NC Rail Run Weekend - Michael Pennie Layout

Jack Haynes

Early Friday morning, I was off to Michael Pennie's N-scale layout near Greensboro. He models several Anthracite Railroads in eastern Pennsylvania and into New Jersey. Primary traffic flow is from New Jersey through Phillipsburg on the Delaware River through Bethlehem and Lehighton, Pennsylvania, then on to Buffalo and other points north and west. Some branch lines and interchanges feed into the main line along the way. Most scenery is complete and represents the wooded mountains of the area very well.

John Cox works Phillipsburg Yard

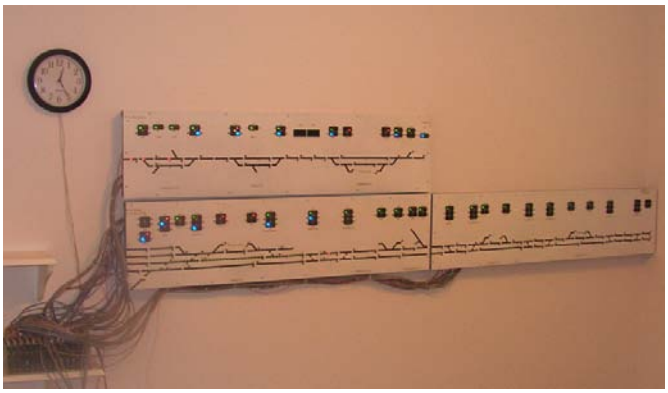
At the east end, traffic comes onto the layout from staging representing Northern New Jersey and enters Phillipsburg (NJ) Yard where local cars are set out and westbound cars are added. A short distance west, after the Delaware River crossing on spectacular bridges, Easton (PA) receives that traffic and also CNJ traffic from a smaller staging yard. The yardmaster there drops and adds appropriate cars.

A large steel plant is modeled at Bethlehem which generates a lot of traffic as well as in-plant switching. (Editor's note: The blast furnaces pictured on the right were scratch built by Michael Pennie since the N-scale Walther's Blast Furnace kits did not exist at the time.)

The Bethlehem Steel plant

Next comes the yard at Lehighton which handles cars for industries served by local freights and for the Hazleton Branch. From there, through trains proceed on the west staging representing all west destinations served by the Lehigh Valley.

Michael uses the waybill on car method for switching. Each car has a round sticker on it. The color identifies the railroad or town destination, and writing on the sticker identifies the specific industry or yard. This is an easy system to pickup. The layout has train detection and is fully signaled. The dispatcher (poor Marcus) is exiled in an upstairs room and communicates by FRS radio.



The Dispatchers display in an upstairs room shows occupied blocks on the road

My first assignment was the Lambertsville turn out of Phillipsburg. Lambertsville is the last town before the east staging area, so there is usually frequent traffic coming through to complicate local switching which involved sidings on both sides of the main and both facing and trailing points. The dispatcher was sympathetic to me and didn't send through too many trains while I was switching.

Lambertsville presents a challenging switching arrangement. The sidings at top left and bottom right lead to industrial areas.

My second run was a coal drag off the Hazleton Branch to Easton Yard. That gave me a tour of just about the whole railroad.

I came away impressed at how well operations worked in N-scale. Long trains make mainline traffic look more realistic. Coupling and uncoupling were easier than I thought it would be thanks to plastic skewers with thin sharp points that fit well between the coupler knuckles. I did need my reading glasses a few times to identify the car I needed to switch and get the pick between the couplers. The most difficult issue was rerailing a derailed car. My usual (HO based) method of picking up the end of the car, positioning the wheels over the track, and lowering it down didn't work well. Watching and listening to others I found that it worked better to tilt the car sideways, get two wheels against the far rail and apply a little pressure to hold them there while I lowered the other side down on the near rail.

Overall, it was an enjoyable morning with a gracious, welcoming host, on a layout which worked smoothly and was well prepared for operations, with a friendly group of modelers, and a great start to a fun weekend.

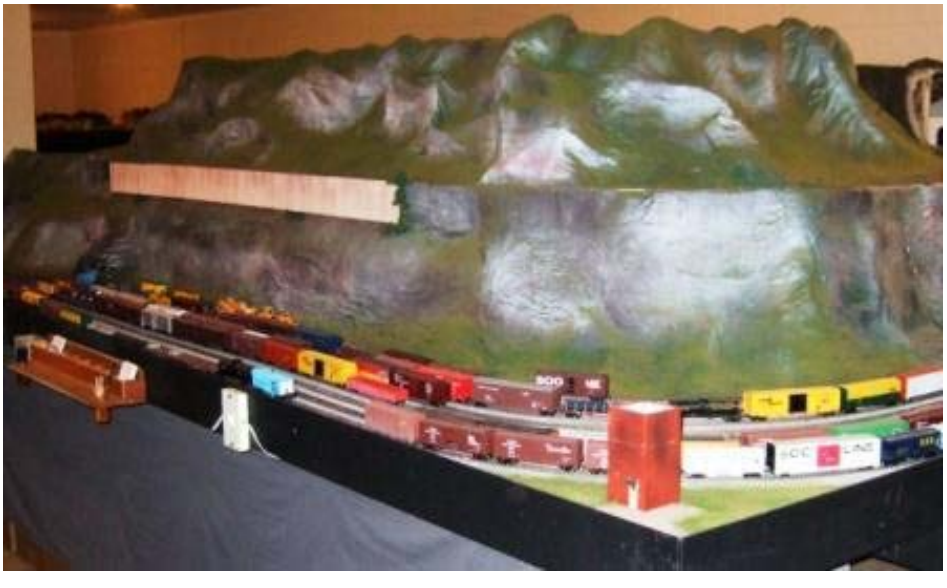
Neal Anderson's 'K K & L Railroad'

By Steve Benezra with information supplied by Neal Anderson

The KK & L Railroad is a local mixed freight and passenger railroad that supports operations of the Chicago Great Western and the Chicago and North Western Railroads. It is set in the Midwestern United States during the late 1950s – 1970s. This is a large layout on two levels, with more than 1,000 feet of track in a large basement. Parts of the layout are still under construction, but it is still a very exciting layout. One major feature of the layout is a 4-level, double track helix nicely disguised behind a large mountain. There are a variety of industries and passenger stations on the layout. The railroad is about 30% sceniced.

The railroad is located at Neal's home just south of Statesville. Ideal crew size is 10 -13 operators. Train control is Digitrax DCC.

Helix hidden behind mountain



Mooney Steel Mill

The layout runs from North to the South. The main line is mostly dual mainline. The track direction is set up to be left hand running. Trains will run to serve the industries on the layout with what they need.

A car card system is used for car fowarding. When a car is enters an industry, the car being dropped will be the last car in line and the car being removed will be the first one inline. Each industry has a number of cars parked at them at all times.

The trains are assigned a train order number. This is number used when calling dispatch. All trains on the main run a caboose. All trains are in control of the switches on both ends of the train.

Yards are in control of the area between the yard limits. Yard Masters switch the cars off the trains unless road crew is asked to do otherwise. All the yards have switching runs to make.

The Dispatcher controls the movements on the mainline. He controls all trains that move on the railroad. Even yard switches out of the yard limit. The Dispatcher keeps a log and a train board updated.

The job assignments were Dispatcher, Howard Yard, Weaver Yard, Needmore Yard, Georgetown Yard, and the Mooney Steel Mill. Four road crews kept freight trains, unit trains, and passenger trains moving all the time.

I signed up for the Mooney Steel Mill for the first half and Weaver Yard for the second half of the op session. The Mooney Steel Mill generates a lot of freight traffic. When the mill gets full with loads ready to go, I had to contact the Needmore yard to pick up the cars. This was a challenge for the yardmaster since he was always busy handling local and through freights. I had to take the initiative and take the cars over to the yard. Cars with raw materials were coming in at a good pace which required more empties to be shipped out. Any railroad which has an integrated steel mill as part of its operation generates a lot of freight and Neal's railroad is no exception.

Weaver Yard was less frantic than the Mooney Steel Mill and kept me busy handling freights and local deliveries for the rest of the op session.

Neal's railroad is expanding. At one end of the railroad he is in the process of adding lots more staging. In a couple of years this is going to be a very large, high traffic density railroad needing lots of operators. I look forward to returning on a regular basis.

Gil Brauch (left) and Carl Wessel at Weaver Yard

Cal Reynolds (left) and Jim Rayer at Needmore Yard

Seth Gartner's New York Central Piney Fork Branch Railroad -HO Scale

Steve Benezra with information provided by Seth Gartner

The Lake Erie, Alliance and Wheeling Railroad was created from the Alliance and Northern Railroad Company which began construction in 1876. Through many failures and reorganizations the railroad reached south from Alliance, Ohio, to Bergholz in 1880. The railroad was extended to Dillonvale, Ohio, by 1902 with bridges being upgraded to steel. This dead end branch was developed to tap into the extensive coal fields of eastern Ohio to feed the industrial appetites of the region including Pittsburgh, Cleveland, and Detroit. Most of the coal was from strip mines brought to tipples along the railroad. There were two deep mines, one of which was operating up to the end of the line in the late 1970's.

Minerva, Ohio is indicated as the red dot.

The modeled area of the Piney Fork branch is in red, ending at Dillonvale, Ohio.

The fictitious extension of the line is indicated in purple.

Seth included some tipples that had been abandoned prior to the modeling years of mid 1960's to give more business for operations. But coal is not the only interest for the line. There were limited freight movements on the line as most of its route is very rural. If a connection existed at the south end of the line Seth then have through freight movements as well. Dillonvale had an interchange with the Wheeling & Lake Erie Railroad, but it would not be busy enough to support entire through freights. Seth began to imagine the line connecting through the hills of southeastern Ohio to the Toledo & Ohio Central line from Charleston, West Virginia, to Columbus, Ohio. His modeled branch might then be a

cutoff for freight heading north to Cleveland and then south to Youngstown and Pittsburgh. Next during the planning was a way to satisfy my interest in the steel industry. No mill existed in the area away from the Ohio River at Wheeling. However, modeling license has allowed the creation of the Lauren Steel Company in its limited glory making steel and served by the extended New York Central Railroad.

Seth has been building the railroad for over 10 years. His profession as a MD and having a young family has taken precedence in his allocation of time. The railroad is partially sceniced. He has foamcore mock ups of structures along the railroad. Some of the railroad is nicely sceniced and complete such as Minerva Yard.

Train control is with Digitrax DCC with wired and radio throttles. Car forwarding is done with car cards generated from an Excel spreadsheet. He and other modelers in the area use a multiposition single car car/waybill. On the left side of the card is a check box and a destination. There are as many as 12 destinations on the card. Seth checks the box on the cards after the op session. If a card is not checked it doesn't move. Coal hoppers move as blocks without cards and the number is determined by mine orders. A few hoppers have cards for local industry needs. There are no passenger trains but will be in the future.

Train movements are directed by the dispatcher. He has three freights, both north and south, to move cars from their yards towards their next destination. He may elect to use a modified Form 19 that looks like more recent track warrants. These are located on the fascia at train order stations as you follow your train.

There were positions available for dispatching, yard operator at Minerva and Piney Fork. There was also a position at St. Clairsville which included both the freight movements into the steel plant as well as some new intraplant duties associated with the steel making process. Road engineers filled out the remaining positions as needed. Halfway through the session there was a break and the operating crew could trade positions if they were interested in doing so.

I ran Minerva yard for the entire operation session. It is a busy yard for one person but the directions provided by Seth made the yard run smoothly. The biggest challenge was getting rid of empty coal hoppers which piled up in one section of the yard. The empty mine orders and trains coming in to fill those orders prevented jamming up the yard with the coal hoppers. There were also local industries which needed to be served as well as handling the through freights. The time went quickly for the session and everyone was kept busy. I look forward to going back to Seth's for more operations in the future. His slow development of the railroad is an advantage. It is evident much thought has gone into the operation of the railroad before it is put in place.

Seth (left) explaining to Dave Draxler the steel mill operation at St. Clairsville. Minerva Yard is on the lower level.

Dave Chance operating Piney Fork Yard

The KB&D HO Scale Railroad

Steve Benezra with information from Rick Knight's brochure

The KB&D railroad is the Norfolk Southern "S Line" running between Spencer and Asheville North Carolina. It is a major bridge route connecting the NS's main N/S line with the coal mines in West Virginia and the traffic flowing to and from Tennessee and points west.

Rick's railroad occupies a standalone outbuilding next to his house. It is approximately 20' x 30' on 2 levels. The railroad is about 90% sceniced. Digitrax DCC is used for train control. There are plug-in throttles (yards) as well a wireless throttles (road crews). Authority for train movement is granted by the Dispatcher. Car forwarding is done with single car cards. On the card is a list of destinations. When a car is spotted, the card is placed in the destination box on the fascia of the layout and a check mark is placed in the box on the card. Using this simple system gets around the repeating of destinations that are common in 4 or 5 cycle waybills. The car card can have up to 18 separate destinations or a few a 2. This introduces a good level of randomness to the car forwarding system.

Turnouts are controlled manually. Public crossings cannot be blocked for more than 5 minutes. One of the enjoyable aspects of this railroad is that is low tech. The dispatcher tracks trains with pencil and paper at his desk next to the railroad. The purpose of this railroad is to move freight and it moves a lot of it. If you like yard work (no, not the gardening type) there are 4 of them to keep you and other yard-a-holics happy. Spencer yard is the busiest, with traffic arriving from and departing to Linwood Yard (staging) to the east which is located on the North/South Florida-New England main line. Spencer has car and engine shops, a roundhouse, as well as other maintenance facilities. Oyama Yard services local industries. The main line runs from Statesville to the "loops" which goes to the second level. The main industry at Oyama is the Duke Power Marshall steam plant at the east end of the yard. Asheville Yard handles traffic from the west (Tennessee). Crew changes and engine servicing also occurs at the Asheville Yard. Redwing Milling on the Murphy Branch is at the east end of the yard. The last yard is the Statesville Yard. This yard handles through freights and also serves the Alexander Railroad industries as well as Statesville industries. This is the yard I chose to operate along Chuck Place who worked with me at Marcus Neubacher's railroad. A lot of freight both local and through is handled at the Statesville Yard. Blocking of outgoing freight is also critical. With one yard crew working the east end and the other working the west end, the yard worked very smoothly. Just when you thought you would not have room for one more car on the classification tracks, along comes a through freight to clear out a track. I never found out if this was luck or built in to the operation system.

Towards the end of the session the frequency of trains slowed a bit which gave the Statesville crew a chance to relax and watch operations on other parts of the railroad. All in all, this was a very well run op session, not unlike all the others I had seen up to this point on the NC RailRun.

Rick Knight (left) showing Chuck Place operations at Statesville Yard

Jeff Turbyfill operating at Oyama Yard.

Scott Teague's N Scale Norfolk Southern Pocahontas District
By Marcus Neubacher

Saturday morning, Scott Teague hosted a session on his beautifully sceniced N Scale Norfolk Southern Pocahontas District. Scott's railroad is an interpretation of NS's former Norfolk & Western coal-hauling division set in the modern day.

A high volume of merchandise, freight, intermodal, and local traffic moves over the double-tracked Pocahontas Division mainline between Williamson and Bluefield, WV. Scott has recently rebuilt portions of the railroad so that both Bluefield and Williamson are represented in large capacity off-line staging yards located in a room adjacent to the main layout room.

In addition to the high-volume mainline, the Dry Fork Branch is represented on the railroad's upper level. This branch has a number of on-line coal load-outs to keep mine run crews busy, as well as a limited amount of other industry. A few through freights ply the rails of the Dry Fork, including a pair of run-through trains from Allen McClelland's Virginian & Ohio.

Operated with Digitrax DCC, the railroad has a functioning signal system with N&W color position light signals. The signals are not dispatcher controlled, but provide automatic block signal protection for the crews. Two dispatchers keep the trains moving, with one working the Pocahontas District mainline and the other working the Dry Fork Branch. Working those two jobs is the difference of night-and-day, with the mainline dispatcher kept very busy throughout the session while the Dry Fork dispatcher enjoys quite a bit of down time while crews switch the load-outs.

One on-line yard at Flat Top supports mine-run and local traffic going out to the industries. Small colored dots on the top of cars help the local crews and yard crews move traffic to and from online industries. Pushers operate on many of the trains in both directions, making for interesting moves as the pushers cut off and return to begin pushing another waiting train.

The Pocahontas Division is an exciting railroad to operate, and it captures the feel of the prototype while taking some liberties to create a more varied mix of local traffic for its operators.

NC Rail Run Weekend - Kevin Beck Layout

Jack Haynes

Friday afternoon was at Kevin Beck's, near Lexington. He models the Southern between Danville, VA and Charlotte, NC, and two local short lines, the Winston-Salem Southbound and the High Point Thomasville & Denton. Both are in N-scale and both use Digitrax DCC control systems.

Both layouts are well scenicked with different sections done representing the four seasons.

On the Southern, the large classification yard at Linwood is modeled along with two smaller yards at High Point and Salisbury. Danville and Charlotte are 16 track staging yards which supply plenty of traffic to the main line. The layout is on two levels, one and a half times around the outside walls of the train room which is a separate building behind his house. It is a "nolix" design where the upper level transitions gradually to the lower over long gentle grades. Linwood Yard is along the side without an upper level providing good access and visibility for yard operations.

There are two dispatchers. North of Linwood is controlled by the Danville dispatcher and south of Linwood by the Charlotte dispatcher. The dispatchers are in a separate room in the building. They communicate with crews by FRS radio on separate frequencies. Kevin has installed signal bridges to indicate control points. The signals do not operate, but they tell crews where they must call in to the dispatcher to provide their location.

Kevin uses a car card/waybill system to route cars to destinations. The car card has the usual identifying information, a pocket for a waybill card, and most have a printed photo of the car. I had not seen car cards with photos and they made it a lot easier to find the car when it had to be switched.

The shortline layout is completely separate from the Southern and has its own character. It is also a two level layout on a long island down the center of the room. A helix at one end connects the two levels. The WSSB yard is near one end of the layout on the bottom level, while the HP

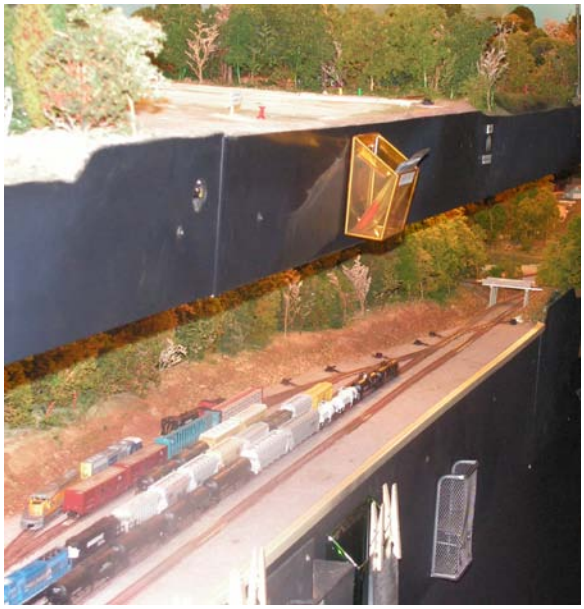
Linwood Yard is the center of activity along the Southern main line.

Bob Johnson takes a train out of Danville staging (upper), while Dick Bronson switches Salisbury (lower)

Donovan Lewis works Lake (upper) above Charlotte staging.

yard is at the other end on the upper level. There are several small towns with industries along the way and a single passing siding. The HP yard is where the short lines would interchange traffic with the Southern, but there is no physical connection between the layouts.

I was assigned the WSSB Bill yardmaster to begin. The first trains were transfer runs to and from HP yard which had to meet at a siding on the HPT&D. When they were done, we made up local turns for each shortline railroad and sent them off to do the local switching.



WSSB's Bill Yard (lower) receives transfers from High Point and handles local turns serving industries on the short lines.

Halfway through the session, we all took a break. Kevin had some refreshments ready in the house and we all filled up while discussing our experiences so far.

In the second part of the session, I had the HPT&D local. This operates as a turn, so I worked industries with trailing point turnouts on the way up to High Point. At HP, I ran around the train and worked the other industries on the way back to WSSB Yard. The time passed quickly. I got back to WSSB Yard leaving the second shift yardmaster just enough time to put my train on a yard track and put the motive power away ready for making up the transfer runs in the next session.

Meantime, the Southern engineers were busy running freights out of the staging yards, dropping blocks of cars at Linwood then continuing on to the staging at the other end. Dispatchers scheduled meets at appropriate sidings and locals out of Linwood switched industries along the main. Everyone was kept busy with some waiting time to get through Linwood Yard where the yardmasters were kept hopping to keep up with the constant flow of traffic.

This was an excellent session on a layout that worked very well. The host and his assistants were available to offer advice and encouragement without trying to tell everyone what to do, leaving it up to the engineer and yardmasters to solve problems on their own which makes a session rewarding for the participants. The operating schemes were well thought out and created an interesting environment.

Marcus Neubacher's CR&E N-Scale Railroad

By Steve Benezra with Railroad Details Provided by Marcus Neubacher

The Charleston, Roanoke & Eastern Railway, is an operating division of Norfolk Southern connecting Charleston, WV, with Roanoke and Danville, VA.

Marcus lives in a modest split level house near Winston Salem. As soon as you enter the house you have a suspicion that either Marcus is a bachelor or his wife is a saint. There is Coca-Cola memorabilia everywhere your eye comes to rest. Your suspicion of his single status is confirmed when you go downstairs where most "normal" people would have bedrooms, a study, and washer dryer area. What would be a large 15.5x19 bedroom/family room is separated by a second smaller 11x22 bedroom/study. The CR&E occupies both rooms and is connected by track that runs, where else, through the washer/dryer room over the washer and dryer. Construction of today's CR&E began in October 2008 with the remodeling of the 11 X 22 space that features the railroad's midpoint classification yard at Lewisburg, WV, and the mountain-climbing loops to get over the Allegheny Ridge into Virginia. By the summer of 2009, remodeling of the 15.5 X 19 foot room was underway. Minimal mainline construction took place in that room by December 2009, enough to have the mainline operational from Lewisburg to the staging yard that was then located just east of New Castle, VA. By February 2010, the railroad was operational from end-to-end, from west of Lewisburg to east of New Castle, for the NC Rail Run N Scale edition. An operational branchline, called the Kessler & Northern District, opened for business during 2010 and the final mainline extension from New Castle to Roanoke, VA, went into service in April 2011.

There is little scenery on the layout to date, but many have said that one does not need scenery to operate a model railroad realistically. Marcus has enjoyed getting started on scenery, but so far the priority has been on getting the railroad operational.

Layout Concept

The Appalachian Mountain railroading with its lush scenery and drama of heavy tonnage, generally slow-moving mountain railroading makes for a great modeling theme.

Marcus chose the prototype-freelance approach to modeling because he could not settle on any one prototype route that had everything he wanted. Influences came from Norfolk Southern routes in North Carolina (the former Southern Railway S-Line between Salisbury and Asheville) and West Virginia (the former Norfolk & Western Pocahontas Division mainline), as well as other prototypes like the Clinchfield Railroad and the Chesapeake & Ohio. Although Marcus always been more of a fan of Norfolk Southern and its predecessors, he also likes CSX equipment in their corporate paint schemes as well as their predecessor schemes. By mixing a number or prototype routes, he hoped to come up with something plausible that would meet all of his modeling desires.

This is medium density mainline railroading with a mixture of overhead and local traffic. A high-priority train is a nice diversion and complication for operations, but generally the pace is semi-relaxed, moving coal trains and merchandise from point to point. Local switching is important to his regular crew, so it was incorporated in the mainline theme.

Marcus' railroad has some light density branchline railroading as well. His is interest in lesser traveled coal branches accessing a number of on-again/off-again loadouts plus a big-time flood loading operation or two. The mainline will someday be CTC, the Kessler & Northern District lower-density branches are operated by Timetable & Train Order rules.

The railroad is controlled with Digitrax DCC. Wireless throttles are use but have not been upgraded to duplex. The throttles have cords which can be plugged into panels along the railroad if radio control is lost between rooms. Communication is done with FRS radios.

I had the Lewisberg yard assignment with Chuck Place. This yard is busy throughout the operating session. It handles east bound and west bound traffic as well as the branch line. It is critical that trains are sent out blocked or road crews will be cursing the yard crew as they proceed along their assigned route. There is good documentation at the yard to insure correct blocking.

Chuck Place at Lewisberg Yard

Paperwork and Car Forwarding

Each train crew will receives a packet of information that includes a train information sheet, car cards and waybills, and work instructions. The train information sheet includes train identification, loco numbers and DCC address, total number of cars allowed, number of cars setout at Lewisburg, and departure time. There is also a track diagram for use with Track Warrant Control limits. Work instructions tells the train crew where a train works and gives any special instructions for the operation of the train along the route.

The waybills inserted into the car cards indicate where each car is going during the session. The "Via" line on the waybill is mostly for the information of yard crews who will need to know what block to put the car in. .

Some trains, including coal trains, will operate with multi-car block cards that take the place of car cards and waybills. These apply when several or all cars in a train go to the same destination. Some through cars on merchandise trains may also operate without car cards and waybills.

Kenny Mann at Newcastle

Cal Reynolds at Meadow Bluff

Train Dispatching

With the exception of some trackage through the Lewisburg Yard Limits, all mainline and siding trackage on the CR&E is governed by the East End Dispatcher. The dispatcher is uses Track Warrant Control to move trains across the district. Trains are given verbal instructions by radio to proceed or work between designated limits. Each limit (or control point) has a name. Crews refer to the track diagram in their train information packet for route assistance.

At Lewisburg Yard, Main One between KD Tower and Lewis is Track Warrant Control governed by the dispatcher. Main Two and all other tracks between KD and Lewis, plus the yard leads on either end of the yard, are under the jurisdiction of the yardmaster at Lewisburg. You must have permission from the proper authority before making any moves.

The Kessler & Northern District branches are controlled by Timetable & Train Order. The K&N Dispatcher will issue train orders to the crews using the K&N.

All turnouts are under control of the train or yard crews. Turnouts at control points, such as passing siding turnouts and junctions, are operated by Tortoise switch machines. A large slide switch is mounted to the fascia or subroadbed at or very close to the turnout it controls. The down position is always “normal” and the up position is always “reverse.”

All industry and yard track turnouts are hand-thrown using small slide switch linkages mounted in holes in the subroadbed.

The op session went very smoothly. This is one of a number of N-scale railroads on the RailRun. Except for Scott Teague’s N-scale railroad, I have had the pleasure of operating Michael Pennie’s and Scott Beck’s railroads. Over the years I have been impressed with how well N-scale railroads operate. Equipment reliability, trackwork, and adherence to standards are important for any scale railroad, but more so for N-scale. These railroads pay attention to these important parameters and, as a result, make operations not only possible, but fun. There is something satisfying about watching a 4 diesel lash-up dragging 40+ freight cars up a 2% grade. This coming from an On30 steam era, short line modeler that classifies a long train as anything over 10 cars.

Check out **www.kntower.com** for more information about Marcus’ CR&E railroad The website contains information and images of the old layout (with scenery) and the current layout (without much scenery. Marcus also has a blog at http://ns-cre.blogspot.com, and is frequently updated.

David Ward's HO Scale Denver, Boulder & Western
By Marcus Neubacher

David Ward's HO scale Denver, Boulder & Western rounded out the schedule of layouts operated during NC RailRun 2011. Being the last slot on the operating schedule on Sunday afternoon, David and his wife Debbie opened their home for an excellent gathering that included grilled hot dogs, hamburgers, and all the fixings.

The DB&W is a representation of the Union Pacific/Burlington Northern Santa Fe Joint Line operating south of Denver, CO. The railroad is primarily double-track with a CTC project underway to keep traffic moving. Large staging yards located throughout the basement feed the railroad from several directions, making the DB&W a very interesting railroad to operate.

Denver is home to a large classification yard and is considered the main yard for Union Pacific traffic moving over the modeled portion of the railroad. Pueblo, south of Denver, is the location of another classification yard that works the BNSF traffic operating over the railroad. Each yard has a yard crew, with the addition of a diesel shop foreman at Denver, and both yard crews are overseen by a yardmaster who works closely with the dispatchers to keep traffic moving. Both Denver and Pueblo yards send out locals to industries, work through freights for their home railroads, and handle transfer runs operating between the two.

Long trains with big modern power are the name of the game on the DB&W. David and his crew have loaded open hoppers with real coal from the Powder River Basin, real iron ore, and other live loads that make the trains very heavy and challenging to operate. Distributed Power (mid-train and rear-end remote control helpers) are used along with manned helpers to keep the tonnage moving, particularly on the relatively steep single-track Moffat Subdivision that diverges from the double-track mainline south of Pueblo.

NCE digital command control is used to control the trains on the railroad and crews communicate with the dispatcher via FRS radios. The railroad's dispatcher works with an assistant dispatcher who lines trains in and out of the hidden staging yards and gives crews their paperwork before trains begin to run.

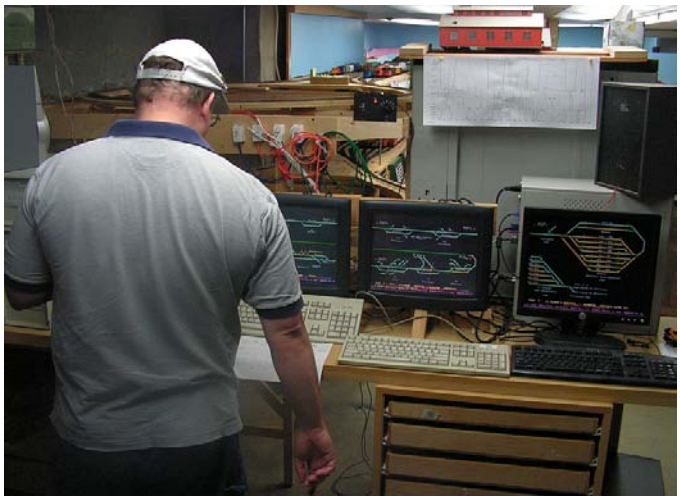
The DB&W uses a homemade car card system for car movements. Cars moving to and from the yards and local industries have a laminated car card with multiple destinations along the car's route. As moves are completed, destinations are marked off and the cars are sent to the next destination. Only cars being moved to and from local industries have car cards, keeping the handling of paperwork simple for the crews.

David is a proponent of realistic operations based on his many years of rail fanning. His experiences trackside give him ideas to emulate during operating sessions, keeping crew members on their toes while performing their jobs. The DB&W gives operators that extra experience of working as realistically as possible with an ever-changing set of circumstances to work around,

NC Rail Run Weekend - Chuck Batherson Layout

Jack Haynes

Sunday morning I was at Chuck Batherson's Blue Ridge and White Mountain Railroad in Greensboro. Chuck models the southeast coast of Maine between Portland and Bangor. The trackwork is mostly complete and some scenery is in place with some having the basic landforms shaped in stacked foam board and some still in plywood. But Chuck has been focused on making it run and that it does, with operational train detection and a dispatcher's control panel laid out across four computer displays. The system uses C/MRI interface. Each town has a local panel with turnout controls with dispatcher override. The dispatcher communicates with engineers and yardmasters with FRS radios. There is a fast clock that the dispatcher can adjust to keep pace with the engineers. Throttles are Digitrax DCC.



Steve Prevette works the Dispatchers desk. Four screens show a schematic of the layout with letter codes to throw turnouts or release a town panel for local switching.

The layout is on two levels. Staging yards representing Bangor (north) and Portland (south) are stacked above one another. Each staging yard is entered through a reverse loop so trains are automatically set up to head back the other way. Tracks run along the walls about three-quarters of the way around the basement (yes there are some basements in North Carolina; we all envy Chuck). They then go onto a peninsula with Searsport yard on one side and a long gentle grade on the other to transition to the lower level and back around the walls to the other staging yard. Along the way there is a short branch line into another staging yard (under Searsport) representing connection to an interchange point at St Albans, ME.

Chuck Batherson gets a train ready to run out of Portland staging (lower). Bangor staging is on the upper level.

This is Maine, so the major industries are wood products and agriculture, primarily potatoes. A dedicated "Wood Job" runs the length of the layout servicing just the wood based industries, delivering logs, pulpwood and wood chips and picking up finished products. Hot shot freights with loads of potatoes come off the St Albans branch and head south to interchange at Portland.

Two passenger trains run in each direction to add operating interest and make the freight engineers pay attention to the schedule and the clock. There is a line schedule chart showing all trains so everyone knows where to expect meets, but, of course, freights can't always keep to their schedule so the Dispatcher has to adapt to changes.

Bodwell (Brunswick) Yard is the primary classification yard on the layout. Blocks of cars are switched in and out of through freights. Local freights are made up and sent out in both directions to serve online industries. A local switcher takes care of in-town industries. St Albans branch trains with general freight originate and terminate here. The smaller yard at Searsport serves mostly local industries, but sends out one turn to service towns on the upper level.

John (M) Cox handles switching at the South end of Bodwell Yard.

Chuck uses the five-step car card and waybill system. The waybill fits into a pocket on the car card with just the top half showing. That provides the destination for that move. After the car is set out, the waybill is turned around or over to show the next destination. When all four moves on the waybill have been completed, the waybill is removed and the return empty destination for the car is uncovered and provides the fifth step. Train packets are made up with the car cards/waybills, a train card that shows the origination, destination, schedule, car limit, and instructions for which towns and/or industries to switch, and an engine card that shows the engine number, address, and also lists town abbreviations for reference. These are all held in a clear plastic pocket protector that keeps them all together and lets the engineer see the train instructions.

My first assignment was the Southbound Wood Job. This was a good introduction. After switching industries at two towns at the north end of the layout, it becomes a through freight just switching blocks of cars at the yards before terminating at Portland. Switching the large paper mill at Orrington took some work and thinking. With both facing and trailing sidings in the mill, I had to use the main for some run-around moves, but had to watch the clock to be sure I had the main clear for passing trains. Once past that challenge, the rest of the run was a leisurely tour of the layout; just stopping at yards while the yardmasters switched blocks in or out of my train and holding at a couple of passing sidings to meet opposing traffic.

The large paper mill at Orrington presents some switching challenges.

The next assignment was a local freight out of Bodwell, switching local industries south to Deering and return. Freeport was the most interesting location with industries on both sides of the main and turnouts facing both directions. As a turn, I only had to deal with trailing point turnouts in each direction, but had to plan the moves across the main to minimize interference with through traffic.

Bob Halsey gets clearance from the Dispatcher to use the main at Freeport, while Tim Rumpf runs a passenger train through Wiscasset.

I had made the outward run when break time arrived. Chuck had some excellent snacks available. The crew filled up and exchanged notes about their experiences to that point.

When we restarted operation, Bob Halsey took over my train and I manned the Dispatcher desk for the second session. It took a little while to get the feel of the panels. The track schematic was clear and having run over the whole layout (and being a little familiar with the represented geography) I could locate the towns I wanted to control or provide in instructions to the engineers. It just took a little while to adapt to entering the right key code. I kept thinking of the code as controlling a specific turnout, but the panel was designed so that the code designated a route. When I had two turnouts to line, I kept trying to figure out what the two codes were when I really only needed one. Fortunately, Chuck was available when I needed help and we managed to keep the layout running without any disasters.

Overall, this was an excellent session with a well thought out operating scheme, plenty of instructions and documentation, and a smoothly operating layout. We all thoroughly enjoyed the morning.