

## **A large coach yard along a 13 foot garage wall**

Do you want your toy trains to operate more realistically, yet want to avoid HiRail modeling? Do you like foreshortened 3-rail passenger cars, but don't think you have enough space? Do you wish your passenger trains had the kind of switching action you get with freight trains?

Well, here is an exciting track layout that comfortably fits on a 13 foot x 3.5 foot shelf. The minimum diameter curves are 0-45. Almost all track is within the recommended 30 inch reach, and a baseboard notch makes the reach even easier. Suggested shelf height is elbow level. This compact track plan is cost saving, using a minimal number of switches.

The assumed location is totally freelance, but could possibly be a fictional northern Ohio setting. Era is an imaginary post-60's autumn, where railroading is still going strong, and vintage equipment in excellent condition is still operated. Trains are assumed to be higher quality 3-rail toys, from manufacturers such as 'Lionel modern-era' and 'MTH Railking'.

The layout theme is a full service coach yard (passenger car sorting and service facility), supporting an unmodeled passenger terminal, unmodeled passenger engine servicing area, unmodeled turnaround track, and unmodeled replacement passenger car storage pool. Your job is to break down trains for refreshing, and rebuild trains for passenger loading. Modeled along with the servicing yard is an express depot and milk transloading platform. The layout is designed to stand alone, but it could easily be incorporated as an appendage to a larger layout. Note that the unmodeled passenger terminal is assumed to handle mail on the platform, and have tracks for parking business (office/recreational) cars in use.

Now for specifics:

For simplicity, the layout uses nothing but sectional (Atlas O 3-rail) track, and is serviced by a single dedicated (probably diesel) switcher. The switcher will travel off the layout to the engine servicing area whenever it needs to be fueled, serviced, or even swapped out. Because only one engine will be in use, the whole layout could be conventionally powered.

The front left is the track assumed to be coming from the passenger terminal, passenger engine servicing area, turnaround track, and spare passenger car storage yard areas. To simulate this, the track will in actuality be a fiddle track upon which passenger cars will be hand placed or removed (touching cars to manually uncouple, or physically remove to a cabinet, is an expectation). If you have a little extra space, you might want to lengthen the staging track slightly for convenience, perhaps by using a track-width fold-down peninsula. Note that all cars will be assumed to have come from the simulated turning track, so shall be placed on this staging track properly oriented. The switcher may still need to run around cuts of cars however, in order to sort them onto the correct spurs.

To the right of the staging track is the locomotive run around, one lead of which passes through a passenger car exterior washing machine. The run around comes together again in the tail track for the sorting yard. Curved turnout gives a "real railroad" impression.

Branching off the left run around track are five sorting yard tracks. Although cars can layover in the yard (terminal tracks are normally only used briefly for the loading/unloading of passengers), its real purpose is to refresh cars between runs. Each of these tracks have paving around them for carts to be wheeled. Although carts can always pass in front of the end of a filled stub track, each track also has two shortcut crossovers spaced approximately one passenger car length apart (indicated by green in the SCARM drawing). Note that the rear yard track is reached entirely by not less than 0-54 diameter curves, allowing even a full 0-scale passenger car to be serviced here (pulled from staging track, through washer, into tail track; and then pushed into yard stub track).

Although any sorting yard track can be used to hold any car type (or even be left open), normally the rearmost track will hold lounge cars (mixed use cars that will often combine food service, sleeping, and socializing areas), due to their need for specialized servicing. The next rearmost track will normally hold food service cars such as full service diners with a kitchen and tables, bar cars (where patrons stand while toting drinks), and kitchenless cafe cars with bistro tables (which serve pre-made meals). The middle track will normally be for sleeping cars, both open berth and compartment type. The track second from the front will normally be for chair cars (coaches equipped with comfortable reclining seats that can be used for napping, and a large restroom for freshening up after a sleep), and the front yard track will normally be for your workhorse coaches.

Branching off the right hand run around track are the head-end car tracks and the inspection track. The inspection track has a pit below where cars which have been on the road for a while are lubricated, and checked for wear and breakage. Over the pit is the repair-in-place track, where minor repairs, including sometimes wheel and brake changes, are performed. There will be some paving around this track, so a cart or vehicle can be brought alongside. Besides the cars regularly appearing on this shelf layout, an occasional business or railway-post-office car might make a guest appearance at the inspection track.

At the end of the inspection track is space for parking a passenger car or a supporting freight car, such as a flat car carrying spare wheels. Note that this section of track is separated from the inspection area by an automatic uncoupling track, and also separated electrically from the rest of the layout. This is so an animated work car can have its track pickups independently electrically fed. Note the orange color on the SCARM drawing which indicates this isolated trackage, and note how it passes slightly to the left of the automatic uncoupler. This is so the magnet can be used to either uncouple the end of the car you wish to park, or to operate an animation feature in the middle of the car.

The head-end car tracks branch to the milk transloading platform and express depot. At the milk track will be a platform for depositing milk cans (we imagine that transporting canned and tanked milk by rail is still a vibrant business). A 'Lionel Milk Can Platform' would be a good choice to use here. In front of this platform is an automatic uncoupler track, intended for operating an animated milk can unloading reefer. Just past the platform is where tank type milk cars can be pumped out. An access driveway on the track side opposite the milk can platform is where the milk transloading trucks appear.

Just past the milk track are two express car tracks servicing an express depot. The truck docks with driveway, are on the rear of the building near the layout edge. The public office is on the unmodeled right side of the building. On the front side are the train car bays. The reason why there are two tracks instead of just one long track, is so one car can be moved without disturbing the other car being loaded/unloaded at the express building. Note that the forward most track is long enough to hold two cars, but only one car will stand along side the building. You could still service both cars though, as the outside car could be loaded directly from a delivery truck in the driveway; or in a "drawbridge" ramp manner, if you line both the inner and outer cars doors up with each other. Express cars temporarily not in use can be shoved into any open spot in the sorting yard. Note that a cut of head-end cars are usually sent to/from the Terminal separately from a cut of passenger cars, even if they are part of the same train along with the passenger cars.

Branching off the sorting yard tail track is the supply track. Paved crossovers allow carts of beverage ice and mechanics supplies to reach both the sorting yard and inspection track. Here is where boxcars and flatcars of sorting yard support supplies will be delivered for unloading. Here also is where you would spot the occasional express reefer or older business car that needs to be block iced.

All along the back of the shelf are building flats and partial buildings, representing the sorting yard service buildings. They can be kitbashed toys, or custom PaperCraft models. Examples ideas for kitbashing these buildings can be found in the magazine article: "Modeling Passenger Servicing Facilities".

Behind the rear sorting track, the leftmost structure is the two story Pullman building. Although the building is mostly for porter supplies such as mattresses and linens, it also supports the cleaning crew which wipes windows, washes surfaces, and vacuums rugs in cars. To its right is the one story commissary, which provides food and drink to food service cars, as well as a place to house the yard offices. Both of these (freestanding model) buildings are normally supplied from their unseen rear side by delivery trucks, but there is no reason why you couldn't spot an occasional supply freight car, such as a boxcar of new bedding materials or a reefer of seasonal vegetables, on the spur that runs in front of these buildings.

Behind the supply track, the leftmost structure is the two story power house, with belowground basement, which provides electricity and steam for the entire coach yard. The power house lets freight cars enter through its side (the idea for the model comes from page 8 of "The Model Railroader's Guide to Industries Along the Tracks 2"). It will get an occasional covered hopper to collect ash stored above on the upper floor, and regular hoppers of coal to dump below into the basement storage pile. Just outside the building is an automatic uncoupler, so a car could optionally be left in the building if desired. The track in the middle of the building also has an automatic uncoupler which would be used to operate an animated dumping hopper. This way a hopper car could enter the building full of coal, and then exit empty. A hole below the hopper car is where the coal would fall, to be caught in a bucket for later re-use. Note that if you do not own a coal hopper, you could substitute a fuel oil tank car, and assume the facility was converted to run on oil.

To the right is the icing station, which uses a left side conveyor to lift ice to a roof level icing platform shed. From here the occasional delayed or outgoing express reefer can be iced. The 'Lionel Icing Station' is a good choice to use for your platform. The actual insulated hut that stores ice for food service and the occasional legacy air conditioner (such as you might find on an old business car) is built underneath the platform, within the legs of the structure. Ice can either be supplied to the hut from the unmodeled rear side by a local ice delivery truck, or from an ice filled reefer unloaded in front. From the hut ice is carted to the conveyor, where it is then temporarily stored in the upper shed while awaiting the reefer to be filled.

Farther to the right is the one story workshop, which holds tools, lubricants, batteries, and other supplies required by maintenance to keep the passenger equipment rolling. This building also can be supplied either from delivery trucks on the unmodeled rear side, or various supply freight cars unloaded in front.

Behind the tail track, is the rear "fire-escape" side of a multi-story YMCA-like hotel that caters to railroad workers. This hotel also contains a casual restaurant, and a lounge areas with relaxation equipment. All hotel supplies come from local delivery trucks, *not* rail cars. The tail track must always be kept clear, although the switcher can stand idle here.