



2024 NARR RAILROAD CONFERENCE

“The Role of the Train Dispatcher: An Overview”



THE NATIONAL ASSOCIATION OF RAILROAD REFEREES

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The aims and purposes of the National Association of Railroad Referees are (1) to promote mutual exchange of ideas and information among its members concerning items of mutual interest; (2) to communicate with the National Mediation Board and other appropriate agencies, groups and organizations to offer aid and assistance as is deemed appropriate for the promotion of railroad arbitration; (3) to be available to the National Mediation Board and other appropriate agencies, groups and organizations to offer comments upon various suggestions and requests as they may solicit same; (4) to obtain and distribute to the membership information and documentation of interest to the professional pursuits of the members; (5) to engage in educational pursuits as may be appropriate; and (6) to take other action to promote the interests of railroad arbitration as deemed appropriate by the Association to achieve the aims and purposes of the Association.

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SPEAKERS

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Director of Research American Train
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TOBY ZELT

Manager – Labor Relations
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Director of Research

American Train Dispatchers Association

Prior to joining ATDA full-time in 2015, worked as a Train Dispatcher and Assistant Chief Dispatcher for CSX in the Chicago area for 20 years.

From 1986 – 1995, worked for Amtrak in various clerical positions including as a Tower Operator at Chicago Union Station from 1990-1995.

Started in the industry in 1985 with the Chicago South Shore and South Bend Railroad (now NICTD) in Michigan City, Indiana.



TOBY ZELT

Manager – Labor Relations

BNSF Railway

Started as a Train Dispatcher in 2012.

Worked as an Assistant Chief Dispatcher and a Chief Dispatcher on three divisions.

Started in Labor Relations in 2022 and am responsible for TCU and ATDA Agreements.



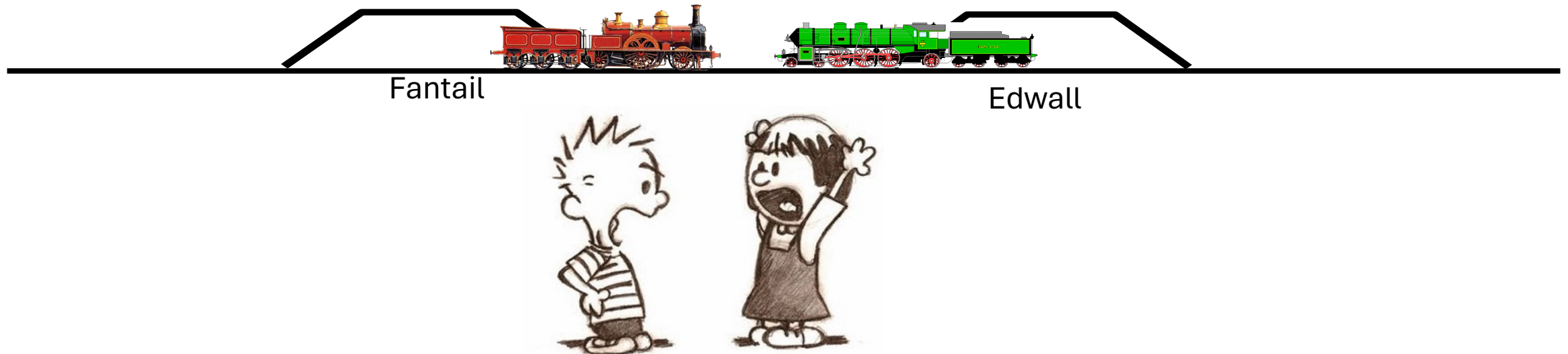
Train Dispatching

The purpose of this presentation is to give a high-level overview of what a Train Dispatcher does and the tools and terminology they use every day.

We hope this will give you a general understanding and some insight into this important railroad position that few people come in contact with.

Railroading Before Dispatching

- Originally trains weren't managed by dispatchers.
- Trains proceeded along the main track without regard to opposing traffic.
- When trains met between sidings, the conductors would agree on which train would back up.



Railroading Before Dispatching

In the early to mid-1800's trains were governed by a timetable.

Meets were prescribed, and one train simply waited on the other.

As traffic increased so did the level of sophistication, culminating in a timetable containing schedules of various classes and establishing priority.

With no way to supersede the timetable, single track operation was slow, haphazard and potentially dangerous.



Fantail



Edwall



Dean



A New Era Begins

- The first Train Order was issued on the New York and Erie Railroad in 1850 by Supt. Charles Minot.
- Minot also appointed the first “dispatchers” in 1851.
- By the mid 1850’s, most train movements were controlled by a dispatcher who used telegraph agents to deliver orders through operators or station agents to affected trains.
- This system remained essentially unchanged for more than a century.
- The dispatcher issued train orders, which superseded the timetable.



Santa Fe

APR 15 19 84 TRAIN ORDER NO.

To C&E NO 4

At ALBUQUERQUE X Opr.

NO 4 ENG 231 MEET NO 3 ENG 251 AT SANDS
NO 3 TAKE SIDING

GEY

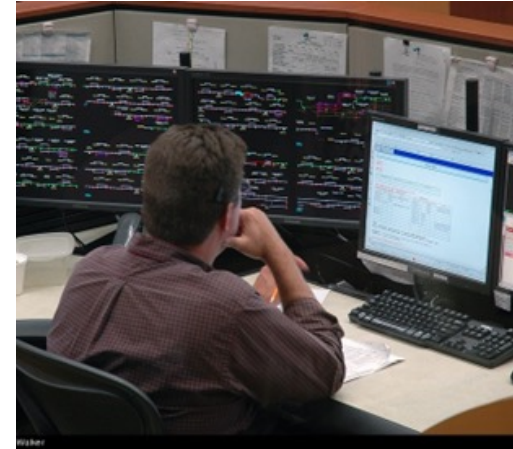
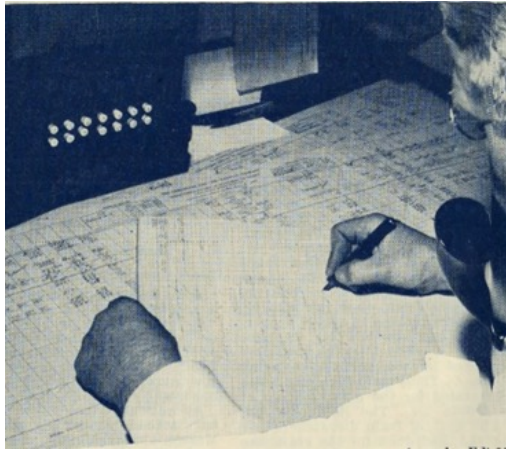
Complete 1141 a.m. Johnson

THIS ORDER NOT TO BE WRITTEN UPON

The position of Train Dispatcher is established...

In 1921, the Interstate Commerce Commission in an Order, generally known as the “Occupational Classification” defined a Train Dispatcher as:

...positions in which the duties of incumbents are to be primarily responsible for the movement of trains by train orders or otherwise...



Today, the 1921 definition is still the bedrock of train dispatching and forms the basis for almost all Train Dispatcher scope agreement provisions. While the tools and terminology may have changed, the basic principles of train dispatching have not.

Basic Train Dispatcher Duties

- Safe and efficient movement of trains on main tracks, the protection of workers on and near the tracks, the protection of the public, and the protection of equipment and or tracks.
- Compliance with all rules by the Train Dispatcher and the enforcement of rules by employees under his jurisdiction.
- Maintain detailed and accurate records of all train and other movements and all unusual occurrences.

Other Train Dispatcher information...

- Train Dispatcher territories can range from a few miles to nearly a thousand miles and can include a mixture of different type of operations (double track, single track, signaled and non-signaled).
- Most positions are worked 24 hour/7 days per week/365 days per year, but there are exceptions to this depending on Agreement provisions.
- Train Dispatchers work schedules are 8 hours per day, with day, afternoon and midnight shifts and almost all regular assignments have two consecutive days off. Train Dispatchers bid on their preferred job, and assignments (with some exceptions) are based on seniority as a Train Dispatcher.

Other Train Dispatcher information...

- Train Dispatchers are covered by the Federal Hours of Service law which limits the number of hours (9) they can be on duty and specifies the number of hours (15) that they must be off duty before performing service on their next work day.
- Relief Train Dispatchers are those which have regular schedules that are set up to cover the rest days of regular Train Dispatchers and may work a combination of shifts or multiple dispatching territories (desks) in their work week.
- Guaranteed Train Dispatchers (GATDs, GAD, Extra) are Train Dispatchers who have no regular assignment and are called to fill vacancies for vacation, personal leave, sick days, etc. Depending on agreement, most of these jobs have some combination of scheduled or unscheduled rest days, but they are guaranteed 40 hours per week and are full-time positions.

Dispatching Tools

Today, almost all Train Dispatchers use some type of computer system to perform their duties. These systems have many names, some generic like:

TCS – Traffic Control Systems

CTC – Centralized Traffic Control

CTEC – Centralized Traffic and Electric Control

NGD – Next Generation Dispatching

While systems are brand names such as:

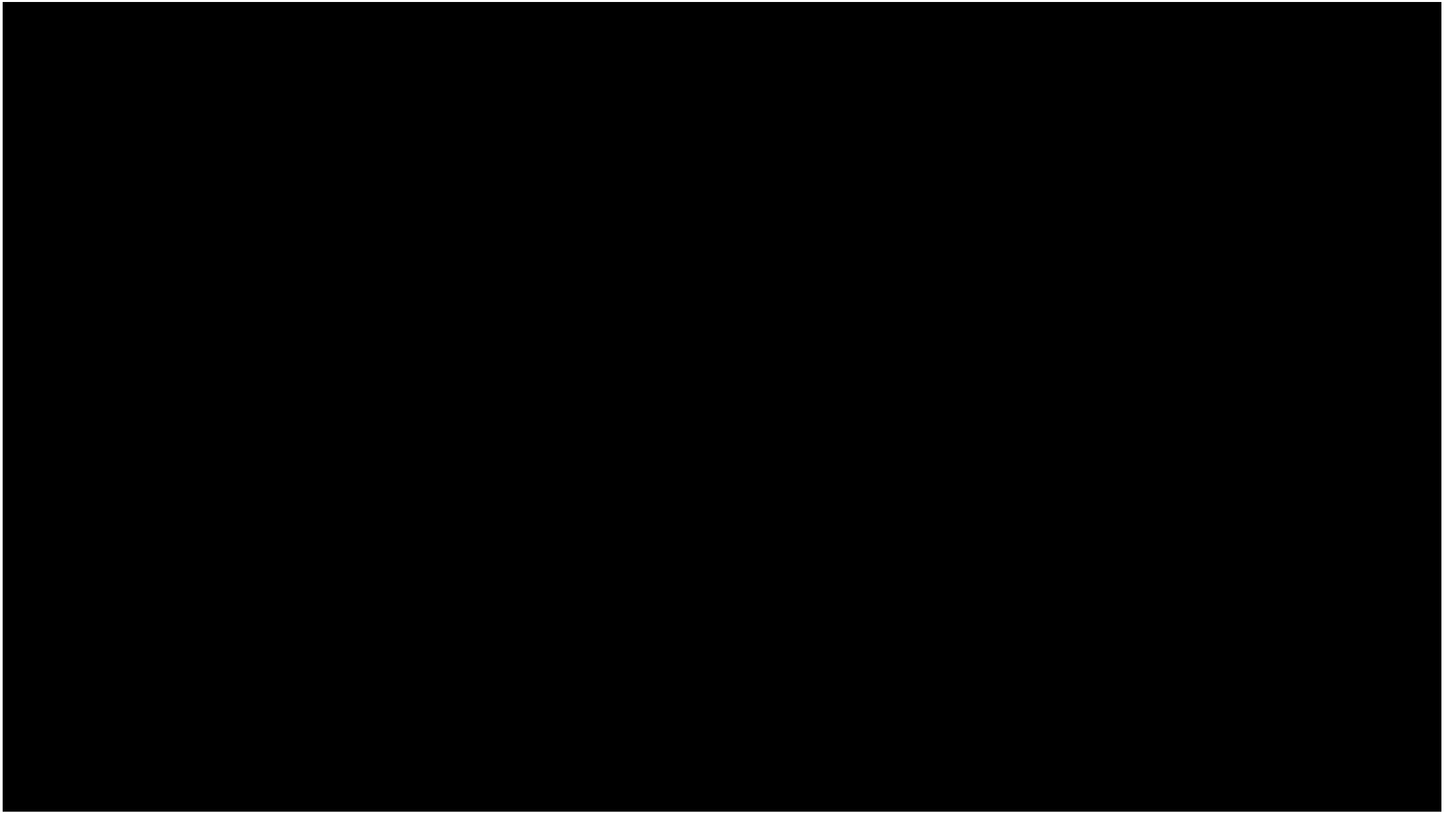
UTCS – Unified Train Control System

PDS – Precision Dispatch System

TMDS – Train Management Dispatch Systems

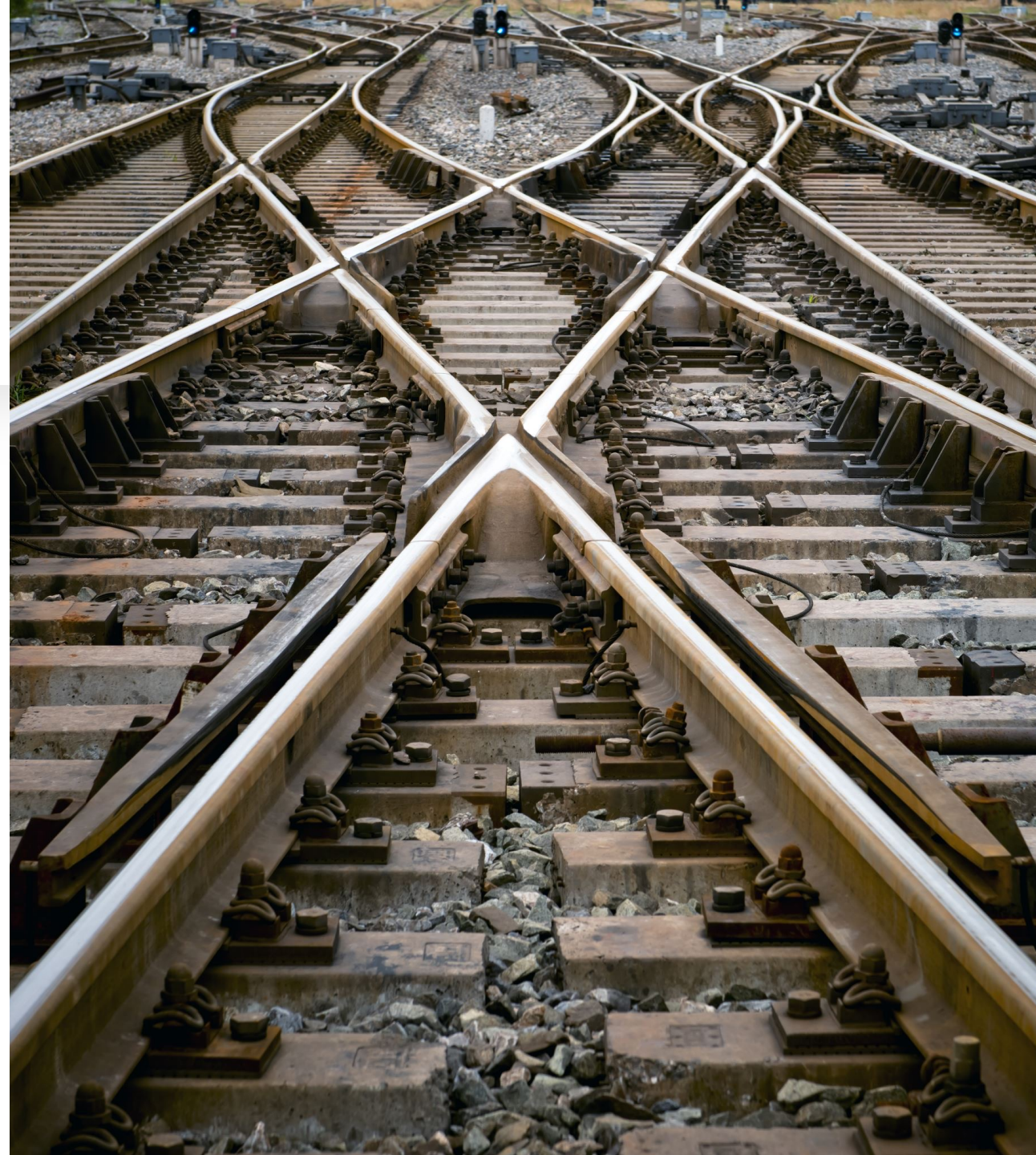
You will also hear many references to PTC – Positive Train Control – which from the Train Dispatchers prospective is a system that takes Train Dispatcher commands entered into a Dispatching system and electronically transmits them to a train and will automatically stop the train to enforce speed restrictions, the limits of authority, signal compliance, should they not be complied with regardless of the reason.

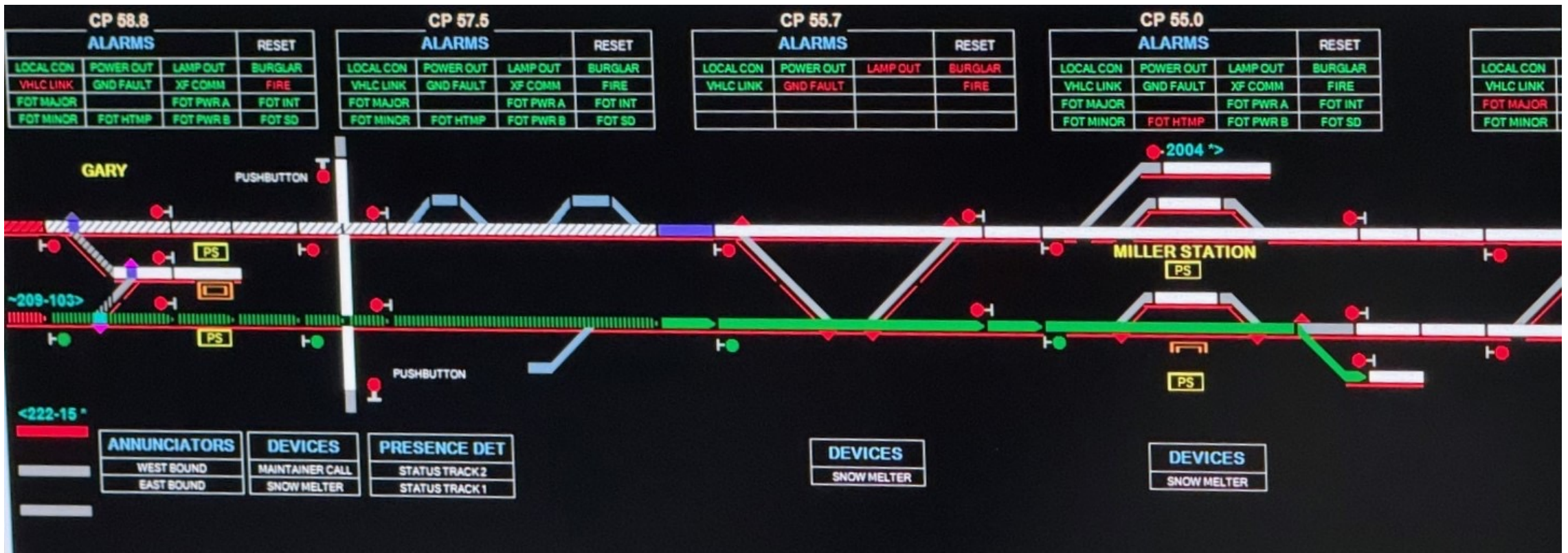




Dispatcher's computer screens only tell part of the story...

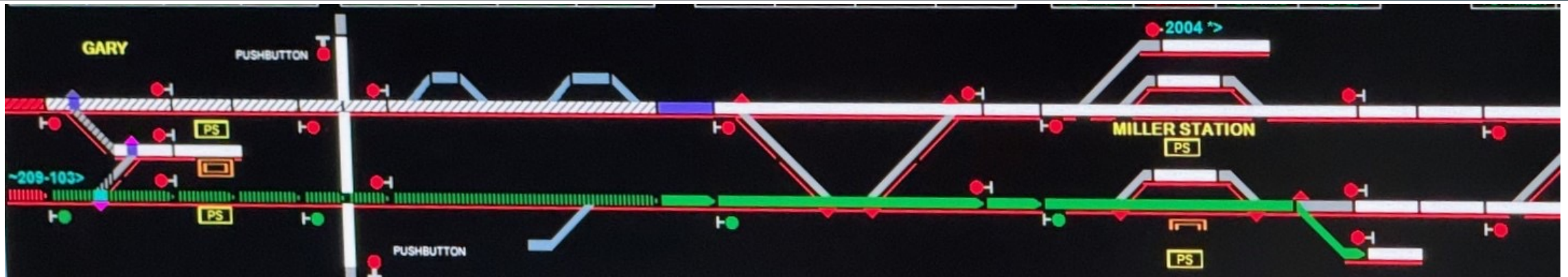
The computer systems used by Train Dispatchers show the tracks, signals, and switches under their control. A variety of colors convey the location of trains, signals that are under his control and their current state (is the signal at stop, or is it lined to allow movement), the position of switches and crossovers, and where the Dispatcher has issued authorities for maintenance or has blocked the track for some other reason, such as a reminder, an out of service condition (such as a track issue, or a road crossing malfunction, or some weather event).



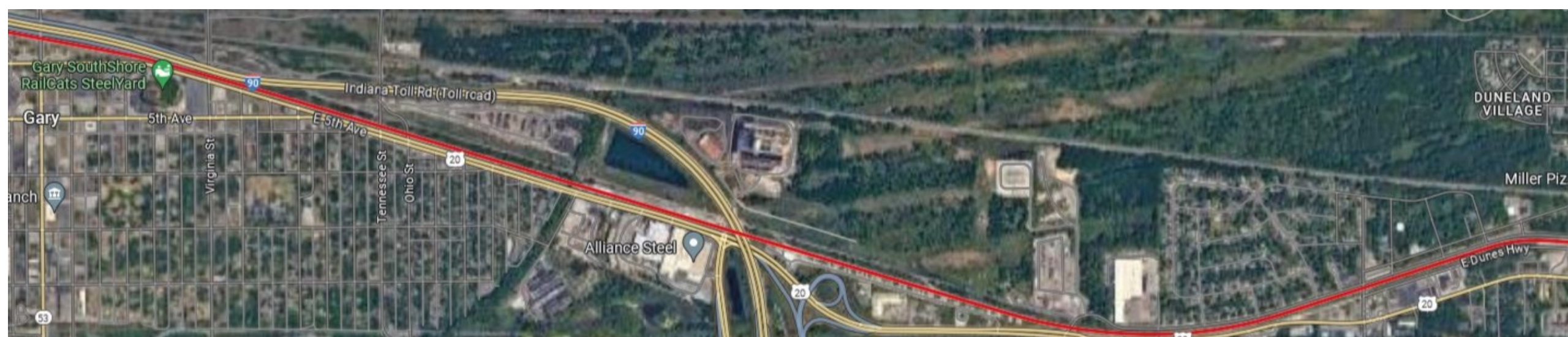


In this example, the white lines indicate tracks and sidings controlled by the Train Dispatcher. The red line indicates trains - the green dot and green line indicate that a signal has been requested and it should display a signal the train to proceed. The red dots indicate that no signal has been requested and the signal should be displaying stop. The railroad is broken into control points, which are the location of signals controlled by the Train Dispatcher and also switches and crossovers.

Dispatcher control screens are not drawn to scale...



The above segment of a Dispatcher's control screen represents about 4 miles of double track railroad with at least 6 road crossings at grade, sidings, and a long reverse curve. Below is a view of the actual track layout.



Another example:



The Southwest side of Chicago

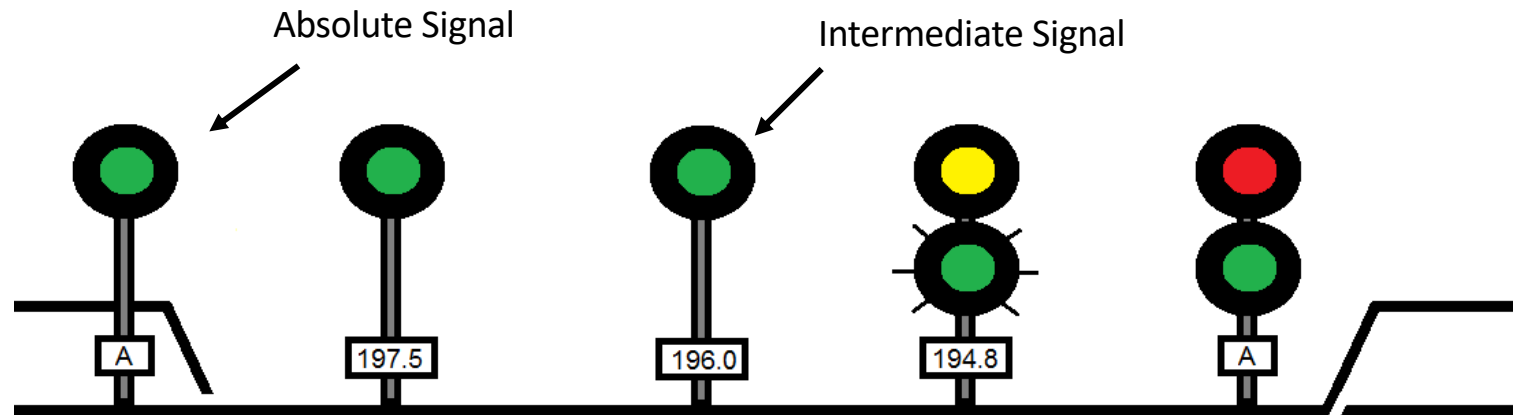


What the Train Dispatcher sees.

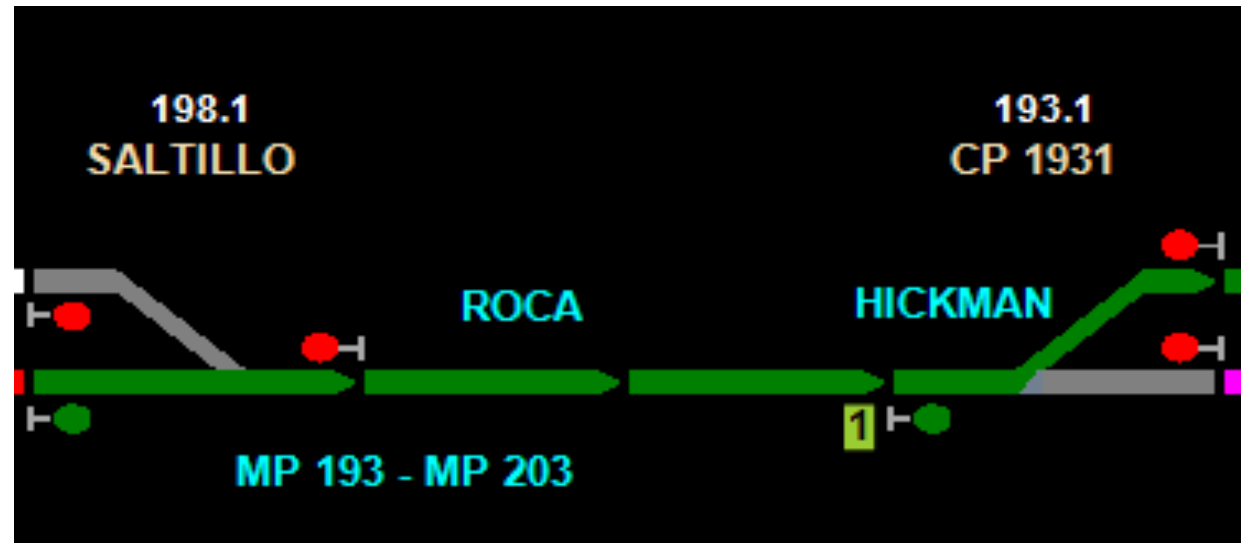
Prioritization of Multiple Tasks



What a Train Crew Sees vs. Dispatcher's View



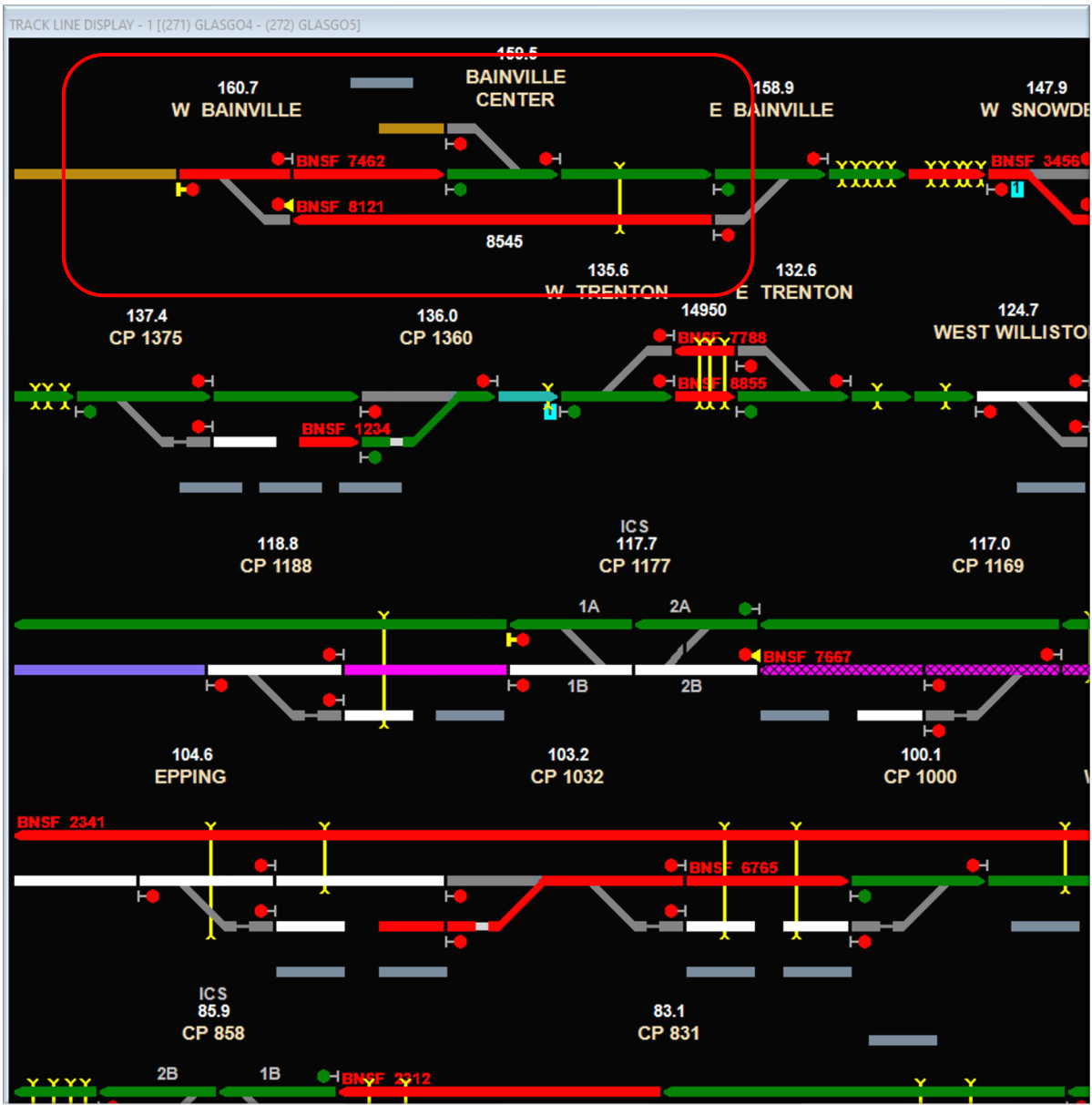
Above is a representation of what an eastbound train crew would see from Saltillo to CP 1931. On the right, the dispatcher only sees that a signal has been displayed but does not see what kind of signal the train crew sees (clear, approach, restricting or even stop).



A train meet...what happens in the field...



What the Train Dispatcher sees...



Here, the Dispatcher issues an authority for maintenance of way to occupy a main track, behind a train....

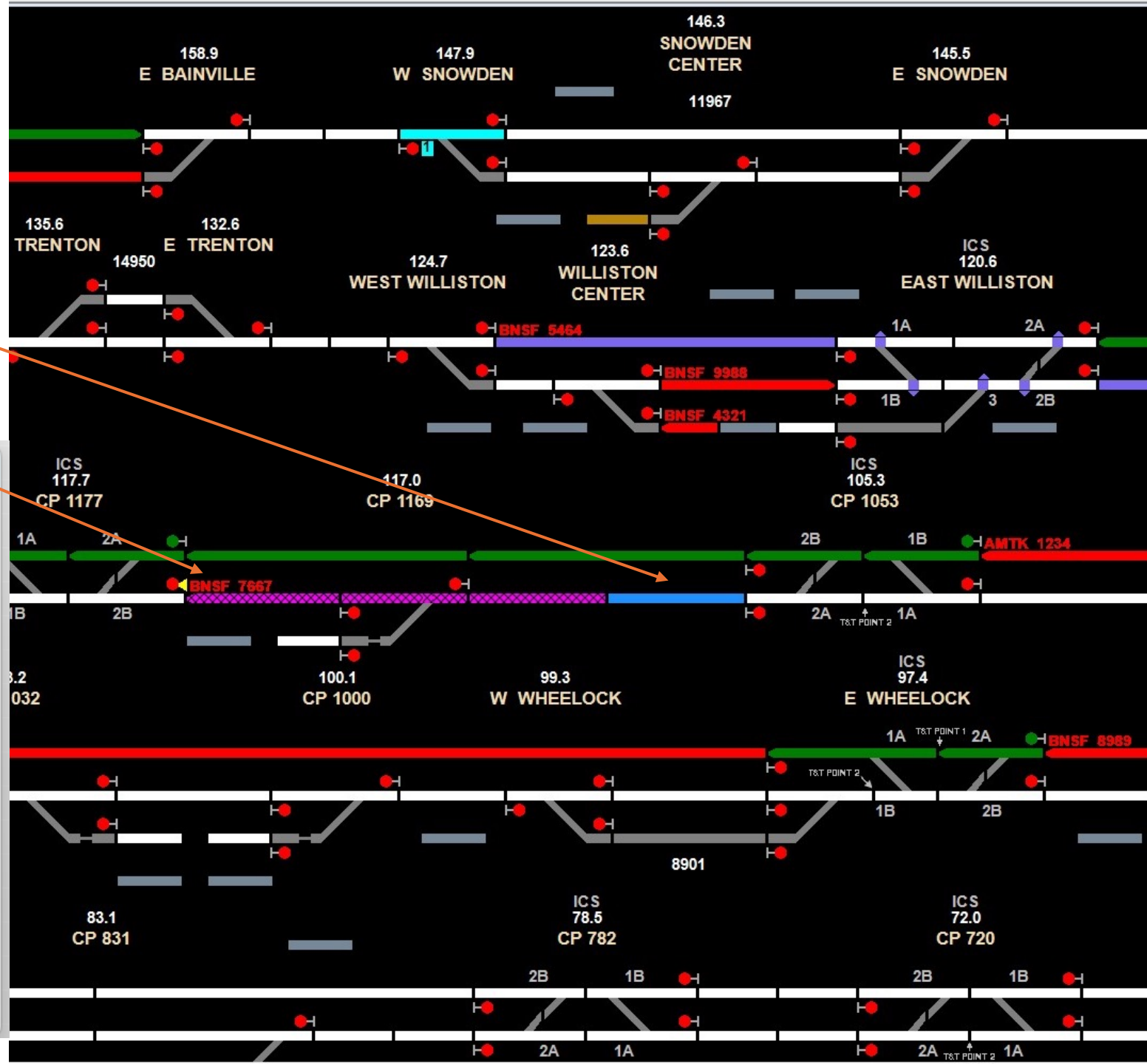
AUTHORITY PREVIEW

AUTHORITY NO: 271 - 2
ISSUED TO: WILSON, M
GRANTED ON MAIN 2 TRACK
BETWEEN WEST CROSSOVER, CP 1053, SW-N
AND EAST CROSSOVER, CP 1177, SW-N
BEHIND TRAIN(s)
(BNSF 7667 WEST)
AUTHORITY IS SOLE

DISP: ZELT, TOBY {TZ}
UNTIL TIME: 0730
OK TIME: 06:52

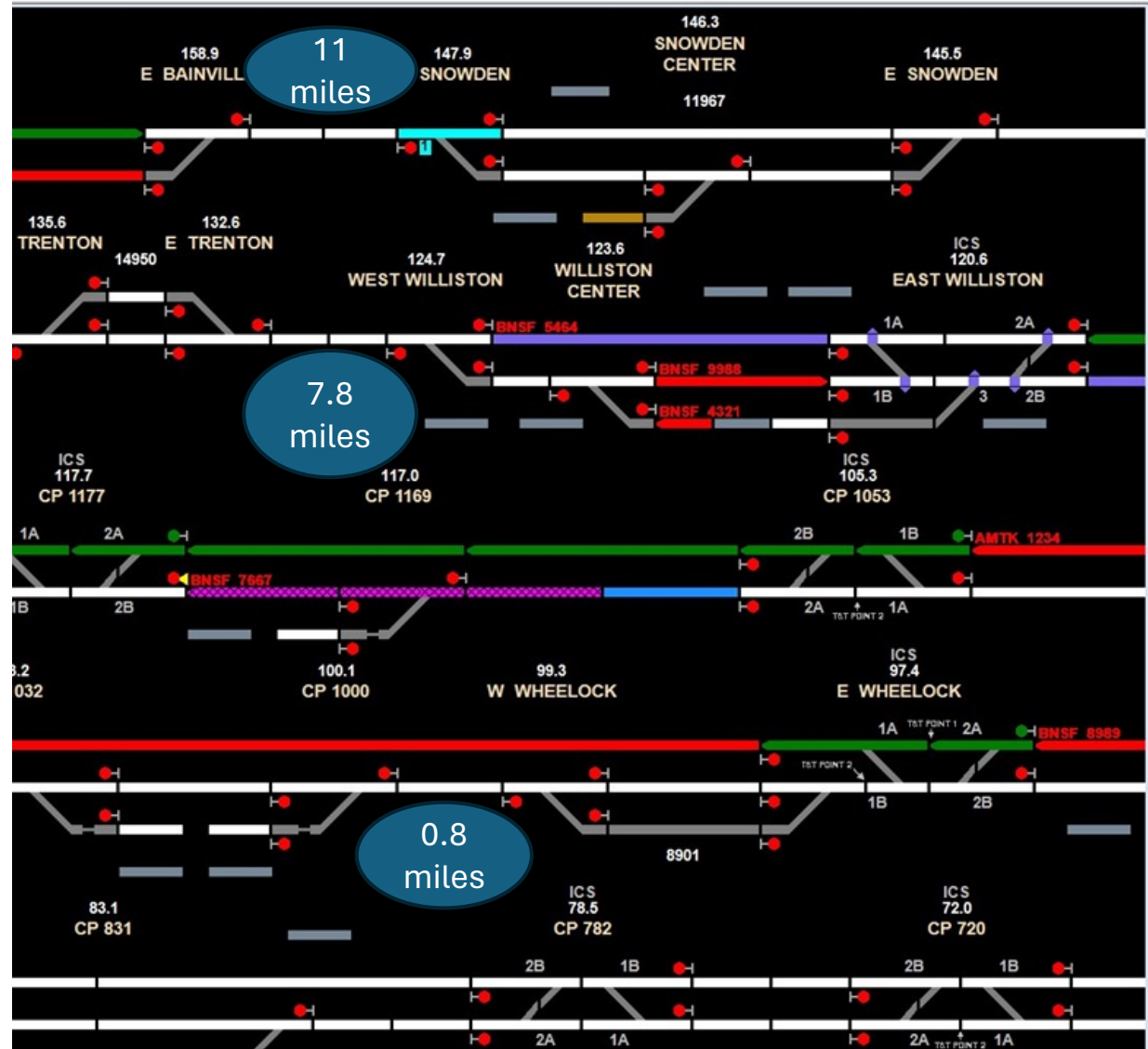
OK

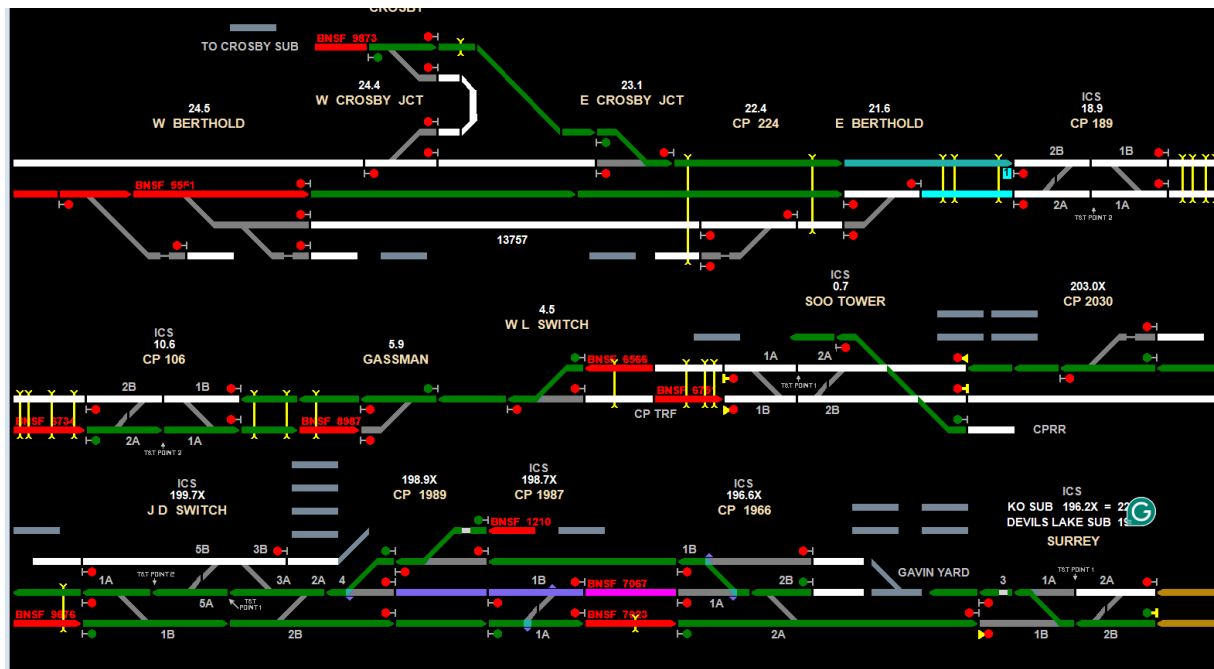
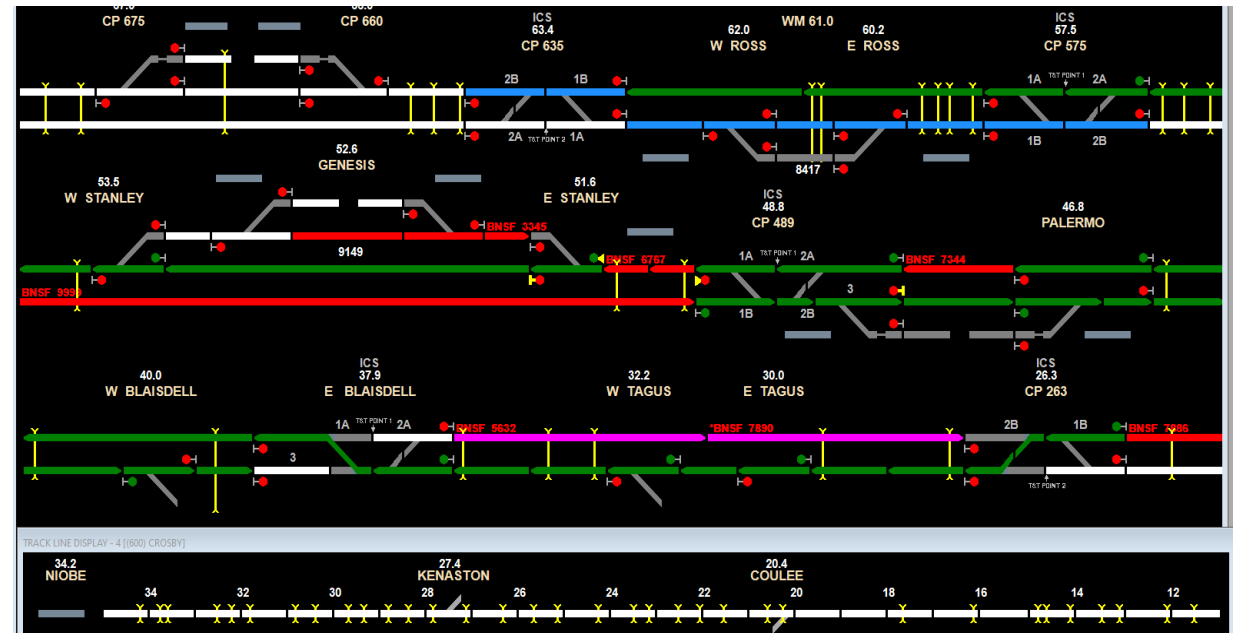
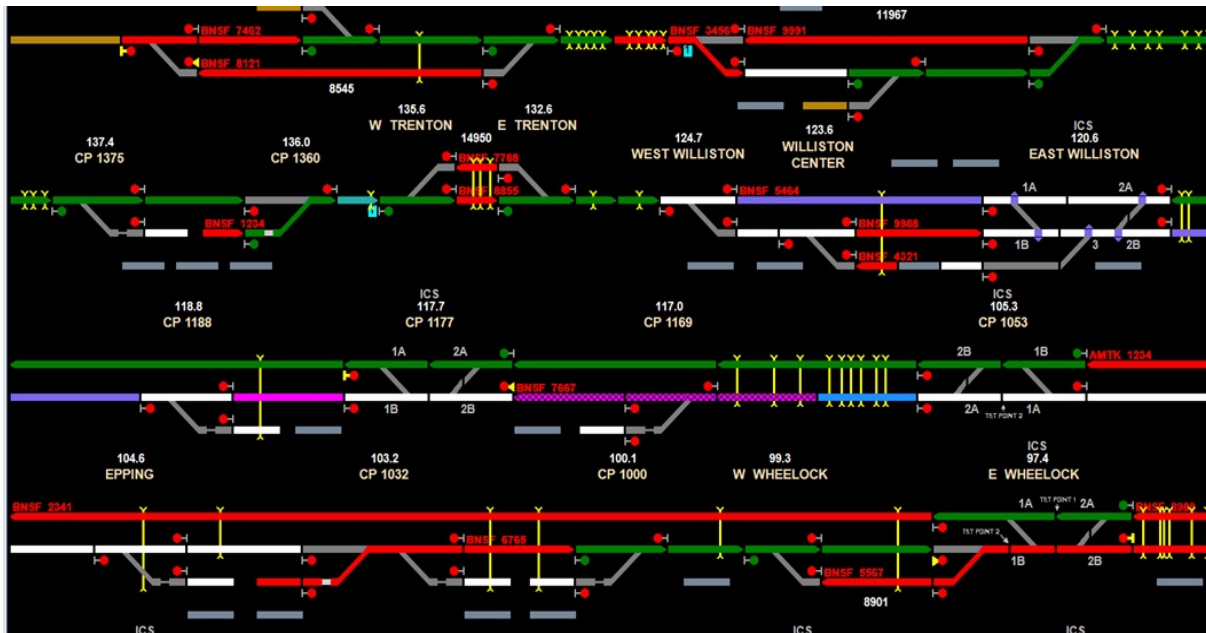
READ



Dispatchers are dependent on information from field employees

Train Dispatchers depend on accurate information from field employees. Train Dispatcher's control equipment does not provide exact locations of trains. Screens are broken into segments which match up with one or more circuits in the field. Some segments may be a half mile, some segments could be 10, 20 or more miles long.





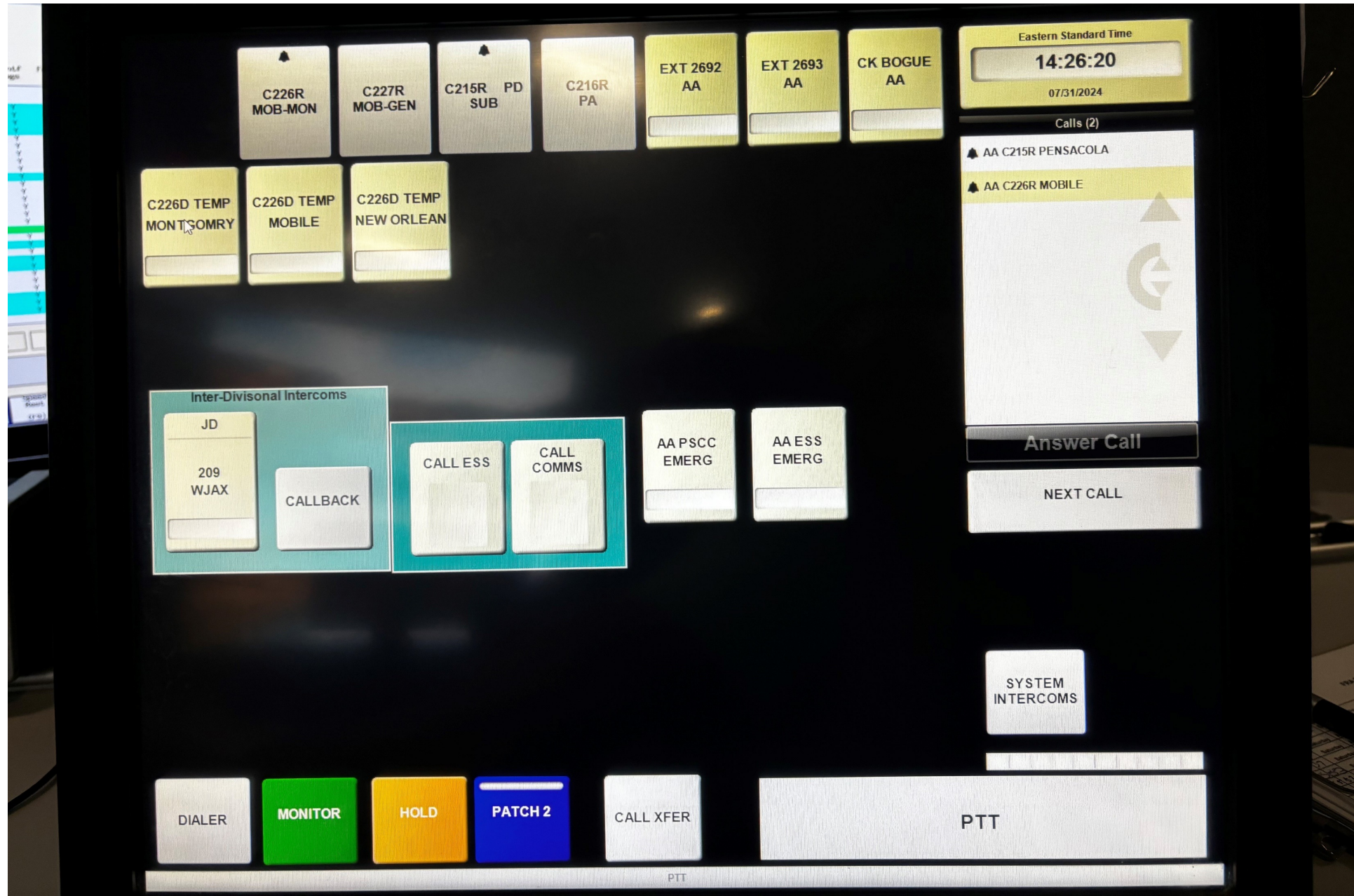
These screen shots represent an example of a Dispatcher's territory of about 150 miles of railroad.

A picture of a working Train Dispatcher's desk





A closeup of a communications console, sometimes referred to the Avtec screen (one of the more well-known companies that develop and sell the communications systems).



Common Train Dispatcher terms and definitions

Track Warrant, Form D, EC-1, Track Authority

Forms that are used by Train Dispatchers (form names vary by railroad or type of Operating Rules in effect) to verbally or electronically issue instructions or mandatory directives to trains or employees, such as speed restrictions, warning about malfunctioning grade crossing protection, weather events, etc. They are also used to authorize maintenance personnel to work on tracks (i.e. track inspectors, immediate track or signal repairs) or they may be used to authorize a train to occupy a track where there are no controlled signals.