The Morgan Valley RR

This 4 x 6-foot track plan could become your first HO model railroad

Scale of plan: 1" = 12"

Unmarked track sections are full 18"-radius curves or 9" straights. Turnouts are Atlas Custom-Line Mark II as noted

BY RICK HENDERSON

W HO SAYS you can't have a layout that's interesting to operate in 4 x 6 feet? The HO scale Morgan Valley RR offers a variety of operating possibilities not normally found in such a limited space. It's an ideal layout for beginners, yet can hold the interest of more experienced modelers as well. The design allows for easy expansion, though even as it is the MV can keep you busy for a long time. It may not be large, but as you'll see it can offer as much to do as a much bigger model railroad.

TRACKS AND TRAINS

The plan in fig. 1 is designed for Atlas Tool Co. sectional track, and you'll find a list of everything you'll need right there. The turnouts ("switches") are Custom-Line Mark IIs. These are more dependable in operation than the Atlas Snap Switch because they're more gently curved.

The two wye turnouts and some 15"-radius curves leave more space for industries in the center of the layout, so the three sidings reaching into this area can serve several good-size buildings. The Morgan Valley is meant to be a branch line using small engines and 40-foot cars, so the 15"-radius industrial

tracks won't be a problem.

One engine and about 12 cars would be enough for this layout. Since the emphasis will be on switching, the engine and cars need working couplers at both ends. I recommend Kadee Magne-Matic couplers. Their small extra cost will buy a large amount of operating satisfaction. The five Kadee delayed-action uncoupling magnets shown on the track plan will service all the industries. In other locations you can uncouple with a handheld tool, such as the Rix Products no. 14 magnetic uncoupler.

If you'll be running a single engine, all the wiring you need do is replace any pair of regular rail joiners with a pair of Atlas terminal joiners and connect them to your power pack. Be sure not to use any plastic rail joiners on the layout. If you'd like to be able to run two locomotives, use the optional wiring scheme shown in fig. 2, along with plastic insulating joiners and terminal joiners as

shown in fig. 1.

This second wiring scheme uses the plastic joiners to divide the railroad into five insulated sections or "blocks." Each block is fed power through its own single terminal joiner, with the "C" or "common" terminal joiner completing the circuit for all five. Switches on the Atlas Connectors let you turn each block on or off independently of the others, so you can park one engine while you run the other.

Another electrical option would be to add a handheld walkaround throttle to your power pack. A Model Rectifier Corp. no. 55 Cab Control can be connected to your power pack with a 6- or 7-foot cable. That would let you move around the layout while you run a train, to follow the action and throw the turnouts manually. Many people prefer to operate this way because they find that it's more like the way a switching crew works on a real railroad.

SWITCHING AND RUNNING

Look carefully at the track plan and you'll see how operating the MV can hold your interest. You'll see that the engine can't simply back into every siding to drop off or pick up cars. Of the nine industrial locations on the plan, five are on spurs leading off in one direction, and four are on spurs going the other way. The short passing track with turnouts at both ends lets the engine run around any car for correct positioning or "spotting" from either direction. This variety is interesting and, like a real railroad, requires you to think before you start to work.

Wait, there's more. Most industries on the MV share a siding with other businesses. If there is a car sitting at Hegert Wholesale when you have a delivery for Getty Oil, you'll have to make several extra moves. You must first move the car at Hegert's, spot the tanker at Getty, and then return the car to Hegert's. Again, just like real railroading.

Now, with just a little imagination, we will make the MV operate as if it were five times its actual size. Follow along with this example and concentrate on just one industrial siding at a time.

Starting at the passing siding, uncouple the engine from your train and pick up a car at the Amhurst loading dock. Next, deliver a boxcar to Bill's Hardware. Return to the passing siding, pick up your train, and make a lap or two around the mainline loop. Then stop at the passing siding again, imagining that it's really the "next" siding or town down the line, and make a delivery to the Forman Foundry.

Pick up your train and make another lap. Arriving at the next town (in fact, the same passing siding), drop your train and service the Evergreen Furniture and Daggett Electrical siding. Pick up your train and continue to the next town, one or more laps away, then drop off a car at Community Lumber.

As you're making the next lap or two consider how you will complete switching at your last stop. You may make several laps before you're ready, because you have a tank car to deliver to Getty Oil and need to pick up a flatcar from

Plastic rail (3) joiners Kadee uncoupling magnet Terminal feeders TRACK PIECES REQUIRED (Atlas nickel-silver track) 12 9" straight 5 15 15"-radius curve 18"-radius curve 25-degree crossing wye turnout no. 4 left-hand turnout no. 4 right-hand turnout no. 6 left-hand turnout 6" straight 1/2 18"-radius curve 1/3 18"-radius curve terminal rail joiners track assortment 2540 track nails (or use no. 18 x 1/2) flathead nails Fig. 1

Block wiring (optional) symbols. See fig. 2

Independent Iron Works, and there is a boxcar sitting at Hegert Wholesale.

MORGAN VALLEY RR TRACK PLAN

It's simple really, but enough of a job to be very entertaining. See if you can figure out how to do it, leaving the train at the passing siding while you do the work on the spurs. Remember, it's okay to move Hegert's boxcar out of the way — just don't forget to replace it before you return to the train and finish your run.

If you were counting you've seen that the Morgan Valley operated as if it had five stations with as many separate industrial sidings and miles of track along the way. After operating for a time, you'll find those switching problems in MODEL RAILROADER easier to solve.

CONSTRUCTION HINTS

The Morgan Valley RR can be in operation in a very short time as construction is quite easy. In a few nights or a weekend you'll be running trains. Figure 3 shows one way to build the layout table or "benchwork." The book *How to Build Model Railroad Benchwork*, published by MR's publisher, the Kalmbach Publishing Co., explains benchwork in detail and offers many useful ideas.

Homasote, a paper wallboard, makes a good top surface because it's soft enough to make driving track nails easy, yet firm enough to hold them tightly. Glue the Homasote to the plywood with an evenly spread coat of yellow carpenter's glue. Clamp or weight the Homasote to keep it flat while the glue dries.

You can go ahead and lay the track right on top of the Homasote. Fit all the sections in place and install any insulating

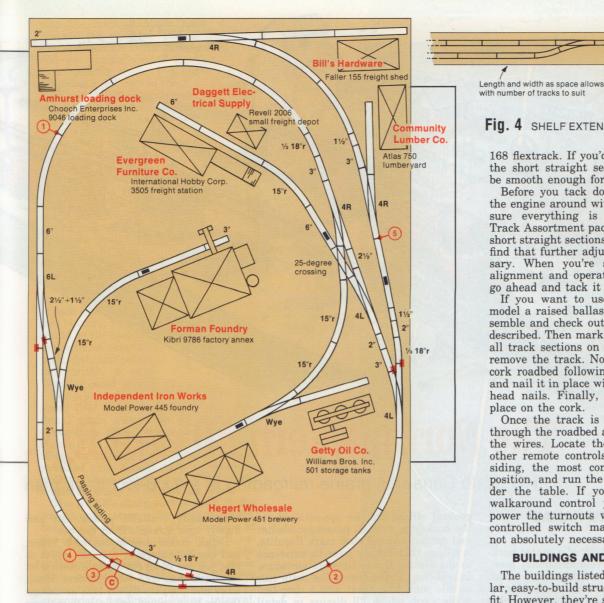


Fig. 4 SHELF EXTENSION

168 flextrack. If you'd rather stick with the short straight sections, they'll still be smooth enough for good operation.

Before you tack down the track, run the engine around with a few cars to be sure everything is okay. The Atlas Track Assortment packs have some very short straight sections you can use if you find that further adjustments are necessary. When you're satisfied with the alignment and operation of your track, go ahead and tack it to the Homasote.

If you want to use cork roadbed to model a raised ballast roadbed, first assemble and check out the layout as I've described. Then mark the center lines of all track sections on the Homasote and remove the track. Now you can lay the cork roadbed following the center lines and nail it in place with no. 18 x 1/2" flathead nails. Finally, tack the track in place on the cork.

Once the track is secure, drill holes through the roadbed and tabletop for all the wires. Locate the power pack and other remote controls near the passing siding, the most convenient operating position, and run the wires to them under the table. If you won't be using walkaround control you may want to power the turnouts with Atlas remotecontrolled switch machines, but that's not absolutely necessary.

BUILDINGS AND EXPANSION

The buildings listed in fig. 1 are popular, easy-to-build structure kits that will fit. However, they're shown only as suggestions, and you should feel free to use any other buildings that you like. If you're ready for more challenging construction, you'll find many craft structure kits, using wood and other materials, that will be perfectly at home on the Morgan Valley RR. Scenic elements such as roads and vegetation to give the trains and buildings a realistic setting I'll leave to your imagination.

The siding that serves Bill's Hardware and the Amhurst loading dock is perfect for expanding the layout when you're ready. One simple way to do that is to add the shelf and storage yard shown in fig. 4. This yard can be used to add operating variety by serving as a staging yard for two or more trains.

You'd put trains on these tracks ready to arrive on the main railroad as if from a distant terminal. After running laps and switching as described before, run the engine around the whole train at the passing siding and work your way back to the staging yard. If you can make the shelf wider to hold more staging tracks, you'll be able to have that many more different trains ready to operate.

I know you'll enjoy building and operating your own Morgan Valley RR. 2

or terminal joiners you need as you go. Try to make all rail joints straight, even, and tight. You may have to leave some slight gaps to fit everything as shown. This is normal with sectional track, but try to split the difference over a couple of sections to keep the gaps as small as possible.

A particular trouble spot in this plan

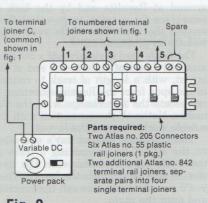
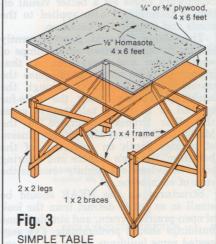


Fig. 2 OPTIONAL BLOCK WIRING



will be the 2" and 3" sections between

the two no. 4 left-hand turnouts on the

right side of the plan. You could make a

smoother transition between these turn-

outs by using a short length of Atlas no.