

Indy Junction 2022 Clinicians and Clinic Descriptions

Dr. Gerry Albers

Things I Wish I'd Known About DCC

Experience is a horrible teacher. First you get a bad experience, then you learn the lesson. Over many years of “experiences,” Gerry has developed a guide of DCC “best practices,” which includes wire and component selection, documentation methods, a collection of appropriate tools, and more. In this clinic he briefly discusses DC and AC power, then discusses DCC in a comprehensible form with a practical list of recommended “do’s and don’ts.” This is a good clinic to learn from his “experience” and save yourself a lot of time and trouble!

Giving Your Model Railroad Meaning and Purpose

MEANING is personal. Why should you invest your time, my money, and passion in this hobby? Many people can and have justified this investment but their “return on investment” (satisfaction) is very short-lived or it never materialized at all. What can build, attract, and keep your interest (and investment) alive over 10, 20, or 30 years? Answer: PURPOSE. Gerry takes this discussion of Meaning and Purpose from the philosophical to the practical. He provides examples, starting with a simple loop of track and moving through to a large enterprise layout, like his Virginian Railroad Deepwater District which was featured in Great Models Railroads 2014.

Building the Deepwater District

“You are what you experience” – and you build (a model railroad) accordingly. Gerry was greatly influenced by Lionel, the Virginian & Ohio RR, early layout attempts, friends’ advice, and more. They all came together when he designed and built his basement - and his wife put a house over it. This “from the ground up” clinic encompasses the many and varied elements that went into designing and building the layout. Everyone will find some “nuggets” in this clinic that can be applied to other layouts, even for an existing layout.

Designing & Building a Layout with CAD

This clinic starts where Gerry did: with railfanning and “druthers.” It then touches on design tools and techniques including Computer Aided Design (CAD), construction tips, numerous examples, and lessons learned. Regardless of where you are in the construction process, there are plenty of helpful ideas that can be applied to your own situation. There is a live demonstration of a CAD program to emphasize the advantages.

Michael Bradley

Maintenance of Way Vehicles

This clinic discusses options for building HO scale 1950s to 1970s MOW trucks for your railroad. Several completed examples will be shared during the clinic.

Indy Junction 2022 Clinicians and Clinic Descriptions

John Burchnell

Timelines of Technology and More

See an incredible number of schematic visual representations of historic events across time covering a large number of hard-to-find modeling topics. These timelines provide guidance in deciding which era and locale to model, help focus your modeling and purchases, improve realism accuracy, and help you add interest and uniqueness to your layout. Timelines include nearly all steam, diesel, and electric locomotive classes, railroad mergers and maps, automobile brands and makes, gas stations and oil companies, road signs and markings, rolling stock classes and Innovations, rail safety and technology milestones, farm tractors, retail stores, and several general interest items. Now you can get all this hard to find historic data in one place. Presented in two parts –

Part 1 – Rail Eras & Regulations, Rolling Stock Innovations, Steam Locomotives, Automobiles, Gas Stations & Oil Co's, Highway Signs & Pavement Markings

Part 2 – Maps & Mergers, Diesel & Electric Locos, Farm Tractors & Silos, Fast Food, Ice Cream, Grocery Stores, Soda Bottles, Trading Stamps, Retail Store

Philip Burnside

Building the Edgar Thomson Blast Furnace Lift House

Using historical photos to build a model using combination of 3D printing, Laser cutting and engraving, and Iron paint to get realistic rusted surface effects.

Basics of building a 3D CAD model

Using 3D CAD to create parts to get that scaled prototypical model.

Dave Capron MMR®

Constructing Craftsman Kits

Forty years ago, there were only Campbell and Suydam kits. Scratch building was the only way to get great looking structures on your layout. Today there are hundreds of kits from dozens of craftsman kit manufacturers. This clinic will cover both the basics of kit construction and how to build award winning kits and dioramas. The use of basic and advanced tools, glues and adhesives, paints, stains, washes, and chinks will be covered. Construction techniques and various methods will be shown. The tips and suggestions that are not in print are reviewed. Interior and exterior detail and signage is also demonstrated. We will quantify the difference between a layout model and an award-winning kit. Finally, the diorama for multiple kits and scenery will be discussed. You have seen scratch building clinics – now learn how to construct the \$25 to \$300 craftsman kits that will be a center point on your layout.

Full and Complete Operations on a Room Size Layout

Full and complete operation on a room size layout. This clinic will show you how to have satisfying operations on your small room size layout, just like the basement empires. The ideas and suggestions presented will change the way you view your layout. There are possibilities that

Indy Junction 2022 Clinicians and Clinic Descriptions

our discussion will permit you to find in and around your layout. The number of operators you will need along with the operational design will be reviewed. In no time you will be able to host operating sessions. Come and see the real size of your layout.

Making and Modeling Real Coal Load Operations

Making and modeling real coal loads. This clinic covers the technique of how to make coal loads of various sizes from real coal. We begin with how coal is mined and moved from the mine to Marshaling and Classification Yards to the final customer. This prototype process is why the modeler needs different sizes of coal loads. The loads are easy and fun to make and will make those coal drags really stand out on your layout. The coal operation modeling is a bonus.

Making and Modeling with Rocks

Rocks in one form or another are on all layouts. Making and modeling rock molds is needed for those modelers who want more than a rock or two. This clinic will show you how to make long lasting molds from natural materials. Using these castings, we will create scenery to match the prototype. Various methods of how to attach them will be presented. The clinic will also cover ways to color the rocks to simulate the scenery you want. "Rocks can be beautiful."

Car Cards and a Chief Clerk

Model railroaders either love or hate Car Cards. While they seem prototypical, they actually are not. Engineers and conductors did not and do not deal with them. The paperwork is handled by the station clerk. We take the Car Card Boxes off the layout facia and put them into a 'Chief Clerks' station. As the train progresses from town to town the Clerk works the Car Cards from his packet for that train. Come and see what adding a "Chief Clerk" position can do for your layout operations.

Ken Chick MMR®

Aluminum Backdrops and Valances

How to use thin aluminum (35 Mil) stock, available from big box home building supply stores, to create smooth, easily curved, and lightweight backdrops and valances. The material comes in roles 50' or 100' allowing for long seamless backdrops. It is easy to install and paint and is much easier to work with than either drywall or Masonite.

Keith DeVault

Showcasing the B&O's important and historic "West End" route

The West End route was located from the heart of the B & O railroad at Cumberland, MD to Grafton, WV. The West End was home to some of the most serious mountain railroading in the United States. It was the nation's toughest railroad grades and operating conditions with coal, freight, and passenger trains. The largest and most powerful locomotives were used by the B&O into present day CSX. Come and see photos of what made this route famous.

Indy Junction 2022 Clinicians and Clinic Descriptions

Bob Frankrone

Love Those Loads

Most model railroaders love open loads. Bob's clinic features a variety of open load models that can be built from commercially available kits or easily scratch built from basic materials. Beginners and expert modelers alike will enjoy learning how to create interesting and realistic open carloads. The clinic includes an abundance of photos from both the prototype and HO scale models. Bob is the author of the "Love Those Loads" series featured monthly in the NMRA Magazine.

How to Add a Scene to a Layout in 15 Easy Steps

Unless you are one of the few model railroaders who have a finished railroad, there is a good chance you have some areas on your layout void of any scene or scenery – a literal "plywood prairie." This clinic will demonstrate how easy it can be to create a nice-looking scene, regardless of one's skill level. Watch as Bob converts a three-square-foot plywood prairie on his layout into a complete scene in 15 easy steps. A few simple tools, one easy-to-build plastic kit, some readily available scenery materials, and various odds and ends like paint and glue are all he uses to create the scene.

Promontory – Past and Present

As we all know, a golden spike was driven at Promontory Point, Utah, in 1859. That spike signified the completion of the transcontinental railroad. Using archival photographs, Bob steps back in time to look at that momentous event in railroad history. Fast forward 150 years and see what the site looks like today and how the National Park Service is keeping that piece of railroad history alive for all to experience.

Ted Goodman

Designing and Building the Age of Steam Roundhouse in Sugar Creek, Ohio

Ted was the architect for the Age of Steam roundhouse in Sugar Creek, Ohio. This clinic will cover the research, site and structure design, and construction of the facility.

Dr. Michael Groves

Lighting your scenery without Wiring - a Novel Approach

Learn the art of implementing scenery lighting in minutes, without wiring, using a revolutionary system. Lighting scenery adds sparkle to the detail that you have worked hard to create. However, for most of us this requires a lot of forethought and even then, we end up with wiring that looks like spaghetti. This clinic will cover advances in lighting, what led the clinician to develop the Dwarvin fiber optic lighting system, and how to use it. A very high intensity light source allows the use of fiber optics for you to design lighting into your buildings, streetlamps, cars, trees, ... whatever you can imagine. A hands-on demonstration is included in this clinic.

Designing prototypical lighting for realism

Prototype lighting requirements will be covered with an emphasis on how to establish the right lighting conditions, especially for roadways, buildings, and parks. This will be somewhat technical as it will consider the luminous intensity requirements for real life conditions and

Indy Junction 2022 Clinicians and Clinic Descriptions

relating that to the scale being modeled to provide good balanced prototypical lighting. This is aimed at helping those who want to make their lighting as realistic as possible. At the end of the clinic, participants should be able to select and design appropriate lighting for their layout.

Mike Hauk

An Introduction to Static Grass

This is a two-part clinic. The first part is a PowerPoint slide deck presentation. The second part is a hands-on clinic where everyone attending the clinic can work at applying static grass with various grass applicators and grass materials based on methods described in the two-part clinic.

Quick and Dirty Weathering With Oils

This is a two-part clinic. The first part is PowerPoint slide deck presentation. The second part is a hands-on clinic where everyone attending the clinic can take a turn at applying various weathering materials based on methods described in the two-part clinic. Clinic attendees must supply their own freight car to fully participate in the weathering portion of the clinic.

Roger Hensley

UTC Interurbans

This clinic will cover street cars and Interurban operations in Indiana beginning with 1890 Anderson Indiana Mule Cars plodding along the city streets of Anderson. It will continue with discussions about the Interurban years from the early years with Union Traction Company (UTC). Also covered during this clinic will be the various power stations throughout Indiana. The clinic concludes with a look at the Indiana Railroad in the 30s to the end of Indiana Interurbans in January of 1941.

Union Traction Days – 2019

This clinic begins with the story of the Union Traction Company (UTC) with its headquarters and through the 1913 flood. It continues with the years until it was changed into the Indiana Railroad and to the end in 1941. The focus of this presentation is primarily the cars of the Union Traction company in and throughout Anderson and the surrounding area.

Railroads, Then and Now

The pictorial story of the Big Four (NYC), the Pennsy, the Central Indiana, the NKP, the Central Indiana and Western, the Penn Central, the CSX, and the Norfolk Southern railroads as they came through Central Indiana and their reach far beyond. The presentation comes to an end with a look at the Model Railroad Museum rooms at the Museum of Madison County with a brief look at railroads in Anderson and Muncie.

Madison County Rails

The history of the Big Four (NYC), the Pennsy, the Central Indiana, the NKP, the Central Indiana and Western, the Penn Central, the CSX, and the Norfolk Southern railroads. Many of the photos in this presentation are not the same as in the clinic, "Railroads, Then and Now," although the description is similar with the exception of the modeled railroads

Indy Junction 2022 Clinicians and Clinic Descriptions

Dan Hinel

Evolution of RxRR 1.0 to 3.0

This clinic discusses how Dan's RailXpress model railroad grew from a 150 square foot room to the current 2700 square foot room. This clinic will be of interest to anyone interested in layout design or starting out small and possibly adding on to enhance railroad operations. For a previous of the layout, visit <http://rxrr.webs.com>

Michael Hohn, MMR®

Modeling the Lehigh Valley Railroad in New York and Pennsylvania in 1890

This clinic describes the building of a model railroad representing two locations on the Lehigh Valley Railroad around the turn of the Twentieth Century: Auburn, NY, a small city with diverse industries and commercial enterprises, and Alderson, PA, a small town in north-central Pennsylvania supported by lumbering and tourism. Track layouts, structures, and rolling stock represent the prototype in these contrasting scenes with as much fidelity as possible, based on insurance and railroad maps, historic photographs, equipment diagrams and registers, and a large dose of conjecture.

Cleanly, Accurately, and Squarely - Basics of Scratch Building Structures and Rolling Stock

Beginning to build structures and rolling stock from scratch requires knowing the characteristics of raw materials; finding sources; gathering a small collection of tools; selecting glues, paints, and weathering media; and practicing some techniques. This clinic will cover what it is like working with different materials - wood, styrene, laser board, strip, sheet; sources of parts for structures and rail cars - windows and doors, brake gear, and grab irons; fundamental tools beyond knife and straightedge; and most importantly, how you do it. Skills, techniques, rules of thumb, by whatever name the goal is a car or building without a lot of glue showing, with straight lines and right angles, with a look of rightness to the builder and the admirer.

Pat Hreachmack

RTV Mold Making

This is a hands-on clinic demonstrating RTV mold making and resin casting to create model railroad component items. Attendees will have the chance to try things such as:

- Create an RTV mold by carefully measuring out, mixing, then pouring a mold into a mold box
- Remove the cured mold from a casting box
- Mix the two-part resin and pour a casting
- Remove fresh castings and toss them to the audience

Indy Junction 2022 Clinicians and Clinic Descriptions

Charles Malinowski

An introduction to Evans Designs' Model Builder paper building software

Property research using Local Government Property Tax systems

Bill Neale MMR®

Weathering Steam Era Freight Cars

This clinic will cover several ways to make your freight cars look appropriate for late steam era railroading. During this clinic, you will be looking over Bill's shoulder as he weathers several cars in front of you. He will also cover some "do's & don'ts" when weathering. In addition to Bill's weathering efforts, the work of several other modelers will be shown. The clinic will close with a video of his layout showing the effects of weathering as discussed during the clinic.

Modeling & Operating a Large Steam Roster

If you want to model steam on your model railroad, what is the best way to approach building and maintaining this fleet of steam engines? Model steamers are fussy and prone to frustrating their owners & operators. Bill offers advice, techniques, and strategies for keeping a large model steam locomotive fleet functional and in operation.

Scott Pandorf

Assemble Your Own Railroad Crossing

Railroad crossings can be simple or complex. This clinic will demonstrate how to assemble a microprocessor and mostly off-the-shelf components to create a grade crossing. The completed project will handle virtually any complexity including lights, sound, and motion with only a little code and a lot of flexibility. This information in this clinic applies to solutions in N scale to G scale.

Model Railroad Speed Trap

How many of us have 'caught' one of our locomotive operators exceeding the posted speed limits in a section of track? This is particularly a problem with a helix or hidden trackage where the train launches out of the tunnel at a high rate of speed! In this clinic, Scott will show you how to use a microprocessor, simple components, and a little programming to time the train, display the speed of the train in scale miles per hour, and optionally sound a warning. This information in this clinic applies to solutions in N scale to G scale.

How far is it?

This clinic will show you how to use a microprocessor and a couple of additional components to build an electronic tape measure to figure linear distance on your railroad. This figure will display as feet and inches (or meters) which can then be translated to scale miles. Because of the size of the required components, it is appropriate to HO scale and larger.

Indy Junction 2022 Clinicians and Clinic Descriptions

Eric Peterson

Moving My O Scale Layout 5 Basements and 2 Garages

Model Railroad Wiring Tips and Tricks One Wire at a Time

Track Geometry, Curves and Spirals, Turnouts Too

Brook Qualmann MMR® and Jay Qualmann

How to Model the Town and Date of Your Choice

With the generous use of maps and photos, this clinic will describe how to model any town in any time period. The older the town you intend to model, the more you need this clinic. Included will be the types of considerations and decisions you should consider, the information you will need, and where to find it. The clinicians will bring their approach to life by explaining how it was applied to their modeling of Milford, Michigan, in 1950.

Greg Rich

Cars-n-Trucks-n-Wagons, oh my!

This clinic covers many of the period HO & O scale vehicles available and what can be done to make them truly unique “eye catchers.” Offered are sources, techniques, tips, and material suggestions that will help the model builder on this quest. Several of the models built by Greg and shown in the clinic will be on display.

Neal Schorr

Capturing the Commonwealth

In this clinic, Neal will show how the Pennsylvania Railroad’s Middle Division was recreated in model form. The clinic focuses on how he accurately reproduced PRR’s Middle Division which stretches across central Pennsylvania. The presentation will explain how both an understanding of the topography and geology of the region, as well knowledge about the physical plant of the railroad, were essential to the goal of accurately modeling the railroad. The clinic includes many comparison images of the prototype railroad and the model. The clinic wraps up with an artistic segment which highlights the scenery of the region which prompted Neal to model the Middle Division. The layout has previously appeared in *Model Railroad Planning* and also appears in *Great Model Railroads 2022*.

Fred Soward

Keeping Your Group Engaged

How we survived and thrived during the COVID-19 shutdown and how we're applying those lessons learned to our continuing engagement of the members of our NMRA Division. Take a look at how we are making email, face-to-face meetings, Zoom meetings, hybrid meetings, Facebook, Instagram, and more work for us.

Indy Junction 2022 Clinicians and Clinic Descriptions

Create a Scale Track using a Fast Tracks Fixture and Filing Jig

The clinic focuses on how creating a scale track for your model railroad, using Fast Tracks fixtures (turnout assembly fixture) and jigs (point forming tool). The clinic also discusses the function and finish of the scale track on a model railroad as well as prototypical installations. Scratch building a scale track or a gauntlet track may be used as one of the three scratch building requirements for the MMR Model Railroad Engineer – Civil Certificate.

Sam Swanson

Modeling With The Masters®

Painting and Weathering with Inexpensive Craft Acrylic Paint

This EXTRA FARE hands-on clinic is focused on developing skills in painting and weathering models using a three-step process, including base-color painting, staining for shadows, and dry brushing for highlights. Each of these steps will be undertaken using common brushes and craft-style acrylic paints. Attendees should bring their small structures (built or unbuilt), details or figures, or rolling stock (preferably with wood sheathing, such a boxcar or stock car) to be painted. Three models maximum are recommended. Each model or components to be painted should be primed with a flat overcoat (paint or Dulcoat), particularly if the model is plastic, to facilitate adherence of the craft acrylics. Brushes and paints will be provided, but attendees may bring their own as well, should guidance on various brush and paints be desired. Practice models will also be available, should attendees want to try various techniques prior to working on their own models. The cost of the clinic is \$20, which includes all work-station materials. We'll meet over a 4-hour period to thoroughly cover the basic techniques and as time allows, any advanced techniques attendees are interested in can be worked on as well.

Advance registration for this event is required.

Richard Turton

Signature Structures for Chiefton, WV

The clinic will cover the author's attempt to model the Western Maryland's Chiefton, WV, yard on his HO scale layout. Background on the Chiefton Yard, it's main function, and history will be provided. A discussion of several key structures and the author's attempts to model each of them will also be presented.

Scott Walton

Wiring for Signals using LCC

Bob Weinheimer, MMR®

Operations on the Pennsylvania Southern

The Pennsylvania Southern is a freelance layout set in 1980 in western Pennsylvania. The Pennsylvania Southern uses train orders but no timetable as all trains are run as extras. We use single use waybills for car routing. These and other topics for discussion include layout philosophy, train scheduling, car fleet description, train schedules, dispatching issues, and supporting paperwork.

Indy Junction 2022 Clinicians and Clinic Descriptions

Mike Wolf, MMR®

Super detailing a steam locomotive

Discusses the research required to accurately model a steam locomotive and provides an overview of the commercial and scratchbuilt parts used to super detail a Bowser locomotive kit into a National contest winner. Discusses the function of the various components on a steam locomotive.

Modifying Sound Projects for Digitrax Sound Decoders

Discusses working with Digitrax sound projects - simple modification and upload tips and techniques

Car Forwarding without using car numbers

A realistic car forwarding method which does not require the use of specific car numbers or waybills. This technique has been presented at several conventions in the past and in articles in NMRA Mag and OPSIG. I demonstrate 3 different implementations used in layouts (including mine) for realistic car forwarding

John Young, Ron St. Laurent, Andy Keeney

Car Cards and Waybills: A 3-part presentation

Part 1: Theory (John Young)

John will discuss how a car card and waybill system works. There will be comparisons to switch list car distribution systems. The primary focus will be on defining and implementing the location code portion of the waybills.

Part 2: Creation (Ron St. Laurent)

John will discuss the creation of Car Cards and Waybills using Microsoft Word/Excel. This clinic provides a step-by-step method to creating great looking car cards and waybills using a combination of Microsoft Word and Excel.

Part 3: Implementation (Andy Keeney)

With the help of John Young, Ron St. Laurent, and other friends, Andy has developed an operations program with car cards and waybills that works well for his operation. In this third clinic of the three-part presentation, you will see how the car cards and waybills allow a large layout with a high density of traffic to function well. The scheme allows 6 railroads, about 1500 freight cars, and more than 70 trains on the daily schedule, to operate in a very realistic fashion and adds greatly to the success of prototypical operations.

Steve Zapytowski, MMR®

Myths and Legends of the Tillamook & Astoria

Does your railroad have a story to tell? Is that story rooted in historical fact, or...not so much? Steve began building his model railroad with an idea growing out of considerations of a geographic location and a period in time. Some of cities and towns represented on his Northwest

Indy Junction 2022 Clinicians and Clinic Descriptions

Oregon layout exist to this day while others have faded from history and are now part of the “mythology” of the Pacific Northwest. Building his model railroad inspired Steve to look more closely at the region’s railroading history. This history journey provides the railroad with its own particular version of what happened in Northwest Oregon from 1900 to 1912. This clinic delves into some of the “true facts” of the time and those “other facts” now obscured by the mists of time.