



Inside **THE** RAIL

From NASA's Confidential Close Call Reporting System



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Train Dispatchers – *Always Heard but Never Seen*



Train dispatchers make critical operating decisions in a matter of seconds with only the information available to them at that moment. Sometimes those decisions are right, sometimes they are wrong, but the only guarantee is that either way, someone will not be happy. That is life on the railroad as a train dispatcher.

Train dispatching actually began in September 1851, when the first effort to control the movement of a train beyond the rule book and operating timetable occurred. Charles Minot, a Division Superintendent on the Erie Railroad, sent a telegram to a railroad employee at another location directing that all trains be held at that point until the train he was riding arrived.

Initially, train dispatchers issued train orders using American Morse Code over telegraph wires. Later, after the telephone was invented in 1876 and became common, most railroads constructed their own telephone systems for internal

communications, which train dispatchers used to issue train orders. The last train order known to have been issued using Morse Code was copied on May 6, 1982, on the Burlington Northern Railroad.

Communication technology and computer-aided dispatching (CAD) systems have given train dispatchers a multitude of tools to move trains safely and efficiently. Train dispatchers manipulate these CAD systems to block out switches and segments of track to protect trains or men and equipment. These tools ensure efficiency and safety only when used properly. All these tools have given that voice on the radio the ability to keep field employees safe. In this issue, C³RS provides de-identified excerpts from Dispatcher's close-call events when providing blocking protection to men and equipment.

Automation is Not Always Automatic

Sometimes, technology does not always work, and train dispatchers always need to be alert to assure a safe operation to protect workers.

■ *Blue Signal Protection was requested and applied to Track X. Track X has a diamond at the north end consisting of a facing point Switch X and trailing point Switch Y. I placed Switch Y in a reverse position to provide secondary protection to the track. All blocking devices were thought to have been applied, but this does not lock out Switch X as expected. There were no injuries or damage to equipment, and this was rectified as soon as it occurred.*

C³RS Expert Analyst's Callback Summary:

The reporter, a Dispatcher, stated that the Dispatching System in use will sometimes allow an automated function to apply blocking and other times, the switch must be lined, and blocking must be applied manually. The reporter explained that on this occasion, the automated function missed one of the switches, and this issue was not noticed due to the workload. This left one of the switches unprotected for Blue Signal Protection. The issue was rectified within

approximately 2 minutes, and the switch was then lined and blocked correctly.

Turnovers and Forgotten Track Cars

Train dispatcher shifts are often the busiest at turnover time. Below, a Dispatcher was very busy during turnover and informed the relieving Dispatcher a track car had traversed an interlocking, which was not the case.

■ *...My Job Safety Briefing with the Local Dispatcher I was relieving stated that the overhead wires had come down west of Station Z. He told me that Interlocking X and Interlocking Y were busy but all quiet here (Interlocking Z). He then told me that the Track Car had come through on Track Z not that long ago and that they were just getting out there. I acknowledged that and as we continued to talk, the Dispatcher called on the Intercom and informed me that they [were] going to begin train movements, and he needed a block on Track Y to bring a train east...*

I then called the Dispatcher and made him aware that there was a Track Indication west of the Distant Signal (MP X) to Station Z. The Dispatcher responded by saying that it was the Track Car. We hung up the phone, and he then directed

me via the Intercom to call Train B and tell them to bring their train to a safe stop. I did just that. In the aftermath, the Dispatcher called me and asked if there was a Local Dispatcher Block on Signal X, and I told him no. Also, there was no record of the Track Car time through the interlocking on the train movement sheet.

Sometimes Release Blocks Doesn't Mean Release All the Blocks

In this next example, a Dispatcher Trainee removed blocks protecting a track car. The blocks included a foreign carrier's block that should not have been released.

■ A foreign Carrier Track Car was crossing our diamond with blocking devices applied with the Foreign Carrier and on our appliances. When the track car cleared, the Dispatcher Trainee removed all the blocks, including the Foreign Carrier's. The blocks with the Foreign Carrier were not to be removed; only our blocks at Station X were to be removed. The Dispatcher Trainee cleared the Foreign Carrier blocks before the Foreign Carrier called to clear them.

C3RS Expert Analyst's Callback Summary:

The reporter, a Dispatcher, stated that a Dispatcher Trainee was at the controls at the time of the incident. The reporter explained that the Dispatcher Trainee was instructed to remove only the blocking protection for the track car on the Dispatcher Trainee's territory; however, the Dispatcher Trainee inadvertently removed the blocking for the other territory as well...the issue was discovered approximately five minutes later when the track car cleared the tracks...

All Railroad Employees Can Make Mistakes!

Believe it or not, train dispatchers need help too. This case involves blocking devices and the actions of a Dispatcher Manager, a Dispatcher, and a Dispatcher Trainee.

■ As the Dispatching Manager on Duty, I was approached by Subdivision X Dispatcher X requesting assistance with handling of train movement under Local Control Authority of a Signal Maintainer on Subdivision X on account of ongoing Code-line Failure issues across that territory. Dispatcher X was also responsible for running rush hour operations at Subdivision Y during this time at the peak of the rush hour. As a result, I engaged the assistance of another qualified Dispatcher Y, to facilitate communication with the Signal Maintainer in Subdivision X for the sake of resuming switching movements.

Under my direction, Dispatcher Y conducted a radio Job [Safety] Briefing with the Signal Maintainer, the Mechanical Foreman, and the train crew in Subdivision X to assess the location of trains and the necessary movements...Dispatcher Y then asked the Signal Maintainer to verify the necessary switches and positions (Switch X Reverse, Switch Y Normal, Switch Z Normal, Switch A Reverse) and then asked the Signal Maintainer for his permission to talk the train past Signal X, set to Stop. Dispatcher Y did not instruct the Signal Maintainer to apply blocking devices to the tracks or switches along the route prior to granting the train Authority to Pass the Stop signal, and I did not recognize the need to request such blocking devices to be applied in the moment either. The movement proceeded along the intended route without incident.

What's Yours is Mine, and What's Mine is Mine!

In this excerpt, a Dispatcher from a foreign railroad granted foul time to a Signal Maintainer on a territory that was not under their control.

■ Dispatcher X is in control of Subdivision X up to the south limits of Control Point (CP) X. Dispatcher Y is in control of the adjoining territory, which begins at the south limits of CP X. At XA:01 PM, one minute after I had taken transfer from the previous Dispatcher, I received a telephone call from Dispatcher Y... At this point, Dispatcher Y informed me that he had, in fact, issued the Foul Time to the Signal Maintainer for the section of track that was not his territory but was, in fact, my territory from Interlocking X to CP X. At this point, I set the signal that was lined from Interlocking X to CP X on Track X at Stop and began to re-route scheduled Train A to crossover and go to Track Y in the event neither Dispatcher Y nor myself, Dispatcher X, could reach the Signal Maintainer to request he clear all tracks immediately. Dispatcher Y called me at XA:03 PM to report he had reached the Signal Maintainer and instructed him to clear all tracks of his Foul Time...

The factors I can identify that contributed to this incident all stem from inexperience. The Signal Maintainer...is a new or relatively new employee, who was uncertain of which Dispatcher was in control of the Territory he was requesting Foul Time on. Likewise, Dispatcher Y...is also a new or relatively new employee and uncertain of the Territory he was in control of. The combination of the two inexperienced employees...resulted in the Foul Time being issued while a scheduled train was signaled through the requested territory of another Train Dispatcher's territory.

Report Intake By Craft January through September 2023	
Transportation	2,274
Engineering	110
Mechanical	69

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Monthly Report Intake Previous 3 Months	
July	305
August	262
September	241