

BUFFALO LINE

12 April 2008

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 Lock Haven interlocking as well as the coal yard at Lock Haven, 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-sigaled track controlled by the Dispatcher. Movements on running track must be made at restricted speed.
normal speed	The maximum authorized speed. Passenger trains: 40 MPH Freight 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

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	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.



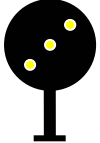

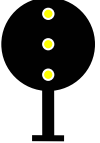



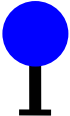
1.0b Model specific definitions.

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 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 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 instruction card	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.

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2.0 Signal Rules

	NAME	FIELD ASPECT	INDICATION	REPEATER ASPECT
2.1	stop		Stop.	
2.2	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.	
2.3	clear		Proceed not exceeding normal speed (maximum authorized speed). Passenger trains: 40 MPH. Freight trains: 35 MPH.	
2.4	restricted		Proceed at restricted speed (15 MPH).	
2.5	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.

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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, it must operate 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 train information card 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 the proper order, that is, insert them 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 train information card and the car card packet, in proper order, into the appropriate staging track car card box (or hook) turned facing away from the aisle.
Exception: At Renovo, hand the train information card and 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.

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- 4.7 Before entering a staging area, obtain the termination track number from the Dispatcher.
- 4.8 Position restricted cars in a freight train so that they are spaced by at least one non-restricted car between the restricted car and both the locomotive and cabin car. Additional restrictions applying to specific High and Wide loads shall be issued with the load.
- 4.9 Position restricted cars in passenger trains so that they are behind all non-restricted cars.

5.0 Communications

- 5.1 The dispatcher and Renovo Yardmaster and yard crew will communicate using dedicated line telephone.
- 5.2 The dispatcher and road crews will communicate using two-way radio.
- 5.3 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.

6.0 Standard Train Symbol Conventions

- 6.1 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.
- 6.2 Train direction indication.

Last digit of symbol	Meaning
Odd number	Train direction is west.
Even number	Train direction is east.

- 6.3 Train symbol formats.

Format	Meaning
#nnnn	Passenger train
AAn	General freight
AAAn	General freight
Unn	Loaded unit train other than coal
Unnn	Loaded coal unit train only
Xnn	Empty unit train other than coal
Xnnn	Empty unit hopper train only

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6.4 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

6.5 Unit train numeric indications.

Second digit of unit train symbol	Meaning
1n	To Enola
1nn	To Enola
2n	To Newberry
2nn	To Newberry
3n	To Renovo
3nn	To Renovo
4n	To Emporium
4nn	To Emporium
5n	To Olean Erie RR (interchange)
5nn	To Olean Erie RR (interchange)
6n	To Buffalo
6nn	To Buffalo

6.6 Passenger train numeric indications.

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

6.7 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.

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7.0 Audible Warning Signal Rules

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

7.2 Whistle / horn

7.2a Sound 1 long blast **—**

When stopped, apply brakes.

7.2b Sound 2 long blasts, 1 short blast, 1 long blast **— — ○ —**

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.

7.2c Sound 1 long blast, 1 short blast **— ○**

Approaching passenger stations.

7.2d Sound 2 short blasts **○ ○**

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.

7.2e Sound 3 short blasts **○ ○ ○**

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

7.3 Bell

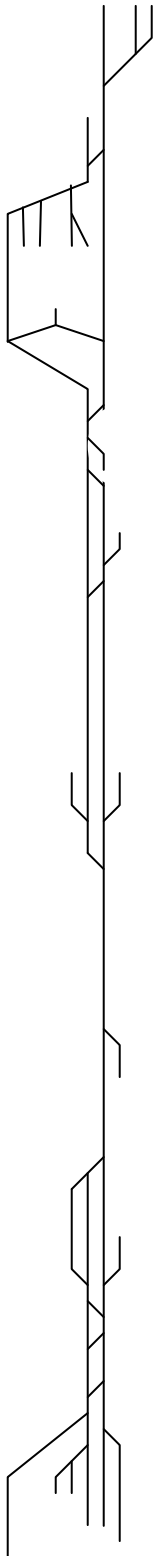
Sound

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.

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Buffalo Line



<u>Int.</u>	<u>Name</u>	<u>Connection</u>
<u>X</u>	<u>Linden</u>	Enola staging, Newberry staging South Williamsport yard
	Lock Haven station	
<u>X</u>	<u>Lock Haven</u>	Coal running, Coal storage yard east end Renovo yard
	Renovo station	
<u>X</u>	<u>RO</u>	west end Renovo yard
<u>X</u>	<u>Drury</u>	Drury industrial, engine pit
<u>X</u>	<u>Keating</u>	
<u>X</u>	<u>Grove</u>	Grove industrial, Helper pocket
	Driftwood station	
<u>X</u>	<u>Drift</u>	Alpha industrial
	Sterling	
	Emporium station	
<u>X</u>	<u>Emporium</u>	Erie PA branch, Emporium Staging
<u>X</u>	<u>Liberty</u>	
	Port Allegany station	
<u>X</u>	<u>Kean</u>	
	Olean station	
<u>X</u>	<u>Olean</u>	Erie RR interchange
<u>X</u>	<u>GJ</u>	Buffalo Staging