

Cape May, Delaware Bay & Cookes Point Ry.

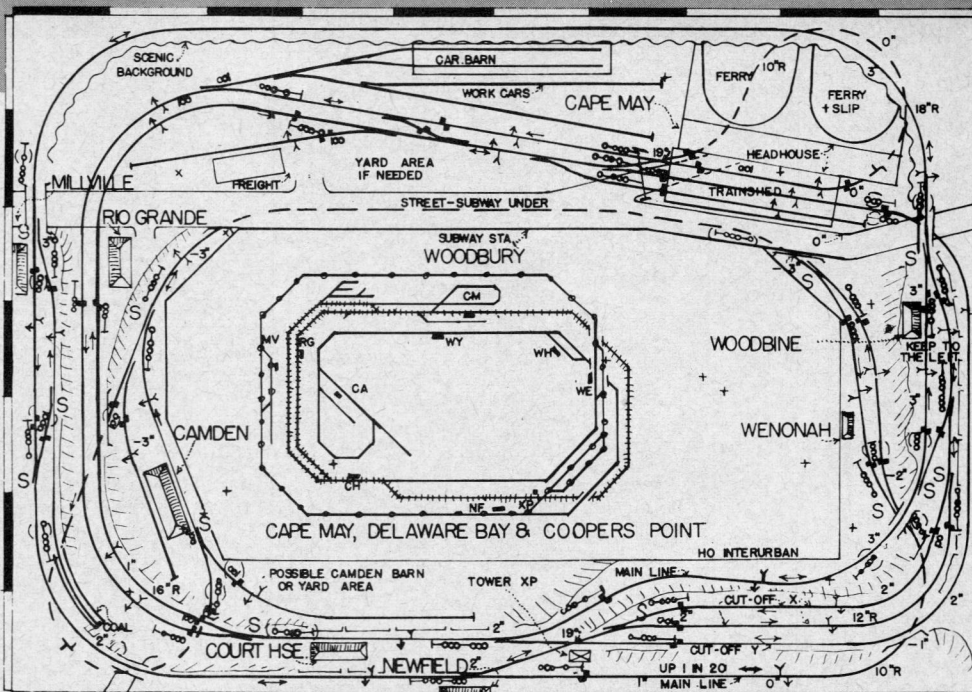
by the layout doctor

AS WE have pointed out on previous occasions, an interurban or street railway line, is single track railroading in microcosm, since only single car trains are run, two or three cars at most, so that sidings can be shorter and terminals less pretentious. From a modeler's viewpoint, and excepting special situations such as end of line loops, the difference between a trolley line (without its overhead wire) and a steam type railroad is negligible or non-existent. Of course, curves are usually wider so that a steam version of CMDB&CP would take up somewhat more room. Yet an all diesel switcher version of the CMDB&CP could duplicate the plan exactly, since a number of one-time trolley lines went diesel.

With that in mind, I present here just such a layout in HO to fit a space 7'0" x 10'2", with operation from an internal operating space. It's called the Cape May, Delaware Bay, and Coopers Point (a slight switch on a long gone prototype car line name) and represents, anachronistically, an interurban connecting the new Delaware Bay ferry connection with Camden, N. J., where there would also have been a ferry connection with Philadelphia. At one time there was an electric line from Camden to Millville, operated by the West Jersey & Seashore part of the P.R.R. with steam trackage continuing via Woodbine and Cape May Court House to Cape May. All of this, less some abandoned trackage, is now part of the P-RSL and operated by diesel.

The name, to be sure, is merely a convenient handle. It had to connect a real or former ferry terminal with some point of importance, for electric lines very often did just that, across the river or bay from any Metropolis from Boston to San Francisco. Matter of fact I started to call the interurban the Pacific Northwestern and had it connecting Sausalito with Eureka (Calif). But having a subway station at Willits seemed a bit more to swallow than having such a station at Woodbury, just within the realm of being reasonable, and not by much, either. If you build such a line you will naturally rename and relocate it to suit your own particular interests.

Curves on the interurban have been kept to a 10" minimum, with other curves at 12", 14", and 16" radius up to a desirable 18". All the switches have 18" radius curves so that Snap-Switches could be used although track divisions for these or for sectional track on the 18" R or straightaways are not shown. Tru-Switches could also be used where manual or electrical control was implied by the lack of an "S" which



indicates spring switch. If overhead wire was used as a power source, then even regular all-rail frog switches, suitably sprung, could be used at spring switch points as well as non-sprung switches. But for spring switches in two rail, only insulated frog switches (such as Snap-Switches) can be used. And by the way, if you like to make your own switches, you can rip Snap-Switches apart so as to utilize frogs and points, mounting them on wooden, fibre, or other roadbeds. The 19° crossings suggested at two points are also available commercially, either fully insulated or all-rail-frog, if you don't want to make them.

At Cape May there is a reverse loop (optional of course) which crosses the outbound track and swings around under the dummy ferry slips and the dummy superstructure of a ferry boat. This presents the car on the innermost track, ready for an outbound run. In times of great traffic, the other two tracks can also be used for holding outbound (or inbound, for that matter) cars. Exit from any of these tracks is controlled by a three-track signal bridge located just outside the terminal and spanning, also, the vehicle entrance road to the ferry slip. For that reason, the inner track has also a dwarf signal just clear of the road, under the trainshed, repeating indication of the bridge signal outside. There is a freight house located on the inbound track, normally backed into by the interurban road's freight motors.

Double track (as so often the case with interurbans and standard railroads) runs out a ways from the terminal, here through Rio Grande to Court House; full name, Cape May

Court House. The end of double track could mark the end of a local service out of Cape May, with quick turn-arounds to keep cars out of the way of other traffic. Single track extends from Court House to Woodbine where there is a strange keep-to-the-left passing track, with spring switches. The reason for keeping to the left will be explained later. This and other passing tracks could hold a maximum of two long interurban cars. Of course one car could stay on the siding while a "long" freight or passenger train ran by on the other part of the siding.

From Woodbine, a long single track runs along behind a scenic background to Millville, where there is another sprung passing track. The background should be high enough to conceal the existence of a track behind it: since that track is 3" above the ground there, another 3 or 4 inches would be needed to conceal overhead wire, making an optimum background height of 7". Single track runs from Millville to Newfield and then drops down a steep grade to negative elevations, -2" to -3" through Wenonah, and at the latter elevation through the Woodbury subway (!) to Camden where cars round a reverse loop under upper trackage to enter the station ready to head right out again.

There is one storage spur behind Camden station, plus a "yard" spur with sprung switch on the other side of the station. There is space, however for more of a yard or barn if desired. Similarly at Cape May, there is space for a yard if more freight service is to be operated.

So far I have described a pretty straightforward single track, point to,

The interurban railway is single track railroading in microcosm, with sidings being shorter, terminals less pretentious, and trains usually three cars or less. This layout doctor design packs in plenty of operation plus a ferry terminal. With some track simplification, the same design could also be used in the same space for 0 gauge.

point operation. You could keep four or five interurbans running on this layout with the passing tracks, double trackage, and reverse loops, and maybe more. But a point to point layout is vastly improved by the addition of "cut-offs" or "sneak-offs" or "hidden connections" to permit continuous round-and-round running. I was able to add to the CMDB&CP two such cut-offs. The first is the reason for keeping to the left at Woodbine passing siding—the switch to the cut-off is on the track that keeping to the left, on the oval to be described, leads to. This oval or round-and-round run is Millville-Newfield-Woodbine-Millville etc. Because the Woodbine passing track is not used for passing when this run is in operation, I have had to install a standard keep-to-the-right passing track on the "cut-off X" between Woodbine and Newfield.

Another continuous run oval can be made by extending one of the Cape May terminal tracks, as I have done, under the main line, up-hill via "cut-off Y" to Court House. This gives a continuous run as follows: Cape May-Rio Grande-Court House-Cape May etc. It has one long section of double track and no other passing tracks, but two cars could be run in opposite directions when continuous running was desired, just as two could run on the previously described "oval."

The two "cut-offs" cross on the level at 19° crossing at Tower XP. It has occurred to me that if this crossing were replaced by a double slip-switch (such as Fleischmann's if you want to buy one R-T-R) a greater variety of operation would be possible. You might like to work this out: actually, it boggles me.

Now I have shown all over the layout, many, many sets of two insulated rail joiners by black blocks, as well as track feeders by means of the standard arrow-heads and -tails (with those to reversing sections just lines, without the heads and tails). This means that if the road were to be operated by 2-rail, a rather large control panel would be required, with at least on-off control for each such sections, which are so numerous I did not letter them. It is probable that some form of cab control would be desirable, with eventually a version of automatic control. While I could draw this up for you, off the top of my head so to speak, it would be of little use to you without an elaborate explanation, requiring at least another article. For any automatic control circuit, signal circuit, etc. YOU should understand what it is all about and design and build it yourself, otherwise troubleshooting—when required—will become onerous.

RAILROAD MODEL CRAFTSMAN



Lehigh Valley Transit three car railfan special in the hole for a regular train in a Hal Carstens photograph. A ride in the rear lounge seat of Cincinnati lightweight No. 1030 was a thrill to be remembered for a lifetime by any traveler.

My own preference for an interurban would be to run from overhead wire. Thus the two running rails would both be grounded or, alternately, one could be grounded with the other used to operate signal and control relays by a fairly simple and foolproof system. Hanging overhead trolley wire is not at all as hard as it sounds and if I move house soon, as hoped for, I'm going to build an overhead trolley system again and photograph and write it up to show how easy it is. IF you do install overhead trolley, my suggestion would be to have NO insulated rail joints, but to make all insulated breaks in the overhead system. These are simple to do and, in addition, can be moved as desired just by rehangng a few feet or yards of trolley wire. The trolley wire cannot be continuous anyhow, so my recommendation is to hang it in three, four, or five foot lengths, connected by insulators, wire contactors (for signals and switches), wire-frogs, and plain splices. Insulators would then be located in the overhead approximately where the twin insulated rail joiners are shown on the plan.

I have also shown, again, three-color light signaling, if you want to add it—or at least have the signal masts, not wired, at approximately the right places. In this I had the assistance of my son, Walter, who is more familiar with railroad signals and operation, where spring switches can be turned manual for contrary movements. He had me put in signals on the single track ahead of each passing track, as well as dwarf signals on each passing track for possible move-

ments out of the sidings from the "wrong" track.

Of course one of the charms of running a model interurban or trolley line is that you can have spring switches which do not need any controls. While they could be there in theory, they would not be there in practice. A quick count shows me twelve spring switches on the Cape May, Delaware Bay, and Coopers Point, all fairly important, yet none needing controls reserved for secondary switches. At loss of some flexibility in operation, quite a few more switches could be sprung. I have, accordingly, indicated the signals and dwarf signals that would not be needed with spring - switches - strictly - sprung - not - manual operation in parentheses. A couple of other signals which would not be visible to spectators because of their locations, have also been parenthesized. And, by the way, if you don't put up any signals, even dummy ones, you are running trains (a) by cab signals—unlikely on an interurban; (b) timetable and train orders; (c) by manual block—call up dispatcher from every siding and junction.

A schematic diagram of the whole interurban is given in the center of the drawing. On this, I have marked one of the continuous runs, via Cape May with cross-hatching, the other, via Millville with little circles.

One of these days I want to take the general layout idea of this interurban and put it in steam railroad form. Wonder how much more space it will take with larger radius curves, gentler switches, and more elaborate terminals? 🚂