

ADVERTISEMENT





Model Railroad Hobbyist | May 2016 | #75

IMAGINEERING

Doug Geiger, MMR



FREELANCING FUN IN OPERATING SESSIONS...

THERE ARE MANY DEGREES OF FREELANCING,

from strict adherence to the real world prototype to a whimsical representation of reality. A very popular middle-ground is the proto-freelancer. This is a model railroader who models or follows a real railroad, but composes from their imagination the locale, or the name, or the setting, and even the era in which that prototype railroad exists on their layout.

Purchasing already-painted locomotives and rolling stock in your favorite prototype scheme can save many hours of painting and decaling. Many model railroads these days fit the protofreelancer mold. Arguments can be made on all levels for the appropriateness of freelancing, too. But whatever form your freelancing takes, model railroading is broad enough for everyone.

As you probably know, model railroading has many interesting and enjoyable parts. That is why the hobby is so interesting to so

EXPLORING THE CREATIVE SIDES OF THE HOBBY

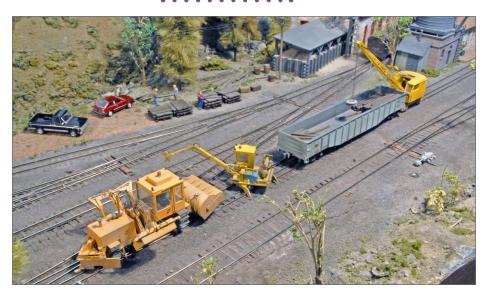
many people, and why so many of us are in the hobby for a lifetime. Woodworking, electronics, modeling, painting, artistry, and history are just a few of those components. And operating the trains realistically is yet another one of those pieces. That is what operations and op sessions are all about: running your layout as if it were a real railroad.

Operation is fast becoming a growing segment of our marvelous hobby today. With the abundance of ready-to-run equipment, getting operations up and running on a layout is much quicker than it used to be.

Attending conventions, open houses and club meetings can be a way of socializing with other model railroaders who might share your interests. Operation is another part of that social glue in model railroading. There is nothing quite like having several of your friends over to run your layout and share their experiences with you and each other. Operating your layout by yourself can be OK, but throw in some cooperation and coordination for moving those trains around, and your op session becomes much more fun.

A sign of a great op session is when the crews give each other good-natured ribbing and teasing. The sign of a bad op session is when no one talks to anyone, and the session seems a lot like work. Operations also needs people management if you have more than one person running your layout. So people skills, along with modeling skills, are required. Since man is inherently a social animal, we all can use op sessions to get in touch with each other.

Although many folks are content with modeling and building a layout, for some, operations adds the final dimension to the hobby. Some have said that we "just play with our toys." Others have tried to emulate the prototype to such a high level that operations can be intimidating or frustrating for the crew members. Fun operations need to be somewhere within this spectrum, depending on the layout owner and the makeup of the operators.



1. Maintenance-of-way equipment takes a piece of track out of service. The gondola car provides detection for the signaling equipment.

Operations can be just getting together with your friends and running your layout. Or it can be an intense session of running your layout as if it were a real company, bent on making a profit (or a loss). But whatever your flavor of "ops" is, you can always inject some fun by adding some prototype-based scenarios into your op session..

For most folks who are deeply into operations in model railroading, we tend to take our hobby seriously. Operations tends to lead the hobbyist in that direction. Take for example command control. Removing the "model railroad-speak" of DC-block control moves our layout closer to reality. Real world locomotives all run independently of each other, so why should our model locos be any different? And as for train movement, almost all layout owners who operate follow some prototype practice of train orders,

schedules, oral authority, or signals. Although op sessions have been called role-playing games or 3D chess, it is rare that owners write all their own rules. It is so much easier to copy the prototype! And your fellow operators usually know many of those rules since we all carry our own "grip" of knowledge, mostly based on the way the real railroaders run things and what we hear and read about.

We also subconsciously carry these rules across different layouts as we expand our ops experiences. The special interest group OPSIG has grown tremendously in the past decade to cater to those model railroaders that desire to learn more about the prototype, and how to apply their rules to your model railroad.

The last few years have seen an explosion of knowledge about how the railroad industry worked in the past and how it works today. Real railroaders in our modeling ranks have given us the information required to accurately simulate the prototype. How we apply that knowledge to our "op sessions" forms our "rules" when we operate. The degree of simulation of the prototype is where freelancing can be applied to operations. We can remove or reduce some of the boring aspects of running a real railroad, like paperwork. And we can add the thought-provoking skills of switching rolling stock. Puzzle-solving is a common trait for many operators.

Operations implies some sort of freelancing. Just the act of compression in our buildings and scenery is one example. The often-heard "good enough" philosophy takes center stage in operations since there is almost no way that a single individual layout owner can detail everything to match a prototype 100%. Some compromises must be made to allow for time to operate! Scratchbuilding every structure on a large layout would leave no time to operate it. And having ultra details on rolling stock can be difficult to maintain, given the handling of cars like



2. The Big Hook has been called out to some accident on the Granite Mountain Railway. The old crane is a steam-powered one from days gone by. In the far distance we see a narrow gauge freight crossing over an ancient wooden bridge.

uncoupling during an op session, so the layout owner needs to remember this. Introducing our vastly over-scale hands into a finely detailed scene can spell disaster to intricate details that normally are applied to high-fidelity prototype models. Fixing broken equipment and general maintenance will be required if one has regular op sessions. Like the prototype, deferred maintenance will take a toll on how your layout runs, so keep to a schedule of regularly repairing your layout and its components.

The role-playing that is introduced during op sessions is another sort of freelancing. The multiple roles that many of us wear during an op session would be unheard of in real railroading. Unions usually prohibit an employee from performing another employee's job. It is rare that the engineer of a modern train is also the conductor and also brakeman. Some shortlines might,

but the regionals and the big guys certainly don't. But on model railroads, these chores are commonly lumped together, even with two-person crews.

And how about that single yardmaster on our layouts? Most prototype railroads have a huge labor pool and work round-the-clock using several shifts of people. We must freelance those many jobs into a select few. We even freelance the time interval on our model railroad empires, using just segments of a day and/or fast clocks to speed up time. Again, we must freelance the real world to apply it to our model operations, but please use the real world for inspiration and example.

Our paperwork is also freelanced in our op sessions. Consider the volumes of reports, waybills, and orders the prototype used. We trim much of that paperwork or even condense it to fit our layouts and operating schema. When was the last time you saw a real switching crew using car cards? They use switchlists, usually quite cryptic to the casual observer. Since our crews run our layouts maybe a dozen times per year, we make the paperwork as readable and obvious as possible, nothing like the prototype.

From the earliest days of real railroading through the 1970s, the prototype used dozens of clerks to keep track of car movements. And more clerks did the billing duties. There were stacks of tariff books to calculate the costs and how to bill the customer. So how many of us model railroad operators to determine profit and loss after a session? Or to fill out complete waybills when making up a shipper request from our miniature industries? Or send bills to those industries to pay for the car movements? I imagine that very few of us do any of those tasks.

Given all the operating sessions I have been a part of, it never ceases to amaze me just how many different ways we go about doing operations. We run the spectrum of trying to match a certain day of how actual trains ran on a specific railroad to a session in which we take on certain personas in dealing with each other. All operations involve some sort of freelancing, given the constraints our layouts impose on operating it. Just think of the huge variety of controls we use just to throw a turnout! Or the many ways just to run a train.

How we use signals must always be freelanced because of the complexity in signaling. Do we use a telegraph to communicate with each other? Do we sit in a chair to run our locomotives? Have we thought about minimizing the footsteps for our miniature switchmen? Do we have unions? Are our crews paid? How about modeling weather conditions? You see, model railroad operations must have some degree of freelancing to be able to attract and maintain crews.

So freelancing must be applied to many phases of model rail-roading, including operations. If you host regular op sessions on your layout or manage someone else's op sessions, consider adding some interest to those sessions to keep your operators connected and focused on having fun. They can ensure that everyone has enjoyment and wants to return to your next session. Nothing relieves boredom more than introducing some prototype-inspired ideas into your subsequent op sessions.

Enough editorializing; here are some ways we add fun to our own Granite Mountain Railway (GMRy) sessions. Included are some examples of the paperwork we use, too. All these ideas may not all be pure freelancing, but they do keep the operators coming back. Some of these are op session activities that many folks may not think about. Consider adding variety to your next operating session by using some of these concepts. Try one or more in your next op session, and see what happens. I guarantee that it will generate interest and discussion.

Maintenance-of-way

Many of us build models of the maintenance-of-way (MOW) equipment, but rarely use it. On the Granite Mountain Railway, we routinely take one of the tracks out of service at selected sidings for MOW work. Each session sees that work move across the layout, one siding at a time. The time set for MOW work is usually 8 a.m. to 5 p.m. on the fast clock. Within that time period, selected MOW rolling stock is positioned on the track, along with a resistance

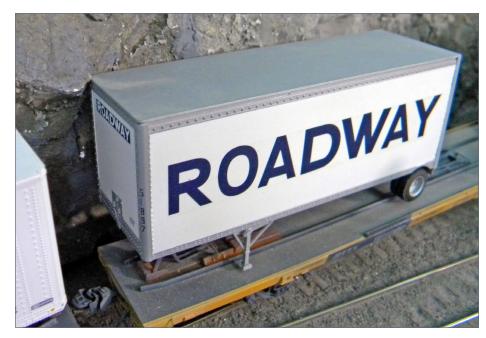




wheelset-equipped car or caboose to activate the electronic detection to keep the dispatcher from running a train into the equipment [1]. After the scheduled "work" time, the equipment is manually removed and normal train operations can commence. Usually a MOW Notice is given to the dispatcher to inform them of when and where the maintenance is to take place.

Wrecks

Some folks have added situation cards when problems arise in a session to add spice, but these can seem forced if done too often. Instead, having spontaneous situations can be more fun. On the GMRy, if a wreck happens, then all sorts of activity begins. A



3a-c. This is the accident that is described in photo 4. One well car almost destroyed the signal mast. Note that it was a pup trailer that got caught on an overhanging rock.

RAILWAY

GRANITE MOUNTAIN RAILWAY

701 SOUTH TERRY STREET

LONGMONT, CO 80501

(303)-651-2225

ACCIDENT REPORT FORM

Date: 10/3/15Time: 5PM (am/pm)

Location: EAST RELIEF AND CURVE

Train(s) involved: BN78 ,

Engine(s) involved: 6338 6335

Engineer(s): Lee , ____,

Dispatcher on Duty: Rich

Fatalities: O

Remarks (describe the accident):

TRAIN LEFT EAST RELIEF AND DERAILED ON THECHNE, SISTAL TO DEPART Relief was Green.

TOPOF
INVESTIGATION DETERMINED ROODWAY TRAILER HIT A ROCK NEAR The
EAST RELIEF Switch - The rock unped in the way!

4. This is the actual accident report form as filled out by one of the crew. Note that there were no fatalities reported. Sometimes the crews have fun filling in these forms – rocks usually don't jump in the way!

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wreck is defined when one or more cars fall over – not just derail. First, the dispatcher must be told about the wreck. They must then call the appropriate yardmaster to assemble a wreck train. Next, the Big Hook train is sent as quickly as possible to the site of the wreck [2]. Meanwhile, the errant train crew takes photos at the wreck site [3] and begins filling out an accident report form [4]. When the wreck train arrives at the nearest siding to the accident, it is rearranged so the Big Hook is closest to the wreck. If any cars indicate via their waybill that they are loaded, those cars are pushed to the side into the scenery. Empty cars are put back into the wrecked train or added to the wrecker train. Then the wreck train is removed from the accident site and stored somewhere close. It now loses its high priority and is worked whenever the dispatcher can return it back to its home yard. Wrecks occur without warning and add a lot of fun (and frustration) to a session, especially if the wrecked cars are carrying live loads! Everyone will want to see the wreck, and some folks try to give their theories as to the cause of the accident.

Snowfall

Another situation that you can add to an op session is simulating a snow plow train. On the GMRy, when it snows within 24 hours of an op session or during an op session, the plow train [5] is called out. It runs as long as the real snowfall happened or whenever the superintendent (yours truly) determines that enough disruption to the session has occurred. Paperwork [6] informs the crew, dispatcher and the yardmaster what is needed, and where the plow train must be run. Our snow plow train runs over approximately 75% of the layout, and must be turned around when completing a pass over the mainline. Regular trains must be held at the one of the two end-point turn-around locations until the plow has arrived and been properly repositioned. Then

the trains which have been "patiently" waiting follow the plow train at a slow speed until the other endpoint is reached. The regular trains then proceed around the plow train and continue on. As you can imagine, running the plow train really disrupts an op session, and can cause quite a lot of backups and schedule changes for the dispatcher. Although we have had over 330 op sessions and we live in Colorado, there have been only a handful of plow train runs, enough so that the crews remember most of them quite well!



5. The plow train will be busy on the other side of the snow shed. The snow must not be too deep, since the plow is not one of the GMRy rotaries. Instead it is an old gondola that has a heavy steel wedge applied and is loaded with rocks for ballast. The switch heater uses propane stored in that small white tank by the side of the track. During one of the summer op sessions, a company tank car is run to each of these tanks in the GMRy high country to replenish the propane.

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GRANITE MOUNTAIN RAILWAY

701 S. TERRY ST., LONGMONT, CO 80501

(303)-651-2225

SNOW ALERT

To: GM Dispatcher, Mesa Yardmaster From: traffic department, GMRy

January 3, 2004

Beginning at 12noon: the SNOW PLOW EXTRA will proceed all trains between Nooksack (NS) and Totem (TO). Locomotive shall be GM F-units, #517+523. The consist should be:

Jordan spreader plow engine tool car boxcar caboose

The snow plow extra will depart from Mesa Yard. Fueling and sand service will be done at Nooksack. The plow will work until 12midnite or until released by the superintendent. Train schedules may have to be adjusted because of weather conditions, so always be prepared for changes to the schedule. The superintendent will advise as to any annulled trains.

6. A Snow Alert bulletin is issued whenever actual snowfall occurs within 24 hours of an op session. The bulletin outlines how the plow must be run.

Fan trips

A great way for a modern modeler to run something different in an op session is to have a steam locomotive fan trip [7]. You can use whatever odd passenger cars you can find since most prototype fan trips use a hodge-podge of equipment that usually come from several private car owners and/or museums. Combine heavyweight cars and lightweight streamliners for a really kaleidoscopic mixture. Invite your operators to bring their own private cars and add them to the train. And prepare some paperwork to inform crews of where the photo run-bys are scheduled and to keep everyone safe [8]. Run this type of operation on an infrequent basis to keep interest high.



7. The GMRy's only surviving steam engine (a 4-8-4 Northern, #155) has just pulled into the Nooksack passenger station. The contrast between the railfan power and the modern intermodal trailer train passing by on the north track is quite dramatic.

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GRANITE MOUNTAIN RAILWAY

701 SOUTH TERRY STREET

LONGMONT, CO 80501

(303)-651-2225

TO: C&E on Railfan Extra Dispatcher Operating crews January 2, 2016

RAILFAN SPECIAL ORDERS

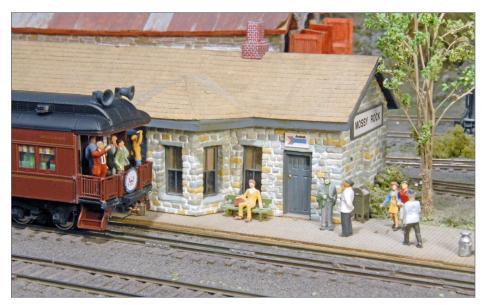
- Uses GM #155 4-8-4 steam locomotive, located in roundhouse.
- · Shop forces to ready locomotive and cars for train.
- Cars to be used include: BN dome car, plus four ex-IC passenger cars, including two coaches, a baggage and an observation.
- Locomotive should be attached to passenger equipment no earlier than 12noon
- · Departs Union Station, Bremer at 1pm, westbound
- Proceeds to Nooksack, with a water stop at Mossy Rock
- Locomotive is turned at Nooksack after coaling, sand and water.
- Consist does not need to be turned or rearranged.
- · Departs Nooksack around 4pm, traffic permitting.
- · Arrives back at Union Station around 7pm, traffic permitting.
- Locomotive is cut from passenger cars before entering Union Station.
- Yard switcher to push passenger cars into Union Station.
- Locomotive is moved to service facility for sand, water and coal and then returned to roundhouse before 8:30pm.
- Passenger equipment is to be left in Union Station.
- Five photo runbys have been promised, conditions and traffic permitting. The Bremer Railroad Club has
 requested that after their members have detrained, the train backs out of sight and then steams past their
 photo line. The train then backs up to reload passengers. Be EXTREMELY safety-conscious during
 unloading and reloading. The five locations are to be:
- 1. westbound, let passengers off just west of bridge over Sweetwater River by Colton.
- 2. westbound, let passengers off at Mossy Rock depot.
- 3. westbound, let passengers off just west of Corkscrew trestle by Mossy Rock
- 4. eastbound, let passengers off at Mossy Rock depot.
- 5. eastbound, let passengers off at handcar shet at Mossy Rock.
- Excursion train has no priority over any other trains. All meets, etc. are at the dispatcher's discretion.
- Remember, you are the railroad's ambassadors, so make our guests comfortable, but safe.

Signed, Doug Geiger, President of the Granite Mountain Railway (and member of the Bremer Railroad Club)

8. This is the Railfan Special bulletin issued to the crew and the dispatcher. Note the locations for the photo run-bys and the reminder to keep everyone safe.

POTUS and private cars

A political campaign train or a POTUS (President of the United States) train can add interest to an op session [9]. Like the fan trip, generate some paperwork to tell the crew and the dispatcher how long to make certain stops so your scale candidates (or the President) can give their speeches. Use of a heavyweight Pullman car is quite appropriate for a modern-themed railroad, since these prototype cars are almost always owned by a very rich person to whom political candidates seem to be attracted. Many POTUS trains have an advance section to ensure that the route is safe for the President's train, so you should run a short passenger train just ahead of the POTUS train. You can also add a private car to the tail of your passenger cars to simulate the rich folks taking one of their holidays on your layout [10].



9. The Vice President is giving a speech from the back platform of the POTUS train. A Pennsy heavyweight sleeper has been outfitted with several loudspeakers (made from O-scale locomotive bells).

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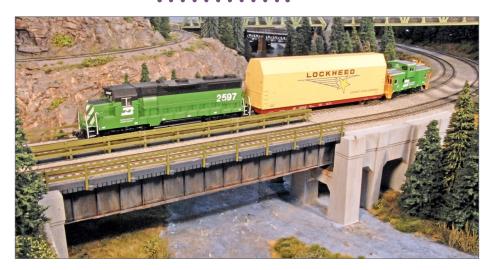
10. An Illinois Central private car has been tacked onto the rear of Amtrak #5. The car is owned by a rich client who likes to travel in style on the GMRy.

High-wide trains

If your clearances permit it on your layout, running a high-wide train can be fun [11]. Like the prototype, these trains are usually short and are run slowly (15-20mph) to avoid derailments. Most have a rider caboose or passenger car within the consist. Run it only very occasionally so your crews will appreciate the uniqueness of the specialized cars. Another special movement train for current-era layouts can be a Boeing fuselage train or a wind-turbine-blade train.

Helpers

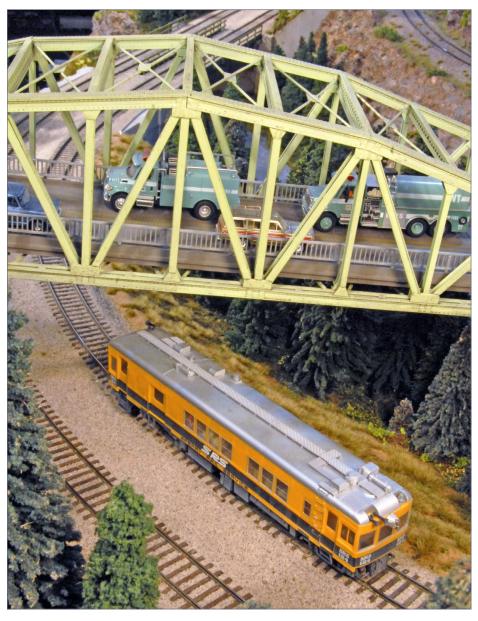
Before command control, simulating helper operations was difficult. But with DCC, having independent helper locomotives can be easy to add and are fun to run, especially if a pusher locomotive is added to the rear of your over-tonnage trains [12]. Good train



11. This high-wide load is a Lockheed airplane parts car. Maximum speed for any high-wide is 20 mph on the Granite Mountain Railway.



12. Careful train handling is needed when pusher helpers are added to freight trains like this loaded coal train. It appears that spring has come late to the high country given the numerous snow piles.



13. A self-propelled Sperry Rail detection car is running over the Totem siding. A set of Forest Service trucks pass overhead on one of the state highways.

handling is crucial to avoid string-lining the train on sharp curves. Of course, bad train handling justifies calling out the Big Hook!

Determine where the slack is running in and out within the train to avoid problems. Head-end helpers are much safer to run and can still add interest to train movements. Before the advent of steel cabooses, a rear-end helper was often added ahead of the caboose to keep the draft forces from crushing the fragile wooden caboose. If your railroad era dictates wooden hacks, then rearranging the train to add and remove a rear-end helper locomotive can generate quite a bit of "play" value.

Sperry Rail

Occasionally, a prototype railroad needs to run a rail detection train. You can either scratchbuild or kitbash one of your own rail detector cars. Some railroads even built their own track geometry cars, usually self-propelled. In HO scale, the Walthers Sperry Rail car is a great model to use [13]. Run the detector car (or train) slowly and have the operator record any trackwork problems on your layout [14], then fix those problems before your next op session, helping to keep deferred maintenance in check.

Defect detectors

Although not strictly a freelance function, defect detectors can add to the fun to an op session. By using the electronics from Boulder Creek Engineering (bouldercreekengineering.com/trainboss.php), you can easily add a detector. It can randomly sense when to alert a passing train's crew that a defect, e.g., hotbox or dragging equipment, has been discovered and the crew will need to do something about the defect. Setting out the ailing piece of rolling stock can add more "play" value to running the train. Of course, unless you model a really decrepit railroad, defects should only occasionally be triggered. One

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701 SOUTH TERRY STREET

LONGMONT, CO 80501

(303)-651-2225

TO: C&E on Sperry Rail Dispatcher August 1, 2015

SPECIAL ORDERS

- · Uses Sperry Rail track detector, located in the Mesa Yard roundhouse
- On duty at 8am, off duty at 12noon.
- . If possible, work as far westbound as possible. Do not proceed past the west switch at Totem.
- End the run, if possible, at Arrow Yard. Otherwise, tie up where appropriate
- Work both north and south tracks at each town.
- Spur tracks are not required to be checked.
- Indicate all rail defects in the following chart (upon completion to be given to Superintendent of Track):

_ocation	Direction (EB, WB)	Defect	
		,	

14. Any track defects are recorded on this GMRy form. It usually takes a full session to run the Sperry Rail detector car over the entire mainline.

defect every fourth or fifth session is enough to keep the crews alert and focused.

Daytime and nighttime

Consider adding nighttime operations to your sessions. Signals and headlights look impressive in the dark [15]. Buildings should have interior lighting to add to the simulation. A side benefit is that crews tend to pay more attention to their trains and do less railfanning and socializing when running trains during a night session. Of course, make sure to add lighting near the floor to keep from having crew falling or tripping. Give your crews flashlights or led hats as an aid during nighttime operations.



15. Nighttime operations are fun, but can be somewhat stressful since the crews must pay more attention to the signals. These two Oakway SD60s have just passed an intermediate signal. The large P on the plate on the signal bridge indicates that the red signal is permissive, trains must stop and then can proceed slowly past the red signal, maintaining adequate sight distance to stop if another train is ahead.



16. Washing each car at the Union Depot after the train arrives adds interest to passenger train operations. The large steel panels surrounding the car washer keep the suds and spray somewhat contained.

Passenger car operations

This operations concept has lots of potential, depending on how involved you want to get with passenger car movements. A quick study of the prototype yields many possible options, including: setting out/picking up a diner en route, adding/subtracting baggage cars and/or express cars during the holidays to simulate all the extra packages and mailings, splitting and recombining trains at interchange points on your layout, and running the consists through a car washer facility at a major terminal [16]. Complete articles have been written that describe the prototype passenger car operations. Consider adding a second section of a

normally-scheduled passenger train occasionally to simulate a spike in passenger loadings. Passenger car procedures can be as extensive as your imagination can make it.

Intermodal loading and unloading

If you have an intermodal facility, consider moving containers and trailers on and off appropriate well cars and flats. Generate paperwork to inform your intermodal yardmaster/operator which trailers and containers to unload and reload from which trains. Breaking up some of the unit trains of intermodal equipment adds variety to a session. It also provides another operating position for your crew members.

These topics are some of the ways to add interest and fun into operating sessions. Hopefully they have stimulated your desire to add some extra movements to your op sessions. All are based on prototype practices, but most need some freelancing to keep the boring parts of the prototype to a minimum. There are many more proto-freelancing ideas that can be applied during an op session depending on your layout and its constraints, including: weighing cars at a loading facility (like grain or gravel), running a weed-sprayer train in the springtime, blocking off a route so that trains need to use alternate routes on the layout, and loading hopper cars with a working flood loader and/or unloading those same cars with a working rotary dumper. Some other possible trains you could consider running include a military train, a Santa Claus train over Christmas, a circus train, and a rail-grinder train. Do you have a steam loco or ancient diesel that does not run properly? Just remove all the drive mechanism, make it as free-rolling as possible and then add it to one of your regular freights to simulate moving it to a museum. Just let your imagineering skills loose, think outside the box for operations, and have fun. ✓

OPSIG – OPERATIONS SPECIAL INTEREST GROUP OF THE NMRA

The principal purpose of OPSIG is to discuss, develop, and disseminate ways of operating model railroads to realistically emulate practices of the prototype. This includes sharing information on various methods of generating, moving, and controlling traffic to heighten the feeling that our models are an active and integral part of the national rail transportation network, serving shippers and consignees throughout the nation. We also discuss and communicate information about the methods and procedures used by the real railroads and ways of most practically and realistically adapting them to the model world. So if you like to operate the railroad you've created, this is a place to learn more and find others with similar interests.

There is a quarterly journal published that contains articles and information on railroad operations (both prototype and model), and listings of operating layouts, sessions, and events that members are invited to attend.

There is also a great website (<u>opsig.org</u>) that contains more information about the SIG, including contacts, upcoming events, resources, and much more. ■

