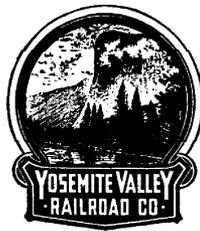


STANDARD CODE
OF
**Yosemite Valley
Railroad Company**



RULES
AND
REGULATIONS

OPERATING
DEPARTMENT

N° 280

THIS BOOK

is the property of

**YOSEMITE VALLEY
RAILROAD CO.**

and is loaned to

NAME _____

EMPLOYED AS _____

Who hereby agrees to return it to the proper officer when called for, or upon leaving this service, or pay for same.

Yosemite Valley Railroad Co.

The rules herein set forth govern the railroad operated by the Yosemite Valley Railroad Company. They take effect March 15th 1939, superceding all previous rules and instructions inconsistent therewith.

Special instructions may be issued by proper authority.

J. A. Burgess
General Manager

GENERAL NOTICE

Safety is of the first importance in the discharge of duty.

Obedience to the rules is essential to safety.

To enter or remain in the service is an assurance of willingness to obey the rules.

The service demands the faithful, intelligent and courteous discharge of duty.

To obtain promotion, capacity must be shown for greater responsibility.

GENERAL RULES

A. Employes whose duties are prescribed by these rules must provide themselves with a copy.

Employes whose duties are in any way affected by the timetable must have a copy of the current timetable with them while on duty.

B. Employes must be conversant with and obey the rules and special instructions. If in doubt as to their meaning, they must apply to proper authority for an explanation.

C. Accidents, failure in the supply of water or fuel, defects in track, bridges, signals, or any unusual conditions which may affect the movement of trains, must be promptly reported by wire to the proper authority.

D. Employes on duty must wear the prescribed badge and uniform and be neat in appearance.

E. In the event of a derailment, employes must exercise care to avoid handling any piece of equipment and instead, report the defects to the proper authority.

F. Engineers must expect trains to run at any time, on any track, in either direction.

DEFINITIONS

ENGINE — A machine propelled by any form of energy and used in train or yard service.

TRAIN — An engine, or motor car, or more than one engine, or motor car, coupled, with or without cars, displaying markers.

REGULAR TRAIN — A train authorized by a timetable schedule.

EXTRA TRAIN — A train not authorized by a timetable schedule.

SUPERIOR TRAIN — A train having precedence over another train.

TRAIN OF SUPERIOR RIGHT — A train given precedence by train order.

TRAIN OF SUPERIOR CLASS — A train given precedence by timetable.

TRAIN OF SUPERIOR DIRECTION — A train given precedence in the direction specified by timetable as between opposing trains of the same class.

TIMETABLE — The authority for the movement of regular trains subject to the rules. It contains the classified schedules of trains with special instructions relating thereto.

SCHEDULE — That part of a timetable which prescribes class, direction, number and movement for a regular train.

MAIN TRACK — A track extending through yards and between stations, upon which trains are operated by timetable or train order, or both.

STATION — A place designated on the timetable by name, at which a train may stop for traffic, or to enter or leave the main track, or from which fixed signals are operated.

SIDING — A track auxiliary to the main track for meeting or passing trains.

FIXED SIGNAL — A signal of fixed location indicating a condition affecting the movement of a train.

YARD — A system of tracks within defined limits provided for the making up of trains, storing of cars, and other purposes, over which movements not authorized by timetable, or by train order, may be made, subject to prescribed signals and rules, or special Instructions.

YARD ENGINE — An engine assigned to yard service and working within yard limits.

RESTRICTED SPEED — Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced.

TRAIN RULES STANDARD TIME

1. Standard time is shown on the System One throttle display and is at a ratio of 10:1.

TIMETABLES

2. Each timetable, from the moment it takes effect, supersedes the preceding timetable.
3. Not more than two times are given for a train at any station; where one is given, it is, unless otherwise indicated, the leaving time; where two, they are the arriving and the leaving times.

The time applies to the switch where an inferior train enters the siding or arrives at the designated station or where traffic is received or discharged.

Schedule meeting or passing stations are indicated by figures in full-faced type.

Both the arriving and leaving time of a train are in full-face type when both are meeting or passing times, or when one or more trains are to meet or pass it between those times.

The following signs when placed before the figures of the schedule indicate:

“s”—regular stop;

“F”—flag stop to receive or discharge passengers or freight;

“L”—leave;

“A”—arrive.

SIGNALS

5. Employees whose duties may require them to give signals, must provide themselves with the proper appliances, and keep them in good order and ready for immediate use.

6. A train finding a fusee burning on or near its track must stop and extinguish the fusee, and then proceed at restricted speed.

7. HAND, FLAG AND LAMP SIGNALS

| MANNER OF USING | INDICATION |
|--|---------------|
| (a) Swung across the track. | Stop. |
| (b) Held horizontally at arm's length. | Reduce speed. |
| (c) Raised and lowered vertically. | Proceed. |

12-h. Any object waved violently by any one on or near the track is signal to stop.

14. ENGINE WHISTLE SIGNALS.

NOTE.—The signals prescribed are illustrated by “o” for short sounds “—” for longer sounds. The sound of the whistle should be distinct, with intensity and duration proportionate to the distance the signal is to be conveyed.

| <u>SOUND</u> | <u>INDICATION</u> |
|---------------|---|
| (a) o | Apply brakes. Stop. |
| (b) — — | Release brakes. Proceed. |
| (c) — ooo | Flagman protect rear of train. |
| (d) — — — — | Flagman may return from west or south, as prescribed by Rule 99. |
| (e) — — — — — | Flagman may return from east or north, as prescribed by Rule 99. |
| (f) ooo | When standing, back. |
| (g) — oo | To call the attention of yard engines, extra trains or trains of the same or inferior class or inferior right to signals displayed for a following section. If not answered by a train, the train displaying signals must stop and ascertain the cause. |

- (h) — — oo Approaching public crossings at grade to be prolonged or repeated until crossing is reached.
- (i) ————— Approaching stations, junctions, railroad crossings at grade and as may be required.
- (j) — — oo Approaching meeting or waiting points.
- (k) Succession of Alarm for persons or livestock on the track.
short sounds.

16. The headlight will be displayed to the front of every train by night. It must be concealed or extinguished when a train turns out to meet another and has stopped clear of main track, or is standing to meet a train at the end of two or more tracks or at a junction. It must be dimmed while passing through yards where yard engines are employed; approaching stations at which stops are to be made or where trains are receiving or discharging passengers; approaching train order signals, junctions, terminals, or meeting points or while standing on main track at meeting points and on two or more tracks when approaching trains in the opposite direction.

When an engine is running backward a white light must be displayed by night on the rear of the tender.

17. Yard engines will display the headlight to the front and rear by night. Yard engines will not display markers.

18. The following signals will be displayed to the rear of every train, as markers to indicate the rear of the train: By day, green marker lamps (not lighted); By night, green lights to the front and side and red lights to the rear; except when the train is clear of the main track, when green lights must be displayed to the front, side and rear.

19. Extra trains will display two white flags and, in addition, two white lights by night, in the place provided for that purpose on the front of the engine.

USE OF SIGNALS

27. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as the most

restrictive indication that can be given by that signal, and the fact reported to the train master. Conductors and enginemen using a switch where the switch light is imperfectly displayed or absent, must also, if practicable, correct or replace the light.

28. The engine-bell must be rung when an engine is about to move and while approaching and passing public crossings at grade.

29. The whistle must be sounded at all places where required by rule or by law.

30. The unnecessary use of either the whistle or the bell is prohibited.

SUPERIORITY OF TRAINS

71. A train is superior to another train by right, class or direction. Right is conferred by train order; class and direction by time table.

Right is superior to class or direction.

Direction is superior as between trains of the same class.

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.

Trains in the direction specified by the time table are superior to trains of the same class in the opposite direction.

73. Extra trains are inferior to regular trains.

MOVEMENT OF TRAINS

82. Time table schedules, unless fulfilled, are in effect for twelve hours after their time at each station.

Regular trains more than twelve hours behind either their scheduled arriving or leaving time at any station lose both right and schedule, and can thereafter proceed only as authorized by train order.

83. A train must not leave its initial station on any station until it has been ascertained whether all trains due, which are superior, or of the same class, have arrived or left.

84. Trains of one schedule may pass trains of another schedule of

the same class, and extra trains may pass and run ahead of second class trains and extra trains.

85. Unless otherwise provided, an inferior train must clear the time of a superior train, in the same direction, not less than five minutes; but must be clear at the time a first class train, in the same direction, is due to leave the next station in the rear where time is shown.

86. An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99.

Extra trains must clear the time of opposing regular trains not less than five minutes unless otherwise provided, and will be governed by train orders with respect to opposing extra trains.

87. At meeting points between trains of the same class, the inferior train must clear the main track before the leaving time of the superior train,

At meeting points between extra trains, the train in the inferior time table direction must take the siding unless otherwise provided.

Trains must pull into the siding when practicable; if necessary to back in, the train must first be protected as prescribed by Rule 99, unless otherwise provided.

88. At meeting points between trains of different classes the inferior train must take the siding and clear the superior train not less than five minutes. and must pull into the siding when practicable. If necessary to back in, the train must first be protected as prescribed in Rule 99, unless otherwise provided.

89. Trains must stop at schedule meeting points if the train to be met is of the same class, unless the switch is properly lined and the track clear.

Train must stop clear of the switch used by the train to be met in going on the siding.

When the expected train of the same class is not found at the schedule meeting point, the superior train must approach all sidings prepared to stop, until the expected train is met.

90. Trains in the same direction must keep not less than five

minutes apart, except in closing up at stations. A train following a train carrying passengers must keep not less than ten minutes behind it.

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.

92. Within yard limits, the main track may be used, protecting against first-class trains.

Second class and extra trains must move within yard limits prepared to stop, unless the main track is seen or known to be clear.

94. Extra trains must not be run without train orders.

99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fuses. When recalled and safety to the train will permit, he may return. When the conditions require, he will leave the torpedoes and a lighted fuse.

The front of the train must be protected in the same way when necessary by the fireman.

Conductors and enginemen are responsible for the protection their trains.

103. When cars are pushed by an engine, except when shifting or making up trains in yards, a trainman must take a conspicuous position on the front of the leading car, and when shifting over public crossings at grade not protected by a watchman, a member of the crew must protect the crossing.

104. Switches must be left in proper position after having been used. Conductors are responsible for the position of the switches set by them and their trainmen but, when practicable, the engineman must see that the switches nearest the engine are properly set.

A switch must not be left open for a following train unless in charge of a trainman of such train.

105. Trains using a siding must proceed, expecting to find it occupied.

RULES FOR MOVEMENT BY TRAIN ORDERS

201. For movements not provided for by timetable, train orders will be issued by authority and over the signature of the trainmaster and only contain information or instructions essential to such movements.

They must be brief and clear, in the prescribed forms when applicable; and without erasure, alteration or interlineation.

Figures in train orders must not be surrounded by brackets, circles or other characters.

202. Train orders must be numbered consecutively each day, beginning at midnight.

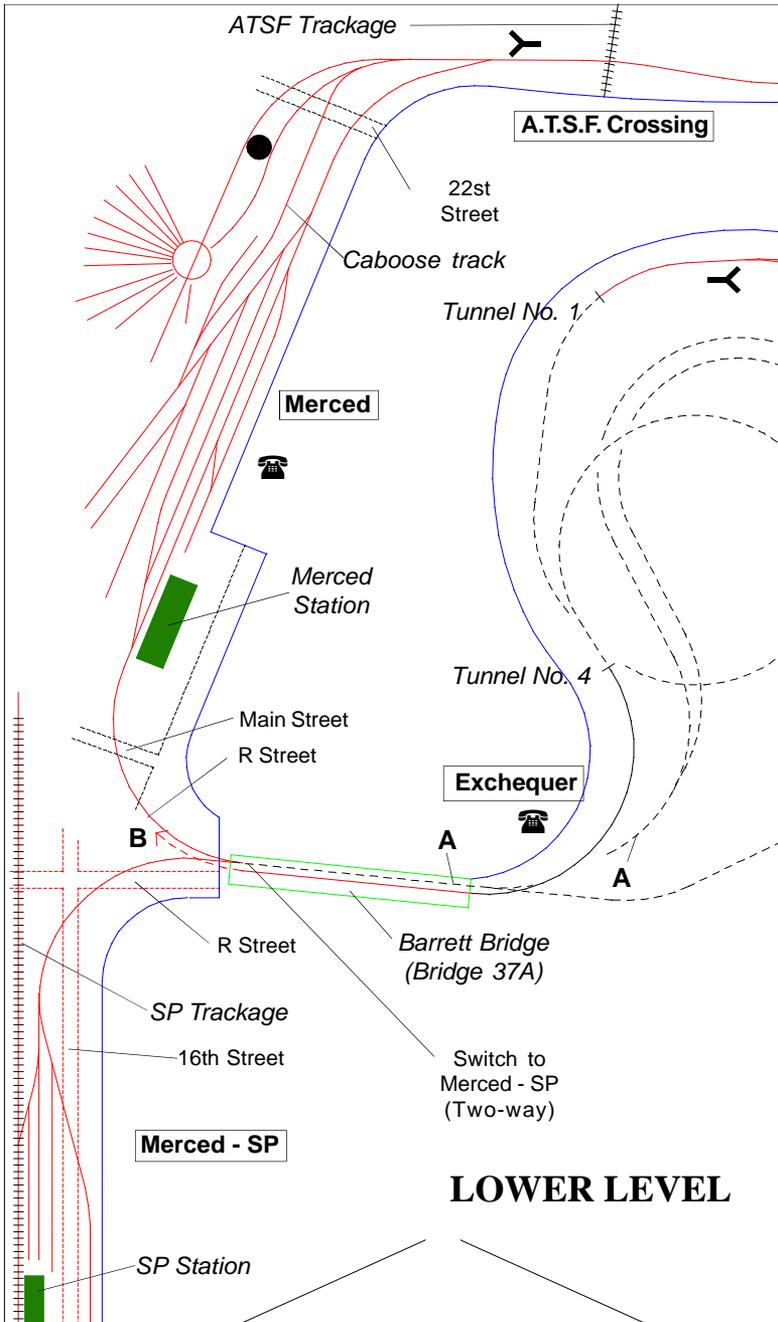
203. Train orders must be addressed to those who are to execute them, naming the place at which each is to receive his copy. Those for a train must be addressed to the conductor and engineman.

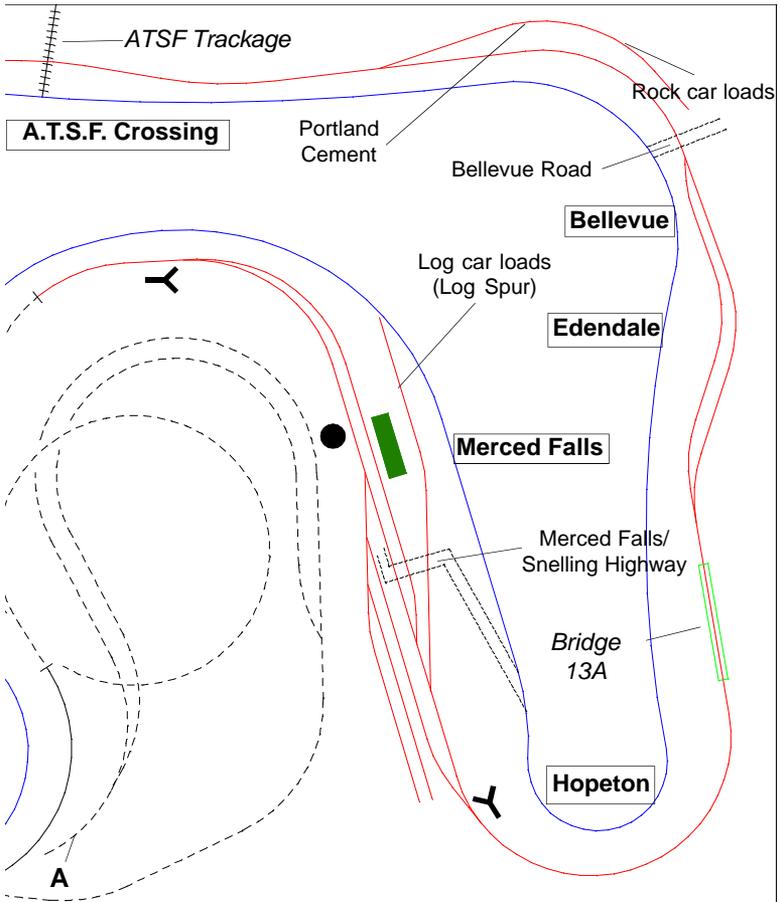
204. Each train order must be written in full in a book provided for the purpose at the office of the dispatcher and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated and the responses transmitted; and the train dispatcher's initials. These records must be made at once, and never from memory or memorandum.

205. In train orders, regular trains will be designated by number as "No. 10", adding engine numbers if desired. Extra trains will be designated by engine numbers, and the direction as "Extra 29 'East' or 'West'".

Even hours must not be used in stating time of day in train order, such as 10: a. m.

210. Those to whom a "31" train order is addressed except enginemen, must read it to the operator and then sign it, and the operator will send their signatures preceded by the number of the order to the dispatcher. The response "complete," and the time, with initials of the trainmaster will then be given by the train dis-

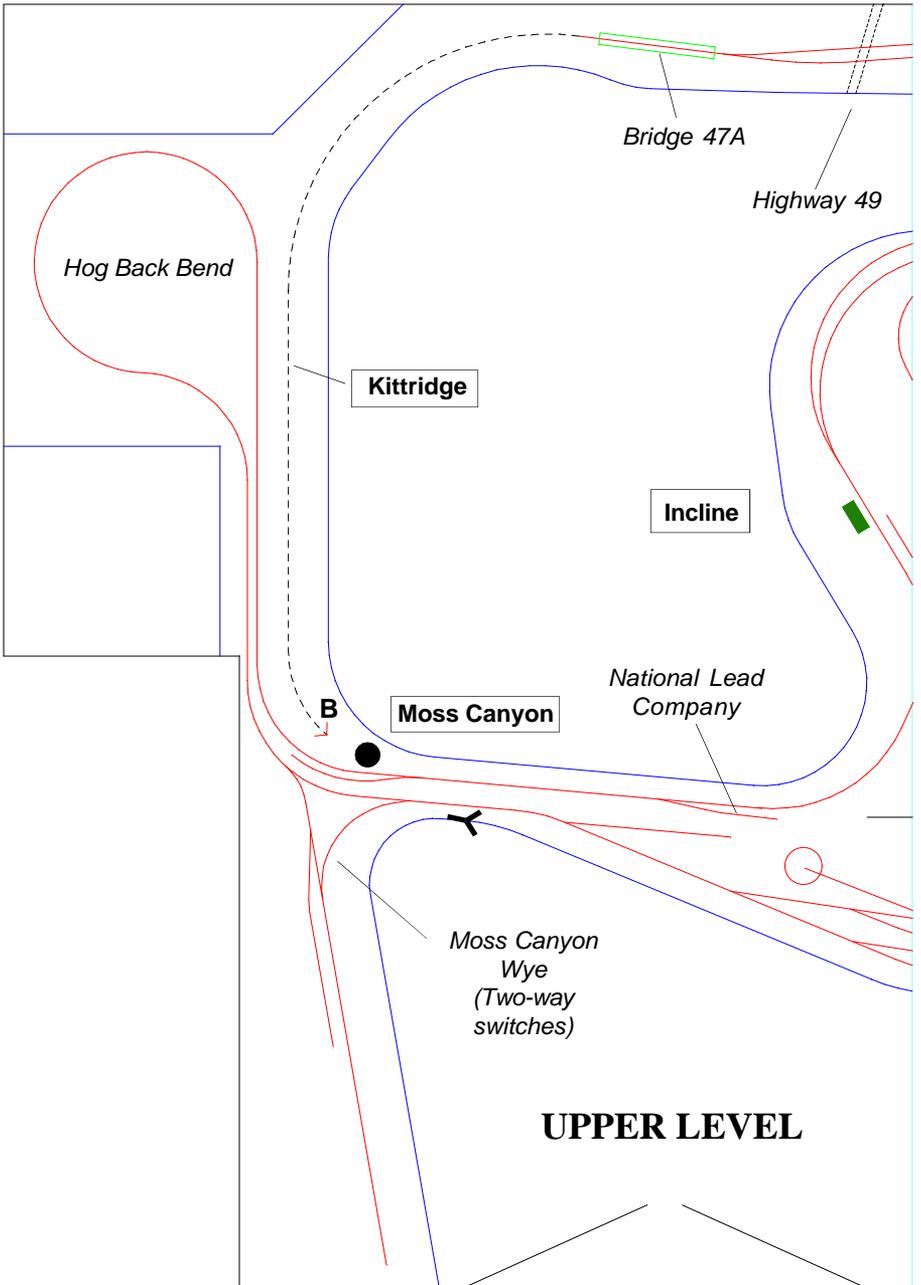


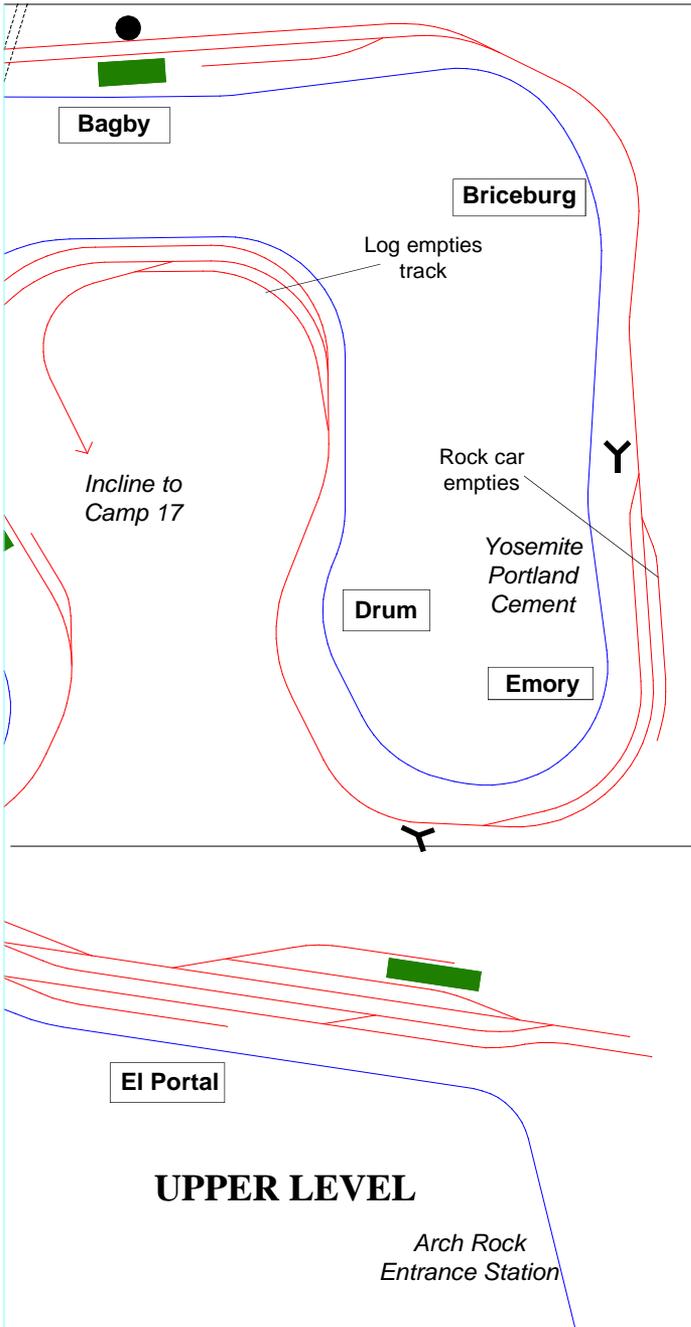


KEY

- Yard Limits 
- Water 
- Phone Station 
- 

LOWER LEVEL





patcher. Each operator receiving this response will then write on each copy the word "complete," the time, and his last name in full, and then deliver a copy to each person addressed, except enginemen. The copy for each engineman must be delivered to him personally by conductor. Engineers must read aloud to conductor all train orders delivered to them by conductors and see that same are understood before acted on.

Enginemen must show train orders to firemen and when practicable to forward trainmen, conductors must show train orders when practicable to trainmen.

221. Unless otherwise provided, a fixed signal must be used at each train order office, which shall indicate "stop" when trains are to be stopped for train orders. When there are no orders the signal must indicate "proceed."

When an operator receives the signal "31" or "19," followed by the direction, he must immediately display the "stop signal" for the direction indicated and then reply "stop displayed," adding the direction and until the orders have been delivered or annulled the signal must not be restored to "proceed." While "stop" is indicated trains must not proceed without a clearance card (Form 325).

Where the semaphore is used, the arm indicates "stop" when horizontal and "proceed" when in a vertical or diagonal position.

222. Enginemen must promptly report to the dispatcher the time of departure of their train at each station.

223. The following signals and abbreviations may be used:

Initials for signature of the trainmaster.

Such office and other signals as are arranged by the General Manager.

C & E — for Conductor and Engineman.

X — Train will be held until train order is made "complete."

Com — for Complete.

O S — Train Report.

No — for Number.

Eng — for Engine.

Sec — for Section.

Psgr — for Passenger.

Frt — for Freight.

Mins — for Minutes.

Dispr — for Train Dispatcher.

Opr — for Operator.

31 or 19 — to clear the line for Train Orders and for Operators to ask for Train Orders.

S D — for “Stop Displayed.”

The usual abbreviations for the names of months and stations.

SUPPLEMENTAL RULES AND INSTRUCTIONS

1. Derailed equipment - Derailed equipment is not to be handled by enginemen. Instead, the General Manager is to be contacted for rerailing equipment.

2. Turning equipment and trains - Equipment to be turned at Merced is to be turned on the turntable rather than by using the reverse loop. To use the turntable, run the equipment onto the turntable, dial up the destination track, and push the red-topped push button. The LED will then begin flashing and the controls will execute the command; if the LED does not flash, push the button again. The toggle switch designates which end of the turntable aligns with the destination track. One end of the turntable bridge is marked with an “oil spot” while the other end is blank. To turn 180 degrees, flip the toggle to the opposite direction and push the red-topped push button. To line the turntable to a specified track, flip the toggle if needed, dial the destination track, and push the red-topped push button.

Trains to be turned at Moss Canyon shall be turned by backing into the wye; engines are not to be run into the tail of the wye. (This will require additional moves.)

3. DCC/Reverse loops - The DCC wiring and turnout toggles for the reversing loop and wye automatically handle “polarity” issues and no attention is needed when running through these sections.

4. Circuit Breakers - Each of the main yards (Merced, Merced Falls, and El Portal) plus the main track are protected by

instant circuit breakers. These circuit breakers are identified by their white-handled recessed toggles. The yard circuit breakers are located along the fascia in the immediate vicinity of the yard. The main track circuit breaker is located just east of the roundhouse lead.

In the event of a short circuit from running through a closed switch or other reason, the appropriate circuit breaker will blow with a noticeable “pop”, cutting all power to that particular section of track. Once the cause of the short circuit has been rectified, the circuit breaker can be reset, restoring power to that section of track. Note that a short circuit anywhere on the main track will disrupt power to the entire main track.

5. Turnout controls - All turnouts are controlled by switch motors. Toggle switches for the turnouts are located on the front panel. With few exceptions, the toggle switch will line up with the points of the turnout being controlled.

Toggle switches controlling main track turnouts can be identified by red toggle handles. The toggle handle will indicate the direction of the switch. Red (diverging track) or white (main track) dots indicate the normal position of the toggle. All main line track toggle switches shall be left lined for the main track.

Toggle switches controlling sidings and spurs not on the main track can be identified by blue toggle handles. The toggle handle will indicate the direction of the switch. Such turnouts can be left lined in either direction.

Toggle switches controlling derails can be identified by white handle handles. The toggle handle will indicate the direction of the switch. Such derails shall be left protecting the main track when switching work is complete.

Toggle switches controlling the wye and 2-way switches (for turnouts controlled from more than one location) can be identified by green toggle handles. Because they operate from more than one location, such toggle handles do not indicate the direction of the switch. Such toggle switches shall be left lined for the main track.

6. Uncouplers - Under the tie magnetic uncouplers are located

on spurs, generally just beyond the clearance point. Their locations are marked with yellow paint on the side of the rail.

7. Timetables - All employees are to have a current copy of the Employee Timetable on their person at all times.

Employees are to read and follow the Special Rules contained therein.

Note that stations listed on the Schedule on Page 3 of the timetable which are in *italics* are not modeled on the layout and are for reference purposes only.

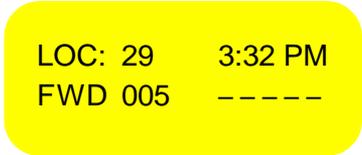
Siding capacities on the Schedule on Page 3 are the total number of 40' cars in the train which can fit into the sidings, not including the engine or caboose. Thus, a capacity of 4 indicates that the engine, caboose, and four 40' freight cars can fit between the clearance points on the siding.

Engine Tonnage Ratings on Page 4 of the timetable are typical ratings, not including the caboose.

The Speed Table on Page 4 refers to the throttle settings on the System One “hammerhead” throttles, using a speed setting of 28.

8. Throttles - A typical throttle display is shown. It provides the engine number, direction, speed, scale time, and which functions are turned on.

To assign a locomotive, press Select Loco, input the engine number, and press Enter. If the locomotive was previously assigned, press 1 to Take, Enter for No.



To change/confirm the speed settings, press 14/28. The speed setting of 28 should be used. Dedicated buttons are provided for the bell, whistle, and head-light functions. Other sound functions are as follows:

- 4 - Cylinder cocks
- 7 - Coupler sound

If the engine sits for a while, the pop-valves will automatically

come on.

The momentum has been fairly high on the throttles. The decoder automatically senses the difference between the throttle setting and the speed of the engine and adjusts the sound volume accordingly. On starting, if you quickly run the speed setting up, the exhaust volume will be higher, typical of starting. As soon as you reach running speed, reduce the throttle setting, and the volume will be reduced, simulating bringing the Johnson Bar back toward the center and reducing the cut-off.

9. Scale Time - A scale time ratio of 10:1 is used. The current time is shown on the throttle display.

To estimate scale time, multiply the estimated actual time by 10. Thus an operation which is estimated to consume 2 actual minutes will take 20 scale minutes.

To pause the time, press Prog Mode 3 times, press Enter, and then press 1 to Stop. To resume the scale time, press Prog Mode 3 times, press Enter, and press Enter to start.

10. Water - All engines are to take water upon arrival or before leaving Merced, Merced Falls, Bagby, or Moss Canyon. Push buttons are located at each of those locations to activate the appropriate sound effects for taking water. Upon spotting the tender hatch under the water spout, push the push button to complete the taking of water.

11. Train Orders - When train orders are to be picked up from a train order station (Merced, Merced Falls, Bagby, or Incline), the dispatcher will set the train order board display to "stop". After picking up the orders, the train order board will be set to "proceed" by the dispatcher.

12. Bulletins - Bulletins are used by the railroad to keep employees informed of temporary changes in trackage, special rules, and other items. All employees are to be knowledgeable of any bulletins in effect.

13. Switch Lists - A typical switch list is shown on page 20. Switch lists are issued to all freight trains except the Log Train and the Rock Train. (Those trains pick up/set out only log cars or rock

cars respectively without the need for a switch list.) Note that switch lists are used for moving freight equipment rather than waybills to minimize paperwork.

The switch list itemizes which cars are to be picked up (by type, owner, and number), their current location (by station only), and their destination, the latter by station and spur name. A schematic indicating station/yard names and spur names is on the backside of the switch list; all spurs are listed by their prototype names. Set outs need only to be on the correct spur; order on the spur is not designated nor important.

Telegrapher abbreviations of the stations are listed under the formal station names; these abbreviations may be used on the switch list at the discretion of the dispatcher.

Pick ups are always listed in order (Merced to El Portal for the Merced Local or El Portal to Merced for the El Portal Local). Set outs are therefore **not** in order.

Blocking of freight trains is at the discretion of the engineman. However, note that ICC rules require that tank cars be placed at least one car from the engine and at least one car from the caboose, whenever practical.

If LCL (Less-than Car Loading) is designated on the switch list, that cargo is typically put in a boxcar directly behind the locomotive for easy access by the head-in brakeman, who is responsible for unloading it at the designated stations. Unloading of LCL requires spotting of this boxcar at the designated station/freight house for a minimum of 4 minutes.

14. Clearance Cards and Train Orders - Before a train can leave its point of origin (beyond the yard limits), the engineman must have a clearance card (Form 325) authorizing the movement from the dispatcher in addition to any appropriate train orders. In order for a train to pass a “stop” train order board, the train order board must be reset to the “proceed” position by the dispatcher or the train must be issued a clearance card by the dispatcher.

Yosemite Valley Railroad Company
SWITCH LIST

X29 East At Merced Station, Aug 11 1939

| | | CAR | | FROM | TO | TRACK |
|-----------|----------------|---------------|----------|------------|-----------|----------|
| Initial's | No. | Type | | | | |
| 1 | <i>YV</i> | <i>609</i> | <i>X</i> | <i>Mer</i> | <i>RO</i> | <i>A</i> |
| 2 | <i>B&O</i> | <i>668421</i> | <i>X</i> | <i>MF</i> | <i>Em</i> | <i>1</i> |
| 3 | <i>PFE</i> | <i>33658</i> | <i>R</i> | <i>MF</i> | <i>Em</i> | <i>1</i> |
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Conductor
Agent
Switchman

Typical Switch List

MERCED SUN-STAR PRESS