

Moffett Field Historical Society Museum

Train Room Docent Handbook

By Al Margolis (Draft 7/14/2021)

Operator Daily Overview

Two volunteers are scheduled for the train room on each open day. There are two distinct roles” Operator and Conductor. The two volunteers choose among themselves who performs each role. They may choose to have a fixed assignment for the day or to alternate on some schedule, usually swapping roles after a lunch break.

The **Train Room Operator** stays in the Train Room to make sure that visitors have a safe and enjoyable experience and that the layout is safeguarded. The operator runs the trains and deals with minor problems but mainly spends time talking to visitors about the layout.

The **Train Room Conductor** moves between the museum entry area and the train room monitoring the flow of visitors. The conductor greets visitors as they leave the ticketing area to let them know that the train room exists and helps regulate the flow of traffic into the train room.

It is critical that volunteers be reliable with their schedules. If you accept a scheduled date it is critical that you arrive on time and stay focussed on visitors throughout the day. The museum has a very small, all volunteer staff. If you don't arrive when you promise, nobody will be available to replace you so the train room will be closed and visitors will be disappointed. If your life doesn't allow for that reliability, let us know and we will work with you to define a less critical role.

Things you may want to bring with you:

- Cell phone
- Lunch
- Water

Opening Procedure:

- Arrive at least 10 minutes before opening.
- Enter the museum through the South door.
- Go to the break room
- Sign-in
- Get the train room key (#20)
- Go to the train room and unlock the door
- Return the key to the key storage box
- Turn on the train room lights (the switch is adjacent to the North museum door and is the switch closest to the corner.
- Turn on the layout (the switch is located XXXXXXXX)
- Take the operator seat and be ready for visitors

Closing Procedure:

- Turn off the layout

- Scan the room for out of place items and deal with them as well as possible
- Turn off the room lights
- Lock and close the train room door
- Stop in the break room and sign-out
- Head home

Logging Your Hours

It is important to post your hours in the Volunteer Hours Log. There are two binders. One is labeled “Air Wing”, we use the binder without that label. There is one page per volunteer, filed by last name. The logs are checked monthly and are used to justify grants that fund the museum. Most docents will only need one or two lines per month. Please skip a line or two between months and draw a line across to separate months. If needed, blank pages are in the back of the binder.

Train Room Visitor Process

- Ideally, only one small family/group of visitors should enter the train room at one time. For the most part, visitors are self-regulating regarding crowding. The operator should not hesitate to ask visitors to wait outside or at least maintain a reasonable amount of distancing.
- The conductor should be monitoring traffic to the train room. When engaging visitors in the main museum aisle the conductor may either direct people immediately toward the train room or suggest that they come back later in their visit.
- Face covering requirements are determined by state and county regulations. At this time there is no mask requirement for fully vaccinated individuals. Feel free to wear a mask if you feel that it is required or supports your well being. There are markings in the floor and a chain to help maintain social distancing from the main operator position.
- There is an ebb and flow to the arrival of museum visitors. This will vary from day to day, but there will generally be an opening rush from 10:30 to 12:30 and an afternoon rush from 1:30 to 2:30. Volunteers should watch for the lunchtime slowing and take that opportunity to close the train room for a lunch break. There is a “Closed for Lunch” sign near the main helix that should be hung on the door.

Visitor Tours

On re-opening day, there will just be one training running in a continuous loop throughout the layout. Over time, this will be enhanced with a more scripted operation with multiple trains moving and interacting as visitors move through the room.

The layout has many interesting details. I have begun documenting them in a separate history document. The history document has a Questions and Answers section that will be expanded as we get feedback from visitors. As we are able, we will add signage to point out major features. We should also have some quiz signs like “can you find XXX”, “how many cities are

represented”, etc. When the room is quiet, you should study the layout so you can answer questions and come up with your own commentary based on your interests.

How you interact with visitors will vary with your personality and that of the visitors. Some people will want to interact with you a lot, some will want to silently study the layout. Every visitor group should be greeted as they enter the room. Do your best to interact with visitors throughout their visit but also respect the wishes of people who verbally or nonverbally express a wish to be left alone.

When interacting with visitors, consider talking about the following:

- History of the layout
- SCG&F geography and fun features
- Museum membership and volunteering
- Museum donations: cash and checks left in box outside train room go into a fund for train room maintenance
- Gift Shop - they now have a few train items in addition to traditional military and aerospace items

Membership forms, volunteer forms and museum business cards are located in the rolling drawer unit in the operator area. New members can turn in forms at the museum cashier. Ask them to say that they were told about membership in the train room.

Visitor Problems

The operator is responsible for the experience in the room. We want visitors to have an enjoyable experience but you should have no hesitation to remind people that they are allowed to look at the layout but not touch it. For children, the first correction should be addressed to the child, the second to the parent. If visitors are not cooperating, you can warn them that they will be asked to leave and then follow through with that.

If a situation seems beyond your ability to manage:

- Turn off the layout
- Call the main museum number and tell them that you are in the train room and have a visitor you can't handle 650-964-4024
- Should a situation require it, consider calling XXXX (911 or base security ???)

Please note: While it will be fairly common for you to remind people about not touching the layout or to mind their rambunctious child, it is highly unlikely that you will ever have to deal with anything more serious than that. The escalation procedures are provided just so you know how to get help should it ever be necessary.

Train Room Supplies

We are trying to equip the train room with any supplies which are needed for routine visitor and maintenance operations. Please put all materials back where they belong at the end of each shift and let the train room lead volunteer know if any items are missing or need to be replenished.

Items located on level zero near the end of the aisle, above the supply carts:

- Push stick
- Grabber arm

Items located in the small carts near the end of the aisle:

- Bright flashlights (2) - these can be used to spotlight layout features when talking to visitors or as work lights when rerailing trains, etc.
- Pens & pencils
- Magnifying glass
- Paper towels
- Printed copy of Docent Handbook (may not be as current as online copy)

Items located under the main helix. These are accessed by lifting the drape near the train room door:

- Folding chairs (2)
- Ladders (2: the painted brown ladder is shorter)
- Rolling work stools (2)

Operating The Layout

Never operate any switches on the control panels except with explicit instructions. Due to the fragility of the layout, switch operations may not be reversible. If you flip a switch, flipping it back may not reverse the operation without repair work. We will be repairing and upgrading the layout over time to allow more flexible operations.

Walk Around Throttle



We control the speed and direction of the train using the small walk-around control branded "Model Rectifier Corporation 1325". The throttle can be plugged in at various locations around the layout. Each location has two RJ11 telephone jacks. At this time, we only use the left jack.

The throttle must be activated each time the layout is turned on. Do this by pressing the right button, labeled "Direction" several times until the light cycles from green to red to green and back to red. At this time, red is the normal direction of travel: eastbound from Sunnyvale to Fresno. Press the direction button to light the green indicator for backing up and before unplugging the throttle to move it to a different jack.

If you unplug with the red indicator on, the train will move at a high rate of speed -- even if the dial is set to stop. With the green light on, the train will continue at its set speed, including stop. **Always set the direction to green before unplugging the throttle.**

Train speed is critical for reliable operations. If trains go too fast they may jump off the tracks. If trains go too slow they may stall at turnouts and other electrical dead spots. A faster, more massive train coasts over the dead spots. You can observe these trouble spots by observing the slowing and reduced sound level of the train. Our goal is to have a “set and forget” speed for each train that allows it to reliably traverse the layout with no throttle adjustments. If you do slow down or stop the train, you may have to push the engine to get moving if it stops at one of these dead spots.

You should normally not need to touch the throttle / powerpack base station which is located on level zero, under the Gilroy station but there are some things to check if you are having trouble controlling the trains.

	<p>The speed knob on the base station should be turned all the way to the left until it hits the end of motion near the “Stop” label. If this knob is turned up, the walk-around speed control may be erratic.</p>
	<p>The blue display shows the voltage and current supplied to the track. For our standard operation, that is in the general area of 14v and 0.5A. If there is a short circuit, the display changes to “oVLd 0.0A” and the train won’t run. Short circuits can be caused by metal objects dropped across the rails and by derailments.</p>

Train Configurations

Only preconfigured and tested trains should be run. Do not rearrange the cars or make other changes. The configured trains run reliably. Making changes leads to unreliable operations for visitors and causes confusion.

The following image shows the standard configuration. The brown hopper car has since been removed due to frequent derailments.



Train #1: At this time the only train that should be run

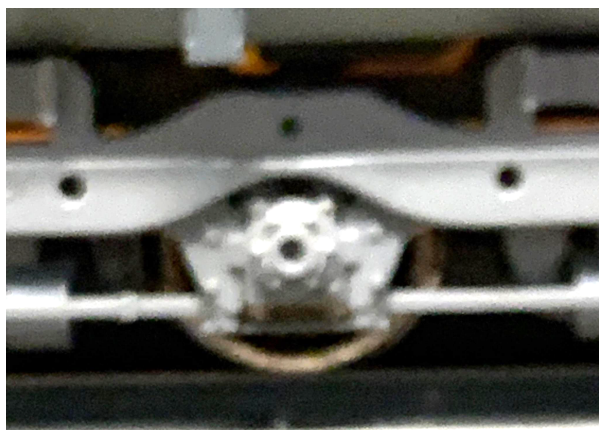
- Southern Pacific SD45T diesel locomotive with no road numbers. Colored dark gray with red nose and tail.
- Potlatch boxcar. Colored green.
- Tank car: colored blue
- Otto Belt hopper car. Colored gray.
- Burlington Northern boxcar. Colored green. Has End of Train (EOT) light.
- This train consist run reliable at a throttle setting of 4-½

This train runs very reliably except for derailments on the helix as it returns to Sunnyvale. This may be mainly an issue related to hot weather. If the train stops there, be patient. It commonly resumes moving after a minute or so. It moves just a few inches at a time but often moves along far enough to be reached from the aisle. When this happens, the problem is generally that the rear truck of the engine is derailed.

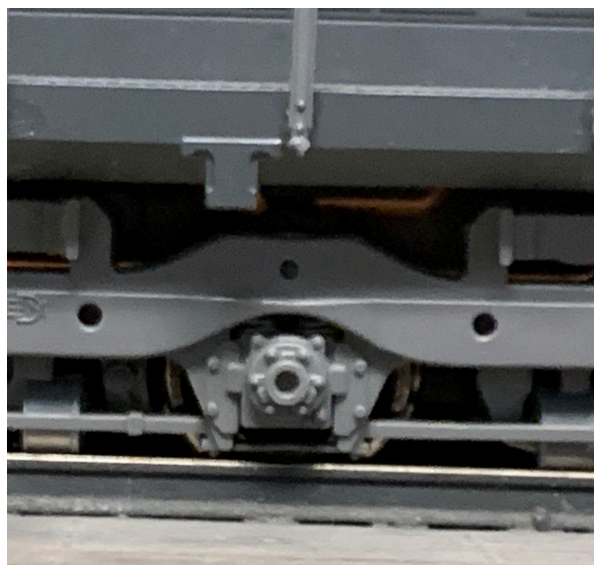
If the train does not move far enough to be reached from the aisle, it can be reached by climbing under the helix. **DO NOT ATTEMPT THIS UNLESS YOU ARE COMFORTABLE DOING SO.** It is always acceptable to tell visitors that due to technical difficulties the trains are not running but that they are welcome to view the static scenery.

Consider the helix fragile. Do not push against the circular base or the support rods while you attempt to reach the train. The space between layers is very tight so you have to have your hand positioned correctly to reach in and remove train cars. It is better to discontinue train running for the day than to damage the helix or drop the train.

If you are having frequent problems, consider running just the engine. Most problems are caused by the interaction of the overall train. The engine runs more reliably by itself.



The engine wheel is on the track.



Derailed: the wheel is inside the track and the bearing is sitting on the rail.

Layout Problems

The operator's responsibility is to show the layout, not repair it. You should take care of minor things that you can handle, but if needed the layout becomes a visual exhibit without moving trains. If a problem is beyond your ability to correct, turn off the layout and proceed with tours as well as you can. It is a fun layout to view. If appropriate you can ask the cashier to stop issuing new tickets and close the room early.

Problems you should be able to handle, if they occur at a place you can safely reach:

- Reconnect train cars that have separated.
- Rerail trains that have come off the tracks.

If possible, these corrections should be made where they occur. That can be difficult because of scenery obstructions or complex tracks. You can consider moving the train to either the Gilroy or Sunnyvale stations where tracks are easier to reach and have a reasonably straight run. At Sunnyvale, the train goes on the track closest to the station building, heading toward the windows. At the Gilroy station, the train goes on the second track from the station building, heading toward the mountain.

If you are having a problem that you think could be helped with a bit of advice, contact numbers for the layout maintenance leads are in the back of the Operator Binder.

As you run the trains, keep your eyes and ears engaged. Especially your ears. After a while you will be able to detect developing problems by the sound of the layout. If a new sound is continuous, it probably indicates an issue with the train. If a new sound develops at one location, it probably indicates a developing problem with the track.

No problems should be considered normal. Please report any problems to AI with a description of what and where it occurred. Texting a picture to AI with a short description is the easiest way to provide all the information in a helpful way.

Warm Weather Days

The train room can get very hot on sunny days. Stay aware of your comfort level: stay hydrated, dress in layers. On warm days, you should keep the north exterior door open. There is a chain on the outside of the building to loop around the door handle to keep it open. It takes time for the train room to heat up and cool down. It is best to open the door early if hot weather is expected. There is a yellow chain on the inside of the door to discourage visitors from using the open door as an entrance. If you notice people entering that way, direct them around the building to the front door.

The layout misbehaves when it overheats. See above for troubleshooting assistance.

Docent Orientation

Before becoming a train room docent, volunteers must attend a brief orientation meeting. This usually takes less than an hour.

The goal of the orientation is for new volunteers to learn what they need to know when they are on the job.

This includes:

- Meet key museum staff
- Find out where things are in the museum including
 - Building entry and exit doors
 - Train Room
 - Break Room: coffee, donuts, water and soda are usually available for about \$1 each. Please bring dollar bills for any items you may want.
 - Bathrooms
 - Keys
 - Light switches and power outlets
- Become a member or verify membership (membership is \$25/yr)
- Review Train Room History and Description document
- Learn how to run the layout and practice a little bit.
 - How to turn the layout on and off

- How to make the trains move back and forth
 - How to couple and uncouple train cars
 - How to rerail train cars
- Learn where to store your personal belongings
 - There are rolling carts near the operator chair where you can stow your belongings while you are in the room. The museum is a very safe place, but you may want to keep valuables with you when you leave the room.
 - Food and drink should be kept below layout level. We can easily clean the floor. It may be impossible to clean a spill on the layout.
- Get an overview of the overall museum exhibit area