Model Railroad Hobbyist

DCC IMPULSES

column

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I'm writing this column starting in the Kansas City airport. I'm returning from an invitational operations weekend called Prairie Rail. This year over 120 folks operated on a few of the many fine layouts here.

The experience here led me to think about sharing some ideas about hosting operations and making guests feel comfortable. Many modelers with DCC layouts are hosting operations or are planning to do so. My observations are based on attending various op sessions (as they are frequently called) and hosting some at our club layout (www.pcmrc.org).

Soon, I'll be hosting small op sessions on my layouts, too. While this is pitched to the beginning host, the old-timers could take a point or two away. Also, check out Mr. DCC's Workbench at the end of this column for some ideas about tuning your locos.

So, what is operating and what are op sessions? I define operating as moving freight and passengers across your railroad with a purpose. Then, op sessions are formal or informal gatherings of like-minded modelers to do so.

There are myriads of schemes to mimic various forms of prototype practice on a model railroad. Some are as simple as sorting cars by type (box vs. gondola) and color and delivering some to industries or making them up into a train to move across the layout. From these simple beginnings, ops can move to amazing levels of complexity involving fast clocks, timetables, dispatchers, radios or telephones, and control panels.

Some folks can sit and watch a train go around their layout for hours. Others want more out of their layout. Ops offers many ways of structuring the moves on your layout with a goal, not just moving trains. Many folks enjoy the mental stimulation that these multi-dimensional puzzles can provide.

1. Railfanning on Jim EuDaily's gorgeous O scale West Virginia fall layout.

I'm interested in operating.

How do I get started as an operator, since I'm not ready to host?

Ask around at local clubs and meets. You may find lots of options in your area.

One really great place to find folks who are interested is the NMRA Op Sig group (opsig.org). Don't fret if things there seem to be over your head. These folks are pretty involved in their operations. Buried within their web site is a listing of open ops activities (opsig.org/events/events.cgi) and even their suggestions for hosting (opsig.org/events/hosting.shtml).

Start with a simple job on a nearby layout. Or practice on your own layout. I have a set of car cards and waybills for some of my cars. If I have more than a couple of tracks set up, I can do some switching and practice my moves.

2. Car card and waybill paperwork on my prior 8-½ by 1 foot HO scale layout.

Get ready

You are scheduled to host an op session. You want to look good. First, relax.

The goal of model railroading should be to have fun, both as an operator and as a layout owner.

There the obvious things to do, like having your track clean and clear and in good repair.

The better the condition of your rolling stock and track, the more fun the session will be for the owner, any helpers and the operators. Spend your time here in preparation for a session. Don't worry about finishing that last scenery project [3].

3. O scale modules with no scenery can still be used to switch cars

It is a good idea to have some practice session(s) with good friends who are seasoned operators. These sessions will benefit you most if they are followed with a serious debriefing session. "Gee, thanks, that was fun," isn't useful in the long run.

Find out what worked well and what didn't. Were the instructions clear? How could they be made better? Were the jobs long enough or too long?

I find I can do a better job if I know up front what the goal is, beyond spending a few fun hours with fellow model railroaders. Expectations may or may not be fulfilled, but at least it is nice to know what is par for the course. A written job sheet goes a long way towards alleviating the anxiety of an operator who is new to your layout or to the specific job. Periodically, you should review these sheets for changes and updates.

Perhaps you will find that you need to do a few more test sessions before you are ready for prime time.

Get set

Your layout knows when out of town guests are visiting. It is more likely to act up then. That's the rule. Don't asked me who made it.

Our club layout has failed a couple of times during op sessions. The biggest failures have occurred during guest sessions, not during our member op sessions. We have never had an electrical failure during a work session, to my memory.

Consider the three fellas who were discussing the most amazing invention in history. One suggested the airplane; the second suggested television. The last said, "The Thermos

bottle." Amazed, the other two asked why. "Well, you put something hot into it and it stays hot. Something cold stays cold." Still unconvinced, they asked why that was so amazing. "Well, how does it know?" was the reply [4].

4. Perhaps the most amazing invention in history, the Thermos bottle.

Electrons know. They know when you have guests and react accordingly. Sometimes to your chagrin.

At Prairie Rail, every layout I operated on had electrical problems. The electrons seem to recognize me, too. Twice, there were throttles that didn't want to behave. A couple of layouts had boards fail. One signaling problem reared its head. The layout owners and helpers worked hard to keep the sessions running as well as possible in spite of the challenges.

The solution for the throttle and board problems is spares.

Once we recognized that a throttle had issues, a change got trains rolling again. If you can swap a booster or a circuit breaker easily, you can overcome some of those major failures quickly.

Batteries die. Be ready. If you use non-rechargeable ones [5], Have a large supply of new batteries. If you use rechargeable ones, have a spare for each throttle fully charged.

5. Non-rechargeable alkaline batteries.

Here's where everybody needs to remember that the goal of these sessions is to have fun. If you can't be doing the job you selected, do some railfanning [1] on the layout while the maintenance crew does its work.

Go

Okay, we are closing in on your session(s). Get the refreshments ready. And don't forget the human comfort issues: temperature, lighting, places to sit when not operating, and

restrooms.

I was impressed by the Prairie Rail layout owner who took the time to email the operators for his layout. The email included the background story of his layout and an idea of what the various jobs were and weren't. He even worked out a car pool and gave us the information on how that would work.

Hosting new folks

New folks may be concerned about operating on your layout and not looking like a dolt. No matter how seasoned the operator is, he may be anxious early on at a new layout. Such anxiety may manifest itself as everything from braggadocio to reserved silence. If you, as a layout owner, can be sensitive to the symptoms and put in a kind word or two, it will help relationships along nicely.

One of the layouts that I operate on frequently became a lot more fun when the owner actively promoted the concept that the goal was to have fun, not to get "done."

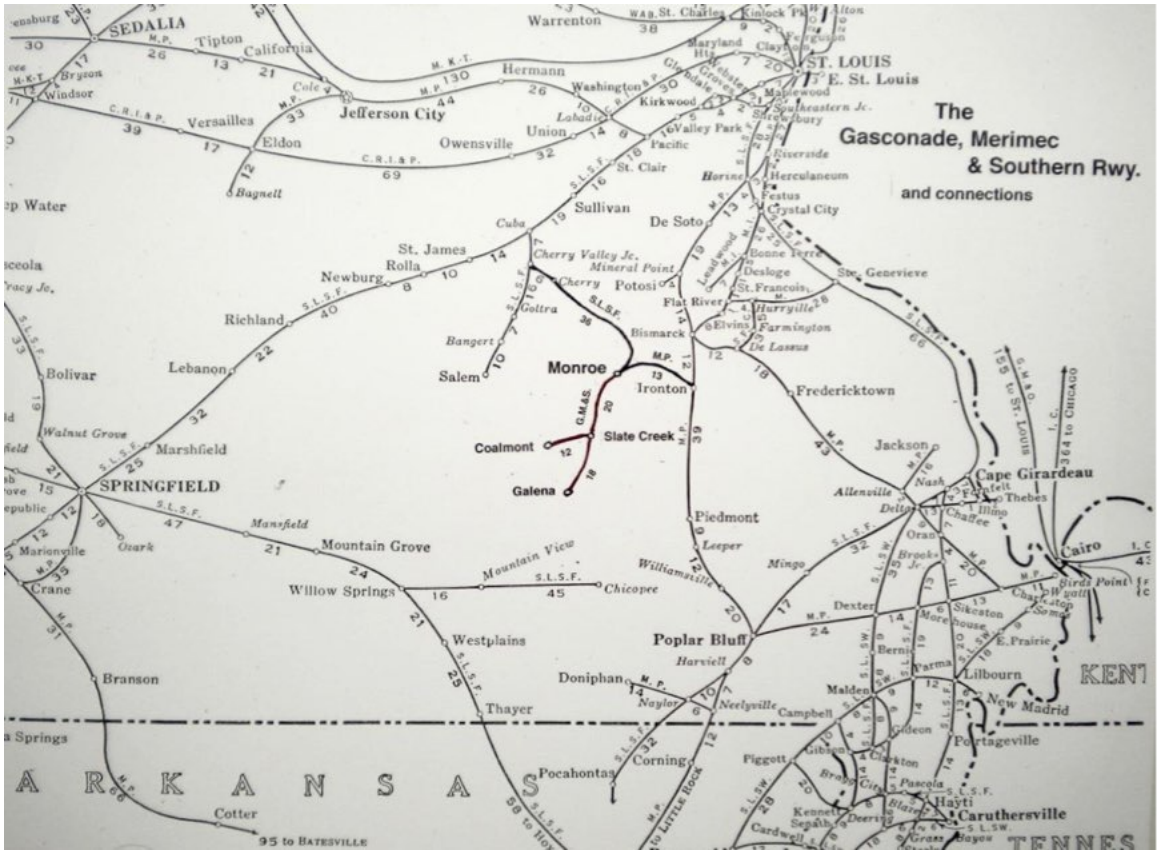
6. A pre-op session briefing on the PebbleCreek Model Railroad Club. (www.pcmrc.org)

Brief your guests [6]. You know where things are in your house, they may not. Yes, there are the obvious ones, like where the rest rooms are. But don't forget the safety issues: fire exits and extinguishers (you do have one or two around the layout, don't you?) and emergency medical aid.

If you have a job way back in some serpentine layout, it would be nice to know if there is a fire exit nearby, as opposed to having to work one's way all the way back out to the original entrance. If you are in frequent earthquake country, mention your safety plan for that.

A layout tour should be more than just a chance for you to show off your handiwork. Point out landmarks and reporting locations. Town names are helpful to know and easier to remember if there are labels: depot signs or fascia plaques or signs hanging from the ceiling. It is nice to have railroad directions mentioned on the fascia. Likewise, have a map of how your layout fits into the world [7].

7. Map showing how Bill Sommerfield's fictitious O scale layout joins the real world in southeast Missouri.



If I'm working in a layout town between Omaha and Kansas City and I have an outbound load it is nice to see a list of what goes where and not rely on my (meager) knowledge of Midwest geography. If you use car cards & waybills, put it on the waybill. Or put it on the switch list. Perhaps, in your world, a load for New England would go to Kansas City, not to the more obvious Omaha.

Just remember to have fun, always.

Folks always seem to have additional ideas to share. Just click on the Reader Feedback icon at the beginning or the end of the column. While you are there, I encourage you to rate the column. "Awesome" is always appreciated. Thanks.

Until next month, I wish you green boards in all your endeavors.

Mr. DCC's Workshop continues this month. Skip ahead to find about settings of locos for operations.

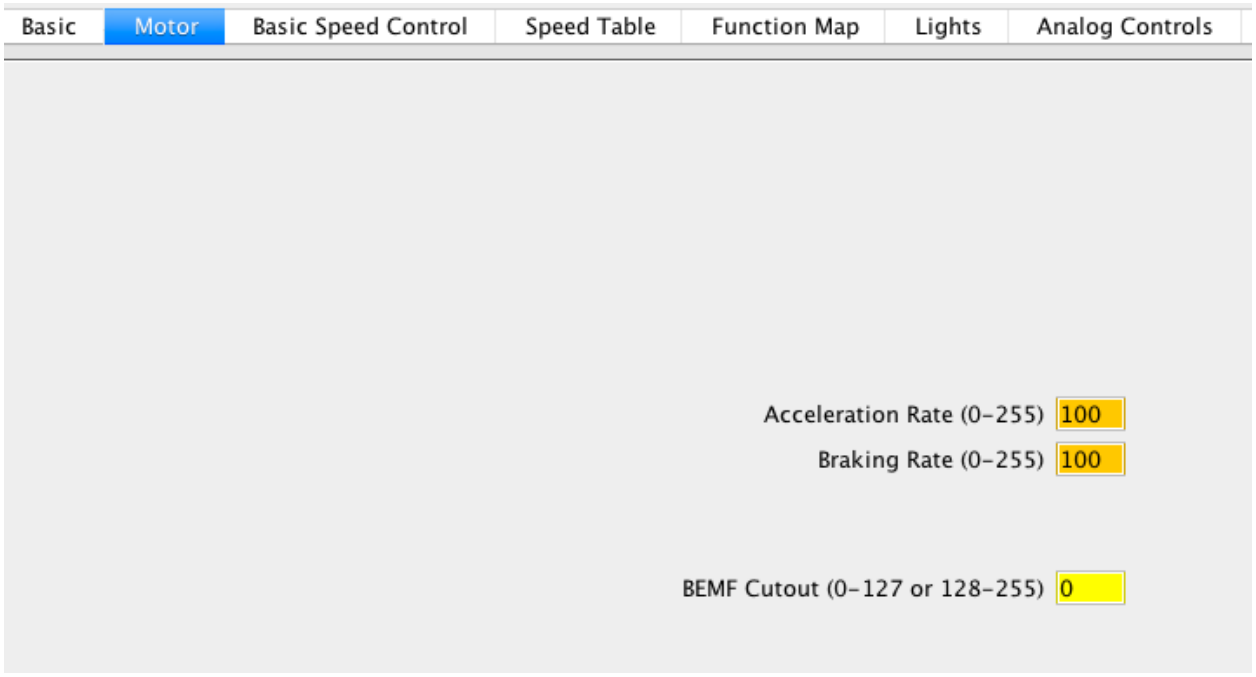
Mr. DCC's Workshop

Limiting locomotive speed & confirming commands

Many of the layout owners in the Kansas City area are using an operation scheme where the locomotives have a lot of momentum programmed into them. The brake function is then used to stop the loco. Every owner that I've discussed this with is using SoundTraxx Tsunami decoders. So, I'll discuss how to set it up for the Tsunami.

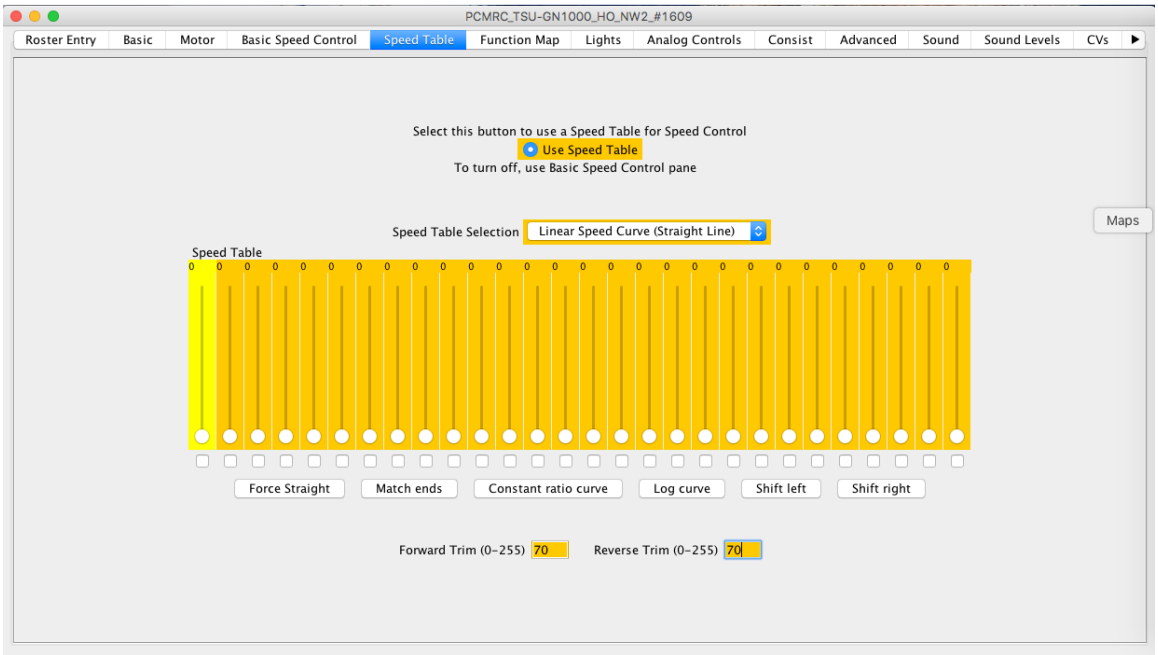
Adjust the momentum to very large values (100 or so). That's CV3 for acceleration (starting) and CV4 for deceleration (stopping) [8].

8. DecoderPro screen shot - setting momentum to 100 (out of 256).



I would like to have more control than naturally comes from this set up. The top speed of the locos is much higher than the top speed of many operating schemes. Here is a quick way to get your operators using the entire range of the throttle, not just the first 25% of the range with Tsunami decoders [9].

9. DecoderPro Screen shot - limiting top speed to 70 (out of 128), or about 60%



Here's what I did (and why). Items that I changed appear in orange in the screen shot [9]. First, I selected the radio button for USE SPEED TABLE (activates this pane by setting CV 29). Then I selected LINEAR SPEED CURVE from the SPEED TABLE SELECTION pulldown (this overrides the 28 speed steps in the graph). Then I set all speed steps to zero (since they are disabled, I might as well set them to zero, making future reads faster). Here is the real reason we are here. Use the FORWARD TRIM and REVERSE TRIM values to adjust the top speed. Unless your loco is way off base forward to reverse, I recommend using the same value in both. The maximum is 128. Any number less than that will slow the loco down. The setting of 70 in [9] means that the loco will go about 55% of its original top speed (70/128 = 54.9%).

The CVs that need to be set to achieve what I mentioned above (for a Tsunami decoder) are as shown in [10]. Once these values are programmed, CVs 66 (forward) and 95 (reverse) can be adjusted to achieve the maximum top speed for your operation needs. If you are doing this manually (not using DecoderPro), I recommend you read the value in CV 29 before you do any manipulation. This CV adjusts many of the features of your decoder. Finding CV 29's value first and adding 16 to it will achieve the result you seek, once the new value is written back into CV 29. Here's where DecoderPro shines.

10. CV values to achieve what was done with DecoderPro in [9].

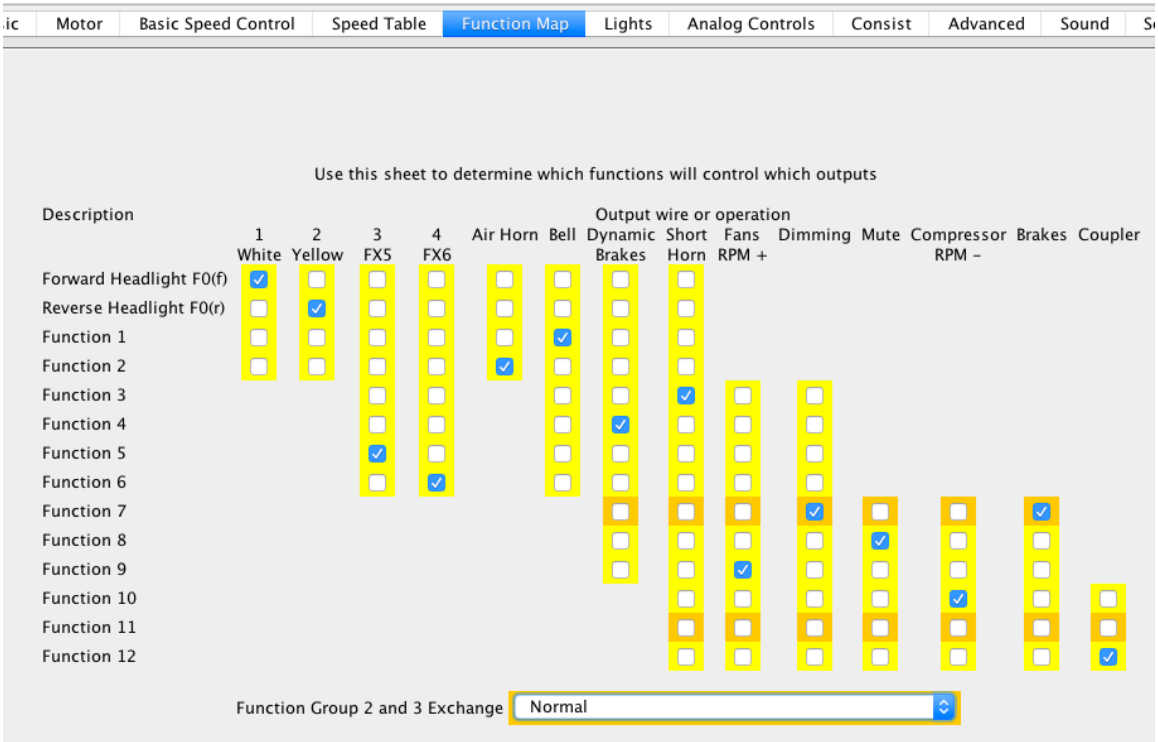
CV	value
25	2
29	16 more than was in it
66	70
68	0
69	0
70	0
71	0
72	0
73	0
74	0
75	0
76	0
77	0
78	0
79	0
80	0
81	0
82	0
83	0
84	0
85	0
86	0
87	0
88	0
89	0
90	0
91	0
92	0
93	0
94	0
95	70

Mapping functions together to help confirm command receipt.

It is difficult, with a lot of momentum set, to know for sure that the brake command (either set or release) has been received by the decoder. One of the throttle failures I mentioned in the column was a failure of the radio cab to send the desired function command to the decoder. Feedback from the loco would have helped diagnose this issue.

With a Tsunami decoder, if you map the dim command to the same function as the brake command, the lights will dim to 60% when the brakes are set. Be sure to adjust the lighting setting to LEDs, if appropriate.

11. DecoderPro screen shot - mapping the dim function to the same button as the brake function.



For the case shown in [11], the brakes were on F11. That box was unchecked and the box for F7 was checked. This puts both the brakes and the dimer on F7. Given the myriad of options for the brake function, providing specific CV values for every situation is not possible.

Other sound and non-sound decoders can be similarly programmed.

With the Econami, the sound of the brakes setting or releasing will be your clue. No need for exotic programming.

