

Jacobsen Declaration Exhibit AA

CLINIC SCHEDULE

Schedule of clinics is listed by clinician name

Albers, Gerry

CAD MODEL RAILROAD DESIGN

Advantages, disadvantages, and benefits of using Computer Aided Design (CAD) for model railroad design are presented, including what to look for in a CAD program. This clinic is pragmatic in nature and includes a "live" demonstration of CADrail 8. A list of all known (to the author) current CAD products is provided. Note: an article in MR Planning 2005 will parallel this clinic.

SUNDAY 2 :30 PM - 3 :30 PM ROOM 262
 MONDAY 10:30 AM - 11:30 AM ROOM 208

SIGNAL SYSTEMS IN MODEL RAILROADING-

The modeler is led gradually through topics from basic prototype signal practices to advanced electronic techniques, including a detailed description of Allen McClelland's original Virginian & Ohio signal system and a description of a modern DCC system. Emphasis is placed on the benefits of operation and animation. The clinic is interlaced with descriptive charts, photos of prototype signals, and photos of model railroad signals. It progresses from a philosophical approach (model railroading is a 3-dimensional, dynamic art form to be interactively shared) through a detailed description of the hardware and software that comprise a signal system. Original and modern prototype signal for model railroading. Various types of model detectors, logic circuits, throttles, drive circuits, CTC panels and other relevant topics are covered.

SUNDAY 1 :00 PM - 2 :00 PM ROOM 262

Ames, John

TRACK, PART 1 - HISTORY & DEVELOPMENT

A historical investigation into the development of railway track, from Roman roads and medieval mining railways to modern slab track. Delve into the logic (or illogic) behind early decisions on physical designs which are now taken for granted: what track gauge to use; what made "standard" gauge standard; why the flange is on the wheel, and why it's on the inside; differences in rail designs and track structure. Find the engineering connection between early railways and canals, why the first "trains" were "unit" trains and that inter-modal transport goes back to the 1790's. Learn why some of the first railways were the best ever built, with scheduled speeds of 120 km/hr (70 mph) by 1845, and discover the amazing "atmospheric" railways, famous for no engines and infamous for their showers of mice! Handout provided.

MONDAY 9 :00 AM - 10:00 AM ROOM 201
 SATURDAY 1 :00 PM - 2 :00 PM ROOM 262

TRACK, PART 2 - DESIGN & HARDWARE

A treatise on the engineering and technical aspects of railway track. Discover how the 1:1 designers lay out a track plan; the relationship between degree of curvature and radius; turnout versus switch and other nomenclature issues; types of switches; types of frogs (yes, there are more than one); what makes a turnout a No. 8; joints and fastenings; ties and tie spacing; why and where you need guard rails; what is gantlet track (no "u"); roadbed and earthworks and modern track developments (how long is a No. 120 turnout?). Everything you ever wanted to know about track but were afraid to ask. Handout provided.

MONDAY 10:30 AM - 11:30 AM ROOM 201
 SATURDAY 2 :30 PM - 3 :30 PM ROOM 262

Ames, Stan

EMERGING ADVANCED TOPICS IN DCC

As DCC advances there are now several new capabilities that are just beginning to emerge. Topics to be discussed are Bi-Directional DCC, Asymmetrical DCC, and Signal Controlled Influence. These emerging technologies combine to significantly enhance model railroad operations. Stan Ames is one of three co-authors of "Digital Command Control: A comprehensive guide to DCC". Stan was the original chair of the DCC working group and was also a former chair of the NMRA Conformance and Inspection program. Stan is a Life Member of the NMRA and past NER Trustee.

WEDNESDAY 6 :30 PM - 7 :30 PM ROOM 204
 THURSDAY 6 :30 PM - 7 :30 PM ROOM 212

SELECTING A DCC SYSTEM

Thinking of going DCC? In 1992 the NMRA initiated an effort to generate standards for a whole new generation of model railroad control, which has become known as NMRA Digital Command Control or DCC. More than 15 manufacturers now produce compatible control systems built to the NMRA DCC specifications. With so many good choices for a model railroad control system how do you choose what is best for your needs? During this clinic we will review the current choices and help you select the features that are most important for your railroad. Brian Barnt and Stan Ames are past chairs of the NMRA DCC working group. Both have extensive experience in DCC and both own and use a variety of DCC systems.

MONDAY 8 :00 PM - 9 :00 PM ROOM 208
 TUESDAY 8 :00 PM - 9 :00 PM ROOM 208

Barnt, Brian

AN INTRODUCTION TO TSUNAMI SOUND DECODERS

Introduction to Soundtraxx' new sound decoder. This decoder allows adjustments to just about every setting, multiple whistles, etc. This decoder will also run in DC mode.

FRIDAY 1 :00 PM - 2 :00 PM ROOM 208
 SATURDAY 4 :00 PM - 5 :00 PM ROOM 204

Barrow, David

CAT MT. & SANTA FE LUBBOCK INDUSTRIAL DISTRICT

"From the model railroad to the railroad model" The Cat Mt. & Santa Fe is now a compressed but otherwise exact model of several Lubbock, Texas industry switching "zones".

WEDNESDAY 9 :00 AM - 10:00 AM ROOM 208
 FRIDAY 10:30 AM - 11:30 AM ROOM 212

Bender, Paul

JMRI COMPUTER PROJECT: JMRI USERS FEEDBACK SESSION

This is your opportunity to ask questions of some of the JMRI project developers. Planned participants: Paul Bender, Dave Duchamp and Bob Jacobsen. For more information about the JMRI project, and it's suite of tools, please visit <http://www.jmri.info>.

MONDAY 9 :30 PM - 10:30 PM ROOM 262
JMRI COMPUTER PROJECT: PANEL PRO - ADVANCED USES

This is a continuation of the PanelPro Introduction and is intended

for users who want to do more with the software. Includes a discussion of scripting, and how to create custom look and feel for your panel. PanelPro is part of the JMRI Projects suite of tools. More information, including download instructions, is available at

MONDAY 2 :30 PM - 3 :30 PM ROOM 262
 FRIDAY 8 :00 PM - 9 :00 PM ROOM 208

JMRI COMPUTER PROJECT: PANELPRO INTRODUCTION

PanelPro is a computer based system for building CTC control panels. A discussion of supported systems and a demonstration of constructing a control panel for a passing siding will be included. PanelPro is part of the JMRI Projects suite of tools. More information, including download instructions, is available at

MONDAY 1 :00 PM - 2 :00 PM ROOM 262
 FRIDAY 6 :30 PM - 7 :30 PM ROOM 208

JMRI SOFTWARE PROJECT: DECODER PRO - A TOOL FOR PROGRAMMING DECODERS

DecoderPro is a tool for programming decoders using a computer. This clinic is an introduction to programming with DecoderPro. An overview of supported DCC systems will also be included. DecoderPro is part of the software developed by the JMRI Project. More information about the project, including download instructions are at <http://www.jmri.info>

MONDAY 10:30 AM - 11:30 AM ROOM 262
 THURSDAY 9 :00 AM - 10:00 AM ROOM 208

Bisgeier, Craig

THE TEN COMMANDMENTS OF MODEL RAILROAD YARD DESIGN

For years, layout builders have tried to design yards for their layouts that work well, but good design information has always been hard to come by. This presentation will change that by sharing with you the best practices and ideas from all over the hobby. By applying the rules you'll learn in the ten commandments to your own design, you will be able to design a classification yard for your layout all by yourself that will be fun to use and won't tie up your railroad.

THURSDAY 6 :30 PM - 7 :30 PM ROOM 262

Bogart, Charles

CIVIL WAR RAILROADS OF KENTUCKY

What railroads were operating in Kentucky in 1861. From where to where? This is a clinic on a seldom modeled era.

WEDNESDAY 6 :30 PM - 7 :30 PM ROOM 207
 THURSDAY 6 :30 PM - 7 :30 PM ROOM 208

Bongiovanni, Frank

LEMON AID

This clinic is about making a poorly running locomotive run well. The emphasis and demonstration pieces are brass steam locomotives, but the underlying principles apply to diesels, die cast, and plastic. Some brass locomotive history is included. Audience participation is encouraged.

MONDAY 2 :30 PM - 3 :30 PM ROOM 207
 FRIDAY 2 :30 PM - 3 :30 PM ROOM 204

PHILOSOPHY, SCIENCE FICTION AND MODEL RAILROADING

This clinic is a different approach to freelance model railroading and

problem solving, and is a layout planning, not track planning, clinic. Frank discusses the concept behind a number of freelance model railroads, including his Chesapeake & Iron Range. The idea is to assist YOU in coming up with a freelance layout scheme that provides what you want and makes sense. Audience participation is

WEDNESDAY 1 :00 PM - 2 :00 PM ROOM 208
 FRIDAY 4 :00 PM - 5 :00 PM ROOM 204

Bragdon, Joel

CREATING GEODESIC FOAM SCENERY

this clinic is an in depth and comprehensive look at all aspects of cast resin/foam scenery. These fast, easy and clean methods produce spectacular results using odorless resins. A light weight mountain railroad diorama will be science during the clinic from the bench work up. Foam bench work and roadbed, foam hard shell and resin/foam rock casting will be demonstrated. Also painting foam scenery, vegetation and final detailing will be covered.

TUESDAY 9 :00 AM - 11:30 AM ROOM 204
 THURSDAY 6 :30 PM - 9 :00 PM ROOM 204

FAST & EASY WEATHERING

Learn to weather models realistically by learning from nature and the real world. Many interesting techniques will be examined; both old and new methods and materials. All are quick and easy to learn and do. There will be a hands-on session for the attendees during the latter portion of the clinic. Everyone will have an opportunity to try several of the demonstrated methods.

TUESDAY 1 :00 PM - 2 :00 PM ROOM 204
 WEDNESDAY 8 :00 PM - 9 :00 PM ROOM 204

MODELING WATER

Numerous methods and materials will be demonstrated for modeling lakes, ponds, coastlines, white water and waterfalls. The pros and cons of various resin types will be looked at and the best use of each for different situations. Examples and demonstrations of acrylic mediums, polyester resins, epoxies and the latest in odorless, water clear polyurethane resins will be shown. Pouring clear resins directly onto the scenic landscape and into special molds will be covered as well as texturing and final detailing.

TUESDAY 4 :00 PM - 5 :00 PM ROOM 204
 WEDNESDAY 4 :00 PM - 5 :00 PM ROOM 204

RTV MOLD MAKING and RESIN CASTING for the MODEL MAKER

This clinic will cover making a variety of types RTV rubber molds for reproducing detail parts, rolling stock, vehicles, structures or almost anything. One piece, multiple piece and split molds will be demonstrated. Casting with a variety of materials will be shown including fast curing, space age polymer resins.

TUESDAY 8 :00 PM - 9 :00 PM ROOM 204
 THURSDAY 1 :00 PM - 2 :00 PM ROOM 204

Breau, John

PROTOTYPE BASED LAYOUT DESIGN & OPERATIONS

Clinics will cover how I researched the prototype railroads of central Montana, GN, NP & Milwaukee. Then used this information to design the layout and set up my operating sessions.

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 THURSDAY 2 :30 PM - 3 :30 PM ROOM 208

Brestel, Mike

C&O CHEVIOT HILL

Many people are surprised to learn that the Chesapeake & Ohio once operated a virtual mountain railroad through the western suburbs of Cincinnati. This clinic will cover the birth, life, and death of the spectacular Cheviot Hill line, the C&O's route to Chicago. Among other topics, this clinic will cover locomotives, scenery, structures, and operations over a 77-year period, as well as construction, abandonment, and disposition of the route.

MONDAY 9 :30 PM - 10:30 PM ROOM 208
 THURSDAY 9 :30 PM - 10:30 PM ROOM 212

Brosnan, Brendan

STEEL MILL MODELING DETAILS

This clinic is an introduction to the steel making process that you will see if you participate in the Cincinnati Limited tours of Newport Steel and/or Matandy Steel. Other steel making processes will also be covered along with a brief history of the evolution of the steel making process.

TUESDAY 6 :30 PM - 7 :30 PM ROOM 211

STEEL MILLS 1 - STEEL MILLS FOR DUMMIES

An overview of how steel is made, starting with early methods and equipment and progressing to modern day. A look at the building and how the process flows.

THURSDAY 8 :00 AM - 9 :00 AM ROOM 201

STEEL MILLS 10 - STEEL MODELING PANEL DISCUSSION

Designed to be an exchange of information between members of the audience with others in the audience and/or the panel of noted steel mill modelers from the RR Industry SIG. This session will go for as long as you can put up with our panel.

THURSDAY 9 :30 PM - 10:30 PM ROOM 201

Bucher, David - Jeffery Leaman

THE FEDERAL RAILROAD ADMINISTRATION -- WE'RE HERE TO HELP

This clinic will describe how the Federal Railroad Administration is involved with railroad and public safety. We will present a brief overview of how the FRA monitors the nation's railroads and how FRA regulators affect railroad operations. Also included are suggestions on simulating prototype model operations.

TUESDAY 8 :00 PM - 9 :00 PM ROOM 212
 WEDNESDAY 4 :00 PM - 5 :00 PM ROOM 262

Burchnell, John

FOAMBOARD LAYOUT CONSTRUCTION

See techniques developed over the past 25 years by the "Eastern Loggers" using horizontal laminations of foamboards in place of conventional roadbeds and scenery bases. Slides and live demonstrations reveal how and why to use this versatile method. Materials, tools and tips are shared through all phases of any layout construction. Includes slides, and design and construction secrets, of the "Eastern Loggers" layout.

MONDAY 9 :30 PM - 10:30 PM ROOM 207
 TUESDAY 9 :30 PM - 10:30 PM ROOM 211

Campbell, Debbie

HISTORY OF DOLL HOUSES

Debbie Campbell will give the history of doll houses from what doll houses were first used up to the latest in current doll houses.

WEDNESDAY 7 :30 PM - 8 :30 PM ROOM 263

Camplin, Roger

STEEL MILLS 4 - SINTER PLANTS

Modeling a sinter plant

THURSDAY 1 :00 PM - 2 :00 PM ROOM 201

Carstens, Hal

CAMELBACK LOCOMOTIVES AND WHY THE SUSQUEHANNA NORTHERN USES THEM

Most railroads burned bituminous (soft) coal but Pennsylvania was known for its anthracite (hard) coal. While camelbacks were tried in many parts of the country, the railroads in the Pennsylvania, New York and New Jersey area were nearest to these coal fields and developed the locomotives with larger fireboxes designed for hard coal. Among the railroads using them were the Erie, Jersey Central, Lehigh & New England, Lehigh & Hudson River, Long Island, Lehigh Valley, Reading, New York Ontario & New England and Susquehanna. And the Susquehanna Northern also has its share of these center cab haulers.

WEDNESDAY 6 :30 PM - 7 :30 PM ROOM 211
 THURSDAY 4 :00 PM - 5 :00 PM ROOM 211

Costello, Marlin

QUICK & EASY SCENERY

Dirt to dirt, weeds to weeds, scrubber pads and Christmas wreaths to trees and greenery. A tsunami of old fashioned, cheap and easy ways to cover plywood and amaze your friends. Beautiful mountains from paper bags and chicken wire. All this in a flash and

MONDAY 9 :30 PM - 10:30 PM ROOM 211
 FRIDAY 2 :30 PM - 3 :30 PM ROOM 212

Dahlberg, Georgia

CASTING SMALL PARTS WITH NEW MATERIALS IN INSTANT MOLDS

Learn techniques for casting small parts using instant molds.

SUNDAY 1 :00 PM - 2 :00 PM ROOM 204
 SATURDAY 9 :00 AM - 10:00 AM ROOM 204

CHANGING SCALES FROM PLANS, MODELS & PHOTOS TO YOURS

Learn techniques for changing scales from plans using a proportional divider. Make one for pennies. Make one for all scales in styrene. Make a special quick one for scaling from photos.

FRIDAY 9 :30 PM - 10:30 PM ROOM 212
 SATURDAY 2 :30 PM - 3 :30 PM ROOM 204

DEVELOPING BONDS AND BRIDGING GAPS IN DIFFERING MATERIALS

Learn about applying ship building skills to model railroading, bonding wood and styrene plastic together, solvent welding plastic, bonding plastic brick sheets, and bridging gaps in different materials.

SUNDAY 4 :00 PM - 5 :00 PM ROOM 204
 SATURDAY 1 :00 PM - 2 :00 PM ROOM 204

STYRENE SALAMI AND JIG BUILDING

This clinic will explain how to build intricate architectural building brackets and decorative trim using a salami technique in styrene

SUNDAY 2 :30 PM - 3 :30 PM ROOM 204
 SATURDAY 10:30 AM - 11:30 AM ROOM 204

De Young, Larry

CONRAIL: THE VIEW FROM INSIDE

TUESDAY 4 :00 PM - 5 :00 PM ROOM 212

Dupont, Aaron

STEEL MILLS 7 - 101 WAYS TO USE THE UNIVERSAL MILL CAR

How many cars can you make from the State Tool & Die Universal Mill Car?

THURSDAY 6 :30 PM - 7 :30 PM ROOM 201

Eaton, Leslie, MMR

NANO ANIMATION FOR UNDER \$10

Leslie shows off an incredible variety of electronic projects that can be created cheaply from commonly available or obtainable products. A must see clinic!

MONDAY 1 :00 PM - 2 :00 PM ROOM 201
 TUESDAY 4 :00 PM - 5 :00 PM ROOM 201

NANO-ANIMATION ELECTRONICS WORKSHOP

Learn the basics of circuit construction and add simple and inexpensive animation to your layout. Construct a dual power supply and choose a second circuit to be powered by it: a bright strobe flashing unit, or a motion animation unit, or a crossing flasher with a synchronized bell. Several new circuits will be added to this through MMR's. Attendees should have some experience soldering small parts. Attendees must bring a small soldering iron (max 40 watts) and stand with sponge, small needle-nose pliers, small side cutters, a clamping tweezers (to use as a heat-sink), a small slot-type screwdriver, and an Optivisor/magnifier (if needed). Workshop cost covers all kit materials. Attendance limited to 24.

THURSDAY 1 :00 PM - 5 :00 PM ROOM 300

TIPS & TRICKS FOR SCRATCHBUILDING

Leslie covers a wide variety of ideas, techniques, and tips for scratch building for your model railroad.

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 WEDNESDAY 2 :30 PM - 3 :30 PM ROOM 204

Edwards, Bill

POLYESTER TREES DONE RIGHT

Since writing the original article on the subject (May 1983 RMC), many modelers have left out certain key steps in modeling the canopy of the forest in the correct manner. Additionally, certain new availability of products used has made the entire process less troublesome and more inviting. The writer of the original article will demonstrate how to gain more satisfactory results from this technique as well as how to utilize the new materials to allow for less trouble in manufacture of the trees and better results in the finished product. The making of trees from weeds will also be discussed and demonstrated.

FRIDAY 8 :00 PM - 9 :00 PM ROOM 207
 SATURDAY 10:30 AM - 11:30 AM ROOM 262

SCRATCHBASHING

Bill and long-time modeling partner, Paul Godwin, will demonstrate their method of creating unusual and original structures as well as some pieces of rolling stock. Their method combines all the practices of the late Art Curren as well as combining them with scratchbuilding techniques in order to obtain totally different and need-driven structures for your layout. Also demonstrated are methods to quickly alter some of the many "built up" structures currently available so your structures can have a uniqueness all their own.

SATURDAY 9 :00 AM - 10:00 AM ROOM 208

WEATHERING WITH WOMEN'S MAKE-UP

This unusual and entertaining clinic touts a method of weathering rolling stock and structures using women's make-up. Bill finds it far superior to chalks and it has become his most preferred method when used in conjunction with other and older methods. Bill will demonstrate needed supplies and techniques involved.

FRIDAY 9 :30 PM - 10:30 PM ROOM 204

Erling, Dale

SCENERY THE MU-CLA WAY

Building realistic scenery with a no mess, easy to use, award winning new product for building your railroad. See just how easy it really is with MU-CLA, the new clay for modeling. Hands-on demo.

FRIDAY 2 :30 PM - 3 :30 PM ROOM 207

Faulkner, Bruce

DESIGNING THE CSXT SHENANDOAH OPSig CLINC -

This clinic covers the prototype and operating influences on the design of the CSXT Shenandoah Division, a 17' x 43' N scale double-deck layout. Bruce will share insights into designing a large model railroad for operations. In addition, design techniques applicable to any scale or any size layout will be discussed. The prototype-freelanced Shenandoah Division is heavily based on CSX's former Clinchfield Railroad route. Prototype images illustrating various design decisions are included along with pictures showing the latest construction progress on the layout.

MONDAY 4 :00 PM - 5 :00 PM ROOM 262
 THURSDAY 4 :00 PM - 5 :00 PM ROOM 212

Feeney, Kevin

A LOOK AT THE C&O THRU ITS ANNUAL REPORTS 1946-1972

As a public company the Chesapeake & Ohio Railway Co. issued annual reports to its share holders and bond holders. These reports are readily available and provide a wealth of information on traffic patterns, railroad operations, additions and changes to motive power and rolling stock as well as the railroad industry as a whole.

TUESDAY 10:30 AM - 11:30 AM ROOM 208
 THURSDAY 2 :30 PM - 3 :30 PM ROOM 212

Frankrone, Bob

MODELING OPEN 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 master modelers alike will enjoy learning how to create interesting and realistic open car loads. With plenty of slides from

both the prototype and HO scale models, Bob's clinic is always a

MONDAY 1 :00 PM - 2 :00 PM ROOM 204
FRIDAY 6 :30 PM - 7 :30 PM ROOM 211

TWO SCENIC RAILROADS . . . AND A CANAL

If you are a fan of tourist railroads, then you won't want to miss Bob's clinic on the Big South Fork and Western Maryland Scenic Railways. Visit the Blue Heron mining camp as you journey on the Big South Fork railroad located in beautiful southeastern Kentucky. Ride behind a restored 1916 Baldwin steam locomotive as you travel the 16 miles from Cumberland, Maryland to Frostburg on the Western Maryland scenic railroad. As a bonus, enjoy a 10 mile bike ride along the historic C&O canal.

WEDNESDAY 8 :00 PM - 9 :00 PM ROOM 207
SATURDAY 9 :00 AM - 10:00 AM ROOM 262

VIEWS FROM THE TRAIN . . . AND MORE

Have you ever wanted to travel cross country on a train? Bob's clinic takes a light-hearted look at his experience while traveling from Louisville, Kentucky to San Diego, California via Amtrak. Once there, Bob takes you on a tour of the San Diego Railroad Museum. That's where you will board the San Diego and Arizona Railway for a ride through the rugged, semi-arid region of southern California. All aboard!

WEDNESDAY 2 :30 PM - 3 :30 PM ROOM 211
FRIDAY 8 :00 PM - 9 :00 PM ROOM 212

Frey, Robert

SWITCHING THE UP AND WESTERN

The UP & Western uses software to move cars. To make it easier, these cars are marked with a two letter code. There are two yards with printouts generated for 8 freights. There are 12 staged trains (some with sound) that run in a planned sequence. A spreadsheet is used to make a 28-step custom speed table for a DCC equipped locomotive. Visit <http://www.bobfrey.auclair.com/> to see pictures of the model railroad and try the spreadsheet.

MONDAY 6 :30 PM - 7 :30 PM ROOM 207
TUESDAY 6 :30 PM - 7 :30 PM ROOM 201

Freytag, Dean, MMR

STEEL MILLS 9 - STYRENE & STEEL, STORY OF A CONTINUOUS CASTER

Dean is a steel mill modeler extraordinaire having built many award winning steel industry models. In this clinic he will explain how he constructed a model of a continuous steel caster.

THURSDAY 8 :00 PM - 9 :00 PM ROOM 201

STYRENE - THE FORGING MEDIUM!!

This is the "Coming Home" for Dean. His first National Clinic was in Cincinnati. Structures - small & simple - large and complex. Dean refers to styrene as "Legos for men," and it truly is, once the concept gets rolling and when "scratch building" you think to yourself that "if this was a kit how would it go together?" and your mind tells you what's generally easier and quicker. Rolling stock is where mistakes go. Questions are absolutely encouraged!!

TUESDAY 9 :30 PM - 10:30 PM ROOM 207
WEDNESDAY 9 :30 PM - 10:30 PM ROOM 204

Gallagher Jr, John

STEEL MILLS 5 - THE UNION RR, STEEL MILL MAINLINE

A look at modeling the operation and equipment of the mainline of the Mon Valley.

THURSDAY 2 :30 PM - 3 :30 PM ROOM 201

Getz, Charlie

ADVANCED TECHNIQUES FOR LASER-CUT KIT BUILDINGS

Clinic provides ideas on assembly, customizing and alterations for laser-cut buildings. Includes description of after-market products to personalize kits. Samples will be shown.

WEDNESDAY 8 :00 PM - 9 :00 PM ROOM 201
THURSDAY 10:30 AM - 11:30 AM ROOM 212

Gough, Ron, MMR

BE A CONTEST WINNER

the subject matter provides the basic rationale of the NMRA Contest process and how entrants can literally help themselves gain Merit Award points while thoroughly enjoying the fun of participation and the thrill of winning. The clinic also addresses many of the perceptions and opinions along with the satisfaction and education in regard to NMRA Model Contests at any level; Divisional,

MONDAY 9 :00 AM - 10:00 AM ROOM 208
WEDNESDAY 1 :00 PM - 2 :00 PM ROOM 207

SCRATCHBUILDING 101

Clinic is all about the very, very very basics of scratch building. Starting from "scratch" the clinic will demonstrate the basic procedures and principles for the purpose of encouraging scratch building and how to get started. The presentation provides a step-by-step process of how to apply the basics including the construction of a simple structure and a box car. The subject matter applies to any building material and to any scale.

MONDAY 1 :00 PM - 2 :00 PM ROOM 207
TUESDAY 1 :00 PM - 2 :00 PM ROOM 262

Gregory, Charles

DCC DECODER INSTALLATION TIPS, IDEAS & DISCOVERIES W/ HARD TO DO ENGINES

This clinic will present tips, ideas and some neat discoveries that I have found while doing DCC Decoder installation as a full time job. During the clinic we will follow go through a step by step guide in installing some hard to do installations in some various engines. This clinic will show you how to do the very basic installation and will leave you with some ideas for future work in engines that you thought may be impossible to get done for your DCC layout. Please bring your questions and even engines to the clinic. Look forward to seeing you there.

SUNDAY 1 :00 PM - 2 :00 PM ROOM 211
MONDAY 6 :30 PM - 7 :30 PM ROOM 201

Hale, Fran & Miles, MMR

CITIES, VILLAGES & TOWNS with DPM

Virtually every layout includes villages, towns, or cities and they all need buildings. DPM has the full city system you need to build whatever structure you want. Learn easy techniques and tips for building the size, shape and style of buildings your city needs with

DPM kits and modular systems.

MONDAY 10:30 AM - 11:30 AM ROOM 204
WEDNESDAY 9:00 AM - 10:00 AM ROOM 262

FOAM SUBTERRAIN . . . THE WOODLAND SCENICS WAY

The newest method for building your layout or module is with high-density foam. Woodland Scenics has it all in the Sub Terrain system and this clinic will show you how to use it. Learn how to create a fast and easy layout using no woodworking skills or tools and very little mess.

MONDAY 4:00 PM - 5:00 PM ROOM 204
WEDNESDAY 10:30 AM - 11:30 AM ROOM 262

TERRAIN AND LANDSCAPING - THE WOODLAND SCENICS WAY

This clinic starts from the terrain up to show you magically how easy and fun it is to model ground cover, bushes, grasses, weeds, and trees for your layout. Learn simple blending and layering techniques that provide ultimate realism as you add both color and texture to your layout. The clinic is designed to help you begin a new layout or add finishing touches to an existing one. Landscaping is easy and almost magic when done the Woodland Scenics way. Come and let Fran and Miles make you a magician.

TUESDAY 2:30 PM - 3:30 PM ROOM 204
WEDNESDAY 6:30 PM - 7:30 PM ROOM 262

Harding, Doug

DECKER MEAT PLANT - PROTOTYPE, MODELING & OPERATIONS

The Jacob E Decker & Sons meat plant at Mason City, Iowa was started in 1899, sold to Armour in 1935 and closed down in 1975. The locals always call it Deckers. The plant was on the M&StL mainline and served exclusively by the M&StL as one of the RR's largest shippers. The clinic will be divided in three parts. First a look at the Decker plant and other meat plants in Iowa using photos, Sanborn maps, RR maps, and interviews. Second, a brief look at modeling Deckers in HO. Third an explanation of Operations answering the question "how did RR's work meat plants?" This will include a listing of commodities and cars in and out of meat plants and the special paperwork for the reefer moves. The Oct & Nov 2004 issues of RMC contained my article on Meat Packing. Handouts provided.

MONDAY 6:30 PM - 7:30 PM ROOM 262
FRIDAY 6:30 PM - 7:30 PM ROOM 262

Henderson, Byron

A QUICK AND EASY START FOR OPERATIONS

Learn the simple steps needed to get your layout ready for operations. A few easy choices and simple preparation are all it takes for an engaging op session. We'll talk about train control, car routing, crew instructions, documentation, and more -- start with the basics and add challenge over time. This is one of the fastest growing and most enjoyable areas of the hobby -- and you can join in! This is Operations for Beginners.

THURSDAY 9:00 AM - 10:00 AM ROOM 211
SATURDAY 1:00 PM - 2:00 PM ROOM 211

DESIGNING PRACTICAL LAYOUTS BASED ON PROTOTYPE RAILROADS

Capturing the essence of a real railroad in limited layout space is a

challenge. Join a custom layout designer to discuss methods to analyze the personality of prototype locations and translate elements to the layout convincingly. We'll cover the sources and use of prototype data, the balance between appearance and operational fidelity, and making it all fit (well, the best parts, at least!)

THURSDAY 2:30 PM - 3:30 PM ROOM 207
FRIDAY 2:30 PM - 3:30 PM ROOM 211

SMALL LAYOUT DESIGN - BEYOND THE TIMESAVER

123456789012345 -

Sometimes there's only enough room (or time, or money) for a small layout. But these layouts can still include believable scenes and operating potential. Move beyond the traditional switching puzzle by including more interesting elements from real railroads. We'll cover examples of engaging small layouts, along with tips for designing and building you own.

FRIDAY 4:00 PM - 5:00 PM ROOM 262
SATURDAY 9:00 AM - 10:00 AM ROOM 211

Henize, Fred

A DAY ON THE J-743

This CSX local switcher works out of Rockdale, Illinois on the old Rock Island Line. Fred worked this job and will tell how trains are made up. This is also an excellent piece of the Rock Island to model.

TUESDAY 9:00 AM - 10:00 AM ROOM 208
WEDNESDAY 4:00 PM - 5:00 PM ROOM 208

THE YARD JOB - J-740

The J-740 switches the small end of the line yard at Ohawa, Illinois on the old Rock Island Line. This job makes up the locals for Bureau Junction (J-742) and Mersailles (J-741). This job also switches a couple of local industries including US Silica.

TUESDAY 2:30 PM - 3:30 PM ROOM 207
WEDNESDAY 9:00 AM - 10:00 AM ROOM 212

Hitchcock, Chuck, MMR

ARGENTINE INDUSTRIAL DISTRICT RAILWAY, A NEW PAINTING

The Argentine Industrial District Railway was built for ease of construction and operation. Clinic will cover the concept of this Kansas City prototype based industrial switching railway, it's design, construction, and operation. Construction began July 2001 and operation commenced New Year's Eve day, 2001. Scenery is 2/3 complete. Allen Keller video due to be released May 2005.

WEDNESDAY 1:00 PM - 2:00 PM ROOM 211
FRIDAY 1:00 PM - 2:00 PM ROOM 212

THE JOY OF OPERATION

OPSig CLINC - LDSIG -

Operation of a model railroad with a group of friends should and can be fun and fulfilling. The purpose of this clinic is to provide information and assistance with the process of (1) developing a concept for your railroad, (2) Designing of a railroad to "fit the concept", (3) construction ideas to consider when beginning, (4) developing the components needed to operate the railroad and (5) recruitment and development of a crew to operate the railroad and other personnel matters.

FRIDAY 2:30 PM - 3:30 PM ROOM 208

THE JOY OF OPERATION - PANEL DISCUSSION**OPSig CLINC -**

This follow up to Chuck's clinic on operation will feature operators David Barrow, John Breau, Steve King, Tony Koester and Allen McClelland as well as Chuck. This discussion is a must for serious operators and those who would like to be.

FRIDAY 4 :00 PM - 5 :00 PM ROOM 208

Hobbs, Paul**TRANSCONTINENTAL PASSENGER TRAINS 1946-1971**

A review of the Transcontinental Passenger trains operating between Chicago / Minneapolis + St. Paul / Kansas City in the Mid-West and Los Angeles / San Francisco / Portland Seattle on the West Coast in the Streamlined era. At 1946 a very few streamlined trains served these markets. Within five-years all the name trains were streamlined, another five and dome cars were featured. We will discuss the competitive routes, the similarities and differences among the several railroads and the styles of equipment utilized.

SUNDAY 2 :30 PM - 3 :30 PM ROOM 211

TUESDAY 10:30 AM - 11:30 AM ROOM 262

Holzheimer, Steve**PROTOTYPE MODELING IN N SCALE - THE BEST CHOICE FOR TODAY?**

Suggest to a space starved prototype modeler that he/she consider N scale and the Incantations begin: CAN'T see the numbers, CAN'T super detail, CAN'T do switching, and on and on. N scale has come a LONG way in the last 15 years. It may even be the best choice for today's busy lifestyles. We'll look at some reasons why and consider a prototype modeler stuck with a small space to illustrate

MONDAY 9 :00 AM - 10:00 AM ROOM 204

THURSDAY 6 :30 PM - 7 :30 PM ROOM 207

Hoover, Gary**MODELING THE SANTA FE IN 1951**

This clinic will present the challenges and rewards of modeling a specific prototype railroad at a specific time. Gary will explain how he made compromises to fit the prototypical scenery and scratch built structures into the space available.

SUNDAY 4 :00 PM - 5 :00 PM ROOM 211

MONDAY 10:30 AM - 11:30 AM ROOM 211

Ireland, Zana**DCC & THE FUTURE OF COMMAND CONTROL**

Learn the basics of DCC and other exciting train control technologies. See how you can have more fun & enjoyment with your layout using simple technologies.

WEDNESDAY 10:30 AM - 11:30 AM ROOM 201

DIGITRAX USER FORUM

Digitrax new product announcements and Q&A. We'll stay until the last question is asked and answered. See you there!

THURSDAY 9 :30 PM - 10:30 PM ROOM 211

Kaczar, Keneth - Brendan Brosnan**STEEL MILLS 6 - COAL TO COKE**

A detailed look at modeling coke plants, from bee hive to Clairton Coke works.

THURSDAY 4 :00 PM - 5 :00 PM ROOM 201

Kannry, Harry**PROPER USE OF LUBRICANTS**

This clinic will cover the use of lubricants of model trains and rolling stock. This will include why, where, when, what and how to use lubricants on your equipment.

WEDNESDAY 6 :30 PM - 7 :30 PM ROOM 212

THURSDAY 9 :00 AM - 10:00 AM ROOM 204

Katt, Dan**CRIME PREVENTION**

Dan Katt is the President of Crime Prevention Solutions, Inc. and a former law officer will present a program on how to protect yourself from identity theft.

TUESDAY 10:00 AM - 11:00 AM ROOM 263

Katzer, Matt**BUILDING YOUR OWN MODEL RAILROAD PROGRAM WITH TRAIN SERVER**

Building model railroad software applications was difficult, time consuming and just hard to do. This problem was solved with Train Server. Train Server provides an open programming interface to build software applications in VB6, VB.NET, C#, J#, (MS Java) (or one of the other 32 different computer languages supported on .NET.) Train Server integrates all of the layout command station plumbing with an easy to use software interface. This clinic focuses on building software applications in using Train Server development tools. Additional information may be found at our web site at <http://www.kamind.com>

TUESDAY 6 :30 PM - 7 :30 PM ROOM 262

DECODER COMMANDER - EASY TOOL FOR PROGRAMMING DECODERS

Programming decoders is filled with challenges. Software applications may not work, the user interfaces are too hard to use and too technical, and all you want to do is to program your locomotive and defined a speed curve. This clinic is an introduction to programming your decoders using Decoder Commander software, an easy to use decoder programming software application designed for the model railroader. Additional information may be found at our web site at <http://www.kamind.com>

TUESDAY 2 :30 PM - 3 :30 PM ROOM 212

DRIVING YOUR LOCO WITH RAIL DRIVER & USB

This clinic will review the operating model of using the RailDriver CAB console and your DCC Command station. At the end of the clinic the user should have an understanding of the different functions available on the RailDriver CAB console and how to use the PC sounds to extend the capability of your locomotive sound

MONDAY 10:30 AM - 11:30 AM ROOM 212

KAM TRAIN TOOLS SOFTWARE USER GROUP MEETING

This will be an open discussion to answer questions about KAM software products today and future products.

THURSDAY 1 :00 PM - 2 :00 PM ROOM 211

USING SIGNALS with DCC and CLASSIC PANEL

This clinic will focus on using Signals on your layout and how to integrate the signals with Classic Panel software. The clinic will

review the different type of signals, what are the signal rules, and how the 1940 style dispatcher panel implements these signal rules. At the end of the clinic, the user should have a good understanding of what signals man and how to use signals on their model railroad

WEDNESDAY 2 :30 PM - 3 :30 PM ROOM 212

Keith, David

LOGGING, NOT JUST SAWMILLS

>From 1870 to 1930 logging in the Eastern United States was not simply to get the lumber, but also the chemicals within the wood. This prototype-modeling clinic takes a detailed look at tanneries and wood chemical plants, two industries which play a prominent role in the logging history of Pennsylvania (NY & W VA too). Examples of how the historical information was applied to the Eastern Logger's model railroad will be presented.

THURSDAY 1 :00 PM - 2 :00 PM ROOM 207

FRIDAY 4 :00 PM - 5 :00 PM ROOM 212

Keller, Allen

MODELING THE MID-SOUTH

Allen will give examples of scenic and structural elements that are typical of the south.

THURSDAY 10:30 AM - 11:30 AM ROOM 211

THURSDAY 1 :00 PM - 2 :00 PM ROOM 212

Keller, Vagel

HO VEHICLES FOR MODELERS OF THE PRE-WORLD WAR II ERA

This copiously illustrated clinic surveys various kits for HO scale vehicles, farm equipment, etc. for an era that continues to be ignored by manufacturers of Ready-to-Run stuff. Vagel has built kits of varying difficulty, believes "simpler is best," and shows why. The presentation compares models to prototypes and offers some tips for altering stock models to suit a different need. Models available for viewing afterwards.

WEDNESDAY 8 :00 PM - 9 :00 PM ROOM 212

FRIDAY 9 :30 PM - 10:30 PM ROOM 262

Kerka, Linda

BEAD JEWELERY

Remember the days of wearing a ribbon around the neck on your Peter-Pan blouse? The design of the "Bow-Tie" silver necklace with celestial highlights is reminiscent of that era. You will use silver-plated tube beads and celestial crystal beads with a magnetic closure to create a hand-crafted treasure to take home. The cost for this

TUESDAY 7 :30 PM - 8 :30 PM ROOM 263

BELLY DANCING

Experience the art of Belly Dancing with all the exotic music and costumes. You may even want to try a few steps to spice up your exercise routine and who knows what else.

WEDNESDAY 9 :00 AM - 10:00 AM ROOM 263

BINGO

Test your luck in our Bingo Parlor. We're still not sure how we'll beat the revenuers. Bring bail money.

MONDAY 2 :30 PM - 5 :00 PM ROOM 263

CAKE DECORATION

The Queen City Decorating Club will share with us how to make your cakes look as good as the "store-bought" bakery cakes. They

will be using real cakes and a snack (cake) will follow this clinic. I will not miss this one!

FRIDAY 10:00 AM - 11:00 AM ROOM 263

CINCINNATI ZOO

Will have the nationally renowned Cincinnati Zoo & Botanical Garden folks share the inside skinny on the operation of a first class zoo. They promise to bring some "little friends" ... So that you can talk to the animals.

TUESDAY 9 :00 AM - 10:00 AM ROOM 263

COTTAGES TO CASTLES

Cincinnati Historical Society will provide a lecture on housing

THURSDAY 12:00 PM - 1 :00 PM ROOM 263

DOLL CLOTHES

Did you ever want to learn how to make doll furniture or arrangements? Then join us at this clinic and you will learn the

THURSDAY 1 :00 PM - 2 :00 PM ROOM 263

FLOWER ARRANGEMENT

Benkins, Cincinnati's premier floral experts will demonstrate with real flowers the secrets of how to make those special arrangements for the holidays, special occasions, and center pieces. After the clinic you may be one of the lucky people who will win the arrangements.

FRIDAY 11:00 AM - 12:00 PM ROOM 263

HAUNTED PLACES OF CINCINNATI

Cincinnati Historical Society lecture on the haunted places of Cincinnati.

TUESDAY 2 :00 PM - 3 :00 PM ROOM 263

HERB SOCIETY - LOG CABIN HERB GARDEN

Learn about herbs and ways to use them. This will be my first lesson in "herbonimics."

THURSDAY 3 :00 PM - 4 :00 PM ROOM 263

HOME SAFETY - CINCINNATI POLICE

The Cincinnati Police Department staff will discuss safety for your home and how to protect yourself when you are away from home.

TUESDAY 6 :00 PM - 7 :00 PM ROOM 263

JAZZERCISE

Start the day out right by joining us for fun and getting a good workout. A professional Jazzercise instructor will have us moving to the beat of music. At the end of the class you will feel great and be ready to have a wonderful day. Please wear comfortable clothes and shoes for this class. There is no charge for the class but you will need to register and present your ticket at the door.

THURSDAY 6 :00 PM - 7 :00 PM ROOM 263

LEMON LAY OFF PARTY

Bring something you want to get rid of and make somebody else take it home. This party will have some real surprises and a lot of

MONDAY 1 :00 PM - 2 :30 PM ROOM 263

LONGABERGER BASKETS

Join us for a Longaberger Basket Party. You will learn how to use baskets for decorating and you will be able to choose from the many baskets and items for sale (some of the items will have to be ordered). You will need to register and present your ticket at the

THURSDAY 8 :00 PM - 9 :30 PM ROOM 263

MAKEUP TIPS

Tips on the latest fashion in make up and applications.

SATURDAY 10:00 AM - 11:00 AM ROOM 263

ORGANIC GARDENING

Learn the current state-of-the-art of gardening without chemicals and pesticides.

TUESDAY 3 :00 PM - 4 :00 PM ROOM 263

SCRAPBOOKING

Wondering what to do with all the vacation pictures you will take while at the Cincinnati Convention? These folks will make it simple and fun.

WEDNESDAY 2 :00 PM - 3 :00 PM ROOM 263

SATURDAY 1 :00 PM - 2 :00 PM ROOM 263

TRAVEL TIPS

Tips from the professionals on planning your next vacation with emphasis on the "do's and don'ts of traveling."

THURSDAY 10:00 AM - 11:00 AM ROOM 263

WILD BIRDS

Learn what types of wild birds there are, their habits and what and how to feed them.

MONDAY 11:00 AM - 12:00 PM ROOM 263

Kline, Larry

STEEL MILLS 3 - STEEL LOADS

How to model open loads destined for or from the mill.

THURSDAY 11:00 AM - 12:00 PM ROOM 201

US FREIGHT CARS IN 1947 AS PHOTOGRAPHED IN HARRISBURG PA

Larry will present photos from a collection of 520 freight car photographs taken primarily in Harrisburg, PA locations in 1946-1948. There are 105 railroads and private car owners represented. The NMRA is publishing a book based on these photos. Larry and Ted Culotta are the co-authors.

MONDAY 6 :30 PM - 7 :30 PM ROOM 204

FRIDAY 9 :30 PM - 10:30 PM ROOM 201

Knapp, Bruce

BRASS TIPS

The clinician will draw from his 30+ years as a repair technician for a local hobby shop to highlight quick ways to make older brass imports run like the newer brass and plastic imports. Topic covered will include can motors, servicing or replacing gear boxes, springing and suspension systems, lead and trailing trucks, and electrical systems. While the clinic will focus on United, Atlas, Samhonga, and Atlas HO steam locomotives, the techniques demonstrated apply to any scale. The clinician will also spend some time discussing early brass diesels. This clinic should be of interest to anyone running some of the earlier brass imports. All clinic attendees will be encouraged to contribute from their own experiences.

MONDAY 9 :00 AM - 10:00 AM ROOM 211

FRIDAY 8 :00 PM - 9 :00 PM ROOM 211

Koester, Tony

RAISING A FALLEN FLAG: NKP's ST LOUIS DIVISION

Update on my new HO layout based on Nickel Plate Road in Indiana and Illinois in 1954. Special emphasis on multi-level layout design and construction, especially lighting ("Day" and "Night"), and on providing realistic work environment for crews such as operator-

THURSDAY 10:30 AM - 11:30 AM ROOM 204

SATURDAY 9 :00 AM - 10:00 AM ROOM 212

Kooning, Clark, MMR - Pete Smith

MODELING w/ THE MASTERS - BUILDING A BOARD-ON-BOARD WOOD STRUCTURE KIT

Get your seat for one of the most exciting NMRA programs. "Modeling with the Masters"! Join a team of Master Model Railroaders as they personally help you build a model. These hands-on sessions will run during the convention Monday through Thursday. Each session is 5 hours and will begin with a workshop on the project followed by a hands-on session during which you will build a model aided by a team of Master Model Railroaders who will assist you, answer your questions and share their modeling expertise, skills and techniques. When the session is finished you will be able to take your project home. This clinic involves building a board-on-board structure kit. Attendance is limited to 28. Cost is \$48 for N & HO and \$53 for S & O scales.

WEDNESDAY 7 :30 AM - 12:30 PM ROOM 300

MODELING w/ THE MASTERS. SCRATCH BUILD A SMALL BRIDGE- WOOD and STYRENE

Get your seat for one of the most exciting NMRA programs. "Modeling with the Masters"! Join a team of Master Model Railroaders as they personally help you build a model. These hands-on sessions will run during the convention Monday through Thursday. Each session is 5 hours and will begin with a workshop on the project followed by a hands-on session during which you will build a model aided by a team of Master Model Railroaders who will assist you, answer your questions and share their modeling expertise, skills and techniques. When the session is finished you will be able to take your project home. This clinic involves scratch building in styrene and wood. Attendance is limited to 28. Cost is \$48 for N & HO and \$53 for S & O scales.

MONDAY 7 :30 AM - 12:30 PM ROOM 300

MODELING w/ THE MASTERS: BUILDING A DPM BUILDING WITH DETAILS AND SIGNS

Get your seat for one of the most exciting NMRA programs. "Modeling with the Masters"! Join a team of Master Model Railroaders as they personally help you build a model. These hands-on sessions will run during the convention Monday through Thursday. Each session is 5 hours and will begin with a workshop on the project followed by a hands-on session during which you will build a model aided by a team of Master Model Railroaders who will assist you, answer your questions and share their modeling expertise, skills and techniques. When the session is finished you will be able to take your project home. This clinic involves building a Design Preservation Models (DPM) building including details and signs. Attendance is limited to 28. Cost is \$48 for N & HO and \$53 for S & O scales.

THURSDAY 7 :30 AM - 12:30 PM ROOM 300

MODELING w/ THE MASTERS: BUILDING A LASER STRUCTURE KIT

Get your seat for one of the most exciting NMRA programs. "Modeling with the Masters"! Join a team of Master Model Railroaders as they personally help you build a model. These

hands-on sessions will run during the convention Monday through Thursday. Each session is 5 hours and will begin with a workshop on the project followed by a hands-on session during which you will build a model aided by a team of Master Model Railroaders who will assist you, answer your questions and share their modeling expertise, skills and techniques. When the session is finished you will be able to take your project home. This clinic involves building a Laser Structure kit. Attendance is limited to 28. Cost is \$48 for N & HO and \$53 for S & O scales.

WEDNESDAY 1 :30 PM - 6 :30 PM ROOM 300

MODELING w/ THE MASTERS: BUILDING A WHITE METAL VEHICLE KIT

Get your seat for one of the most exciting NMRA programs. "Modeling with the Masters"! Join a team of Master Model Railroaders as they personally help you build a model. These hands-on sessions will run during the convention Monday through Thursday. Each session is 5 hours and will begin with a workshop on the project followed by a hands-on session during which you will build a model aided by a team of Master Model Railroaders who will assist you, answer your questions and share their modeling expertise, skills and techniques. When the session is finished you will be able to take your project home. This clinic involves building a white metal vehicle. Attendance is limited to 28. Cost is \$48 for N & HO and \$53 for S & O scales.

TUESDAY 7 :30 AM - 12:30 PM ROOM 300

MODELING w/ THE MASTERS: SCRATCH-BUILDING A STYRENE STRUCTURE

Get your seat for one of the most exciting NMRA programs. "Modeling with the Masters"! Join a team of Master Model Railroaders as they personally help you build a model. These hands-on sessions will run during the convention Monday through Thursday. Each session is 5 hours and will begin with a workshop on the project followed by a hands-on session during which you will build a model aided by a team of Master Model Railroaders who will assist you, answer your questions and share their modeling expertise, skills and techniques. When the session is finished you will be able to take your project home. This clinic involves scratch building a structure in styrene. Attendance is limited to 28. Cost is \$48 for N & HO and \$53 for S & O scales.

MONDAY 1 :30 PM - 6 :30 PM ROOM 300

Kunkle, Robert

STEEL MILLS 2 - BEYOND THE BASEMENT, MODELING STEEL WITHOUT THE MILL

Modeling steel in a limited space or talent. Use the illusion of mill buildings beyond the basement.

THURSDAY 9 :15 AM - 10:15 AM ROOM 201

Lambert, Brent

INSIDE THE KALMBACH MEMORIAL LIBRARY'S KENTLEIN-PORTER COLLECTION

This clinic provides an inside look at NMRA's Kentlein-Porter Collection. A world-class collection by any standards, the Kentlein-Porter Collection includes 1000 builders photos, numerous catalogs, blueprints, and company correspondence from the H.K. Porter Company, once the premier industrial locomotive builder in the world.

TUESDAY 10:30 AM - 11:30 AM ROOM 201

WEDNESDAY 6 :30 PM - 7 :30 PM ROOM 201

Lana, Patrick, MMR

MODELING AGRICULTURE

Modeling the Midwest, Enjoying the Rockies. A clinic on modeling agriculture: Some of the many faces of agriculture will be shown -- in different seasons and regions of the US -- but mostly in the Midwestern summer. My favorite methods of modeling Midwest agriculture will be discussed including research and modeling of crops, livestock, buildings, and machinery. The majority of time will be spent on modeling crops like corn, soybeans, and hay. Although modeled in N scale, these concepts will work in other scales.

WEDNESDAY 2 :30 PM - 3 :30 PM ROOM 262

MODELING PROTOTYPE DISPATCHING WITH OPEN SOFTWARE

OPSig CLINC -

An introduction to prototypical dispatching for model railroads using the Crandic Automated Traffic System (CATS). CATS is based on freeware JMRI and is networked to a DCC system on the N scale CRANDIC railroad. Criteria and evolution of this flexible system, installation of hardware (including searchlight and semaphore construction) will be covered along with details of the protable software developed to assign crews and trains, and control signals and turnouts in CTC and ABS.

MONDAY 2 :30 PM - 3 :30 PM ROOM 201

WEDNESDAY 8 :00 PM - 9 :00 PM ROOM 262

Larson, Lloyd, MMR

FROM THE TRACK BACK

Three part clinic describing track detail, lighting and creating three dimensional backdrops. The use of black lights and rope lights. Slide presentation with hands-on and recreation. (All Scales)

TUESDAY 10:30 AM - 11:30 AM ROOM 211

WEDNESDAY 1 :00 PM - 2 :00 PM ROOM 204

Lee, John, MMR

EVERYTHING YOU WANTED TO KNOW ABOUT MODELFLEX PAINTS BUT DIDN'T ASK

This clinic gives people the opportunity to ask questions about the do's and don'ts of Modelflex paints and acrylic paints in general.

WEDNESDAY 9 :00 AM - 10:00 AM ROOM 201

PAINTING SUPER CLINIC -- AIRBRUSHING & DECALING FREIGHT CARS

A hands-on double session clinic sponsored by Badger Air Brush, Athearn & Microscale Decals. Each participant will paint an Athearn freight car with a Badger Air Brush & Modelflex paint and then decal the car with custom-made convention style decals from Microscale Decals to take home.

WEDNESDAY 7 :30 PM - 10:00 PM ROOM 300

Lenz, Bernd - Deborah Ames

LENZ USER'S FORUM

After 25 years of producing model railroad equipment, Lenz Elektronik is introducing three new, innovative DCC technologies, that will further enhance DCC operation. We invite you to learn about: Asymmetric DCC, RailCom, and USP. Special emphasis will be on users' questions and users' ideas for new products.

WEDNESDAY 9 :30 PM - 10:30 PM ROOM 201

Licharson, John

UPGRADING CHEAP CARS TO MODERN STANDARDS

This clinic is intended to show owners of older, cheaper rolling stock (I.e. Athearn, Bachman, Life Like, Mantua, Varney, etc.) how to upgrade their models to modern standards of detail. The upgrading can bring run of the mill cars up to where they meet NMRA Achievement Program Merit Standards.

TUESDAY 9 :00 AM - 10:00 AM ROOM 207
 THURSDAY 1 :00 PM - 2 :00 PM ROOM 262

Lowrance, John, MMR

SETTING THE SCENE

This clinic is based on the observation that "Today we have the very best selection of highly detailed structures, vehicles, figures, details and scenery products ever available in the history of model railroading, yet many people still have difficulty mixing these components together into a realistic scene." This clinic will strive to provide some basic things that help create realistic scenes. Some of the topics include: why scenery may be the most important part of your layout, nature's laws that must be followed, setting a season and time period, every scene tells a story, how much detail is needed, control of views, placement of structures, and more.

MONDAY 8 :00 PM - 9 :00 PM ROOM 212
 TUESDAY 2 :30 PM - 3 :30 PM ROOM 262

THE SKY'S THE LIMIT!

This is backdrop painting for the artistically challenged! The zany team of John and Miles present the use of stencils used for painting backgrounds with clouds, mountains, cities, and hills. The background magically appears before your eyes in this live demonstration. Don't miss the fun.

MONDAY 1 :00 PM - 2 :00 PM ROOM 212
 THURSDAY 9 :00 AM - 10:00 AM ROOM 207

Luginbill, John

THE CINCINNATI SUBWAY

Experience the true story of the little-known attempt at rapid transit in Cincinnati. Today, over 2 miles of tunnels and station platforms exist under a major thoroughfare in downtown Cincinnati, never used for over 75 years. Plans, details, and photos are presented, along with a discussion of the politics of the era.

WEDNESDAY 4 :00 PM - 5 :00 PM ROOM 201

MacHan, Jeffrey

GAME-BASED OPERATIONS FOR SMALL RAILROADS

Single persons & small layout owners are the neglected majority when it comes to "operations." Not anymore! Jeffrey MacHan demonstrates how game-based operations can be used to enhance the joy of small railroads, such as his award-winning "Val Ease Central". The system is highly flexible and can be adapted to basic, intermediate and advanced operations.

FRIDAY 1 :00 PM - 2 :00 PM ROOM 211
 FRIDAY 4 :00 PM - 5 :00 PM ROOM 211

Mack, Tom

COMPUTERIZED TRAIN GENERATION USING MS EXCEL

OPSig CLINC -

This clinic demonstrates how to use Microsoft Excel to develop a train consist generator and car ordering system, and how to integrate these into operating sessions. Details include defining variabel train lengths, setting up inbound/outbound industry request tables, creating automated switchlists and train manifests, and using the tools with or without car cards during an operating

TUESDAY 1 :00 PM - 2 :00 PM ROOM 207

Marshall, John

SOLDERING 101, BACK TO BASICS

It should be the easiest but is often the hardest thing for a modeler to do. Is it an art or a science? The answer: a little of both! This clinic will serve as an introduction to the ancient practice of soldering, provide an overview of the tools and supplies needed and the techniques that will boost your skill set. You may not become a world class soldering expert but you will lose your fear of the

MONDAY 2 :30 PM - 3 :30 PM ROOM 211
 TUESDAY 9 :00 AM - 10:00 AM ROOM 262

THE JOY OF SPLINE ROADBED

This clinic offers an intriguing alternative to the 'cookie cutter' or plywood slab methods of sub-roadbed construction. Advantages, materials and assembly techniques for the application of this construction style will be presented and discussed. If you are planning a new layout or rebuilding your current layout, Spine roadbed offers a viable option

TUESDAY 1 :00 PM - 2 :00 PM ROOM 211
 WEDNESDAY 10:30 AM - 11:30 AM ROOM 208

Maslyn, Tim

SIGNALS - TYPE, FUNCTION, MODELING

An overview of signals. Mast, bridge, dwarf and platform types of signal heads and modeling possibilities using integrated signal systems components.

MONDAY 4 :00 PM - 5 :00 PM ROOM 211
 TUESDAY 4 :00 PM - 5 :00 PM ROOM 262

McClelland, Allen, MMR

EVOLUTION OF THE NEW VIRGINIAN & OHIO

It would be helpful to attend this clinic before doing my layout tour. Update on the new V&O Railroad now under construction with new design considerations and unique techniques construction, computer track planning and construction drawings, with an overview of concepts for prototype operation for the new V&O.

MONDAY 2 :30 PM - 3 :30 PM ROOM 204
 MONDAY 8 :00 PM - 9 :00 PM ROOM 204

McClelland, Bradley A

THE SHORT LINE (L&N's CINCINNATI & LOUISVILLE LINE)

A synchronized twin projector photo essay on the L&N's historic route from Cincinnati to Louisville, now operated by the CSX LCL Subdivision. This show is a must for fans of the L&N or CSX, mountain railroading, and modern high-quality rail photography.

SUNDAY 4 :00 PM - 5 :00 PM ROOM 201
 MONDAY 9 :30 PM - 10:30 PM ROOM 212

WELCOME TO CINCINNATI (RAILROADING AROUND CINCINNATI)

An authoritative look at today's railroading in the Cincinnati area, including local CSX, NS, short line and industrial railroad action. It's a must see for anyone planning to check out the Cincinnati railroad scene while in town for the convention.

SUNDAY 1 :00 PM - 2 :00 PM ROOM 201
MONDAY 6 :30 PM - 7 :30 PM ROOM 212

McQuade, Richard

FROM WOOD TO STEEL

Based on the popular book of the same name, this clinic will focus on the evolution of passenger cars from the open platform "Wild West" cars of the 1860's to the beginning of the steel car era. Although built between 1860 and 1920, a surprising number of these cars persisted into the 1950's and beyond. Copies of the book will

THURSDAY 4 :00 PM - 5 :00 PM ROOM 207
FRIDAY 1 :00 PM - 2 :00 PM ROOM 207

Meetz, Richard

AGING EYES

Richard will discuss the effects that aging has on your eyesight. This includes what happens to your eyes as you age and how difficult it is to build models when your eyesight is failing.

MONDAY 10:00 AM - 11:00 AM ROOM 263

EYESIGHT, AGING AND THE MODELER

The ability to do prolonged detail work at near distances changes with age. Mature modelers must also change how they model either by changing scales or by the use of vision-aids and lighting. This clinic will explain what difficulties these age-related changes present to the modeler. Discussed in detail will be methods of compensating for these changes so that modeling activities need not be curtailed or abandoned as the modeler ages. With these methods, the modeler can pursue detailed modeling, even in the smaller scales, for hours at a time without eyestrain or discomfort.

MONDAY 1 :00 PM - 2 :00 PM ROOM 211
THURSDAY 10:30 AM - 11:30 AM ROOM 208

Metal, David

HOW I BUILD SIGNAL ASSEMBLIES FOR MY MODEL RAILROAD

This clinic shows how I build the three light signals that I needed for my HO railroad. Provides all the information needed to construct the signal assy. Shows the material and tools used and provides detailed construction steps from start to finish. Includes a handout.

MONDAY 4 :00 PM - 5 :00 PM ROOM 212

HOW I SIGNALLED MY MODEL RAILROAD

Reasons for signaling, decisions made and equipment selection.

MONDAY 2 :30 PM - 3 :30 PM ROOM 212

Moir, Jim

PROTRAK OPERATIONS SOFTWARE

How to use switch lists, train lists and yard lists in your operations. Making all the operating roles realistic. Modeling the complete car cycle -- using your "clean out", rip tracks, weigh scale and service trackage. Do you want to get into operations in the easiest way possible? If this interests you, then you should attend this clinic. This is the clinic that introduces operations management with

MONDAY 9 :00 AM - 10:00 AM ROOM 212
TUESDAY 1 :00 PM - 2 :00 PM ROOM 208

PROTRAK USERS FORUM

Users' questions and answers about ProTrak, the real time operations software. A brief introduction to ProTrak and Grapevine, followed by an open forum. Questions and "how to" about ProTrak and about operations. Here's your opportunity to get all of your questions answered.

TUESDAY 8 :00 PM - 9 :00 PM ROOM 262

Morgan, Victoria

CINCINNATI BALLET

Victoria Morgan is the Artist Director from the world famous Cincinnati Ballet. She will present a clinic on ballet. With costumes, props, and pictures she will show us what goes into a production number and what it takes to become a dancer.

FRIDAY 1 :00 PM - 2 :00 PM ROOM 263

Morris, Don

LOOK WHAT'S GROWING IN THE GARDEN

A quick and easy guide on how to design, build, run and maintain a garden railroad. We will include all aspects of building a garden railroad from start to finish using the latest materials and techniques.

This will include things such as minimum radius, minimum track spacing, maximum grade, and types of roadbed, wiring and various types of track including brass, aluminum, nickel silver, and stainless steel.

TUESDAY 2 :30 PM - 3 :30 PM ROOM 211
WEDNESDAY 2 :30 PM - 3 :30 PM ROOM 207

Murphy, Dennis

BASIC ELECTRIC & WIRING FOR MODEL RAILROADING "LET'S GET WIRED"

This clinic is for the modeler who is getting started in the hobby. The clinic will cover (1) Electron theory, (2) DC current, (3) AC current, (4) Volts, Amps, Watts & Ohms, (4) Incandescent vs. LED lights, (5) electric motors & types, (6) power pickup, (7) powering track and accessories and (8) advanced considerations with wiring.

FRIDAY 6 :30 PM - 7 :30 PM ROOM 212

MICRO MINI COLOR CAMERA CAR CONSTRUCTION

This clinic is for the modeler that wants more out of his hobby. Wow .. what good fun!! Have you ever wanted to look at your train layout from "street level"? Have you ever wondered if that new office building model you just completed is as "real" looking as you think it is? Have you ever wanted to ride inside your favorite locomotive, watching the scenery pass by? Well, now you can! There are great little battery or DCC powered cameras that can bring your miniature world to life. These cameras are so small that I use them with my N-scale trains.

WEDNESDAY 6 :30 PM - 7 :30 PM ROOM 208
SATURDAY 10:30 AM - 11:30 AM ROOM 212

Naumann, Walter

UP & W MODEL RAILROAD EMPIRE - STATUS REPORT

The UP&W is N-Scale of a bit of Union Pacific in Wyoming, May 21, 1950. Accuracy requires code 30 and 40 rail, turn radii from 9 to 200

inches, up to #20 turnouts and scenery to match. Past clinics described hand digging 200 tons of earth and rock for the room. Retaining walls, room finishing, bench work, sound control, track work and scenery continue to use unusual designs, methods and tools. Some areas are complete thru final scenery. W is for Whimsy.

MONDAY 1 :00 PM - 2 :00 PM ROOM 208
 THURSDAY 1 :00 PM - 2 :00 PM ROOM 208

Nesbit, Bill

KIT BASHING THE WALTHER'S RAILROAD CAR FLOAT

Conversion of a Walthers Railroad Car Float into an Intermodal Barge, a Coal-Sand-Gravel Barge, Liquid Fuels Barge, or a Construction Barge; while still having a Railroad Car Float. This project will create two waterfront models from one Walthers Railroad Car Float kit #933-3142. The additional models discussed in this clinic are: an Intermodal barge, a coal-sand-gravel barge, liquid fuels barge, or a construction barge. The cost to the modeler for the conversion of the Walthers Railroad Car Float varies with the specific version undertaken. However, this conversion cost is generally less than twenty dollars.

MONDAY 4 :00 PM - 5 :00 PM ROOM 208
 TUESDAY 4 :00 PM - 5 :00 PM ROOM 208

Newell, Kathleen

HOW TO PAINT A BRASS LOCOMOTIVE

Beginner Clinic. Clinic explains all steps involved in painting a small brass steam locomotive. Tools needed, disassembly, cleaning, preparation, painting, reassembly, decal application and weathering will be explained in detail.

MONDAY 6 :30 PM - 7 :30 PM ROOM 211

INSTALLING DCC DECODERS IN A BRASS LOCOMOTIVE

Beginner Clinic. Installing a DCC decoder in a brass locomotive. Basic programming will also be discussed.

WEDNESDAY 8 :00 PM - 9 :00 PM ROOM 208

REMOTORING A BRASS LOCOMOTIVE

Beginner Clinic. This clinic will explain various steps involved in installation of a "can motor" in a small brass steam locomotive. This clinic will also demonstrate the installation of a "Helix Humper can motor" in a Bowser steam locomotive. Tools needed, disassembly, modifications and reassembly will be explained in detail.

TUESDAY 6 :30 PM - 7 :30 PM ROOM 207

Newmiller, Richard

MODELING WOODEN STRUCTURES

Modeling wooden structures for either freelance or prototype buildings involves selection and coordination of the key building system components such as foundations, frames, siding, windows, doors and roofing. An overview of these building systems combined with various materials of construction and individual modeling techniques provides the builder with many options. Several of these methods are demonstrated by the step-by-step process to turn lengths of scale lumber & timbers into a 150 ton coal tower using modified craftsman kit plans.

THURSDAY 2 :30 PM - 3 :30 PM ROOM 211
 FRIDAY 2 :30 PM - 3 :30 PM ROOM 262

Nichols, Joe, MMR

DETAILING INDUSTRIAL BUILDINGS

The clinic will describe techniques for adding details to industrial buildings, whether kit-built, kit-bashed, or scratch built and materials from various sources. It is the details which give a building its character and realism.

TUESDAY 2 :30 PM - 3 :30 PM ROOM 201
 WEDNESDAY 4 :00 PM - 5 :00 PM ROOM 211

SCRATCHBUILDING STYRENE INDUSTRIAL BUILDINGS

The clinic will describe techniques for building prototype industrial buildings from styrene and obtaining styrene in large sheets instead of small pieces.

TUESDAY 9 :00 AM - 10:00 AM ROOM 212
 WEDNESDAY 1 :00 PM - 2 :00 PM ROOM 262

Paul, Kermit, MMR

LET'S MAKE A MOVIE

Kermit will discuss his experiences in taking digital video and making DVD movies using Adobe Premier Elements software.

MONDAY 4 :00 PM - 5 :00 PM ROOM 207
 THURSDAY 9 :00 AM - 10:00 AM ROOM 212

Persing, Ray

DAYTON & TROY ELECTRIC RAILWAY COMPANY

Much like the dot-coms at the end of the 20th century, interurbans at the end of the 19th century were the investment of choice. The Dayton and Troy Electric Railway ran from Dayton to Piqua between 1901 and 1932, and was a critical link in the vast mid-west interurban network in the early part of the twentieth century. We'll examine the story behind this long-gone and little-remembered part of the Miami Valley. Seldom-seen photos illustrate the 31-year life of an integral part of the mid-west, and we'll look at the few remaining vestiges of the railroad.

FRIDAY 9 :30 PM - 10:30 PM ROOM 208

SCRATCHBUILDING IN WOOD

Nothing looks so much like wood in a model structure than real wood. Master Builder Ray Persing will take you though a selection of modeling techniques you can apply to your wood modeling. We'll follow the construction of a merit-award winning model and look at methods that work, as well as a few that don't so much!

MONDAY 6 :30 PM - 7 :30 PM ROOM 208
 TUESDAY 8 :00 PM - 9 :00 PM ROOM 207

Petrarca, Bruce

DCC SOUND, A DESIGNER'S NOTEBOOK

A hands-on look at getting the most sound out of your locos. HO scale is featured, but the techniques discussed extend to any scale.

FRIDAY 1 :00 PM - 2 :00 PM ROOM 204
 SATURDAY 2 :30 PM - 3 :30 PM ROOM 212

Phillips, Dave

MODELING MODERN C&NW COVERED HOPPERS

Throughout the history of the C&NW it has been a major Grainger railroad. Transportation of grain & food products had always been a major source of revenue. Covered hoppers were the most numerous

freight car type on the C&NW. Whether or not you model the C&NW, some of these hopper cars belong in your freight car

TUESDAY 10:30 AM - 11:30 AM ROOM 207
FRIDAY 6:30 PM - 7:30 PM ROOM 201

Puthoff, David E.

ELECTRONIC LOGIC CONTROL OF TRACKSIDE SIGNALS

Electronic logic circuitry can be used to operate 2 and 3-aspect trackside signals in 1 or 2 directions of travel, with or without automatic stopping of trains, using conventional or DCC controls. A primer on prototype signaling is presented, with circuit details, examples of train detectors, and options that enable a close imitation of the prototype in any scale.

SUNDAY 2:30 PM - 3:30 PM ROOM 212
WEDNESDAY 8:00 PM - 9:00 PM ROOM 211

Rathbone, Michael

TWILIGHT OF STEAM IN CHINA - FROM THE CAB

The last steam is rapidly vanishing from China. But a few centers remain. Riding in the cab and driving these great machines is a unique experience shared with the engine crews of the early 20th Century in North America.

SUNDAY 4:00 PM - 5:00 PM ROOM 212
TUESDAY 4:00 PM - 5:00 PM ROOM 211

Reid, Walter

THE DOLLY VARDEN MINING RAILWAY - A SMALL RAILWAY YOU CAN MODEL

The Dolly Varden Railway was an 18 mile narrow gauge railway built between 1917-1920 in Northern British Columbia to haul silver ore from minehead to the waterside ore bunker in Alice Arm (British Columbia). It was also briefly used as a logging railway as well. With the aid of slides, we will explore the railway's features and spend time focusing on the modeling potential such a specific prototype has to offer. This clinic will be of interest to modelers who are interested in mining or logging narrow gauge, as it's a well-documented example of a railway built with minimal resources. Recently found blueprints of the ore bunker and surrounding area will also be featured.

WEDNESDAY 10:30 AM - 11:30 AM ROOM 207
WEDNESDAY 1:00 PM - 2:00 PM ROOM 212

Rising, Paul

CLAY ROCK MODELLING

Tired of the inflexibility and sameness of Hydrocal rock casting? This technique allows you to make superb, unique and even prototype rock formations/outcrops using air dry clay and latex rock molds. For the beginning to expert modeler who wants custom

TUESDAY 9:00 AM - 10:00 AM ROOM 211
THURSDAY 9:00 AM - 10:00 AM ROOM 262

HEAT ALTERING STYRENE FOR TEXTURAL EFFECTS

Learn how to modify standard modeling styrene and old plastic kits so realistically replicate wood shingles, board formed concrete, logs and stone. This technique uses a low wattage soldering pencil and home made tips. For the intermediate modeler not afraid to

MONDAY 8:00 PM - 9:00 PM ROOM 211
WEDNESDAY 9:00 AM - 10:00 AM ROOM 204

Roberts, John, MMR

APPALACHIAN COAL MINES AND TIPPLES

If you're interested in modeling Eastern coal country, this clinic is a must see. John has extensive knowledge of the coal mining industry and will share a wide variety of prototype photos of mines, tipples, and general regional structures of interest. The clinic will also cover points of interest regarding railroad operations (C&O, WM, N&W, CRR, PRR, B&O, L&N) in this region and will address changes that have occurred in the industry from the 1930's to present. So if you're interested in mining coal on your model railroad, whether it's steam or diesel era, you'll find this presentation packed with all the necessary information to successfully begin modeling coal country or to expand knowledge to enhance your current models and layout.

MONDAY 9:00 AM - 10:00 AM ROOM 262
WEDNESDAY 4:00 PM - 5:00 PM ROOM 212

MEET THE NMRA PRESIDENT & VICE PRESIDENT

MONDAY 2:30 PM - 3:30 PM ROOM 208

Sacco, Jim

A BRIEF HISTORY OF THE AMERICAN GAS STATION & SOME TIPS FOR MODELING ONE

The title pretty much says it all. It begins with a brief photo history of the gas station in America and is followed by some tips that may help modelers build a more realistic model of a gas station. The clinic ends with a slide show of common, unusual or just plain wacky gas stations. I'd like to think that it is a clinic where folks can sit back and enjoy the pictures. Or as the late night talk show host, Tom Snyder, used to say "Sit back and watch the pictures as they fly

TUESDAY 4:00 PM - 5:00 PM ROOM 207
THURSDAY 8:00 PM - 9:00 PM ROOM 211

Schaumburg, Bill

RAILROAD TIE TREATING

A brief historical survey of railroad tie treatment, a look at typical older plants and a tour of a modern tie treatment plant. Bill is the editor of Railroad Model Craftsman and models the Nevada County Narrow Gauge RR (which mostly used Western red cedar ties, it turns out) in On3.

TUESDAY 6:30 PM - 7:30 PM ROOM 204
WEDNESDAY 9:30 PM - 10:30 PM ROOM 207

Schlotfeldt, Ken

CHOOSING, USING, MAINTAINING AND TROUBLESHOOTING YOUR AIRBRUSH EQUIPMENT

Ken Schlotfeldt is the owner of Badger Airbrush will show you how to choose the airbrush that is best for you and how to use and maintain your airbrush for maximum potential. He will show you how

to troubleshoot your airbrush and the equipment that goes along

WEDNESDAY 1:00 PM - 2:00 PM ROOM 201
THURSDAY 8:00 PM - 9:00 PM ROOM 207

FUN, FOOLPROOF PAINTING WITH WATER BASE ACRYLIC PAINTS

Ken Schlotfeldt from Badger Airbrush will show you how to select and apply the latest in acrylics and get more enjoyment from your

WEDNESDAY 2 :30 PM - 3 :30 PM ROOM 201
 THURSDAY 9 :30 PM - 10:30 PM ROOM 204

Schorr, Neal

MODELING THE MIDDLE DIVISION OF THE PENNSYLVANIA RAILROAD

The picturesque Middle Division of the Pennsylvania Railroad connected Harrisburg with Altoona, Pennsylvania, and was the first portion of the PRR to be constructed in the mid-19th century. In this clinic, we will take a tour of the prototype railroad by means of over 50 railfan slides taken of the Middle Division in the 1940's, 50's, and 60's. The second half of the clinic will then turn its attention to Neal's layout which portrays the Middle Division as it once existed.

TUESDAY 8 :00 PM - 9 :00 PM ROOM 201

Sharpe, William

WELLAND ONTARIO - LATE SUMMER 1953 - MODELING A TIME & PLACE

Have you ever thought of becoming a prototype modeler? Many of us do and begin by accurately modeling rolling stock and locomotives of a certain era. Suppose you went one step further and did a whole town. William Sharpe began by starting small to render the scene faithfully. He will discuss the prototype location and why it was selected, the era chosen, and the various components constructed to date as well as future plans. By dealing with one piece at a time your layout need not be generic, but rather a faithful compliment to your prototype locomotives and rolling stock.

TUESDAY 1 :00 PM - 2 :00 PM ROOM 201
 THURSDAY 9 :30 PM - 10:30 PM ROOM 208

Smith, Howard R., MMR

BIG IDEAS – SMALL INDUSTRIES

This clinic is for modelers with BIG IDEAS but room for only small industrial models. Presentation includes photos of both prototype and model industries suitable for model railroad layouts.

TUESDAY 9 :30 PM - 10:30 PM ROOM 204
 WEDNESDAY 9 :30 PM - 10:30 PM ROOM 211

Spurlock, Loy

DCC BASICS

(1) Why DCC: The benefits of DCC; (2) Defining Terminology & features: You don't know what you need if you don't know what the buzz words mean; (3) How DCC works: A semi-technical discussion in plain English; (4) Choosing DCC equipment: systems, throttles, decoders & other equipment.

MONDAY 8 :00 PM - 10:30 PM ROOM 201

DCC WIRING; TRACK & LOCONET

(1) DCC Layout wiring: Basic to complex; (2) Turnouts: Powered frog/insulated frog, identifying problems; (3) Reverse Section Control: Manual, simultaneous, automatic, short circuit, & detection; (4) Digitrax LocoNet: Building, testing, & troubleshooting; (5) Power Supply: Voltage, amperage, other issues & features.

TUESDAY 9 :30 PM - 10:30 PM ROOM 201

DECODER INSTALLATION

Testing: Decoder loco, plug-n-play. Installation: isolation, wired, plug-n-play, drop-in, sound. Programming: cv's, decimal/hexadecimal/binary, ops/service mode. Loy will cover the decoder installation subject "from soup to nuts".

WEDNESDAY 9 :30 PM - 10:30 PM ROOM 262

SIGNALING WITH LOCONET

A discussion of signaling with Team Digital's SIC24. Subjects covered will include: (1) Blocking & detection, (2) LocoNet messaging, (3) Logic, (4) Other fun stuff including Locking out turnout control when occupied and route indication.

THURSDAY 2 :30 PM - 5 :00 PM ROOM 262

TROUBLESHOOTING DCC

This DCC clinic will cover: (1) System & command station, throttle, network, layout, loco and decoders; (2) Layout: track wiring, turnouts, loco, decoder and (3) Loco: decoder, installation, loco, etc.

FRIDAY 4 :00 PM - 5 :00 PM ROOM 207

Swanson, Sam

SCENIC DETAILING

Ideas and techniques on how to color and texture trees, weeds, ivy, wooded hills, ground cover, and water are covered in this clinic. Both foreground and background scenic elements are presented, along with ideas for transitioning between the two.

TUESDAY 6 :30 PM - 7 :30 PM ROOM 212
 THURSDAY 8 :00 PM - 9 :00 PM ROOM 212

Truax, Jerry

USING WIRELESS MICRO VIDEO CAMERAS ON YOUR TRAINS

Find out how to install and use wireless micro color video cameras on your trains, on any scale, from "Z" to "12 inches = 1 foot". Trouble shooting interference and how to correct it.

FRIDAY 8 :00 PM - 9 :00 PM ROOM 262
 SATURDAY 1 :00 PM - 2 :00 PM ROOM 212

Tylick, Michael

KITBASH THIS (BUILDING)

Many hobbyists hope to bang out a layout as quickly as possible, but soon the layout is nearly finished, or something is needed that just can't go out and buy. Scratch building can be a rewarding pastime onto itself; in this slide presentation Michael discusses several structure and rolling stock projects built from a wide variety of materials. In traditional Yankee fashion, if you can't find what you want at the store, you can make it yourself while spending very

TUESDAY 1 :00 PM - 2 :00 PM ROOM 212
 FRIDAY 6 :30 PM - 7 :30 PM ROOM 204

SCENERY CONSTRUCTION

Over the years, I've worked with a number of ways to build scenery and scenic elements, including landforms and detailing. I will describe my experiences with many of them, some of which I feel are unusual. Most of the finished work is set in autumn, not often modeled but among the most visually compelling times of year.

WEDNESDAY 10:30 AM - 11:30 AM ROOM 211

SCENERY IN TIGHT SPACES

Scenery design in tight spaces, which in reality is every model railroad. It was felt that hiding tight space in urban scenery, but difficult to do the same in the country. While assembling the clinic, I

found the same devices will work in both. I've tried to include every trick I could think of, and much mention is made of what is popularly known as "forced perspective" This clinic makes use of prototype photos

FRIDAY 8 :00 PM - 9 :00 PM ROOM 204

THE JOY OF SCRATCHBUILDING

Many hobbyists hope to bang out a layout as quickly as possible, but soon the layout is nearly finished, or something is needed that just can't go out and buy. Scratch building can be a rewarding pastime onto itself; in this slide presentation Michael discusses several structure and rolling stock projects built from a wide variety of materials. In traditional Yankee fashion, if you can't find what you want at the store, you can make it yourself while spending very

THURSDAY 10:30 AM - 11:30 AM ROOM 262

Vaccaro, Dennis

SMALL HYDROELECTRIC PLANTS

Do your scale people have enough power for their busy lives? Small hydroelectric plants have dotted the landscape all across the US for over 100 years. Many are still in operation. An overview of plant equipment, site arrangements, building construction, operations, and modeling possibilities will be presented. Slides of several sites in New England will be shown.

TUESDAY 2 :30 PM - 3 :30 PM ROOM 208

THURSDAY 4 :00 PM - 5 :00 PM ROOM 208

Van Arnem, Bob

COUNTRY GRAIN ELEVATORS ALONG THE OSL

IN IDAHO

Presentation will include research, photographs of prototype, their construction and operation, drawing scale plans, and techniques/jigs used in scratch building components.

WEDNESDAY 2 :30 PM - 3 :30 PM ROOM 208

THURSDAY 6 :30 PM - 7 :30 PM ROOM 211

Vaughn, Marty, MMR

CONTEST JUDGING

This clinic covers the NMRA Contest and the requirements to be a contest judge -- for both experienced and novice.

TUESDAY 10:30 AM - 11:30 AM ROOM 212

Wagner, Richard

MODELING MAINTENANCE OF WAY 101

Ever notice Maintenance of Way equipment sitting on a nearby siding? Ever wonder what it does? This clinic will give the modeler a broad overview of the prototype equipment that modern railroads use to maintain their track and right of way. The clinic will discuss some ideas to incorporate MOW practices and display some examples of models currently available in HO that can be used to simulate these MOW projects.

TUESDAY 9 :30 PM - 10:30 PM ROOM 212

WEDNESDAY 9 :30 PM - 10:30 PM ROOM 212

THE COLORFUL PENN CENTRAL

OK, so you think that the Penn Central was just black engines and green box cars. How could the Penn Central be colorful? Add to that that you never really liked the Penn Central! After this clinic you may have a different opinion. After a brief discussion of the

history of this railroad, the clinic will show many variations to the PC paint and lettering schemes and disprove the myth that all Penn Central equipment looks the same. Who knows, you may even come to appreciate the Penn Central? p.s. if you like the Penn Central, you are welcome too!

MONDAY 8 :00 PM - 9 :00 PM ROOM 207

THURSDAY 8 :00 PM - 9 :00 PM ROOM 208

Wentworth, David

MAKING REALISTIC WATER SCENES

After presenting photos of actual ponds, streams, dams and waterfalls, the clinic focuses on how David made the many water scenes on his HO (New England) and O-scale (PRR) layouts. The clinic examines techniques for making three types of water: (1) calm/smooth reflective water, (2) choppy rough/white water, and (3) waterfalls. Dioramas demonstrate how weeds, lily pads, rocks, shoreline, wood and stone dams, and retaining walls make realistic

WEDNESDAY 10:30 AM - 11:30 AM ROOM 204

WEDNESDAY 4 :00 PM - 5 :00 PM ROOM 207

Wesner, John

TRACK PLANNING: A HANDS-ON DESIGN EXPERIENCE

When you want to design something, do you have trouble thinking up new ideas, and then deciding which is the best? Would you like to learn and practice some methods to help you generate ideas and then pick the solutions that best satisfies your goals? Come to this hands-on clinic. Our example will be track planning, but the methods we use will have lots of applications.

MONDAY 9 :00 AM - 11:30 AM ROOM 207

THURSDAY 2 :30 PM - 5 :00 PM ROOM 204

Westerfield, Al, MMR

FISHBELLY SIDE SILL BOX CARS

Built almost exclusively in 1902-1910, they were the first steel under frame house cars. Although most were scrapped in the 1930's, many ran into the 1950's and 1960's in MOW service.

FRIDAY 8 :00 PM - 9 :00 PM ROOM 201

SATURDAY 10:30 AM - 11:30 AM ROOM 211

Wickhorst, Charles - Gary Loiseau

OPEN LOADS --

Reviewing the prototypes through slides and emulating it for our railroads. How to model what we see to get the effect. By Gary and Charlie, two of the contributors to the book "Modeling Open Loads", an NMRA publication.

WEDNESDAY 9 :00 AM - 10:00 AM ROOM 207

THURSDAY 10:30 AM - 11:30 AM ROOM 207

Wissinger, John, MMR

BUT WHY TRACTION?

Electric traction railroads had their beginnings in the mid-1800's, flourished between 1900 and 1920 transporting passengers and freight and, with the exception of some regional and city lines, all but disappeared by 1939. This clinic will review the history of the traction industry using prototype slides and a short movie of interurban freight and street railway equipment. Even if you do not model traction railroads and think trolleys are uninteresting buses

with broomsticks on their roofs, come to this clinic to learn about this fascinating aspect of railroading that few people know of today.

THURSDAY 9 :30 PM - 10:30 PM ROOM 262

MODEL TRACTION OVERHEAD CONSTRUCTION

This clinic shows a relatively easy method of installing "simple cross span" model traction overhead. While it is not an exact scale reproduction of the prototype, it is a reasonable representation of streetcar and interurban overhead. Many prototype photos are used for reference so it is applicable to all scales.

TUESDAY 8 :00 PM - 9 :00 PM ROOM 211

THE MECHANICS OF LAYOUT PLANNING

The success or failure of a model railroad can often be traced to the amount of planning that went into the layout before construction was started. In this clinic, the steps in designing your perfect model railroad will be outlined. Following these steps will make your model railroad a pleasure to operate, instead of an exercise in frustration. Whether you use a computer, a drafting board or just a pencil and tablet, this clinic will show how to avoid many of the mistakes that often occur. Note: this clinic is about how to plan a model railroad, not what goes into a good layout. That is up to the individual to decide.

MONDAY 9 :30 PM - 10:30 PM ROOM 204

FRIDAY 6 :30 PM - 7 :30 PM ROOM 207

Wolohon, Larry, MMR

1930's PASSENGER TRAINS - UPDATE

I will attempt to show the causes of the downfall of passenger train usage in the 1930's and how the railroads attempted to revive the passenger traffic in the 1930's.

TUESDAY 9 :30 PM - 10:30 PM ROOM 208

FRIDAY 9 :30 PM - 10:30 PM ROOM 211

Yungblut, Gibson R

CINCINNATI UNION TERMINAL

It is a fascinating and exhaustive look at the planning, building, operation, and slow fading away of the Cincinnati Union Terminal, an Art Deco masterpiece and one of the world's great railway stations. The story of the terminal's triumphal rebirth as the Cincinnati Museum Center is also included. Mr. Yungblut is one of three authors of the book "Cincinnati Union Terminal" and is world authority on the subject.

SUNDAY 2 :30 PM - 3 :30 PM ROOM 201

MONDAY 8 :00 PM - 9 :00 PM ROOM 262

Ziegler, Peter W

THE ZIMO DCC SYSTEM OVERVIEW

Here's a chance to hear about Zimo's DCC system and its features

FRIDAY 2 :30 PM - 3 :30 PM ROOM 201

THE ZIMO DCC SYSTEM, 2005 NEWS

Hear what's the latest developments from Zimo DCC systems.

FRIDAY 4 :00 PM - 5 :00 PM ROOM 201