



The Nickel City Dispatch

News From The Nickel City Line Railroad

DECEMBER 2019

History in the Making

On March 2nd, 11 operators reported for duty on the Nickel City Line to commemorate an historic event, the 100th Ops Session. It was the 1st Trick and the session date was February 8th, 1999.

Sixteen trains ran during the session with Extra X424, a coal train, kicking off the day as it departed Ridgway, Pennsylvania bound for Harrisburg, Pennsylvania. The usual schedule of regular freight and coal trains followed, including the addition of a extra coal train, X421, which worked the local mines before heading west to Ridgway. The passenger trains, both commuter and Amtrak, rounded out the session as the sun began to rise.

It was a smooth running session where 114 cars were moved during the allotted time. Of the cars moved, only two cars were misdirected. Those would be quickly picked up on the following Trick.

envisioned that the railroad would achieve 100 operations sessions. Not that it wasn't possible, rather the focus was more on building and refining the railroad. It was only in late 2018 as the 2019 schedule was being developed, it was noted that March would be the 100th ops session.

The first NCL ops session was held on November 30,
See History, Page 3, Column 1



100th Ops Session participants (l to r) Back row: Bryan Kidd, Matt McMullen, Ernie Little, Lee Stoermer. Front row: Gregory Tate, George Meyrick, Bill Lyders, Jim Schornick, Joel Hoffman, Pete LaGuardia, and Phil Raymond.

The NCL Management had never

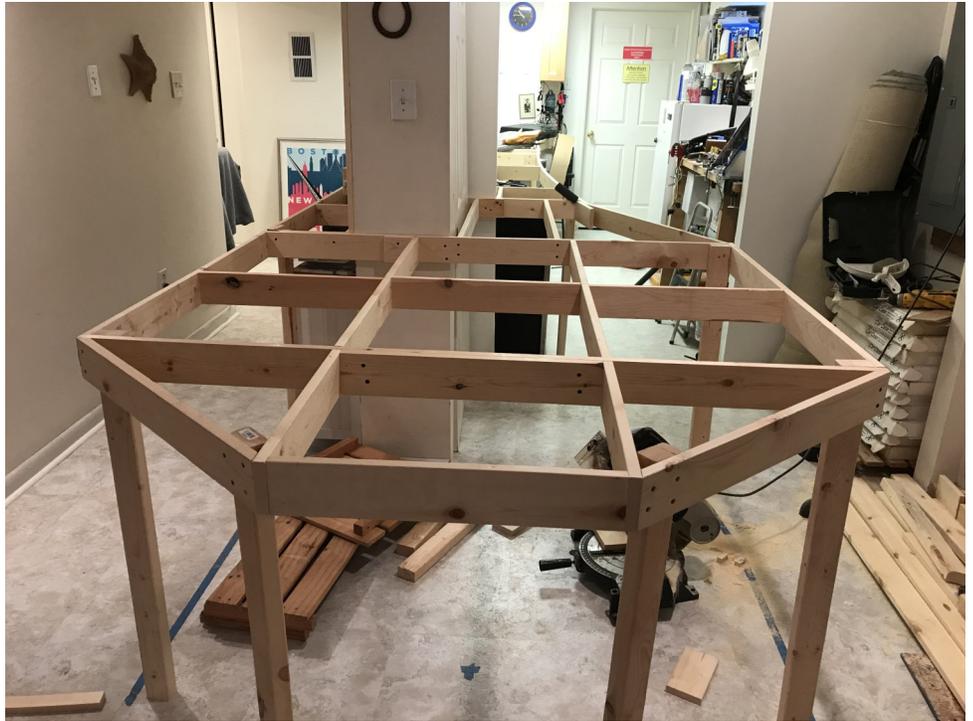
Go West Young Manand East too!

On March 3rd, the wheels had barely cooled off on the locomotives from the 100th ops session before the NCL broke ground on the largest expansion project since the construction of the original railroad. After some productive negotiations with the governing authority, the NCL was granted a permit to construct an additional 500 square feet of triple deck railroad.

The expansion would include the towns of Karthaus, Pennsylvania to the east and Dubois to the west. Karthaus was designed as a spur off the main line between Nickel City and Waterloo Junction. The spur would permit local switching in Karthaus as well as exchanging cars from Keating, Pennsylvania on an interchange track. The creation of Karthaus permitted the relocation of the intermodal yard from Nickel City East and the Miner's Shuttle in Nickel City Yard to Karthaus. Both moves opened up sorely needed track space in both locations.

Dubois offered an opportunity to enhance coal operations on the railroad. Dubois would house a coal processing plant which receives mined coal from local mines; crushes and sifts the coal; cleans it of impurities; and reloads the coal for transportation to awaiting steel mills and power plants. The Dubois plant also required supplies by rail of needed equipment and waste handling cars connected with the daily operation of the plant. The Dubois Plant was designed as a single job for one person over the entire operations session.

Finally the expansion allowed for the relocation and expansion of the North Staging Yard known as Emporium, and the East Staging Yard known as Waterloo Junction. Both yards were accessible off the main operator aisles previously which limited access to trains due to some design flaws. The new yard configurations provided easier access to all trains and equip-



Above: Initial bench work was started once the wall between the work shop and rec room was removed and new flooring was installed.

ment.

The first step in construction was to open up the walls between the old rec room, pantry closet, work room, and layout room. It also afforded an opportunity to install new flooring in these areas as the floor was showing signs of serious wear and tear from years of use. The main wall between the hallway and work room was left in place and the layout was constructed around it. The wall provided additional stability for the triple deck design.

As the bench work was installed, four 1/2 inch holes

See Expansion, Page 3, Column 2.

History, from Page 1.

2002. 14 operators participated in the session. Seventeen trains ran that day. The fast clock was set to 6:1 and covered a 24 hour period in 4 hours! By November 23, 2008 the fast clock was slowed down to 3:1. And on March 27, 2011 it was slowed down further to 2:1 where it remains today.

The first operators on the NCL were: Ed Barr, John Draper, Todd Edwards, Tim Hall, Joel Hoffman, Dave Karcher, Benjamin Kidd, Bryan Kidd, Jennifer Kidd, Ernie Little, Ed Price, Bob Rodriguez, Steve Rowhowlt, and Russ Rusynko. Since then some have remained, others have moved on, and new faces continue to grace the operations group each year.

So where did the name of the railroad come from?



Above: Two operators work the first version of Nickel City East. The upper deck in this area was still under construction.

The location for the railroad would be in Pennsylvania. One afternoon around 1987, my wife and I dined at a restaurant along the Inner Harbor of Baltimore named the Nickel Diner Restaurant (it is no longer in business). I liked the name and adjusted it to Nickel City. And so the railroad was born.

The railroad continues to evolve and improve because

of the many suggestions and assistance from the operators of the railroad. The operators are what makes the layout come alive. While I couldn't envision 100 ops sessions way back in 2002, I certainly can envision 200 ops sessions in 2019 and look forward to that special day sometime in the near future. Until then, there will be plenty of trains that need to be run!



Expansion, from page 2.

were cut into each 1 x 4 cross member. These holes provided access for running wiring below the layout and above storage below.

The top layer of the bench work consisted of 1/2 thick plywood sheets topped with 1/2 sheets of Homasote. Roadbed and track work were laid on top of the Homasote.

The new section would be tied into the existing layout but would function electrically independent. The only connection between the existing layout and the new extension (besides double gapped track) was a single Loconet cable. This cable provided all the communications between the Command Station, locomotives, throttles, accessory devices, and boosters in the existing room and the expansion area. To house all the required equipment necessitated the construction of an equipment box. The box was located at the mid point of the expansion area. All cables and wires for the expansion section terminated within the equipment cabinet.

Time was of the essence to have the new section up and running and interfaced with the existing section. An open house for the railroad was scheduled for June 22nd as part of the National Model Railroad Association's Potomac Division monthly layout tours.

See Expansion, Page 4, Column 1.

Expansion, From Page 3.

As June quickly approached, it was critical not to skimp on labels for components. Every feeder wire, turnout, signal head, and block was properly labeled throughout the new section. The extra effort to label everything was intended to aid in quickly troubleshooting future issues within the new section.

One of the requirements for the relocated staging yards was to have each track protected by a dwarf signal. These signals were tied into the main signal system and would provide the engineer a signal indication when it is clear to proceed or not. To do this required a large number of signal heads. Rather than purchasing these signals, I opted to design and print them with my 3D printer. The cost was minimal, far less than if I had purchased them commercially. I already had a fair amount of LEDs and resistors on hand so the signal heads were easy to paint, assemble and install prior to the June open house.

By April it was time to move forward with a big



Above: 3D printed dwarf signals for the staging yards were created and installed for very little cost.

change to the railroad's dispatching system. While the NCL had been using custom designed dispatcher panels I created with JMRI's PanelPro, they still did not have the feel of a prototype Computer Assisted Traffic Control System I desired. With that in mind, I switched over to Rodney Black's CATS (Computer Assisted Traffic System). CATS had many of the



Above: The new CATS and TrainStat dispatching software have a prototypical look and feel to them.

features I wanted to incorporate in the NCL Dispatcher's role which included train tracking; route allocation; safety lockouts; track warrant control; ability to place tracks out of service; just to name a few. In addition, CATS operates overtop of the JMRI software so all my predefined devices from PanelPro were readily available as I switched over



Above: The new expanded section in operation, including multi-colored LED light strips for day and nighttime operations.

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Expansion, From Page 4.

to CATS.

By early June the new expansion was connected and interfaced with the existing layout. Several test runs were done to point out issues requiring attention. A few adjustments were made. However, by June 22nd, the layout was ready for the open house and performed flawlessly.

Operations sessions followed, starting in July. Monthly sessions were held through November, including two sessions in November, in order to give the overall layout a really good shakedown. Except for a few minor developments, which were quickly addressed, the larger layout has functioned nicely and to the delight of the operators.

As we move into 2020, scenery will begin on the new extension which will add additional interest and enjoyment to upcoming sessions.

Annual Operations Report for the Year 2019

Number of Operation Session Held: 9

Number of Open Houses Held: 1

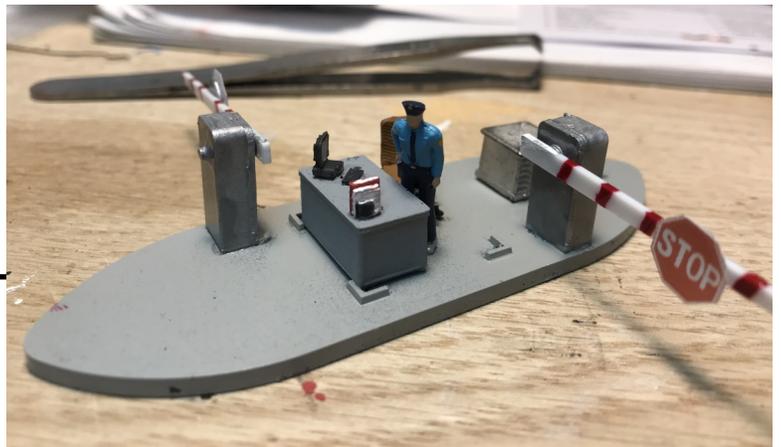
Number of Trains Operated: 120

Number of Rail Cars Moved: 1045

Number of Rail Cars Correctly Setout: 1039

Number of Rail Cars Incorrectly Setout: 6

2019 Efficiency Score: 99%



Above: The power plant's security guard is very happy with his 3D printed office furniture, computer and books for his guard shack.

It's All in the Details

Details, details, details. It is all in the details. Especially inside close up structures.

At the end of December, 2018, I began experimenting with 3D printing on my recently provided 3D printer. I had always intended to provide interior details in all close up structures. I had used a number of techniques prior, including scratch built, commercially purchased, and kit-bashed items. I always enjoy the results, especially when my operators notice the details during ops sessions.

With the 3D printer, I had an additional resource to create exactly what I needed, when I needed it. The first project was the guard shack at the power plant in Nickel City. For that project, a desk, office chair, computer, and books were printed using the 3D printer. A warm white LED was installed in the ceiling to illuminate the scene. The result was as I

envisioned. A lot of great detail visible up close.

The main power plant building in Nickel City is a mix of the old plant, with its brick façade and large arched windows, and the more modern metal sided structure. Because the plant had these large arch windows, they begged for interior details. I purchased the Walthers Cornerstone Interior Kit (# 933-3130). But from that point forward I used some scratch building and kitbashing techniques to build the interior. I situated the turbines in the desired location, then added a staircase to an upper walkway which contained numerous piping and shelving. I also added several banks of control panels on the

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Details, From Page 5.

turbine room floor. Searching the internet, I came across a company that sells industrial switch gear cabinets. I downloaded several pictures of various types from the on-line catalog. I then used Photoshop to adjust the drawing to the space and configuration I desired. I constructed the cabinets from styrene. Then I glued the scaled down drawings to the cabinets. I drilled small holes in the styrene where indicator lamps were on the prototype. Next I ran fine fiber optic filaments through each hole and through the bottom of the cabinet. The filaments

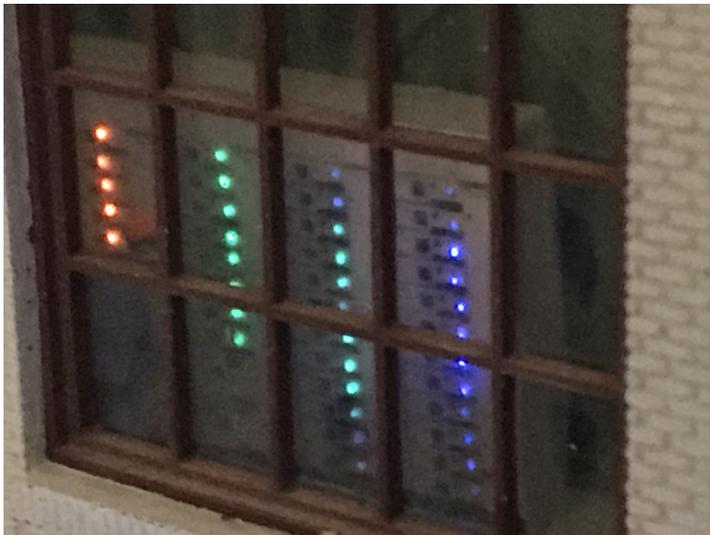


Above and Below: Interior details add a lot of interest to structures at the front of any layout scene.



tion, I again turned to the internet to find pictures of drink coolers and snack stands. I constructed styrene structures for each and then glued the scaled down pictures onto the styrene. The main office is a mix of scratch built items and a few fixtures salvaged from old kits. The service bay was furnished by purchasing Walthers SceneMaster Garage Detail Set (#949-4167). The bar was furnished with kitbashed and scrap parts I had on hand. The interior walls and pictures were again created by searching the internet for the appropriate pictures and then scaling them down. The main bar is illuminated with an LED or-

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Above: Micro-fiber optics connected to LED colored Christmas lights makes for impressive and realistic switch gear panels inside the power plant turbine room.

were glued in place and trimmed. I drilled holes in the floor of the turbine room large enough for all the filaments in each cabinet to fit through and then glued the cabinets to the floor. Underneath the turbine room floor, the filaments were trimmed to equal lengths and fitted into a styrene tube. At the end of the tube I stalled a small LED Christmas light. Each cabinet was fed by a different colored LED (Blue, Yellow, Orange, and Green). The effect was incredible.

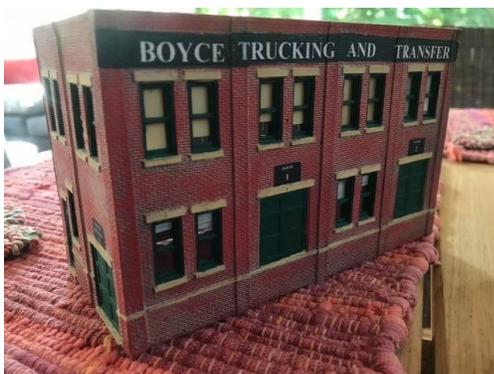
The adjacent block contains 4 buildings. I started with the local bar and gas station. For the gas sta-

In Memoriam



On July 27th we received word of the passing of one of our former operators, Roger Boyce. Roger had passed away on July 24th. Roger was a regular operator on the NCL for many years. His happy and positive attitude always added another level of enjoyment to the NCL ops sessions.

In Roger's memory we added an industry in his name, Boyce Trucking and Transfer. The new building is located in Nickel City East and will be served regularly by rail.



Details, From Page 6.

ange Christmas light. The remainder of the upstairs as well as the garage are illuminated with warm white LED. I used NEC Light-It boards for the lighting in each structure. Various lightes are programmed to go on and off at different times based on the fast clock time. This is accomplished using switch commands tied to JMRI Logix conditions. So far it has worked out well.

Detailed structures will progress slowly, block by block until all close up structures are fully detailed for the enjoyment of the operators and visitors to the NCL.



2020 Operations Schedule

January

Saturday - January 11, 2020 - 9:30a to 1:30p (Session 49B)

Special Session - Beltway Ops Group

February

Wednesday – February 5, 2020 - 9:30a to 1:30p (Session 49C)

March

Saturday – March 7, 2020 – 9:30a to 1:30p (Session 50A)

April - No Session

May

Saturday – May 30, 2020 – 9:30a – 1:30p (Session 50B)

June

Wednesday – June 17, 2020 – 9:30a – 1:30p (Session 50C)

July

Wednesday – July 22, 2019 – 9:30a to 1:30p (Session 51A)

August - No Session

September

Saturday, September 19, 2020 – **1:00p to 5:00p** (Session 51B)

October

Wednesday – October 14, 2020 – 9:30am-1:30pm (Session 51C)

November

Saturday, November 7, 2020 - 9:30a to 1:30p (Session 52A)

Special Session - Beltway Ops Group

December - No Session



2019 NCL Recap

• **January 2019**

- Started adding details printed with 3D printer
- Added blue filters to layout room Florissant light fixtures to enhance night operations.

• **February 2019**

- Installed UP92 duplex transceiver in main layout room. Layout can now operate with both simplex and duplex radio throttles.

• **March 2019**

- Held the 100th Ops Session on March 2, 2019.
- 500 square foot layout expansion started on March 3, 2019
- Lower level bench work, track work, and turnout installation completed.
- DCC Equipment Cabinet construction and component installation started.

• **April 2019**

- DCC Equipment Cabinet completed.
- 3D printed dwarf signals printed, assembled and installed in lower level staging yards.
- First test runs of relocated staging yards conducted.

- Connector bridges between existing layout and new section constructed and tied in.

• **May 2019**

- New signal boards added to existing layout due to relocation of similar equipment to the new extension.
- Middle level construction completed.
- Upper deck construction started.

• **June 2019**

- Upper deck construction completed.
- CATS Dispatching software integrated into the railroad.
- Staging dwarf signals active in new staging yards.
- Fascia painted and labels installed on new layout section.
- TrainStat software tied into CATS dispatching software. Remote TrainStat screen now active in Crew Lounge area.
- Full testing of new section integration completed.
- NMRA Potomac Division Open House held on June 22.
- Upper deck in new section connected to Ridgway yard in existing sec-

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Recap, From Page 8

tion.

• **July 2019**

- Trackwork in Karthaus started.
- Trackwork for Dubois Coal Processing plant started and completed.
- Signalling added to main lines in Dubois.
- The Norfolk Southern Connector generously contributes 24 coal hoppers to help augment the new coal operations scheme on the NCL.
- Dubois plant opens for business.
- Ops sessions resume on July 24.
- UR91 installed in expanded layout area.
- Fascia boards in the new section installed.
- Added additional ops sessions in August and November.

• **October 2019**

- Most of the structures for Dubois were test fitted.
- Multi-colored LED light strips were installed in the new addition for day and night time operations.
- Local main line switch controls were updated for Sheppardsfield. Local main line switch control was added to Dubois at CP32.

- Fascia on existing layout was repainted black to match new fascia sections. New labels and town maps were added to the existing fascia.
- Local circuit breakers were installed for the yards and sidings at Bristow, Canova, Laurel Valley, Monserrat and Sheppardsfield.

• **November 2019**

- An additional UR92 duplex transceiver was added to the new section to provide complete radio coverage for wireless throttles.
- The final ops session of 2019 was held on November 21st. It was Session 49A, the 1st Trick, 12a to 8a.



Stay Informed. Check Out the Nickel City Line on the Web at:

<http://home.comcast.net/~nclrr/index.htm>

or on Facebook at:

www.facebook.com/NickelCityLineModelRailroad

Hot Shots



Left: Al's Place, the local bar, is pretty busy on a mild winter night. The Gas N' Go next door is open 24 hours for your fueling and hunger needs.

Right: Extra X421 holds short of the signal at Bristow awaiting a green indication. X421 is headed to the Dubois coal processing plant with a load of mine coal.

Below:

Nickel City Locomotive Yard is busy moving equipment around. The Pennsylvania Railroad leases several storage tracks in the yard.

