

Class 1 for one man

The action is heavy and continuous, just like that at a prototype division point

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THE lover of class 1 trunkline railroading faces a special problem in designing a layout. How can one man possibly run a whole trunkline railroad all by himself? Obviously he can't—but he can handle a single part of such a railroad, no matter how heavily trafficked it may be. If he is willing to forego mainline running for the pleasures of yard switching and train servicing, he can easily fit a layout representing a portion of a trunk line into the kind of space most of us have available. The Great Central shows one way.

The area represents a medium-sized industrial center, the imaginary city of Dorchester. It is also division headquarters and an interchange point on the Great Central RR. We have modeled the GC's passenger station and storage tracks, freight classification yard, and engine terminal. We have been able to include the Dorchester Belt RR., a wholly owned GC subsidiary, as an operating bonus. The DBRR runs through Dorchester's industrial district to an interchange with another trunk line, the Atlantic & Western, on the other side of the city. This gives us all we need to duplicate class 1 railroading in and around a typical industrial city.

There isn't any main line. Main lines demand a great deal of space if they are to be represented with any degree of reality. Unless the main line is to be the principal feature of a trunkline layout, it is best eliminated. On the Great Central we represent the main line with five hidden layover tracks connected to both ends of the division yards. These holding tracks take up no effective space, since they are located under the industrial district; yet they produce the equivalent traffic of two separate mainline divisions running for hundreds of miles in opposite directions from Dorchester.

The train movement sheet shows the volume of traffic in and around Dorchester in the course of a typical day. There are 25 trains, and each demands its own switching movements that vary each day. This traffic can be handled quite efficiently on the model layout by one man.

The layout's basic operating practices merit a closer look because they avoid a common but unprototypic situation found on many model layouts. Most of the rolling stock on the ordinary layout is found standing in the yards. Prototype road superintendents who know their job well would regard such a condition with horror. Their income depends on moving traffic, not letting it sit. Their motto is: "Empty yards and a full main."

On the Great Central model this is accomplished by starting each operating session with most of the rolling stock

made up into four trains. These are out of sight on the layover tracks. Two are passenger trains; two are freights. The rest of our cars are divided more or less equally between the Atlantic & Western interchange yard, sidings along the Belt Line, and Dorchester division yards. This is a more realistic approximation of prototype car distribution. Now for the fun:

At specified intervals trains are brought into the division yards from the hidden layover tracks. They are serviced, classified, made into new trains, and sent on their way. The action is heavy and continuous, just like that at a prototype division point.

Despite the traffic volume the lone operator never has more than one train movement to handle at a time. If he wishes he can run by timetable and fast clock; but a layout like this is also a natural for "sequence operation." This means that you forget about synchronizing your movements to a clock. Time is merely taken in order. You regard each train movement as a separate step in a progressive chain.

For example: the 1 a.m. Belt Line way freight movement called for in the schedule takes place after the departure of no. 21. The operator can spend as much time with no. 21 as is needed. In sequence operation the passage of time is measured by the completion of railroad movements rather than by the progress of clock hands. Not only is scheduling easier but the operator can also take time out to answer questions, to rectify minor problems that are bound to occur, and to analyze and experiment with different kinds of switching moves. Sometimes he may just sit back and contemplate the fascinating harmony of the little world he presides over.

Regardless of what operating method he uses, the operator of this layout is handling a traffic volume that would do credit to a large club layout.

Kinds of traffic

The Dorchester yards see three general types of Great Central trains: freights that originate or terminate there, freights that run through, and through passenger trains. Freights can start or end their runs at Dorchester because it is a division point with interchange facilities.

On a prototype road a division point is nothing more than a bottleneck. Freight cars that have been moving nicely along main or branch lines must stop at a division point to be classified or reclassified as to destination and route before continuing their journeys. This kind of bottleneck is just as fundamental to traditional railroading as are the movements of long trains between two points hundreds of miles apart.

The freights that terminate at Dorchester from either direction arrive on

track 5. Engines and cabooses are cut off; then the consist is classified according to destination and routing. Car destination can be determined by one of the card or thumbtack forwarding systems described in the past or it can be based on informal, spur-of-the-moment decisions. Track 6 is for classifying westbound through cars; track 7, for eastbound through cars. Track 8 is used for westbound way freights, track 9 for eastbound way freights, track 10 for cars bound for local destinations or the Atlantic & West-

Train movements at Dorchester

Eastbound trains have even numbers; westbound trains carry odd numbers; extras take the number of the locomotive. Abbreviations: e-express; m-mail; m-b, mail-baggage; c-coach; d-diner; d-l, diner-lounge; p-parlor; s-sleeper; o-observation.

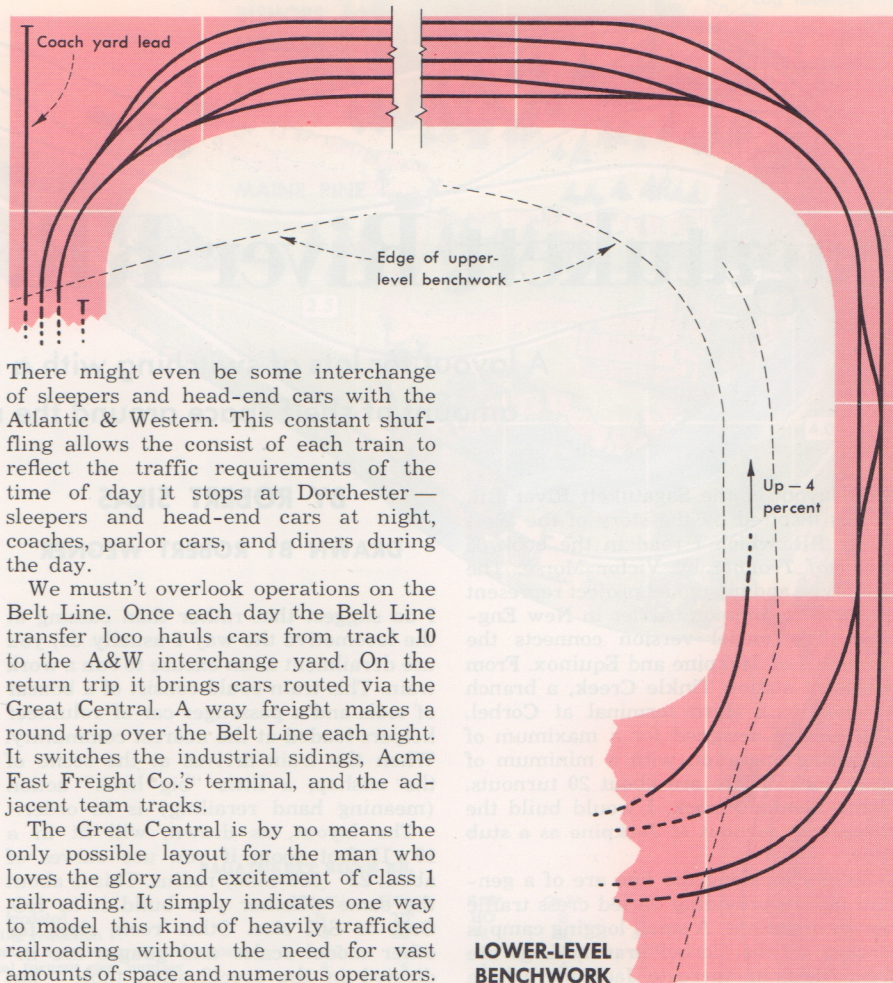
Time of day	Type of action
Midnight	No. 21, westbound through freight, arrives, is serviced, sets out cars for Dorchester, picks up westbound cars, departs westbound at 12:30.
1:00	Belt Line way freight departs eastbound.
1:30	No. 22, eastbound through freight, arrives, is serviced, makes setouts and pickups, departs eastbound at 2:00.
2:30	Westbound Belt Line way freight arrives.
3:00	No. 1, westbound passenger, arrives and is serviced. Consist: m, m-b, c, s, s, o. Drops m and s, adds c and d. Departs 3:30.
4:00	No. 31, westbound way freight, arrives and is classified.
5:00	No. 2, eastbound passenger, arrives and is serviced. Consist: m, m, m, m-b, c, d, s. Drops m, m, m; adds e, e, d. Departs 5:30.
6:00	No. 32, eastbound way freight, arrives and is classified.
7:00	No. 4, eastbound passenger, arrives and is serviced. Consist: e, e, m-b, c, d, s. Drops e; adds c. Departs 7:30.
8:00	Through freight west X-1 made up to depart at 8:30.
9:00	No. 3, westbound passenger, arrives and is serviced. Consist: m-b, c, c, d, s, o. Drops d and s; adds p and e. Departs 9:30.
10:00	Westbound passenger local no. 15 made up: m-b, c, c, d-l, s from no. 3. Departs 10:30.
11:30	Through freight east X-2 is made up and departs 11:30.
Noon	No. 5, westbound passenger, arrives and is serviced. Consist: e, m-b, c, c, p, o. Drops e; adds d. Departs 12:30.
1:00	Belt Line interchange freight leaves eastbound.
1:30	Belt Line interchange freight switches A&W transfer yard.
2:00	Belt Line interchange freight arrives westbound.
2:30	No. 7, westbound passenger, arrives and is serviced. Consist: m-b, c, c, d, p, o. Drops d; adds e. Departs 3:00.
3:30	Westbound through freight X-3 arrives and is classified.
4:30	No. 6, eastbound passenger, arrives and is serviced. Consist: e, m-b, c, c, d, s. Drops e and d; adds new e and d. Departs 5:00.
5:30	No. 17, westbound passenger, arrives and is broken up. Consist: m-b, c, c, d-l, s. Hold s to be added to no. 9.
6:00	No. 9, westbound passenger, arrives and is serviced. Consist: e, m-b, c, c, p, o. Drops e and p; adds d, and s from no. 17. Departs 6:30.
7:00	Eastbound through freight X-4 arrives and is classified.
8:00	Westbound way freight no. 33 made up. Departs 8:30.
9:00	Eastbound passenger no. 8 arrives and is serviced. Consist: e, m-b, c, c, d, s. Drops e, c, d; adds m, m, m. Departs 9:30.
10:00	Eastbound way freight no. 34 made up. Departs 10:30.
11:00	Westbound passenger no. 11 arrives and is serviced. Consist: m-b, c, c, d, s. Adds m and s. Departs 11:30.

ern interchange. This gives the cars of any freight train four possible classification slots. When a classification track has filled, its cars are moved to the makeup track, track 5. There they are given an engine and caboose and sent on their way.

Many trunk roads operate "mainliners" —freights that run through a number of divisions before the cars are reclassified. The consist of such redball or time freights may be cars bound for the same destination, or cars bound for the same port, manufacturer, or distributor. In any case such trains are not reclassified (switched) but they do have to stop at division points for servicing and crew changes. On the Great Central nos. 21 and 22 are highball freights which continue from Dorchester after such a service stop on track 5. Since Dorchester is an important industrial center, such a train might have a cut of cars to drop or be added, thus varying the routine.

In operating the Great Central a string of cars may leave Dorchester as a through freight; this consist may return later as a way freight. This illustrates the principle on which the layout is run: once a train reaches the layover tracks it loses its identity, eventually becoming another train as called for by the operating schedule.

A heavy passenger schedule can be operated with only three strings of equipment. Each train stops at Dorchester to change crews and be serviced. The trains also pick up and drop diners, sleepers, parlor cars, coaches, and head-end cars.



There might even be some interchange of sleepers and head-end cars with the Atlantic & Western. This constant shuffling allows the consist of each train to reflect the traffic requirements of the time of day it stops at Dorchester — sleepers and head-end cars at night, coaches, parlor cars, and diners during the day.

We mustn't overlook operations on the Belt Line. Once each day the Belt Line transfer loco hauls cars from track 10 to the A&W interchange yard. On the return trip it brings cars routed via the Great Central. A way freight makes a round trip over the Belt Line each night. It switches the industrial sidings, Acme Fast Freight Co.'s terminal, and the adjacent team tracks.

The Great Central is by no means the only possible layout for the man who loves the glory and excitement of class 1 railroading. It simply indicates one way to model this kind of heavily trafficked railroading without the need for vast amounts of space and numerous operators.

LOWER-LEVEL BENCHWORK

