

"Old School" Passenger Train Layout

Most track plans found in books are designed for HO, and they almost always use flex-track and straight legged turnouts. I chose a multiple commuter RDC train friendly *John Armstrong* track plan (see Plan-26 on page 14 in the book "*101 Track Plans for Model Railroaders*") as a feasibility study, to see how easily a mixed passenger/freight HO track plan could be upscaled to O-scale (with spurs capable of accommodating modern jumbo sized rollingstock), while building as close as designed but using only 3rail curved leg turnouts and (as much as possible) sectional track pieces. Two RDCs and one road engine can easily be on the layout simultaneously.

The original track plan was 4'x8', which would require a 8'x16' table if exactly upscaled to O-scale. Because accessing the inside of the layout would be too far of a reach at that size, and because O-scale 3rail trains can negotiate tighter curves than HO trains, I compressed the track plan to fit a more S-scale sized 5.5'x13.25' table. It is possible to shorten the table length by a further 10" (on the *Hazleton* side) if you are willing to reduced spur lengths slightly. There must be an access isle way along both of the tables long sides, but the short *Hazleton* side can butt against a wall, and the *Alesburg* side can have its corners rounded off.

The tracks had to be radiused slightly to fit the compact space (no curves are tighter than O-45). Turnouts use the conventional 3rail curved legs instead of the HO strait legs, but all turnout directions remain the same. The railroad can be operated in three modes: Point-to-Point, Out-and-Back, and Continuous Run. The track plan is capable of serious Operations, accepting both a Passenger Timetable and a Freight Car Forwarding scheme (offline traffic is "fiddled" on/off the layout at *Manville*). The only significant track plan departure was the elimination of the operationally undesired cutoff near *O'Keefe* (a legacy of outdated "lots of multiple routes" thinking). Without it trains can still go round-and-round in a continuous loop, while its removal makes the layout less cluttered and redeems the cost of two expensive turnouts.

Building footprints were mostly dimensioned as if they were Lionel R-T-R structures (but custom structures will look better). Railroad structures are colored blue, freight destinations are colored green, and passenger stations are colored red (the *Hazleton* urban station building is a raised structure, so that tracks can run beneath). Yes, all of the buildings will be closer together than in the original track plan, but esthetically it isn't too obnoxious. Because the layout was designed when steam engines were still in use, a water tank is shown beside the engine layover track in *Alesburg*. In our diesel era this water tank would not exist.

For better operations, the *Skillman* suburban station (reduced now to just a platform) was relocated to the opposite side of the track and sandwiched between the two parallel tracks. The single physical platform will now operationally appear as two independent places on the route, so we have to imagine this same single platform to be two spacially separated and differently named ones (a trick used by *John Armstrong* himself on his own layout). Any trains on the outer track will be at *Skillman*, whereas any trains on the inner track will be at *Namlliks* (*Skillman* spelled backwards).

Passenger trains can hold at the urban terminal of *Hazleton*, the suburban platform of *Namlliks* (when not using the Continuous Run), and the rural station of *Manville*, without fouling other traffic on the pike. As such, ideal Point-to-Point commuter passenger routes would be: *Namlliks* --- *O'Keefe* --- (Alesburg) --- *Hazleton*; and *Manville* --- (Armstrong Jc) --- *Skillman* --- *O'Keefe* --- (Alesburg) --- *Hazleton*. Long distance passenger trains would also follow the *Manville* to *Hazleton* route (shown in grey), with the trainset being placed on, and removed from, the layout at *Manville*. Any unidirectional passenger trains arriving at *Hazleton* can use the balloon track (which goes under the urban station and over the two crossings) to turn the entire trainset around after unloading. Trains terminating at *Namlliks* can optionally turn around by looping back rather than operate exclusively push-pull.

Due to the track plans age, the original plan was designed for a fixed cab (probably in front of *Skillman*). With contemporary walk around control we can make the layout appear bigger by adding a partial length scene divider (shown in yellow). If you note on the original plan, a mesa was used to create a similar scene dividing effect (along with ridiculous tunnels... popular at the time). In place of the tunnel portal in the mesa near *O'Keefe*, a more logical elevated outdoor parking lot could extend from the elevated *Hazleton* station building to the scene divider to create a similar tunneling effect.

The *O'Keefe* suburban station was moved to the opposite side of the track, and made into a "reduced depth structure" that merges into a painting on the scene divider. On the opposite side of the divider a picture of a rural industry for the Armstrong Jc spur should be rested up against the scene divider. It is suggested that you make this a swappable "flat" structure, so that on different operating nights you could exchange it so as to legitimately spot different car types on this spur. If you choose instead to make this a permanent scene, a dairy would be a good choice as you could shuttle a milk tank car to the team track in *Hazleton* (for transloading to an offline creamery).

Note: for simplification it is **encouraged** that the Armstrong Jc Industry/Intechange spur have its turnout relocated to the opposite side of the spur, reversely connecting into the main line where the 10" track segment is shown on the track plan (e.g., connecting into the main line closer to the *Manville* station, but having identical spur length and enough "tail" to allow switching). This will then make all the freight spurs on the layout face the same direction, eliminating the need for a locomotive runaround movement. If instead you keep the spur facing as is, you could if need be either extend the spur length or shift the turnout closer to *Manville*, so as to better match the spur to the scene you place upon the scene divider.