



# OPERATIONS REVIEW

## STATION NAMES AND DIRECTION

All station names referred to in the Timetable are labeled on the fascia. You are always looking toward the north when looking at the layout.

## TURNOUTS AND DERAILS

All turnout controls are controlled by slow-action Hanksraft motors. Turnout controls (toggle switches) are on the fascia and are color-coded: red for mainline turnouts, blue for non-mainline turnouts, white for the derails, and green for the wye at Moss Canyon. The handle indicates the direction of the turnout points except for the green ones for the wye (they are the equivalent to two-way switches and can also be controlled from a small control panel near the Merced station). Except for a few locations, all of the toggle switches are in line with the turnout points. Note that the Special Rules require that all mainline turnouts be left lined for the main. To help, all mainline toggle switches have red and white “targets” above/below the toggles to help indicate the correct position when lined for the main (i.e., the toggle will be pointed toward the white target like the prototype switch target when it is lined for the main). The west wye switch at Moss Canyon (which is difficult to view at eye level) has a working switchstand which can be seen from Moss Canyon. The position of all of the turnouts comprising the wye can be also determined from the LEDs on the Moss Canyon control panel.

The DCC wiring and turnout toggles for the wye automatically handle “polarity” issues and no attention is needed when running through the Moss Canyon wye.

The two derails at El Portal are “working derails”. Be sure to line them in the non-protected direction before switching these two spurs and leave them lined in the protected direction when switching in the area is complete.

Clearance points are marked on most spurs and sidings.

## THROTTLES

The railroad uses System One throttles. Throttles have been pre-assigned to each locomotive and you should not need to assign it. However, if you need to assign a locomotive to a throttle, press Select Loco, input the two-digit locomotive number, and press Enter. If the locomotive was previously assigned, press 1 to Take or press Enter for No.

**I insist** on running scale speeds or slower. The timetable was built using a 10:1 clock and allows plenty of time to make moves, etc. To estimate your speed, multiply the speed setting on the throttle by 2 (i.e., a setting of 9 is about 18 mph). Prototype speed limits are listed in Special Rule 5 in the Timetable. However, I prefer that no one run higher than 20 mph anywhere.

All of the engines are equipped with on-board Soundtraxx decoders and are programmed with a fairly high momentum rate. Expect to take a little time to get used to the momentum. Once you do, slow easy starts and stops will be automatic.

You will find that listening to the engine helps! 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.

Whistle signals are listed on the back of the “cheat sheet” for talking to the Dispatcher.

## **CIRCUIT BREAKERS AND SHORTS**

Instant circuit breakers protect each of the main yards (Merced, Merced Falls, and El Portal) and the main track (four “blocks” total). 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.

## **TELEPHONES**

All engineers are required to OS the Dispatcher (temporarily taking on the position of Station Agent) when passing any station where there is a depot or when passing any siding where there is a telephone (Emory or Moss Canyon). To OS the Dispatcher, pick up the nearest telephone and push the white button to buzz the Dispatcher (the telephone is a party-line system). A “cheat sheet” is provided to indicate the prototypical form of communication with the Dispatcher.

## **TURNTABLE**

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, select which end of the turntable is being addressed (each end is programmed individually), dial up the destination track, and push the red-topped push button (hold the button down for a second and then release). 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 should be turned by backing into the wye; engines are not normally run into the tail of a wye.

## **UNCOUPLERS**

Under the tie magnetic uncouplers are located on every spur, generally just beyond the clearance point. Their locations are marked with yellow paint on the side of the rail. Couplers can also be uncoupled by using a swizzle stick.

## **TAKING WATER**

All engines are to take water upon arrival or before leaving the water tanks at 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. Where there is a water plug, the water plug is also animated. Upon spotting the tender hatch under the water spout at a water tank, push the push button to complete the taking of water. When there is a water plug and/or tank, spot the tender at the plug, use the toggle switch to swing the water plug over the tender, and then push the push button. Be sure and

use the toggle to swing the water plug back into stowed position before leaving! At Merced Falls, use the toggle to swing the plug back into stowed position and then center the toggle to stop the movement of the plug.

## **HANDLING EQUIPMENT**

Please note that (with few exceptions) I do not allow visitors to handle equipment, whether rerailling a car and pushing a stubborn engine. Please call for help if you have a problem. If a car continually has problems, let the Dispatcher know and Bad Order the car at the nearest siding.

## **TIMETABLE AND ORDERS**

All of the forms used during operating sessions are duplicates of prototype YVRR forms. You are not required to have a Rule Book on your person but one will be provided if desired; they follow standard railroad rules. Each Engineer does need to have a Timetable. Meeting times are shown on the Timetable in **Bold**. Upon receiving assignments, each Engineer will be provided an Assignment Card which will provide information on the Train Assignment, Engine No., Caboose No., etc. Each Engineer will also be provided with a “cheat sheet” with the general directions for his/her train. Way freight Engineers will also be given a Switch List listing pickup and setouts along the route.

Before leaving the originating station, you will need to get a Clearance Card from the Dispatcher.

Before passing any station along the line (i.e., Merced Falls, Bagby, or Incline), note the position of the Train Order Board. If the Train Order Board is in the up or stop position, you must call the Dispatcher and get any orders and/or a Clearance Card before proceeding.

## **TT/TO OPERATION**

If you have never operated under Timetable (TT) and Train Order (TO), the rules and procedures may seem difficult and illogical. The YV Rule Book which I use is exactly the same Rule Book used by the prototype Yosemite Valley Railroad with the addition of some supplemental instructions similar to the ones listed herein and track plans for the layout. Because the YV in a linear layout without through trains, TT/TO operation is relatively simple and is generally run using the following basic TT/TO rules:

- Every engineer must have a copy of the timetable with them at all times. The TT follows the same format as the prototype YVRR timetables and lists each scheduled train. For eastbound trains, read down. For westbound trains, read up.
- All scheduled trains are Second Class trains. Second Class trains have rights over Extra Trains and eastbound Second Class trains have rights over westbound Second Class trains. Thus, Extras always take the siding for any Second Class train and westbound Second Class trains take the siding for eastbound Second Class trains.
- Before departing your originating station, you must get a Clearance Card from the Dispatcher.
- Referring to your TT, you can not leave any listed station before the time shown. If the TT lists two times at a station, the first is the arrival and the second is the departure time. In addition, you are not supposed to arrive early at any listed station. However, with a fast clock, this is difficult. If you are arriving early, just be on the lookout for any other trains which may be occupying the main.
- Meets with other trains are shown on in **Bold** on the TT. To determine which train you are meeting, look across the TT on the same line for another train with approximately the same arrival time.
- Call the Dispatcher as you pass or leave any station with a depot or Emory or Moss Canyon.

(Locations with telephones are also noted on the TT.)

## **GENERAL OPERATING SCHEME**

The YVRR is completely linear and, since it duplicates a prototype without through-trains, there is no staging. All trains run from the terminal at Merced to the other terminal at El Portal or visa-versa.

Sessions can be run with either all scheduled trains or a combination of scheduled and extra trains at the option of the operators. In either scenario, the following trains will be scheduled trains:

- Trains No. 8 and No. 9 - This is the Log Train. Train No. 8 runs light from Merced to Merced Falls, picks up the empty log cars, runs to Incline and drops the empties on the siding, and then takes the caboose and runs light to the wye at Moss Canyon. Upon turning, it becomes Train No. 9 and runs back down to Incline, switching the empties for the loaded log cars. The loads are taken down to Merced Falls, dropped on the log spur, and the train runs back to Merced to tie up.
- Trains No. 11 and 12 - This is the Rock Train which begins its run at El Portal, running light down to Emory, site of the limestone quarry (called lime rock on the YV) where it picks up the loaded rock cars (22' hoppers). It then continues down to Edendale, the siding near the Rock Switch leading into the Portland Cement plant spur. The loads are left on the Edendale siding and the locomotive and caboose are run light to Merced and turned on the turntable (the caboose also needs to be turned). After turning, No. 11 becomes No. 12 and runs light back to the Portland Cement spur. The empties are then pulled out and the loads shoved into the siding. After the train is made back up, No. 12 runs back up to Emory and puts the empties into the siding. It then runs light with the caboose to El Portal and ties up.

The remaining two trains can be scheduled Second Class trains or Extras, depending on which form of the timetable is selected. In either case, these trains make the same runs as either a way freight or Local. If they are run as scheduled trains, they will be No. 14 and No. 15:

- No. 14 - This is the eastbound way freight. Using a Switch List (siding names are diagramed on the back of the Switch List), No. 14 makes up its train in the Merced yards. It then proceeds eastbound to Merced Falls, Bagby, Incline, etc. to El Portal, making setouts and pickups along the way.
- No. 15 - This is the westbound way freight. Using a Switch List, No. 15 makes up its train in El Portal. Note that this train is made up "backwards" and once the train is made up, the train and caboose are backed out of the El Portal yards and turned at the Moss Canyon wye before proceeding westbound. This train eventually ends up at Merced.

If these trains are run as extras (typical of the YV), they are referred to as the Merced Local and El Portal Local. (On the YV, crews exchanged trains at around the mid-point of the line and thus returned to their originating yards.) Note that because of the nature of the YV, cars picked up by these trains may be setout further along the way.

## **HAVING FUN**

Operations can be as simple or complex as operators want to make them. I only insist that operators run as slow, prototype speeds, leave turnouts lined for the main, and respect the equipment and layout by not handling the equipment or putting elbows or papers on the layout. Demerits aren't given if you forget to take water at a water tank or forget to make a setout. On the other hand, I encourage operators to attempt to communicate with the Dispatcher in a prototype manner, stop to let their brakeman throw switches, and make a standing brake test after making up their train. Safety first and have fun!