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A Clinic by Steve “Breezy” Gust

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The Basics of Operations

Operations on a model railroad can be one of the most challenging and fun aspects of the hobby. To many of us, it can also be intimidating. Like many other abilities in this hobby, starting with some basic, simple steps and building on acquired skills can provide rewarding experiences. Once exposed, many model railroaders find operating to be the most enjoyable experience in the hobby. It requires planning, skill and attention to detail.

Excellent resource material is available in many of the most popular model railroad publications. Look for articles by Bruce Chubb, John Armstrong, Tony Koester, Jim Kelly and Andy Sperandio to name just a few. Another excellent resource is the Operations Special Interest Group. They publish a helpful magazine four times a year. See me after the clinic if you need more information...

So, What Is Operations?

One definition of operations is the practice of running your model railroad in a manner similar to the real rail transportation industry. Remember that transportation is a service industry and the customers are the shippers and consignees who contract with the railroad to transport their products or inventory between two or more points. Customers are served by the crews on the trains by providing timely delivery of products or the empty equipment in which to load the product. The manner in which this service is accomplished can be determined by a timetable, operations handbook, a simple one-page description of the operating plan or even an illustration on the wall. The simplicity or complexity of this process in the model railroad realm is largely up to the individual modeler. As with benchwork, scenery or rolling stock, it is best to start simple. Even if you have a complex track plan, start with some simple tasks and become proficient before taking the giant leap!

Getting Started

I suggest developing an operating plan based on an interest you have in prototype railroading. Do you enjoy the mining industry? Or perhaps you have a fascination with scrap metal recycling? How about the shipping of finished lumber or paper products? A decision regarding the products shipped to or from industries on your railroad isn't absolutely necessary, but it can enhance your fun. In other words, the type of equipment (boxcars, tank cars, gondolas) operating on your railroad can be determined by the industries you serve. This can be further refined (or not) by choosing an era in which to model: For instance, it would not be likely to see a steam powered locomotive from the early 1900's pulling a string of modern double-stack equipment. It might also be considered unusual to find stock cars spotted at an oil refinery. Anyway, deciding what you ship (or receive,) and when you ship it can be part of the fun. It can also lead to some interesting research.

Destinations, Destinations...

If you have decided what and when you are shipping, then the next step should be where do the cars come from and where do they go? Many operators solve this question by creating tracks that are "off the layout" for the purpose of staging. Even if you have a simple loop railroad with just a couple of industrial spurs, the "far side" of your loop can serve as your fiddle and staging...a place where equipment can be exchanged or removed by hand. A basic operation could involve bringing a train from the loop to the front of your layout and switching an industrial spur by exchanging loaded cars from the factories for empty cars in your train. If your railroad has a siding or runaround, you can even turn your train by cutting your engine off and running to the other end of your train and repositioning the caboose on the opposite end to allow the train to depart in the opposite direction from arrival!

The Jobs Not Complete Until the Paperwork is Done!

Many operators employ record keeping methods to keep track of equipment and record movements. There are computer programs printed card programs available for this purpose. These systems provide information regarding car movements based on reporting marks and/or car types. They can be complicated or simple and further enhance the operating experience. These systems will usually list car initial and number, type of car, lading (load or empty,) origin and destination.

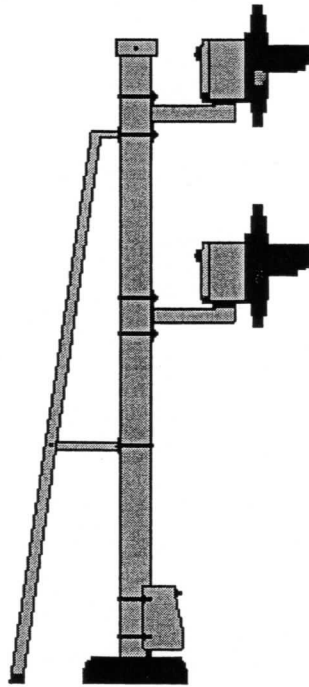
So, What Are Some of the Basic Tools Necessary?

Well, a model railroad would help, but isn't always necessary (talk to me about club membership.) As previously stated, a complicated track plan isn't required either. Many years ago, famed modeler John Allen designed a great operating layout requiring only five turnouts and a space of just 12"X56" in HO scale. There were no lists, no timetables, and no waybills, yet this trackplan continues to endure and is considered by some to be one of the finest small railroad plans ever conceived. It is still featured as the switching contest at many model railroad conventions and meets. Basically, industry trackage, a means to runaround equipment, the ability to re-arrange equipment and origins and destinations (real or imaginary) is all you need.

What are You Waiting For?

So go home and assess that pike. Do you have the basic ingredients and the desire to operate? You might be surprised how easy the system can be applied to your railroad. Hopefully I have provided some ideas and insights to stir your interest in model railroad operations. I've attached some common operating terms (by no means, a complete list!) and some operating suggestions from past clinics and projects I've done for my personal layouts and those of clubs where I've been a member. Please feel free to contact me if you have questions about getting started in Model Railroad Operations!

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The following pages are operating suggestions on my own personal layout (The Clay & Mud Point Railroad) and on club layout for the Denver HO Model Railroad Club (Denver & Western)

I hope they will serve to spark your interest in operations! Enjoy!

WESTWARD ↓		STATIONS	↑ EASTWARD	
Station Number	Siding Feet			Mile Post
01570	300	TROUBLESOME	A B R	680.0
02045		U.P. CROSSING 0.1		679.9
02040		CLAY 6.9		673.0
		(7.0)		

Welcome to the Clay & Mud Point Railroad

History and Theme: The C & MP actually started life as the Coquille and Myrtle Point in 1984 representing the end of a very short line on the Oregon coast. The C & MP relocated to California in 1989 and changed the name to the fictitious but catchy title it bears today. It is intended to represent the end of a short line common carrier in the California Central Valley in the 70's era. The concept for the present track plan came from an article by Bob Hayden which appeared June 1992 issue of Model Railroader. The railroad boasts connections with the Santa Fe, Southern Pacific and Western Pacific. This enviable situation keeps the shippers happy and allows the Clay & Mud Point to show a modest profit. The shippers at this end of the line include a rice growers co-op (Dill's Mills,) a catsup processing plant (Clune's Catsup,) an oil recycler (Rotter Robbies,) and a custom cabinet shop (Zinn's Cabinets.)

Design and Construction: The C & MP is an expandable shelf layout with two modules, each about one foot wide and six feet long. The Troublesome module is framed in 1 X 2's and was built open grid to allow for gently rolling scenery. The Clay module is a simpler table top framed with standard 1 X 3's. Rail is Shinohara code 70. Structures include the scratch built Dill's Mills by Tom Dill, Clune's Catsup from an A.H.M. styrene kit started in 1967, and Zinn's Cabinets (a Walthers Cornerstone Kit.) Rotter Robbies Oil Recyclers is a kitbash of several styrene componets. Most of the rolling stock were built from kits by Athearn and equipped with Kadee trucks and couplers. Cars longer than 40 feet generally do not operate on the C & MP.

Operations: The typical operating session on the C & MP would find the crew assuming duty at Clay and assembling the outbound train with one of the roads two SW-1's from the four cars on the siding. There are no restrictions on train make-up, except that the crew should line up the cars to provide the fewest switching moves once the train arrives at Troublesome. Operation of a caboose is at the discretion of the Management. Upon arrival at Troublesome, each of the four cars in the train will be traded for the cars on spot at the four industries. After the switching at Troublesome is completed, the engine and caboose (if any,) must be properly positioned for the return trip to Clay. Two other operating restrictions apply: 1.) Cars may not be left standing on the UP Crossing and 2.) Grade crossing serving Rotter Robbie's may not be blocked for more than four moves. Don't forget to observe the stop signs at UP Crossing and engine restriction sign at Troublesome. On returning to Clay, the inbound train is traded for the cars on the interchange. The power and caboose are returned to the house track and the crew ties up. Good luck and have fun!

