

Fig. 1 MOUNT GILEAD

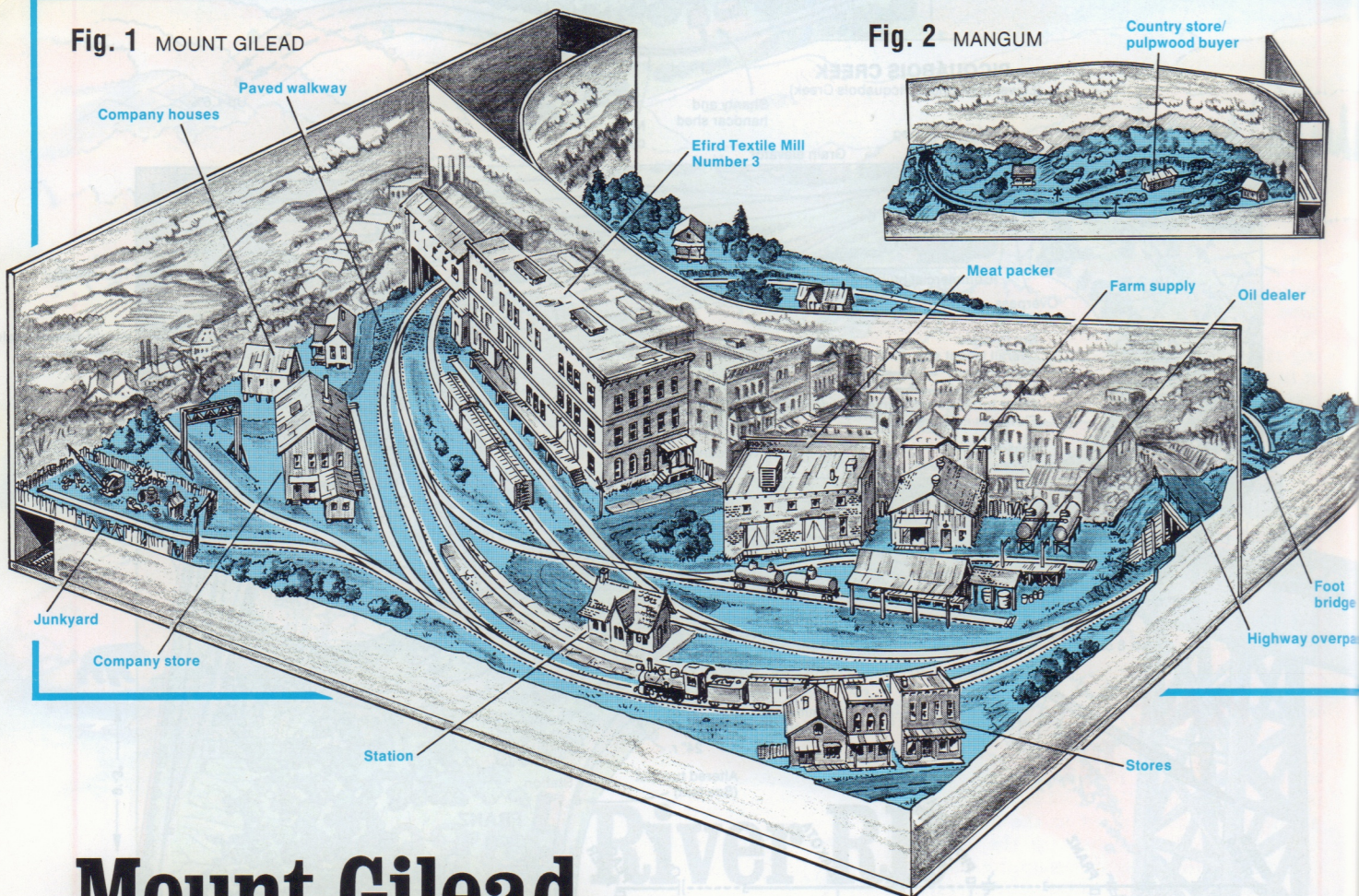
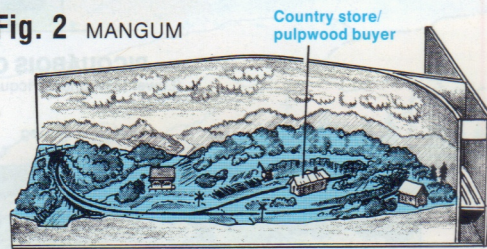


Fig. 2 MANGUM



Mount Gilead, a town on the move

An interesting portable layout section that uses the middle of the room

BY MICHAEL ROGERS

LAYOUT PLANNING has always been an exercise in selective compression and compromises. All of the elements must be balanced against each other to create an impression of space and time in a relatively confined area. As a career Air Force officer, I have always had to consider the additional problems of coping with a mobile lifestyle.

Over the years, I have designed a number of sectional shelf-type layouts designed to fit against the wall. In each case I planned things so the sections could be easily rearranged to take advantage of whatever space I had available. All of these around the wall arrangements were somewhat frustrating to me since they failed to make efficient use of the middle of the layout room.

During a recent planning session, I turned my efforts toward designing a

semiportable layout section that would make use of the middle of a room. To begin with, I examined exactly what I wanted the railroad section to accomplish, and then I listed the physical constraints that were necessary to maintain the layout's portability.

Any layout section that extends peninsula fashion, into a room from a shelf-type railroad must either be a dead end (terminal), or it must be wide enough to contain a turnback curve to get the main track out of the section. Since my personal hobby interest is in shortline-style railroading (using a series of portable sections that may be combined to simulate several towns connected by the railroad), a dead-end shelf is only useful as a terminal or as an industrial switching area leading off the main line. For this reason I designed my new layout section as a larger unit that would serve as an intermediate portion of the layout.

Any layout section with a turnback

curve has to be made slightly wider than the diameter of the curve to allow for proper clearances. This would be 4 feet or more for an HO scale minimum radius of 20" (which is about as tight as I desire even for my small shortline equipment). This width can create serious problems when it comes to moving the railroad. In fact, I have experienced some difficulty at times when it came to getting my 2 x 8-foot layout sections into or out of houses which have winding stairways or rooms leading off narrow hallways.

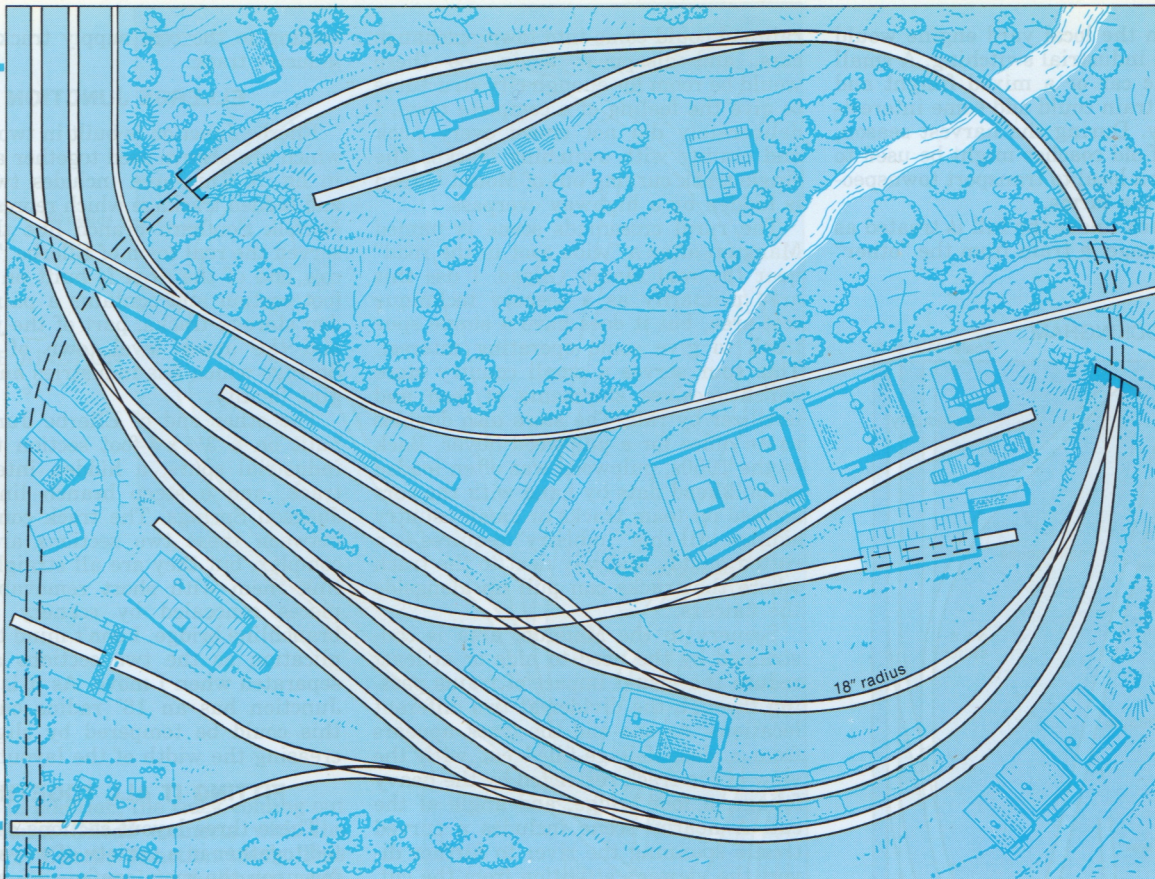
Some years ago I remember reading an item about possible sizes for portable layout modules in relation to the problem of door sizes (which are about 6'-6" tall in most homes). If a wide layout section is limited to an overall length of about 6 feet, it can be moved through residential doorways on end. With this in mind, I settled on a 4½ x 6-foot layout section that gives me a little extra room for a wider radius and better track positioning.

I am primarily interested in layout sections that may be rearranged and combined in various ways to make an interesting short line. To accomplish this, each layout section has a center of operations such as a yard or a switching area. Whenever I finally retire and settle down, I will be able to connect these activity centers with simple scenicked sections of railroad.

On this larger section I wanted one

Fig. 3
TRACK
PLAN

Scale:
1" = 1'-0"



side to have a small town with lots of switching while the other side would have a countryside setting to give a sense of distance. To accomplish this I used a scenic divider through the main portion of the layout section. An appropriate background painting would give the rural side a feeling of distance, while building flats set near the backdrop would help increase the apparent size of the town on the other side of the section.

MOUNT GILEAD

Figures 1, 2, and 3 show the track plan I developed to meet these requirements. I named this layout section Mount Gilead after a small town near my home town in North Carolina. Like its prototype, the model Mount Gilead is a textile and farming town typical of many found in the rural south. The track enters the section at the right rear corner and comes through the scenic divider into town. As it leaves town, the track again passes through the scenery divider, descends through the rural area and disappears into a tunnel under the town scene.

The minimum radius through Mount Gilead is 20". I curved the scenic divider to provide more room for the town scene and to make it easier to blend the rural scenery into the backdrop. This divider is also split at the right rear corner to conceal the tracks from the town scene while allowing access from above. This makes it possible to exchange cars on this track if it is used to simulate an interchange point.

Any movable layout section must be designed to protect the interior during

moves without adding excessive weight. Mount Gilead has a bottom made from a solid piece of plywood that is reinforced by side pieces and ribs under the town area. A lot of primary strength comes from the scenic divider and the plywood back which are the same height. These parts make it easy to add removable plywood covers (mounted with screws) for moving protection. Removable panels under the town provide wiring access and the turnouts are controlled with ground throws to minimize complication.

Working out the grade necessary to bring the main line under the town proved to be a major design challenge. I wanted to keep the town switching area level so cars would not roll away. This meant the grade could not begin until the track entered the rural scene. Since there was no room to add more track, I searched for a way to reduce the thickness of the overhead supporting structure at the point where the lower track passed underneath it. I wound up removing the town level's plywood trackboard where it passed over the bottom track and then used thin metal or plastic to support the town tracks and scenery over the gap. This reduced the effective grade in the area to 3.75 percent.

Mount Gilead is now a major operating center for the railroad. The town is dominated by Efrd Mill No. 3, a three-story textile plant which is the area's biggest employer and source of revenue for the short line. This mill is actually only a few inches thick, with most of the structure built as a flat along the center divider. The tracks curve back under an extension of the mill to make a visual transition.

Since my railroad is set in the 1950s, a series of mill houses is appropriate. These company-owned homes are across the track from the mill with a paved walkway connecting the properties. This walkway also serves as an easy way to conceal the different construction I used over the hidden lower track. A nearby company store receives durable goods and food products by rail as well as fuel and other supplies.

Both the company houses and the store are simple wooden structures, unadorned but sturdy. They were generally built on brick pilings to keep their wooden floors away from termites and to allow air to circulate underneath during the hot weather.

One of the spur tracks passes under the mill beside the main line. It may be treated as a mill siding or as an interchange with another railroad. There are five other spurs in the area serving a variety of industries. One track serves the rear docks of a group of stores and wholesalers which face the town (toward the divider). These include a farm supply house and a meat packer. Diagonally across town is a junkyard and a retail oil dealership. All of these industries were chosen to use a variety of car types and be fairly typical of what one might find in a small town.

My own preference is for local freight operation, but Mount Gilead is certainly large enough to have its own switcher. An EMD SW1 or Baldwin S-12 diesel switcher, or an 0-4-0 or 0-6-0 steam switcher would fit right in. In such cases, the local freight would simply drop off a group of inbound cars and pick up the outbound cars on its way through

town. Then the local yard engine would handle the industrial switching. A small gas electric car or a mixed freight and passenger train could add some interesting variety. During the harvest season, a couple of old coaches might be used to run an extra local to transport townspeople out to the farms.

If the track under the hill is treated as an interchange, a train from the "other"

railroad could come into town, exchange cars, and disappear again. So there would be room for enough city structures to give the feeling of a complete town. I deliberately did not crowd every nook and cranny with switching tracks. The single track curving out of Mount Gilead is hidden by a highway overpass.

The rural crossroads scene is named Mangum after a "wide spot in the road" near the real Mount Gilead. I use this area primarily as a scenery technique test area, but it does have a single spur track to give some operating interest. This spur serves a small country store which receives shipments of feed and fertilizer by rail. The store also doubles as an office for a pulpwood buyer. Back in the 1950s, pulpwood was often loaded on bulkhead flats by hand with the cars spotted on team tracks or small country sidings. All this "industry" requires is a rutted muddy roadway next to the track where the trucks can pull up alongside the flatcars.

Scenery in the Magnum area is constrained by the need to hide or at least reduce the visual impact of trains passing through the divider at two different locations. At one end the track appears from a deep foliage-filled cut with the view of the foliage restricted by the heavy foliage, a foot bridge, and angle of the cut. A nearby scene includes a curved trestle spanning the river to further divert the viewer's attention from the cut. The opposite end of the scene has a normal tunnel approach and portal so everything remains fairly visible. A lot of foliage is built around the track in this entire scene to help conceal the steepness of the grade.

ROCKINGHAM

Rockingham is a 2 x 8-foot yard section complete with engine facilities, a car repair shed, and a work-equipment storage track (fig. 4). It can take care of the required switching for a short line or a small division point on a regular railroad. Although the turntable and enginehouse are restricted to engines shorter than 12" long, larger engines can work through the yard since it is built with Atlas no. 4 Customline turnouts, except for a single three-way switch and the sharper turnouts

leading to the coal supply track and an industry track.

ELLERBE JUNCTION

Ellerbe Junction is built in two sections which are always used together as shown in fig. 5. This area includes two towns and hidden trackage which represents the Norfolk Southern branch line that once served the real town of Ellerbe. The narrow end of the area is built on a 2 x 6-foot section and contains a pair of hidden storage tracks, part of the junction, and the upper level town of Jackson Springs which has industries and an engine facility.

The other end of Ellerbe Junction is built on a 3 1/2 x 4-foot section that has industrial spurs, a hidden interchange track, and a steep branch line up to Jackson Springs. The track connections between these two sections are pretty complex, but they are all straight, and I link them with short removable track pieces concealed by scenery and the branchline bridge. I don't mind this complication as the two sections are only separated when I move. As it is, Ellerbe Junction has an 18" radius curve, but this could be tempered by slightly increasing the width of the layout section.

FITTING IT ALL TOGETHER

These three layout sections can be fitted together in a variety of ways depending upon the room configuration. Figure 6 (A, B, and C) shows three possibilities with the major towns connected by short sections of simple benchwork I custom-fit as needed.

In version A the town sections are connected so the trains travel from Rockingham, through Mount Gilead, to reach the hidden storage tracks of Ellerbe Junction. This scheme will just barely fit into a 10 x 12-foot room. It has no turning facilities at Ellerbe Junction, so operations would be difficult unless diesel road switchers are used.

I like the arrangement in version B better, but it would require a 10 x 12 1/2-foot room if 24"-wide operator spaces are used. In this setup Mount Gilead is set out about 3" from the wall so a hidden track may connect the upper-level branch (Jackson Springs) to the track from Rock-

Fig. 4 ROCKINGHAM

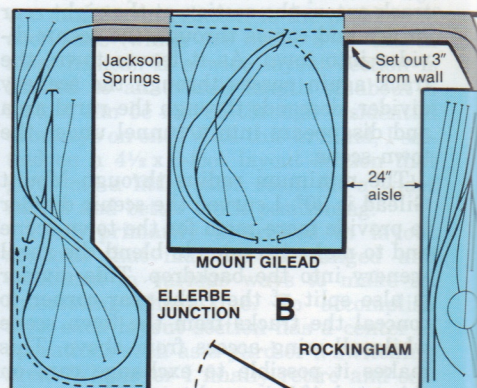
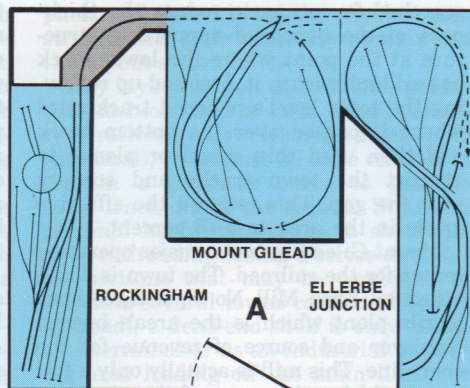
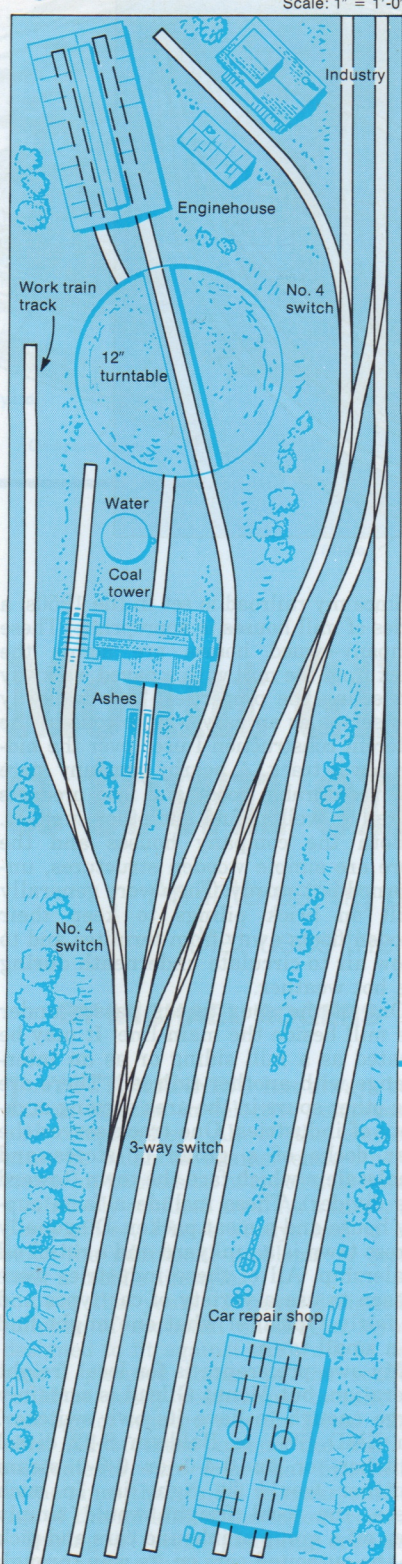
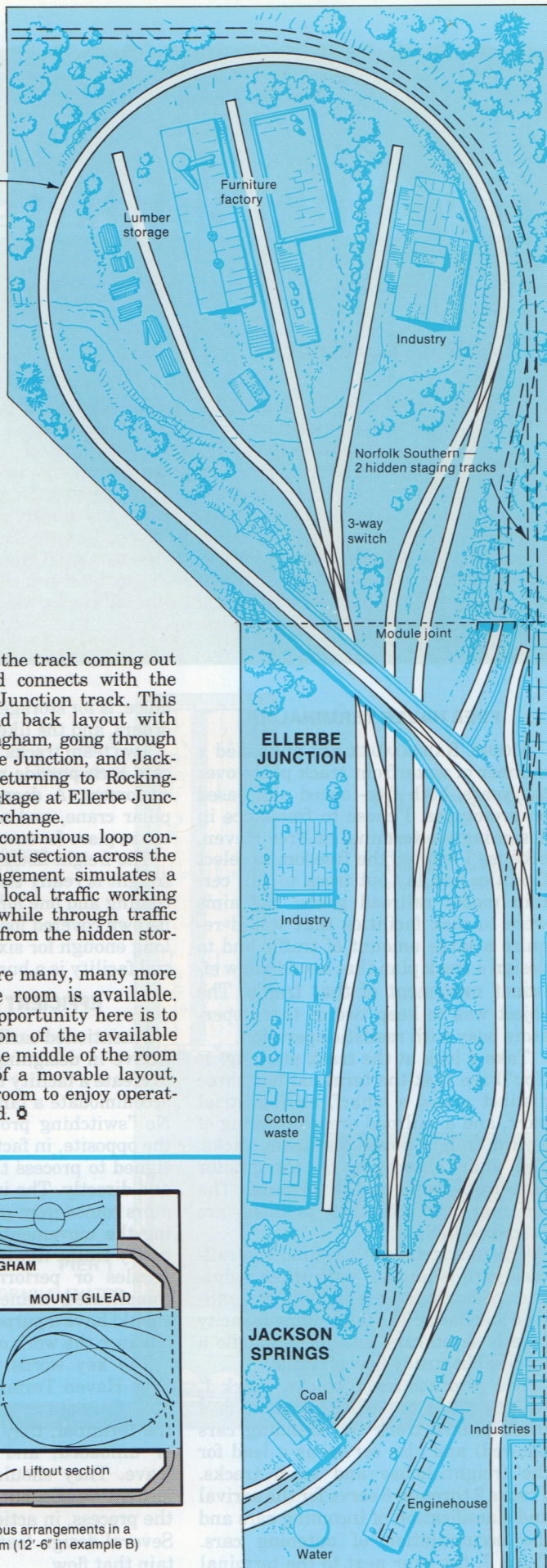


Fig. 6 MODULE COMBINATIONS

Not to scale

Fig. 5
ELLERBE JUNCTION
 Scale: 1" = 1'-0"

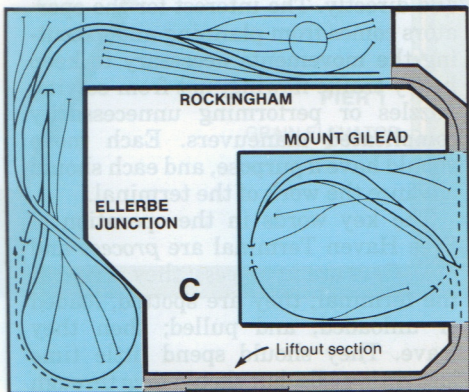
18' radius



ingham. In addition, the track coming out under Mount Gilead connects with the lower level Ellerbe Junction track. This produces an out and back layout with trains leaving Rockingham, going through Mount Gilead, Ellerbe Junction, and Jackson Springs before returning to Rockingham. The hidden trackage at Ellerbe Junction becomes an interchange.

Version C has a continuous loop configuration with a liftout section across the doorway. This arrangement simulates a larger railroad with local traffic working out of Rockingham while through traffic appears occasionally from the hidden storage tracks.

Obviously there are many, many more possibilities if more room is available. However, the real opportunity here is to get better utilization of the available space. By turning the middle of the room into a useful part of a movable layout, there is even more room to enjoy operating a model railroad. ☐



Modules shown in various arrangements in a typical 10 x 12-foot room (12'-6" in example B)