

**BROTHERHOOD OF LOCOMOTIVE ENGINEERS  
AND TRAINMEN**

*A DIVISION OF THE RAIL CONFERENCE*

*INTERNATIONAL BROTHERHOOD OF TEAMSTERS*

**BEFORE THE NATIONAL TRANSPORTATION SAFETY BOARD**

**NTSB Accident Number: RRD23FR016**

**Class: Regional**

**January 30, 2024**

**Proposed findings, probable cause, and safety recommendations in connection with the CSX Transportation employee fatality, which occurred while riding equipment during a shoving movement in the vicinity of Cumberland, Maryland on August 6, 2023**

L.R. Fannon, BLET Safety Task Force, National Chairman  
D.P. Wyatt, BLET Safety Task Force, Party Spokesman

**Final Submission**

The Brotherhood of Locomotive Engineers and Trainmen (“BLET”), a division of the International Brotherhood of Teamsters (“IBT”), was assigned party status by the Board in the above-referenced investigation. BLET respectfully submits these proposed findings, probable cause, and safety recommendations to the Board for consideration.

## Accident Synopsis

On August 6, 2023, at approximately 11:42 p.m. Eastern Standard Time (“EST”),<sup>1</sup> a CSX Transportation (“CSXT”) Conductor Trainee was fatally injured when he struck standing equipment on an adjacent track, while riding the side of a railcar during a shoving movement. The Conductor Trainee was qualifying on train I13706, which is a train consisting entirely of intermodal railcars.<sup>2</sup>

The accident occurred while train I13706 was operating on a track designated as the “Freight Track” in close proximity to the CSXT Cumberland Yard facility in Cumberland, MD.



*Figure 1 – Post accident photo showing separation of involved equipment (Courtesy of BLET)*

---

<sup>1</sup> All times throughout the report will be Eastern Standard Time

<sup>2</sup> Intermodal railcars (also called “well” or “spine” cars) are special railcars that carry containers within their car body. The containers can be single or pairs that are stacked atop one another. These specialized railcars can be in groupings of three (3) or five (5) railcars dedicated together as one.

## Accident Narrative

### Train Information:

Train I13706 originated in the Baltimore, MD vicinity, and was operating to Cumberland, MD. At the time of incident, train I13706 consisted of two (2) locomotives and three (3) intermodal railcars. Both locomotives were on the head-end of the train, with the CSXT 583 as the controlling locomotive. At the time of the accident, train I13706 weighed 305 tons, and was 728 feet in length.

### Method of Operation:

The Cumberland Terminal Subdivision <sup>3</sup> extends from milepost (“MP”) BA 173.3 to MP BA 179.7, in a west-east direction. The subdivision consists primarily of two (2) Main Tracks, but is a junction point where three (3) CSXT subdivisions converge.

At the location of the accident (MP BA 178.76), all movements are governed by rules pertaining to Movement on other than Main Track, which requires trains to move at a speed that allows them to stop within half the range of vision and stop short of trains, engines, railroad car, men or equipment fouling the track, stop signals, or derails or switches lined improperly.

Parallel to the accident area, there are two (2) Main Tracks with a maximum authorized speed (“MAS”) of twenty-five (25) miles per hour (“MPH”), on which movement is governed by centralized traffic control (“CTC”).<sup>4</sup> These movements are coordinated by a CSXT Train Dispatcher, who is located in Jacksonville, FL, and also the CSXT Cumberland Yardmaster who is located in Cumberland, MD.

The entirety of the Cumberland Terminal Subdivision has Positive Train Control (“PTC”) <sup>5</sup> that assists in the movement of train traffic.

---

<sup>3</sup> See Appendix A at the end of this report for relevant portions of the CSXT timetable.

<sup>4</sup> Centralized Traffic Control is a signaling system that uses block signal systems to authorize train movements.

<sup>5</sup> Positive Train Control is a system designed to prevent certain train collisions, overspeed incidents, incursions into established work zone limits, and the movement of a train through a Main Track switch in the improper position.

## **CSX Transportation Railway Documents for TY&E <sup>6</sup> Employees:**

Below is the list of the documents governing TY & E employees provided by CSX Transportation Railway for this accident investigation:

- CSXT Employee Operating Manual – *effective February 1, 2023*
- CSXT Safe Way Rule Book – *effective February 1, 2023*
- CSXT Air Brake and Train Handling Rule Book – *effective February 1, 2023*
- CSXT Equipment Handling Rule Book- *effective February 1, 2023*
- CSXT Hazardous Materials Handling Rule Book – *effective July 1, 2022*
- CSXT Critical Rules – *effective May 30, 2023*
- CSXT Cumberland Terminal Subdivision Bulletin – *effective July 1, 2023*
- CSXT Cumberland Terminal Subdivision Timetable No.2. – *effective November 17, 2019*

No additional information was provided regarding the documentation and/or rules in effect at the time of this accident.

### **Crew Information:**

#### **Locomotive Engineer:**

The Locomotive Engineer obtained his initial certification with CSXT in February of 2000, and was certified as a Locomotive Engineer in November of 2005. CSXT training records indicate that he had completed his last Federal Railroad Administration (“FRA”) mandated Re-Certification in 2022, and the last General Knowledge Rules Exam that same year. He had no medical condition that would affect his performance and was deemed fit for duty.

#### **Conductor:**

The Conductor began his career with CSXT in January of 2023, when he received his initial certification. He had no medical condition that would affect his performance and was deemed fit for duty.

---

<sup>6</sup> Train, Yard, and Engine

## Conductor Trainee (“CT”):

The fatally injured CT was initially hired with CSXT in June of 2023. He had no medical condition that would affect his performance and was deemed fit for duty.



Figure 2 - Schematic of accident location, including equipment, employee and track data (Courtesy of NTSB)

## Movements of train I13706:

The train crew for train I13706 reported for duty at 5:00 p.m. on August 6, 2023, at the CSXT Seigirt Yard crew office, which is located in Baltimore, MD. As part of their assigned duties, they are responsible for transporting intermodal rail traffic between the vicinities of Baltimore, MD and Cumberland, MD. The train crew obtained all required paperwork and conducted all necessary job briefings with their immediate supervisor. After all job briefings were complete, the train crew assembled their train consist, and performed all the required train operational testing.

Train I13706 departed Baltimore, MD with two (2) locomotives and three (3) loaded intermodal rail cars, consisting of 305 trailing tons and 728 feet in total length. Upon arrival in Cumberland, MD the train crew received instructions to pick up an additional thirteen (13) intermodal railcars. In order to accomplish this, the Conductor and CT would need to dismount the controlling locomotive and perform a shoving movement, while providing protection from the leading end of

the movement, as outlined in CSXT Operating Rule 406.<sup>7</sup> Prior to initiating the movement, the Conductor positioned himself on the outer side of the lead intermodal railcar and the CT mounted the outer side of the second intermodal railcar.

The planned shoving movement was to involve operating train I13706 through the “Freight Track”, on a path where additional railroad tracks were present on either side of their own. As the train crew performed their shoving movement, they approached a set of unattended locomotives on the adjacent track, which is known as the “City Track”. The Conductor instructed the Locomotive Engineer by radio transmission to continue the movement past the standing locomotives. As they were shoving past the standing locomotives, the Conductor looked back and observed the CT falling from his position riding on the second to last railcar, and immediately instructed the Locomotive Engineer to stop the shoving movement. Train I13706 travelled an additional 275 feet before coming to a full stop. The Conductor returned to the CT and found him injured and in distress. The train crew immediately called the Train Dispatcher for emergency assistance.

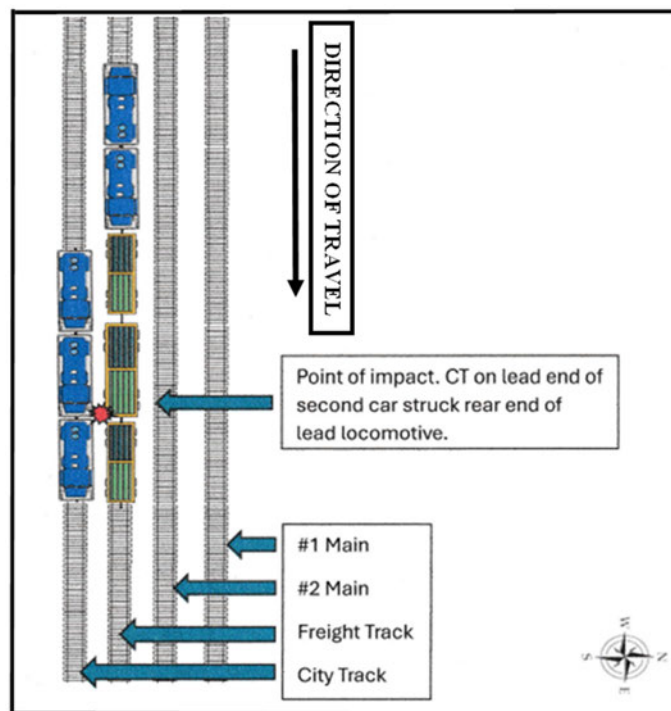


Figure 3 - Schematic of accident location (Courtesy of BLET)

<sup>7</sup> See Appendix B at the end of this report for CSXT Operating Rule 406 (Shoving or Pushing Equipment) in its entirety.

## Locomotive Event Recorder (“LER”), Audio Recorder and Security Video Evaluation:

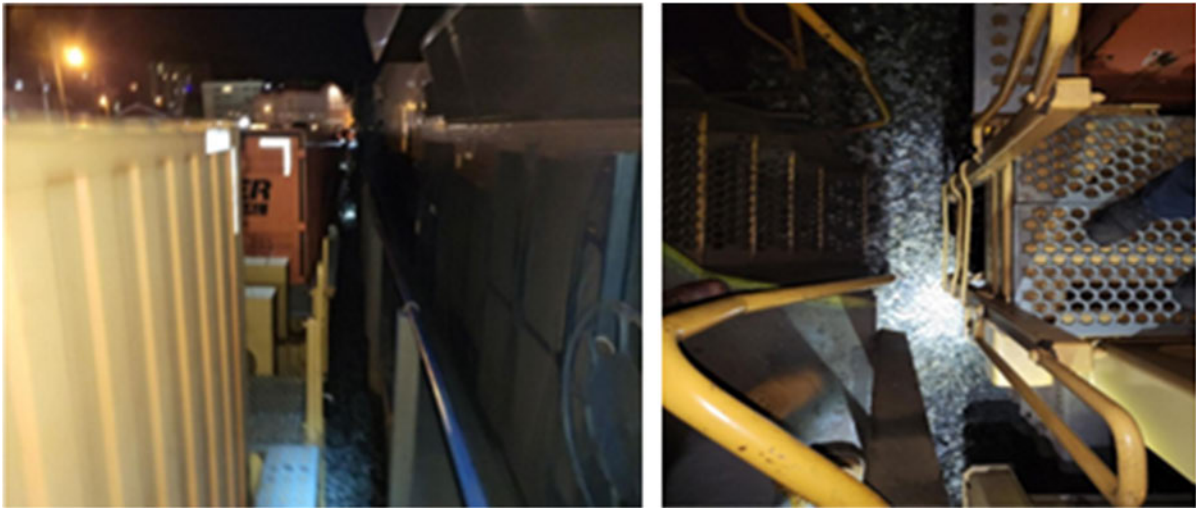
As part of the investigation, a review of LER data from the controlling locomotive of train I13706 (CSXT 583), security video provided by a local business, and audio recorder data from the standing locomotives was reviewed. The following timeline was developed:

TIME (p.m.)	ACTIVITY
11:35:02	<ul style="list-style-type: none"> <li>• Train I13706 observed moving in a westerly direction.</li> </ul>
11:38:02	<ul style="list-style-type: none"> <li>• Conductor observed mounting the south side of the rear railcar of train I13706.</li> </ul>
11:38:03	<ul style="list-style-type: none"> <li>• CT observed mounting the south side of the railcar that was the second from the rear of train I13706.</li> </ul>
11:38:33	<ul style="list-style-type: none"> <li>• Conductor informs the Locomotive Engineer by radio transmission that both him and the CT were prepared to begin the shoving movement and they had a “restricting signal”.<sup>8</sup> The I13706 begins movement in an eastward direction.</li> </ul>
11:38:57	<ul style="list-style-type: none"> <li>• Train I13706 begins shoving movement.</li> </ul>
11:40:24	<ul style="list-style-type: none"> <li>• Locomotive Engineer makes a minimum brake pipe reduction.</li> </ul>
11:40:42	<ul style="list-style-type: none"> <li>• Locomotive Engineer modulates between throttle notch No.1 and notch No.2.</li> <li>• Train I13706 speed fluctuates between six (6) mph and 9.5 mph.</li> </ul>
11:41:13	<ul style="list-style-type: none"> <li>• Conductor provides instructions to the Locomotive Engineer to “come back an additional twenty (20) cars”.</li> </ul>
11:42:16	<ul style="list-style-type: none"> <li>• CT makes first contact with standing equipment on adjacent track. Audio is heard of CT in apparent distress.</li> </ul>
11:42:20	<ul style="list-style-type: none"> <li>• Conductor issues instructions to the Locomotive Engineer to “stop, stop, stop”</li> </ul>
11:42:23	<ul style="list-style-type: none"> <li>• Locomotive Engineer makes full-service brake pipe reduction.</li> <li>• Train I13706 speed is 9.5 mph.</li> </ul>

<sup>8</sup> A “restricting signal” is a signal that requires the movement to proceed at a speed that allows them to stop within half the range of vision and stop short of trains, engines, railroad car, men or equipment fouling the track, stop signals, or derails or switches lined improperly.

11:42:41	<ul style="list-style-type: none"> <li>• Train I13706 comes to a complete stop.</li> <li>• Total distance traveled is 2,238 feet.</li> </ul>
11:43:06	<ul style="list-style-type: none"> <li>• Conductor observed walking towards CT.</li> </ul>

The LER data from the controlling locomotive established that the train handling methods utilized by the Locomotive Engineer were within the normal operating procedures for the area and investigators took no exceptions to his operating actions.



**Figure 4** – Post accident photos showing separation between equipment (*Courtesy of BLET*)

## **Post-Accident Actions by Involved Parties:**

### **CSXT:**

After the accident, CSXT initiated the following responses and operational changes:

- All trainees were recalled to their working locations for a one-half day safety discussion.
- On August 10, 2023, a Safety Alert was issued to all transportation employees.<sup>9</sup>
- A new rule book was created and issued to all transportation employees listing close clearance locations by milepost location.
- The training program for new employees received a reduction in class size, an increase in training time, and additional mentor involvement.

<sup>9</sup> See Appendix C at the end of this report for the CSXT Safety Alert issued on August 10, 2023.



- No trainee may work with another employee who has less than one year of service without the approval of a supervisor.

### **Switching Operations Fatality Working Group:**

The Switching Operations Fatality Analysis (“SOFA”) Working Group is an established, volunteer, non-regulatory, workplace safety partnership that is sponsored by the FRA. The SOFA Working Group issues regular Safety Alerts to help achieve its goal of eliminating switching injuries and fatalities. FRA formed the group in 1998 to review switching operations accident reports and to develop recommendations for reducing fatalities and injuries.

On November 19, 2020, following an accident in Tuscola, IL, the SOFA Working Group issued a Safety Alert that focused on the fact that 1 in 4 switching fatalities occur in close/no clearance<sup>10</sup> situations and included a recommendation for employees to “Plan for the worst-case scenario and . . . prepare an escape strategy.”<sup>11</sup>

The CSXT Cumberland Terminal yard tracks are not designated as close/no clearance. However, while making their shoving movement, the track immediately adjacent to the train crew contained standing equipment. Due to the close proximity of these yard tracks, a temporary close/no clearance situation was created.

On August 11, 2023, the SOFA Working Group issued a safety alert.<sup>12</sup> This safety alert addressed two (2) separate instances of Conductor Trainee fatalities and the most common contributing factors. The safety alert reminded all employees to “remain vigilant while mentoring inexperienced employees” and also to “remember to always hold a job briefing whenever the job or situation changes, especially prior to making a shove movement.”

---

<sup>10</sup> “Close/no clearance” refers to a permanent or temporary safety hazard involving insufficient space or no space for an employee to take evasive action to avoid being struck if passing or being passed by an object, structure, or equipment.

<sup>11</sup> See Appendix D at the end of this report for the FRA SOFA Safety Alert issued November 19, 2020.

<sup>12</sup> See Appendix E at the end of this report for the FRA SOFA ALERT issued August 11, 2023.

## Probable Cause

The Brotherhood of Locomotive Engineers and Trainmen conclude that the probable cause of the August 6, 2023, accident and Conductor Trainee fatality at Cumberland, MD was the failure of the I13706 Conductor to adhere to the requirements of CSXT Operating Rule 406.5<sup>13</sup> and recognize the standing equipment as a potential close/no clearance hazard. As outlined in CSXT Operating Rule Glossary, a close clearance, whether permanent or temporary, would prevent the safe passage of an employee riding the side of equipment. In this situation, although the Conductor was capable of clearing the standing equipment on the adjacent track, the Conductor Trainee was not.

The Brotherhood of Locomotive Engineers and Trainmen also concludes that there were four (4) significant contributing factors that led to the accident on August 6, 2023:

- The Conductor involved in this accident began his railroad career in January of 2023, which was only five (5) months prior to the fatally injured Conductor Trainee. CSXT allowed a new employee who had a very limited amount of railroad/territorial experience to supervise and mentor a Conductor Trainee with approximately two (2) months of railroad experience.
- The level of education and experience of the I13706 Conductor was lacking. This lack of education and experience impeded the Conductor when recognizing and making the proper determination of potential hazards and close/no clearances. The post-accident responses by CSXT provide a clear insight as to the method of education newer employees were receiving to this point, and included:
  - Overly large class sizes precluded one-on-one interaction with instructors.
  - Insufficient field training time granted for those new to the industry.
  - Less experienced and underqualified employees being held responsible for the instruction of Conductor Trainees.

Each of these contributed to the accident on August 6, 2023.

---

<sup>13</sup> See Appendix B at the end of this report for CSXT Rule 406.5.

- The failure of CSXT to exercise proper precautions and protect employees from close/no clearance possibilities by developing a method of inspection which accounts for both track centerline proximity and the presence of standing equipment. At the current time, only track centerline separations are taken into account, and the responsibility of recognizing a potentially hazardous close/no clearance situation is placed solely upon the employee. When considering the movement of I13706, the initial distance between their train and the standing equipment, when first reaching the close/no clearance location, was over sixteen (16) inches, yet narrowed to approximately only seven (7) inches at the point of impact.
- The lack of Federal regulations to govern clearance requirements of track centerlines and forewarning procedures when close track centerlines exist. The fact that a piece of equipment could be less than one (1) foot from another piece of equipment on an adjacent track, whether stationary or in motion, is a situation that should not exist. Additionally, there are no current additional considerations for minimum separation when an employee may be present, whether on the ground or on the side of equipment, versus when an employee is prohibited from taking such a position.

## **Proposed Recommendations**

### **To CSXT:**

1. Use the circumstances of this accident to further educate all field employees as to the specific operating rules and procedures involved when encountering a potential close clearance situation while shoving equipment.
2. Revise CSXT Operating Rule 406 to allow for an employee to dismount moving equipment in the event of an emergency.
3. Identify operational areas that, though historically in compliance with Federal track safety guidelines, pose a potential for an accident when the additional factor of equipment width is taken into consideration.
4. Continue to improve the methods and procedures of new-hire training. Enhance the current training program to include extensive training on dismounting moving equipment in

emergency situations, as well as identifying permanent or temporary close/no clearance situations. Education and development are the foundational elements of a safety-conscious workforce.

5. Immediately cease any / all possibilities of an employee with less than one (1) year of work experience being responsible for the training of another employee.
6. Identify and implement changes to improve yard lighting in all areas where regular switching operations occur.

**To FRA:**

1. Update and amend the Code of Federal Regulations (“CFR”) Title 49, Part 213, Subtitle B Chapter II.<sup>14</sup> This amendment should take into consideration the presence of railroad workers between parallel tracks and the safety standards associated with their protection. Regardless of whether adjacent railroad tracks lie within a yard terminal, customer facility, other than main track, or on main track, a finite amount of space exists between them. Every bulge on a rail car, every piece of protruding commodity or equipment, every track centerline, and every inch of cross level deviation reduces that space and increases the potential for impact. It is the responsibility of all parties (railroad, customers, employees, government agencies) to take every possible precaution to maintain that separation and avoid the potential for danger.
2. Mandate a process that would require all railroad managers to review with all field employees for the proper knowledge and understanding of close/no clearances, bulletin and timetable instructions and for proper demonstration of the application of such rules.
3. Mandate changes to enhance yard lighting in all areas where regular switching operations occur through all times of day.
4. Form a Working Group to specifically study and address railcar design as it pertains to railroad employees safely performing their duties. This study should include the riding of

---

<sup>14</sup> See Appendix F at the end of this report for the table of contents for CFR, Title 49, Part 213, Subtitle B, Chapter II.

all different types of railcars. This Working Group should include all concerned parties (management, employees, government agencies, and rail union labor leaders).

**To the National Transportation Safety Board (“NTSB”):**

1. Due to the number of significant accidents on multiple Class I rail carriers in the US, open additional special investigations into the organization and safety culture of all Class I rail carriers. These special investigations could be done on an individual basis with each rail carrier (with involvement of management, employees, and rail union labor leaders) with a goal of ensuring that they all have active and productive safety plans and policies, as well as a safety culture that fosters good working relationships, with participation and input from employees and rail union labor leaders at all levels, without fear of retribution or retaliation.
2. Form a Working Group to specifically study and address railcar design as it pertains to railroad employees safely performing their duties. This study should include the riding of all different types of railcars. This Working Group should include all concerned parties (management, employees, government agencies, and rail union labor leaders).

**CERTIFICATE OF SERVICE**

*I certify that on January 30, 2024, I have electronically served upon Mr. Michael Bachmeier (michael.bachmeier@ntsb.gov), Investigator in Charge, National Transportation Safety Board, a complete and accurate copy of these proposed findings regarding the August 6, 2023, CSXT employee fatality, which occurred while shoving equipment in the vicinity of Cumberland, MD (NTSB Docket No. RRD23FR016). An electronic copy of same was also forwarded to the individuals listed below in this certificate of service, as required by 49 CFR § 845.27 (Proposed Findings)*

Mr. Michael Bachmeier  
Investigator-in-Charge, RRD23FR016  
National Transportation Safety Board  
490 L'Enfant Plaza, SW  
Washington, DC 20594  
[REDACTED]

Josh Quillen, FRA  
Operating Practices Inspector  
[REDACTED]

Steve Ammons, CSXT  
Director of Train Handling Rules and Practices  
[REDACTED]

Jared Cassity, SMART-TD  
SMART-TD National Safety Team  
[REDACTED]

Zachary Boone, Maryland Department of Labor  
Track  
[REDACTED]

Sincerely yours,

[REDACTED]

L. Randy Fannon  
Blet National Vice President  
Safety Task Force National Chairmen  
Brotherhood of Locomotive Engineers &  
Trainmen  
7061 East Pleasant Valley Road  
Independence, OH 4413



Appendix A



**CUMBERLAND TERMINAL  
SUBDIVISION  
TIMETABLE NO.2**

**EFFECTIVE  
FRIDAY, NOVEMBER 1, 2019  
AT 0001 HOURS  
CSX STANDARD TIME**

Updated Through September 25, 2023



## CUMBERLAND TERMINAL SUBDIVISION - C3

AUTHORIZED SPEED - REFER TO SPEED TABLES				MILE POST	STATION	TRACK DIAGRAM		AUTH FOR MOVE	NOTES
WEST		WEST							
1		2				CUMBERLAND SD			
P	F	P	F			1 2			
60	50	60	50	BA 173.3	MEXICO 0.2	BB DISP 094 - 4 RD 008	PPG LEAD	CP	1. EAS Viaduct Jct is BA 179.1 = BF 178.6. All references to BF MP prefix are removed from the Viaduct Jct CP and the BA MP prefix has been extended to the EAS signal at Viaduct Jct.
				BA 173.5					
60	50	60	50	BA 174.4	2.0	CUMBERLAND YARD YARDMASTER - 008 & 070	1 2 3 4 5 7 8	TC	
50	45	50	45	BA 174.6					
60	50	60	50	BA 175.5				WEST HUMP (CP NO 2)	
55	50	55	50	BA 176.1	1.5			TC	
60	50	60	50	BA 176.7				TC	
40	35	40	35	BA 177.0	VIRGINIA AVE			CP	
				BA 178.2	1.6			TC	
				BA 178.3				CUMBERLAND (P)	
				BA 178.6				BALTIMORE ST	TC
25	25	25	25	BA 178.9	VIADUCT JCT	0.3	SP TO AND FROM MOUNTAIN SD	CP	
								1 2	1
20	20	25	25	BA 179.1	0.7	KEYSTONE SD		TC	
								SINGLE	
								P F	
				BA 179.5	0.1			CP	
				BA 179.6				BEALL ST	
				BA 179.7					
						MOUNTAIN SD			

6.4 MILES BA 173.3 TO BA 179.7

# CUMBERLAND TERMINAL SUBDIVISION SPECIAL INSTRUCTIONS

## 1. INSTRUCTIONS RELATING TO OPERATING RULES

### AUTHORIZED SPEEDS -- CUMBERLAND TERMINAL

Trk	MP/Location	P	F
Both	BA 173.3 - 174.4	60	50
Both	BA 174.4 - 174.6	50	45
Both	BA 174.6 - 175.5	60	
Both	BA 175.5 - 176.1	55	50
Both	BA 176.1 - 176.7	60	
Both	BA 176.7 - 178.2	40	35
Both	BA 178.2 - 178.9	25	25
1	BA 178.9 - 179.1	20	20
2	BA 178.9 - 179.1	25	25
SG	BA 178.9 - 179.1	10	10
SG	BA 179.1 - 179.5		
Both	BA 179.5 - 179.7	20	20

### ADDITIONAL SPEEDS (SP) -- CUMBERLAND TERMINAL

Location	Track Type	P	F
BA 178.9 - 178.9	TO	10	10

### ADDITIONAL SPEED RESTRICTIONS

**BA 178.0 Cumberland Scales** – 5 MPH  
**BA 178.0 Underpass** – 5 MPH for engine movements only  
**BA 178.0 31 Crossovers** – 5 MPH

**BA 178.0 Engine Load Testing Track – Track 6 1/2** – 30 MPH when load testing by Mechanical Personnel. All other movements in compliance with Rule 300.4

### 110.4 TRAINS AND ON-TRACK EQUIPMENT

#### POSITION OF CREW MEMBERS

Conductors and conductor pilots may ride the 2nd unit for instructional purposes when insufficient seating is available on the lead unit.

### 314 PROVIDING PROTECTION AT HIGHWAY-RAIL CROSSINGS AT GRADE

MP	Location	Instructions
BA 178.56	Baltimore St	Freight Trk equipped with motion detectors. No 1 Yard has no grade xing warning device. City Trk is equipped with island circuit, extending 100 Ft from xing in east & west direction (Rule 314.7 applies)

**Road Crossings** – Every reasonable effort must be made to not block any Road Crossing in the city of Cumberland, Maryland. Cumberland City code states that no train will prevent the use of any street for the purpose of travel for a period of time longer than five (5) minutes.

### 401 OPERATING SWITCHES AND DERAILS BY HAND

#### H01 and TAL Track Switch

The switch on the east end of H01 must be restored after use towards the East Lead to prevent conflicting movements on the TAL Track. Switch must be locked after each use. Updated job briefings between crew members must be used before the leading end traverses this switch to confirm the position of the switch and switch points are properly lined for the route.

#### North and South Lead Switches

The switch on the South Lead at the air compressor will be lined to prevent a conflicting movement with the North Lead.

#### Switches at Virginia Ave

The yard switches at Virginia Ave will be left lined as last used or as instructed by the yardmaster.

#### Switches at the Underpass

A. The switch from the open track to the underpass will be left lined for the open track.

B. The switch from the underpass to the bypass will be left lined for the bypass.

### 401 OPERATING SWITCHES AND DERAILS BY HAND

#### Power Assisted Switches (PAS)

There are two types of radio controlled Power Assisted Switches 'PAS'. Instructions for the similarities of these switches are as follows:

- Standard Lever type switch 'SLT'
- Hydraulic Pump type switch 'HPT'

#### Definitions

**Power Assisted Switch (PAS)** – A switch identified as 'PAS' can be controlled remotely by use of a DTMF keypad located on a radio, a key box located on a switch point indicator bungalow, a toggle switch located on the switch stand, or manually.

**Auto Restoring Switch** – Once a train has entered and exited the switch and no further commands have been received, the switches and derails will auto-restore to the normal position. A 'Restored' radio message will be broadcast.

**Signage** – The following signs will be used at Power Assisted Switch PAS locations:

**"Begin OS" and "End OS"** – These signs identify the limits of the on-switch circuit locations. In order for the PAS to be operated by DTMF or pushbutton, the limits of the OS must not be occupied.

**Dual-tone multi-frequency signaling (DTMF) Sequence / Code** - The sequences / codes for a specific location.

**"Switch Control"** – Signs are placed a distance as specified by the in-service bulletin from a Power Assisted Switch for the purpose of notifying the crew they must enter the proper DTMF sequence.

**Confirmation Messages:** Radio Message indicating the switch / derail position

Example:

'CSX west end Alpha MP 123.4 switch is normal, switch is normal, CSX west end Alpha out'

**Normal** – Crossover / switch is lined for straight line movement / main to main / siding to siding.

**Reverse** – Crossover / switch is lined for diverging track movement / main to siding movement.

**Switch Point / Derail Indicator** – A visual L.E.D. display fixed at a switch / derail location to indicate the position of the switch points/ derail. In the case of a crossover, a switch point indicator will be located at each switch. Train crews will utilize the L.E.D. display at their entering end of the crossover to determine the position of the switch. It is not necessary to view the displays on each end of the crossover.

Indicator Light	Switch Status
Green	Normal position, straight line mvmt
Yellow	Reverse position, diverging mvmt
Red or Dark	Switch/xover out of correspondence

**Operating a Power Assisted Switch (PAS)** – To operate a PAS, a crew member must perform the following:

**In yards, with switches equipped with PAS:**

1. Before entering the OS circuit, a crew member must enter, on the yard channel, the proper DTMF sequence for the desired switch position.

2. After entering the proper DTMF sequence/code, crew will receive a radio confirmation message. If the train will not pass the 'Begin OS' sign within 10 minutes after a confirmation message is received that the switch is properly lined for their movement, the train must stop before passing the 'Begin OS' sign and repeat proper DTMF sequence.

3. The switch point indicator displays the switch is properly lined for the desired movement.

4. If the switch point indicator does not properly respond to the proper key controller sequence or Engineering Department operating on-track equipment, either alone or in combination with other equipment, be governed as follows:

- Must stop movement short of the "Begin OS" circuit.
- Obtain instruction of the yardmaster to operate the PAS in hand position.
- Follow **"Manual Switch Operations"**.

#### **Manual Switch Operations**

The PAS must be operated manually by one of the "Manual Switch Operations" procedures below.

#### **Hydraulic Pump Type Switch (HPT) Operation**

- Confirm that there are no obstructions.
- Remove lock from pump handle.
- Open hand throw cover and insert pump handle.
- Move direction lever to the direction of movement.
- Operate pump handle to reverse switch (approximately 15 times)
- Check switch points and corresponding indicator light.
- Reinstall pump handle in holder and lock.

#### **To Change The Original Requested Route**

- If a change is needed from the original requested route, train crew must stop short of 'Begin OS' sign,
- Notify the proper authority,
- Wait 15 minutes from received confirmation, and
- Then enter the proper DTMF sequence described in "Operating a power assisted switch PAS".

#### **RADIO CONTROLLED POWER ASSISTED SWITCHES**

Radio Controlled switches are installed at the following locations:

MP	Location	Switch Inquire	Switch Normal	Switch Reverse
BA 177.0	Xover No 1 from 1 to 3 Yard	#15	#11	#13
BA 177.0	Xover No 2 from North Lead to Open Trk	#25	#21	#23
BA 177.0	Xover No 3 from Open Trk to Freight Trk	#35	#31	#33
BA 177.0	Xover No 4 from Freight Trk to Yard Lead	#45	#41	#43

Normal position is for Straight Track movement.  
Reverse position is for Diverging Track movement.  
Switch Point Indicator Lights are in service.

#### **405 SWITCHING EQUIPMENT**

In addition to Rule 405.2, when at industries, movements must only be made when all rail equipment being moved by industry personnel is stopped.

CSX train crews observing rail equipment being moved by industry personnel while inside the industry must:

- Stop all movement,
- Job brief with industry personnel, and
- Notify local Manager Train Operation (MTO) of the occurrence

#### **405.6 KICKING CARS**

In Addition To The Rule:

Cars must not be kicked into a clear track. The track cars are kicked into must be properly secured. The secured cars must be positioned no closer than three cars from the clearance point to ensure the cars remain in the clear. Use caution when kicking cars to avoid coupling cars in curves. The ranking employee must ensure all tracks are stretched, properly secured, and spotted when switching is completed.

#### **North and South Leads**

Kicking cars is prohibited on the North and South Leads when holding on to a cut of more than 30 cars.

**406 SHOVING OR PUSHING EQUIPMENT**

Equipment must not be shoved, operated or placed within 150 feet of the end of tracks on the east end of tracks W06 – W13 and W15 – W32. Markers on the east end identify 150 feet from the end of each track.

**409 SECUREMENT OF CARS**

The following exceptions apply:

MP	Location	Minimum Tested Hand Brakes Required
BA 178.0	Class Yard (W01-W32)	2 cars or less = 100% HB tied & tested More than 2 cars = 2 HB tied & tested on the east end of each cut of cars

**504.1 GENERAL SIGNAL RULES**

MP/Location	Signal Rules
Cumberland Terminal SD	1281-1298

**512.3 CAB SIGNAL SYSTEM (CSS) - GENERAL**

**CAB Signal Departure Tests**

Trains originating at Cumberland and destined to the RF&P must have tested train control units on the head end. When units are tested, and the test fails, the yardmaster and dispatcher must be advised.

**CAB Signal Test Slips**

Employees required to test cab signals must leave a signed copy of the test results in a cab signal test slip (CSTS) box prior to departing the location where the test was completed.

When conditions exist that will not allow for a CSTS to be deposited at a CSTS box safely, the information must be relayed / transmitted to an authorized employee who can safely make a copy and deposit it in a CSTS box prior to the train's departure.

MP	Location	Location of CSTS Box
BA 173.5	Cumberland Terminal SD	Yard - on post at the east end of the Open Trk East
BA 173.5		Mexico - on post at east end of old Mexico Tower
BA 175.8		Yard office wall on the first floor
BA 176.0		Main office bldg - on the wall by the east end landing

Locomotive operators may remove seals in order to position controls and switches to perform the test. When the test is completed, seals must be replaced. Seals may be obtained from the mechanical department. Any forms on the locomotive marked with seal numbers must be updated with replacement correct seal numbers.

**902.1 REMOTE CONTROL ZONES**

Yard Name	Zone Name	Description of Zone
Cumberland	North	6-18 Class Ladder & Leads west to the East End clearance point of the #2 Xover power operated switch at Virginia LN
	South	19-30 Class Ladder & Leads west to the East End clearance point of the #2 Xover power operated switch at Virginia LN
	1 Yard	The clearance point of the east end & west end of the zone trk
	3 Yard	The clearance point of the east end & west end of the zone trk
	East	From the clearance point of the east end of trks W01-W05 thru the bypass to the east end of WR1

Sign and radio channel information for defined Remote Control Zones:

Yard	Zone	Sign Locations	Sign Display	Radio Channel
Cumberland	North	Adjacent to North Trk at the East End Clearance Point of the #2 Xover power operated switch at Virginia LN	Cont	070
	South	Adjacent to South Trk at the East End Clearance Point of the #2 Cover power operated switch at Virginia LN		
	1 Yard	West End: Adjacent to 1 Yard Trk, 415 Ft west of I-68 bridge. East End: Adjacent to 3 Yard Trk, 115 Ft west of EB signal bridge		
	3 Yard	West End: Adjacent to 3 yard Trk, 110 Ft west of I-68 bridge. East End: Adjacent to 3 Yard Trk, 115 Ft west of EB signal bridge		
	East	No signs due to close clearance		

Switches requiring locks:

Yard	Zone	Switch
Cumberland	North	All Xovers & W01 thru W05
	South	All Xovers, W30 West End, Rip Trk & OTW

#### 902.5 INSTRUCTIONS FOR TRAINS, ENGINES, AND ON-TRACK EQUIPMENT

##### Instructions for train, engine and on-track equipment movements arriving

All inbound trains, engines or on-track equipment movements will not proceed without contacting the yardmaster to determine if a Remote Controlled Zone is activated.

#### 903 POSITIVE STOP PROTECTION (PSP)

The following conditions will relieve remote control operators from point protection on the North Zone, South Zone, 1 Yard Zone and 3 Yard Zone.

PSP locomotives must be leading unit in pullback direction. PSP equipment is installed on RCL assigned to Cumberland Terminal.

Prior to proceeding west from the North or South Zone the following is required:

Permission from yardmaster to occupy switches at Virginia Ave, and verification of zone to be used.

Positive Stop Protection is in effect as follows:

Yard	Zone	Track
Cumberland	North	North Lead
	South	South Lead

#### YARD AND ZONE ADDITIONAL INSTRUCTIONS

##### East Zone –

**Switches:** West End Bypass, East End Bypass, West End WR1/2 Lead, West End of WR1 will be locked for movement on the zone

**Bell Pucks:** Installed on the East End of the WR1 to identify an operator is approaching the EAS of track.

**Dispatcher Responsibilities:** To activate the zone the train dispatcher must apply blocking protection on the West Hump and on the East End Mexico WR1.

#### 904 OPERATING REMOTE CONTROL EQUIPMENT

##### RCOs Assisting Switching Moves

When it becomes necessary for two RCO crews to move a cut of cars together the crews must:

##### A. A direct job briefing will occur between both RCOF's and must include:

1. Leading end's head end location,
2. Leading end's head end power (# of powered axles on line),
3. Tonnage information and total number of cars coupled to,
4. The position of empty cars located within the rear third of the cut of cars closest to the trailing end,
5. The distance of the move to be made,
6. Trailing end's location,

7. Trailing end's total number of powered axles on line,
8. Understanding of consist information and location of empty cars, and
9. Ready to proceed with the movement on leading end RCO's command.

##### B. Once the job briefing is complete the following steps of communication must take place prior to and during movement:

1. Leading end's RCO informs trailing end's RCO of intentions to start the movement,
2. Trailing end's RCO confirms ready for movement to begin,
3. Leading end's RCO informs trailing end's RCO that speed select Couple has been selected,
4. Trailing end's RCO acknowledges leading end speed select position is in Couple,
5. After movement has started, leading end's RCO directs trailing end's RCO to place speed select in Couple,
6. Trailing end's RCO confirms speed select is in Couple and that movement has started on the assisting end,
7. After reaching 1 MPH or 5 car lengths, leading end's RCO can move the speed select lever to 4 MPH and directs trailing end's RCO to move speed select to match, and
8. Both RCOs confirm speed select is in 4 MPH.

##### C. When the movement needs to be stopped, the following steps of communications must take place prior to stopping in order to use good train handling techniques.

1. Leading end RCO's communicates intentions to stop and directs trailing end's RCO to move from 4 MPH to Couple,
2. All operators confirm that speed select lever is now in Couple,
3. After moving speed select to Couple and allowing for slack to adjust, the leading end's RCO directs the trailing end's RCO to move speed select to Coast,
4. All confirm that speed select lever is now in Coast,
5. Leading end's RCO selects Stop, and directs trailing end's RCO to speed select in Stop, and
6. Both RCOs confirm movement has stopped and that speed select is in Stop.

**Note:** Emergency may be selected at anytime an emergency exist. Communication of the emergency situation must occur.

A remote Control Locomotive Consist with cars attached is not considered unattended when the RCO travels to the other end of the train to continue work if the Remote Control Locomotive Consist is equipped with:

1. An electronic hand brake,
2. OCU Interface, and
3. The electronic hand brake is applied, tested, and effective

#### 1003.6 GENERAL RADIO RULES

MP	Location	Hours	Channels Assigned	Type Station
BA 176.8	Cumberland Terminal	Cont	008, 070 094-4	Terminal

**2. INSTRUCTIONS RELATING TO SAFETY RULES**

**2000 SAFETY RESPONSIBILITIES**

**Locomotive Safety**

When first boarding locomotives and prior to movement, crew members must ascertain that the operating cab is in proper condition for their use. The following items must be checked to ensure they are in such condition that will permit safe use while on the locomotive:

1. If for any reason you smell fumes, etc. on the locomotive, get off the locomotive immediately, then notify the proper authority (yardmaster or dispatcher). Do not re-enter / re-board the locomotive.
2. Caution must be exercised when slippery conditions exist, such as, rain, snow, or mud. The floor area should be free from slip, trip and fall hazards. After dark, a light should be used when first entering the cab area.
3. All radio, HTD and other such panels should be checked to ensure they are properly latched and secured to prevent them from opening during the trip.
4. Sidewall heaters should be checked and any plastic bottles, trash, etc. must be removed from these devices.

Should any of the above inspection items need correction by other than the crew, the yardmaster or dispatcher will be notified and corrections made prior to departure.

**2100 ON OR ABOUT TRACK SAFETY**

1. Crews or car inspectors walking a train adjacent to the main will request block protection.
2. The dispatchers will place an O. S. block to prevent inadvertently running a train without advising of the movement.
3. When trains approach, the dispatcher will advise the approaching train to proceed prepared to stop at the location until he has talked with the employee on the ground, and will advise the employee requesting protection of the approaching train.
4. When finished with the block protection, employees involved must release track to the dispatcher.

**2102 RIDING EQUIPMENT**

Employees are prohibited from riding the side of equipment next to an occupied track. Employees may ride on the side next to a clear track.

MP	Location
BA 178.0	SO Yard / Trks 1 - 6
BA 178.0	E03 & E04

**3. INSTRUCTIONS RELATING TO HAZARDOUS MATERIALS**

**6052 GENERAL DOT REQUIREMENT**

**Washington DC HazMat Ban Exemption**

Non-revenue work trains and equipment carrying containers of hazardous materials for the purpose of engineering construction, maintenance or repairs are permitted to operate through Washington, DC.

**Guide for Compliance with Washington DC HazMat Ban**

A ban on loaded cars containing certain designated hazardous materials is in effect for the I-95 corridor through the Washington, DC metropolitan area. This ban applies only to loaded cars (including trailers and containers on flat cars) containing hazardous materials with the restricted class codes and only on the segments of the Alexandria Extension and RF&P Subdivision, within the District of Columbia and between the limits designated below:

**Restriction Limits**

- \* RF&P Subdivision between CFP 110.1 (RO) and CFP 113.8 end of subdivision (M Street)
- \* Capital Subdivision between CFP 113.8 (M Street) and CFP 114.7 (Anacostia)
- \* Capital Subdivision between BAA 36.9 and BAA 37.2 (F Tower)
- \* Metropolitan Subdivision between BA 1.0 (F Tower / C Tower) to BA 1.7.
- \* Alexandria Extension between CFP 113.8 (M Street) and CFP 119.2 (Jones Hill)

**Restricted Class Codes**

- \* Class 1, Division 1.1 (Explosives)
- \* Class 1, Division 1.2 (Explosives)
- \* Class 1, Division 1.3 (Explosives)
- \* Class 2, Division 2.1 (Flammable Gas)
- \* Class 2, Division 2.2 (Non-Flammable Gas-Anhydrous Ammonia Only)
- \* Class 2, Division 2.3 (Poison Gas)
- \* Class 6, Division 6.1 (Poisons) Poison Inhalation Hazard, Hazard Zone A and B, only
- \* Class 7, Radioactive materials

Any commodity with a shipping description of poisonous inhalation hazard, or inhalation hazard.

In order to ensure compliance with this ban on cars carrying the banned commodities that would normally move through the Washington, DC Metropolitan Area, CSX has implemented safeguards that include alert messages in train documents and changes to yardmaster closeouts to prevent cars from being placed in trains moving to the affected area.

Restricted cars will be flagged at the earliest point possible in each train's route to allow efficient reroute. For example, a car containing a restricted commodity placed in a Selkirk block at Waycross will be flagged with an alert message in the train documents. The safeguards will not allow completion of the yardmaster closeout until the car with the restricted commodity has been removed from the train. Yardmasters and train and locomotive operator service personnel will be governed as follows:

**Yardmasters**

Any car which is restricted to or through the DC area will be displayed as:  
RESTRICTION  
\*\*STOP TRAIN\*\*

This commodity (or car number) is restricted from moving through the Washington, DC Metropolitan Area and must be set out.

When this occurs, the yardmaster will not be able to complete the closeout, but should press "enter" to clear out of the closeout process and then:

- 1) Take the appropriate steps to have the car set out of the train.
- 2) Notify the Terminal Manager/Superintendent.
- 3) Delete the closeout and reissue the closeout after the car has been cut out of the train.

**Train and Locomotive Operator Service**

Train Crews Must:

- \* Reference their CSX train documentation restricted and Special Handling list to ensure that their train consist does not include a restricted car that is governed by Special Instruction:
- \*\*\*STOP TRAIN\*\*\*

This commodity (or car number) is restricted from moving through the Washington, DC Metropolitan Area and must be set out

- \* When practicable, observe train for placards indicating a banned material.
- \* If crew suspects a car carrying a banned material in their train, they must reference the train listing and hazardous material description in their train documentation for the hazmat STCC code of the commodity.

T&E crews, or other field personnel finding one or more of the aforementioned loaded hazardous materials cars in trains enroute to the affected subdivisions must:

- \* Report the incident to the train dispatcher,
- \* Stop train and set out the car prior to reaching the limits of the ban area.

Particular scrutiny should be applied to trains destined to operate over the RF&P SD and the Alexandria Extension at the locations where they originate and where they last perform work.

**4. INSTRUCTIONS RELATING TO EQUIPMENT HANDLING RULES**

**4052 DISCOVERING A CAR THAT IS UNSAFE TO MOVE**

When a car wheel is found to have excessive tread build up\*, it must not be moved until authorized by a mechanical department employee and/or a transportation officer.

\*Tread buildup is considered excessive when the height of the buildup exceeds one-eighth of an inch.

**4406 HANDLING A COAL OR BALLAST TRAIN EQUIPPED WITH AN AIR DUMP SYSTEM**

A. Rapid Discharge Air Dump Systems  
Trains equipped with an air dump system for automatic unloading must be operated enroute to the unloading location with the locomotive main reservoir end cock closed and the locomotive-to-auxiliary train line hose removed. This will cause the system to become void of air and therefore eliminate any possibility of these cars dumping accidentally enroute. Upon arrival at the location to begin charging the dumping system, the locomotive-to-auxiliary hose must be reapplied and the end cock on the locomotive opened to permit recharging the system for unloading.

B. At the loading facility where these trains have been loaded, they must be inspected to determine:

1. The locomotive-to-auxiliary train line has been removed, and

2. All hoses are coupled and angle cocks properly positioned. If for any reason it becomes necessary to charge the rapid discharge dumping system extreme caution must be used.

3. If these cars are uncoupled and then recoupled at any time, the auxiliary dump hoses must be reconnected.

**4467 TRAIN LENGTH AND TONNAGE RESTRICTIONS**

Empty trains operating with head end power only must not exceed 10,500'.

**4475 HANDLING PASSENGER EQUIPMENT**

Speed restrictions for MARC III 7800 cars and VRE Bi-Levels with over-inflated air springs:

- (A) Through crossovers and turnouts - 5 MPH
  - (B) All other movements - 30 MPH
- There are no restrictions when air springs are under-inflated.

Movement of passenger trains handling Hybrid Intermodal Transportation (HIT) containers in Amtrak multi-level or auto frame equipment is prohibited.

**4500 ENSURING AUTHORIZATION TO MOVE SHIPMENT**

**Double Stack and Multi-Level Movements**

Unless otherwise authorized by the Clearance Bureau or Network Operations, the following are the maximum double stack and multi-level heights allowed on the main track and sidings. CSX Train Documentation will list this equipment as restricted and will show applicable height dimensions.

MP Locations	Double Stack	Multi-Level
Mexico to Viaduct Jct	20'2"	20'2"
Viaduct Jct to Beall St	Prohibited	Prohibited

**4551 MOVING LARGE ENGINEERING EQUIPMENT**

- When plowing with ditcher-spreader cars, must not:
- \* Have short hood of locomotive against snow plow;
  - \* Be shoved by a locomotive consist exceeding two units;
  - \* Handle more than 5 cars, including snowplow and caboose;

Be governed by instructions of supervisor accompanying the movement as to further speed restrictions.

**5. INSTRUCTIONS RELATING TO AIR BRAKE AND TRAIN HANDLING RULES**

**5304 PERFORMING A CALENDAR DAY INSPECTION**

Cumberland, MD –  
Locomotive Calendar Day Inspections will be made for yard assignments in Cumberland at the end of third shift. Locomotive or RCO operators will notify supervisors during their tour of duty of defects needing repair, so that locomotives may be repaired and kept in service.

**5354 CHANGING ENDS**

When making extended movements with light locomotives, movement will be controlled from cab of leading unit in

direction of movement when possible.

**5502 TRACTIVE EFFORT**

Helper locomotive consist must not exceed the equivalent power axle value of the head end consist unless the head end power axle value was reduced from an en-route failure. When an en-route failure occurs and a higher power axle value is needed for a rear end helper than the power axle value that exist on the head end, the helper power must be reduced to no more than 18 power axles. If an en-route failure did not occur on the head end power, and more power axles are needed to shove the train, the helper power must be placed into the train with approximately 70% of the helper locomotive tonnage rating behind the helper locomotive.

**Baltimore Beltline**

If train is not powered for the Baltimore Belt Line, the Terminal Manager Train Operation (MTO) at Cumberland and the train dispatcher must be informed prior to train departing Cumberland.

**5556 SWITCHING**

When switching cars, the following tonnage/car counts must be adhered to. When this tonnage/car count is exceeded, the minimum cars with air cut-in must be used.

Locomotive	Tonnage	Minimum Cars with Air
Cumberland Terminal	Less than 2,000	None
One or more Locomotives	2,001 - 4,000	5
	4,001 & above	10

**6. INSTRUCTIONS RELATING TO RESTRICTED EQUIPMENT**

MP	Location	Equipment	Restriction
BA 178.0	Cumberland Terminal	Engines operated through the secondary retarders	Do not exceed 5 MPH
	Cumberland Terminal Master Retarders	Engines other than designated yard engines	Prohibited through retarders

**7. CLOSE CLEARANCE**

MP	Location	Remarks
BA 178.0	Cumberland Car Shop	Wheel Trk at the loading dock
BA 178.0	Superfos/Berry Plastics	All Trks
BA 178.0	Oil Spot Trks	
BA 178.0	Locomotive Shop	
BA 178.0	Castle Siding	At ballast dump area

**8. MISCELLANEOUS**

**GENERAL MISCELLANEOUS**

**A. Cumberland – Yarding Instructions**

1. Westward trains exiting at Viaduct must not foul Baltimore Street without knowledge that the BB Dispatcher will take the train. Notify yardmaster when departing.
2. Westward trains departing on 1 or 2 Main Tracks must not foul Baltimore St or the Amtrak station without knowledge that the BB Dispatcher will take the train.
3. All trains yarding in the receiving yard at Cumberland Terminal, tracks WR1 through WR8, must spot and secure their train on the west end of the track, unless otherwise instructed.

**B. Inbound Power to Service Tracks**

1. Contact the Service Track Foreman (STF) when your consist has "arrived" and "stopped" at Evitts Creek.
2. Contact the STF on Channel #036 and be governed by his/her instructions.

**C. Outbound Power from Service Track**

1. Go to STF office to get power assignment and its location.
2. When in service track area always wear hearing protection and safety glasses.
3. Go to outbound tracks and retrieve your consist.
4. Once your consist is retrieved and you are ready to depart, contact the STF on Channel #036 to receive further instruction.
5. The STF will ask to verify whether the derail is in the "off" position and has the blue oscillating light changed to amber. Once this information is verified, permission will be granted to move off the outbound track(s).
6. After clearing the derail(s), contact the STF and notify him/her that your consist is in the clear of their derail.

**9. HIGHWAY ROAD CROSSINGS**

**203.2 LOCOMOTIVE BELL AND HORN**

The following crossings have been identified as quiet zones, and are not subject to the requirements of Rule 203.2(a). All other requirements of Rule 203.2 remain in place.

MP / Location	Xing Type	DOT#	Horn	Bell	Hours
BA 178.56 / Baltimore St	PB	144684Y	No	Yes	Cont
BA 179.06 / Knox		145050F			
BA 179.60 / Beall St		144694E			

**ROAD CROSSINGS AT GRADE EQUIPPED WITH AUTOMATIC WARNING DEVICES**

MP	Location	DOT#	Type
BA 178.56	Baltimore St	144684Y	M
BA 179.06	Knox St	145050F	
BA 179.60	Beall St	144694E	

**10. TERMINAL INSTRUCTIONS**

NONE



## 11. LOADED UNIT CRUDE OIL TRAINS

NONE

## 12. POSITIVE TRAIN CONTROL

Trains that have a PTC equipped locomotive should initialize and run with Positive Train Control on all controlled tracks within the specified limits as outlined in the table below.

MP	Instructions
BA 173.3 - BA 179.7	PTC IN EFFECT - ALL CONTROLLED TRACKS

### GENERAL INSTRUCTIONS

All re-crews and road switchers taking charge of trains in PTC territory must contact the Train Dispatcher before initializing PTC.

## Appendix B

### 406 - Shoving or Pushing Equipment

**406.1** Employees involved in shoving or pushing movements must not:

- a. Engage in unrelated tasks, or
- b. Provide protection while occupying an automobile or similar motorized vehicle.

**406.2** Employees directing a shoving or pushing movement must:

1. Confirm all cars to be shoved are coupled by stretching the slack,
2. Make a visual determination that cars on the track adjacent to the track being shoved are located behind the clearance point, and verbally confirm the determination via radio with other crew members, and
3. Ride the side of the leading end of the equipment or be in a position on the ground ahead and in the clear of any shoving movement that will traverse any switch, derail, public highway-rail or pedestrian crossing located on the portion of track to be shoved in order to ensure such devices are properly lined and appropriate protection is provided at crossings.

**406.3** The leading end of shoving and pushing movements must be visually protected (eyes on it) at all times by a qualified Employee to ensure the track is clear of equipment and conflicting movements using one of the methods below:

- a. From the ground at a location clear of all tracks where the leading end of the movement can be visually observed at all times,
- b. Being positioned on the leading end of the movement in the required riding position, or
- c. Constant monitoring via technological means such as:
  - a. Shove lights, or
  - b. Cameras

**406.4** The employee directing a shove movement must give instructions sufficiently in advance to permit compliance. The employee receiving instructions must comply with the intent of those instructions. If there is any doubt as to the meaning of the instructions, or for whom such instructions are intended, the movement must:

1. Be stopped immediately, and
2. Not resume until the instructions are understood.

**406.5** When the equipment being shoved or pushed is moving, the employee directing the movement must be located either on the ground or riding the leading end of the equipment and comply with the following requirements:

- a. When on the ground:
  1. Remain clear of all tracks, and
  2. Maintain visual contact with the leading end of the equipment at all times, either visually or utilizing technological means.
- b. When riding the equipment:
  1. Be positioned on the equipment appropriately as required by SafeWay rules,
  2. Face the direction of movement, and
  3. Dismount the equipment no less than 150 ft. (3 car lengths) from a:
    - a. Obstruction fouling or potentially fouling the track, or
    - b. Coupling, or
    - c. Close clearance, or
    - d. Gate/doorway not open and secured, or
    - e. Switch not properly lined for the movement, or
    - f. Derail in the derailing position, or
    - g. Adjacent track with equipment fouling the track being shoved.

**406.6** When radios are used during a shoving or pushing movement, the employee directing the movement must communicate the following to the employee receiving the instructions:

1. Employee is in the clear of all tracks,
2. How the point protection will be provided,
  - a. From the leading end of the equipment - "On the point", or
  - b. From the ground visually - "Point from the ground", or
  - c. Utilizing technology - "Point from a camera or shove light"
3. Switches and derails involved with the movement are properly lined,
4. Distance of the movement to be made (not to exceed a maximum of 20 car lengths at a time ) or the sight distance available, whichever is less, in 50-foot car lengths, and
5. Additional instructions must be communicated to the employee controlling the movement prior to reaching one-half of the previous specified distance until the movement stops.

Exception: On a Main Track or Signaled siding governed by a signal indication more favorable than restricting, or when operating in TWC-D with an unrestricted EC-1, it is permissible to communicate up to a maximum of 50 car-length increments if range of vision allows.

**406.7** When radios are used during a shoving or pushing movement, the employee controlling the movement must:

1. Not begin the movement until the employee directing the movement provides the required instructions,
2. Acknowledge the instructions by repeating them back to the employee protecting the movement,
3. Continue to repeat the instructions given (when the distance remaining is 4 cars or less then acknowledgement is no longer required), and
4. Stop the movement in one-half of the last specified distance to go instruction unless additional instructions are received.

**406.8** When shoving or pushing equipment for purposes other than coupling:

1. The movement must stop 150 feet short of:
  - A. A blue signal, or
  - B. A fixed derail, or
  - C. An improperly lined switch, or
  - D. On-track equipment, or
  - E. An obstruction, or
  - F. End of the track.
2. If necessary to make any further movement to place equipment, allow the slack to adjust before moving.

**406.9** Equipment must not be shoved, operated or placed within 150 feet of a portable derail.

## Appendix C



### Safety Briefing – Temporary Close Clearance

On August 6, 2023 a CSX trainee was fatally injured when he encountered a temporary close clearance while riding equipment in Cumberland, MD. This tragic incident remains under investigation and is a somber reminder that we must all remain focused and committed to maintaining situational awareness when performing critical activities.

Leaving equipment in the clear is a crucial part of our work process. Failure to comply with the requirements of leaving equipment in the clear can create unknown and/or hidden hazards that jeopardize the health and safety of other employees that may exist long after the equipment has been left. Considering the potential damage or severity of injury that improperly placed equipment can cause, it becomes clear that constant peer-to-peer communication regarding the location of equipment is necessary in order to safely execute our duties. Not only should these conversations occur between crew members, these conversations should occur between all affected personnel to ensure that all employees are apprised of changing conditions at a given location.

Although permanent close clearance locations may be identified by timetable and/or signage, situations or conditions that constitute a temporary close clearance may be more difficult to identify due to the dynamic nature of our work environment. As such, employees must know, and be familiar with, the locations in which they operate with regard to riding equipment. If employees are not familiar with the location, or are unsure if the positioning of equipment on an adjacent track might constitute a temporary close clearance condition - employees are empowered to stop, dismount, assess the condition and job brief accordingly. If a determination cannot be made, employees must take the safe course:

**Taking the safest course of action means that we actively look to identify potential hazards and analyze the work environment in real time. We are empowered to make changes (ex: stop, slow down, reposition) to ensure the safest outcome for ourselves and our peers.**



**CSX** Safety Department

### Critical Rule and Focus Requirements

- Always leave equipment in clear and beyond clearance point when indicated.
- If no clearance point is marked, identify a safe clearance location by extending an arm toward equipment where it can no longer be touched. Then position equipment an additional 50 foot car length in the track.
- If necessary to leave equipment fouling connecting tracks, equipment must be left completely occupying switch of connecting track.



## Points of Emphasis

- The location of equipment to be left unattended should be a constant consideration and topic of job briefings throughout each tour of duty.
- During switching operations, assignments should maintain dialogue between each other as to the location of equipment.
- Employees must remain vigilant at locations wherein customers conduct interplant switching themselves, as there may be an elevated risk of equipment in the foul.
- We work within a dynamic environment, **do not take the location of equipment for granted** – as it may have moved unbeknownst to the employee.
- If **any part** of the equipment extends beyond a designated clearance marker, the condition is considered to be non-compliant.

Given recent changes with regard to the requirements of shoving movements, employees must remain vigilant as to the location of equipment when protecting a movement from the leading end. It is imperative that employees remain alert to the location of standing equipment, be familiar with the location in which they operate, and ride equipment properly during the course of the movement. Additionally, employees must never leave equipment standing or unattended in a non-compliant manner, as it may facilitate an unsafe condition for themselves and their fellow employees

## **CSX Operating Requirements**

### **Rule 407.1**

Standing equipment must not foul connecting tracks. Clearance points may be designated by a visible yellow tie or other designated marker on non-controlled tracks. Yellow ties on main tracks and designated siding tracks are not designated clearance points. When the clearance is not identified, determine the clearance point by:

1. Standing outside the rail and off the end of crosstie of the connecting track,
2. Extending arm toward the equipment,
3. Identifying the location where the equipment can no longer be touched, and
4. Positioning equipment an additional 50-foot car length into the track from the location identified in Step 3.

### **Rule 407.2**

When the track length is insufficient to permit leaving equipment clear of connecting tracks and it is necessary to leave equipment beyond the clearance point, the equipment must completely occupy the switch of the connecting track.

### **Rule 2102.1**

When riding on equipment, employees must:

1. Position body to face the equipment and look in the direction of travel,
2. Maintain 3-points of contact, keeping secure hand holds and footing,
3. Be prepared for unexpected movements and slack action at all times,
4. Ride the side of cars equipped with a horizontal grab iron at least 12 inches above the floor of the car or at least one vertical grab iron that allow an employee to stand upright.
5. Ride the side of rail cars or the trailing end of a cut of cars equipped with an end platform.
6. Ride the steps or front/rear locomotive platforms when positioned on the outside of a moving locomotive,
7. **Dismount 150 feet before passing a close clearance sign or reaching a close clearance,**
8. Ride on the side of equipment away from live tracks, main tracks, sidings, close clearances or other hazards, and
9. Dismount equipment 150 feet prior to coupling.



## **Course Code Information**

**Title:** Safety Alert, Temporary Close Clearance Briefing 2023 Q2

**Description:**

This 15 minute Instructor Led course will cover the procedures to leave unattended equipment in the clear of adjacent tracks. Rules to be discussed are:



- 407.1
- 407.2
- 2102.1

Short Description/**CLRS code:** TATEMCCSA23

OLC course number: OLC2515007

Duration: 0.25 hr

## Appendix D



**Share Knowledge ~ Save a Life**  
**ZERO FATALITIES**

# SOFA ALERT

*PLEASE POST IMMEDIATELY*

**August 13, 2020: Crossett, AR** – An employee protecting a shove movement into a customer warehouse was fatally injured after encountering a close clearance situation and contacting a loading dock.

**October 11, 2020: Richmond, VA** – An employee protecting a shove movement into a track was fatally injured after encountering a close clearance situation and contacting a box car on an adjacent track.

**November 11, 2020: Tuscola, IL** – An employee protecting a shove movement into a customer siding was fatally injured after encountering a close clearance situation with a fence and was struck by the equipment.

Take Away

*While these recent cases have not yet been analyzed, the SOFA Working Group is concerned by the 159 injuries that occurred this year through August 31, 2020 and reminds all employees to remain vigilant during switching operations by not only protecting the shove movement, but also protecting themselves by avoiding close or no clearances hazards. Last, but not least, remember to always hold a job briefing whenever the job or situation changes.*

Most Common Findings in Switching Operations Fatalities

Close / No Clearance	Inexperienced Employee	Industry Hazard	Inadequate Job Briefing	Struck by Mainline Train
25%	22%	21%	20%	17%

As a cross-industry collaboration for over 20 years, the SOFA Working Group has identified the Possible Contributing Factors for more than 210 switching operations fatalities since 1992. The SOFA Working Group reports its finding and emerging data trends with the goal of zero fatalities in the railroad industry.



## SOFA Lifesavers

Share Knowledge ~ Save a Life ~ Zero Fatalities

As a cross-industry collaboration for over 20 years, the SOFA Working Group has identified the Possible Contributing Factors for more than 210 switching operations fatalities since 1992. The SOFA Working Group reports its findings and emerging data trends with the goal of zero fatalities in the railroad industry.

## Why Avoid Close / No Clearances?

1 in 4 switching operations fatalities due to a close or no clearance

**Case Example:** A two-person RCL crew shoved five empty cars into a snow-covered industry track. Ice build-up on the track caused the lead car of the movement to derail. The RCL operator, riding the lead car and controlling the move, was crushed against the side of an industry building and fatally injured. **Take Away:** Before starting a move, check for obstructions that may prevent clearance for a crew member riding a car, and discuss the hazard during the job briefing.

### What?

A close or no clearance is a permanent or temporary safety hazard involving insufficient or no space for an employee to take evasive action to avoid being struck if passing or being passed by an object, structure, or equipment.

### When?

Close or no clearances can occur due to a fixed structure that remains in the same location day to day, such as a building, or when a movable object, such as a stack of cross ties, passes by an employee or an employee passes.

### How?

So employees know when to walk, or when and where to ride, establish "defensive switching" standards on how to handle close/no clearance situations, including the following:

- Look for hazards. Encourage inspection of the work site before acting.
- Ride the side away from hazards.
- Plan for the worst-case scenario, such as a derailment, and prepare an escape strategy.
- Maintain focus and avoid distractions, such as holding unnecessary conversations, doing paperwork, or using cell phones.
- Expand job briefings to emphasize issues such as:
  - Dangers of equipment left fouling.
  - Warnings to other crews when placing oversized cars on tracks adjacent to their work.
  - Location & potential for close/no clearances.

- ✓ Eliminate close/no clearances, re-engineer where feasible, and/or report as required.
- ✓ Improve signage to be instructional, such as "Stop and Dismount."
- ✓ Mark all permanent close/no clearances with highly visible signs.
- ✓ Prepare employees to identify & avoid close/no clearances.



## Most Common Findings in Switching Operations Fatalities



## Appendix E



**Share Knowledge ~ Save a Life**  
**ZERO FATALITIES**



# SOFA ALERT

*PLEASE POST IMMEDIATELY*



**June 26, 2023 – A Conductor trainee who was riding the leading end of a shoving movement was fatally injured after falling into the path of the movement.**

**August 6, 2023 - A Conductor trainee who was riding the side of equipment was fatally injured after encountering a close clearance situation during a shove movement.**

### Take Away

*While these recent cases have not yet been analyzed, the SOFA Working Group is concerned by the two fatalities that have occurred involving employees in training and reminds all employees to remain vigilant while mentoring inexperienced employees. Last, but not least, remember to always hold a job briefing whenever the job or situation changes, especially prior to making a shove movement.*

Most Common Findings in Switching Operations Fatalities				
Close / No Clearance	Inexperienced Employee	Industry Hazard	Inadequate Job Briefing	Struck by Mainline Train
25%	22%	21%	20%	17%

As a cross-industry collaboration for over 20 years, the SOFA Working Group has identified the Possible Contributing Factors for more than 210 switching operations fatalities since 1992. The SOFA Working Group reports its finding and emerging data trends with the goal of zero fatalities in the railroad industry.

# Appendix F

49 CFR Part 213 (up to date as of 1/10/2024)  
Track Safety Standards

49 CFR Part 213 (Jan. 10, 2024)

---

This content is from the eCFR and is authoritative but unofficial.

---

## Title 49 –Transportation

### Subtitle B –Other Regulations Relating to Transportation

#### Chapter II – Federal Railroad Administration, Department of Transportation

##### Part 213 Track Safety Standards

###### Subpart A General

- § 213.1 Scope of part.
- § 213.3 Application.
- § 213.4 Excepted track.
- § 213.5 Responsibility for compliance.
- § 213.7 Designation of qualified persons to supervise certain renewals and inspect track.
- § 213.9 Classes of track: operating speed limits.
- § 213.11 Restoration or renewal of track under traffic conditions.
- § 213.13 Measuring track not under load.
- § 213.14 Application of requirements to curved track.
- § 213.15 Penalties.
- § 213.17 Waivers.
- § 213.19 Information collection.

###### Subpart B Roadbed

- § 213.31 Scope.
- § 213.33 Drainage.
- § 213.37 Vegetation.

###### Subpart C Track Geometry

- § 213.51 Scope.
- § 213.53 Gage.
- § 213.55 Track alinement.
- § 213.57 Curves; elevation and speed limitations.
- § 213.59 Elevation of curved track; runoff.
- § 213.63 Track surface.
- § 213.65 Combined track alinement and surface deviations.

###### Subpart D Track Structure

- § 213.101 Scope.
- § 213.103 Ballast; general.
- § 213.109 Crossties.
- § 213.110 Gage restraint measurement systems.
- § 213.113 Defective rails.
- § 213.115 Rail end mismatch.

- § 213.118 Continuous welded rail (CWR); plan review and approval.
- § 213.119 Continuous welded rail (CWR); plan contents.
- § 213.121 Rail joints.
- § 213.122 Torch cut rail.
- § 213.123 Tie plates.
- § 213.127 Rail fastening systems.
- § 213.133 Turnouts and track crossings generally.
- § 213.135 Switches.
- § 213.137 Frogs.
- § 213.139 Spring rail frogs.
- § 213.141 Self-guarded frogs.
- § 213.143 Frog guard rails and guard faces; gage.
- Subpart E** Track Appliances and Track-Related Devices
  - § 213.201 Scope.
  - § 213.205 Derails.
- Subpart F** Inspection
  - § 213.231 Scope.
  - § 213.233 Visual track inspections.
  - § 213.234 Automated inspection of track constructed with concrete crossties.
  - § 213.235 Inspection of switches, track crossings, and lift rail assemblies or other transition devices on moveable bridges.
  - § 213.237 Inspection of rail.
  - § 213.238 Qualified operator.
  - § 213.239 Special inspections.
  - § 213.240 Continuous rail testing.
  - § 213.241 Inspection records.
- Subpart G** Train Operations at Track Classes 6 and Higher
  - § 213.301 Scope of subpart.
  - § 213.303 Responsibility for compliance.
  - § 213.305 Designation of qualified individuals; general qualifications.
  - § 213.307 Classes of track: operating speed limits.
  - § 213.309 Restoration or renewal of track under traffic conditions.
  - § 213.311 Measuring track not under load.
  - § 213.313 Application of requirements to curved track.
  - § 213.317 Waivers.
  - § 213.319 Drainage.
  - § 213.321 Vegetation.
  - § 213.323 Track gage.
  - § 213.327 Track alinement.

- § 213.329 Curves; elevation and speed limitations.
- § 213.331 Track surface.
- § 213.332 Combined track alinement and surface deviations.
- § 213.333 Automated vehicle-based inspection systems.
- § 213.334 Ballast; general.
- § 213.335 Crossties.
- § 213.337 Defective rails.
- § 213.339 Inspection of rail in service.
- § 213.341 Initial inspection of new rail and welds.
- § 213.343 Continuous welded rail (CWR).
- § 213.345 Vehicle/track system qualification.
- § 213.347 Automotive or railroad crossings at grade.
- § 213.349 Rail end mismatch.
- § 213.351 Rail joints.
- § 213.352 Torch cut rail.
- § 213.353 Turnouts, crossovers, and lift rail assemblies or other transition devices on moveable bridges.
- § 213.355 Frog guard rails and guard faces; gage.
- § 213.357 Derails.
- § 213.359 Track stiffness.
- § 213.361 Right of way.
- § 213.365 Visual track inspections.
- § 213.367 Special inspections.
- § 213.369 Inspection records.

**Appendix A to Part 213**

Maximum Allowable Curving Speeds

*Appendixes B–C to Part 213 [Reserved]*

**Appendix D to Part 213**

Minimally Compliant Analytical Track (MCAT) Simulations Used  
for Qualifying Vehicles To Operate at High Speeds and at High  
Cant Deficiencies

## **PART 213—TRACK SAFETY STANDARDS**

**Authority:** 49 U.S.C. 20102–20114 and 20142; 28 U.S.C. 2461 note; and 49 CFR 1.89.

**Source:** 63 FR 34029, June 22, 1998, unless otherwise noted.

### **Subpart A—General**