The Operators

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Operator I.G. Barrett calls in an OS to the dispatcher from the Santa Fe station in Stratford, Texas. People reporting trains "on sheet" kept dispatchers informed in railroading's classic era. J. David Ingles photo

OS-ing trains

A sharp buzz alerts the dispatcher to an incoming telephone call. Pressing the foot switch that activates the microphone above his desk, he answers:

"Dispatcher."

"OS Beacon," the caller responds through the loudspeaker in the dispatcher's office.

The dispatcher has picked up his pen by now and holds it hovering over the line for the station of Beacon on his train sheet.

"Go ahead, Beacon," the dispatcher answers.

"Extra 1414 East by at 8:42 a.m.," the caller reports.

"Fourteen-fourteen East at '42, thanks," the dispatcher replies, as he writes the time at Beacon in the column he's designated for this extra freight. Releasing the foot switch, he ends the call.

So what's this exchange all about, what does "OS" mean anyway, and how does any of this apply to model railroading? That's what I'd like to share with you in this first installment of a new monthly column, "The Operators," that will deal with various aspects of model railroad operation.

OS reports. The telephone conversation notified the dispatcher of the progress of a train across his territory. He used that information to update his record of train movements and his mental picture of the railroad. The exchange follows a common prototype format, even though it's actually about a train on David Popp's N scale New Haven Naugatuck Branch. "Beacon" is Beacon, Conn., and "Extra 1414 East" is the train-order designation for symbol freight ND-2.

(Why ND-2 operates as an extra with no timetable schedule is a subject for another time.)

The abbreviation "OS" is the old telegraph shorthand for "on sheet," used when a telegraph operator at a wayside station or tower had noted a movement on his own train record and reported it to the dispatcher. When communication by telephone replaced the telegraph, operators kept sending the same message verbally instead of in Morse code. Because the time reported is usually the time the last car of the train passes the operator's office, some sources give "out of station" as an alternative definition for "OS."

In model operation. Since model railroads generally don't have the space or the numbers of people to assign train-order operators to every station, the convention most often adopted is to have a member of a train crew stand in for the operators at the offices (stations or towers) along the train's run. The crew member temporarily shifts roles when phoning the dispatcher, delivering the OS report as the train-order operator. Where there are yard and tower operators on a model railroad, sometimes they'll make the report for the train crew.

The dispatcher needs to know where trains are to be able to issue orders that both keep them apart and assist their progress. When running a train in an operating session, I take it as a matter not only of expectation but of politeness to help out by making OS reports when I should. Dispatchers usually respond by helping crews who make helpful reports.

The layout owner can help too, by making it clear where train crews are expected to report. This may be presented prototypically with notations on the timetable schedule page to show which stations have open offices as well as what hours they're open if not around the clock. A more direct approach that many find effective is to put prominent signs with the letters "OS" on the layout fascia at reporting stations.

The next time you're at an operating session, you'll understand what "OS-ing" is all about and be ready to play your part. **MR**

THEOPERATORS

Dispatcher and operator, part 1

"Kosich Yard, copy two north on a 19." That's the train dispatcher's call over the "train wire" telephone line alerting the train order operator at one of the terminals on his district to make two copies of a Form 19 train order for a northward train at that station.

"Kosich Yard ready to copy," the operator replies. While speaking, the op (operator) pulls a pad of train order forms with carbon paper set up for making three copies onto the center of the station desk. The DS (dispatcher) wants two copies of the order for the train, but the op always makes an extra "station copy" to file.

The DS continues by dictating the address of the order.

"Kosich Yard, this will be train order number two of August 9, 1948, to the conductor and engineer of engine eight hundred one, eight-naught-one, period."

The DS says the word "period" to signal the op that the address is complete and the body of the order will follow. By rule, the dispatcher must write the order in the train order book as he dictates it, both to make a record and to control the speed of dictation. Similarly, the operator must copy word-by-word as dictated, without relying on memory.

"Engine eight hundred one, eight naught one, run extra Kosich Yard, K-o-s-i-c-h Y-a-r-d, to Davenport, D-a-v-e-n-p-o-r-t, period. Sign it LER." Again, the "period" signals the end of the order, and the signature is with the initials of the DS (some roads used the initials of the chief dispatcher or the division superintendent).

The op has by now written out the order as shown above, using approved abbreviations and without punctuation. Next the op will read the order back to the DS for confirmation as follows:

"Kosich Yard reads back order number two, August 9, 1948, to the conductor and engineer of engine eight hundred one, eight-naught-one, at Kosich Yard. Engine eight hundred one, eight-naught-one, run extra Kosich Yard, K-o-s-i-c-h Y-a-r-d, to Davenport, D-a-v-e-n-p-o-r-t, period. Signed LER, operator APS."

As the op reads back the order and concludes with his own initials, the DS reads along in the order book and underlines every correct word or numeral to show that the read-back was accurate. To confirm that and put the order in effect, the DS says "Make order no. 2 complete at 3:39 a.m., LER," giving the current time and his initials once more. The op writes "Complete" and the time at the bottom of the form and replies with "Order no. 2 complete at 3:39 a.m., APS."

The completed order has to be delivered with a clearance card listing all orders and messages for the train, which because of order no. 2 is now identified as Extra 801 North. The op will ask the DS if there are other orders or messages for the train.

"Dispatcher, Kosich Yard, anything more for Extra 801 North?" If not, the dispatcher will say something like "No more for that extra, Kosich Yard." The op then fills out the clearance card and calls the dispatcher again.

"Dispatcher, Kosich Yard for clearance." This alerts the DS to be prepared to enter the clearance in the train order book, perhaps on a separate page listing all clearances for the shift, or even in a separate clearance book. When ready, the DS answers, "Ready for your clearance, Kosich Yard."

"Kosich Yard clears extra eight hundred one north with one, o-n-e, order, order No. 2, and no messages. APS, operator." After entering the clearance, the DS responds with "Clearance okay at 3:44 a.m., LER." The op writes the time on the clearance card along with the dispatcher's initials, and responds "Okay at 3:44 a.m., APS."

Now the op can staple copies of the clearance card onto the copies of order No. 2 for the conductor and engineer assigned to the extra. As Kosich is a terminal station, the conductor will come to the office to pick up both copies and deliver one to the engineer when the engine couples to the train in the yard.

This realistic train order from Larry Buell's HO scale Minneapolis, St. Croix & Southern RR helps to re-create the everyday atmosphere of railroading under timetable authority. It also serves the practical purpose of accurately conveying the dispatcher's instructions to the model railroad's operators.

This kind of conversation is typical of what's required to transmit orders for timetable-and-train-order movement, and for model railroaders it's part of the enjoyment of such operations. The interaction between dispatcher and operator re-creates everyday railroading as it used to be practiced.

The prescribed formats of these conversations serve the same practical purposes of safety and clarity that they did on the prototype railroads. Next time I'll explain some of the rules and procedures behind them. It's well worth providing the jobs, facilities, and time to support such communication if you use timetable authority on your railroad. **MR**

Dispatcher and operator, part 2

When the DS first told the op at Kosich Yard to "copy two north on a 19" in last month's The Operators, there was no need for a train order signal to be set.

That's because Kosich Yard is a terminal station where even scheduled trains require a clearance card to depart. If the order were being issued at an intermediate station, the op might have replied with "SD (for 'signal displayed') north" instead of "ready to copy." That would tell the DS that the signal was set to hold northbound trains until the order was complete and a clearance card okayed.

Rules varied on different railroads, but many required that train order signals be set at "stop" whenever there was an op on duty in the station. This is usually impractical on model railroads, so common practice is to normally display "clear" and have the op set individual signals to "stop" when an order is to be issued. (See The Operators in the August and September 2009 *Model Railroader*s for more on train order signals.)

The DS addressed the order to the conductor and engineer of engine 801, indicating who would receive the two copies. On model railroads one person may take both roles, and the usual practice is to make one copy for the "crew."

When stating the engine number the DS first pronounced it in words, "eight hundred one," and then as individual numerals, "eight naught one," using the word "naught" for zero. This is required by Rule 206 to prevent misunderstandings, and also applies to train and engine numbers. When the number is a single digit, it's first spoken and then spelled, as in "engine 2, t-w-o."

Similarly station names in the body of the order are first pronounced and then spelled out, as with "Davenport, D-a-v-e-n-p-o-r-t." If a time is given in the body of the order it is first pronounced, for example "ten nineteen a.m.," and then stated in numerals, "one naught one nine." Even hours, such as 10:00 a.m., are not used in train orders. The DS would use 10:01 instead.

There are several versions of Rule 206, with differences in how much must be spelled, pronounced, and stated in numerals. If your favorite railroad's Rule 206 varies from what I've just explained, follow that by all means.

The body of the order is a typical Form G creating an extra train. The common practice is that a Form G must give both the train's initial and terminal stations, in our case Kosich Yard and Davenport. Form G orders aren't issued to run to an intermediate station unless the train will terminate at that station.

There are several reasons for this, including work rules defining the crew's workday. If ordered first to run to Galesburg and later to go on to Davenport, the crew may be able to claim two days' pay.

For more on the forms of train orders, see The Operators in the October 2011 MR. For more on extras, see The Operators in the November 2009 MR.

The clearance card serves several purposes. When orders or messages are delivered to a train, they are always accompanied by a clearance card. The clearance states the total number of orders and messages to be delivered and lists the orders individually by number. This allows the op and the DS to check that everything addressed to the train is being delivered, and likewise lets the crew see the delivery is complete.

Clearances are also issued to scheduled trains at their initial stations on any district or subdivision, even if no orders or messages are being delivered. In this use the clearance serves as the train's authority to operate on the main line under the particular schedule.

Clearance cards are also issued when a train that is not receiving orders approaches a train order signal set for another train. In that case, the clearance serves as authority to pass the signal displaying "stop."

Finally, on two or more main tracks operated under a current of traffic – trains keep to the right (or left) – clearance cards can authorize extra trains or sections of scheduled trains. This is usually stated as a special rule in the employee timetable, and these clearances must be numbered in sequence as well as okayed by the dispatcher.

In all cases note that the clearance is initiated by the op, not by the DS. The

This is St. Croix train order number 2 as shown last month, but now ready for delivery with a clearance card attached. The clearance here serves as a receipt or invoice showing the train crew what's being delivered.

DS keeps a record of clearances okayed as a check of what trains have been given what authority, but the op fills out the form and calls the DS for the okay.

The conversations for issuing train orders and okaying clearances can be re-created with a high degree of realism on model railroads, while they serve the useful purpose of providing the train crews with accurate and explicit instructions. On smaller layouts the functions of op and DS are sometimes combined, with one person producing paperwork without any conversation. Using two (or more) people for these functions is not only atmospheric but reproduces the prototype's checks for accuracy and correctness of form. It also allows the op (or ops) to learn the dispatcher's job. **MR**

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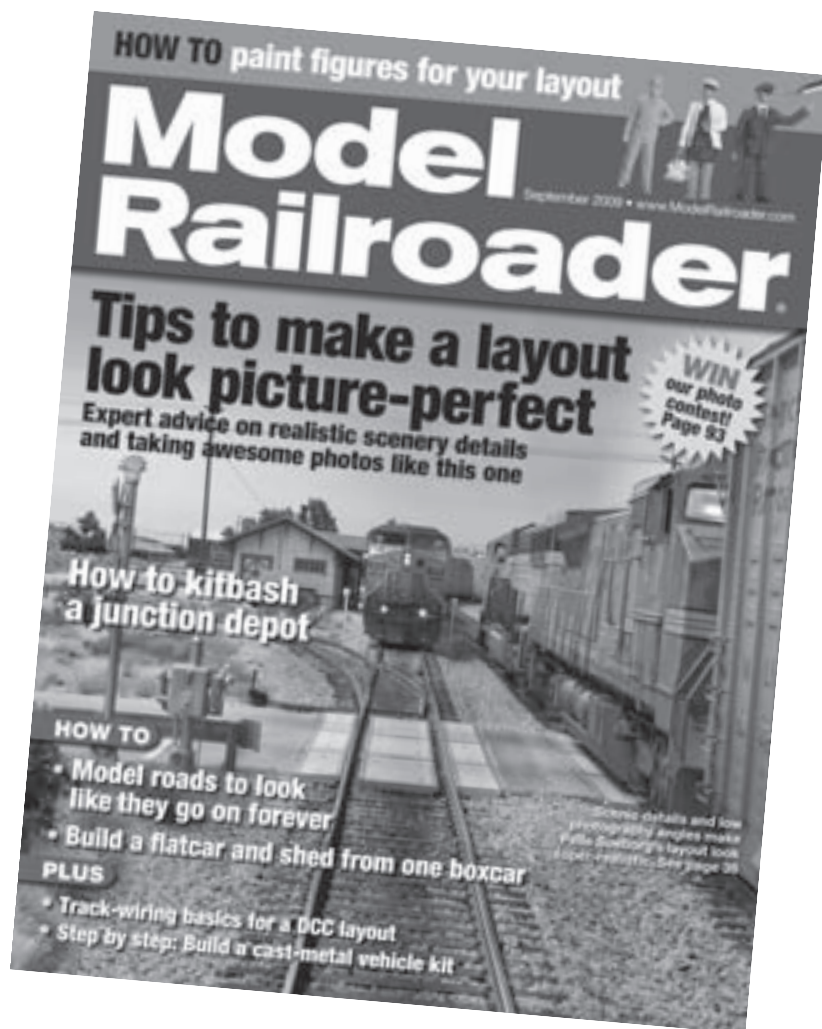
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