**Operating Rules**

**1.0 Definitions**

1.0a Prototype derived definitions.

| **Term** | **Definition** |
| --- | --- |
| head room | The action of making one move in a forward direction followed by one move in a reverse direction. If the forward move enters an interlocking, the reverse move must be on the same track when leaving the interlocking. |
| holding head room | Making multiple head room moves. For holding head room at an interlocking, see rule 3.2. |
| tail room | The action of making one move in a reverse direction followed by one move in a forward direction. If the reverse move enters an interlocking, the forward move must be on the same track when leaving the interlocking. |
| holding tail room | Making multiple tail room moves. For holding tail room at an interlocking, see rule 3.2. |
| foul | To obstruct |
| double | The process of coupling cars on one track to cars on another track. |
| drilling | The process of switching cars. |
| set out | The action of dropping one or more cars from a train. |
| pick up | The action of adding one or more cars to a train. |
| constrained | Shiftable loads that do not extend above or to the side of, and that do not overhang the car’s bulkhead are constrained. |
| restricted car | All tank cars, any car carrying a shiftable load that is not constrained, all cars carrying any load designated as High and Wide, and any non‑passenger equipped car on a passenger train. |
| dummy mast | A mast displaying a blue reflective plate instead of a signal head, and used as a placeholder for a position on a signal bridge marking a track that is not signaled from that bridge. |
| signal aspect | The signal appearance that conveys the indication (what it looks like). |
| signal indication | The required action conveyed by a signal aspect (what it means you should do). |
| Block | A stretch of track between interlockings where train movements are authorized by signal indication or verbal permission of the Dispatcher. |
| Yard | A system of tracks used for making up of trains and storage of cars.Movements in a yard must be made at restricted speed. (**Note**: All yard tracks between RO interlocking and Drocton interlocking as well as the coal yard at Drocton, except for running track, are under control of the Yard Master at Renovo.) |
| yard track | A track within a yard. |
| main track | A track on which train movements are authorized by signal indication or verbal permission of the Dispatcher. |
| siding track | A track adjacent to a main track. The Dispatcher controls siding tracks. Train movements are authorized by signal indication or verbal permission of the Dispatcher. |
| industrial track | A track that serves industries. Movements on industrial track must be made at restricted speed. |
| storage track | A utility track used for storage of cars, engines, etc. |
| running track | A non-signaled track controlled by the Dispatcher. Movements on running track must be made at restricted speed. |
| normal speed | The maximum authorized speed.Passenger trains: 40 MPHFreight trains: 35 MPH |
| medium speed | Not to exceed 25 MPH. |
| restricted speed | Not to exceed 15 MPH prepared to stop short of switches not properly lined, cars or other obstructions. |
| Interlocking | An interconnection of signals and switch appliances whose movements must succeed each other in a predetermined sequence, assuring that signals cannot be displayed simultaneously on conflicting routes. |
| home signal | A controlled signal of an interlocking. |
| interlocking limits | The tracks between the opposing home signals of an interlocking. |
| train symbol | Identity (name) of a train. |
| hand switch | A switch not under dispatcher control that is operated by mechanical movement of a lever. |
| tie it down | Park the equipment as directed by the dispatcher. Completion of this action terminates your crew work assignment. |

1.0b Model specific definitions.

| **Term** | **Definition** |
| --- | --- |
| waybill | A small, color-coded card, inserted into a car card, that shows whether the car is loaded or empty, and the car’s destination. The destination written on the waybill is synchronized with the color of the waybill card. |
| car card | A 2 x 3.5 inch card upon which is displayed car identifying information for a single car The card is folded to form a pocket at the bottom into which a waybill may be inserted. |
| block freight car card | A color-coded card that serves as both a car card and a waybill for a block of one or more freight cars The car identifying number of the west end car is written on the card, If the car block has two or more cars, the car identifying number of the east end car is also written on the card. A separate count of loaded and empty cars in the block is noted. The destination written on the card is synchronized with the color of the card. |
| passenger car consist card | A white card that identifies the total number of passenger carrying cars in a train |
| train cover card | A single card showing the train symbol. It is used to identify which car cards or consist cards are associated with which train. If a train has no cars, such as when an engine runs light or with only a cabin car, the train cover card will have no attached car cards or consist cards. If a train is very long, is staged on more than one track, or picks up cars at an interchange, the car cards for the blocks of cars to be picked up may have separate train cover cards that have an additional notation that they are subsequent blocks and/or pick ups (p/u). |
| car card packet | The train cover card and zero or more single car and block car cards, or passenger car consist cards. The cards in a car card packet are in proper order. |
| proper order | The order of car cards and consist cards so that they are in the same sequence as the order of the cars in the physical train, with the top card after the train cover card being for the first car in the train, and the bottom card being for the last car in the train. |
| staging area | A yard that simulates a location from which trains originate and terminate that is not on the modeled portion of the railroad (Buffalo, Emporium, Enola, Newberry). |
| crew brief | A 2 x 3.5 inch card summarizing the work instructions and operational details about a specific train. The top edge of the card is color coded according to the destination of the train. The card is folded to form a pocket at the bottom of the reverse side into which other cards are inserted showing the crew what locomotive DCC code they should use and where they can find the train. |

**2.0 Signal Rules**

 NAME FIELD INDICATION REPEATER

 ASPECT ASPECT

2.1

2.2

Stop.

**stop**

2.3

**approach**

Proceed prepared to stop at the next signal. Trains exceeding medium speed (25 MPH) must begin to reduce to medium speed as soon as the engine passes the approach.

2.4

**clear**

Proceed not exceeding normal speed (maximum authorized speed).
Passenger trains: 40 MPH.
Freight trains: 35 MPH.

2.5

**restricting**

Proceed at restricted speed (15 MPH).

**dummy
 mast**

This track is not signaled from this signal bridge.

 NONE

2.6 The Dispatcher must authorize reverse movements between interlockings.

2.7 The Dispatcher must grant permission in advance before you may move any switch on a signaled track.

**Exception:** If a train is already on signaled track at the switch, permission is not required.

2.8 After using a hand switch on signaled track, you must return the hand switch to normal position.
If holding signaled track for drilling, the switch may be left in an open position until departure or clearing at the hand switch.

**3.0 Interlocking Rules**

3.1 Trains must not enter interlocking limits without proper signal indication or verbal permission of the Dispatcher.

3.2 Holding head room or tail room within interlocking limits must be authorized by the Dispatcher. When holding head room or tail room within an interlocking, if movement clears the interlocking limits, permission is automatically cancelled.

3.3 Each reverse movement within interlocking limits must be authorized by the Dispatcher.

**Exception:** When holding head room or tail room through an interlocking, multiple reverse moves are allowed.

3.4 Signal indication to a running track gives permission for use of that track.

3.5 When the Dispatcher authorizes a train to pass a stop signal, the train shall stop at the signal, then proceed at restricted speed..

**4.0 General Rules**

4.1 All trains must have a cabin car on the rear of the train on main or siding tracks.

**Exceptions:** While making drill moves
passenger trains
light engine movements

4.2 Before a train occupies any track that is controlled by a Yard Master or Dispatcher, you must, in advance, receive permission to occupy that track.

**Note:** Proper signal indication gives you permission to enter main, siding or running track.

4.3 Before you leave any cars on a controlled track, the person controlling that track must grant permission.

4.4 When helpers are attached to a road train, the road crew is responsible for the entire train including the helper power. All clearances and instructions must be supervised by the road crew.

4.5 Train crews are responsible for keeping waybills in proper order. After receiving an assignment to crew a train, you must obtain your train’s paperwork -- that is, the crew brief and the car card packet -- before departing with your train. Keep the train’s paperwork, including all train cover cards, with the train until you reach your destination.

4.5a At work locations
1 When you set out cars, leave those car’s cards in the appropriate set out box at that location.
2 When you pick up cars, obtain those car’s cards from the pick up box at that location and insert them into the train’s car card packet in proper order; that is, insert the car cards within the packet in the position corresponding to the picked up cars positions within the train, with the card for the front car on top of the car card stack.

4.5b When a train terminates, place the car card packet, in proper order, into the appropriate staging track car card box turned facing away from the aisle. Return the crew brief to the Dispatcher.

**Exception:** At Renovo, hand the car card packet, in proper order, to the Yard Master.

4.6 When departing staging areas, obtain permission to depart from the Dispatcher in advance, before fouling the staging area track ladder.

4.7 Before entering a staging area, obtain the termination track number from the Dispatcher. Pull into the staging track to the end of the track, or up to any train already on that track.

**5.0 Equipment Restriction**

5.1 Separate all dangerous commodities tank cars from locomotives and cabin cars by placing at least one non‑dangerous spacer car between the dangerous car and both the locomotive and the cabin car.

**Exception:**

This rule shall not apply when switching cars.

If the train car count will not allow enough spacer cars per this rule, the train may proceed to its destination.

**Note:** If only one spacer car is available, place it between the locomotive and the dangerous car.

5.2 Separate all cars with a shiftable load, such as pipe or lumber, from locomotives, cabin cars, and dangerous cars by placing at least one non‑dangerous spacer car between the car with the shiftable load and the dangerous car, the locomotive, and the cabin car.

**Exception:** If the load is below the end walls or bulkhead of a gondola or flat car, this rule shall not apply.

5.3 Move scale cars, which do not have brakes, only when they are coupled to a spacer car. In trains, place scale cars near the rear end of the train with one spacer car in front of the cabin car and at least one spacer car behind the locomotive. Do NOT shove scale cars with helpers.

**Exception:** This rule shall not apply when switching cars.

5.4 Restrict speed to 15 mph when moving snow plows and Gordan spreaders with the blades or side blades leading. Restrict speed to 25 mph with the blades trailing.

5.5 Restrict speed to 15 mph when moving cranes and shovels then the boom is leading. When the boom is trailing, there are no restrictions. This rule shall apply when the equipment is loaded on a flat car or a gondola.

**Exception:** This rule shall not apply when the boom is detached.

5.6 Consider any lading that extends over the side of a car to be a High & Wide shipment. The Dispatcher shall issue written or verbal restricted movement instructions.

**6.0 Communications**

6.1 The dispatcher and Renovo Yardmaster and yard crew will communicate using dedicated line telephone.

6.2 The dispatcher and road crews will communicate using two-way radio.

6.3 When a crew member initiates radio contact with the Dispatcher, the proper train symbol followed by the words “… to Dispatcher” must be transmitted. No other message content will be stated until contact is confirmed. ONLY after the Dispatcher responds will any requests, reports or questions be stated.

**7.0 Standard Train Symbol Conventions**

7.1 Train symbols are three, four or five characters long. The characters may be letters, numbers or number sign (#). The last character shall be a number, and that number shall indicate the direction of the train; odd numbers indicate that the train direction is westward while even numbers indicate eastward.

7.2 Train symbol formats.

|  |  |
| --- | --- |
| **Format** | **Meaning** |
| **#**nnnn | Passenger train |
| **AA**n | General freight |
| **AAA**n | General freight |
| **U**nn | Loaded unit train other than coal |
| **U**nnn | Loaded coal unit train only |
| **X**nn | Empty unit train other than coal |
| **X**nnn | Empty unit hopper train only |

7.3 Letters used for general freight trains will be one or two letter abbreviations of the train origin and destination city names shown in the following table in order by location, railroad east to west.

|  |  |
| --- | --- |
| **Letters** | **Location** |
| **E** | Enola |
| **NB** | Newberry |
| **SW** | South Williamsport |
| **R** | Renovo |
| **G** | Grove |
| **D** | Driftwood |
| **WN** | Warren, PA |
| **ER** | Erie, PA |
| **PA** | Port Allegany |
| **OL** | Olean |
| **B** | Buffalo |

7.4 Unit train numeric indications.

|  |  |
| --- | --- |
| **Second digit of unit train symbol** | **Meaning** |
| **1**n | To Enola |
| **1**nn | To Enola |
| **2**n | To Newberry |
| **2**nn | To Newberry |
| **3**n | To Renovo |
| **3**nn | To Renovo |
| **4**n | To Erie Branch (Emporium + Erie, PA) |
| **4**nn | To Erie Branch (Emporium + Erie, PA) |
| **5**n | To Olean Erie RR (interchange) |
| **5**nn | To Olean Erie RR (interchange) |
| **6**n | To Buffalo |
| **6**nn | To Buffalo |

7.5 Passenger train numeric indications.

|  |  |  |
| --- | --- | --- |
| **First three digits** | **Last digit** | **Meaning** |
| **#14**nn | Odd | Harrisburg to Erie, PA |
| **#14**nn | Even | Erie, PA to Harrisburg |
| **#15**nn | Odd | Harrisburg to Olean Erie RR |
| **#15**nn | Even | Olean to Harrisburg |
| **#16**nn | Odd | Harrisburg to Buffalo |
| **#16**nn | Even | Buffalo to Harrisburg |

7.6 Non-standard symbols may sometimes be used for special circumstances. Such symbols will not necessarily conform to the train symbol conventions. These symbols may be used for identification of such equipment as maintenance of way equipment.

**8.0 Audible Warning Signal Rules**

8.1 The following rules govern operation of the whistle, horn and bell on locomotives.

8.2 Whistle / horn

8.2a Sound 1 long blast         ▬

 When stopped, apply brakes.

8.2b Sound 2 long blasts, 1 short blast, 1 long blast         ▬  ▬  O  ▬

 1. Approaching a road crossing.

 2. Approaching locations where maintenance personnel are working.

 3. Approaching and passing standing trains.

**NOTE:** At a road crossing, hold the last long blast until the locomotive is on the crossing.

8.2c Sound 1 long blast, 1 short blast         ▬  O

 Approaching passenger stations.

8.2d Sound 2 short blasts         O  O

 1. When standing, warning that train will start to move in a forward direction.

 2. Acknowledgement of hand signal from a train crew or other employee.

8.2e Sound 3 short blasts         O  O  O

 1. When standing, warning that train will start to move in a reverse direction.

8.3 Bell

 Sound

 1. When passing over bridges and in tunnels.

 2. When approaching and passing over road crossings.

 3. When passing standing trains or cars on adjacent tracks.

 4. While passing maintenance personnel.

 **Erie Branch**

|  |  |  |
| --- | --- | --- |
| **Int.** | **Name** |  **Connection**  |
|  |  |  |
| **X** | **Emporium** | **Buffalo Line** |
|  | **Mine** | **Emporium, Doan Mine** |
| **X** | **JN** | **Emporium industrial, Helper Pocket** |
|  |  |  |
| **X** | **DW** | **Warren Yard** |
|  **X** | **Warren stationELM** | **South lead Warren YardNorth lead Warren YardErie, PA Staging** |
|  |  |  |

EAST

To Renovo, PA

To Buffalo, NY

H

H

IT

IT
           HLP

SDG

YD

S

To Erie, PA

 **LEGEND**

 **X = Interlocking Location**

 **Name = Interlocking Name**

 **Name = Non-Interlocking station Name**

 **Name station = Passenger station Name**

 **KEYS**

 **H = Hand Switch**

 **HLP = Helper Pocket**

 **IT = Industrial Track**

 **RT = Running Track**

 **S = Passenger station Location**

 **SDG = Siding**

 **YD = Yard**

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 **Buffalo Line**

EAST

|  |  |  |
| --- | --- | --- |
| **Int.** | **Name** |  **Connection**  |
| **X** | **Linden** | **Newberry staging, Enola staging,South Williamsport industrial** |
|  |  | **Coal storage yardCoal running** |
| **X** | **Drocton** | **east end Renovo yard** |
| **X** | **RO** | **west end Renovo yard** |
|  | **Renovo station** |  |
| **X** | **Drury** | **Drury industrial, engine pit** |
| **X** | **Keating** |  |
|  |  | **Grove industrial, Helper pocket** |
| **X** | **GroveWood** | **Valier industrial** |
| **X** | **DriftDriftwood station** | **Driftwood industrial,** |
|  | **Sterling** |  |
|  | **Emporium station** |  |
| **X** | **Emporium** | **Erie PA branch** |
| **X** | **Liberty** |  |
|  |  |  |
| **X** | **Kean** |  |
|  | **Port Allegany station** |  |
| **X** | **Olean** |  |
| **X** | **Olean stationGJ** | **Erie RR interchangeBuffalo Staging** |
|  |  |  |

To Newberry

 To Enola, PA

 IT

   YD

RT

YD

             S

IT

   IT

HLP

 H
   IT
   IT

 H
S

S

To Erie, PA

H

SDG

S

S

YD

To Buffalo, NY

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