

Albers, Gerry: Building the Virginian Deepwater District

Gerry shares what it has taken to design, construct, and operate a world-class model railroad. Gerry's HO scale Deepwater District of the New River Division of the Virginian Railway has a 1600 square-foot footprint, and features 11 hidden staging yards, 41 staging tracks, and five railroads, including the current version of the Virginian & Ohio RR. For a preview, check the 2014 *Great Model Railroads* and the 2005 *Model Railroad Planning*.

Albers, Gerry: Things I Wish I'd Known about DCC

Learning from experience is no fun. First you get a bad experience, then you learn the lesson. Over many years of "experiences," I have 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 I briefly present DC and AC power, then discuss DCC and how it transmits both power and information. Come learn from my experience and save yourself the trouble!

Albert, Greg: Steel Mill Modeling with a Twist

Using recycled materials and odds and ends from craft, auto supply, and hardware stores, along with some ingenious kit bashing and more than a little inspiration from famous architecture, Greg has created a unique interpretation of a mid-century open hearth steel mill. He'll show how you can apply his approach and techniques to create your own one-of-kind industrial scenes.

Albert, Mark: Modeling the Historic Crosley Building

A combination of resourceful kitbashing and accurate scratchbuilding produced this striking model of a noted Cincinnati landmark, the iconic Crosley Radio factory in Camp Washington. The model also enhanced the transition between two modules of a portable layout. The presenter will discuss the techniques and the philosophy behind this project.

Amato, Jim: Young People and Model Railroading

First Tee is a successful twenty-year-old national program designed to help kids develop life skills through golf. Jim, a First Tee Level II Coach and the program's Volunteer of the Year in 2015, has identified much in their program that is useful for introducing kids to model railroading, and is eager to share what he's learned with us.

Dahlberg, Georgia: From Photo to Model

For many years I have been modeling using not only traditional HO scale plans, but also from my own photos, pictures out of books, articles, and drawings that I've been able to find, and then scaling them to HO. Please rest assured that this is not an algebra lesson, and we will talk only about scale modeling and what it really means. Although this talk is geared to HO scale, it works for S, O, Large Scale, N, Z, or any other scale you might favor.

Dahlberg, Georgia: Modeling Structures Accurately

If you are going to model a structure, whether it's a high-rise building or a small water tank, it helps to understand how buildings are designed and built. Engineers follow load path design, which deals with how a structure's weight and stresses work their way down to the ground. If you understand how to transmit the model loads down to the ground, your structures will look more realistic and your model citizens will live happily ever after.

DeVault, Keith: The West End of the B&O RR

This clinic will showcase the B&O's important and historic route west of Cumberland, Maryland and through West Virginia during the B&O and Chessie System eras. The West End Division was home to some of the most serious mountain railroading in the United States. Come see what made this route famous.

Endreola, Chuck: Creating Rock Faces from Foamboard

Learn how to turn extruded foam insulation board (the pink kind) into several types of rock faces, colored and ready to install. It's easy, it's quick, it's lightweight, and it's perfect for lift-out hatches, modules, dioramas, or the entire layout.

Forsythe, John, Train Control Systems: Introduction to Layout Command Control

A non-technical introduction to LCC, the NMRA standard for layout control. Learn about this emerging standard, the technology that comes with it, and what products are now available. Clinic presented by John Forsythe, owner of Train Control Systems (TCS). We will also review the Train Control Systems DCC command system under development.

Getz, Charlie: Great Products from Strange Places

In an era of closing hobby shops, it is helpful to think outside the box and find places you may not associate with model railroad supplies. In this clinic, we will discuss some of those options and perhaps some products of which you were not aware, usable for any scale of model railroading. Examples will be shown and local places discussed. In truth, there are a number of "train shops" that don't know they're train shops, even in this area. In this clinic, you will discover some of those options.

Klein, Chuck: B&O Steam Finale

May 17, 1958 was the day that the Cleveland Railroad Club sponsored a B&O Steam Finale. Along with his brother and his father, Chuck was on this trip. Now, on the 60th Anniversary (to the day!) of this event, Chuck invites you to join him in a digital remembrance of this unique and unforgettable experience.

Knapp, Bruce: New Life for Old Brass – Repowering Locomotives

There are many very nice DCC/sound locomotives available today, but many, many more locos were built in the old days that just need a little work to run with the new stuff. This clinic will focus on the United/PFM 2-8-0 and an LMB Burlington 4-6-2, both excellent models that can be brought up to current standards and expectations. We'll look at how to disassemble them, examine and adjust the frame and running gear, replace the motor, add a decoder and speaker, then reassemble and test. We'll also talk about can motors, replacement gearboxes, and other items that will help bring older models into the digital age.

Leone, Gerry: Easy, Realistic Model Railroad Photography

Modelers are often intimidated by model photographs they see in magazines or the NMRA Calendar. The truth is, it's not hard to take photos like that when you understand some of the basics of photography. From inexpensive lights to focus stacking, we'll cover everything you need to know to be a prize-winning model photographer.

Magoun, Pete: Modeling the Prototype – North Whitefield, Maine

Modeling prototypical scenery is not hard to do. Pete will walk through the processes involved in creating a prototypical scene, with an unexpected benefit. This is *NOT* a scenery demo, it's a voyage through the planning and execution process.

Mahaney, Rick: Selecting Industries for your Model Railroad (Industries, Part One)

This clinic is designed to help model railroaders select industries and community businesses for their model railroad through a systematic approach. We'll look at how railroads service their customers and how to increase traffic by considering car types that are used to service various industries. Both prototype and model examples will be considered.

Mahaney, Rick: Quick Industries for your Model Railroad (Industries, Part Two)

This presentation is designed give industry ideas for model railroads that can quickly increase railroad traffic and new customers and can be assembled in several evenings or days of work. Examples of real facilities and model railroad examples are given. We will look at other details such as trackwork, loading docks, industry placement, and industry building concepts. This is Part Two of *Selecting Industries for Your Model Railroad*.

Mahaney, Rick: Crude Oil and Ethanol Operations

This clinic looks at crude oil and ethanol products, hazardous materials, placards, loading and unloading facilities, specific tank cars for transporting these products, unit trains, high-hazard flammable trains, and other related information. It is designed to help model railroaders who want to add these increasingly common unit trains and their operations to their modern era layouts.

Mahaney, Rick: Perishables Operations in the 1950s

A look at refrigerator cars for produce, fruit, meat, and other ladings; the supporting operations (icing, cleanout, repair, storage buildings and warehouses, brokers and customers); the paperwork involved; how to apply all this to realistic model railroad operations; and examples of current best practice in these areas.

Mayhew, Chris: The Cincinnati Southern Railway

Ludlow, Kentucky native Chris Mayhew takes you on a photographic journey along the Cincinnati Southern Railway/Cincinnati, New Orleans & Texas Pacific from past to present. The Queen & Crescent Route era of the early 1900s will be emphasized. You'll see plenty of images of the Ludlow Shops, as well as motive power, stations, towers, and bridges along the line.

McClelland, W. Allen, with Gerry Albers: The V&O Today

An update on current operations on the Virginian & Ohio RR, in conjunction with Gerry Albers' Virginian Railway Deepwater District. The New York Central (Kanawha & Michigan) and the V&O share trackage rights along the north side of the Kanawha River from Gauley, WV to the Ohio River. This is the V&O's K&M Subdivision. At the small town of Alloy, WV, the V&O has a coal mine and a coal dock for barge loading, several industries to be switched, and an interchange with the VGN and the C&O.

Miller, Hal: A Brief Look at Some *Model Railroader* Project Railroads

A look back at the construction and lives of some *Model Railroader* project layouts of the past several decades, their concepts, and methods of construction. Includes some "Where are they now?" stories.

Miller, Hal: Modeling the Muskogee (OK) Roads in O Scale

The Midland Valley RR; Kansas, Oklahoma & Gulf Ry; and Oklahoma City-Ada-Atoka Ry. comprised the Muskogee Co., a small regional system that served as a bridge line for Missouri Pacific through Kansas, Oklahoma, Arkansas, and Texas. Its facilities and rolling stock make it ideal for O scale modeling.

Puthoff, Dave: Layout Lighting with LED Strips

This clinic will show how to retrofit an existing layout with 12-volt DC Light Emitting Diode (LED) Strip Lights, without valances, cut to length and mounted on molding strips. Ways of mounting the strips to both flat and open-joint ceilings are shown. Optional circuits using commercial components to allow dimming/brightening of room lighting in both manual and automated (timed) modes are also presented.

Sassi, Lou and Cheryl: Scenery Along the Right-of-Way

Lou explains the materials and techniques he utilizes to replicate various kinds and colors of rocks, specific tree types, woods, grass, and right-of-way fencing representative of that found on the prototype of his model railroad. Included will be a step-by-step video explaining the mixing of "Ground Goop."

Sassi, Lou: Improving Your Trucks and Trains

Lou discusses the materials and techniques he employs to convert and detail vehicles intended for the children's toy market into realistic representations of their prototype counterparts. He also explains the techniques he uses to improve not only the looks but also the performance of various types of freight equipment on his SR&RL Railroad.

Stern, Rick: Some Exotic Trains – Trains of India

Steam in three gauges, diesel, electric, Galloping Geese, the world's oldest operating steam locomotive, and a unique national railway that is part of the fabric of daily life: all of this could be seen on the *Trains Magazine* 2017 "Heritage Trains of India" trip, a two-week adventure exploring the trains and the flavors of this unique and challenging country.

Swain, Ed: Scratchbuilding a Rolling Lift Bridge

Ed will describe how he scratchbuilt a 160-scale-foot-long Scherzer Rolling Lift Bridge from styrene. Then, using through plate girder bridge kits, he will show how he installed the bridges on his layout to represent those seen on the New York & Long Branch RR in New Jersey. He will also show the surrounding scenery that completes the scene.

Swanson, Sam: Finishing Materials and Techniques for Models

Adopting a finishing system for your structure and rolling stock models will yield layout scenes that are consistently painted and weathered. This clinic presents examples of brush-painting with acrylics, along with weathering using diluted acrylics to indicate age, shadows, and highlights. Specialty finishing, such as highlighting and weathering black surfaces and creating various types of corrosion, will also be covered.

Tipton, Rick: The Pennsylvania Railroad in Cincinnati

The obvious image of the Pennsy in Cincinnati is of Tuscan passenger trains at art-deco Cincinnati Union Terminal, alongside the trains of L&N, N&W, and others. However, The Standard Railroad of the World often exiled any less-than-standard motive power to this corner of its far-flung empire. Thus, Cincinnati was home to fleets of USRA steam power, Fairbanks-Morse hood units, and dual-service FP-7's. Mix in Cincinnati's challenging geography, and we'll be looking at an interesting "railfan stew."

Weiglin, Peter: Railway Post Offices (RPOs)

For many years, the Railway Mail Service carried America's mail by contract with the railroads. Routes and schedules were determined by the Post Office. The railroads provided the equipment and followed the Post Office's strict standards and expectations. This clinic describes the RPO service, and helps the modeler follow prototype designs and practices.

Weinheimer, Bob: Evolution of an Operating Scheme

This clinic looks at how the Pennsylvania Southern and its operating scheme have evolved over the past 35 years, through two moves, industrial growth, more and different staging methods for more cars and trains, improved crew operating skills, and changing dispatching technology and methods.

Weinheimer, Getz, Leone, Koch, Brestel, Magoun, et al: Meet the NMRA Leaders

Meet the NMRA Presidents (past, present, and future), as well as the MCR president, the NMRA VP for Special Projects, the NMRA CFO/Treasurer, and maybe more. Bring your own questions and ideas, and supply your own hip boots – it may get deep!

Zapytowski, Steve: Judging the MCR Model Contest

This clinic explores the process and philosophy behind the judging of models for the MCR Model Contest, and examines each of the five areas of evaluation: Construction, Detail, Conformity, Finish and Lettering, and Scratch Building. The judging matrix and the manner of awarding points are discussed, as is a strategy for efficient judging. This clinic is different from the one offered in previous years and is strongly recommended for all judges, veterans and first-timers alike.

Zapytowski, Steve: MCR Model Contest Committee Meeting

This clinic is a training session for the members of the MCR Contest Committee. The management of the contest and its administration and the software used will be covered. Attendance is required for all members of the MCR contest committee.

Zapytowski, Steve: Scratchbuilding in the Digital Age

As a long time CAD user for my former day job, it was not surprising to find myself using computers for my model railroading efforts. The term CAM has meant Computer Aided Manufacturing. With this clinic I'd like provide a second meaning for that acronym - Computer Aided Modeling. In the past several years I've worked with both laser cutting and etching in addition to 3D printing for my scratch building efforts. I will talk about the software and hardware I use in making my models as well as the limitations of the technologies used. There will be examples of my work shown in the presentation.

Zapytowski, Steve and Hukill, Bruce: Taking the Perfect Photo...That Failed

Bruce, as the photographer, and I, as the modeler, describe our quest to take a photo for the 2018 NMRA Calendar. There were many trials and errors we experienced in the process of just taking a "simple" photograph. Once the shoot was over Bruce worked in Photoshop with all the photos. After two four-hour photo sessions and hours of work in Photoshop, we ended up with a result that failed to get into the calendar, but is still a wonderful photograph.