



CONDENSED STANDARD CODE

SOUTHERN PACIFIC RAILROAD COMPANY



RULES AND REGULATIONS

"The Valley before Silicon"

SOUTHERN PACIFIC

COAST DIVISION

SAN FRANCISCO SUBDIVISION

OPERATING
DEPARTMENT

EFFECTIVE MARCH 1950

Southern Pacific Railroad - Coast Division - San Francisco Subdivision
1950 Rules Book





At the Throttle Safety first!

To expedite the learning process the Valley_before_Silicum used a simplified rulebook based on the 1952 Southern Pacific rulebook. From time to time as the crews become more familiar with the rules new rules and order types may be added.

NOTE: On all SP lines: if the track headed toward San Francisco it was going WEST, if away from San Francisco it was going EAST.

Classes of Trains

Scheduled trains have classes which indicate priority. 1st class has the highest priority.

Unscheduled trains (that do not appear in the timetable), called Extra trains, may also be present. All trains with a class are superior to extra trains (unless the dispatcher issues a train order stating otherwise).

- **1st Class** - important passenger or freight trains that must not be delayed such as named passenger trains, reefer express trains or hotshot freights.
- **2nd Class** - regular trains, passenger or freight, of medium priority such as local passenger trains or freight haulers
- **3rd Class** - regular trains, freight, of low priority such as drags or scheduled freight locals.
- **Extras** - these trains have no schedule given in the time table. Instead they are created when the dispatcher issues a train order such as "Eng SP 5317 at Bayshore, run extra to Redwood Jct.". Turns or other local freights are often run as extras although any train could, in theory be an extra (if it does not exist in the timetable).

Rule S-71.

A train is superior to another train by right, class, or direction.

Right is conferred by train order, class and direction by timetable.

Right is superior to class or direction.

Direction is superior as between trains of the same class: on most of the SP, **timetables listed westbound trains as superior**.

Rule 72.

Trains of the first class are superior to those of the second, trains of the second class are superior to those of the third; and so on.

Rule S-72.

In double-track sections the normal hand is Right track. Permission to use crossovers tracks is given by signal indications.

Trains in the direction specified by the timetable are superior to trains of the same class in the opposite directions.

Westward trains are superior to Eastward trains of the same class, except as otherwise provided.

Rule 73.

Extra trains are inferior to regular trains.

Rule 81.

A main track must not be occupied without authority and it must not be fouled until, by observation or protection by flagmen, the engineer or the conduction as the case may be is assured it is safe to do so.

Rule S-83.

A train must not leave its initial station, or a junction, or an intermediate station where schedules originate or terminate, until it has been ascertained whether all superior trains due have arrived or left, or that it has authority to proceed.

Rule 86.

Unless otherwise provided, an inferior train must clear the time a superior train, in the same direction, not less than 5 minutes.

Rule 87 (outside of block system limits).

- A regular train must be clear of main track before the leaving time of an opposing train of superior direction
- A train must be clear of main track no less than five minutes before the leaving time of an opposing train of superior right or class.
- A train must be clear of main track before a superior first-class train or a train of superior right in the same direction is due to leave the next station in the rear where time is shown, but not less than ten minutes if schedule provides less than ten minutes time between the two stations.

Rule 91.

A train must not arrive at a station in advance of its schedule arriving time.

A train must not leave a station in advance of its schedule leaving time

Sound and Lighth

Headlights on Always (It's 6AM in a fog morning in the Bay). It must be extinguished when a train has stopped clear.

The bell must be rung

- entering or leaving a yard,
- approaching a level crossing or passenger depot.
- all times on street trackage

The horn/whistle to be used:

- before a train departs
- approaching a level crossing or passenger depot
- before crossing a bridge or entering a tunnel





The unnecessary use of the whistle is prohibited an must not be sounded while passing or being passed by a passenger train, except where required by rule or law, or in case of an emergency.

<u> </u> long ° short	
<u> </u>	When standing, air brakes applied.
<u> </u> <u> </u>	Release brakes. Proceed.
° ° °	When standing, back.
<u> </u> °	Warning for both persons, animals and when approaching stations, tunnels, and bridges
<u> </u> <u> </u> ° <u> </u>	Approaching public crossings at grade, continue until grade crossing fully occupied Standard sign will designate point at which signal must begin

Cabooses: each caboose is assigned to a particular conductor and crew. Park it at the "Caboose track" at end of your turn.

Spotting Cars

- Careful Switching :
When approaching a stationary car, stop a cars length from the car then approach at no more than 4mph.
- A stop must be made just prior to coupling to occupied (passengers on board) equipment or Freight cars loaded with Fragile loads.
- Switching must be done in a careful manner to avoid severe shocks by sudden starting or stopping or by impact in making couplings and to prevent personal injury or damage to equipment. Cars and engines must not be permitted to couple at excessive speeds.
Use a 'twistle stick' to uncouple cars, not your hands.
- All blind shoves must have brakeman riding the leading end of leading car.
Here on the SP a brakeman with a flag or lantern was common, often one on each side ladder and maybe the third guy sitting on the roof. If they had a long way to go they might shove with a caboose with air whistle leading.
For blind shoves, add a red push pin to the coupler of the leading car to represent a brakeman riding the front of the shove.
- Cars must be spotted at warehouse doors/car spots as directed by warehouse manager (check your Job Switchlist)
- Apply hand brakes to spotted cars. Remove brakes when pickup car.
- Loco at the head, caboose at the tail, avoid placing the caboose on the industry spur.

Position of Cars in train

- Any 'lightweight' cars (those who's nature makes it impossible to weight to NMRA standards, like skeleton flatcars) are so identified, and must be placed within the last 10 cars of the train.
- Any 'special dangerous' cars (eg. cars like LPG tanks, gasoline, or liquefied chlorine) are so identified on waybills, and they are to be place at least 5 cars from the head end or caboose of a train. In cases where this is not possible, then the train must travel with a permanent speed restriction of 30 MPH. This rule does not apply to yard switchers or local switching moves.
- Empty hazardous must be at least one car distance from caboose or loco.

Turnouts Operations

- **Engineers are not allowed to walk ahead of their trains to align switches so they don't have to stop their trains..** In real life the engine would have to stop to allow the conductor or brakeman to get down and throw the switch and then stop again after to realign the switch.
- In switching or other movements where trainmen are handling turnouts, they must verify that the turnout is properly set and points are aligned and locked before signaling the engineer to move.
- All manual operated switches must be left lined for the main
- Stop Before Turntable: Before movement is made onto or off of a turntable, a stop must be made

Brake Test

- Before a train can depart from a yard the air must be pumped up. Use a count of 3 for each car in the train.
- The conductor will assist and direct the proper brake test prior to the train's departure, and after any change in consist.
- A running brake test must be performed in the event of any crew change.
- Engineer must bunch and stretch the train to check continuity before departure.

Locomotive Consist

- In multiple unit operation of Diesel locomotives the locomotive number used to indicate the full consist is the one of the lead unit only.









Absolute MAX Speed (exceptions are listed in Special Instructions on Timetable)

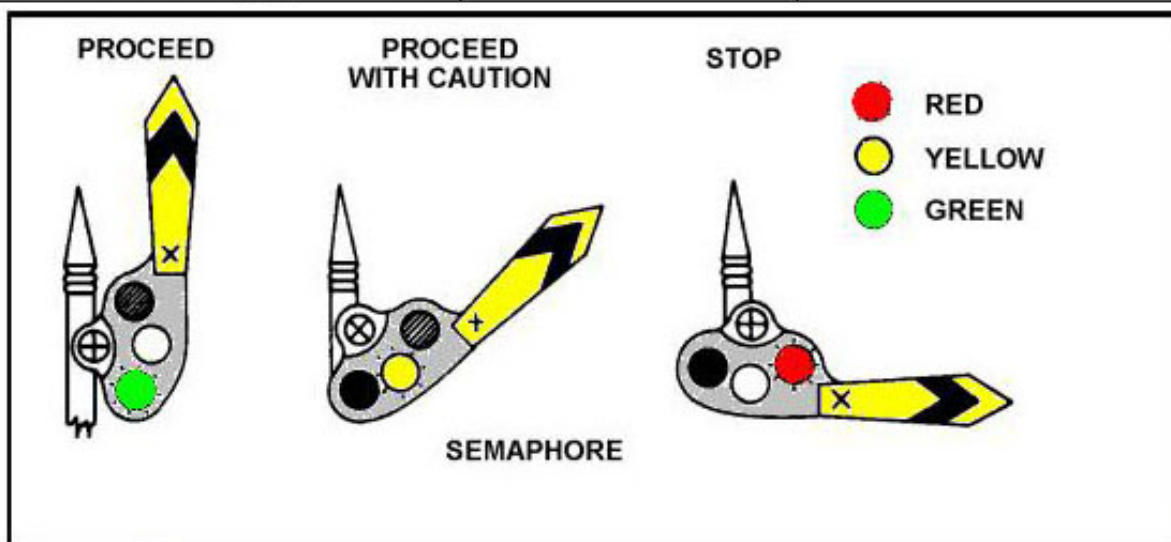
- In yard and industrial districts **10 mph**
- Freights **35 mph**
- Passengers **50 mph**



Signal Aspects and Indications

Signal aspects and indications are as shown in the rule book, timetable, or special instructions.

		CLEAR	Proceed
		APPROACH	Proceed prepared to stop at the next signal, trains exceeding 5 MPH immediately reduce to that speed.
		DIVERGING CLEAR	Proceed on diverging route Not exceeding prescribed Speed through turnout.
		DIVERGING APPROACH	Proceed on diverging route Not exceeding prescribed Speed through turnout preparing to stop. If exceeding 5 MPH, immediately reduce to that speed
		stop	Stop.





SP Pipeline Oil

Redwood Inct

- Industrial spurs:
 - Elliot & Sons Buildings Materials
 - Duffy-Mott Apple Juice
 - Pacific Manufacturing Co.
 - Majestic Hardware
 - Pacific Ready Mix Concrete
- Interlocking Tower

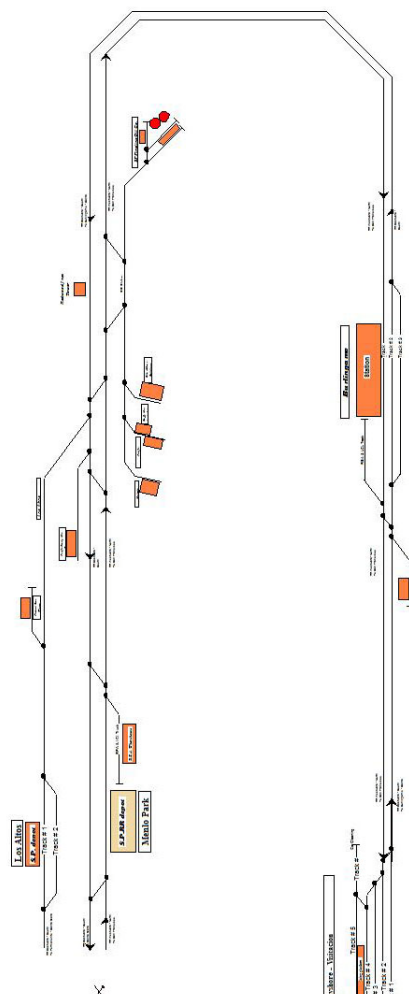
Los Altos-Permanente branch line

Los Altos-Permanente Branch

- Picchetti Bros. Winery
- Los Altos Station

Menlo Park

- Station
- REA Mail track



Burlingame

- Station
- REA Mail track
- Hubbard Lumber

Bayshore-Visitation

- Passengers Flag stop
- Reefers Ice house
- Interlocking Tower

San Francisco

- Mission Bay Turntable
- Interlocking Tower

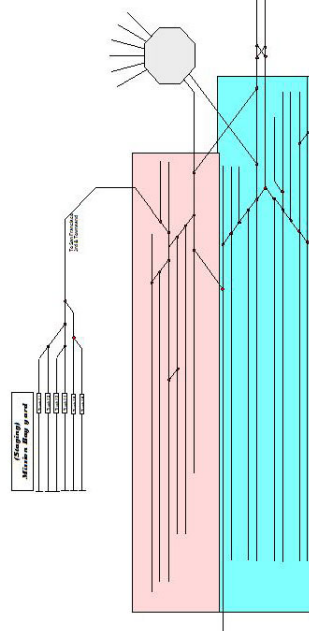
San Francisco

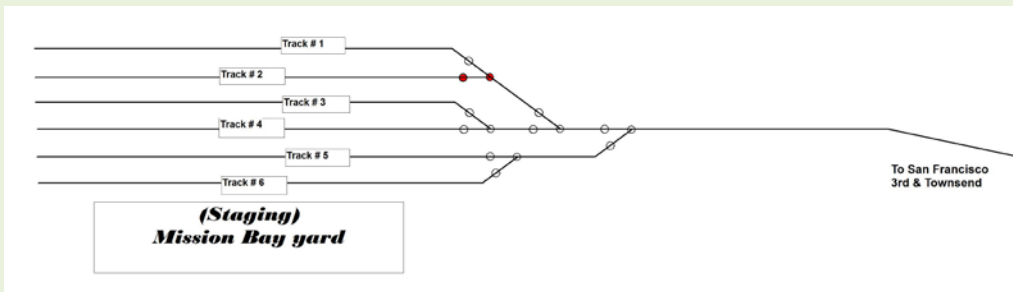
- From left:
- Mission Bay Staging
 - Freight yard (King st)
 - 3rd & Townsend passenger station

The Valley before Silicon

Layout General View

(2014-March)

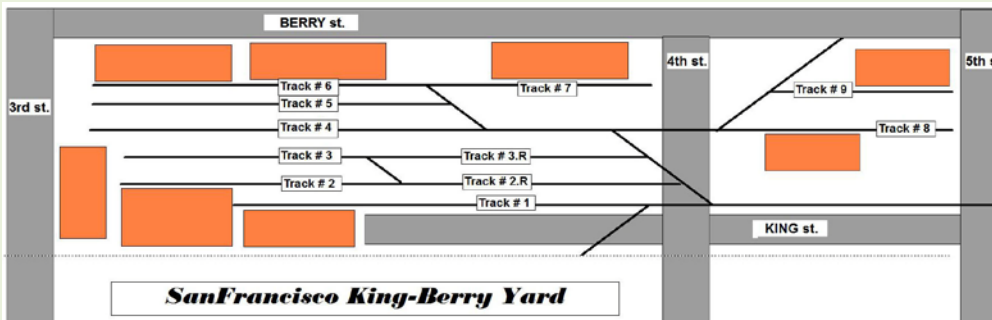


Track dimensions by Location (in 40' cars)**San Francisco – Mission Bay****Note:**

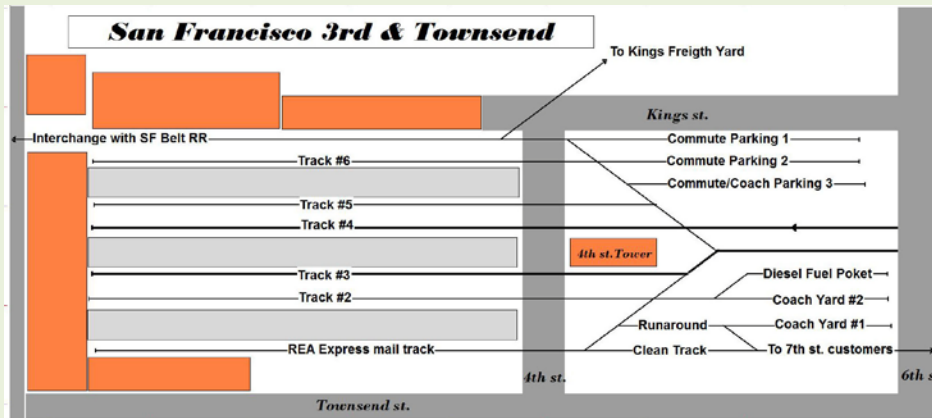
80' Lightweight passengers
73' Heavyweight passengers
40' freight cars

Length in 80'73' / 40' cars

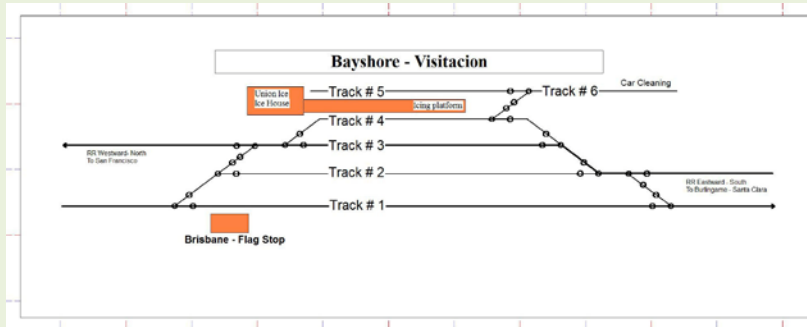
Track #1 – 8 / 9 / 15
Track #2 – 8 / 9 / 15
Track #3 – 8 / 9 / 15
Track #4 – 8 / 9 / 15
Track #5 – 8 / 9 / 15
Track #6 – 8 / 9 / 15

San Francisco – King's Freight yard**Length in 40' cars**

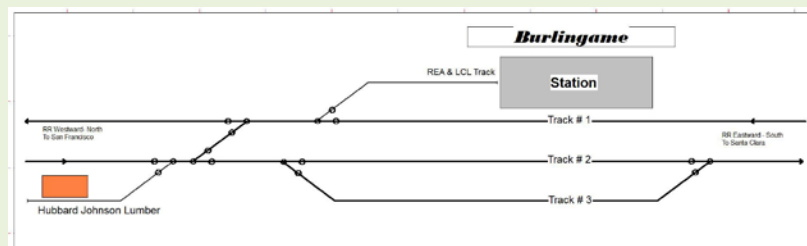
Track #1 - 7
Track #2 - 6
Track #2.R - 3
Track #3 - 6
Track #3.R - 3
Track #4 - 11
Track #5 - 11
Track #6 - 11
Track #7 - 3
Track #8 – Team Track - 5
Track #9 (Oil Dealer) - 4

San Francisco 3rd&Townsend Passengers Station**Length in 80' / 73' / 60' (Commute)**

Mail Track – 4 / 5 / 6
Track #2 – 6 / 7 / 8
Track #3 – 7 / 8 / 9
Track #4 – 7 / 8 / 9
Track #5 – 6 / 7 / 8
Track #6 – 5 / 6 / 7
Belt RR Intrechange – 5 / 6 / 7
Coach Yard #1 - 3 / 4 / 5
Coach Yard #2 – 2 / 3 / 4
Car Clean – 2 / 3 / 4
Diesel Fuel Poket – 2 / 3 / 4
Commute Parking.1 – 5
Commute Parking.2 – 4
Commute Parking.3 - 2 / 3 / 4

Bayshore-Visitation**Length in 40' cars**

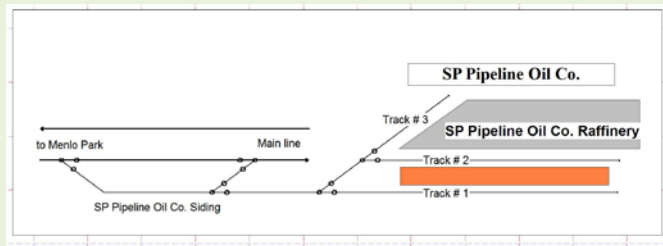
Track #1 - 18
Track #2 - 14
Track #3 - 10
Track #4 - 6
Track #5 - 5
Track #6 - 5

Burlingame**Length in 40' / 80' cars**

Track #1 – 12 / 6
Track #2 – 12 / 6
Track #3 – 10 / 5
REX Express Mail – 6 / 3

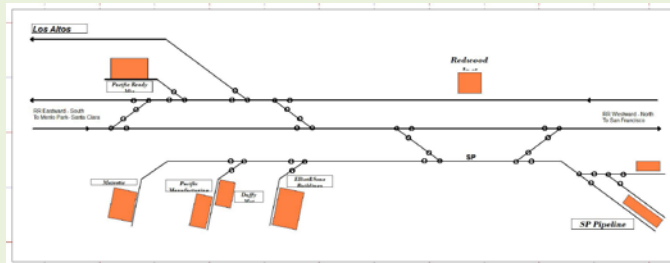
Hubbard Lumber Spur: 6 x 40'



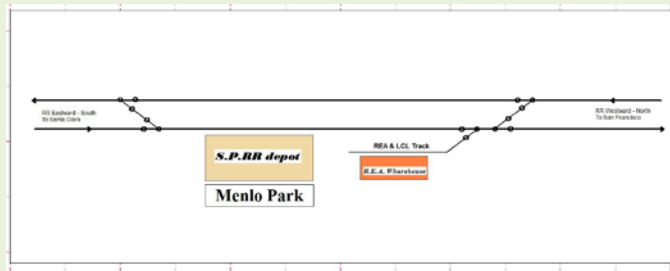
**Redwood Jct****SP Pipeline Oil Co****Length in 40' cars**

Track #1 – 7
Track #2 – 6
Track #3 – 3

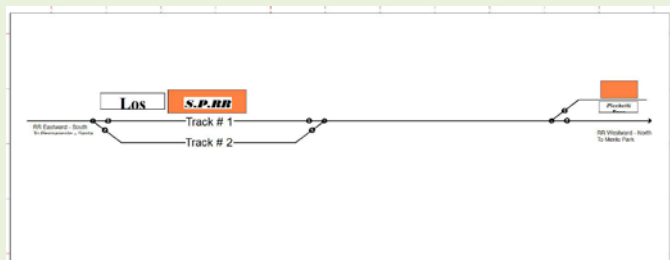
SP Pipeline Siding – 9

Industrial Spurs area**Length in 40' cars**

Elliot & Sons Buildings Materials : 4
Duffy-Mott Apple Juice 4
Pacific Manufacturing Co.: 4
Majestic Hardware: 6
Pacific Ready Mix Concrete: 6

Menlo Park**Length in 40' / 80' cars**

Track #1 - 9 / 4
Track #2 – 12 / 6
REA Spur – 3 / 1

Los Altos-Permanente Branch line**Los Altos****Length in 40' / 60' cars**

Picchetti Bros. Winery: 4 (40')
Track #1 - 10 / 7
Track #2 – 10 / 7

Kaiser Permanente Cement Plant (Line Construction in Progress)**Length in 40' cars**

Load siding #1 –
Empty siding #2 –
Pocket track :
Spur #1 :

Santa Clara – Newall Yard (Line Construction in Progress)**Length in 40' cars**

Rosenberg Bros (Cannery):	REA Express mail :
Union Ice #1 :	Commutes A/D:
Union Ice #2 :	Trough Trains A/D #1:
Team Track:	Trough Trains A/D #2:
Del Monte Packing Plant #1	Freigh Yard #1 :
Del Monte Packing Plant #2:	Freigh Yard #2 :
Del Monte Packing Plant #3:	Freigh Yard #3 :
Industry #1(Oil Dealer) :	Freigh Yard #4 :
Industry #2(----- TBD) :	

San Jose to Los Angeles – Staging (Line Construction in Progress)

Track #1 - Track #7 :





Short Glossary of rail transport terms

SIGNALS

- **Absolute signal:** a block signal whose most restrictive indication is stop. An absolute signal is identified by having no number plate or by an **A**-plate affixed to the mast or supporting structure. Proceeding beyond an absolute signal that is displaying a stop indication is prohibited unless authorized by a dispatcher.
- **Blue signal (Flag):** A method of on-track protection for rail cars and locomotives that are being loaded/unloaded, maintained, or serviced; typically in the form of a sheet-metal blue flag in daylight and a flashing blue light at night. Only the employee (or another employee from the same department) who placed a blue signal may remove it.
- **Centralized traffic control (CTC):** A system in which signals and switches for a given area of track are controlled from a centralized location.
- **Dark territory:** A section of track without block signals
- **Restricted speed:** A speed not exceeding 20 mph which allows stopping within half the range of vision short of an obstruction on the tracks.
- **Slow order:** A local speed restriction below the track's normal speed limit often designated by yellow and green flags. Slow orders can be imposed on a temporary basis to protect, for example, maintenance of way employees while sections of track are under repair.

TRAIN CREW

- **Brakeman:** A train crew member who performs *railcar* and track management; often a single job description along with switchman. A brakeman manually activated brakes on railroad cars before the advent of air brakes.
- **Conductor:** The person "in charge" of a train and its crew. On passenger trains, a conductor is also responsible for tasks such as assisting passengers and collecting tickets.
- **Engineer:** The operator of a locomotive.
- **Switchman:** A railroad worker responsible for assembling trains and switching railroad cars in a yard.

TRAINS

- **Consist :** a group of locomotives connected together for Multiple-Unit (MU) operation.
- **Dead freight:** Low priority freight, especially movements of empty cars.
- **Drag:** A long, heavy freight train moving at low speed.
- **Express train:** A train that passes selected stations without stopping.
- **Extra:** A train that is not included in the normal schedule of a railroad. They often run during busy holiday travel periods in order to handle larger crowds and reduce the number of passengers that are forced to stand or are stranded at a station. In train order territory, extras are required to clear the main line for scheduled trains to pass.
- **Heavy haul:** Heavy freight operations.
- **Hotshot:** A fast, long-distance train given priority on the track over other trains.
- **Local:** A train that stops at most, if not all, stations along its route.
- **Manifest:** An express freight train carrying a variety of general merchandise.
- **Pig train:** (slang): An intermodal train, so nicknamed after its "piggyback" hauling of trailers and containers on flat cars.
- **Turn:** A local freight train that makes a round trip, returning to originating station.
- **Way freight:** See *local train*.

