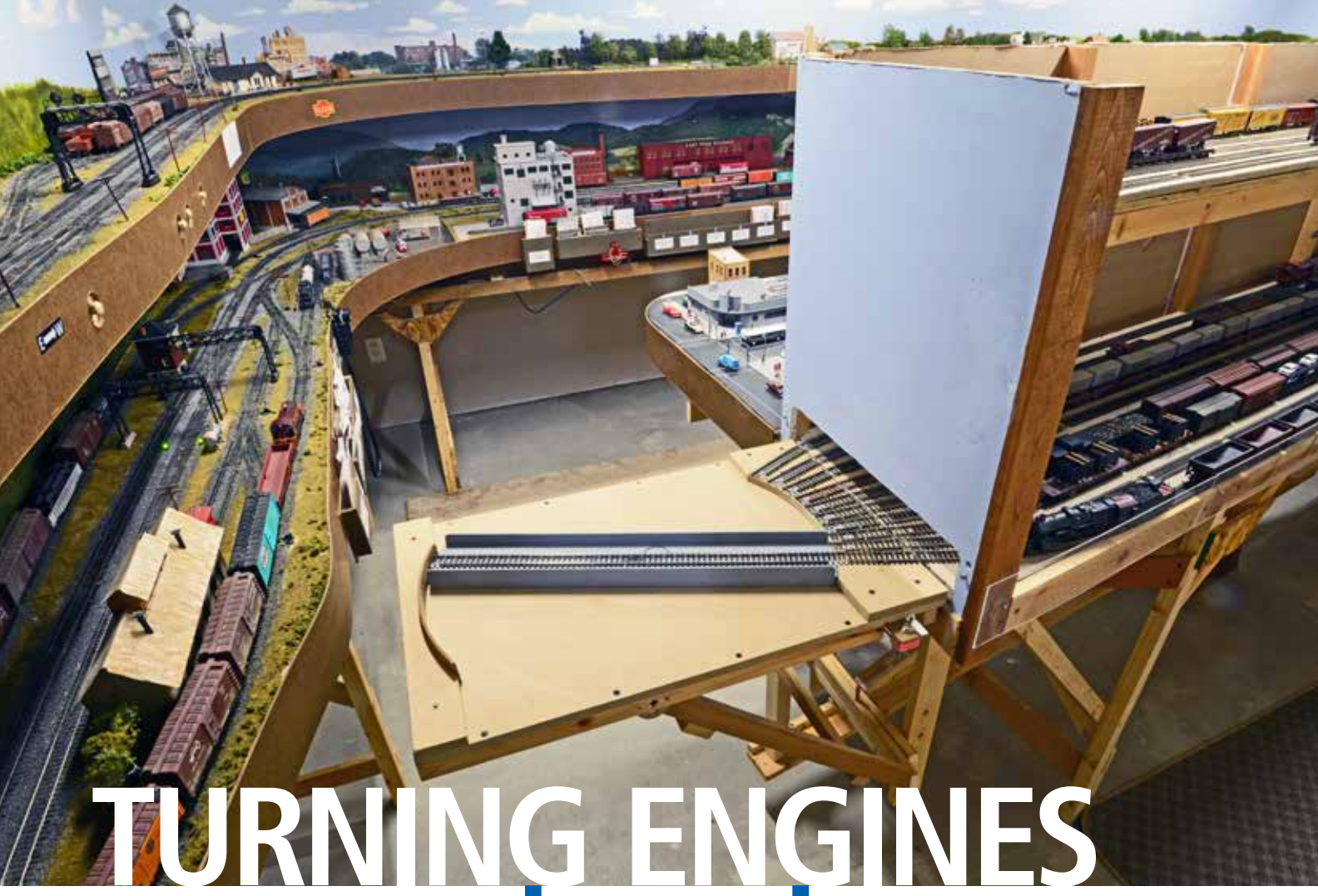


TURNING ENGINES on a stub-end staging yard

A flip-up turntable sector plate makes a finicky task easier

By David Holl
Photos by John Burchnall

In order to turn and restage steam locomotives, diesel consists, and passenger cars between operating sessions, Dave Wintermute built a flip-up turntable for David Holl's Pennsylvania RR Buffalo Line.

Several decades ago, with the advent of using staging tracks for model railroads, our miniature worlds suddenly became larger. With this concept, model railroading changed from moving trains around abbreviated circles to more of a point-to-point transportation network. Many MR articles through the years have compared the different styles of staging tracks.

Open-ended (or double-ended) staging yards allow trains to enter on one end and exit on the other. I used this concept on my prior layout, The Penn Valley Railroad (see the October 2008 issue of MR). That hidden staging yard was located behind a wall with remote cameras to view both ends. Physical access, when needed, required getting on my hands and knees to go through an opening in the wall under the layout. Fortunately, because it was a run-through staging yard, it didn't require individual engines and lash-ups to be turned between operating sessions.

A new model railroad

On my current layout I use a dedicated aisle within the layout room to easily access a 12-foot-long, stub-ended visible staging yard. On the other side of this yard is a long city scene. Both the city and the staging yard share a peninsula with a hardboard backdrop separating each. A problem with such stub-end yards is how to efficiently turn and/or run engines around to place them on the other end of trains to get them ready for the next operating session.

One way to do this is to manually pick up the engines after each operating session, turn them, and place them on the other end of the yard. Steam engines are particularly difficult to handle this

The turntable platform hangs down at the end of the staging yard peninsula during operating sessions, taking up negligible aisle space. It's so unobtrusive that most operators never notice it.

Raising the turntable is easy: Just slip off the panel covering the track opening and lift the platform — no pins or bolts are involved. The dangling pair of legs form a knee brace by inserting their ends onto a wood angle ledge attached to the vertical support wall.

way. It's hard to keep the drawbar and connector wires attached between the engine and tender while at the same time striving to rerail the leading, trailing, and tender trucks. Moving multiple-unit diesel consists prevents similar issues. Rerailing a steam engine and tender or a multi-unit consist of diesels in the midst of a 10-track staging yard full of rolling stock isn't very fun.

Searching for solutions

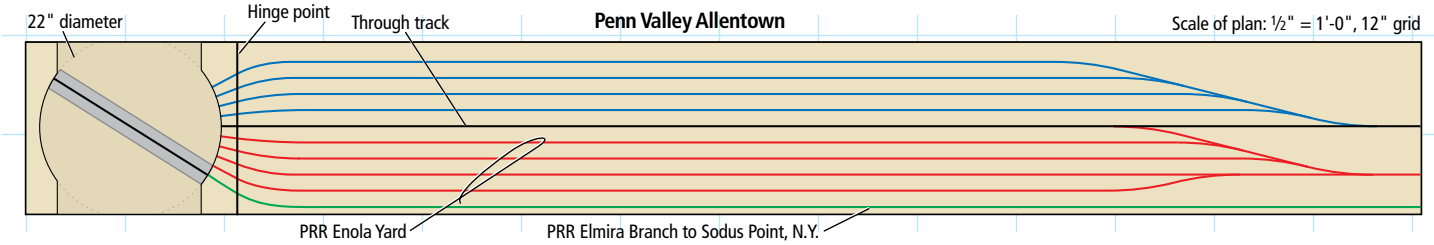
A turnout ladder with runaround and escape tracks could be used to reposition the locomotives. However, this would take far too much space, and the locomotives would still have to be turned. A pivoting sector plate could use less space, but again wouldn't allow for turning.

One of my friends, the late Dave Wintermute, came up with a better idea. His solution was to design and install a large flip-up turntable at the stub end of the yard with all 10 yard tracks flowing into it. Since this device is only used between operating sessions, it's not scenicked, is turned manually, and never blocks the aisle during operating sessions. The single device compactly serves the escape and runaround functions of a sector plate and the consist-turning function of an extra-long turntable. Furthermore, its long length makes it suitable for turning both locomotives and passenger cars.

Time to build

To construct this ingenious device, Dave first built a 21" x 72" vertical wall at the stub-end of the yard. This wall conceals the end of the open staging and also provides support for the device. He then mounted a 17" x 26" piece of medium density fiberboard (MDF) to that wall using a 16" long stainless-steel piano hinge.

Dave used another layer of MDF to build the 22"-long turntable pit and bridge. A pair of hinged legs functioning as knee braces complete the flip-up assembly. A 4½" x 18" hole was cut through the wall, then short track



The turntable bridge is manually rotated. The center (Track 7) is always kept open to serve as the escape track for all locomotives and rolling stock needing to move to the other side of the staging yard.

extensions were laid to connect the staging tracks to the turntable. A 5½" x 21" piece of removable hardboard covers the hole during operating sessions.

Reliable wiring

My friend Gregg Heeter created a straightforward electrical setup. The turntable pivots on a two-conductor phone plug and mating socket. The positive and negative track power wires are routed through a manually operated double-pole double-throw (DPDT), polarity-reversing toggle switch, with the two output wires connected to the conductors on the pivot socket. Each wire from the plug is soldered to one of the turntable rails.

We painted the ends of the staging tracks white, one end of the turntable bridge white, and the corresponding side of the toggle switch white. When the white end of the turntable lines up with the white staging tracks, the toggle needs to be thrown to that white side.

You could also replace the toggle switch with a Frog Juicer or similar commercial electronic device to change the turntable polarity automatically. We opted instead for the low-cost toggle switch solution.

With the turntable lined on the correct track, locomotives or cars run on or off the turntable. A toggle switch is used to reverse its electrical polarity when the white marks on the end of the turntable don't match those on the lead tracks.

Ready when you need it

The turntable/sector plate hangs down 99% of the time until I need to turn and runaround or reposition locomotives. For those occasions, I simply lift the slotted hardboard off the screw "post" anchors on the wall and swing the platform up to a level plane.

I then rotate the turntable bridge manually to align it with the track of the engine(s) to be turned, run the engine(s) onto the bridge, manually spin the turntable to the always unoccupied "through track" in the center of the yard, flip the DPDT toggle switch if the table was reversed, and run the engine(s) to the proper yard track.

When finished, I drop the table and reposition the cover plate, ready to host the next operating session. MR

David Holl is a retired government employee of the United States Air Force. His previous two layouts were featured in Great Model Railroads 1989 *and the October 2008 issue of MR, respectively. David resides in the Dayton, Ohio, area.*