



# 2024 Operator Requalification



# Training Outline

- Go over Operating Orders
- New General Notice
- T Rail Switches
- East campus operations
- New Timetable
- Moving Cars out of the TDB
- Winter Operations
- Professionalism
- Safety
- Odds and ends
- Ride and Talk



**PTM**

OPERATIONS DEPARTMENT

**OPERATING ORDER**

**Subject: Operation at Car barn Yard and Tracks 11-12-13**

To: Operations Personnel and All Concerned

SINGLE-ENDED CARS

Effective immediately single-ended cars are NOT to be backed into the car yard - this includes the yard throat as well as Tracks 11-12-13.

Backing cars into this area creates a number of operational issues.

All single-ended cars must be operated toward the barn in a forward-facing orientation. The existence, or lack of, back-up controls is not relevant to this order.

The only exception to the above would be under the guidance of a supervisor (Dispatcher/Instructor) on the scene.

**CARS PROHIBITED ON TRACK 13**

Cars 66, 78 and 1758 are NOT to be operated on Track 13 due to operational and non-clearance issues.

**Subject: Potentially Dangerous Situation Due to Loss of Ground**

To: Operations Personnel and All Concerned

A potentially dangerous condition can occur if the track should become covered with dirt or other debris. If the car does not make good contact with the track, there is no ground and the car body will become electrically "hot", or charged with 600V of DC current. This has the potential to be fatal to someone who is touching both the car body and ground.

If you see that the track is so obstructed, STOP. Sweep the track clean so that the wheels will make direct contact with the rail.

If you have lost the ground and are on the car:

1. Do not allow anyone to exit the car.
2. If possible, pull the pole down from inside the body using the trolley rope.
3. Use your radio to request assistance. Notify responders of the problem and ask them to pull your car's pole or shut off the power.
4. If no help is available and you must exit the car, jump off the car WITHOUT TOUCHING BOTH CAR AND GROUND AT THE SAME TIME. Be sure to tell others to remain on the car until the situation is resolved.

If you are on the ground, DO NOT TOUCH THE CAR BODY until the pole is down or the power has been turned off.

Once ground has been re-established, carefully return pole to the wire and ensure the compressor and/or lights come on.

**Subject: Extension of Nachod Block & New Operating and Safety Procedures**

To: Operations Personnel and All Concerned

The Nachod block has been extended from Richfol Platform eastward into County Home Siding and covers the area between the west end of County Home Siding and Fairgrounds Siding.

Effective immediately the following procedures apply:

**Inbound from Fairgrounds:**

No change in procedure, except for short-turns.

**From Shop or Car House leads:**

Contactors have been installed on leads from both buildings. Cars leaving these locations will check into the signal block. Cars entering these locations will check out of the signal block.

Cars must proceed eastward through the new wire contactor on the main line past the Siding Clearance Light and stopping at the "Change Ends Here" sign near County Home Stop before changing ends.

**Westbound at County Home Siding:**

The single aspect repeater light has been removed and replaced with a traditional two-aspect Nachod signal. Cars approaching this location may encounter a dark signal, an amber aspect or a red aspect and will operate according to the rules.

**Richfol Platform Short Turns:**

The existing two-aspec Nachod will remain and will function as a repeater signal for the one located at County Home.

Crews of cars making short-turn moves... i.e. operating from fairgrounds to richfol and returning to the Arden end of the line MUST:

1. Obtain Permission from the dispatcher to ascertain no other car is in the block.
2. Open the set and release button box located on the steel pole near the substation.
3. Push the SET button. This will give you an AMBER aspect to permit operation back toward the arden end of the line.

Note that the contactor at the substation now controls only the Main Street flashers.

Short-turn moves from the east end of the line do not need to operate the buttons...simply change ends and exit the east end of the block.

Your understanding of and compliance with this change is anticipated. Questions should be referred to an instructor or dispatcher should clarification be required.

Chris Walker  
Operations Manger

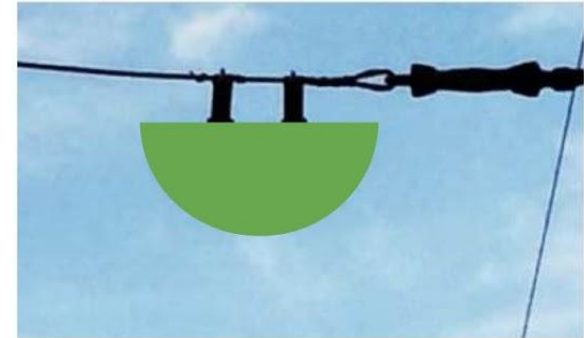
Effective July 28, 2018

**Subject: Green Half-Moon**

To: Operations Personnel and All Concerned

The following changes will be in effect:

1. The mandatory safety stop IB at Museum Road has been discontinued. The red half-moon has been replaced with a green one, indicating it is permissible to proceed at a safe speed... in this case not to exceed 5MPH. Operators must ensure the way is clear before crossing the roadway.



As always, your input on and compliance with these changes is appreciated.



**Subject: Suspension of Rule 117**

To: Operations Personnel and All Concerned

UNTIL FURTHER NOTICE

This order will suspend Rule 117.

*“During events at the Washington County Fairgrounds that generate pedestrian traffic at Fairgrounds crossing, a mandatory safety stop shall be made at each facing point switch of fairgrounds siding.”*

Due to the new switches at Fairgrounds and the installation of grade timers, Rule 117 is no longer needed and would only cause more confusion with the activation of the crossing flashers by a stopped car.

00# 23-01

Issued September 10, 2023

Effective Immediately

**Subject: Cars parked on front track of carbarn**

To: Operations Personnel and All Concerned

Effective immediately West Penn Railways #832 & Pittsburgh Railways #1138 are NOT to be parked on the front position of any track in Founders' Carbarn. Both of these cars have exhibited rolling due to the slight grade at the front of the building. If either car is found to be parked in this spot, the wheels MUST be chocked.

Effective November 27, 2023

**Subject: Revised Rule #200**

To: Operations Personnel and All Concerned

Rule 200 previously stated:

~~*“For normal operation, the orientation of the line is in regard to Richfol Shelter. Cars operating away from Richfol are going in an “outbound” direction. Cars operating toward Richfol are going in an “inbound” direction.”*~~

It now states:

*“Any car facing McClane Loop is considered to be “eastbound” and any car facing Arden Loop is considered to be “westbound.”*

To clarify, if a car does not make it one loop or the other, such as an Interurban than turns at Redman Wye rather than going to McClane Loop, then the car changes direction at whichever wye the car turns.

Effective November 27, 2023

**Subject: Sounding the bell when passing cars on the street**

To: Operations Personnel and All Concerned

In operation on Volunteer Boulevard, a situation regularly occurs when a car passes another. This creates a blind corner which can hide pedestrians. Operators MUST ring the bell as they pass the opposing car and keep speed to no more than 5 mph.

Effective November 27, 2023

**Subject: Traffic Light****To: Operations Personnel and All Concerned**

Antique traffic signals have been added to the Intersection of Volunteer Blvd. & Allegheny Ave. They have 4 phases, Green, Green & Amber, Amber, and Red, and are set up to favor Volunteer Blvd traffic. All Streetcars MUST obey the traffic signals.

In the event that the traffic signals are Dark, streetcars will treat the intersection as a 4-way stop and MUST make a safety stop before proceeding through the intersection.

Effective November 27, 2023

**Subject: Electric Switch Reversal at Redman Wye**

To: Operations Personnel and All Concerned

In order to facilitate the new regular operating patterns, the electric switch at the west leg of Redman Wye has been reversed. Pulling power through the contractor will send the car to McClane loop and drifting through the contactor will send the car up to Volunteer Boulevard.

Pennsylvania Trolley Museum  
Operations Department  
**GENERAL NOTICE**



**Subject:** TDB Yard Switch Electrified  
**To:** Operations personnel and all concerned

This General Notice is to notify all that the TDB yard switch off the Main Line has been converted to an Electrically Operated Switch

- The switch control contactor is located 2 poles toward Redman Wye
- When you are approaching the switch to the TDB you will see a Yellow cross-tie.
  - To stay on the main line and continue toward Volunteer Blvd, you must coast across the yellow cross-tie.
  - To enter the TDB yard, you must stop short of the yellow cross-tie and then take power as you cross the yellow tie.
- If the switch does not throw in the direction you want, stop the car short of the switch and throw the switch with a switch iron.
- This switch is set up with a circuit that prevents the electric switch from being activated in a trailing move as to limit the wear on the switch mechanism.
- As this switch is now electric always assume that the switch point could move at any time. Never place your fingers or any other body part in or near any moving part of the switch.



Pennsylvania Trolley Museum  
Operations Department

# GENERAL NOTICE

GN# 24-02

Issued February 17, 2024

Effective Immediately

**Subject: Red Repeater for Main Street Crossing**

To: Operations personnel and all concerned

A Red Repeater signal has been added to the telephone poles on both sides of Main Street Crossing to protect following section cars. This signal will come on with the crossing to prevent a following section car from entering the crossing circuit before the preceding car exits. This also acts as a failsafe for opposing car movements as the opposite bound signal will also light Red.



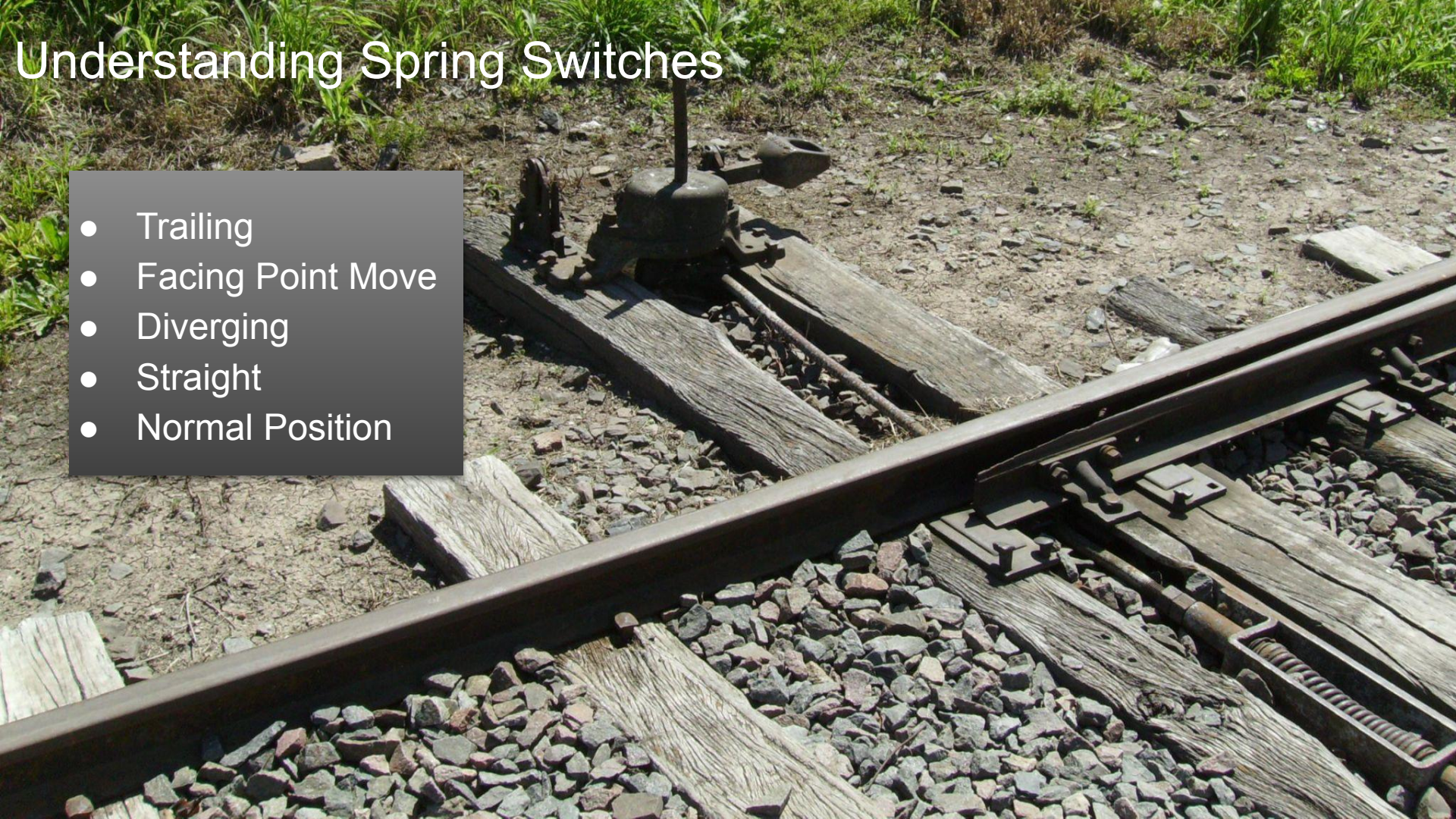


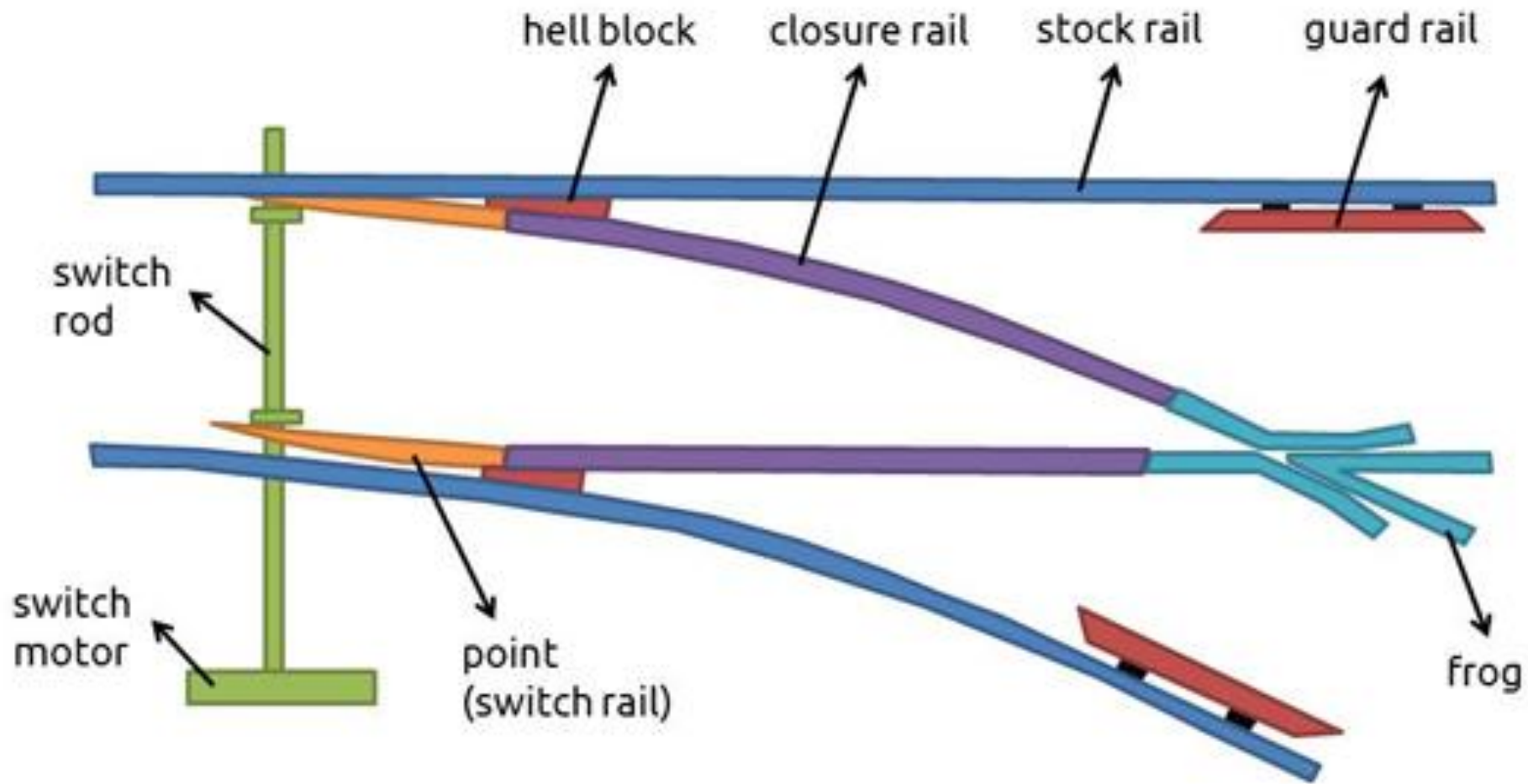
FAIRGROUNDS

150

# Understanding Spring Switches

- Trailing
- Facing Point Move
- Diverging
- Straight
- Normal Position





# East Campus Operations



# New East Site Operations

- Right of way behind TDB
- Loading at Safety Island
- Rounding up guest
- What to do at McClane (5 min max) read the crowd
  - Volunteer opportunities
  - Ring Bell
  - Short History
  - History of the car
- Operate contrasting cars
- Help with putting up & taking down poles in the TDB
- Be extra cautious when running on Volunteer Blvd., look out for pedestrians and other vehicles. Be particularly cautious during special events! Ring bell when passing blind spots
- New Time Table



**PENNSYLVANIA TROLLEY MUSEUM**  
OPERATING THE  
**ARDEN ELECTRIC RAILWAY**  
EFFECTIVE FEBRUARY 14th 2024  
TIMETABLE #21

**SPECIAL RULES:**

- OO# 23-02: Any car facing McClane Loop is considered to be “eastbound” and any car facing Arden Loop is considered to be “westbound. To clarify, if a car does not make it one loop or the other, such as an Interurban than turns at Redman Wye rather than going to McClane Loop, then the car changes direction at whichever wye the car turns.
- OO# 23-03: In operation on Volunteer Boulevard, a situation regularly occurs when a car passes another. This creates a blind corner which can hide pedestrians. Operators **MUST** ring the bell as they pass the opposing car and keep speed to no more than 5 mph.
- OO# 23-04: Antique traffic signals have been added to the Intersection of Volunteer Blvd. & Allegheny Ave. They have 4 phases, Green, Green & Amber, Amber, and Red, and are set up to favor Volunteer Blvd traffic. All Streetcars **MUST** obey the traffic signals. In the event that the traffic signals are Dark, streetcars will treat the intersection as a 4-way stop and **MUST** make a safety stop before proceeding through the intersection.

<b>TRIP</b>	<b>CAR</b>	<b>DEPART</b>
<b>1</b>	<b>INTERURBAN</b>	<b>10:15</b>
<b>2</b>	<b>CITY</b>	<b>10:45</b>
<b>3</b>	<b>INTERURBAN</b>	<b>11:15</b>
<b>4</b>	<b>CITY</b>	<b>11:45</b>
<b>5</b>	<b>INTERURBAN</b>	<b>12:15</b>
<b>6</b>	<b>CITY</b>	<b>12:45</b>
<b>7</b>	<b>INTERURBAN</b>	<b>1:15</b>
<b>8</b>	<b>CITY</b>	<b>1:45</b>
<b>9</b>	<b>INTERURBAN</b>	<b>2:15</b>
<b>10</b>	<b>CITY</b>	<b>2:45</b>
<b>11</b>	<b>INTERURBAN</b>	<b>3:15</b>
<b>12</b>	<b>CITY</b>	<b>3:45</b>



## Special Moves

- Birthday Party cars shall depart W&EC platform 20 min after the hour, and be treated as a special move with no given rights over the railway. All moves must be coordinated with the dispatcher or the service car crew if no dispatcher is on duty.
- Any car movement onto or over the main line of the Arden Electric Railway that is not listed on this timetable must get permission from the dispatcher or the service car crew if no dispatcher is on duty.
- Before setting up any work zones along the main line of the Arden Electric Railway maintenance crews must get permission from the dispatcher or the service car crew if no dispatcher is on duty.

EASTBOUND CARS		LOCATION	WESTBOUND CARS	
CITY	INTER-URBAN		INTER-URBAN	CITY
:48 arrive		McLANE		:53 depart
	:34	VOLUNTEER Blvd	:15	
:46	:33	REDMAN		:54
	:32	ENTERPRISE	:17	:55
:45		VOLUNTEER Blvd		:56
	:30	COUNTY HOME	:19	
	:29	RICHFOL	:20	
	:28	FAIRGROUNDS	:21	
	:25 depart	ARDEN	:24 arrive	

**PENNSYLVANIA TROLLEY MUSEUM**  
 OPERATING THE  
**ARDEN ELECTRIC RAILWAY**  
 EFFECTIVE FEBRUARY 14th 2024  
 TIMETABLE #21

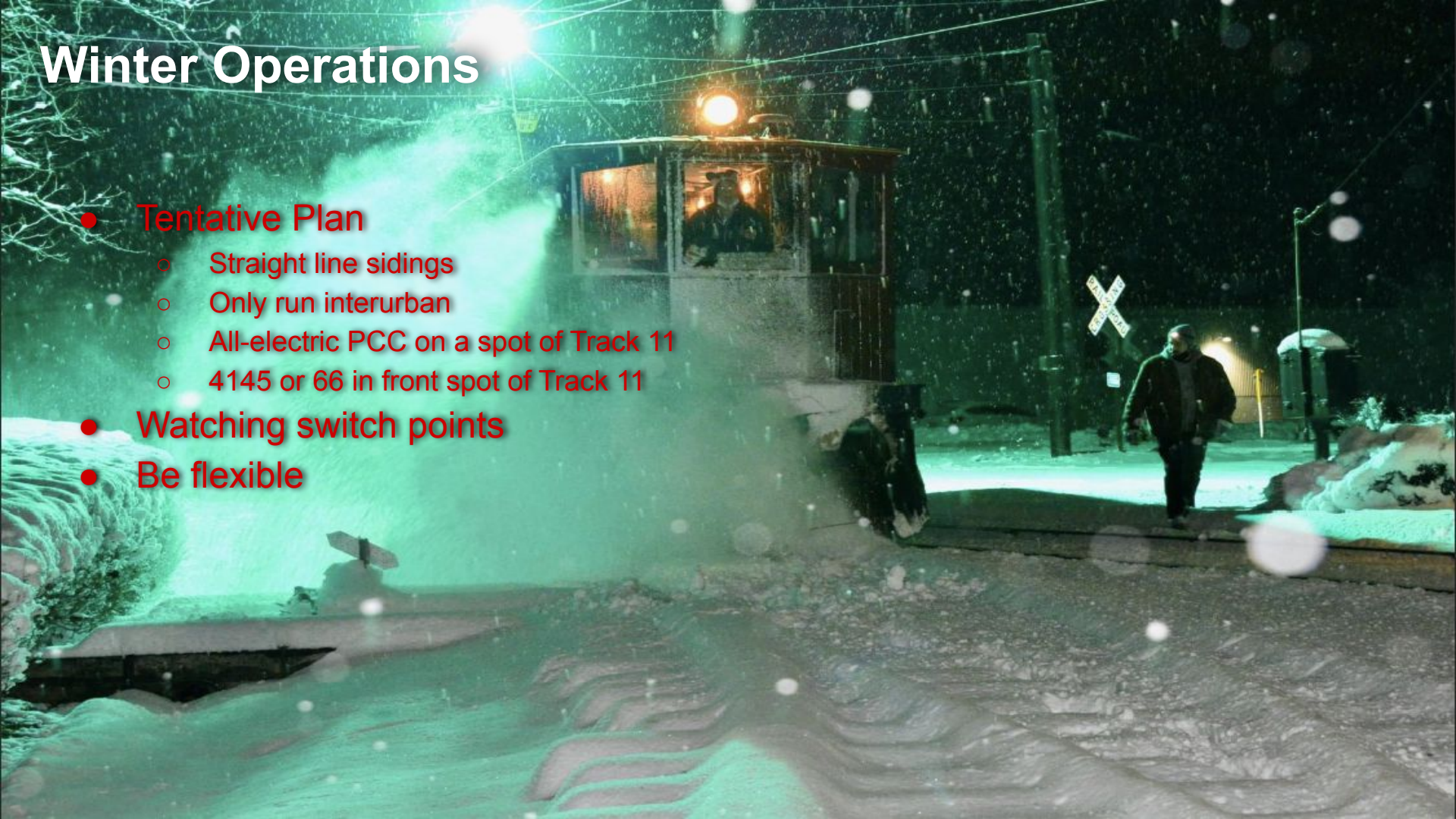


# Moving TDB cars

- TDB needs to be completely full
- Only empty slot is 2711
- Cars must set up for display
  - Shut off everything but lights. Turn off main switch
  - Rope off controllers
  - Door facing isles and open
  - TDB must have a PCC, low floor, and highfloor car
- Proper sign must be next car
- Stanchions in proper position

# Winter Operations

- **Tentative Plan**
  - Straight line sidings
  - Only run interurban
  - All-electric PCC on a spot of Track 11
  - 4145 or 66 in front spot of Track 11
- **Watching switch points**
- **Be flexible**



# Professionalism

- Appearance
- Communication with guest
- Knowledge
- Demeanor
- Crew responsibilities
- Staying on time

# Safety

- Safety is job 1. That's why we put it on slide 29
- Always be watching out for yourself and others
- Do not be afraid to speak up when you feel something is unsafe
- Plan for the day. Do a pre Shift brief. Talk about crew makeup and proficiency, equipment (car) proficiency, changes from normal equipment (car, track, signal) conditions, special cars, recent errors or issues.
- Self checking. STAR, stop think act review. Don't make assumptions. Actively think about what you need to do, what result you expect from your action and what do you do if you don't get the expected results.
- Look at what needs to be looked at

# General Notes

- Turn off Roof lights and dim headlights during the day
- Watch spreading myths
- Situational Awareness at all times!
- Certified Autism
- Please consider signing up to be a museum guide
- Cars MUST make a safety stop both when entering & exiting the carbarn
- New rule book is coming out in 2025. Please send any suggestions to [operations@patrolley.org](mailto:operations@patrolley.org)

# Ride and Talk

- Signal
- Crossings
- Electric Switches
- Spring Switches
- Points
- Winter operations
- Looking at proper items
- Nice ride not too fast