

CLINIC SCHEDULE

Schedule of clinics is listed by category

ACHIEVEMENT PROGRAM

MMR PROGRESS TRACKING SPREADSHEET

Dziadul, Jack

Demonstration of Excel spreadsheet developed to simplify the organization and tracking of progress toward achieving the Master Model Railroader designation. Attendees will have an opportunity to customize the spreadsheet for their specific certificate objectives. Recommended to bring your laptop to the clinic.

MONDAY 8:30 PM - 9:30 PM

TUESDAY 8:00 AM - 9:00 AM

AIRBRUSHING, PAINTING & WEATHERING

AIRBRUSHING & DECALING FREIGHT CARS

Lee, John, MMR

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. This is a commercial clinic.

WEDNESDAY 7:30 PM - 9:30 PM

GETTING DOWN & DIRTY WITH WEATHERING

Eaton, Leslie, MMR

Join Leslie Eaton, MMR and learn a variety of techniques including airbrushing, dry brushing, and the layering of colours to achieve prototypical results on your cars and structures. Weathering techniques and colour selection will also be demonstrated to blend and enhance scenery.

SUNDAY 7:00 PM - 8:00 PM

MONDAY 4:00 PM - 5:00 PM

WEATHERING CARS, STRUCTURES AND SCENERY

Eaton, Leslie, MMR

Enjoy the opportunity to learn simple airbrush and dry brush weathering techniques, including colour selection and layering of colours. Get hands-on experience weathering cars, scenery materials, and even track. All materials needed for the clinic will be provided. Attendance is limited to 20.

WEDNESDAY 8:00 AM - 11:00 AM

WEATHERING WITH AN AIRBRUSH

McCalla, Mac

This is an air brush weathering clinic by the renowned large scale modeler Mac McCalla. Mac will show you how to make new models look old by using just his air brush and several different colors of paint. This is a "must see" clinic, so don't miss it.

THURSDAY 1:00 PM - 2:00 PM

ANIMATION & LAYOUT SOUND EFFECTS

FINE SCALE ANIMATION FOR OPERATION

Day, Charles (Bill)

This power point presentation by Bill and Carla Day covers fine scale animation including working bascule bridges, water tanks, coal tipples, oar bins, water plugs, engine houses, coal elevators, warehouse doors, dump trucks, and other animated lineside structures enhancing operation. Some operations have appeared in Model Railroader. A working model, winner of First Place (Popular Vote) online structures, at a national NMRA Convention, will be used as a teaching aid. Attendance unlimited. Although a 15-page handout and two CDs are provided, there is no

TUESDAY 8:30 PM - 9:30 PM

LAYOUT SOUND DESIGN FOR THE GRAND FUNK RAILROAD

Wells, Jim

Mike & Hope Lewitzke were one of our first RailRoadies clients, although they became friends almost before they became clients. We met them at the San Jose NMRA convention in 2000, and at that time the goal was the Milwaukie NMRA convention in 2010. In the past 10 years we've done one of just about everything imaginable in layout sound on this amazing pike. We'll discuss the evolution of layout sound design for this unusual and totally emersive railroad experience, and describe some of the innovative scale sound modeling tricks The GFR necessitated. How do you design sound for a layout with effectively endless detail? We'll examine the straightforward 'free running' approach that kept this project from being an ordeal.

WEDNESDAY 1:00 PM - 2:00 PM

THURSDAY 10:00 PM - 11:00 PM

SCALE SOUND FOR MODEL RAILROAD LAYOUTS

Wells, Jim

In this clinic we will explore the existing 'state of the art', and also the potential of layout sound. We will briefly discuss the basics of the nature of sound in scale and human hearing, the distinction between the audio system and the actual scale model (the sound), some of the evolutions in system approaches, and then open the floor up to participant questions. Several scale sound models will be on 'display'.

WEDNESDAY 2:30 PM - 3:30 PM

FRIDAY 4:00 PM - 5:00 PM

BASIC SKILLS

KADEE COUPLERS - A TREATISE

Hobbs, Paul

Improve the operating performance of your trains with consistent installations of your couplers. We will discuss considerations in layout design, preparing the couplers, coupler mounting methods, and deal with different manufacturers' cars and locomotives.

SUNDAY 2:30 PM - 3:30 PM

FRIDAY 4:00 PM - 5:00 PM

BENCHWORK & TRACK

TURNOUT CONSTRUCTION FOR APPEARANCE AND RELIABILITY

Ataras, Bill

A simple approach for scratch building turnouts will be described. Bill has earned the Model Railroad Engineer, Civil Achievement Program Certificate using these techniques. In addition, the same methods have been used to construct curved turnouts, three-way turnouts, crossings, and even 12-point double slip switches. We will go step-by-step from laying out the turnout to constructing all of the parts. Even the frog is so simple that many past attendees have overcome their fears and built reliable, high quality turnouts for their own layouts.

SUNDAY 8:30 PM - 9:30 PM

TUESDAY 8:30 PM - 9:30 PM

BRASS MODELS

IMPORTED HO BRASS BY INTERNATIONAL MODEL PRODUCTS

Nesbit, Bill

Clinic will present examples of International Model Products HO brass locomotives and different bridges. On-hand will be the brass and the different style boxes IMP used, during the 1950's. The presentation contains many examples of models made by Tetsudo Mokei Sha, which IMP imported, including some reportedly made, but, not

SUNDAY 8:30 PM - 9:30 PM

TUESDAY 1:00 PM - 2:00 PM

COMPUTERS

ONLINE RESOURCES FOR MODEL RAILROADERS

Fugate, Joe

The Model Railroad Hobbyist mediaZine staff de-mystifies the tricks to finding the best model railroading resources on the internet. If you want to leverage the world wide web as an information resource for your hobby, this is a "don't miss" clinic.

MONDAY 4:00 PM - 5:00 PM

TUESDAY 4:00 PM - 5:00 PM

COMPUTERS, SIGNALING, AUTOMATION

ADDING PROTOTYPICAL SIGNALING TO YOUR MODEL RAILROAD

Chubb, Dr. Bruce, MMR

Bruce expands upon the "Signaling Made Easier" series published in MR, "Understanding Railroad Signals" published in Scale Rails and the newly released multi-volume "Railroader's Application Handbook" ABS, APB and CTC are explained along with their impact on how railroads operate. Block detection, signal placement, total compatibility with DCC and how to easily drive different signal types are addressed. Bruce explains how to use the new Super Mini-Node card coupled with the power of the computer, to joyfully reduce layout wiring and significantly reduce

TUESDAY 2:30 PM - 3:30 PM

THURSDAY 8:30 PM - 9:30 PM

INTERFACING A COMPUTER TO YOUR MODEL RAILROAD

Chubb, Dr. Bruce, MMR

OPSig CLINC - LDSIG -

Bruce, the inventor of the Computer/Model Railroad Interface explains how easy it is to interface a computer to your model railroad. Focus is on a new Super Mini-node that greatly improves I/O distribution and significantly reduces system cost. Up to 128 nodes can be distributed all around your layout using a single 4-wire cable. Simply connect any device directly to the nearest node. Applications focus on reducing layout wiring, signaling systems, staging track control, and interfacing to DCC. The result can greatly increase your railroad's prototypical realism and hobby enjoyment.

TUESDAY 4:00 PM - 5:00 PM

THURSDAY 7:00 PM - 8:00 PM

DCC & SOUND

AC/DC/DCC.

Albers, Dr. Gerry

Good primer for both uninitiated and experienced DCC users. DC and AC technology is briefly presented. Popular DCC systems and their Cab Bus architectures are discussed as a factor in choosing a system. "DCC wiring basics" puts the user on the "right track". Occupancy detector selection and wiring introduces signal system concepts. "Signals By Spreadsheet" clinic follows

MONDAY 1:00 PM - 2:00 PM
WEDNESDAY 4:00 PM - 5:00 PM

ADVANCED DCC PROGRAMMING FOR LIGHTING, SOUND, AND PROTOTYPICAL OPS

Wheelbarger, Lee

A complete tutorial of how to install, and program, Lights, and Sound, for Prototypical operations using Decoder Pro, and the Quantum Programmer. Covering, MRC, NCE TCS, Soundtraxx, and QSI

I encourage the audience to ask questions as well, and normally I have a Q, and A session for the last few Minutes

MONDAY 8:00 AM - 9:00 AM
TUESDAY 10:00 PM - 11:00 PM

ASPECT BASED SIGNALING WITH JMRI PANELPRO

Bronson, Dick - Bob Jacobsen - Dave DuChamp

JMRI's PanelPro has supported use of signals for many years, including tools for implementing signal logic. JMRI's new Aspect Based Signaling provides an enhanced capability to model the signals as used by various railroads in a more realistic way. Aspect Based Signaling will be described, and the capabilities of this new feature will be discussed. This session should be of interest to all model railroaders interested in signaling.

WEDNESDAY 2:30 PM - 3:30 PM

BIG SOUND FROM LITTLE TRAINS

Ireland, Jarrette

An introduction for modelers to the world of scale sound, including an overview of what is currently available, how to install sound, and what the ingredients of good full sound are. This is a commercial clinic.

THURSDAY 7:00 PM - 8:00 PM
FRIDAY 7:00 PM - 8:00 PM

CREATE A DETAILED CTC MACHINE MODEL WITH JMRI PANELPRO

Bronson, Dick - Dave DuChamp - Bob Jacobsen

PanelPro allows you to add a fully functioning model CTC machine to your layout, either a virtual panel on your computer screen, or a physical panel using switches and lights. This clinic will discuss the basics on how this can be done to create one for your own model railroad. A classic US&S machine appropriate for the mid 20th century will be modeled on the computer screen.

WEDNESDAY 4:00 PM - 5:00 PM

DCC SPEED STEPS

Frey, Robert

"DCC Speed Steps" was an article and photographs by Robert Frey published in Scale RAILS August 2008 pages 26 to 29. Almost all DCC decoders now support the three-point speed table CV2-6-5, where CV2 sets the starting voltage, CV6 adjusts the midpoint speed and CV5 adjusts the top speed of an engine by lowering the maximum motor voltage.

All DCC decoders are received from the manufacturer with the address (CV1) set to 03, and the CV2-6-5 are all set to 0. This clinic is a procedure to find the CV values that will give a start of 5 MPH, a midpoint of 30 MPH and maximum speed of 60 MPH. A good way to measure MPH is with a speed trap. A table with a 30 MPH and a 3 MPH Speed trap for use in N, HO, S, or O Gauge will be given as a handout in this clinic. With this speed trap table, any scale speed can easily be measured with a stopwatch and a yard stick.

MONDAY 11:00 AM - 12:00 PM
TUESDAY 10:00 PM - 11:00 PM

DIGITRAX USER FORUM

Ireland, Zana - A.J. Ireland

The annual Digitrax User Forum is your opportunity to learn what's new at Digitrax; and, have all your questions answered. This is a commercial clinic.

THURSDAY 8:30 PM - 11:00 PM

INTRO TO JMRI AND PANELPRO'S LAYOUT EDITOR

Duchamp, David - Dick Bronson

JMRI is a computer software written by a bunch of model railroaders to make it easier to program DCC decoders and to run trains. This session will provide a brief introduction to JMRI, including DecoderPro and PanelPro, then focus on using Layout Editor to build panels and run trains using PanelPro. This clinic should be of interest to those new to JMRI, and should provide new insights to experienced JMRI users.

TUESDAY 1:00 PM - 2:00 PM

INTRODUCTION TO LAYOUT CONTROL WITH JMRI PANELPRO

Bronson, Dick - Dave Duchamp

PanelPro is a JMRI program that can help you add control panels, signals, turnout control, and other automation to your layout. This session will show you how to create computer-based control panels using PanelPro's Panel Editor. All model railroaders, whether new to JMRI or experienced users, should be interested in this dynamic

TUESDAY 2:30 PM - 3:30 PM

JMRI - NEW AND ADVANCED FEATURES

Jacobsen, Bob - Dave DuChamp - Dick Bronson

This clinic focuses on the features and capabilities added to JMRI DecoderPro and PanelPro since last summer. We'll demonstrate some new and cool things you can do, and show you how to get more out of the program with some options & tools you may not have noticed yet. Although there will be lots of time allocated for questions, the Q&A session is intended for discussion of new and advanced features.

WEDNESDAY 7:00 PM - 8:00 PM

JMRI USER GROUP MEETING: WHAT'S NEW AND COMING?

Jacobsen, Bob - Dick Bronson - David Duchamp

DCC -

JMRI, including DecoderPro and PanelPro, is software for model railroaders to use in our great hobby. Whether you are new to JMRI, or an experienced JMRI user, please come to hear about in-progress development suggest new things, and meet others in the JMRI community. After a Q&A session focused on new and coming JMRI features, the floor will be open for general questions and suggestions related to all areas of JMRI.

WEDNESDAY 8:30 PM - 11:00 PM

LENZ USER'S FORUM

Ames, Debbie

Explore the Lenz DCC product line, learn about the new features in Version 3.6, and hear about our new "PLUS" line of ecoders. Special emphasis will be given to user's questions and ideas for new features and products. This is a commercial clinic.

THURSDAY 7:00 PM - 8:00 PM

MRC DCC BEGINNER SEMINAR

Sandor, Tim

You will receive hands on instruction using MRC's DCC system by the end of the seminar you will be able to program and operate a DCC system. You will also learn about decoders and other related equipment. This is a commercial clinic.

SATURDAY 9:30 AM - 12:00 PM

PROTOTYPE SOUNDS AND OPERATION OF A DIESEL TSUNAMI

Bogatiuk, George

Come and explore all of the sounds and features found in your Tsunami equipped locomotives and learn how to operate them just like the real thing. Included in this clinic will be setting up the sound to match a specific locomotive, what the sounds of a locomotive are, what they do, and how to use the sounds just like the real prototype. This is a commercial clinic.

THURSDAY 10:00 PM - 11:00 PM

FRIDAY 10:00 PM - 11:00 PM

PROTOTYPE SOUNDS AND OPERATION OF A STEAM TSUNAMI

Ireland, Jarrette

Come and explore all of the sounds and features found in your Tsunami equipped locomotives and learn how to operate them just like the real thing. Included in this clinic will be setting up the sound to match a specific locomotive, what the sounds of a locomotive are, what they do, and how to use the sounds just like the real prototype. This is a commercial clinic.

THURSDAY 8:30 PM - 9:30 PM

FRIDAY 8:30 PM - 9:30 PM

RUNNING TRAINS WITH JMRI's DISPATCHER

Duchamp, David - Dick Bronson - Bob Jacobsen

JMRI provides many features that make it easier to run trains with the aid of a computer. This clinic will provide an introduction to Dispatcher, a new addition to JMRI that allows running trains both manually and automatically. Features of Dispatcher will be presented, manual operation will be demonstrated, and current progress on automatic running will be discussed.

WEDNESDAY 1:00 PM - 2:00 PM

ELECTRONICS, SIGNALING, DETECTION

LD/OP SIG - PLANNING FOR SIGNALS FORUM

Albers, Dr. Gerry

Effective signaling must be planned physically, as well as electrically, before and during construction. This is a chance to learn from, and ask questions of, the experts, those who have had experience as their teacher.

THURSDAY 11:00 AM - 12:00 PM

SIGNALING PRACTICES ON PROTOTYPE AND MODEL RAILROADS

Ataras, Bill

Prototype practices will be explained for automatic block signals and CTC signals. These types of signals are used to provide for safe train movements in a variety of situations. Always learning from the prototype, we will show how to use signals in similar model railroad situations. In addition, there are special signaling requirements that we modelers have. These will be described in detail to allow us to use train detection to enhance our operations. Simple ways to detect trains and operate both trackside signals and signal lights on panels will be presented.

All of the information will be presented so you can use these approaches on your layout. While rocket scientists are welcome, everyone will be able to install train detection and signaling. Feel free to ask your questions, either during the clinic, or whenever you see me.

WEDNESDAY 7:00 PM - 8:00 PM

THURSDAY 9:30 AM - 10:30 AM

SIGNALS BY SPREADSHEET

Albers, Dr. Gerry

Follows AC/DC/DCC clinic. Introduces an integrated hardware/software signal system based on lessons learned from Allen McClelland's original V&O signal system. "Average" model railroaders can implement sophisticated interlocking and signal systems. Simple spreadsheets are used for "programming". No additional wiring is necessary for an existing DCC layout. A live demo drives the point home.

MONDAY 2:30 PM - 3:30 PM

WEDNESDAY 7:00 PM - 8:00 PM

FREIGHT EQUIPMENT

HOPPER TO HOLD, HOLD TO HOPPER

Nelson, Capt. Al

The loading of the S.S. Arthur M. Anderson, a 767 foot Great Lakes bulk freighter, being loaded with coal at Sandusky Ohio and the same ship unloading 28,000 tons of limestone in Duluth Harbor.

TUESDAY 11:00 AM - 12:00 PM

THURSDAY 10:00 PM - 11:00 PM

MODELING OPEN LOADS

Frankrone, Bob

Open Loads: Many 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 real crowd pleaser.

TUESDAY 7:00 PM - 8:00 PM

FRIDAY 2:30 PM - 3:30 PM

OPEN AND UNUSUAL LOADS

Sima, Dave

Photos of open loads that are not so common. 50 nifty very realistic HO scale models you can model on display. Techniques used to secure the loads and some prototypical loading rules.

SUNDAY 10:00 PM - 11:00 PM

SATURDAY 8:00 AM - 9:00 AM

WEATHERING, LOADING AND CABLING A WALTHERS 72' CENTER BEAM LUMBER CAR

Jameson, Gene - Benita Jameson

A discussion of the history of transportation of lumber on the railroad and the cars that were used over the years, from the transition era to the modern era. This clinic gives a step by step description of how to model this unique car, either loaded or empty with all those neat looking cables.

WEDNESDAY 4:00 PM - 5:00 PM

THURSDAY 10:00 PM - 11:00 PM

HISTORY

HOW LONG DID IT TAKE TO BUILD A LOCOMOTIVE

Ristow, Bob

A power point look at locomotive construction in the 1920's using "The Baldwin Locomotive Works -1831-1915" by John K. Brown. Baldwin and Lima practices are used to answer the question, "How long did it take to build a steam locomotive?"

FRIDAY 2:30 PM - 3:30 PM

SATURDAY 11:00 AM - 12:00 PM

MILLITARY RAILROAD EQUIPMENT UPDATE, 1990-2010

Myers, Dave

Modern day look at recent and current railway equipment in use by the U.S. Army, Navy, Marine Corps, and Air Force. Provides a look at current paint schemes and new "green" energy efficient and near pollution free motive power being used.

SUNDAY 2:30 PM - 3:30 PM

MONDAY 2:30 PM - 3:30 PM

TRENSETING V&O RAILROAD

McClelland, Allen, MMR

This new PowerPoint Ppogram has the latest update on the Viginian & Ohio RR that was under construction. This presentation will show the use a computer for track planning and unique construction techiques. An overview of the V&O concepts fof prototype operation. History of the V&O with prize winding photos.

SUNDAY 8:30 PM - 9:30 PM

TUESDAY 11:00 AM - 12:00 PM

U.S. RAILWAY ARTILLERY IN THE GREAT WAR OVER THERE, 1917-1918

Myers, Dave

Historical look at the four little known U.S Coast Artillery Corps units sent to France in 1917 to support Allied armies until the American Army under General John J Pershing could join the fight. Photos from the National Archives, and Fort Monroe, VA

MONDAY 1:00 PM - 2:00 PM

WEDNESDAY 8:30 PM - 9:30 PM

INDUSTRIAL MODELING

BILLET CASTING

Skrabutenas, Joe

Billet casters operate about the same as a slab caster just smaller. The cast steel is called a billet or bar. Size of a billet is about 6"X6"X30-38'. The whole process starts with making iron or metal. That is transported to a BOF and the steel making process is started. It is then poured into the caster and is form in a billet. A steel billet is used for high quality steel for different applications such as bolts, nuts, housings, and wire for like coil springs. I will bring a couple of buildings and some rolling stock to show. If there is time I will talk about current operations of a steel mill where I work.

THURSDAY 2:30 PM - 3:30 PM

COPPER INDUSTRY PHELPS DODGE CORP

Knotts, Stan

The history of the copper industry in Arizona based on the Phelps Dodge Corporation. Includes both historical and current photos of the mines and railroads.

WEDNESDAY 8:00 AM - 9:00 AM

SATURDAY 2:30 PM - 3:30 PM

FROM SEA TO RAIL: A STORY OF GREAT LAKES SHIPPING - 1950 TO THE PRESENT

Bedell, Bill

Great lakes shipping featuring ocean going shipping, lake freighters, ferries, tugs and barges. Shots will include onboard and below decks and the drama of night time photos.

SATURDAY 9:30 AM - 10:30 AM

INDUSTRIAL SETTINGS

Larson, Lloyd, MMR

How to provide a dirty, gritty setting for heavy industries.

MONDAY 8:00 AM - 9:00 AM

THURSDAY 2:30 PM - 3:30 PM

MODELING COAL FIRED POWER PLANTS

Tillman, Dave

This clinic provides instruction in modeling coal-fired power plants focusing on scratch building. Elements include major elements of a coal-fired plant, different approaches to the plants, coal yards and becoming more green, and converting drawings and sketches into reality.

TUESDAY 11:00 AM - 12:00 PM

THURSDAY 8:30 PM - 9:30 PM

OIL DEALERS

Keyser, Lloyd

The operations of medium sized bulk oil dealers will be discussed, including proper piping and pump arrangement. Slides will cover small to medium sized facilities served by rail and will end with a mockup of a bulk dealer on Lloyd's layout.

TUESDAY 10:00 PM - 11:00 PM

THURSDAY 2:30 PM - 3:30 PM

ONE PIECE AT A TIME

Kohlmann, Keith

Bucyrus-Erie plant and Railroad Operations at South Milwaukee. Bucyrus-Erie has been producing massive mining machinery at this plant for over 100 years.

TUESDAY 7:00 PM - 8:00 PM

WEDNESDAY 2:30 PM - 3:30 PM

ROGERS LIME AND THOMAS COKE-STEEL MILL STRUCTURES FROM WALTHERS KITS

Altieri, Vince

Lime and coke (coal that has had the impurities removed) are two essential ingredients of steel making. This clinic will show how the Walthers Valley Cement kit can be totally re-worked (i.e. kit-bashed) into a lime processor with and operating kiln, similar to the one shown in Dean Freytag's " History, Making, and Modeling of Steel ". The second part of the clinic will show how the Walthers modular kits were modified and then used to model the Benzol plant from the Thomas Coke Works in Birmingham, Ala. Benzol is a by-product of the coke-making process. The structure has numerous scratch-built tanks and a maze of piping and valves. This model won the Dean Freytag Award at the 2008 Steel Mill Modelers' Meet and was featured in Lineside (the newsletter of the SIG-Heavy

THURSDAY 8:00 AM - 9:00 AM

STEEL LOADS - PLATE STEEL AND I BEAM

Jameson, Gene - Benita Jameson

A discussion of the different steel loads and the cars used to carry them. This clinic gives a step by step description of how to model a plate steel load on a 60 foot standard flat car and an I-beam load on a 60 foot

SUNDAY 7:00 PM - 8:00 PM
TUESDAY 9:30 AM - 10:30 AM

STEEL LOADS, PART II - EXTREME STEEL LOADS

Jameson, Gene - Benita Jameson

This clinic gives a step by step description of how to model an extremely large I-beam load on an 89 foot flatcar.

SUNDAY 8:30 PM - 9:30 PM
TUESDAY 11:00 AM - 12:00 PM

STEEL TRACK - ANIMATING A HULETT ORE UNLOADER

Day, Charles (Bill)

This clinic describes animating the Walthers HO Hulett Ore Unloader, using 130 kit parts and 300 scratch-built parts. Animation uses nine motors yet is relatively easy to construct. Animation includes sound and light as well as mechanical movement.

THURSDAY 1:00 PM - 2:00 PM

STEEL TRACK - BUILDING AND OPERATING AN INTEGRATED STEEL MILL

DiPaola, Jim

An Integrated Steel Mill is massive with hundreds of buildings and miles of railroad track. Through selective compression you will be shown how a Basic Oxygen Furnace, 2 Blast Furnaces, Continuous Caster, Rolling Mill, Power Plant and Blowing Engine House fit into a 32' x 26' layout set in a modern day theme. An overview of the specialized equipment and the movement of raw materials and finished product will also be presented.

THURSDAY 9:30 AM - 10:30 AM

STEEL TRACK - STEEL MODELING ROUNDTABLE

Camplin, Roger - Dean Freytag

Steel Modeling Roundtable w/ guests including Dean Freytag & others to be named later. Questions & answers along with show & tell regarding steel industry modeling.

THURSDAY 4:00 PM - 5:00 PM

THE PITS

Kohlmann, Keith

Vulcan Materials Quarry at Caledonia. This limestone quarry has been served by rail since it opened in the 1880's. See the pits, plants, railroads, and follow the changes in railroad operations over the years. Includes a look at steam narrow gauge, electric traction and present day unit train operations.

MONDAY 8:30 PM - 9:30 PM
WEDNESDAY 1:00 PM - 2:00 PM

LAYOUT DESIGN

BUILDING & OPERATING AN INDUSTRIAL STRENGTH RR - THE ALLEGHENY TERMINAL

Johnson, Greg

The Allegheny Terminal Railroad is a large industrial themed layout based upon the Pittsburgh, PA area highlighting steam to diesel operations of the PRR, B&O & P&LE. The layout was featured in Kalmbach's "Great Model Railroads- 2010". Construction methods, including foam sub-roadbed as well as how to build large structures out of Gatorfoam will be covered. The layouts industrial operating scheme will be described, including descriptions of switching jobs and how they are handled.

TUESDAY 2:30 PM - 3:30 PM

BUILDING THE THOMASVILLE REGION OF THE C&NW

Blocks, PE, Roger

An update showing how a semi monocque layout works. This O Gauge layout was designed to provide hands on design, construction and operation training for the author and six grandchildren.

MONDAY 8:30 PM - 9:30 PM

FRIDAY 7:00 PM - 8:00 PM

COLUMBIA GORGE MODEL RAILROAD CLUB - 63 YEARS OLD AND GOING STRONG

Auburg, Doug

The Columbia Gorge MRC is a 63 year old club with a 4200 sq. foot HO layout in Portland, Oregon (See the May 1994 MR for a cover story on their layout). In 1983 they built a new building and constructed a new layout in it. At the 1985 Milwaukee NMRA National Convention Doug presented two clinics on the construction of their building and layout. Now Doug will quickly review the construction and then bring the story up to date on what's been going on with this large, well established club.

SUNDAY 8:30 PM - 9:30 PM

FRIDAY 2:30 PM - 3:30 PM

DESIGNING & MODIFYING MY RAILROAD

Mayer, Gene

Gene will describe and discuss the revised plan for his coal hauling Freeborn & Western Railroad. He retired in 1995, constructed a 20 x 20 foot train room over the garage and began working on a new version of the FWRR. He changed the basic concept, era and geographic location and recently converted to Digital Command Control

TUESDAY 1:00 PM - 2:00 PM

SATURDAY 2:30 PM - 3:30 PM

DESIGNING THE DEEPWATER DISTRICT WITH CAD

Albers, Dr. Gerry

Advantages, disadvantages, and benefits of using Computer Aided Design (CAD) to design and build a model railroad are presented. Clinic is pragmatic in nature and includes construction tips, lessons learned and pictures of the semi-finished railroad. The topic of "what to look for in a CAD program" is addressed, followed by a "live" demonstration of CADrail 8. A list of current CAD products is provided.

TUESDAY 11:00 AM - 12:00 PM

WEDNESDAY 8:00 AM - 9:00 AM

DOCUMENTING YOUR LAYOUT

Jameson, Gene

The clinic will cover all the items that need to be documented, the what and how, from wiring to rolling stock.

MONDAY 10:00 PM - 11:00 PM

WEDNESDAY 2:30 PM - 3:30 PM

FREE-MO MODULAR STANDARDS

Slater, Mike

The Clinic is an informative clinic on the Free-Mo Modular standards that promote realistic operation, realistic scenery, and higher standards of detail. I am part of a group that is working on bring modules from almost 13 states to the National Train show.

WEDNESDAY 10:00 PM - 11:00 PM

THURSDAY 11:00 AM - 12:00 PM

LD/OP SIG - DESIGNING THE CSX SHENANDOAH DIVISION

Faulkner, Bruce

OPSig CLINC - LDSIG -

This clinic covers the prototype and operating influences on the design of the CSX 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 a virtual layout tour showing the latest construction progress on the layout. Bruce's layout is featured in "Model Railroad Planning 2010."

MONDAY 7:00 PM - 8:00 PM

TUESDAY 9:30 AM - 10:30 AM

LD/OP SIG - IMPROVING TRACK PLAN GRAPHICS

Koester, Tony

LDSIG -

We all plan layouts using sketches, CAD drawing tools and the like. How can these plans best be presented? Our moderated panel will delve into the intricacies of taking a detailed track plan and making it understandable for views of displays, magazine articles and web pages.

THURSDAY 2:30 PM - 3:30 PM

LD/OP SIG - LAYOUT DESIGN BOOTCAMP

Henderson, Byron

LDSIG -

Join a custom layout designer and other members of the NMRA's Layout Design SIG for an intensive session on track planning and layout design. Discover how to refine vision, concept, and purpose; select layout footprints and schematics; draw accurate and useful plans; create efficient and engaging yards and industrial areas; make best use of staging tracks; maintain space for people; and avoid common track planning errors. Whether your dream layout is strongly prototype-based, a creative freelanced theme, or somewhere in between, this practical session will give you the tools and best practices to design a great layout!

MONDAY 8:00 AM - 12:00 PM

LD/OP SIG -TURNOUT CONSIDERATIONS FOR LAYOUT DESIGNERS

Neumann, Seth

OPSig CLINC - LDSIG -

Learn what track work experts have to say about track planning for turnouts. Learn the pros and cons of hand laying, using jigs and kits as well as commercial turnouts. This moderated panel will feature experts on track work with ample opportunity for audience participation.

THURSDAY 1:00 PM - 2:00 PM

MULTI-DECK MODEL RAILROAD DESIGN AND CONSTRUCTION

Koester, Tony

"Model Railroad Planning" editor and MR Trains of Thought columnist Tony Koester will present an overview of the advantages and concerns related to the design and construction of multi-deck model railroads. He will also provide an update of progress on his own multi-deck HO layout.

MONDAY 7:00 PM - 8:00 PM

TUESDAY 7:00 PM - 8:00 PM

PROTOTYPE MODELING AND THE SUNSET VALLEY OREGON SYSTEM

Chubb, Dr. Bruce, MMR

LDSIG -

Dr. Chubb explains how the research, planning and layout design was accomplished with the assistance of over 60 NMRA and prototype Historical & Technical Society members. Using material obtained from historical archives and thousands of hours of prototypical research, the presentation provides rich examples illustrating how the prototypical-based material is applied to maximize the fidelity of the modeled system.

MONDAY 9:30 AM - 10:30 AM

WEDNESDAY 9:30 AM - 10:30 AM

STEEL BENCHWORK

Johnson, Ron

Steel stud wall systems can be quickly and easily assembled into model railroad benchwork that is light, sturdy, inexpensive, fire proof, easily modified and recyclable. Any layout would benefit, but this technique is especially valuable for modules, dominos, cassettes, multi-decks, shelves, mushrooms, and running behind the furnace.

SUNDAY 7:00 PM - 8:00 PM

TUESDAY 8:00 AM - 9:00 AM

THE ARGENTINE INDUSTRIAL DISTRICT RAILWAY (AIDRY)

Hitchcock, Chuck, MMR

There is a popular trend toward the designing and building of industrial railways and this clinic will cover the development of the concept, design, construction and operation of the AIDRY.

WEDNESDAY 8:00 AM - 9:00 AM

THURSDAY 4:00 PM - 5:00 PM

THE ART AND SCIENCE OF SELECTIVE COMPRESSION

Hanke, Jeffrey

A step by step approach to using a prototype track plan to create a selectively compressed version in your given modeling space. Analysis of the track plan, determination of the key features and removal of the unnecessary elements are all covered, using the presenter's Baltimore & Ohio main line, circa 1982, through Hancock WV, as an

SUNDAY 10:00 PM - 11:00 PM

TUESDAY 9:30 AM - 10:30 AM

TRACK PLANNING: A HANDS-ON DESIGN EXPERIENCE

Wesner, John

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 solution that best satisfies your goals? Come to this hands-on clinic. Our example will track planning, but the methods we use will have lots of applications.

WEDNESDAY 11:00 AM - 12:00 PM

THURSDAY 4:00 PM - 5:00 PM

ZACHOW: THE DREAM OF BUILDING YOUR HOMETOWN TO (OR IN N) SCALE

Rindt, Jim - John Dornfeld

We will like to focus on the idea of modeling a snapshot of an historical date in small town USA. Included will be the idea, logistics, history vs now, modeling - accuracy & methods, etc.

SUNDAY 2:30 PM - 3:30 PM

FRIDAY 7:00 PM - 8:00 PM

LIGHTING & SUPER DETAILING

LEDs FOR MODEL LIGHTING

Luzenski, Robert

Light Emitting Diodes (LEDs) are solid state lights that are available in many sizes and colors, including white. Superior to incandescent lamps, LEDs are brighter, with less heat, and significantly longer life. Learn how to use LEDs to light up your models. Clinic covers LED basics, simple drive circuits, use with decoders, and examples of LEDs in locomotives, rolling stock, and structures.

THURSDAY 2:30 PM - 3:30 PM

SATURDAY 11:00 AM - 12:00 PM

MAKE & TAKE - EXTRA FEE

BUILD A WAREHOUSE ROLL-UP DOOR

Day, Charles (Bill) - Carla D. Day

Following a power point presentation on fine scale animation by Bill and Carla Day, this make-and-take clinic enables attendees to build the key mechanism for an animated warehouse roll-up door, using a unique (provided) kit that includes Design Preservation Models panels and pilasters, Evergreen styrene H columns, door and bearing. Upon returning home, the modeler will need to provide a Tortoise switch machine and several DPM panels to complete the model. This roll-up door design has been covered by Model Railroader. A working model, winner of First Place (Popular Vote) online structures, at a national NMRA Convention, will be used as a teaching aid. Attendees receive a 15-page handout and two CDs replicating the presentation. Limit: 25. Cost to cover materials:

MONDAY 7:30 PM - 9:30 PM

MODELING w/ THE MASTERS: BUILDING A TURNOUT USING A COMMERCIAL FIXTURE

Kooning, Clark, MMR

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 can be up to 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 turnout from scratch using a commercial fixture from Fastracks. Attendance is limited to 28. Cost is \$30 for N, HO,

TUESDAY 1:30 PM - 6:30 PM

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

Hale, Miles, MMR - Clark Kooning, MMR - John Lowrance, MMR

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.

TUESDAY 7:30 AM - 12:30 PM

MODELING w/ THE MASTERS: BUILDING A LASER STRUCTURE KIT

Kooning, Clark, MMR - John Lowrance, MMR - Miles Hale, MMR

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.

SUNDAY 6:30 PM - 11:30 PM

MODELING w/ THE MASTERS: NANO-ANIMATION ELECTRONICS WORKSHOP

Eaton, Leslie, MMR

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 from the following six to be powered by it: a bright strobe flashing unit, a motion animation unit, a crossing flasher with a synchronized bell, a Flicker-N-Flame circuit, a circuit to allow street lamps to turn on and slowly increase in brightness, or a circuit that imitates the flicker from a colour television set for inside houses and buildings. This clinic is appropriate for beginners through MMR's. Attendees should have some experience soldering small parts. Attendees must bring a small soldering iron (max 40 watts) and soldering iron 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

WEDNESDAY 12:30 PM - 6:00 PM

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

Kooning, Clark, MMR - John Lowrance, MMR - Miles Hale, MMR

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

MODELING w/ THE MASTERS: SCRATCHBUILDING CAR LOADS FOR YOUR FREIGHT CARS

Lowrance, John, MMR - Miles Hale, MMR - Clark Kooning, MMR

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. In this clinic you will build scratchbuild three different "loads" for a freight car. In addition to this you will learn some basic weathering skills to be applied to the freight car which you will be supplied. Attendance is limited to 28. students. Cost is \$48 N and HO.

MONDAY 7:30 AM - 12:30 PM

MISCELLANEOUS

75 YEARS OF DEVELOPMENT AND ACHIEVEMENT IN MODEL RAILROADING

Hobbs, Paul

Our hobby today is vastly different from that available to our organization's founders in 1935. We will review a number of significant events, processes, inventions, companies and individuals contributing to the progress of our

SUNDAY 7:00 PM - 8:00 PM

MONDAY 8:00 AM - 9:00 AM

DANGERS OF RAILROADING

Sima, Dave

Photos and video clips of various accidents. Focus on the inherent dangers of railroading and safety programs developed to prevent accidents. How some derailments occurred and practices used to prohibit them from

SUNDAY 1:00 PM - 2:00 PM

SATURDAY 1:00 PM - 2:00 PM

HANDBOOK OF DIVISIONAL AND REGIONAL ACTIVITIES

Kaufman, Bill

Come learn about this new product that has been developed to help divisional and regional leaders produce better programs for their members

TUESDAY 7:00 PM - 8:00 PM

THURSDAY 4:00 PM - 5:00 PM

IS MODEL RAILROADING A MENTAL DISORDER?

Mihordin, Ron

Dr. Ron Mihordin, a model railroader since age 5 and a psychiatrist for the last 42 years, will discuss the social, biological, psychological, historical, and cultural factors that may explain why we became model railroaders. Part serious, part tongue-in-cheek, the clinic will present a classification of the psychological sub-types seen among model railroaders. The presentation will clarify and confirm what model railroaders and those who live with us have known, or suspected, by may not have put into words.

TUESDAY 9:30 AM - 10:30 AM

WEDNESDAY 8:00 AM - 9:00 AM

JUDGING THE MODEL CONTEST

Hamm, Bob, MMR

The NMRA National Contest Chairman, and Chief Judge Allen Gross, give the lowdown on the contest, and the benefits of judging; as well as how and when it is done. Team judging, matrix scoring, the five judging factors, and the AP Judging Guidelines are discussed. Each factor (construction, conformity, etc.) is then individually addressed, noting point allocation and critical aspects, with numerous examples. Some of the knottier issues are tackled, including size vs. complexity, scratch-built vs. kit-bash vs. kit-built, free lance vs. prototype, and more vs. less documentation. Questions and discussions of any contest issues are welcome. Attendance required for new

MONDAY 4:00 PM - 5:00 PM

MANUFACTURING MODEL RAILROAD PRODUCTS: HOW, WHAT, WHERE, WHEN & WHY

Smith, Donald - Daniel Huberman

How- How do you get a new product to market.

What- What products should you choose and what are the pitfalls.

Where- Where to get the product manufactured and at what cost.

When- When will it arrive and why are there so many delays.

Why- Why settler for mediocrity or should you push the envelope and produce a high quality product.

FRIDAY 10:00 PM - 11:00 PM

SATURDAY 8:00 AM - 9:00 AM

MODELING A MUSEUM

Wolfe, John

See how modeling a museum can enhance your operating potential and add to your equipment variety. We'll look at several museums and see how their unique features can be incorporated into your layout. Examples portraying a museum as both a secondary focus and a primary purpose are given to provide you with prototypical activities such as interchanges, switching, dispatching, and excursions.

SUNDAY 1:00 PM - 2:00 PM

MY JOURNEY INTO MODEL RAILROADING W/ THE GUIDANCE OF DEAN FREYTAG

Kennedy, Daniel

This presentation will be about how Dean has helped me create the B and B Steel Corporation and Hurricane Coal and Coke Company. Dean's help has been immeasurable.

THURSDAY 11:00 AM - 12:00 PM

NMRA NATIONAL CONVENTIONS, HIGHLIGHTS OF THE PAST TEN YEARS

Mangan, Paul

In this clinic we will review National Model Railroad Association's conventions from 1999 to 2009. We will begin by looking at the 2009 convention in Hartford with commentary and digital media. Following last year's review, we will go back to 1999 Tracks to the North Star, 2000 21st Century Limited and many more with musical background. Don't be too surprised if you see yourself or your layout in this presentation. Come on in, sit down, relax and enjoy this fun look back at the NMRA's national conventions.

MONDAY 9:30 AM - 10:30 AM

THURSDAY 11:00 AM - 12:00 PM

SO YOU WANT TO GIVE A CLINIC!

Hamilton, Jack

Getting started in the clinic circuit. Picking a subject, preparing the clinic, preparation tips, and getting ready for presentation. Replacing the fear associated with public speaking with a desire to share with others and learn more through teaching. This clinic will not make you an expert or even settle the butterflies (presenter still gets them) but you will be better prepared to tackle the challenge and perhaps earn some AP points toward Author or Volunteer.

TUESDAY 8:00 AM - 9:00 AM

SATURDAY 8:00 AM - 9:00 AM

THE EXCITING WORLD OF BROADWAY LIMITED PRODUCTS AND ELECTRONICS

Grubba, Bob

The exciting world of Broadway Limited Imports, locomotives, passenger cars, rolling stock and electronics. One lucky attendee will win a Paragon2 locomotive. This is a commercial clinic.

SATURDAY 1:00 PM - 2:00 PM

THE PRESENT STATUS OF S SCALE

Holt, William

In this clinic Will explores the status of S scale today, and overview of model railroading in S scale based upon products available today and examples of layouts in S scale.

MONDAY 8:00 AM - 9:00 AM

TUESDAY 8:30 PM - 9:30 PM

WALK, FLY OR BIKE THE ELROY SPARTA TRAIL (on original C&NW 400 route)

Blocks, PE, Roger

Love real rail. Bike and fly the Elroy-Sparta trail. Biking and flying stories of this former C&NW line between Chicago and Minneapolis, Duluth line, with personal photos and powerpoint.

WEDNESDAY 10:00 PM - 11:00 PM

FRIDAY 10:00 PM - 11:00 PM

NON-RAIL

BEADED NECKLACE

Spooner, Janet

Make a lovely beaded necklace. (Minimal charge) (LIMIT 20 PEOPLE)

MONDAY 2:30 PM - 3:30 PM

BEGINNER QUILTING

Lijewski, Kathy

Learn to make a 9" trivet. Will include a brief overview of hand piecing & quilting techniques easily transferrable to machine quilting. (Minimal charge) (15 PEOPLE)

WEDNESDAY 4:00 PM - 5:00 PM

BEGINNING BASKETRY

Snider, Ann

Learn to make a wood-base basket with twine & reeds from a renowned basket designer.

THURSDAY 8:30 AM - 10:30 AM

BINGO

Coleman, Rich

Spend the evening playing this old favorite.

MONDAY 7:00 PM - 9:30 PM

BLUE JEAN APRON

Harris, Margaret

Instructions for blue-jean aprons, pot-holders.

FRIDAY 4:00 PM - 5:00 PM

CHARADES

Milwaukee Committee, .

Let you "hair down", and enjoy play-acting words, movies, books and expressions.

TUESDAY 7:00 PM - 9:30 PM

CLINIC REVIEW

Kahrs, Chip - Janet Spooner - Dianne Forbes - Cindy Proeber

If you missed some clinics, we will have a review of some of the favorites.

SATURDAY 8:30 AM - 12:00 PM

CLOWNING AROUND

Loper, Annette

Watch a clown emerge while hearing the history of clowns and their make-up.

TUESDAY 3:30 PM - 5:00 PM

COLOR WHEEL

Law, Mary

Color basics & the psychology of color. "Paint" your own color wheel and gain color confidence for your home, garden and crafts.

MONDAY 1:00 PM - 2:00 PM

DREAMCATCHER

Howat, Patricia

Learn how to make a dreamcatcher.

THURSDAY 3:00 PM - 4:00 PM

FABRIC APPLIQUE

Proeber, Cindy

Applique a picture of a botanical bulb suitable for framing. (Materials fee)

FRIDAY 1:00 PM - 2:00 PM

FABRIC COASTERS

Forbes, Diane

In this class we will use fabric (from my stash) to sew coasters that stay on the base of a stemmed glass. We will also have the opportunity to decorate the strap to our badges using fabric yo-yo's, beads and buttons. All supplies will be provided both projects. Class fee \$5.

FRIDAY 8:30 AM - 9:30 AM

FISH-HOOK BOOKMARKS

Spooner, Janet

Make fisherman-hook bookmarks and pins.

THURSDAY 11:00 AM - 12:00 PM

GAMES GALORE

Milwaukee Committee, .

Enjoy an evening of card games, board games, etc.

WEDNESDAY 7:00 PM - 9:30 PM

GARDENING TIPS

Jaglinski, Marlene

Learn gardening tips from a Master Gardener.

FRIDAY 2:30 PM - 3:30 PM

HARVEY GIRLS

Spooner, Janet

Presentation of Harvey Girls plus DVD.

THURSDAY 7:00 PM - 9:30 PM

HEALING TOUCH

Mullins, Dianne

Find out how the use of human energy and touch can heal our bodies.

WEDNESDAY 10:00 AM - 11:30 AM

JEWELRY MAKING

Bullard, Patti

Learn techniques for making "wired-up beads."

FRIDAY 11:00 AM - 12:00 PM

LEMON LAYOFF

Spooner, Janet - Chip Kahrs

After the welcome, stay to meet others and enjoy a fun exchange of "gifts" as an ice-breaker.

MONDAY 9:30 AM - 11:30 AM

PICTIONARY

Kahrs, Chip

On your mark, get set, DRAW! Play the fun team game and draw your way to a win!

FRIDAY 7:00 PM - 9:30 PM

PROJECT LINUS

Mangan, Patti

We will make quilts to donate to a local children's hospital and to PROJECT LINUS.

TUESDAY 8:30 AM - 10:00 AM

SEARCH & RESCUE DOGS

Gardiner, Lynn - People & Paws

Learn how dogs are trained to rescue people from fires, water, cave-ins, etc.

WEDNESDAY 8:30 AM - 9:30 AM

SOCIALIZING PUPPIES

Meadowcraft, Nicole - Occupaws

Discover how puppies are "socialized" to become ready for Seeing Eye Dog training.

FRIDAY 9:30 AM - 10:30 AM

SPICE HOUSE

Erd, Kate

The lore and lure of spices.

WEDNESDAY 3:00 PM - 4:00 PM

TAI CHI

Urey, Margaret

MONDAY 4:00 PM - 5:00 PM

TAI CHI (TAPE)

Urey, Margaret

Achieve stress reduction, relaxation and improve balance and flexibility through gentle movements.

TUESDAY 8:00 AM - 8:30 AM

WEDNESDAY 8:00 AM - 8:30 AM

THURSDAY 8:00 AM - 8:30 AM

FRIDAY 8:00 AM - 8:30 AM

TEDDY BEARS

Manlick, Dolores

Teddy bear making demonstration.

THURSDAY 4:00 PM - 5:00 PM

WELCOME & CITY OVERVIEW

Kahrs, Chip

Description of clinics, changes in schedule, points of interest in Milwaukee.

MONDAY 8:30 AM - 9:30 AM

WIRED-UP BEADS

Bullard, Patti

Learn techniques for making "wired up beads" (LIMIT 20 PEOPLE)

TUESDAY 10:30 AM - 12:00 PM

WOMEN'S ROLE AMERICAN INDIAN COMMUNITY

Howat, Patricia

Understanding the role of the American Indian woman in the Indian community.

THURSDAY 1:00 PM - 2:30 PM

ZENTANGLE

Brusewitz, Yvonne

Zentangle is an easy method of creating beautiful images from repetitive patterns, and provides a sense of well-being and artistic satisfaction. \$5.00 fee to participate.

TUESDAY 1:00 PM - 2:30 PM

OPERATIONS, DISPATCHING

AN INTRODUCTION INTO COMMUTER RAIL

Schaumburg, Bill

Commuter railroad operations: Commuter railroading offers a great opportunity to add passenger service to a layout, not only for modeling but for operations, as this presentation shows using examples from various prototypes. It does not have to be four track mainlines and all rush hour, either, and it can be adapted to many layout sizes and

WEDNESDAY 11:00 AM - 12:00 PM

THURSDAY 7:00 PM - 8:00 PM

CENTRALIZED TRAFFIC CONTROL SYSTEMS

Chubb, Dr. Bruce, MMR

Bruce explains the basics of CTC operations and how it can smooth traffic flow on your railroad. As illustrated, constructing a dispatcher's CTC panel and interfacing it to your railroad is much easier than most modelers realize. Differences between US&S and GRS machines are explained and how their different components are interfaced. Additionally, entrance-exit interlocking is discussed along with using computer graphics to emulate modern dispatching operations.

SUNDAY 8:30 PM - 9:30 PM

THURSDAY 10:00 PM - 11:00 PM

CREATING MODERN CTC PANEL WITH CATS, Part 1

Black, Rodney

The first Clinic will focus on what needs to be done to a layout in order to set up computer controlled signaling via JMRI. More Specifically, it will look at the "nuts and bolts" (in this case, silicon and copper wires) of a signal system. It will touch on the requirements placed on the layout for switch machine control, turnout feedback, occupancy detection, driving signals, etc. The talk will illustrate how to fulfill those requirements with commercially available electronics. It will transition from the electronics to how to tell the computer software (CATS through JMRI) what is on the layout and how to use it.

MONDAY 7:00 PM - 8:00 PM
FRIDAY 2:30 PM - 3:30 PM

CREATING MODERN CTC PANEL WITH CATS, Part 2

Black, Rodney

The emphasis of the second talk will move from wiring the layout to creating the track plan for CATS and setting up the operational characteristics of a control panel. It will explore the features of CATS that assist in tailoring the control panel for custom operations. The tour of CATS will visit features of CATS for assisting in operating a model railroad with a prototypical feel. Through the use of a simulator, the talk will show how the layout elements appear on the control panel and how an operator (dispatcher) manipulates them to move trains across the layout. Because of time constraints, the second talk will refer to the first only in passing, so to avoid being lost, you are strongly encouraged to attend the first talk before going to the second.

MONDAY 8:30 PM - 9:30 PM
FRIDAY 4:00 PM - 5:00 PM

CREATING AN OPERATIONS SCHEME

Fryman, Jeff

A behind the scenes look at what goes in to turning an operations dream into an operations scheme, covering the research, development, and preparation of the paper work and jobs necessary to support an operations session on the TT&TO Operations Road Show layout seen at four of the recent NMRA conventions.

TUESDAY 2:30 PM - 3:30 PM
FRIDAY 2:30 PM - 3:30 PM

CTC DEMYSTIFIED 1 - INTRODUCTION TO CENTRALIZED TRAFFIC CONTROL

Geiger, Doug, MMR

Ever wondered about how a ctc machine worked or have wanted to implement a ctc machine for your own layout? From the 1930's through the 1980's, ctc machines were commonly large, relay-driven consoles used to move trains efficiently and safely. Using photos taken from a recently restored 1955 Union Switch & Signal ATSF-style ctc machine, this clinic will help you understand the basics of how those machines functioned. Definitions and photos of actual ctc hardware will illustrate how a typical dispatcher used a ctc machine. Model photos taken on the HO-scale Granite Mountain Railway are used to show how certain signals change when various ctc levers and buttons are operated.

MONDAY 9:30 AM - 10:30 AM
THURSDAY 7:00 PM - 8:00 PM

CTC DEMYSTIFIED 2 - ADVANCED CTC

Geiger, Doug, MMR

As a follow-on to part 1, this clinic will explore many of the more advanced concepts of centralized traffic control, including: preconditioning, fleet, and call-on to name just a few. Auxiliary ctc machine equipment, such as the line meter and blocking devices plus others will be discussed and shown. Like part 1, the clinic uses model photos to illustrate prototype concepts and operations of various ctc hardware running a model railroad layout. We will also spend some time learning how relay logic actually worked to control switches and signals on a prototype railroad by using only two wires via codes. If you are thinking to expand your own ctc machine in a prototypical manner or just want to learn more about centralized traffic control machines, then attend this clinic to discover these features.

MONDAY 11:00 AM - 12:00 PM

THURSDAY 8:30 PM - 9:30 PM

KAMRR - 1940 AUTOMATED DISPATCHER

Katzer, Matt

KAMRRs Classic Panel® software is a 1940 US&S manual dispatching software package. Classic Panel allows you to support multiple dispatching panels to control your layout operations either stand alone or over a network connection. Classic Panel allows each switch, or signal component to be defined down to the individual layout sensor. As a dispatcher, you have the option to select a traditional 1940 US&S view, or a more modern view with location feedback, and visual switch tips. Classic Panel software was first available in April 2001. This is a

FRIDAY 8:30 PM - 9:30 PM

LD/OP SIG - IMPROVED 4 CYCLE WAYBILLS

Pamperin, Ted

OPSig CLINC -

In collaboration with Tony Koester and with the following objectives in mind this more prototypical waybill car routing system is built upon the contributions of Steve King, Dan Holbrook, Bill Neale, John King and many others.

- Documents governing the routing of cars are prototypical in appearance and function.
- Car routing documents are contained in plastic sleeves, fit into existing Micro-Mark boxes and more convenient to handle.
- Complete flexibility in the number of cycles supported.
- Enable car router to use any empty home or foreign-road car for customer loading.
- Empty and loaded cars routed prototypically.
- Mine cars (hoppers and gondolas) routed prototypically.
- The convenience and ease of use of the existing 4 cycle system is retained.
- The system can be phased in by operators currently using the most common car card systems

THURSDAY 9:30 AM - 10:30 AM

FRIDAY 7:00 PM - 8:00 PM

LD/OP SIG - RUNNING THE BUCKLAND WAY FREIGHT WITH TT&TO

Sexsmith, Cal

This clinic shows how TT&TO can be adapted to a typical model railroad by following the progress of one train across the railroad. Topics discussed will include timetables, clearances and train orders.

MONDAY 2:30 PM - 3:30 PM

LD/OP SIG - TRACK & SCENERY DESIGN FOR A PRAIRIE TOWN

Sexsmith, Cal

In this clinic I will go into the reasons for choosing a particular prototype for my layout and explore in detail the design of one of the towns. The clinic will include photographs of the prototype and several of the design options that were explored before arriving at the final design. The clinic will conclude with photos of progress to date on construction of the town.

MONDAY 1:00 PM - 2:00 PM

LD/OP SIG-HIDDEN SECRETS OF HOSTING OP SESSIONS:HOW IT'S DONE ON THE CSX

Faulkner, Bruce

This clinic covers the hidden secrets of hosting operating sessions by examining the planning and execution of operations on the CSX Shenandoah Division, a 17' x 43' N scale double-deck layout. Drawn from his experience hosting operating sessions on two different layouts, Bruce will share insights into a variety of operating topics, including session planning and setup, personnel responsibilities, car routing, dispatching, and the supporting paperwork. Hosting an operating session often involves significant planning and preparation, so both session hosts and crew members may learn useful techniques.

MONDAY 8:30 PM - 9:30 PM

TUESDAY 11:00 AM - 12:00 PM

LD/OP SIG - PROTOTYPICAL WAYBILLS FOR REALISTIC OPERATION

Thompson, Tony

OP SIG CLINC -

The popular four-cycle waybill, used in many operating schemes, has the drawback that minimal prototype information is included, and that often the four cycles become a permanent feature for a particular car, never leaving the car card. An alternative approach is described, along with a discussion on what is useful for modeling in the information on a prototype waybill. The use of these waybills in a layout operating scheme is presented and illustrated on the speaker's layout, and the gains in flexibility and realism are emphasized.

THURSDAY 8:00 AM - 9:00 AM

OPERATIONS ON THE APPLE ROUTE

Henize, Fred

This clinic illustrates how an operating session on Amrail, the Apple Route, is set up and conducted. Handouts include copies of all the forms and other documents used on the layout, an 18 x 28 foot N-scale layout. There is room for 9 crews and a dispatcher.

TUESDAY 9:30 AM - 10:30 AM

WEDNESDAY 8:00 AM - 9:00 AM

OPERATIONS ON THE LOUISVILLE SOUTHERN LINES

Frankrone, Bob

Operations on the Louisville Southern Lines: If you think you can't operate your layout...think again. In this clinic, Bob discusses how he transformed his LSL layout into an operating layout long after it was designed and built. He presents a short history of the layout; describes the cities, towns and industries; and diagrams the LSL route map. Bob explains his requirements for model railroad operation, the constraints his layout poses, and the mechanics of an operating session on the LSL.

WEDNESDAY 9:30 AM - 10:30 AM

FRIDAY 4:00 PM - 5:00 PM

OPERATIONS ON THE RICE LAKE, DALLAS & MENOMONIE RAILROAD

Wundrock, Bob

The clinic gives a brief overview of my RLD&M HO scale layout but concentrates on prototypical operations. It will follow the assembly and on-line switching of a mainline train as well as extra and branch line trains.

MONDAY 9:30 AM - 10:30 AM

SATURDAY 11:00 AM - 12:00 PM

OPERATIONS OVERVIEW

Koester, Tony

A review of why timetable and train-order operation is so much fun as well as a detailed look at a new prototypical waybill system.

MONDAY 8:30 PM - 9:30 PM

TUESDAY 8:30 PM - 9:30 PM

OPSIG INDUSTRIAL DATABASE

Williamson, Randy

A little known research database listing over 50,000 industries located in North America.

SATURDAY 9:30 AM - 10:30 AM

PROTOTYPE OPERATIONS ON THE SUNSET VALLEY OREGON SYSTEM

Chubb, Dr. Bruce, MMR

OPSig CLINC -

The SVOS models 10 prototype railroads operating in the Pacific Northwest in 1955 and seeing how operation of the different railroads intertwine is a most interesting and informative story. Over 125 trains operate during a simulated 24 hour day. Prototype modeling of passenger traffic operating in and out of Portland OR is an important ingredient along with 7 major classification yards set up to handle freight traffic. Prototype research, selective compression, dispatching, a new freight car forwarding system and operator interaction are discussed.

MONDAY 11:00 AM - 12:00 PM

WEDNESDAY 11:00 AM - 12:00 PM

PUTTING ORDER INTO LAYOUT OPERATION

Galka, Chris

What conditions do Prototype railroads consider when implementing train control systems and how you can model them? This clinic is designed to address train control systems. CTC, interlockings, Yard Limits, Track Warrants, etc.

Building a CTC system can be an operating marvel, but it's not the answer for everyone. What can you do today to abolish chaos and conflict on your model railroad. Learn how railroads apply diverse concepts to meet operating conditions by observing several case studies based on layouts both prototypical and model. Often more than one solution applies to any scenario. Considerations such as Era, Traffic Density, Class of Railroad and other factors help clarify typical examples. Situational questions encouraged. This clinic does not address waybills, car cards, switchlists, or other auxiliary operations.

FRIDAY 8:30 PM - 9:30 PM

SISKIYOU LINE POTPOURI

Fugate, Joe

Now that Joe Fugate's Siskiyou Line has traversed the 1980's timeline on his HO layout, what's ahead? This clinic includes layout design tips, modeling tips, DCC tricks, and some insightful operations anecdotes.

MONDAY 2:30 PM - 3:30 PM

TUESDAY 2:30 PM - 3:30 PM

THE BASICS OF A CENTRALIZED TRAFFIC CONTROL MACHINE

Burgett, Mike

Learn how to design, construct, and operate a prototypically correct centralized traffic control machine. Learn how these machines operated and how they would react to a variety of wayside conditions. See an accurate reproduction of a prototypical CTC machine operate before your very eyes, try your hand at lining up switches and signals across a fully interlocked CTC machine.

FRIDAY 7:00 PM - 8:00 PM

SATURDAY 1:00 PM - 2:00 PM

PASSENGER EQUIPMENT

PASSENGER TERMINALS AND SERVICING FACILITIES: PROTOTYPE EXAMPLES

Clark, Robert A.

The clinic focuses on the wide variety of servicing facilities needed to service passenger trains at large terminals and is illustrated with slides of facilities such as coach yards, Pullman buildings, commissaries, car washers, mail and railway express buildings. Track diagrams of large city terminals are shown. Switching of these facilities is described. Handout includes specifications on servicing platform design and utilities such as compressed air, water,

TUESDAY 9:30 AM - 10:30 AM

THURSDAY 8:00 AM - 9:00 AM

PROTOTYPE EQUIPMENT

ON REBUILDING THE MILWAUKEE RR BRIDGE AT HASTINGS, MN.

Blocks, PE, Roger

Bridge 268 built in 1871 as a 300 swing bridge across the Mississippi River channel, was replaced with only a two days outage with a modern lift bridge.

MONDAY 10:00 PM - 11:00 PM

WEDNESDAY 8:30 PM - 9:30 PM

PROTOTYPE MODELING

A MILWAUKEE ROAD PRESENTATION IN 35mm: RACINE WI and AREA

Bakus, Doug

See the possibilities of modeling The Milwaukee Road in Racine WI in pictures and diagrams.

SUNDAY 7:00 PM - 8:00 PM

MONDAY 2:30 PM - 3:30 PM

CHICAGO & NORTHWESTERN PROTOTYPES

Liba, Carl

Modeling the Northwestern? Attend this clinic to see what the 400's and the city trains looked like. Show will include steam and diesels. Will cover system but will have many local scenes.

TUESDAY 10:00 PM - 11:00 PM

WEDNESDAY 7:00 PM - 8:00 PM

CLEVELAND, WISCONSIN, REVISITED

Hanke, Rich

Cleveland, Wisconsin is a small agrarian community whose life and economy revolved around the C&NW Ry. Hear how Rich gleaned pictures, prototype information and colorful stories about this wonderful town. See how Rich used what he found to model Cleveland during the 1950's.

MONDAY 1:00 PM - 2:00 PM

THURSDAY 8:00 AM - 9:00 AM

FREIGHT CARS NOT OF YOUR FAVORITE PROTOTYPE - WHY YOU NEED THEM

Wolohon, Larry, MMR

This is a clinic on why you ought to have cars of other prototypes on your layout. I will present some facts & figures on the size of fleets of some prototype RR's & how they fit in. Also I will show some of the types, classes of freight cars that were a sizeable number in the late 1940's.

MONDAY 10:00 PM - 11:00 PM

SATURDAY 1:00 PM - 2:00 PM

GETTING INSPIRATION FROM THE PROTOTYPE

Burgess, Jack, MMR

Prototype modeling, in its many forms, is growing rapidly in popularity. Even freelanced layouts are based, in most ways, on prototype railroads. The prototype can therefore provide inspiration for our layouts and models in a multitude of ways, from rolling stock and scenery to details and operating schemes. In this all-new clinic, Jack will show how easy it is to use prototype photos and other information sources for dozens of satisfying model

MONDAY 4:00 PM - 5:00 PM

WEDNESDAY 9:30 AM - 10:30 AM

IT'S A MILK RUN! MODELING MILK TRAIN EQUIPMENT AND OPERATIONS

Lewtas, Ted

You've heard the term "Milk Run" applied to an activity that is low-key, unhurried or low priority. Think again, a milk run was anything but. A perishable commodity, specialized equipment and tight schedules made the transport of milk a colorful aspect of railroading that can add interest to almost any layout up to the steam/diesel era.

The prototype portion of the clinic will include a brief history of the economics of the milk business and the evolution of milk cars and associated structures. The model portion of the clinic will show examples of what is available for modeling milk cars and related structures through side-by-side comparisons of prototype cars and structures to models I have built. I will have copies of books and magazines that contain information on modeling milk trains. There will be some discussion of how milk train operations might be incorporated into a layout.

MONDAY 10:00 PM - 11:00 PM

WEDNESDAY 9:30 AM - 10:30 AM

LD/OPSIG - C&O SAGINAW SUB IN N SCALE

Young, John

OPSig CLINC - LDSIG -

Explore the decision making process of creating a C&O based layout designed to support Time Table and Train Order operations. Attention to creating a mainline length long enough to fully utilize TT&TO style operations is the primary goal of this layout. Multi level with unique features to support the planned operation style, this will be life time goal layout. Built as point to point, division point to division point, this is a C&O prototype based layout without mountains or hundreds of coal hoppers.

SATURDAY 9:30 AM - 10:30 AM

LIVESTOCK BY RAIL

McQueeney, Jim

A look at the history of moving livestock by rail, from the 1800's to today, including rolling stock, animals transported and facilities used.

THURSDAY 2:30 PM - 3:30 PM

FRIDAY 8:30 PM - 9:30 PM

MILWAUKEE ROAD PROTOTYPES

Liba, Carl

Milwaukee Road modelers take note. Hiawatha trains and city trains as well as freight, with steam and diesels will be in this slide show. Prototypes of CMSP&P historic slides will be presented. Many Milwaukee locality shots but also system wide.

WEDNESDAY 8:30 PM - 9:30 PM

THURSDAY 7:00 PM - 8:00 PM

MODELING C&NW RY PULPWOOD CARS AND MOVEMENTS

Hanke, Rich

The C&NW moved large amounts of pulpwood and logs. Rich will discuss the history and the modeling of several of the unique cars that brought the pulpwood to the mills in Northern Wisconsin.

MONDAY 2:30 PM - 3:30 PM

THURSDAY 2:30 PM - 3:30 PM

MODELING FROM THE PROTOTYPE

Leider, David, MMR

In my case Waupaca, Wisconsin as it existed in 1947. I will explain why I choose that town and date and the research I did. I will give examples of where to look and what one might find along the way.

WEDNESDAY 9:30 AM - 10:30 AM

THURSDAY 4:00 PM - 5:00 PM

MODELING NEWPORT NEWS, VIRGINIA -- C&O

Roberts, John, MMR

Design of layout and modeling ideas for modeling Newport news, VA in 1971 on the C&O railway. Also modeling Newport News ShipBuilding and Drydock Co. interchange with the C&O.

MONDAY 11:00 AM - 12:00 PM

THURSDAY 8:30 PM - 9:30 PM

MODELING THE MODERN C&NW SECOND HAND FREIGHT CAR FLEET

Phillips, David

Although this clinic focuses on the secondhand freight cars that represented a large portion of the modern C&NW freight car fleet, many modelers will find this clinic full of ideas that they can incorporate into their own modern-era rolling stock fleets. Modeling cars with restenciled reporting marks is a quick and easy way to add realism to any modern-era layout.

THURSDAY 1:00 PM - 2:00 PM

PROPER CAR PLACEMENT IN TRAINS

Henize, Fred

This clinic illustrates through Powerpoint and handout how prototype rules regarding hazardous loads and restricted equipment can be applied to your model railroad to enhance operation. The clinic is presented by a former conductor who worked for CSX.

TUESDAY 11:00 AM - 12:00 PM

WEDNESDAY 4:00 PM - 5:00 PM

RESEARCHING, DESIGNING & BUILDING SP SWITCHING LAYOUT- T&NO CLINTON BRCH

Johnson, Greg

This clinic will provide information on the prototype SP Clinton Branch, its interesting history and great variety of industries. The clinic will show the variety of sources used for historical research, including Sanborn Insurance maps, Historical Society information and local historical resources. The layout design aspect will describe how the 11' x 22' shelf layout was conceived, with industries and operating concepts woven into its design. The layout design phase will also describe how the plan is designed to be incorporated into a much larger future SP, Houston-area layout. Construction information will detail the sectional construction methods utilizing extruded foam, Homosote and Topper Tape for roadbed.

TUESDAY 8:00 AM - 9:00 AM

SP FREIGHT CARS YOU CAN MODEL

Thompson, Tony

This talk presents examples of kit and kit conversion models in HO scale that represent important SP freight cars for the steam-diesel transition era. All types of cars, from flats and gondolas to box, tank and hopper cars and cabooses, are included. The focus is on accurate and reasonable representations of each prototype car, not of museum-quality modeling. Some information on car usage is also included. A handout summarizes the car classes and commercial model(s) used as the basis for each car.

MONDAY 7:00 PM - 8:00 PM

THURSDAY 7:00 PM - 8:00 PM

STEAM-ERA TANK CAR BASICS, WITH MODELING APPROACHES

Thompson, Tony

Several aspects of the construction of tank cars are described, with the aim of understanding modeling variations among prototypes as well as challenges in reproducing them. Car handling and car usage is also described to help understand possible modeling choices. Several tank car projects will be presented, for both insulated and uninsulated cars in HO scale, to illustrate the various techniques and approaches to these interesting prototypes. Comments about decal artwork for those unusual cars are also included.

MONDAY 10:00 PM - 11:00 PM

SATURDAY 11:00 AM - 12:00 PM

RAILFANNING & PHOTOGRAPHY

RAILFANNING HOT SPOTS IN SOUTHEASTERN WISCONSIN - NORTHERN ILLINOIS

Schmidt, Keith

For those might be interested in catching some 1:1 scale railroading while in town for the NMRA Convention. I will highlight some of the spots where trains from the various railroads that serve Milwaukee and the area can be seen. The local railroads include Union Pacific, Canadian Pacific, Canadian National and Wisconsin & Southern. I will use photos from the locations also maps and possibly the internet to show off the locations.

SUNDAY 1:00 PM - 2:00 PM

RAILFANNING WITH HAL CARSTENS - 70 YEARS OF CHASING TRAINS

Barry, Steve

The Colorful Railroad World of Hal Carstens. The clinic will feature steam, diesel and traction scenes from Hal's seven decades of taking photographs. Canadian steam, the Colorado Narrow Gauge and New York's 3rd Avenue Elevated are just three of the many subjects that will be seen during the show.

TUESDAY 8:00 AM - 9:00 AM

WEDNESDAY 10:00 PM - 11:00 PM

SPECIAL PHOTOS and PHOTO SPECIALS

Schmidt, Keith

This presentation will include photos from special guests that have appeared in Milwaukee and the area in the past several years. Some of these guests include UP #3985, Milw Road #261, Soo Line #1003 and SP #4449. There have also been some diesel special guests from Wisconsin & Southern and Union Pacific. Also shots from some Photographers Specials that were held in the area featuring Soo #1003.

SATURDAY 9:30 AM - 10:30 AM

RAILROAD HISTORY

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

Sacco, Jim

The title pretty much says it all. A photo history of the gas station in North America followed by some tips that may help modelers build a more realistic model of one. Ending with a look at common, unusual, or just plain wacky gas stations. Sit back, relax and just enjoy the photos. Most of the modeling tips are useful to all eras and style of stations being modeled.

TUESDAY 9:30 AM - 10:30 AM

FRIDAY 8:30 PM - 9:30 PM

ABRAHAM LINCOLN, FUNERAL TRAINS AND URETHANE CASTING

Wesolowski, Wayne

The first half is a really well-researched clinic on the historical Lincoln funeral Train filled with photos, drawings and stories about what may have been the largest traditional funeral in the nation's history. Fully one-third of the nation personally came trackside to just catch a glimpse of the Lincoln Train.

The second half is entirely on making the 1/12 museum quality scale models of the train and is really a 1/2 clinic on scratchbuilding using urethane castings. I dress as a Veterans Reserve Sergeant who was one of the pallbearers. This clinic would be of interest to both modelers and spouses.

TUESDAY 10:00 PM - 11:00 PM

WEDNESDAY 11:00 AM - 12:00 PM

FIRST GENERATION DIESELS FROM AROUND NORTH AMERICA

Bedell, Bill

Centipedes, Sharks, Babyfaces, and Covered Wagons -- Have you ever wondered what these names mean? Come to Bill's clinic and he'll show you. First Generation Diesels from around North America, including photos from all the major builders and many of the minority and specialty builders used by class 1, short lines and industrial

SUNDAY 8:30 PM - 9:30 PM

LAST STEAM OPERATION ON THE B&O RAILROAD

Klein, Chuck

The story of the last steam operation on the Baltimore & Ohio Railroad on May 17, 1958. This steam excursion, sponsored by the Cleveland Railroad Club, ran from Cleveland to the southern Ohio coal fields at Holloway. See the magnificent EM-1, Big 6 Santa Fe's and F-7 units.

FRIDAY 7:00 PM - 8:00 PM

SATURDAY 2:30 PM - 3:30 PM

MILWAUKEE ELECTRIC RAILWAY SYSTEM - AN OVERVIEW AND SEARCH FOR REMNANTS

Wundrock, Bob

An overview of the electric railway system that was in the Milwaukee area. I also show locations where remnants (track, structures, etc.) can be found. I use historical black & white/color photos and slides showing equipment, locations and maps of the system.

MONDAY 11:00 AM - 12:00 PM

SATURDAY 9:30 AM - 10:30 AM

MILWAUKEE ROAD CABOOSES

Kehoe, Jeff

Cabooes of the Milwaukee Road will be the topic of a slide presentation by the Milwaukee Road Historical Association member, Jeff Kehoe. His clinic includes modeling tips and examples of preservation efforts.

WEDNESDAY 2:30 PM - 3:30 PM

RAILFAN VIEWS OF MILWAUKEE, THE 1935-1955 ERA

Kohlmann, Keith

Slides of the railroads operating in the Milwaukee area in the 1935-1955 era. This will include C&NW and CMS&P freight and streamliners; CNS&M and TMER&L interurbans and street cars; GTW/ PRR and PM/C&O

MONDAY 7:00 PM - 8:00 PM

TUESDAY 8:30 PM - 9:30 PM

RAILROAD CHAPEL CARS

Coleman, Rich

A look at the history of American railroad chapel cars, and the building of a model of one. (This is a filler description -- I'll get you a better one later)

TUESDAY 4:00 PM - 5:00 PM

THURSDAY 11:00 AM - 12:00 PM

SEVENTY FIVE YEARS OF RAILROADING

Stewart, Steve

Steve will show the evolution of railroad motive power technology from 1934 to 2011. Photographs will show US railroads' transformation from steam to diesel. Some electric motive power will also be featured. Colorful paint schemes from early diesel days will be shown. The contrast with the later years will be striking.

THURSDAY 11:00 AM - 12:00 PM

SATURDAY 1:00 PM - 2:00 PM

THE GREAT NORTHERN FROM A TO Z

Hilton, Jerry

Examples of each different wheel arrangement of steam locomotive that the GN had (0-6-0s were their class A, 4-6-6-4s were class Z), plus the electrics, diesels and some of the more interesting and unusual cars and equipment they had. Starting with their Class G-5 4-8-0s, which were the largest locomotives in the world when built in 1898, the GN was noted for its large and powerful motive power, which included "Hustle Mustle", the first EMD SD-45 built. Their Class R-2 2-8-8-2s, which the railroad built themselves, had the highest tractive effort of any simple articulated steam locomotive ever built. (Sorry about that UP Big Boy fans!)

SUNDAY 2:30 PM - 3:30 PM

FRIDAY 8:30 PM - 9:30 PM

TWO SCENIC RAILROADS AND A CANAL

Frankrone, Bob

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 11:00 AM - 12:00 PM

THURSDAY 10:00 PM - 11:00 PM

U.S. MILITARY RAILROADS IN THE CIVIL WAR: 1862-1865

Myers, Dave

In-depth look at President Abe Lincoln's nationalization of civilian railroads and their operation by the military during the upheaval of our civil conflict. Photos from the National Archives in Washington D.C. and various military

TUESDAY 10:00 PM - 11:00 PM

WEDNESDAY 7:00 PM - 8:00 PM

SCENERY

EASY CITY STREETS USING SINTRA

Sacco, Jim

What is Sintra and what is it good for? Come in and find out why it is a neat, easy-to-use alternative to many commonly used methods of making city streets. Includes some basic guidelines for modeling urban streets that are applicable to most methods of street construction.

TUESDAY 1:00 PM - 2:00 PM

WEDNESDAY 8:30 PM - 9:30 PM

FOAM SUBTERRAIN . . . THE WOODLAND SCENICS WAY

Hale, Fran, MMR - Miles Hale, MMR

The newest method for building your layout or module is with high-density foam. Woodland Scenics has it all in the SubTerrain 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 tool and with very little mess. This is a commercial clinic.

MONDAY 8:30 PM - 9:30 PM

TUESDAY 8:30 PM - 9:30 PM

FROM THE TRACK BACK

Larson, Lloyd, MMR

This clinic describes 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 4:00 PM - 5:00 PM

THURSDAY 1:00 PM - 2:00 PM

FUN WITH PLASTER

Spice, Jim

This is a hands on scenery clinic in which I actually show the techniques of hard-shell and soft shell scenery and rock molding etc...also casting with latex molds. A diorama is built in about an hour...

TUESDAY 2:30 PM - 3:30 PM

SATURDAY 1:00 PM - 2:00 PM

HARD WATER

Edwards, Bill

Discussion and demonstration of various ways to model water using substances other than resin, hard substances.

You will be amazed at the results that can be obtained without the hassle of modeling the stream bed or pouring liquids.

We will also discuss and demonstrate making waterfalls, adding ripples, current lines etc. so that the water on your

SATURDAY 8:00 AM - 9:00 AM

HOME BREW SCENERY

Magoun, Pete, MMR

Scenery doesn't have to be expensive. See how common, free items such as real dirt, plants and leaves can be used in making scenery. Add in a few inexpensive, non-traditional materials and your scenery will "pop."

SUNDAY 2:30 PM - 3:30 PM

MONDAY 4:00 PM - 5:00 PM

LINE POLES AND POLE LINES -- THE MOST OVERLOOKED ASPECT OF MODEL RR

Schorr, Neal

Line poles, the telephone poles found along railroad tracks, were found along virtually all mainline railroads through at least the 1980's. Nevertheless, they are usually modeled incorrectly if at all on most model railroads. This clinic takes a look at how the prototype constructs and uses line poles and pole lines, the collective assemblage of telephone poles, wires, and the right of way upon which they are installed. It will then turn its attention to how the modeler can realistically model them on their layout. Neal's work on this subject and others has appeared in "Model Railroad Planning", "How to Build Realistic Reliable Track", and "Model Railroader."

THURSDAY 9:30 AM - 10:30 AM

FRIDAY 10:00 PM - 11:00 PM

MATCHBOOK SIGNS AND BILLBOARDS

Harbin, Donald

Learn how to make great looking billboards from matchbook covers using a scanner and home computer. Billboard and advertising can help set the time period and tell a story on your layout. Easy to master skills will help make your layout come alive. Mostly a visual demonstration with handout.

MONDAY 10:00 PM - 11:00 PM

MODELING AGRICULTURE

Lana, Patrick, MMR

I'll show some of the many faces of agriculture--in different seasons and regions of the US but mostly in the Midwestern summer. I discuss some of my favorite methods of modeling Midwest agriculture including research and modeling of crops, livestock, buildings and machinery. The majority of time will be spent on modeling N scale crops like corn, soybeans, and hay. Although I model in N scale these concepts will work in other scales.

MONDAY 7:00 PM - 8:00 PM

THURSDAY 4:00 PM - 5:00 PM

MODELING GRADE CROSSING SCENES

Ataras, Bill

The basic design requirements for prototype grade crossings will be presented. Then, slides of numerous prototype scenes, all including grade crossings, that would provide interesting scenes on model railroads will be presented and described. The goal is to describe some of the variety of grade crossings that can be modeled, and to point out often overlooked details that add interest to the scenes we model.

Sources for many of the items we should include in our scenes will be provided.

WEDNESDAY 4:00 PM - 5:00 PM

THURSDAY 8:00 AM - 9:00 AM

MODELING VEHICLES TO COMPLIMENT YOUR RAILROAD

Lana, Patrick, MMR

Trains are our main focus but the interchange of freight and passengers with other modes of transportation sets the scene, shows the era being modeled and the geographic location, and gives a reason for why we and real railroads operate the way we do. In this clinic, various modes - automobiles, trucks, farm equipment, and some boats and aircraft will be discussed. Topics include sources for scale models, painting and simple alterations, kit-bashing and scratch-building. Although I model in N scale these concepts and methods apply to all scales.

MONDAY 4:00 PM - 5:00 PM

THURSDAY 1:00 PM - 2:00 PM

NATURE'S WAY OF MODELING REALISTIC SEDIMENTARY ROCKS

Rathbone, Michel

Many railroads run through sedimentary rocks that are difficult to model realistically. Mimicking the natural rock formation enables modeling these rocks in natural layers as they were formed. Combining layers can precisely copy the natural rock formations in a face many feet high. A casting step with slight variations enables construction of a large area very quickly. When painted correctly that rock face becomes very realistic, and can even be viewed as foreground scenery.

MONDAY 9:30 AM - 10:30 AM

POLYESTER TREES DONE CORRECTLY

Edwards, Bill - Paul Godwin

The polyester tree method for creating a forest canopy as well as the oft-neglected "edge of the woods" technique which makes the whole thing work properly. Bill has been acknowledged as the inventor (arbitrary) of this process. This clinic is usually well received. There have been some new techniques introduced to the original method---techniques that make it easier and quicker to get desired results. Web sites for obtaining these new supplies will be provided in the clinic.

FRIDAY 10:00 PM - 11:00 PM

SCENERY - FROM SOUP TO NUTS - SESSION 1: PLANNING & PLASTERING

Bussard, John

This is a package of six one-hour clinics of scenery instruction/demonstration 1st hour Planning & Plastering, 2nd hour Painting & Textures, 3rd hour Scenery Repair & Roads, 4th hour Conifers & Bushes, 5th hour Deciduous Trees, 6th hour Scenery Detailing & Happy Hour.

SATURDAY 8:00 AM - 9:00 AM

SCENERY - FROM SOUP TO NUTS - SESSION 2: PAINTING & TEXTURES

Bussard, John

This is a package of six one-hour clinics of scenery instruction/demonstration 1st hour Planning & Plastering, 2nd hour Painting & Textures, 3rd hour Scenery Repair & Roads, 4th hour Conifers & Bushes, 5th hour Deciduous Trees, 6th hour Scenery Detailing & Happy Hour.

SATURDAY 9:30 AM - 10:30 AM

SCENERY - FROM SOUP TO NUTS - SESSION 3: SCENERY REPAIR & ROADS

Bussard, John

This is a package of six one-hour clinics of scenery instruction/demonstration 1st hour Planning & Plastering, 2nd hour Painting& Textures, 3rd hour Scenery Repair & Roads, 4th hour Conifers & Bushes, 5th hour Deciduous Trees, 6th hour Scenery Detailing & Happy Hour.

SATURDAY 11:00 AM - 12:00 PM

SCENERY - FROM SOUP TO NUTS - SESSION 4: CONIFERS & BUSHES

Bussard, John

This is a package of six one-hour clinics of scenery instruction/demonstration 1st hour Planning & Plastering, 2nd hour Painting& Textures, 3rd hour Scenery Repair & Roads, 4th hour Conifers & Bushes, 5th hour Deciduous Trees, 6th hour Scenery Detailing & Happy Hour.

SATURDAY 1:00 PM - 2:00 PM

SCENERY - FROM SOUP TO NUTS - SESSION 5: DECIDUOUS TREES

Bussard, John

This is a package of six one-hour clinics of scenery instruction/demonstration 1st hour Planning & Plastering, 2nd hour Painting& Textures, 3rd hour Scenery Repair & Roads, 4th hour Conifers & Bushes, 5th hour Deciduous Trees, 6th hour Scenery Detailing & Happy Hour.

SATURDAY 2:30 PM - 3:30 PM

SCENERY - FROM SOUP TO NUTS - SESSION 6: SCENERY DETAILING & HAPPY HOUR

Bussard, John

This is a package of six one-hour clinics of scenery instruction/demonstration 1st hour Planning & Plastering, 2nd hour Painting& Textures, 3rd hour Scenery Repair & Roads, 4th hour Conifers & Bushes, 5th hour Deciduous Trees, 6th hour Scenery Detailing & Happy Hour.

SATURDAY 4:00 PM - 5:00 PM

SCENERY MAKING TIPS II

Russ, Joe

A second generation clinic (my late dad and I gave it at the 1985 National) on how to use cheesecloth, newspaper, and molding plaster to make scenery. It will also cover using Rit Dye for coloring plaster, sand for ballast, and sawdust for grass. It will also cover making your own rock molds and castings, and trees from Sedyim.

WEDNESDAY 1:00 PM - 2:00 PM

FRIDAY 7:00 PM - 8:00 PM

SOME SIMPLE SCENERY TECHNIQUES

Darnaby, Bill

Bill will show us some of the modern materials and methods available to the modeler. Bill will give an update on state-of-the-art scenery techniques (electrostatic grass, narrow scenes, etc.) that he recently gave at the Naperville and Cocoa Beach Prototype Modeler meets. Bill is the craator of the highly regarded Maumee Route, featured in the pages of Model Railroader and Model Railroad Planning magazines.

THURSDAY 8:00 AM - 9:00 AM

FRIDAY 4:00 PM - 5:00 PM

TERRAIN AND LANDSCAPING -- THE WOODLAND SCENICS WAY

Hale, Fran, MMR - Miles Hale, MMR

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. This is a commercial clinic.

MONDAY 7:00 PM - 8:00 PM

WEDNESDAY 8:30 PM - 9:30 PM

THE JOY OF BACKDROP PAINTING

Spice, Jim

This is a play on words from the old PBS series..Also a "hands on" clinic I show how to paint a backdrop using acrylic paint and after I make one I call upon someone from the audience and they do one to show how easy it really is. about an hour...

TUESDAY 4:00 PM - 5:00 PM

SATURDAY 2:30 PM - 3:30 PM

THE ROOTS OF MAKING TREES

Harbin, Donald

Make great looking inexpensive trees using the roots of common 'weed' plants. By adding commercial foliage materials to the weed stock, spring, summer, fall and even bare winter branches make for some great looking trees. Slides. Some hands on modeling.

TUESDAY 8:00 AM - 9:00 AM

SCRATCH BUILDING & KIT BASHING

KIT-BASHING HOn30 MOTIVE POWER FOR NARROW GAUGE APPLICATIONS

Gliebe, Phil

This clinic presents the author's experiences in kit bashing HOn30 locomotives from N-scale drive mechanisms utilizing both conversion kits and kit bashing standard gauge kits for locomotive superstructures. Inspired by the pioneering work of Frary and Hayden published in MR and RMC, and articles in Light Iron Digest, the author has built several steam, diesel and gas-mechanical locomotives for various narrow gauge applications utilizing relatively inexpensive ingredients. This clinic describes the inspiration for each of these locomotives, their construction, special assembly techniques, detailing, and running characteristics.

WEDNESDAY 4:00 PM - 5:00 PM

FRIDAY 2:30 PM - 3:30 PM

PRIVATE STOCK, ROLLING THAT IS

Guintier, Robert

A photo roster of his railroad, Tryangit Southern or TS Lines. All of the cars have been painted and lettered with custom decals, and weathered. Most also have been kit-bashed, but nothing real complicated. Most of the work is well within the scope of most model railroaders.

TUESDAY 8:00 AM - 9:00 AM

WEDNESDAY 1:00 PM - 2:00 PM

SCRATCHBUILDING 101

Gough, Ron, MMR

This clinic is about the very, very, VERY basics of scratchbuilding, demonstrating the basic procedures and principles. 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.

MONDAY 9:30 AM - 10:30 AM

TUESDAY 7:00 PM - 8:00 PM

SCRATCHBUILDING 102 (Recommended prerequisite: Scratchbuilding 101)

Gough, Ron, MMR

This clinic addresses How To scratch build prototypical details for structures, rolling stock and the layout.

MONDAY 11:00 AM - 12:00 PM

TUESDAY 8:30 PM - 9:30 PM

TAKE YOUR STRUCTURES FROM STANDARD TO STELLAR!

Jameson, Benita

Discover how to transform a generic styrene building into a highly detailed model uniquely crafted to suit your layout. Topics to be discussed include kit selection, staging, painting, weathering and super detailing.

SUNDAY 2:30 PM - 3:30 PM

MONDAY 4:00 PM - 5:00 PM

TURNING INEXPENSIVE STYRENE KITS INTO "FRONT ROW" BUILDINGS

Alley, Katharine

"Front row" buildings are those that are intended to be viewed through the bottom part of your bifocals. With a little care in selection, painting, and staging, inexpensive styrene kits can shine in this role. Suggestions will cover selection of kits; preparation of parts for painting and assembly; three methods for making realistic bricks (pastes, washes, and dry brushing); detail painting; people painting; and, weathering. And conclude by combining these elements into small scenes worthy of a place of honor on your layout.

WEDNESDAY 9:30 AM - 10:30 AM

SATURDAY 11:00 AM - 12:00 PM

SIGNALLING

HOW I BUILT MY RAILROAD SIGNALS

Metal, David

This clinic provides detailed instruction on building and wiring a signal using a commercial signal target, some brass tube and some plastic shapes. Results in a nice working signal for less than \$8.00.

MONDAY 1:00 PM - 2:00 PM

HOW I SIGNED MY MODEL RAILROAD

Metal, David

This clinic goes into the planning and preparation of the railroad before starting to install signals. The clinic discusses creating signal blocks, block detection, signal drivers, wiring standards and wiring for the installation of

MONDAY 2:30 PM - 3:30 PM

STRUCTURES

AN INSIDE LOOK AT CRAFTSMAN QUALITY KITS

Fahie, Art

An Inside Look At Craftsman Quality Kits - How They're Made & How To Get The Most From Them. Presented by the owner of the Bar Mills Scale Model Works.

FRIDAY 10:00 PM - 11:00 PM

BUILDING HANCOCK "HO" TOWER IN HO SCALE

Hanke, Jeffrey

A clinic covering a complete scratchbuilt structure of the B&O mechanical interlocking tower at Hancock, WV. The clinic covers everything including history, taking measurements, making a plan and all phases of construction, painting, detailing and weathering this signature B&O structure.

SUNDAY 7:00 PM - 8:00 PM

TUESDAY 10:00 PM - 11:00 PM

CITIES, VILLAGES & TOWNS with DPM

Hale, Fran, MMR - Miles Hale, MMR

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. This is a commercial clinic.

TUESDAY 7:00 PM - 8:00 PM

WEDNESDAY 7:00 PM - 8:00 PM

GIPX: TECHNIQUES FOR WINDOWS AND INTERIORS

Richards, John

A step-by-step guide to completing your model buildings with highly-detailed windows and interior settings -- using straight-forward tools available right on your computer and the Internet. Included will be a live demonstration of techniques for creating show windows with art glass window inserts, custom signage and commercial logos. Quick but realistic "2-1/2 D" interiors combine transparent, opaque and metallic effects, all using low-cost

THURSDAY 11:00 AM - 12:00 PM

FRIDAY 8:30 PM - 9:30 PM

MODELING SANTA FE AND OTHER SIX LEG TRESTLES

Barrett, Mike

Prototype Atcheson, Topeka, & Santa Fe design documentation and photographs are presented. Techniques for modeling the trestles and using the Black Bear construction jig and Trestle Buddy are discussed. A specific trestle near Lubbock, Texas, is modeled. Techniques for modeling round legs, square legs, pile bents and frame bents are presented. This is a commercial clinic.

WEDNESDAY 10:00 PM - 11:00 PM

SATURDAY 8:00 AM - 9:00 AM

SEVEN SIMPLE STRUCTURES

Swanson, Sam

Small and simple structures can help fill out scenes, on everything from large layouts to portable modules. Methods for building structures from a variety of common materials are covered. Examples include scratchbuilt and kitbashed sheds, fishing shacks, garage, well house, outhouse, and cottage residence. Inexpensive finishing and weathering techniques, using a grey primer spray paint basecoat with water-based paint overcoats, will also be

TUESDAY 4:00 PM - 5:00 PM

THURSDAY 9:30 AM - 10:30 AM

WOODEN BRIDGES AND TRESTLES

Coleman, Rich

A wooden bridge or trestle can be one of the scenic highlights of a layout. This clinic will take a look at some of the different types, and the situations where each should be used, and why. We'll also talk about some of the tips and techniques for constructing both the big masterpieces and the small structures that can add character to a scene on even a modern layout.

TUESDAY 2:30 PM - 3:30 PM

THURSDAY 9:30 AM - 10:30 AM

TOOLS & TECHNIQUES

BUILDING RESIN FREIGHT-CAR KITS

Sperandeo, Andy

In an illustrated how-to-do-it talk, Andy takes the audience through the construction of a typical HO scale boxcar kit step by step, with advice on tools, materials, techniques, and when to follow or ignore the kit instructions. Andy also shows examples of kits from at least five different resin kit manufacturers.

TUESDAY 1:00 PM - 2:00 PM

THURSDAY 1:00 PM - 2:00 PM

BUILDING TURNOUTS THE FAST TRACKS WAY

Warris, Tim - Clark Kooning, MMR

Watch as Tim Warris, the developer of the Fast Tracks turnout building system, demonstrates how to build a turnout using a turnout assembly fixture. While Clark Kooning, MMR helps to describe the process and offer tips and hints as Tim builds a complete turnout in less than an hour! This is a commercial clinic.

WEDNESDAY 8:00 AM - 9:00 AM

CHOOSING, USING, MAINTAINING AND TROUBLESHOOTING YOUR AIRBRUSH EQUIPMENT

Schlotfeldt, Ken

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 with it.

WEDNESDAY 1:00 PM - 2:00 PM

THURSDAY 8:00 AM - 9:00 AM

DECALING BASICS

Hanke, Jeffrey

A clinic covering all aspects of decaling including types, tools, how to, troubleshooting, and a myriad of decaling projects. The purpose of the clinic is to give a model railroader of any skill level an overview of what is possible with decals. Example decal project cars will be shown and passed around.

TUESDAY 1:00 PM - 2:00 PM

FRIDAY 2:30 PM - 3:30 PM

ETCHED BRASS KITS

Guerra, Glenn

Etched brass kit technology

What are etched brass kits, how are they made, and some features of the kits.

Tools and techniques for forming the etchings

Cutting the etching, forming the rivets, and forming the etching for assembly

Tools and techniques for soldering the etching

Soldering techniques and tools with some info on soldering materials.

MONDAY 8:00 AM - 9:00 AM

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

Lee, John, MMR

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

WEDNESDAY 11:00 AM - 12:00 PM

EYESIGHT, AGING AND THE MODELER

Meetz, Richard

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

MONDAY 1:00 PM - 2:00 PM

FRIDAY 4:00 PM - 5:00 PM

FEAR NO STRIPWOOD KIT - BUILDING OLD CRAFTSMAN KITS W/ MODERN TECHNIQUES

Riley, George

Languishing on our shelves, in closets and down in the basement there resides collections of old kits. Far from being obsolete and un-buildable with new methods and materials they can easily be the stars of our collection. Using new techniques, finishing materials, tools and adhesives anyone can construct these older kits to today's standards.

SUNDAY 1:00 PM - 2:00 PM

MONDAY 8:00 AM - 9:00 AM

FIFTY YEARS OF MODELING TIPS AND IDEAS

Wesolowski, Wayne - Mary Cay Wesolowski

Experts to beginners will be entertained and learn new skills from this fast-paced potpourri of ideas, tips, notions and philosophies about building better models. Cutting your own stripwood, bending styrene, weathering aluminum with olive oil, plaster and urethane casting, building design with symmetry and chemical etching are just a few of the many topics covered in HO to 1/12 scale. Come and join the fun.

TUESDAY 7:00 PM - 8:00 PM

THURSDAY 4:00 PM - 5:00 PM

FUN, FOOLPROOF PAINTING WITH WATER BASE ACRYLIC PAINTS

Schlotfeldt, Ken

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

WEDNESDAY 2:30 PM - 3:30 PM

THURSDAY 9:30 AM - 10:30 AM

NANO ANIMATION FOR UNDER \$10

Eaton, Leslie, MMR

Animation for your layout the easy way, with 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

TUESDAY 1:00 PM - 2:00 PM

PROPER USE OF LUBRICANTS

Kannry, Harry

Learn the proper use of lubricants for your engines, rolling stock and track, including why, when, where, and how to use lubricants on your model railroad equipment and layout.

THURSDAY 8:30 PM - 9:30 PM

WHAT'S NEW IN MY TOOL BOX

Hamilton, Jack

Taking a look at some of the different or unique tools used in modeling. You will be surprised at where some of the tools come from and what other people think they should be used for. Clinic hopes to open your mind to different opportunities to acquire tools to make a difference in the hobby. Come away with a list of tools and sources.

SUNDAY 7:00 PM - 8:00 PM

TUESDAY 4:00 PM - 5:00 PM