

Whistle signals:

o = short — = long

oooooooo warning

— When running – Stop or stopping at next station.

— When stopped – brakes set, safe to get on/off, the train. “In between”

— — Moving engine forward,

o o Answer to signals

o o o Moving engine backward

— o o o Flagman protect train

— — — Recall Flagman

— — o — Grade crossing, start at whistle post or 10 seconds before crossing. Sustain last long until crossing is occupied

— o Warning to people near tracks, followed by oo oo oo until engine passes the people.



TMRR.ORG

2025 Operations Meet

Timetable No. 21

Effective July 26, 2025
00:01

Hand Signals:

Use your hand, lantern, or timetable. Be sure movement is perpendicular to the track.

Hand raised and lowered vertically—move engine forward.

Hand swung in circle—move engine in reverse. Large circle=quickly, small circle=slowly.

Hand waved over head = Set Brakes

“Set and Center, In Between”

Hand held overhead = Release Brakes

Hand swung down in an arc = STOP.

Any drastic waving of arms or objects – EMERGENCY STOP!

Outlaw Signals

Move both hands toward your face in a circular motion = come to me.

Move both hands away from your face in a circular motion = go away from me.

John Cooper
President Train Mountain Railroad

Richard Croll
Train Master

John Cooper
Signal Superintendent
Dispatching and Tower

Caden Powell
Dispatcher

Jordan Dobson
ATM Freight

John Lovely
ATM Passengers

1. Introduction

Schedule For Operations Week

Saturday—Tuesday

**8:30 AM — Daily Job Briefing
TMRR Project Work**

Wednesday

**8:30 AM — Daily Job Briefing
11:00 AM — 5:00 PM Operations**

Thursday

**8:30 AM — Daily Job Briefing
9:00 AM — 5:00 PM Operations**

Last day to buy your Banquet tickets.

Friday

**8:30 AM — Daily Job Briefing
9:00 AM — 5:00 PM Operations**

Saturday

**8:30 AM — Daily Job Briefing
9:00 AM — 5:00 PM Operations
5:00 PM — All Conductor Reports due
6:00 PM — Banquet
Buy your tickets by Thursday**

Sunday

**Open Running
Train Game Operational**

**We will attempt to have the event office
open after the Job Briefing each day to an-
swer questions.**

9. GPS Tracking of Trains

Transponder for Android

To assist in the dispatching role of the meet, an application for Android phones has been developed to report a train's location to the dispatcher. The application will report GPS location to the server every minute, providing the dispatcher with accurate information about the train. To alleviate privacy concerns, the application will immediately terminate when the GPS coordinates are off of Train Mountain property. The application can be installed from this link:

www.trainmtn.org/dailyphotos/tm-gps.apk

2. General Operations

- First Class Trains
Scheduled Passenger Trains – (111-142)
Museum Tour Trains (101-102) as needed
- All other trains run as EXTRA. Use the reporting marks of the lead engine for train number.
- Track Warrant Control (TWC) in effect, all trains must have **Authorization** from the Dispatcher to occupy Main Track outside Yard Limits. Call the Dispatcher before leaving Central Station, Main Yard, or Fuel Yard. Tell the dispatcher train your number, your location, and your destination.
- Passenger Trains have Timetable Authority for the entire trip. Call Dispatcher as you leave stations with an asterisk. Append your initial departure time to your train number: “TRN 131—10 (Train 131 dash ten).” Passenger operations are centered at the event office.
- All trains must clear main track for Passenger Trains. Listen to the radio and check the timetable for scheduled trains. Your Flagman should assist in clearing the way.
- As a courtesy, allow any other trains to pass.

3. Passenger Operations

When you run all the schedules you will enjoy the entire railroad. The challenge is to run on time, and on route.

3.1 Preparations: Sign the register sheet for the train you will be operating. You may reserve a train ahead of time. Prepare a Conductor Report. Notify the Dispatcher of your engine and train numbers about 5 minutes before departure time. Append the departure time to the train number: TRN131-10, TRN 141-3. The Dispatcher should give you a HIGH BALL at your departure time. Do not run ahead of schedule. Note: if you just happen to go to beans at Hope, get a warrant to run extra back to Central.

3.3 Procedure: Passengers and tickets: Passenger envelopes are printed with a name, home terminal, and ID number. Tickets have 4 coupons listing *from*, *to*, train number, and ID number. When two train numbers are listed with a hyphen it means passengers stay on the train when the train number changes for the

return trip. A slash means “or” for train numbers.

Board/discharge passengers at each depot. Real people are OK too as long as they have a ticket to pay the fare.

Record the number ON and OFF on your Conductor Report.

Turn the ticket of departing passengers to the next coupon before you deposit them in the depot box.

Do not pickup passengers you just dropped off at Witcombe, Schubert, and Dog Walk. Put a paper clip on them to remind yourself.

Prepare a complete and neatly written Conductor Report (one per crew for the meet). Return it to the Event Office before 5:00 PM Saturday.

You may run a route more than once and use the highest count. Don't add them together.

The most productive crews will be recognized at the Saturday Banquet.

4 Way Freight Operations

Obtain a switch list using TMRR Train Game Rail OPS. Obtain a warrant from the dispatcher for each segment of your run.

4.1 Pick up and deliver cars according to your Switch List. Make sure to verify that the car you are working with is spotted on the proper Track ID Number. If you have to move other cars during your pick up or delivery, make sure you return them to their original spots.

If you can't find a car, report a problem using TMRR Train Game Rail Ops.

Controlled switching only with engine attached – no kicking or flying switches. No 0-2-0 switching.

4.2 DO NOT use track cross-overs when switching cars; cross-overs are special switch trackage that allows changing between inbound and outbound directional track. Doing so, will cause the car being switched to have the safety chains/cables on the wrong end of the car!

4.3 Be sure safety chains/cables are firmly attached and nuts tightened. Safety Chains are permanently attached to the rear/trailing end of each car. When not attached to an adjacent car, make sure the safety chain/cable is not dangling below track level; instead place it on an appropriate temporary storage point on the car and close the nut.

Train Mountain Railroad		
The North Woods Limited		
Timetable No. 20		First Class
June 26, 2024		TRN 141
Station	MP	Schedule Time
Central Station *	CE0.0	0:00
K&W Junction	CE0.10	0:05
Daffodil Hill - Python	S6.33	0:17
Dog Walk *	DW6.80	0:29
M&M Corner	DO12.74	0:43
Farmersville	HO30.10	0:49
Whitcomb JCT *	HO30.62	0:56
Cooper	HO31.12	1:03
Schubert JCT	HO31.70	1:11
Crane Arr.	HO32.16	1:17
Crane Lv. *		1:20
Hope - Flitton Arr	HO32.58	1:27
<i>Change Train Number</i>		TRN 142
Hope - Flitton Dep *		1:32
Panzik JCT	HO33.14	1:38
Schubert JCT	HO33.56	1:45
Coyote	HO33.90	1:50
Whitcomb JCT *	HO34.29	1:56
Shepherd	HO34.56	2:01
Clyde	HO34.72	2:04
Beauchamp	AS13.72	2:10
Steuer Arr.	DO7.78	2:16
Steuer Dep. *		2:21
Dog Walk	DW8.48	2:31
Daffodil Hill (Python)	SE2.86	2:37
Central Station *	CE10.92	2:47
* Report times to Dispatcher		
Routing Instructions:		
Left at K&W Junction; Track 3 at Grand Junction;		
Right at Copper Head Jct to Dog Walk		
Keep right to go through tunnel to Douglas Sub.		
Right at M&M Corner to Farmersville Circle;		
Continue North to Hope - Flitton		
Keep right to return South to Panzik and Steuer		
Left at So. Portal to Dog Walk; first switch,		
Left at Copper Head Jct., continue up Serpentine		
Left after Long Tunnel to Central		

NOTE: Three minute stop at Crane is to allow steam engines to take on water. Non-steam trains may run early Crane to Hope.
Panzik—steam engines top off your water. The next water will be at Dog Walk

Train Mountain Railroad		
Aspen Arrow		
Timetable No. 20		First Class
June 26, 2024		TRN 131
Station	MP	Schedule Time
Central Station *	CE0.0	0:05
K&W Junction	CE0.10	0:10
Chiloquin	KW4.20	0:14
Friehe	KW4.58	0:21
Daffodil Hill - Python *	SE6.33	0:26
Youngstown	SE6.50	0:30
Williamson	MI9.10	0:36
G-Ville *	MI2.2	0:40
Yuma	RG19.16	0:44
South Portal Circle *	RG940	0:48
Woodpecker	DO7.18	0:52
Elizabeth	DO12.52	0:57
M & M *	DO12.74	0:52
<i>Change Train Number</i>		TRN 132
M & M *	DO12.74	0:55
Helena	DO13.00	0:58
Douglas	DO7.64	1:03
Beauchamp	AS13.74	1:10
Steuer Arr. *	DO8:02	1:16
Steuer Lv.	DO8:02	1:21
Timberlake	DO8.00	1:28
Dogwalk *	DW8.48	1:35
Daffodil Hill (Python)	SE2.86	1:41
Central Station *	CE10.92	1:52
* Report times to Dispatcher		
Routing Instructions:		
Right at K&W Jct; TRK 2 at Chiloquin;		
Straight to TM at Pine Hollow Jct.;		
Continue down Serpentine;		
Left after Williamson to Midway Circle		
Right at Midway North to Red Ant Jct		
Keep right to Elizabeth Loop		
Left at M&M corner to Helena		
Right at Aspen Jct. to Beauchamp		
Continue Aspen Loop to Steuer		
Left at to Dog Walk; first switch		
Left at So. Portal to Dogwalk		
Left at Copperhead to Python		
Left after Long Tunnel to Central		

4.5 Observe and follow the “Special Transit Rules” listed for any car on your Switch List.

Livestock cars must be at the front of the train to minimize slack action. Stop to water livestock at every 2nd water tower/hose for 2 minutes. Strive to minimize the time livestock are in your consist.

Cars with Hazardous Materials, Flammables, and Explosives must have a buffer car between it and an occupied car. Explosives must be handled very gently.

4.6 Each car movement listed on your Switch List has a “Points Value” that will be credited to your Train Game account.

4.7 Portable Wheel Stops are used to prevent cars from rolling when parked in yards. It consists of a yellow tie with angled slots cut in one side. Place it on the track, slots down, and near the downhill wheel set. You should carry enough for the cars you will set-out. They are available at the Main Yard.

4.8 Special Train Operations. A special train is dispatched for a specific assignment. They operate the same as other extra trains.

5 Radio

Radio Channels:

Channel	Label	Use for
1	ADMIN Dispatch	Dispatching system wide.
3	TOWER	CTC territory, switches and signals
2 and 4	Open	Inter Train Communication
5	Event Office	Freight & Passenger Agents

5.1 Use the UHF (Baofeng) radios for inter-train communication and to call Dispatch, Tower, and Offices. Use FRS radios for crew communications.

You may check out a UHF radio for use at the event office either daily or for the week.

The Conductor or a crew member must monitor the UHF channel 1 at all times.

Use plain English. “Roger” is a positive acknowledgement and agreement.

5.2 Protocol

Listen for a clear channel. Press and hold talk button for 2 seconds before talking. Use the railroad initials and your engine number.

“TMR Dispatcher this is SP 2034 WEST, Over.” “TMR Dispatcher answers SP 2034, Over.” “SP 2034 is *blah, blah, blah*, Over.” Conductor should repeat the instructions. When the information is verified, Dispatcher will say, “That is correct. Dispatcher Out.” “SP 2034 OUT.”

Over means you expect an answer or have more to say. Out means end of conversation. (You cannot be over and out.)

Do not interrupt another radio conversation.

Call the dispatcher to get a warrant for each move. Release your warrant when you have completed the move.

Call the Tower at the signs to get routing out of or into CTC territory. Follow signal indication.

7. Safety Rules

For the Operations Meet

Always operate in a safe manner. If in doubt take the safest route.

All trains must have a person situated to observe the train at all times and be able to tell the engineer to stop if necessary.

Speed—all trains must be operated at a safe speed—able to stop short of any obstruction. Maximum Track Speed is 7 mph (10 seconds per MP) or as posted.

Restricted Speed at all diamond crossings and junctions.

Following distance—A minimum of 2 mile posts separation between trains.

All trains must have radios for communication. A cell phone is highly recommended to call the office in emergency. 541-783-3030.

Get authority for each move from the Dispatcher. Reverse moves may be made at restricted speed with flag protection.

Within signaled territory, reverse moves may only be made with permission of the Tower Operator.

Flag protection against following trains on the same track is **required** for all trains. (Except rail bikes, and other one person engines that

Train Mountain Railroad		
The Rio Grande Zephyr		
Timetable No. 20	First Class	
June 26, 2024	TRN 121	
Station	MP	Schedule Time
Central Station *	C0.0	0:10
K&W Junction	C0.10	0:15
New Isom	C0.54	0:23
Deadwood	C0.82	0:28
South Portal Circle *	C1.32	0:35
Phillips	R1.54	0:40
Saanich	R1.64	0:43
Stockbridge	R1.88	0:47
Rio Grande *	R2.00	0:50
Lillyville	R2.14	0:54
G-Ville Arr.	M2.22	0:57
<i>Change train number Hold for TRN 111</i>		TRN 122
G-Ville Lv. *	M2.22	1:10
Robinson	M11.96	1:13
Sprague	M2.30	1:18
Coral	S2.50	1:22
Youngstown	S2.64	1:25
Daffodil Hill - Python *	S2.86	1:29
Vitz	S3.15	1:34
Colton	C3.40	1:39
Ward (Bond)	C3.84	1:46
Chiloquin *	K4.18	1:53
Debra's Corner	C10.55	2:03
Central Station *	C10.92	2:09
* Report Times to Dispatcher		
Routing Instructions:		
Left at K&W Junction; Track 1 at Grand Junction;		
Right at Hairpin, Right at South Portal Circle		
Then left to Phillips and Saanich		
Keep right after Saanich to Rio Grande Loop		
Keep right at G-Ville to serve Robinson		
Continue up Serpentine;		
Straight after Long Tunnel to Ward (Bond)		
After Ward keep right to K&W		
Return to TMRR		
Right at Cox Jct. Use Main Track to Central		

Train Mountain Railroad		
The Southern Belle		
Timetable No. 20		First Class
June 26, 2024		TRN 111
Station	MP	Schedule Time
Central Station *	C0.0	0:15
K&W Junction	C0.1	0:22
Colton	C5.8	0:28
Vitz Yard	S6.02	0:32
Daffodil Hill - Python	S6.33	0:37
Youngstown	S8.77	0:42
King	S8.98	0:45
Williamson	M9.11	0:48
Midway West	M11.10	0:51
Anaheim *	M11.46	0:56
Azusa	M11.52	
Cucamonga	M11.62	0:59
Rochester	M11.66	
G-Ville Arr.	M11.82	1:02
<i>Change Train Number Hold for TRN 121</i>		TRN 112
G-Ville Lv. *	M11.82	1:12
Yuma	RG9.18	1:15
South Portal Circle *	RG9.10	1:20
Deadwood	C9.97	1:27
New Isom - 2% SW	C10.19	1:34
Debra's Corner	C10.65	1:39
Central Station *	C10.92	1:46
* Report times to Dispatcher		
Routing Instructions:		
Left at K&W Jct; Track 3 at Grand Jct; Follow Serpentine to		
Williamson; Left to Midway West		
Right at Midway West to South Meadow Loop;		
Rejoin Midway Circle at G-Ville; keep left		
Right at Midway North to Red Ant Jct.		
Right to South Portal north; Keep left to Mopac and Deadwood		
Left at Hairpin to Little Falls, or keep straight to		
serpentine to avoid 3% grade, then left on 2% Solution		
Keep right at Cox Jct,		
use Main Track to Central		

can be quickly removed from the track) When stopped, a flagman must go back 2 mile posts to stop any following train. Don't let another train run into your train.

Flag protection is not required for First Class Trains operating on time (within 15 minutes of time table) when making station stops. All other stops must be flagged.

Restricted Speed is in effect at junctions, within Yard Limits, on other than main track, and approaching a timetable station where passenger trains may be loading. (See 8. RR Terms p. 7)

All trains must display a Marker on the last car – a flag during daylight hours and/or a red light/reflector. Between sunset and sunrise the marker must be illuminated; steady or flashing.

All switches must be re-aligned for Main Track after use. Route selection switches are always aligned for Main Track.

All trains must have safety cables, chains, or draw bars fastened between each car. Permanent attachment is to the rear of the car. If chain or cable is not in use, it must not drag on the ground or below railheads.

All trains must be equipped with fire protection tools and stop blocks, wheel chocks, or brakes to hold the train on a grade.

From sunset to sunrise, each train must have a lighted, front head light, lighted marker, lights for reading gauges, and a flashlight.

All engines must be equipped with an audible warning device (horn or whistle). Sound proper whistle signals when needed.

Steam engines must use propane (no liquid or solid fuels). A current boiler certification is required.

Place a green block beside the track at any location where a derailment occurs that appears to be the fault of the track.

8. Railroading Terms

TM – Train Master – the person in charge of the meet. May appoint Assistant Train Masters.

ATM – Assistant Train Master assists the TM.

Dispatcher – Maintains radio communication with all trains. Authorizes the movement of trains. Issues instructions as necessary for safe operations.

Tower Operator – controls CTC operations.

Yard Master – supervises switching in Yards.

Train Crew – Minimum is Conductor and Engineer.

Conductor – person in charge of the train. Supervises all train movements. May assign duties to other crew members. Appoint a *Conductor of Record* for your crew. Trade jobs as you want, but the *Conductor of Record* prepares the final paperwork to hand in.

Engineer – operates the engine per instructions from Conductor in a safe and efficient manner.

Fireman – Assists the Engineer and acts as head end brakeman. On passenger trains, keeps train on route, listens for radio messages, watches time points.

Rear Brakeman – Assists the Conductor. Responsible for flagging. May handle passengers.

Engine – A self propelled piece of RR equipment with any of source of power.

Train – Engine(s), with or without cars, displaying markers and authorized to occupy Main Track outside yard limits.

Main Track – used for movement of trains, runs between stations and through yards.

Flag Protection – prevent another train from running into your train when you are stopped on Main Track.

Flagman – member of the crew whose duty is to provide flag protection.

Other than Main Track – all other track: sidings, yard tracks, service tracks, etc. Used for meets, passes, storage, and servicing of RR Equipment. Trains may make reverse moves. All movements are at Restricted Speed.

Restricted Speed – All moves must be made at a speed so you are able to stop within half the distance of sight. Not more than 3 mph.

Yard Limits – Applies to Main Track around Six Acre, Main Yard, and Central Station to Grand Junction. Restricted Speed. Call the Tower Operator for movement on CTC signaled tracks.

Clearance point – Where diverging tracks are far enough apart to allow a train to safely pass by another train or car. Marked by a washer on the ties. Do not leave cars between the clearance points and switch points (fouling a switch).

Maintenance Of Way Flags

Flags are displayed to the right of the affected track. There may be a track bulletin relating to the area.

Yellow — slow down dangerous track conditions 2 MP ahead.

Yellow/Red — Red Flag 2 MP ahead prepare to stop.

Red — Stop. Ascertain why the red flag from the “owner.” He may give permission to pass. If between the rails, only the owner may remove it.

Green — resume track speed.

Blue — persons working in, on, or under the RR equipment. Do not move or couple to the cars.

9. CTC Signals

Top Head	Main/Primary Route
Second Head	First Diverging Route
Third Head	Second Diverging Route

<u>Aspect</u>	<u>Indication</u>
Green	Proceed at track speed
Flashing Yellow	Reduce Speed at next signal
Yellow	Prepare to stop at next signal
Flashing Red	Restricted Speed
Red	STOP—do not pass without Dispatcher’s permission
Lunar White	Entering Yard—Restricted Speed

9.1 Call tower to get in the queue. State your location by the signal number and your destination in CTC territory.

9.2 You will be given an order to, “Follow signal indication.” Wait for a permissive aspect before proceeding.