tower: The CTC type control machine in "A" Cabin is arranged in two panels. the end section at the right being set at an angle with the main section, so that the operator can readily reach any of the levers without leaving his chair. The machine has 15 levers for the control of 7 single switches, 2 derails and 6 crossovers; 23 levers for the control of 44 signals, 2 traffic levers and 4 levers for the control of electric switch locks and as selector levers on hand operated switches. The levers are of the usual

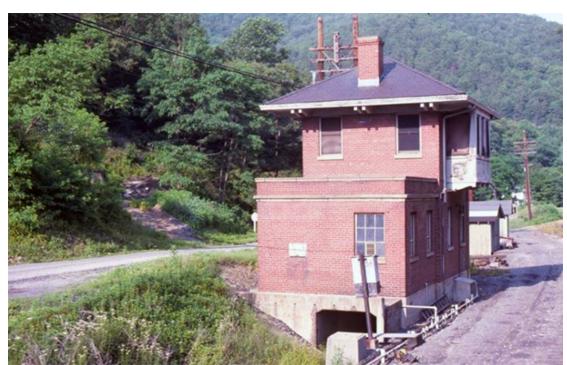


FIGURE 1 ALLEGHANY CABIN CA 1970

miniature type, each lever being equipped with indication repeater lamps, so that the leverman knows the position of each switch and the aspect of each signal. An illuminated track diagram, mounted just above the levers, indicates the location of all trains on the main tracks in the five-mile controlled territory.[2]

This tower is characteristic of the standard design which C&O adopted in the 1930's and is quite suitable as a representation of modern towers elsewhere in the U.S. And yes, not quite a river, but a stream did run through, or better said under, the building as seen in this circa late 1960's – early 1970's prototype photograph courtesy of North American Interlockings at www.northamericaninterlockings.com.

- [1] S Scale Journal, Vol. 2 No. 5, "A River Runs Through It, by JC Rooney" http://sscale.org/1134/volume-2-no-5-alkem-scalemodels-co-cabin-kit/
- [2] From Railway Age, August 15, 1936. This and other reprints prepared by Tony Liccese and photos are available from the Chesapeake & Ohio Historical Society.

Here in Figure 2 is the track diagram for the area mentioned in the text including both sets of tunnels and the area surrounding, controlled by Alleghany CTC from Tuckahoe to Jerry's Run as mentioned.

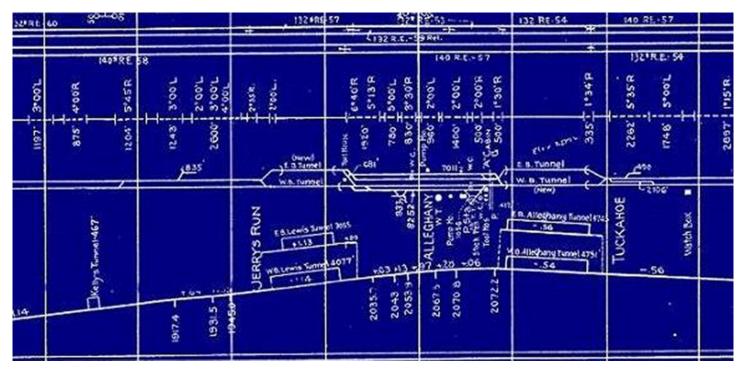


FIGURE 2 – PORTION OF TRACK CHART TC-M1-31 19370908 FROM C&OHS ARCHIVES.

Although the track layout was rather simple and straightforward, selective compression and alteration were necessary for modeling purposes in S scale.

In the prototype the eastbound (EB top) and westbound (WB bottom) Alleghany Tunnels were single track. There was a mid-track crossing and siding at Tuckahoe. Track to the West (left) in Lewis Tunnels was paired single bores EB and WB.

What is not known is:

- 1. When was bi-directional running instituted? The earliest pictures we have of the new installation at Alleghany Cabin (tower), from the J.W. Barriger Collection ca 1936 (C&OHS photo #1152) show unidirectional signaling as in Figure 3.
- 2. Signaling at the tunnel portals in the 1930's era also appears to be unidirectional as in Figure 4. This arrangement seems to have persisted into the 1950's.



FIGURE 3 ALLEGHANY CABIN CA 1936



At Alleghany, the predominant flow was loaded coal trains EB (right) to Newport News plus manifest freights in the same direction and scheduled passenger trains. WB trains were primarily empties being returned to the mines and manifest freights and passenger. EB trains required helpers that were run from Hinton to Alleghany and turned there to return west. WB trains consisting mainly of empties from Clifton Forge were often handled by a single Allegheny type 2-6-6-6 locomotive.

FIGURE 4 FROM RAILWAY AGE REPRINT

Alleghany was the summit and beyond that merely a 1.4-mile-long "hole in the mountains" where helpers were cut off and returned, road engines were watered, and local freight and passengers were served at the depot. But this simplicity leaves the modeler with few choices if one is trying to maximize operating possibilities with holding tracks on either side, continuous loop running, etc. In addition, space considerations dictated flipping the scene to its mirror image, so the cabin and station are on the south side of the tracks, not the north.

Our solution to this dilemma was to double track even in the tunnels and to use the double track for trains moving on and off the Alleghany scene, as if on a British diorama layout. This provides for level, continuous running on the segment joining EB Alleghany Tunnel around the room hidden by scenery and reentering through the double track WB Lewis Tunnel on the left side of the scene as below.

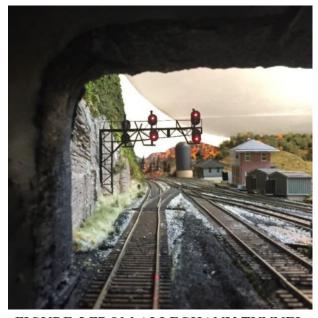


FIGURE 5 FROM ALLEGHANY TUNNEL

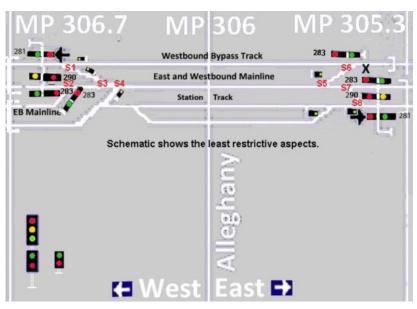


FIGURE 6 SCHEMATIC TRACK PLAN AS MODELED

Still the dilemma remained about signaling, and it was decided to assume bi-directional running on most segments of the Alleghany scene, as well as to assume a modified track diagram as in Figure 6, which shows the transition for modeling purposes. The first track from the top was to be the WB Mainline Bypass Track (this bypass was also constructed at Alleghany by C&O) which would handle through trains without sending them into all the crossovers within the interlocking. The center track would become a bi-directional running track for both EB and WB trains. The lower track would become the station track. And, at the very bottom, there is room for an un-signaled siding to handle local cars and helpers. At this point, a turntable at Alleghany remains in the future, but when one is added, the lead will diverge from the siding.

The model signaling project has several objectives:

- 1. Portray the scene as realistically as possible before the demise of steam, given operating needs, including the sections in both directions up and down the hills;
- 2. Accommodate a continuous running section on the layout's top-level portions that were not part of the physical arrangement at Alleghany in the prototype;
- 3. Pass two trains simultaneously;
- 4. Allow a cabin "operator" to control all the through tracks with minimal training;
- 5. As far as possible, make use of C&O cantilevered and dwarf signals.



near the water tower is signal 305.1, a mast signal, the home signal guarding the eastern entrance to the interlocking from the upper level. Behind the water tower, we see signal 305.3, a cantilever home signal that

FIGURE 7 OVERVIEW WESTWARD

Figure 6 schematic shows in

As modeled, Figure 7 shows the physical configuration of the

looking from East to West and in the background, cantilever signal 306.7 and mast signal 306.5 peeping over the tower roof. Also shown red is the facing "leaving" signal explained later.

guards the eastern crossover and

summit of the grade from Tuckahoe (Tuxedo here).

turnouts numbered in red and the proposed position of signals to

greater detail the modeled

control them with least restrictive aspects shown and C&O rules numbered in black.

tracks at Alleghany tower

Figure 8 shows the view eastward past the station and This signaling is not entirely prototypical in that only two signal aspects are displayed per signal. Stop C&O Rule 292 is red over red. Proceed is shown as either yellow over yellow Approach Slow per C&O Rule 284 or C&O Rule 283 Medium Clear shown as red over green, depending on the tracks governed.

Dwarf signals indicate switch position and are not directly operator controlled as they would be the prototype.

In Figure 6, the black arrows indicate a feature sometimes employed by C&O. For example, the cantilever signal 306.7 shows a "leaving" indication for the WB track. Also, at MP 305.3, an EB "leaving" signal governs the downhill track. In Figure 5, the "X" indicates where an additional "leaving" signal might be required for EB trains entering the WB main track via the crossover with additional rotary signal switches added to the panel.

Figure 9 shows the control panel which "emulates" a CTC panel, but in simplified form. SPDT Toggle switches along the center line control the turnouts [3], rather than the rotary switches of the prototype, with position indications shown on

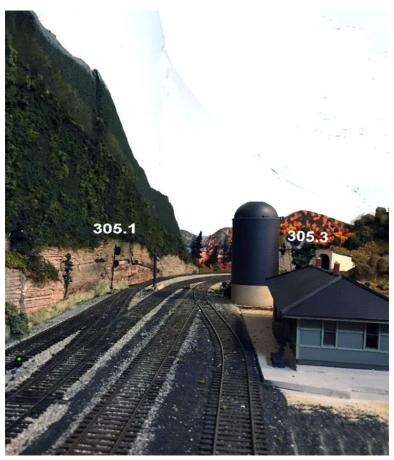


FIGURE 8 OVERVIEW EASTWARD

the plan board panel as in the prototype. Rotary switches and Rix CTC handles control signal indications based on intervention by the operator and these are shown as L (left WB) and R (right EB) giving stop-red and various clear indications per C&O rules. For clarity, the panel signal lights only indicate that stop or proceed indications have been set, the actual indications that will be displayed as signal aspects on two targets are shown in appendix Figure 11.





FIGURE 9 CONTROL PANELS MODELED LEFT AND ALLEGHANY CABIN RIGHT

[3] Toggle switches are connected to 751D electronic turnout switch kits produced by Ken's Hobby Electronics in Canada. These are very durable kits that produce a capacitor generated pulse suitable for twin coil solenoids used on the Alleghany turnouts due to lack of headroom for undermounted controls.

As stated above, one of the objectives was to create a job for the Alleghany operator who would have a direct and active role in moving trains across the railroad through the use of home signals at Alleghany and approach signals at Tuckahoe and Jerry's Run just as in the prototype.

The easy answer today would be to use one of the popular computer simulation products such as JMRI Panel Pro to reproduce the track diagrams on a computer monitor. But, turning the clock back 70 years or so, how is all this accomplished in a prototypical manner to replicate the "machine" installed at Alleghany tower in the steam to diesel transition era?

The answer is to use Arduino technology. The blue boards in Figure 10 are the Arduino Uno units which are located behind scenery very close to the signal heads to shorten wiring. In other words, decision-making is decentralized to near the actual signal heads and track switches, with the Arduino logic checking the panel settings versus the track switch position versus the signal indication. If the switch positions along the intended path of the train are consistent with the instructions given by the panel operator, the signal indications will register on the panel and on the signal head just as in the prototype. If something is misaligned, the signals will continue to display red until any conflicts are resolved.





FIGURE 10 ARDUINO INSTALLATION

The Arduino can be viewed as a limited function mini-computer capable of providing binary (on/off) outputs of up to 5 volts to power LED signals directly or other devices such as servomotors. The following example of the coding that operates the mast signal at MP 306.5 is included for illustration.

```
(Ed NOTE: to cut and paste this code save the article as a PDF)
SAMPLE OF ARDUINO CODE FOR SIGNAL 306.5
CODE WRITTEN FOR CHRIS ROONEY'S SIGNALING PROJECT BY CREAKY CHAIR MODELS 306-5-1
ASPECT = CLEAR
THE CIRCUIT:
* LED ATTACHED FROM OUTPUT PIN TO GROUND WITH A 5K RESISTOR
* SWITCH INPUTS ATTACHED TO PINS FROM GROUND
ROTARY SWITCH PIN 0
TURNOUT #2 PIN 1
TURNOUT #3 PIN 2
TURNOUT #4 PIN 3
UPPER RED SIGNAL PIN 4
UPPER YELLOW SIGNAL PIN 5
UPPER GREEN SIGNAL PIN 6
LOWER RED SIGNAL PIN 7
LOWER GREEN SIGNAL PIN 8
*/
// CONSTANTS WON'T CHANGE. THEY'RE USED HERE TO
// SET PIN NUMBERS:
CONST INT EBMNUH1 = 0; // THE NUMBER OF THE ROTARY SWITCHPIN (UP HILL MAIN)
CONST INT EBSW2 = 1; // THE NUMBER OF THE TURNOUT PIN
CONST INT EBSW3 = 2; // THE NUMBER OF THE TURNOUT PIN
CONST INT EBSW4 = 3; // THE NUMBER OF THE TURNOUT PIN
CONST INT UPPERRED = 4; // THE NUMBER OF THE UPPER RED LED PIN
CONST INT UPPERYELLOW = 5; // THE NUMBER OF THE UPPER YELLOW LED PIN
CONST INT UPPERGREEN = 6; // THE NUMBER OF THE UPPER GREEN LED PIN
CONST INT LOWERRED = 7; // THE NUMBER OF THE LOWER RED LED PIN
CONST INT LOWERGREEN = 8; // THE NUMBER OF THE LOWER GREEN LED PIN
// VARIABLES WILL CHANGE:
INT SWITCHSTATELV1 = 0; // VARIABLE FOR READING THE SWITCH STATUS
```

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```
INT SWITCHSTATELV2 = 0; // VARIABLE FOR READING THE SWITCH STATUS
INT SWITCHSTATELV3 = 0; // VARIABLE FOR READING THE SWITCH STATUS
INT SWITCHSTATELV4 = 0; // VARIABLE FOR READING THE SWITCH STATUS
VOID SETUP() {
// INITIALIZE THE LED PIN AS AN OUTPUT:
PINMODE (UPPERRED, OUTPUT);
PINMODE (UPPERYELLOW, OUTPUT);
PINMODE (UPPERGREEN, OUTPUT);
PINMODE (LOWERRED, OUTPUT);
PINMODE (LOWERGREEN, OUTPUT);
// INITIALIZE THE SWITCH PIN AS AN INPUT:
PINMODE (EBMNUH1, INPUT PULLUP);
PINMODE (EBSW2, INPUT PULLUP);
PINMODE (EBSW3, INPUT PULLUP);
PINMODE (EBSW4, INPUT PULLUP);
}
VOID LOOP() {
STEPONE();
VOID STEPONE() {
// READ THE STATE OF THE SWITCH VALUE:
SWITCHSTATELV1 = DIGITALREAD(EBMNUH1);
SWITCHSTATELV2 = DIGITALREAD(EBSW2);
SWITCHSTATELV3 = DIGITALREAD(EBSW3);
SWITCHSTATELV4 = DIGITALREAD (EBSW4);
// CHECK IF THE SWITCH IS PRESSED.
// IF IT IS, THE BUTTONSTATE IS LOW:
IF (SWITCHSTATELV1 == LOW) {
IF (SWITCHSTATELV2 == LOW) {
IF (SWITCHSTATELV3 == LOW) {
IF (SWITCHSTATELV4 == HIGH) {
// TURN LED'S BELOW ON:
DIGITALWRITE (UPPERRED, HIGH);
```

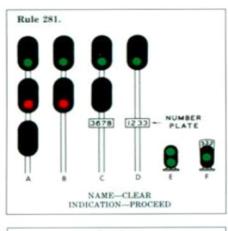
```
DIGITALWRITE(LOWERRED, LOW);
DIGITALWRITE (UPPERGREEN, LOW);
DIGITALWRITE (LOWERGREEN, HIGH);
} ELSE {
// TURN YELLOW LED OFF AND RED ON:
DIGITALWRITE (UPPERRED, HIGH);
DIGITALWRITE (LOWERGREEN, LOW);
DIGITALWRITE (UPPERGREEN, LOW);
DIGITALWRITE (LOWERRED, HIGH);
} ELSE {
// TURN YELLOW LED OFF AND RED ON:
DIGITALWRITE(UPPERRED, HIGH);
DIGITALWRITE (LOWERGREEN, LOW);
DIGITALWRITE (UPPERGREEN, LOW);
DIGITALWRITE(LOWERRED, HIGH);
}
} ELSE {
// TURN YELLOW LED OFF AND RED ON:
DIGITALWRITE (UPPERRED, HIGH);
DIGITALWRITE (LOWERGREEN, LOW);
DIGITALWRITE(LOWERRED, HIGH);
} ELSE {
// TURN YELLOW LED OFF AND RED ON:
DIGITALWRITE (UPPERRED, HIGH);
DIGITALWRITE (LOWERGREEN, LOW);
DIGITALWRITE(LOWERRED, HIGH);
} }
```

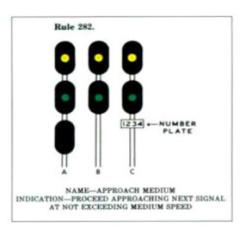
Arduino coding is easily learned, but becomes an art form to the extent that understanding of the logic of devices is required. To that end a "truth table" such as the one shown in Table 1 is a handy means of organizing the binary steps of the Arduino in a logical sequence of "if", "or" and "and" conditionalities to make the devices, here signal lamps, function as desired.

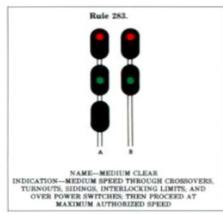
TABLE 1 – "TRUTH TABLE" OF LEAST RESTRICTIVE ASPECTS AND CONDITIONALITIES

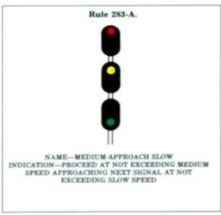
SIGNAL	TRACK	NON RED RULE#	NON RED ASPECT	HEAD	COLOR	ROTARY SW R	TURNOUT #1	TURNOUT #2	TURNOUT #3
306.7-1 LV	WB 1 WALL LEAVE	281	CLEAR	U	G	L LEAVE			
				L	R	L LEAVE			
306.7-1	WB 1 WALL	284	APPR. SLOW	U	Y	R ENTER	S1 REVERS	S 3 NORMAL	S 4 NORMAL
				L	Y	R ENTER	OR	S 1 NORMAL	S 6 NORMAL
306.7-2	EB 2 AISLE	283	MED. CLR.	U	R	R ENTER			
				L	G	R ENTER	S 2 NORMAL	S 3 NORMAL	S 4 NORMAL
306.5 MAST SIG.	EB MAIN UPHILL	283	MED. CLR	U	R	R ENTER			
				L	G	R ENTER	S2 REVERS	S3 NORMAL	S 4 NORMAL
305.1 MAST SIG.	WB BYPASS	283	MED. CLR	U	R	L ENTER	S 6 NORMAL	S 1 NORMAL	
				L	G	L ENTER	OR	S6REVERS	S5 REVERS
305.3-1	WB MAIN	283	MED. CLR	U	R	L ENTER			
	UPHILL			L	G	L ENTER	S 7 NORMAL	S 5 NORMAL	
305.3 - 2	WB STA.TRA CK	290	RESTRIC TING	U	R	L ENTER	S 7 REVERS	S 5 NORMAL	
	UPHILL			L	Y	L ENTER			
305.3 -3 LV	WB STATION	281	CLEAR	U	G	R LEAVE			
				L	R	R LEAVE			

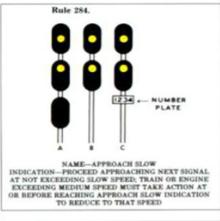
Figure 11 (Next Page) shows the 1958 aspects at left with three heads or targets and at right with two targets as per 3/31/51 operating rules that we have adopted from an article produced by retired CSX signal executive Eric Peterson [4]. The diagrams shown here are as applied to Mike Burgett's C&O Clifton Forge Division.

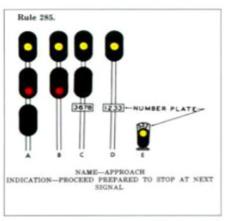




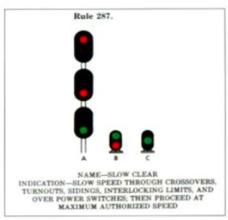


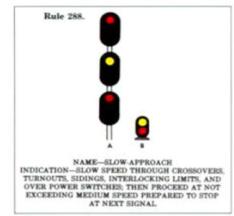


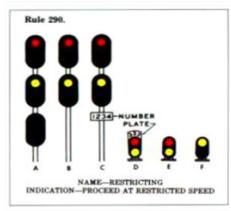


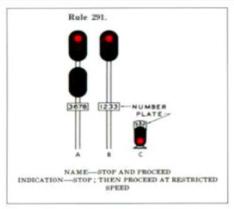


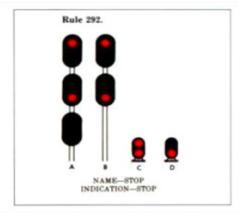












[4] More on C&O Signaling, by Eric G. Peterson, C&O Magazine, Winter 2016.



Model of Alleghany Cabin by JC Rooney from an Alkem kit in S scale.

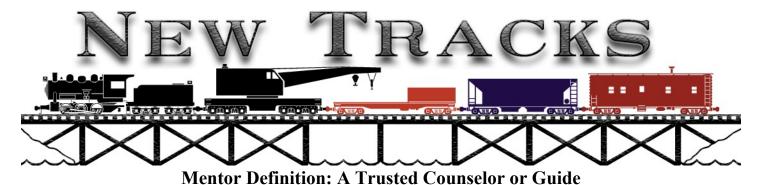


The S Scale Resource August/September 2020





Don't forget to read our other magazine, The O Scale Resource, for more modeling ideas.



By Contributing Editor Jim Kellow MMR

Gunfighters S Scale Modeling The Old West

Before I start this article there are some comments I would like to make. Actually the first two are answers to questions I have been asked and the other is to correct a mistake I made in an earlier article. Please bear with me.

Why do I write "New Tracks" articles and host Zoom meetings, and why should you want a mentor?

Answer to both is: To help you "become a better model railroader".

You may be nervous to ask another modeler questions about something you want to understand. But how else will you learn? I believe asking a person for help is the greatest honor you can bestow on them. There is nothing to be nervous about. As they say, nothing ventured, nothing gained.

You may be hoping that someone you admire can give you confidence to build a model, but I believe "trying and building" is the only way to develop confidence in your own modeling abilities. After all, a lot of modelers you read about can become your mentors if you just ask them questions about their modeling, and try their advice on your next build.

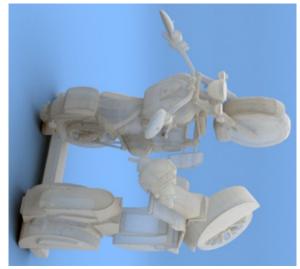
Also, as I was recently reminded, don't forget to give feedback to the modeler who gave you the advice. That will help continue your conversation and cement your personal relationship. Therefore, ask questions of other modelers to develop your modeling skills and techniques, and build models to develop your confidence. You will definitely "build better models". Please continue reading why the Zoom Meetups?

"New Tracks" ZOOM Meetups are where you can meet, talk with, and learn from other Modelers and maybe find a mentor!

Each live ZOOM Meetup has a featured modeler and/or manufacturer, talking and answering questions, with other participants about their skills, techniques or products. There are currently two Meetups a week, on Wednesday and Saturday evenings at 7pm EST. All the details and a log in Link are posted in the Events section on my Jim Kellow MMR Facebook page: https://www.facebook.com/Jim-Kellow-MMR-107123997469688/

It's easy to participate, give it a try. If you miss a ZOOM Meetup, you can download a free video of it later from my Facebook page.

If you want to be a featured modeler or manufacturer in one of our Zoom Meetups, or want to see a ZOOM Meetup with a specific modeler or manufacturer, let me know by email at jimkellow@sscaleresource.com. We look forward to seeing you at one of our future "New Tracks" Zoom Meetups!



Lastly, I need to correct an error I made in the last article on Carl Brannin's profile.

Carl Brannin's 3D Motorcycles

Carl is an excellent 3D printer and wanted to offer a Contest Drawing where the winner would receive one of his 3D Printed Motorcycles. I left his generous offer out of his profile. But it is not too late. Carl is still making the same offer.

How to Enter Carl Brannin's 3D Motorcycles drawing: Modelers fill out form, agree to use the models and write an article on their experience that I will include in one of my future "New Tracks" articles.

I am looking forward to seeing how the winner uses Carl's

3D motorcycle in his modeling and sharing it with all of you. Thanks Carl for your most generous contribution, and good luck to everyone who enters the contest drawing. Now let's build some models.

ENTER HERE TO WIN OUR CARL BRANNIN'S 3D MOTORCYCLES DRAWING

Modeling the Old West

Recently I stumbled across a page called "Gunfighter's Ball",

a Gaming Site, on Facebook showing some painted figures of a dancer and a Mariachi Band.

It was so colorful I immediately loved it. I had a perfect place for it in one of the dioramas for my Model Railroad. For me, these figures were something new and different so I decided to investigate further. I am so glad I did.

I wrote the above awhile ago. Yesterday, July 4th, I found another photo of a band and dancer that was posted by Chris Gaele. This one is made by Boot Hill Miniatures. Maybe I need both?

These photos opened up a new modeling experience for me and I believe I can see several dioramas of the Old West in my future. A mountain man rendezvous and another of the OK Corral, immediately come to mind. Indian tepees hmm... Keep in mind, the Transcontinental Railroad was completed May 10, 1869, so there is a lot of time







periods to model in the Old West. I can't wait to start the research

But before I do, I want to share another Facebook post I found about an N Scale Civil War era model railroad built by the late Ken Wodek. His model railroad is on display at the Railroad Museum in Frisco, Texas. To me, this model presents "the Old West" the best I have ever seen it modeled. Now there is no question I want to explore this "New Tracks" modeling opportunity.

I found that the figures I saw on the Gunfighter's Ball Facebook page were

28mm scale. Not knowing what Model Railroad Scale that was, I went to an S Scale site and asked what was the mm size used in S Scale. I immediately got two answers that said 28mm! Then I got other comments saying 28mm was more like O or On30 Scale and I should look for 25mm figures.

Then I remembered an article about S Scale figures recently published in *The S Scale Resource Magazine*. I reviewed the article and found that the author concluded that figures anywhere from 25 to 30 mm seemed to be the right size for S Scale. Basically, figures about 1 inch or so tall, to keep the measurement simple for people like me, is what he concluded. I noticed that the manufacturer of figures I was profiling was not listed in the article. I can understand this since until I found the Gunfighter's Ball Facebook page, I had also never heard of the manufacturer either.

Since I now knew I had found S Scale size figures, I contacted the admin of the Gunfighter's Ball Facebook site, who I saw had posted a lot of photos of his modeling to the site, including the Mariachi Band. Tony Nygren could not have been more helpful in my research. Tony is profiled later in this article. I learned from him there is a manufacturer of 28mm figures normally used in the Gunfighter's Ball Gaming group, and the owner of the site plus the creator of the Gunfighter's Ball Game. I also saw some of the Old West structures and scenery these modelers built for their scenes to use in the Games.

Don't get me wrong, I have no plans to become a gamer, but I am getting more interested in adding some of these figures to my 1800-1900 scenes, and I think these manufacturers and modelers can help me learn how to do that.

I discovered a website for "Museum of the Mountain Man". Maybe this site can help with my education and knowledge of the Old West history and people to contact in my modeling. I know that there are other museums and sites that can also be helpful, I just have not found them so far. If any of you can recommend other sites for me to research, please let me know at jimkellow@sscaleresource.com. Hopefully, I can profile them in a future article.

I talked to the Director of Museum of the Mountain Man and he provided the information used in the museum's Profile later in this article. What a great resource this museum is for my modeling and particularly my initial rendezvous diorama. But first, please meet the Old West manufacturer that started my interest:



Knuckleduster Miniatures (28mm)

Forrest Harris, the owner of Knuckleduster Miniatures has a wide variety of 28mm figures and a separate group of Old West O Scale figures. He also told me he has figures I can use for my OK Corral Diorama, and is interested in creating some Figures of Mountain men, animals, etc for the period of history that had annual Rendezvous. Great, maybe I can use some of them in my planned Diorama. Please visit his web site to see for yourself his wide variety of available Figure subjects. While my interest is in Old West figures, Forrest told me that: Our hobby is called Miniature Wargaming, and the gunfighting games like the one we produce is a tiny part of a larger hobby. I want to investigate some of

those other sites in the future. Forrest was extremely helpful to my understanding of the Gunfighter's Ball gaming experience, the modelers involved, and how their modeling is different from S Scale model railroaders. Forrest thanks for your help.

One of the main differences between an S Scale model railroader and a Gunfighter gamer is the gamer needs all of his figures and models to be able to move, often, from one gaming site to another, so a highly detailed fragile S Scale structure is not what gamers look for. They want as much external and internal detail as possible in their models, but the model has to be able to travel and be handled a lot with a minimum of damage or maintenance.

Second, the figures used by gamers require construction that can be regularly handled and normally the figures have larger hands, to hold weapons, and larger heads, to get more recognizable facial detail, than a normal S Scale figure. Forrest emphasized that once the base was removed, which he told me is easy to do, and the figure painted and placed in a scene, these larger features were not really noticeable. (I would appreciate comments from S Scale model railroaders who have used these figures as to their feelings about this issue). You can also see the kind of building effort and detailed construction of structures and scenery items in the individual profiles of modelers below.

Third, Forrest said that the types of figures and models that gamer's fathers and grandfathers liked are not necessarily what new younger gamers want. The younger gamers like to paint elaborate figures and scratch build fantasy or fiction models. Forrest equated this to the same problem seen in attracting younger people to model railroading. The new model railroader of today is not necessarily interested in the same things that drew



us older guys to the hobby, 70 something years ago in my case.

Forrest told me his solution (which I found interesting) to get new gamers to learn to paint figures is to encourage them to use "The Army Painter" system when they start out. I know what he is talking about as I have used it and it made my figures, both my poorly as well as my better painted figures, look great. I have written about my experience in painting figures in a previous "New Tracks" article. We talked at length by telephone, and I believe I found the right person to help me understand this new modeling hobby of Gaming.

ENTER HERE TO WIN OUR KNUCKLEDUSTER MINIATURES DRAWING

During our conversation, I suggested to Forrest that he offer a Contest Drawing where modelers would send in an email and a winner would be drawn from the email entries. He immediately agreed and told me the prize to the winner would be a selection of his S Scale shopkeepers and laborers.

In addition, Forrest will

provide mentoring to the winner on painting the figures. I really appreciate his help and interest in wanting to have S Scale model railroaders exposed to his figures.

How to Enter Knuckleduster Miniatures drawing: Modelers fill out form, agree to use the models and write an article on their experience that I will include in one of my future "New Tracks" articles.

Please show your appreciation to Forrest by entering this contest. You can reach Forrest to learn more about his Gunfighter's Ball game and his figures at his email **knuckledusterharris@sscaleresource.com**

Museum Of The Mountain Man

I immediately knew I had found the place that was going to help me in my research by the way the lady who answered the phone listened to my request and got me instantly to the person who could answer all my questions. Friendly, outgoing, and helpful are understatements of the way she welcomed me to the Museum. Thanks Nancy for your kindness and help.

Clint Glichrist, Museum Director, continued where Nancy left off. I encourage you to visit the museum's website and see for yourself the programs, events, and services they offer.

The S Scale Resource August/September 2020

https://museumofthemountainman.com/ If I can't find help here, I am in real trouble.

Clint told me: "Among the stories of the American West, the Mountain Man era is often overlooked. At a time before the immigrants, the homesteaders, the gold rush, the cattle, the cowboys, the outlaws, the railroad and even towns, a group of young men in their 20s and 30s ventured to the far off, wild and unknown mountains to trap beaver. This was the true promise of the then young America – freedom, independence, self-reliance, adventure and a chance to become rich."

While I was listening to Clint, all kinds of modeling ideas for an Old West scene ran through my mind. These people can sure be my mentors! I only hope they have a modeling program connected to the museum. I know with the knowledge of people who are re-enactors of the Renedevzous era and the help of members of the American Mountain Men Association, the knowledge and research of the era is available. See below an idea for model builders to provide knowledge of model building skills and techniques to the museum in creating a Rendevzous model for possible display in the museum.



Who were the Mountain Men?

Clint provided the answer to my question:

Mountain Men

The mountain men were the first non-natives to live year round in the Rocky Mountains. St. Louis was the closest supply center, a 2-3 month trip each way. They mainly trapped in the fall, winter and spring when beaver fur is thickest, hunkering down for a couple months in "winter quarters" when the mountain lakes and rivers were frozen over. To survive

in the mountains and living nomadic, they adopted a lot of the lifestyle of the native tribes including, food, clothes, lodging and even some of their culture. It was not uncommon for mountain men to marry Indian women and even live with the tribes, especially in winter. This created a unique mixed culture character. Their return to civilization was noteworthy, and city folk instantly recognized them from their fringed and decorated leather clothes. Being from a mysterious and far off place, at the time they were called "mountaineers", but today we call them mountain men.

The mountains were a dangerous place where everyday could be your last. Starvation, weather, grizzly bears and hostile Indians were the primary threats. For protection, they trapped in brigades of several dozen men, with small groups of 3 or 4 men fanning out each day to set and retrieve traps.

It was not only dangerous, but they were dropped into a complex political world on several levels. Mountain men had to navigate geopolitical forces. Parts of the West were claimed by the United States, Great Britain, Mexico and even the Republic of Texas. But, in reality, the West was controlled by the native Indian tribes. Mountain men had to navigate the internal and intertribal politics that had developed over many generations and changed on a regular basis. And, multiple fur trade companies battled over trade in a lawless corporate environment.

Even though remote, many nations and cultures were represented in the fur trade. Trappers interacted with more than a dozen native tribes on a regular basis. Mountain men themselves included American, British, Scottish, Irish, Spanish, Mexican, French, German, Canadian Metis, ex-slaves, mixed-blood, and even Delaware and Iroquois Indians from the east.

Adventure and a chance at wealth lured men to the fur trade. At a time when a typical laborer in America earned less than a dollar a day, a mountain man could get \$5 for a single beaver pelt at rendezvous and each trapper carried 5 or 6 traps. A good day trapping could produce a month's worth of wages.

Plains Indians

A few hundred mountain men entered an environment dominated by hundreds of thousands of Indians living in dozens of tribes.

Acquiring horses from the Spanish and guns from the British in the 1700s, many tribes developed a new culture based primarily on the massive buffalo herds of the Great Plains. They are now referred to collectively as as Plains Indians. This was a thriving resource rich, warrior culture by the early 1800s and most tribes were eager to trade for European goods brought by the mountain men. Relationships with various tribes were complex. Mountain men traded, married and lived with friendly tribes including Shoshone, Bannock, Flathead, Ute, Nez Perce, Crow, Mandan and Hidatsa. Relationships with others like the Cheyenne, Sioux, Arapahoe and Pawnee were generally friendly, but soured at times. Conflict most often occurred with the Arikara, Comanche, and the Blackfoot affiliated tribes.



Rendezvous

Jed Smith, Thomas Fitzpatrick, William Sublette and 8 companions trapped a fortune in beaver in the summer of 1824 in the Green River Valley. Knowing they were on to something big, Fitzpatrick was tasked with taking the summer catch back to St. Louis telling the boss, William Ashley, they badly needed supplies, but the rest were staying in the mountains to continue to trap. By the next summer, Ashley had made it to the

mountains with supplies and met up with his trappers on Henry's Creek at the southern end of the Green River Valley. That first rendezvous in 1825 lasted only one day to exchange supplies and furs. Ashley neglected to bring alcohol, but that mistake would never be made again. These annual summer meetings would happen every July for 16 years and became a huge party lasting more than a month. At the height in 1832 at Pierre's Hole in what is now Teton Valley, Idaho and in 1833 on the Green River near what is now Pinedale, Wyoming, rendezvous were attended by several hundred mountain men and several thousand Indians. It was a time to catch up with old friends and blow off some steam from a long winter in the far reaches of the mountains.

The supply caravan came from St. Louis, but the goods brought to this remote location in the mountains were just as international as the participants. Trading supplies included beads from Italy; bells, mirrors and clay pipes from Germany; cotton and wool cloth from France; blankets and guns from England; sugar and coffee from New Orleans; clothing and knives from New York; and powder, shot, meal, and corn from St. Louis.

Depending on the year, a beaver pelt could be traded for \$3-\$5 per pelt at rendezvous. Some examples of the cost of trade good at rendezvous are \$150 rifle; \$80 horse; \$60 beaver trap; \$9 dozen knife blades; \$8 pair of 2 point blanket; \$5 iron kettle; \$3 flannel shirt; \$16 gallon liquor; \$4 pound of coffee.

Visitors to the Green River Rendezvous grounds can imagine the famous events that took place over six different rendezvous:

- 1833 was one of the largest with camps spread over 10 miles along the Green River. The most noted event was the rabid wolf that visited multiple camps over multiple nights biting several men resulting in at least two deaths. This was also the first rendezvous attended by a tourist, Sir William Drummond Stewart of Scotland.
- 1835 was attended by missionary and doctor Marcus Whitman. During rendezvous, he removed the metal arrow point from Jim Bridger's back from a battle three years earlier with the Blackfoot. This was also the year of the famous duel between Kit Carson and the bully Frenchman Shunar.
- 1836 was noted by the arrival of the missionary wives Narcissa Whitman and Eliza Spaulding, the first white women to cross the Continental Divide.
- 1837 was the year William Drummond Stewart brought along artists Alfred Jacob Miller. His artwork is the only visual records ever made of the rendezvous and mountain men of the era.
- 1840 was the last rendezvous and noted by the first Catholic mass held west of the Continental Divide officiated by Father DeSmet.

Famous Mountain Men

- Jim Bridger The old man
- Jed Smith The explorer
- Kit Carson The legend
- William Sublette The godfather
- Hugh Glass The famous grizzly attack

End of an Era

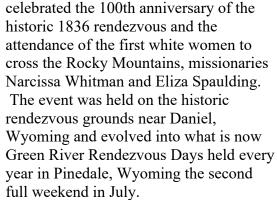
By the time of the last rendezvous in 1840, several mountain forts including Fort Laramie, Fort Hall and Fort Boise had been built eliminating the need for a summer rendezvous. Almost two decades of intensive trapping made beaver hard to find and a change in fashion to silk hats reduced their value ending one of the most colorful eras in the American West. But the mountain men had largely filled in the unknown area on maps and would be followed closely by emigrants headed to Oregon and eventually the California gold fields. Many would stay in the mountains and become guides for the wagon trains. Some homesteaded in Oregon and California. And some like, Jim Bridger and Jack Robertson, set roots in the Green River Valley they had come to love. Robertson started what was probably the first cattle herd in the Rocky Mountains in the 1840s foreshadowing the cattle industry that would come to dominate the Rocky Mountains during the settlement era after the Civil War.

What is the Museum?

Again Clint provided the answer:

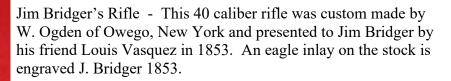
The Sublette County Historical Society (SCHS) was founded in 1935 with the reburial of mountain man Pinckney Sublette overlooking the historic rendezvous grounds. The organization's first major event in 1936





After decades of planning and fund raising, SCHS opened the Museum of the Mountain Man (MMM) in Pinedale, Wyoming in 1990. The 15,000 square foot facility is the nation's care taker of the mountain man and rendezvous era history, welcoming 10,000 visitors

each year from all 50 states and over 30 countries. Feature display and artifacts at MMM include:



Buffalo Hide Teepee – The largest buffalo hide teepee on display. It is an exact replica of a teepee located in the Smithsonian, which is too fragile to display, that was captured from Sioux Chief American Horse in 1876 at the Battle of Slim Buttes following the Battle of Little Big Horn. The 20-foot teepee is constructed of 20 brain tanned hides with an additional 10 hides for the liner. This represents the kind of teepee that would have been made during the rendezvous and mountain man era of the 1820s and 1830s before canvas was available.

Sheephorn Bow – Radio-carbon dated at 300 years, this is the oldest surviving authenticated sheephorn bow. It was found in a cave in the Gros Ventre Mountains at the northern end of the Green River Valley. Sheephorn bows were made from the outside curl of a bighorn ram and backed by sinew. They were the most

prized bows of the Plains Indians probably made by the Shoshone Sheepeater Indians. Modern replicas can take months to build and have pull strength as high as 80 pounds.



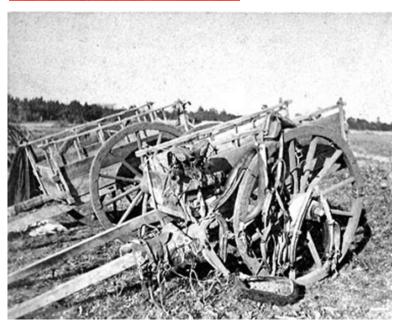


Rendezvous era artist Alfred Jacob Miller noted that a sheephorn bow could drive an arrow clear through a buffalo.

Fur Trade Letters – MMM has several original hand written documents from the 1820s and 1830s. These remarkable documents give insight and convey emotions that are not as readily available from the transcribed words in history books.



Beaver Hat - Mountain men would catch, skin, scrape and dry beaver pelts on a willow hope. These were then packed in bales of 60 to 80 skins and about 100 pounds that were transported to St. Louis and most eventually went to Europe to hat making factories. At the hat factory, coarse guard hairs were first plucked from the pelt and the under fur was shaved off. The underfur, or "beaver wool", that keeps a beaver's skin dry underwater can be felted to create a water repellant hat. With much physical labor the beaver wool was matted together with pressure and steam to create a water tight felt than can be shaped into a hat. The final product was died black making the high fashion top hat (think Abraham Lincoln) of the day. A solution containing mercury was used to stiffen the felt and increase matting. From this exposure, many hatters went crazy creating the term "mad hatter" or "mad as a hatter".



Red River Cart – The supply caravans would bring tens of thousands of pounds of goods more than 1000 miles taking up to 3 months from St. Louis to rendezvous every July. They would then return with tens of thousands of pounds of beaver pelts. A common misconception is that wagons were used to transport the goods. In reality supply wagons were brought to only one rendezvous (1830) and never repeated. The reality is heavy wagons are very difficult to manage when there are no roads. They work fine on the plains, but not in the mountains. The supply caravan instead used mules and charrettes (two wheel carts). The carts carried a smaller load and were much more maneuverable over rough terrain. After Fort Laramie was built in 1834, wagons were used across the plains of what is now Kansas and Nebraska to the fort, but then goods were

transferred to carts and mules for the second half of the trip to rendezvous. The authentic replica red river cart at MMM was built using only hides and wood with no metal. The hide covered wheels would wear out faster than metal, but 1000 miles from metal supplies, the materials needed to repair were readily available making the much more reliable.

There is no question if I could I would attend their annual Rendevzous in July 2020. I bet that would be a real party not to mention a great modeling research experience. Take a look! Please send me photos if you go. (However it may not occur because of the Covid-19. Please check their website for updates)

Green River Rendezvous Days

Several thousand people descend on Pinedale, Wyoming more than doubling the population the second full weekend each July to take part in Green River Rendezvous Days. The weekend is anchored by the Green River Rendezvous Pageant on Sunday afternoon; MMM hosts over 30 programs including living history

demonstrations, tours, scholarly presentation on the latest research, and children's programs; the Sporting Associations host a three day rodeo; the Chamber of Commerce sponsors a rendezvous parade on Saturday and vendors in the Park; Traders Row provides opportunity to shop for pre-1840 goods; and several other organizations sponsor dozens of companion events.

In 1936, the newly formed Sublette County Historical Society honored the 100th anniversary of the original 1836 rendezvous with a rendezvous pageant program. More than 80 years later the celebration has evolved into Green River Rendezvous Days, but is still anchored by the Green River Rendezvous Pageant. In 2003, the Pageant was split off from SCHS into a separate non-profit organization because of liability concerns for the Museum of the Mountain Man's growing and valuable collection. The Pageant association is run entirely by volunteers and donations. Each year more than 100 volunteers put on a large elaborate outdoor performance involving wagons and horses recreating and telling the story of the historic rendezvous.

Historic Sites

- Located in the heart of historic fur trade country, MMM visitors are only a few miles from important historic sites including:
- Trapper's Point An interpretive site overlooking the Green River rendezvous grounds where 6 of the 16 historic rendezvous were held. The rendezvous grounds are a designated National Historic Landmark.
- Rendezvous Grounds A six-acre park within the historic Green River rendezvous ground located in the town of Daniel.
- DeSmet Monument Location of the first catholic mass held west of the Continental Divide at the last rendezvous in 1840.
- Fort Bonneville Site Location of the first permanent structure built in what is now Wyoming that figured prominently in the 1833 rendezvous

I next asked if the museum had any type of mentoring programs?

Clint said: "We do not have a formal mentoring program, but our mission is to educate and help anyone learn mountain man history. We have a strong partnership with the American Mountain Men, an all volunteer organization dedicated to living, learning and educating the pre-1840 trapper lifestyle. They help bring alive two events each year, Living History Days established for kids, and Green River Rendevous. Through our annual publication, Rocky Mountain Fur Trade Journal, we have a network of over 50 experts in the fur trade to rely on."

What about building a Scale model of a Rendezvous?

Clint said: "We have never done anything like that, but it sounds really exciting. Our team knows the history well, but we could use some expertise on the modeling side." Well Clint, readers of this magazine have the modeling skills to build anything. How much space could be made available for a model of a Rendezvous?

If Clint can make suitable space available for a modeling program can we get one started?

The Museum has a curatorial committee and an Historic Advisory Board that are consulted on any display that is put up. Clint said he would need to engage all of them before committing to displaying the model. The final decisions will probably be based on the model and timing (what else is on display).

Can we create a model scene of what a 1830s Mountain Man Rendezvous would look like?

Clint said: The Museum volunteers certainly have the historical knowledge and this might be a great learning experience for many years of school children and adults to learn model building and create a true piece of history!

How about it – any modelers interested? I know I am. Think of all the opportunities for model building, scenery, land, rivers, backdrops, figures, people and animal, painting, and fire simulation, scenes, Two wheel carts, wagons, tents, Indian tepeess, barrels, boxes, stacks of furs, missionaries, lighting effects, animation, sounds, etc. and all the modeling skills readers of this article have and use in their model building.

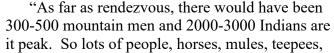
So if you want to be a part of creating a scale model of history, please let Clint and me know at **MountainMan@sscaleresource.com**. This could be a fun way for us to share our model building skills and techniques for a totally new modeling experience. I look forward to hearing from you on this opportunity.



By the way, here is another figure manufacturer I found. Foundry Miniatures LTD. has some great figures of mountain men. Here is one example. Visit their website to see many more examples.

Also take a look at the Wargames Foundry LTD. miniatures and article they just posted. Introducing: The Mountain Men By Lance Cawkwell – Wargames Foundry.

Clint told me what a Rendevzous might look like:



tents, campfires. And stacks of supplies (boxes, wood barrels, cloth sacks) and bundles of beaver pelts. There probably would not have been wagons, but many 2 wheel carts. They used mostly mules and carts to haul supplies. In 1830 they did bring ten wagons, but didn't do that again. The "tourists" and "missionaries" did bring wagons, so there would be a few around. A small missionary camp would be interesting. They were present for the last 9 rendezvous. I don't know how their camp would differ from mountain man camps, but most likely would have a couple wagons. Also the presence of missionary wives who came in 1836 and caused a big stir."



Well, that is way too large for my diorama, so I need to talk to some of the reenactors at the Museum and members of the American Mountain Men Association to get their thoughts about what I could do in a smaller size diorama to represent a Rendevzous scene. Maybe a Tipi, a Mountain Man trader's tent, some carts, people, and animal figures. Or maybe a missionary wagon, figures, etc. as Clint mentioned?

Here is a start for me (teepee, campfire, supplies, Green River Cart and mule and rider. Needs some mentoring help! Especially the teepee. The black and white photo I used as a prototype.



How to Become a Member of the Museum

Becoming a member of the Museum is easy. Just click on this page: https://museumofthemountainman.com/product-category/membership/ and join at the level you want. As Clint points out, there are very significant benefits to being a member, even if you can not personally visit the Museum. "Members are mailed a newsletter, annual report, annual art auction catalog, and invitations to major events. But most importantly, they get a copy of the Rocky Mountain Fur Trade Journal. This is a 128 page, full color, peer reviewed, publication issued once each year with the latest research in the Rocky Mountain fur trade. Members who are not from the area also get gift shop discounts for online orders, so even if they can not visit the museum, they get a discount. Any members that can visit get free admission and a number of free guess passes with number depending on membership level." Sounds good to me. But read on!

Get a FREE one year membership

ENTER HERE TO WIN OUR ONE YEAR MEMBERSHIP TO MUSEUM OF THE MOUNTAIN MAN DRAWING

Clint had a great idea to encourage some of you modelers to help in creating their Model Rendezvous. He is offering a free one year membership to the first "5" S Scale Model Railroaders who agree to help in the planning and development of the Model Rendezvous. Fill out this form to participate in this free offer.

How to Enter Museum of the Mountain Man one year membership drawing: Modelers fill out form, What a great learning and teaching experience for my readers.

Thanks Nancy and Clint for a great experience at your Museum. I will be in touch for the additional mentoring I need.

I was also interested in finding information on the "American Mountain Men Association" that Clint talked about. So I went to their web site and found reenactors who could certainly help in my education and research. Please go to http://americanmountainmen.org/ to learn about the Association, see some photos of Association members at recent Rendevzous events and learn some Mountain Man language and weapon skills. If I was



younger I would really be interested in becoming a member of this group of men, but for now I am content to ask them to help us create a realistic scene of a Rendezvous.

Now I want you to meet several very talented modelers. All four have been extremely helpful to me in understanding the Old West Gaming group of modelers and their modeling. Thanks so much for your help.

Tony Nygren

When I asked Tony what Scale he modeled, he said 28mm. I told him that was S Scale. He said OK.

My name is Tony Nygren and I was born on the 12th of August 1962. At the age of seven, I got a new friend in the same neighborhood, and he was building these wonderful airplane models in 1/72 scale. I was

bitten, and started to build my own. It was basically a fuselage, propeller, a canopy wings and wheels. I had to learn to do everything myself, and with the help of my father who showed me once how to read the drawings. One thing led to another and soon I was building tank models instead, both in 1/72 and 1/35 scale since these were available. I built a lot and did it all by trial and error. It was a bit hard for me since my English lessons didn't start in school until I was 9 years of age.

I played a lot of family games, and card games (there were no computers then) and got this fixed idea of making my own wargame with all the plastic tanks and planes I had. As a boy we played a lot of wargames outside with peashooters and toy guns, but I was thinking of using dice and a table. I did my own rules (childish ones I presume) and had fun with them. I continued to both play, build and learning more English every day. I even started to read English books to be better at it. Years went by, and at the young ripe age of 15, after being on the premiere of Star Wars IV, 1977 (in Sweden) I went into a bookstore, yes they actually existed back then, a lot of them, and found a British magazine called military modeler, a new magazine with an advertisement about a board game of the Korean War from a company called SPI (Simulations Publications Incorporated).

I had to write a letter to this company asking how to go about getting my hands on a copy, then I got a letter telling me to send a check, and when I got that letter, my parents was baffled that I got a letter from USA, so I had to explain and mercifully ask my parents for a loan, so I could buy it. Needles to say, but the game arrived a few weeks later, and my world became a bit bigger. Then it became AH games, and D&D and it just rolled on, into tabletop gaming with themes as World War II, fantasy etc.

Now we have to go back to 1968 when I was six years old. My dad came home with a wooden box with four legs on it, and said to me "sit on the sofa and wait". He did plug it in, and pushed some white huge ivory button (bakelite) and I waited while he stood there smiling. Then suddenly there was a white dot on that big (rather small) green glass, that became bigger and bigger, and suddenly...there was a western movie playing! Now I know it was 3:10 to Yuma with Glenn Ford from 1957, the birth year of my wife to be. He has a special place in my heart ever since then.

We had but one channel (typical of a socialist country) but the channel CEO, was in love with the wild west, so there was an abundance of western movies from between the ages of 40-60's. I was totally in love with this era, and loved the Indians more than the cowboys. I got a stagecoach, Indians, cowboys, and toy soldiers when I was 6, and the Indians always came to the rescue of the stagecoach, when bandits tried to rob it, then the soldiers came and chased the Indians away. Yes, I was a child. Then the spaghetti western came along, then the realistic blood squib 70's westerns including the wild bunch etc.

Since I played a lot of tabletop games, I found two boxes of western gunfighters from grenadier models, not very nice models, but then again, there wasn't that much out there. Still have the boxes though. And in 1990, I started to think of building myself a wild west town. This was an ongoing thought, grinding away in my head until 1994, when I decided to try and build a wild west house in wood, abachi wood. This wood is very hard, and was the chosen wood, since balsa wood was to brittle to use. I did a saloon, and still have that building with me. It has been renovated a few years back, and is now filled with interior details.

The town grew, with a sheriffs office, undertaker etc. And today I have about 45 buildings (can't have them all on the table at the same time) and we played with a lot of different rules I found on Internet. I have about 300 figures from various companies, and recently I found Knuckleduster Miniatures, who, in my opinion, do the most beautiful figures today on the market, even HO model train wild west figures. As with plastic models, it was trial and error for me, but most of the time I succeeded. My experiment led to building the houses in black 2mm cardboard, then dressing the buildings with balsa wood both on the outside, and on the inside making them more sturdy. In 2004, I begun my biggest project of renovation all my buildings.

I cut them all up with a Dremel hobby drill, and put in flooring, wallpaper and furniture, since there was a lot of new businesses on the Internet, selling all kinds of furniture in western style. [Let's take a look at some of Tony's fine modeling and then get back to his story.]











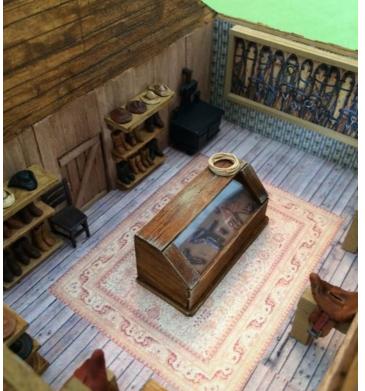
Clockwise from top left: Mexican pueblo made out of styrofoam and spackle. Mine, also styrofoam and various stones & sand. General store with full interior, picture made to look old. Some of the buildings are up for play. Working on the front of my newspaper building.

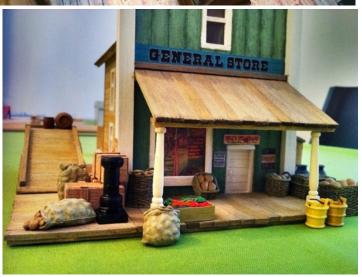
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Clockwise from top left: A small table for convention play. Saddle maker made looking old. Interior of saddlemaker. General store. Another interior of saddlemaker.

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Clockwise from top left: Interior of saloon. This house is first built by 2mm cardboard. And then dressed up with wood. Full interior of course. Some of my citizens in 32mm scale. Old photo of town. The figures on square bases are now on round ones.

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Clockwise from top left: One of my two trains and my station. The bank is rather new, it hasn't been robbed yet strangely enough. Inside of the bank. Docs has full interior, but the house on right is locked, no entry.















Clockwise from top left: Tile laying on a ready made kickstarter building by Knuckleduster Miniatures. First floor of my Madame Blanche's house of "good" repute. Line shack with interior. Three tong with sinister business. With tong members and opium den. All buildings with interior.









Clockwise from top left: the good, the bad and the ugly. Tom Mix. Drunks or shot. Take your pick. My own designed laminated character cards.









Clockwise from top left: Sleeping it off. Faro table. Top view of another section of town. Started to paint, but the fumes made him thirsty.



Some buildings were impossible to work on, so I sold of a lot of them with a sad heart. But more keep coming, and its a great satisfaction for me to both build wild west houses, and paint up my little lead western figures. These days I sell off my older ones, and replace them with newer, better (Knuckleduster Miniatures) and better painted. My painting skill has

improved over the past 50 years, even though my eyesight is worsening. (call me four-eyes) I started a Facebook page in 2014 and called it "Abachi Town Tabletop Western", figuring there must be more folks out there interested in wild west lore.

Tony has also written a coffee table book about his Abachi Town. For more information on this book contact Tony.)

Today At the age of 57, I am still at it, playing wargames, tabletop games and even role playing sometimes with old friends I found back in the 70's, and some newer, all at the same age as myself, or a few years

older or younger, and boy do we have a blast! We are like little boys when we meet on Mondays and Wednesdays to play something after work. It's still magic and meditation for me to build paint, and play, and it will be so until my dying days, and the wild west is still one of my absolute favorite periods of all time. I have read everything I can get my hands on, recently Bob Boze Bell's absolutely fantastic wild west books out there, even a signed free copy of the *Life of Billy the Kid*, (thanks Bob).

I know the real wild west was really harsh, hard, and sometimes a very very bad place, but the life back then



and all the stories told, makes you wonder if you weren't born in the wrong century, and in the wrong country. My wife Yvonne, for 30 years, let me have my hobby. She is the best thing that ever happened to me, and sometimes says that I really am a cowboy in spirit and soul, bless her huge heart.

If you think I can help with your modeling or Old West scenes, please contact me at **Tony.Nygren@sscaleresource.com**

Mark Huskins

In the late 70's my father discovered a unique hobby store in a neighboring town focused on wargaming. They had a large selection of fantasy, science fiction, and historical miniatures, as well as buildings, tree fortifications, etc. I played around with some science fiction a bit when I was very young, but by the time I was eight or nine, I really leaned heavily towards the historical stuff. My primary focus has always been painting miniatures, and I only in the last decade

or so really got into building terrain both from kits and from scratch.

My father taught me most of the techniques I use to this day, but there is always something new to learn, and I've done lots of experimenting over the years scratch building bunkers, gun emplacements and various other terrain features in different scales.

Most of my modeling and gaming is done in 28mm as it's a really popular scale, and kits are readily available, however, I have built quite a few 15mm pieces for use in a WWII game.







I typically start a new project every summer and work towards a game to be played at The Maine Historical Wargamers Convention in May. "Huzzah!".

I've run scenarios in several different periods, from The War of the Roses straight up through WWII. Last year I ran an American Revolution game, and I'm currently working on a Wild West project for a lighter and more kid friendly scenario.





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I'm a big fan of promoting the hobby to kids, I drive a school bus for a living and love kids to begin with. On weekends I run games for local teens, and regularly work with my daughter building terrain and painting.

Most of the buildings I'm using now are Things From The Basement, 4Ground, or Sarissa. However, I have a few that were printed with a 3D printer. I also have lots of scatter terrain and cactus printed. 3D printers are certainly changing the way we model and game. Things that used to be expensive resin cast models can be printed in a few hours for a fraction of the price and with much greater detail.

I'm hoping I can teach kids that face to face interactions are much more rewarding than playing a game with someone online. I also hope they learn the gratification of creating something that will bring joy to others, and be around long after we are gone. Creativity is something I'm afraid is quickly being lost to technology.

If you feel I can help with your modeling please contact me at patriots nation@sscaleresource.com.



Craig Brandt

I started in the hobby in the same way I guess many have. When I was 8 years old, Mom and Dad bought me a Lionel Train Set for Christmas. From that point on I was hooked. Each year they would buy me additional pieces for my train and the collection grew. I lost touch with the hobby during my college years, but jumped right back into it once I was working in my career and purchase my first house. I model in O Gauge and over the years I have had several layouts, mostly which have been big steam that modeled the steam/diesel transition years. Once I relocated to the American Southwest, I began to model this area of the country during the old west time period. My latest layout is a fictitious endeavor named the Copper Gulch & Bear River Railroad. The layout is based on the late 1800's somewhere along the Utah/Arizona Border.

Early in the hobby my modeling consisted of buying kits and building them as most folks do. I never had a mentor, I just read articles and learned from what others in the hobby had done. Modeling was a favorite hobby of mine as a child and I built more WWII fighter planes and ships than my poor dad could build shelves to hold. Eventually I realized that the only way to have something truly unique on my model railroad was to scratch build as much as possible.

I think there's a special satisfaction that comes from scratch building. You have an idea, you build it from nothing, then sit back and take a look at it and think "yeah, that's pretty cool, I couldn't buy that". I scratch build mostly everything on my layout. On occasion I may have a plastic structure from my earlier years that I will "bash" and use for the basis of something else. I take the same approach with figures. I have a small cabinet with several drawers of figures I have accumulated over the years. If I need a specific type of figure for a scene I will "hack up" a figure, creating a different pose, making hats, or whatever is required. I do purchase many figures that are readily available for the era I model.

The materials I use for structures primarily consists of illustration board, craft sticks, poster board and whatever else I can find that achieves the end goal. Most of the structures I build have finished interiors and are lighted. Scenery is primarily made from insulation foam board that you can purchase at any home improvement store. Gaps in the foam are filled with Sculptamold, then base and detailed painted to get the look I'm after.

I think to have something truly unique, you have to have many levels of interest in a layout. I achieve this by creating little vignettes within a scene. I want a viewer to look at the layout and and think "there's so much to see" right within a specific area. I think these little points of interest give a special and unique experience for anyone viewing a model railroad.

Model railroading is a great hobby. It's an escape to an imaginary time where we can build our dreams and make whatever we desire come true. For me, the scratch building of structures and details achieves that goal.



Thanks Craig. You can get more information from him by contacting him at **Craig.Brandt@sscaleresource.com.**

"Henderson and Sons Freight"

Here's an example of a structure made from illustration board. The "board panels" are scribed in to the board to give the look and texture of individual planks. The decking was made from craft sticks then aged with India ink and alcohol. The shingles on the roof were made from a roll of wood veneer tape you can purchase at



any home improvement store. Everything in this scene was scratch built, including the freight wagon.

"Col. Tucker"

Creating little vignettes within a scene bring interest to your layout. This one is happening out in the street next to the Copper Gulch Train Station. The wagon was found as part of a 28mm medieval set. I altered it, did some careful painting, then created the custom decals.







"The Red Dog Saloon"

Finished interiors that are lighted really bring a whole new level of interest to your layout. Shutting the lights off in your train room and allowing visitors to see all the detailing going on "inside" your town bring the layout to a whole new level. Here you can see the level of detail that went into the interior of the saloon. Everything has been scratch built and the figures and card tables are from Knuckleduster. As you can see, when the lights go out the "joint is jumping" just as a real saloon would have been back in the day.

I found the following modeler recently from a Facebook post I made during my recent "Stay at Home" time caused by Covid-19. I thought it could be a good time to meet modelers I had not heard about before. I was right and Jacob is one of the modelers I heard from.

Jacob Dziubek

When I first met Jacob, he told me: "Attached are photos of a scratch-made miner's shack made of popsicle sticks, card stock, and

pink insulation foam. I'd love it if you'd feature it, as it is one of my favorite buildings I've made recently. I have others also if you'd like to see more."

I told him to please send more information and photos. He provided the following information for his profile.

Thanks Jacob, nice to meet you.

I got into modeling when I was about ten. I Started playing a wargame called 'Heroscape,' where all the figures and terrain came factory painted right out of the box. Quickly however, I grew dissatisfied playing with only what the game designers had to offer. I wanted to put my own stamp on it. Thus, I ventured out into making my own terrain and figures.

I learned to build through trial and error. Lots of great tutorials online, but I started when I was too young and impatient to pay them the mind they deserved. The result was a lot of attempts I wouldn't be proud to show that brought me to a few that I am proud of.









I've always been in O scale/28mm scale because that's the scale that good ol' Heroscape was in. Never ventured far beyond that scale as a result.

All the people I know who are interested in these hobbies learned about it from me. A good friend of mine got himself a 3-D printer and is tinkering with how to get that to create scale terrain. It's a great feeling to make something cool enough to make someone else want to make something!

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You can reach me at Jacob.Dziubek@sscaleresource.com if I can help you with your modeling.

Please note that Jacob said he uses 28mm for O Scale. I recently had a friend send me a 28 mm figure and I compared it to both S Scale and O Scale figures I have. Frankly I think it can be used for both scales. Take off the base and use them is my advice. That's my plan.

Thanks to all of you for your interest and help with this article.

Before I go, I want to include a photo of a portion of the Old West scene on my railroad. Yes, I do occasionally actually build models. These structures are scratchbuilt with a variety of figures and some wagons from kits. It is a work in progress. Several of the structures have sound modules and lights in them. Great fun. Got to get a Band and Dancer in the street, maybe two!

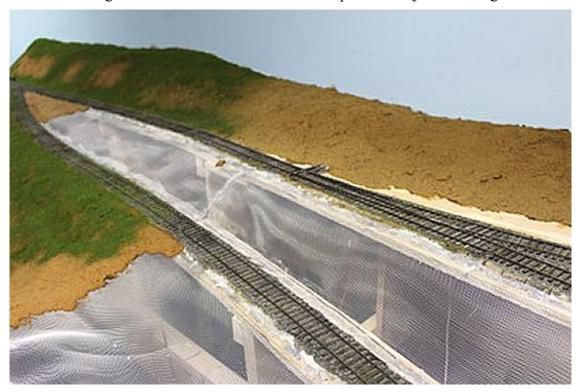


Well that's it for this time. I need to get back to my workbench and build something. Please visit my Facebook page, Jim Kellow MMR, and Follow/Like it so we can stay in touch between articles, and you will be able to easily log into our Zoom "New Tracks Meetups".

Thanks for reading this far and for traveling these "New Tracks" with me. I appreciate hearing any ideas for future articles. Best of luck with your modeling. Till next time.

SCENE AROUND THE LAYOUT

From Chris Elliott: Myself and Scott Lister use a mix of sawdust, diluted white glue and paint over aluminum screen for basic ground cover. It's lot less mess than plaster and just as strong.







We are proud to feature readers' work. Depending on your response, we would like to make this regular feature. So get those cameras and cell phones out and start shooting!

High quality JPG or TIF files are only.

Email to daniel@modelrailroadresource.com with a description of your pictures.



S Scale Shows & Meets

The S Scale Resource Magazine will now be providing a free listing of upcoming events. This small, text only listing will include the Event, Date, Location, Type of Event, and Contact Information. Click here to go to the sign up form. This form will take your information, and we will publish it in our next issue. If it is an annual event, you will need to submit your information every year.

O & S Scale Midwest Show

September 18-20, 2020 Indianapolis, Indiana

It's September! Time to kick off your modeling season. Come enjoy the O & S Scale Midwest Show.

This is a dedicated 2 rail O Scale and S Scale show; however, we encourage and watche the many modelers and collectors from the 3 rail and high rail side of the hobbit thend. There are many aspects of the hobbit, in rading building, scenery and more that applies to any scale. Moreover, this show is a great place to get inspired while meeting old friends and making new ones!

Website: oscalemidwest.com/ Email: info@oscalemidwest.com

2021 NASG Convention

August 3rd through 7th, 2021 Buffalo, NY.

The 2021 NASG CanAm Convention will be held in Buffalo NY, August 3-7 at the Buffalo Marriott Niagara in nearby Amherst. The city of Buffalo has undergone a stunning revival in recent years with its downtown Art Deco architecture, its lakeside setting, and its extensive rail facilities. Mark it on your calendar as a "must-attend" and watch for further details in future issues of the S Scale Resource.

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O & S Scale Midwest Show

September 17-19, 2021 Indianapolis, Indiana

It's September! Time to kick off your modeling season. Come enjoy the O & S Scale Midwest Show. Dates are tentative – details to follow!



S-FEST 2020

An Annual Midwest S-gauge & S-scale Event November 6th through November 8th, 2020 Four Points by Sheraton 5311 S. Howell Milwaukee WI Hosted by Badgerland-S-Gaugers

Website: trainweb.org/bsg/events/sfest.htm







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Yes, we now have a Facebook page to help keep you up to date on new products and ideas. And, even in an on-line magazine, we sometimes have more pictures than we can use, so we'll post them on Facebook.