

# TRAIN MOUNTAIN RAILROAD ENCYCLOPEDIA

April 2013 Edition

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## Preface

This Encyclopedia fulfills a number of functions and replaces what otherwise would be a number of separate publications:

**Institutional Memory:** In a hundred years, members will have a ready source for the history behind every place name. It is also a place for recognition of individuals who have made extraordinary contributions to Train Mountain.

**Questions & Answers:** Many entries have been written to answer simple questions: How many feet are there between mileposts? What videos have been made about Train Mountain? What is a Green Tag?

**Rule Explanation:** Clear explanations of the background make rules such as those respecting Pets, Safety Chains and Train Length easier to understand.

**Procedures:** Institutionalizing procedures will save countless hours in the future when someone new is doing something old: What is a Train Inspector supposed to look for? What is the specification for the lettering on a milepost sign? How many gallons of propane can you safely put in a propane tank car?

This Encyclopedia will always be a work in progress. Blank spaces, hashmarks(####) or zeros mean that a distance has not yet been measured, a file has not been found or the best information has not yet been located.

Our thanks to Bill Shepherd, Bob Hayes, Walter Freihube, Dale Taylor, Veronica Taylor, Cal Tinkham, Mignonne Tinkham, Jim Griffin, Barbara Griffin, Dennis Ward and Frank Bartholomew for their proof reading and measuring contributions over the years.

If you have a location that should be identified, a question, a rule that has not been explained, an entry that you think should be included or have found an error, please let us know at [info@tmrr.org](mailto:info@tmrr.org).

As the Encyclopedia has grown, the early editions were posted on the Train Mountain Web Site. The first printed version was the August 13, 2000 edition for attendees of IBLS 2000 and the second was the June 12, 2003 edition for attendees at the 2003 Triennial. Our present plan is that it will be available to the membership as a download from the internet.

The Encyclopedia is set in Times New Roman type. The body of the text uses twelve-point type, except for entry headings, which use fourteen-point bold type. The spaces between paragraphs and entries are an eight-point line.

**Bold underlined** type within the text indicates a cross-reference to that subject. The date of the most recent revision is indicated in parenthesis at the end of the entry. (9/12)

## A

**Anaheim Siding.** Located at South Meadow Loop northbound at mile 11.456, Anaheim Siding is 149' long. (1/07)

**Appendix Spur.** Located at the south end of South Meadow Loop northbound at mile 11.44, Appendix Siding is 67' long and is the lowest elevation point on the railroad. (10/06)

**Aragon Sub-Division.** Located in the [Friends Division](#), Aragon Sub-Division leaves the [Hope Sub-Division](#) at mile ##.##, [Meisser Junction](#). This sub-division includes the future track to Rio Grande trestle and back. Track on Aragon Sub-Division has been laid only as far as [Ward Meet Siding](#). (11/12)

**Aspen Grove Loop.** The entrance to Aspen Grove Loop is a main line switch on the [Douglas Division](#) at mile 7.676. That is the start of a loop that goes completely around and through a lovely aspen grove before rejoining the main line just west of [Steuer Rest Stop](#) at mile 7.76. At the far end of Aspen Grove Loop, there is a rest stop with two sidings at [Beauchamp Siding](#) (formerly [Sheep Station](#)).



The right of way for Aspen Grove Loop was cleared in 2000 and the first fill was done in the summer of 2001. After that had settled, a second layer of fill was added in the summer of 2002. As of 11/06, two-thirds of one track had been laid on Aspen Grove Loop. A wye from Aspen Grove Loop to [Witcombe Wye](#) is part of the final track plan and is under construction in 9/12. Inauguration of

Aspen Grove Loop occurred in September 2007. (9/12)

**Aspen Grove Sub-Division.** A sub division of the [Douglas Division](#) which goes from mile 7.676 to mile 7.760. [Aspen Grove Loop](#) and [Beauchamp Siding](#) is the only track currently within this sub-division. (8/12)

**Aspen-Witcombe Connector.** A section of track under construction in the [Hope sub-division](#) that provides a return route from [Witcombe Wye](#) to [Aspen Grove Loop](#). This will eliminate the bi-directional route between [Witcombe](#) and [Farmersville](#). (4/13)

**Attendance.** In the beginning, Train Mountain held two train meets, one in June and one in September. When attendance at each of these meets began to exceed 150, we added two more meets each summer to spread the number attending over more events. By 2005, all four summer meets were attracting over 115 registrants.

While the track and yards can accommodate over 1,000 people and over 250 trains, the limiting factor for regular train meets is banquet capacity. The central portion of the banquet area comfortably accommodates 160 and we can squeeze in up to 200 by adding seating west of the main seating area.

In 2005 two more events were added. The first was a four-day [Polar Bear Run](#) in January devoted to Winter train operations. This involves plowing and spreading full size snow on a 1/8 scale railroad. The second was a four-day [Operations Meet](#) in October devoted to dispatcher-controlled freight trains and timetable-controlled passenger trains. This meet has now been moved to July to avoid inclement weather and make it accessible to more members. Both are now regular fixtures in the annual schedule.

The following table contains the number of respective meet/banquet registrations for the years which we have maintained records. Note that the Triennials held in 2003 and 2006 in lieu of the July meet do not have a banquet because there is no place in [Chiloquin](#) large enough to accommodate over 900 people. (10/06)

Year	January/ Polar Bear	Narrow Gauge	June	July/TRI	August/ OPS	September	Oct/Fall Colors	Totals
2001	N/A		120/97	103/93	59/52	136/124	N/A	418/366
2002	N/A		101/89	110/92	67/46	146/133	N/A	424/360
2003	N/A		68/63	904/TRI	48/38	153/107	N/A	1173/366
2004	N/A		89/79	110/83	103/85	157/119	N/A	459/366
2005	42/NA		128/119	117/82	120/100	200/194	62/56	669/495
2006	41/29		77/72	1228/TRI	80/60	114/93	88/73	1628/327
2007	34/27	117/93	95/75	144/89	126/102	171/131	66/47	753/564
2008	28/28	150/116	152/106	143/119	129/104	44/37	42/30	668/540
2009	3/1	117/94	64/57	1249/TRI	96/101	134/99	78/45	1741/397
2010	6/6	127/99	78/70	160/109	72/52	149/109	65/42	657/487
2011		38/22	48/24	118/73	47/35	66/38	33/Potluck	350/225
2012		43/21		1401/TRI	41/Potluck	44/Potluck	47/Potluck	1576/153
2013	16/Potluck							

**Azusa Siding.** Located at [South Meadow Loop](#) northbound at mile 11.505, Azusa Siding is 134' long. (10/06)

**Axle Load.** The axle load of an engine or a car is determined by dividing the total weight by the number of axles. Thus, a 1,200-pound fully loaded ballast car riding on a pair of two axle trucks would have an axle load of 300 pounds per axle. The maximum axle load at Train Mountain is 400 pounds without a special [track warrant](#). (5/03)

## B

**Backshop.** The backshop was originally built as a 40'x150' train shed to store engines and rolling stock. The train shed contains 10 tracks, each 150' long. Later additions include wings on the north and the south sides of the building each extending the full 150'. Each wing is 20' wide. The north wing contains 5 tracks, elevated 40" over a pit which is 140' long and 18' wide. The south wing has a similar pit but has only three tracks. The remainder of the pit area is taken up by a machine shop, a paint shop, an electrical shop, a parts room and a member lounge. Track

18, the northern most track in the south wing has a scales for weighing locomotives and rolling stock. All three south wing tracks have a twenty foot removable section at their center. One lift out and one roll around piece are available to fill the removable area to assure that each of the tracks can be a through track. A gantry hoist is available over this section to lift and transport heavy equipment to the machine shop area. (9/12)

**Ballast.** The first ballast used at Train Mountain was three quarter minus--a mixture of crushed stone and fines that had everything larger than three-quarters of an inch in diameter screened out. Two inches of this mixture was spread on plastic underlayment and graded The track panels laid on top and another layer of ballast was laid up to the top of the ties. As in became evident this was not the best approach due to the local climate. Moisture would collect in the fines and freeze, heaving the ties and track to the top of the ballast, requiring still more ballast on top to the point where some sections of track might have a foot of accumulated ballast.

Train Mountain now uses a three quarter clean stone mixture--a crushed stone mixture with everything screened out except the three-quarter inch diameter stone. There are no fines. A slight hump is graded into the sub-grade for drainage. Then plastic is laid on top of the subgrade. The track panels are the laid directly on the plastic. Finally ballast is laid to the top of the ties. This allows moisture to drain out of the ballast, eliminating both frost heave risk and the need for adding more ballast.

Train Mountain's standard is to lay ballast to a width of eight feet for single line track main line and twelve feet for double track main line. This recognizes the reality that rights of way perform two functions: they are rights of way for track and they are also used as walking paths. A problem with narrower rights of way is that pedestrian traffic tends to kick the ballast off of the right of way. Additionally the wider right-of-way keeps the combustible materials further from the trains. (1/13)

**Beanery.** The beanery is located on the south side of Central Station. It consists of a kitchen to provide fast food to the members and their guests while at Train Mountain. The beanery is currently out of service. (9/12)

**Beauchamp Siding.** A two track siding at the north end of [Aspen Grove Loop](#) in the [Aspen Sub-Division](#) at mile [##.###](#). The sidings are [###](#) and [###](#) feet long. The plan is to install a picnic area near this siding. A junction for an alternate route (under construction in August 2012) from [Witcombe Wye](#) will terminate at Beauchamp Siding. (9/12)

**Bi-Directional Track.** Bi-directional track allows for traffic moving in either direction at different times. Because most prototype main line tracks are bi-directional, many in the one-eighth-scale hobby prefer bi-directional track as it permits playing the railroad game more realistically.

However, safe bi-directional train operation requires a [block signal system](#) to control entry onto a section (block) of bi-directional track. Creating a [block signal system](#) for Train Mountain's many miles of main line track would be a monumental task. For this reason, Train Mountain is primarily a double track main line railroad with tracks dedicated to a single direction of travel. However, there are three locations where there is bi-directional track: [Farmersville Circle](#) to [Witcombe Wye](#), [Bottleneck](#) and [Dogwalk Highline](#). (1/13)

**Block Signal System.** A block signal system requires a very dedicated group of competent signal people to undertake the process; of both installing and maintaining a block signal system. At this time, we have individuals willing to do this in small segments of the railroad. At such

time as we name a dedicated group with enough members to ensure continued longevity, Train Mountain will consider the installment of a block signal system for the entire railroad. (1/13)

**Blue Caboose Campground.** An RV campground located next to [Vitz Yard](#) near the highway 97 entrance to Train Mountain. Blue Caboose Campground provides accommodations for the volunteers who provide the majority of the labor at Train Mountain. Blue Caboose Campground has water and 20 amp electrical service available at 18 sites. Currently there is no septic available. (8/12)

**Boiler Inspection.** Prior to 2000, Train Mountain relied on certificates from other train clubs for proof of boiler inspection on a meet-by-meet basis. Now, there can be over 100 steam locomotives at a [Triennial](#) meet.

Train Mountain has adopted the general rules in the live steam hobby for boiler safety, which are the following:

1. Each boiler must pass a hydrostatic test at 150% of maximum allowable working pressure.
2. Each boiler must have a minimum of two safety valves, set not to exceed the maximum allowable working pressure of the boiler.



TRAIN MOUNTAIN RAILROAD  
Steam Engine Boiler  
Acceptance Certificate  
Expires: \_\_\_\_\_  
Engine Type: \_\_\_\_\_  
Road Name: \_\_\_\_\_  
Road Number: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Boiler Inspection Certificate  
issued by  
\_\_\_\_\_  
examined and accepted by  
Train Mountain Railroad  
Date: \_\_\_\_\_  
Train Mountain Railroad  
Boiler Inspector  
Boiler Certificate #2



TRAIN MOUNTAIN RAILROAD  
Steam Engine Boiler  
Inspection Certificate  
Expires: \_\_\_\_\_  
Engine Type: \_\_\_\_\_  
Road Name: \_\_\_\_\_  
Road Number: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Tested Pressure: \_\_\_\_\_  
Safety Relief #1: \_\_\_\_\_ PSI  
Safety Relief #2: \_\_\_\_\_ PSI  
Safety Relief #3: \_\_\_\_\_ PSI  
Safety Relief #4: \_\_\_\_\_ PSI  
Date of Test: \_\_\_\_\_  
Train Mountain Railroad  
Boiler Inspector  
Boiler Certificate #1

While the State of Oregon ASME only requires testing for 100% of operating pressure, Train Mountain tests at the hobby wide standard of 150% of operating pressure so that its certification will be acceptable at other live steam train clubs and meets.

The first time during each calendar year that an engineer brings a steam engine to Train Mountain, he/she is requested to check in with the Boiler Inspector/Tester. If the engineer can show a current certification letter, form or card from another club verifying that minimum standards as set forth in this section have been met, then the Inspector will issue a Green Tag,

Boiler Certificate #2, valid through the expiration of the certificate. Minimum standards must include identification of the issuing organization, description of the boiler/locomotive, the inspector's signature, expiration date and must record the tested hydro pressure as at least 1.5 times the stated relief pressure of the safety valve or valves.

If the engineer does not have a certificate from a recognized train club, then the Train Mountain Boiler Inspector/Tester will test the boiler to determine that it meets Train Mountain requirements. Once the boiler passes the test, the Tester will then issue a Green Tag, Boiler Certificate #1, valid either through the end of the meet or through the end of the current year, as the inspector shall deem appropriate.

The two certificates are printed on opposite sides of the Green Tag. The Green Tag is designed to be tied to, or near, the left window of the steam locomotive cab so that it is clearly visible as the engine passes the [Inspection Station](#) between [Ellingson Yard](#) and [Klamath & Western Junction](#). (1/13)

**Bone Yard.** An area on the east side of [South Meadow](#) used to store materials and salvaged equipment. One of three [burns pits](#) is located in the bone yard. (9/12)

**Bottleneck.** The sole trackage in the Bottleneck Sub-Division, Bottleneck is a connector between the main line tracks on the west side of [Train Mountain Road](#) at [Hairpin Curve](#) (mile 10.036 and mile 0.713) and the main line tracks on the east side of [Train Mountain Road](#) at [Diamondback Junction](#) (mile 6.194 and mile 3.026), near the top of the [Serpentine](#). The source of its name is that it is the only bi-directional single-track grade crossing at [Train Mountain Road](#).



In addition to providing variety in route selection, Bottleneck provides an alternative means of ascent or descent when portions of either of the connecting tracks are closed due to repairs, construction or derailment. The most recent example was the re-grading of the track from [Panama Canal](#) and [Hairpin](#) in 2009. (9/12)

**Bottleneck Sub-Division.** See [Bottleneck](#). (5/03)

**Braking Systems.** There are a number of approaches to braking systems.

Steam locomotives most often rely on steam brakes on engines and vacuum brakes on cars because it is a simple process to generate a vacuum from steam. Air brake systems are rare on steam locomotives because an air compressor would have to be powered either by a steam powered compressor or by a steam powered generator, neither of which are reliable on 7½” gauge locomotives . Where air brakes are used on steam locomotives, their compressors rely on battery power.

Gasoline powered engines have alternators to power a compressor. A compressor can provide 100 p.s.i., whereas the atmospheric pressure at sea level from a vacuum pump is 14.7 p.s.i. and at 4,000' is 12.7 p.s.i.. Train Mountain uses a Thomas 12-Volt DC Compressor (Model 405ADC38/12c), which is rated for continuous duty at 100 p.s.i.

In most cases, an engine and a train of up to five cars can rely on engine braking to bring the train to a safe stop. For longer trains the number of cars requiring brakes will vary with their weight and load. Trains with heavy cars may need brakes on every car.

Train Mountain will be equipping its own trains with brakes in the next few years and at that time will develop a comprehensive set of brake rules based on its own hands-on experience.

There is also the problem of keeping a train not under power from moving when parked on a grade. A hand-operated brake is often the simplest solution. An alternative is to set the vacuum or air brake system while a train is parked.

One thing is for certain: "Feet on the ground" and "throwing out an anchor" are not acceptable braking systems. See also: [Stopping Distance](#). (1/13)

**Brobdingnagians.** In 1726, Jonathan Swift published *Gulliver's Travels*, a fictional account of travels to several remote nations of the world. Most familiar to most readers is the first nation

visited by Gulliver, where the people are very tiny, Lilliputians. Less well known is the second nation he visited, where the people are giants, Brobdingnagians. See [Building Scale](#). (11/04)

**Bridges.** Rather than moving material to create bridge opportunities, Train Mountain moves material to avoid bridges. Where raised track is required, Train Mountain uses earth embankments instead of bridges and trestles. Where the right of way crosses over a creek or drainage, we try to use a culvert instead of a trestle or bridge.

In each case the choice is driven by the desire to reduce the long-term maintenance cost associated with the bridge or trestle. But where one track crosses over another, a bridge is often the only choice. To date Train Mountain has built a total of eight bridges of which five have been installed and three are awaiting installation on [Shepherd's Grade](#) when that track is laid. They are the following:

Name	MP	Type	Year Built	Length	Internal Width	Internal Height	Clearance Under	Paint Color
<a href="#">Ellingson Bridge</a> (double)	1.00	steel beam	1992	12' 0"	142"	n/a	103"	silver
<a href="#">Wright Bridge</a>	5.36	steel truss	1999	20' 0"	64"	n/a	87"	silver
<a href="#">Crisp Bridge</a>								
Genevieve Span (east)	0.00	steel truss	2000	22' 6"	64"	83"	90"	silver
Art Span (west)	0.00	steel truss	2000	24' 0"	64"	83"	116"	silver
<a href="#">Cox Bridge</a>	10.68	steel truss	2000	21' 6"	64"	83"	85"	silver
<a href="#">Perrin Bridge</a>	0.00	steel truss	2000	28' 0"	64"	83"	100"	silver
<a href="#">Shepherd's Grade</a> #1	n/a	steel truss	1999	20' 0"	64"	n/a	n/a	black
<a href="#">Shepherd's Grade</a> #2 (dbl)	n/a	steel truss	2000	20' 0"	128"	83"	n/a	silver
<a href="#">Shepherd's Grade</a> Chiloquin #3 (dbl)	n/a	steel truss	2000	20' 0"	128"	83"	n/a	silver
Per standards, minimum dimensions for any new single track bridge					64"	83"	83"	silver
Per standards, minimum dimensions for any new double track bridge					112"	83"	83"	silver

The next bridge to be built will most likely cross [South Chiloquin Road](#) to [Shepherd's Grade](#) for the climb to [Caboose Ridge](#). The present plan calls for it to be a truss bridge sheathed to look like an old style covered bridge. This bridge will be built when [Caboose Ridge](#) is developed. (11/06)

**Building Code.** From time to time members ask if it is all right for them to construct buildings for Train Mountain. Train Mountain is delighted to have more buildings and even more towns. However, to ensure longevity and ease of long-term maintenance, it does require that all new buildings be built in conformance to the Train Mountain Building Code, which is as follows:

1. Scale: All buildings shall be one-sixth scale, or two inches to the foot. Think of them as being occupied by Barbie, Ken, GI Joe and their respective entourages, all in period dress. See [Building Scale](#).
2. Foundations: Foundations should be constructed of 2" x 3" plastic tie or Trex type material. Inlay the foregoing with ¼" inch exterior plywood. Galvanized screws should be used for construction of the foundation. Foundations should be painted with gray paint to simulate concrete or painted red with gray lines to simulate brick. Foundations should be under all protrusions such as porches and decks.
3. Eyebolts: At least four ¼" inch eyebolts should be screwed into the foundation at the building corners and at other locations as needed to permit the use of lifting hooks to

move the building from its track side location for transport to the shop for maintenance or repair. Typically, buildings are brought in for repair every three to five years.

4. Framing: The interior skeleton should be made of 2" x 2" material as needed, or with  $\frac{3}{4}$ " inch plywood with an outer skin applied to detail the building. Small structures may use downsized sheeting as long as strength is adequate to keep walls from warping. Interior bracing is necessary in most cases to stabilize the walls. If the interior will be furnished, bracing must not be apparent. 1" x 2" or greater framing should be used to provide a lip for the roof to be set on.

5. Roof: Must be sealed to withstand rain sleet, snow and hail. Wood shingles are discouraged, as they are too fragile for Chiloquin's harsh winters. We strongly suggest the use of metal or composition material. Roof joints should be made with flashing material, and sealed with caulk. The ridge cap should be functional and can be made with a strip of rolled roofing, copper, metal ridge cap material or equivalent. The roof structure must provide access to the interior, either by being hinged or removable.

6. Vents: Air vents one inch in diameter should be placed at each end of the building. Other vent placement may be required in the case of odd building configurations.

7. Doors: Doors larger than 12" standard walk-through doors should be operational to provide reach in access to the inside of the building. When not in use, the door should be securely bolted shut so that small animals and birds cannot get inside and build nests.

8. Windows: All windows should provide a clear view to the interior (either glass or plastic panels), with the exception of stained glass in churches.

9. Paint: All wood to be painted must be primed first. All exterior galvanized screws and nails should be set and filled prior to painting. Paint should be semi-gloss exterior latex paint or good quality oil-based exterior paint. (1/13)



**Building Scale.** Every miniature railroad has buildings along the right of way. For the smaller scales, from Z to G, the buildings will almost always be in the same scale as the trains. But what is the ideal scale for a 7½" gauge railroad?

To begin with, trains of several different scales operate on 7½" gauge track. Historically, the most common scale has been 1.5" to the foot, or  $\frac{1}{8}$  scale. More recently narrow gauge equipment, 2½" to the foot, and larger, has been gaining in popularity. Unlike the smaller scales, the "audience" is full size people riding on the trains, not [Brodingnagians](#) looking down on a tiny train set.

In short, the problem is how to make the passengers see themselves in the picture looking out and not outside the picture looking in. The answer lies in perspective. If passengers are looking *out at* buildings and not *down on* buildings, they will feel that they are a part of the scene. Being in the scene encourages a willing suspension of disbelief.



It turns out that a passenger riding on a 1.5" or 1.6" scale train going past a two-story 1/6 scale building is looking at the building and not down on the building. At the same time, a 1/6 scale building does not look "out of scale" from the perspective of that same passenger. In other words, two-story 1/6 scale buildings prove to be ideal for a 7½" gauge railroad carrying full sized passengers.

Unfortunately, 1/6 is not a standard scale. "Doll House" scale is 1" to the foot, or 1/12 full size. The dolls, furniture, automobiles and tea sets for that scale do not look right for either 1/8 or 1/6 scale. For the most part, finding these kinds of items to furnish the porch or interior of a 1/6 scale building is strictly a hit or miss proposition.

The exceptions are Barbie, Ken, GI Joe and their peers and a flood of policemen and firemen, in the aftermath of 9/11. The adults are 10" to 12" tall, which scales out to about six feet. Though it is rare that Barbie's furniture or equipment is appropriate for a building situated along the right of way, the basic dolls can model hand made period costumes quite well.

A real challenge is to find dolls to be used in the cab of an engine for an engineer or fireman. 2½" narrow gauge engines can use Ken or G.I. Joe as a basic figure. Figures for a 1/8 scale locomotive or caboose are more difficult.

To look right in the cab of a 1.5" or 1.6" scale engine cab, the ideal doll is 9" tall, which would scale out to six feet. The only dolls to meet these requirements we have seen thus far are some 9" Star Trek Second Generation dolls. Now, the only problem for the hobby is that all of the figures in 1.5" and 1.6" scale trains will look like Captain Picard, Tuvok or Beverly Crusher. (11/06)

**Burn Pits.** There are three locations at Train Mountain where pits have been created to allow a place for forest debris to be stored until it can be burned with minimal risk of creating a wild fire. Two of the burn pits are accessible by train. One is alongside the [Burn Pit Cutoff](#) in the [Central Division](#), another near [Hope Circle](#) in the [Douglas Division](#). The third is located in the [bone yard](#) and is accessible only by road (9/12)

**Burn Pit Cutoff.** Located in the [Central Sub-Division](#) between milepost 1.021, at the entrance, and mileposts 1.262 and 9.508, at the exit The Burn Pit Cutoff was installed in 2011 to allow the transport of forest waste to the [burn pit](#) by train. (8/12)

## C

**Caboose Ridge.** Caboose Ridge is located on the east side of Train Mountain between Highway 97 and [Elizabeth River](#) and extending approximately 1 mile north of [South Chiloquin Road](#) There are 23 prototypical (4'8-1/2" gauge) cabooses located on either side of Caboose Ridge. (9/12)

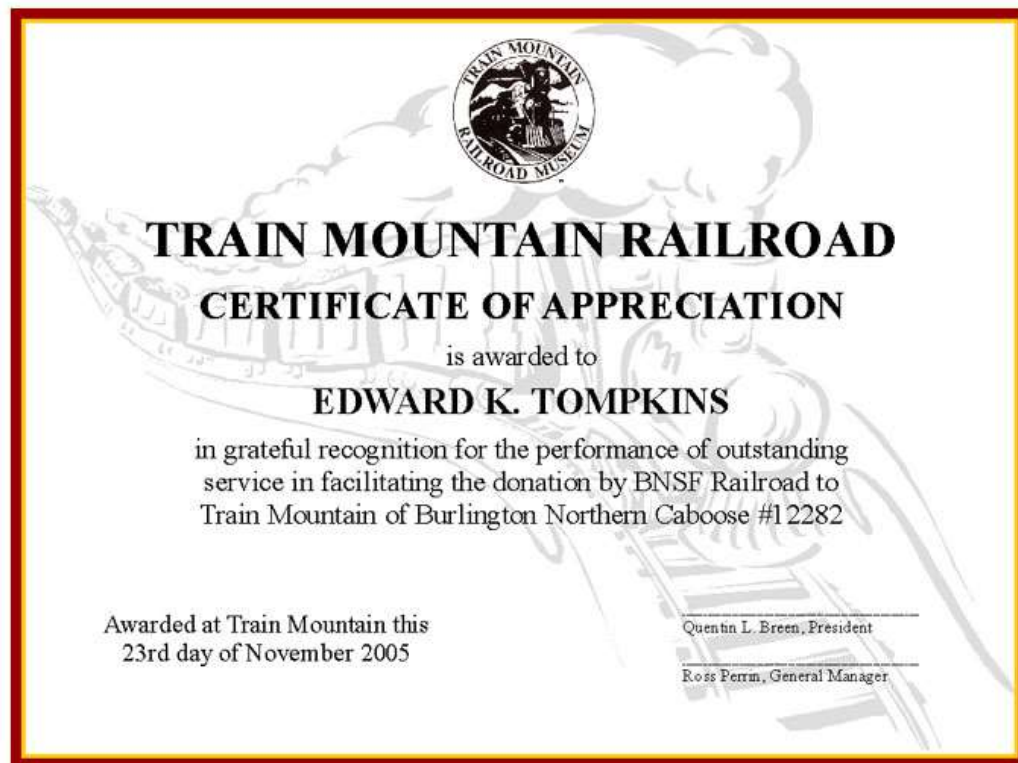
**Caboose Ridge Division.** The Caboose Ridge Division will consist of all track north of [South Chiloquin Road](#) leading to and on [Caboose Ridge](#). At present, there are three subdivisions planned within the Caboose Ridge Division, as follows: [Shepherd's Grade](#), [Eastside](#) and [Topside](#). See also: [Douglas Division](#) and [Romulus Division](#). (5/03)

**Central Station.** Central Station is located just to the east of [Train Mountain Road](#). Central Station is the location of the Train Mountain Office, the [Hall of Flags](#), the [Company Store](#),

three guest rooms, a guest suite and the bunk room. The [Beanery](#) is also located in Central Station. Central Station is the main boarding area for passenger trains at Train Mountain. (9/12)

**Central Sub-Division.** The Central Sub-Division includes [Central Station](#), the [Main Yard](#) and [Six-Acre Campground](#). It connects with the [Rio Grande Sub-Division](#) at [South Portal Circle](#) (mile 1.321 and mile 9.410), with the [Serpentine Sub-Division](#) at the [Hilltop Grade Crossing](#) (mile 5.920 and mile 3.265) and the [Klamath & Western Sub-Division](#) at the [Klamath & Western Junction](#) (mile 3.993 and mile 5.433). (10/06)

**Certificate of Appreciation.** From time to time, someone does something really special for Train Mountain and we want to say "thank you" in a special way. Thus, the framed Certificate of Appreciation, as follows:



So far, Certificates of Appreciation have been issued to:

Spectra-Physics Lasers, Inc., Bill and Cheryl Beaubien, for the donation of a Sunnen Power Cylinder Hone;

Edward Tompkins for assisting in obtaining the donation of the Burlington Northern Caboose #12282 by BNSF Railroad;

The Ralph McNutt family for the donation of a full-size velocipede and trailer, Ralph's 7½" gauge handcar and miscellaneous tools;

Charles W. Partridge for his donation of a DR Leaf and Lawn Vacuum; and

Steve Panzik for his efforts in obtaining a Railway Express baggage cart. (8/12)



**Chiloquin.** The town of [Chiloquin](#) is located near the confluence of the [Williamson](#) and [Sprague](#) Rivers, having been the site of Indian dwellings from early times. Chiloquin is the white man's form of a Klamath Indian name *Chaloquin*. Chaloquin was the village chief of the old Indian town of *Bosuck Siwas*, or Painted Rock, and his name was given as *Chaloquenas* in the treaty of 1864. Two sons, George Chaloquin and Mose Chaloquin, served with the state troops in the Modoc War.

Chiloquin is 30 miles north of [Klamath Falls, Oregon](#) and 35 miles southeast of [Crater Lake National Park](#). [Chiloquin](#) had its first Post Office in 1912 and was incorporated in 1926. In the 1920's, [Chiloquin](#) was a community of 2,000, supported by five sawmills. Now that the mills are gone, population has been about 750 for the past ten years. Most of the area's population growth in recent years has been outside the city limits.

[Chiloquin](#) has a highly rated volunteer fire department, a medical clinic, a well regarded volunteer ambulance service, an excellent library, two food markets, a very well stocked hardware store, a post office, an extensive book store with an enormous used book section, a gas station and 2 hair/tanning salons. In 2004 a new Community Center opened, which included space for the Chiloquin Library, the Two Rivers Village Art Gallery and Community Center. Most people travel to Klamath Falls for major shopping. (1/13)

**Colton.** Located southbound on the west Main at mile 5.746, Colton has six sidings and four businesses. Colton Cement Company, Perrin & Wright Metal Works, Spring Creek Packers and Brother Bill's Farm Equipment. (10/06)

**Company Store.** The Train Mountain Company Store is located in [Central Station](#) next to the [Hall of Flags](#). The Company Store is an excellent source of supplies for the 7-1/2" gauge hobbyist. (9/12)

**Conductor.** The first rule in the [Rules of the Road](#) requires that every train have both an engineer and a



conductor. The reason for this rule is grounded in the functions that a conductor performs.

The conductor is responsible for flagging two milepost lengths behind a stopped train. It is not enough for the engineer to place a flag stand on the track two-milepost lengths behind a stopped train and go back to the engine and attempt to get it going. This does not assure that the following train will stop. A live body who will wave a flag and, if needed, raise a hue and cry, creates a substantial probability that the approaching train will stop.

Although a broken down train on the main line may be inconvenient, an engineer with his head in the cab of a steam locomotive running into the rear of a stopped train can cause serious personal injury. Conductors waving red flags by day (and flashlights by night) behind stopped trains and calling out if needed, have prevented more accidents than any other single safety rule in the hobby.

The one exception to this rule is for speeders and other very very small locomotives that can be easily removed from the track by one person in the event of a break down. We grant that exception because the reason for the rule is to have a conductor available to flag in case of a non-functioning locomotive. If the problem locomotive can easily be removed from the track, then there is no reason for a conductor.

Many engineers ask their conductors to serve as the communications officer for maintaining contact with both the dispatcher and other trains. Long trains have a flagger in the last car. Really long trains have brakemen every ten cars throughout the length of the train in addition to the flagger. For these trains, the conductor is ideally situated to maintain radio contact with the flagger and brakemen.

First time engineers at Train Mountain often ask an experienced engineer to sit in the conductor's seat the first time around the track to act as navigator and to explain the locations of rest stops, water stops and shortcuts back to Central Station. Even more important, a conductor can be a great help with directions, refueling, breakdowns, a medical emergency and derailments. Putting a derailed engine back on the track is a whole lot easier with two backs than one. (11/04)

**Containerville.** Containerville is located inside the loop created by [Grand Junction Track #4](#). It began in 2004 with 10 shipping containers installed on concrete foundation blocks. Ten more containers followed in 2011/12. The 20 containers in the south row will have siding access to [Track #4](#) from [Grand Junction](#). There are plans for the installation of an additional 20 containers in the north row. All containers will have access by a 20' transfer table served by a siding off of [Track #4](#). The first 10 containers and their siding access tracks were placed in service in the summer of 2005. The second 10 containers are being placed into service in 2012. (9/12)



**Cooperstown Connector.** Connecting the main line bypass just after the [Long Tunnel](#) at mile 3.701 with the approach to the Passenger Yard at mile 10.876, the Cooperstown Connector, the idea of John Cooper, was surveyed and staked by Bill Shepherd, excavated by Richard Cox and laid by Art Crisp and Charlie-Bill Schubert, all in 2004 and 2005. (1/13)

**Cooper Siding.** Located in the [Friends division](#) on northbound track between the west leg of [Witcombe Wye](#) and the west leg of [Schubert Wye](#) at mile [##.###](#) in the [Hope sub division](#). Cooper siding is [###](#) feet long and includes a [###](#) foot stub siding at the north end. (8/12)

**Copperhead Junction.** A double track wye located in [Serpentine Sub-Division](#) west of [Youngstown](#). Copperhead Junction provides access between [Dogwalk](#) and the [Serpentine](#). (9/12)

**Couplers.** The basic design for the standard coupler used in 1.5" and 1.6" scale railroading was developed by Bill McCready in the 1970s and based on an AAR E-50 prototype coupler. The original McCready Coupler has been out of production for many years.

In the 1980s, that pattern was copied by Mercer Locomotive Works for its manganese bronze loop shank coupler. Reasonably priced, the Mercer coupler enjoyed considerable popularity and became the standard for the hobby in the 1980s and early 1990s. When Mercer ceased production in the mid 1990's, two stainless steel couplers based on the same pattern became the only alternative for an authentic looking coupler that was compatible with the McCready/Mercer couplers already in service.



The first is manufactured by Superscale. As with all Superscale products, the execution and finish is superb. While beautiful to look at, the pricing on this coupler limits its use to a showpiece engine or car.

The other stainless steel coupler is made by L&S. It is based on the same design and differs from the Superscale coupler only in the shape of the shank, detail and the exquisiteness of the finish. Though more reasonably priced than the Superscale product, the limitation on the L&S product is that it is available only by special order and in limited quantities.

After a careful evaluation of the alternatives, Train Mountain went into coupler production in 2000. So that it will be compatible with the most number of couplers already in the hobby, the design is mechanically identical to existing McCready, Mercer, Superscale and L&S couplers and the shank is along the lines of the Mercer and L&S coupler. However, so that there can be no doubt, the coupler has "TMRR" lettering. The coupler is made of cast ductile iron. It was field tested in August of 2004 when every car in a 190 car train used a Train Mountain coupler without a single coupler failure.



So that there will continue to be one *de facto* coupler standard in the hobby, Train Mountain has made the commitment to produce this coupler in sufficient quantity that there will always be 100 pair of couplers in stock and available to the hobby. The first production run was 500 pair and the first couplers were made available to the hobby at IBLS 2000. They are now carried in the Train Mountain Company Store.

The coupler is offered in two forms. One is without anything within the loop shank. This permits the purchaser to insert the traditional springs and bushing for cushioning. The other form is with a block of compression rubber that performs the same function. Train

Mountain uses this configuration for all of its newly installed couplers. (10/06)

**Coupler Height.** Standards are an elusive thing in the 7¼" and 7½" gauge train hobby. There have been no fewer than four different widely used coupler height standards: 4 <sup>7</sup>/<sub>16</sub>", 4 <sup>5</sup>/<sub>16</sub>", 4 <sup>3</sup>/<sub>8</sub>" and 4.38". We have determined the following coupler height history thanks to the help of Ken Casford, Nick Edwards and Gordon Sherwood.

The 4 <sup>7</sup>/<sub>16</sub>" standard first appears in print in the 1962 Little Engines Catalog. This same standard was used by Riverside Live Steamers from its inception and formally adopted in 1964. It also appears on page 137 of the 1970 Railroad Supply Corporation ("RRSC") Catalog #4.

That same 1970 RRSC Catalog shows the Golden Gate Live Steamers ("GGLS") standard as 4 <sup>5</sup>/<sub>16</sub>". The 1976 RRSC *Engineering Handbook* also states that the GGLS standard as being 4 <sup>5</sup>/<sub>16</sub>". GGLS, founded in 1936, first published its standard of 4 <sup>5</sup>/<sub>16</sub>" in 1963.

The next RRSC Catalog, #5 published in 1973, shows a coupler height standard of 4 <sup>3</sup>/<sub>8</sub>" adopted from Los Angeles Live Steamers ("LALS") and a standard of 4.38" adopted from BLS. All subsequent RRSC catalogs use the 4.38" standard. LALS first published its standard in 1966 at 4 <sup>3</sup>/<sub>8</sub>". It revised its standard in 1980 from 4 <sup>3</sup>/<sub>8</sub>" to 4.38".

Train Mountain has adopted a **coupler height standard of 4 <sup>3</sup>/<sub>8</sub>" from the middle of the coupler to the top of the rail for an unloaded car, with an allowed tolerance of plus or minus <sup>1</sup>/<sub>16</sub>".** We prefer 4 <sup>3</sup>/<sub>8</sub>" to 4.38" (actually a difference of only .005 between 4.380" and 4.375") because most of us carry tape measures marked in <sup>1</sup>/<sub>8</sub>" and <sup>1</sup>/<sub>16</sub>" divisions and very few carry tape measures marked in decimals. This height seems to be the generally accepted standard for the hobby and is, conveniently, exactly between the other two standards. (1/13)

**Cox Bridge.** The [No. 2 track](#) from [Grand Junction](#), which goes through Six-Acre Campground, is connected to [Wedding Cake](#) by the Cox Bridge at mile 10.672. The bridge crosses over the [No. 3 track](#) from [Grand Junction](#) and the main line track leading to the [Long Tunnel](#). Cox



Bridge is named for Richard *Cox*, who has been a faithful employee of Train Mountain since 1991. (10/06)

**Coyote Alley.** Named for Wile E. Coyote, a frequent visitor to [South Meadow](#). Coyote Alley is a road which traverses [South Meadow](#) from [Molly Lane](#) to [Katy Lane](#). (1/07)

**Coyote Meet Siding.** Located on southbound track between south leg of [Schubert Wye](#) and north end of [Witcombe Meet Siding](#) at mile [##.###](#) in the [Hope sub division](#). Coyote meet siding is [###](#) feet long. (8/12)

**Crane Water Siding.** Located on northbound track between [Schubert Wye](#) and [Hope Circle](#) at mile [##.###](#) in the [Hope sub division](#). Crane siding is [###](#) feet long and includes a [###](#) foot stub siding near the north end. A water tank, Crane station and a Gramps tank car are located at Crane Water Siding. (9/12)



**Crisp Bridge.** Crisp Bridge will connect the returning tracks from the [South Chiloquin Road Bridge](#) and [Caboose Ridge](#) with [Wedding Cake](#) and has two spans. The west span (24' long) is named in honor of Art Crisp, who has done so much for so many years to make the Train Mountain dream a reality. The east span (22' 6" long) is named in honor of Genevieve Crisp, who encouraged and supported Art for all of those years, (i.e. she let him do it). See also, [Crisp Yard](#).

Art Crisp has been a resident member and faithful volunteer at Train Mountain and [Klamath and Western Railroad](#) since 1982 and in that time has completed numerous projects. The following are samples of projects that Art Crisp has completed since 1994:

1994: Designed, laid out and joined the switches and tracks in Crisp Yard. Designed, built and installed the switches and connecting tracks at Central Station.

1995: Designed, built and installed the 27 stub switches and related storage tracks around the Ellingson Turntable.



1996: With the help of Bert Van der Kooy, cut and assembled all of the components for four hundred 75' radius switches and fifty 100' radius switches. Built the racks to hold the parts for 450 switches.

1997: Designed and joined the switch ladders and connecting tracks for the Train Shed East Lead Tracks and the [Main Yard](#) Spur Tracks. Revised the grades and curves of the [Klamath & Western Railroad](#) track plan so that it could be re-built to eliminate existing operational problems. Designed and installed the new Switch Factory at the [Klamath & Western Railroad](#).

1998: Designed and installed the switch ladders and connecting track for the Train Shed West lead tracks, the West Ladder of the [Main Yard](#) and the South Ladder adjacent to the [Back Shop](#). Rebuilt all of the trucks for the [Klamath & Western Railroad](#) articulated riding cars. Designed and joined the switch ladders and connecting tracks for [Crisp Yard](#). Built diamonds for [Blue Caboose Campground](#) and [Copperhead Junction](#). Supervised the rebuilding of the Klamath & Western Turntable to accommodate 20' engine consists.

1999: Designed and joined all of the switch ladders and connecting track for the East Ladder and the Middle Ladder of the [Main Yard](#). Built two diamonds out of steel rail for [South Portal](#).

2000: Designed and cut all the pieces for the four bridges built during the winter of 1999-2000. Supervised the re-building of the two transfer-tables at the unloading area adjacent to [Crisp Yard](#). Built three [diamonds](#) for [Hairpin Junction](#) at the west-end of [Bottleneck](#), two more for [South Portal](#) and one for [Midway Circle](#). (8/12)

**Crisp Yard.** Crisp Yard is located in the [Central Sub-Division](#) adjacent to the unloading area. Its 24 steaming bays are served by two transfer table hoists on the west side and lead tracks with access to the main line on the east side. Crisp Yard is named for Art Crisp who three times laid and





joined the switches and track for Crisp Yard in its three separate iterations, the first in 1994 and the last in 2004.

**Crossbucks.** The most common railroad warning sign is the crossbuck, usually located on a road at the edge of the railroad right of way. Crossbucks at Train Mountain have gone through two phases. For the first ten years, they were made from 1" x 4" x 28" lumber painted white with "RAILROAD CROSSING" in black lettering. The wood proved to be a high maintenance item.

In 1999, Train Mountain acquired patterns for 4" x 21½" cast aluminum crossbucks from the late Lyle Brown of the [Pacific Northwest Live Steamers](#) in Molalla. At that time, enough sets of crossbucks were cast from these patterns to replace all of the wooden crossbucks, provide for future grade crossings and provide an inventory available in the Train Mountain [Company Store](#) for sale to other operators of 7¼" and 7½" gauge tracks. In 2006, the second production run provided enough sets to provide an inventory for both Train Mountain and Company Store needs.

We prepare the crossbucks by drilling a ¼" hole in the center and milling a 1" wide notch on opposite sides of two crossbucks so that a pair of crossbucks will fit on each side of a 1¼" piece of galvanized pipe. Then the cross bucks are powder coated white and black paint is applied to the "RAILROAD CROSSING" portion of the signs. Now that all of the crossbucks have been replaced, we expect that maintenance will be limited to touching up the black lettering every ten years.

Crossbucks are mounted 6' 0" above the ground on a 6' 6" long 1¼" galvanized pipe threaded on both ends. A 1¼" galvanized coupling attaches the pipe to a 36" galvanized pipe set in concrete that protrudes six inches above the ground. The top of the pipe has a 1¼" galvanized cap to keep the rain out so that water does not accumulate inside and freeze, splitting the pipe.

Each grade crossing has two crossbucks, each on its own pole, one facing each direction of vehicle traffic. The poles are located at a point that is both four feet from the centerline of the closest track and at the edge of the roadway.

If the grade crossing has two tracks, there is an additional TWO TRACKS warning sign, 8½" below the center of the crossbucks. At present that sign is made from a 1" x 4" x 8" piece of wood painted white with black lettering. We are considering having a pattern made for a cast aluminum TWO TRACKS sign. (1/07)

**Crossing Signals (Full Size).** At present, there are two sets of full size crossing signals at Train Mountain. The first is just inside the main gate from South Chiloquin Road protecting the four-track crossing at [Grand Junction](#). These signals and the accompanying crossing gates are fully operational, having gone into service during the summer of 2000. Presently they are maintained by John Cooper.



The second full size crossing signal is on Katy Lane near South Chiloquin Road and protects the west Rio Grande Loop crossing. This has not been activated because there is no 120-volt power nearby. Activation will have to await installation of [Solar Panels](#) for the nearby Denver & Rio Grande Western cabooses.

These full size crossing signals are part of a number of similar items donated to Train Mountain by CSX Railroad in 1999, as a result of the efforts of Steve Panzik, a member who was a CSX engineer living in Florida at that time. Steve supervised the installation of the first signals

during the summer of 1999 and Sellar Nugent made the Main Gate crossing signal and gates operational during the summer of 2000. (10/06)

**Crossing Signals (Scale).** Protecting grade crossings with crossbucks is a simple matter. Adding crossing signals to [Crossbucks](#) requires a source of electric power. For that reason, at present only those grade crossings close to buildings have crossing signals. The next step will be powering crossing signals with [Solar Panels](#).

For the most part, the crossing signals are made from off the shelf components. The flashing red lights are standard Peterson 4" truck tail lights. They are connected to a ½" electric Condulet using two ½" x 3½" and two ½" x 2" galvanized pipe nipples and two ½" galvanized elbows, all of which are painted silver. The only pieces requiring fabrication were the early versions of the eyelid/sunshade assemblies, which were initially aluminum painted black and are now powder coated black steel.



The whole assembly is attached, using an ¼" muffler clamp, to the crossbuck pole 4' 6" above the ground. If two sets of lights are installed back to back on the same pole, then two ¼" bolts are used to bolt the Condulets together. In either case, a ¼" hole in the back of the Condulet lines up with another ¼" hole in the pole for wiring. (4/03)

**Crossroads Sub-Division.** (4/13)

**Crossroads Junction.** A future rail junction to be located in the [Aragon Sub-Division](#) of the [Friends Division](#). (11/12)

**Cucamonga Siding.** Located at the north end of [South Meadow Loop](#) westbound at mile 11.61, Cucamonga Siding is 104' long and has a 65' spur. See also [Anaheim](#), [Azusa](#). (11/06)

## D

**Dam #2** Located in the [Douglas Division](#), Dam #2 was created in order to allow track to be laid across the [Elizabeth River](#) so that the [Douglas Loop](#) could be completed back to [North Portal](#). (1/13)

**Dam #3** Located in the [Douglas Division](#), Dam #3 was created in order allow to track to be laid across the [Elizabeth River](#) so that a shorter route could be created back to [North Portal](#). (1/13)

**Dam #3.5** Located in the [Douglas Division](#), Dam #3.5 was created in order to allow track to be laid across the [Elizabeth River](#) so that a return track could be created to return northbound on the [Douglas Loop](#) toward the [Elizabeth River Loop](#) without accessing the [Timberlake Railroad](#). Dam #3.5 also carries road traffic. (1/13)

**Dam #4** Located in the [Douglas Division](#), Dam #4 was created in order to allow track to be laid across the [Elizabeth River](#) so that the [Douglas Loop](#) could be created. (1/13)

**Diamond.** A point on a railroad where two tracks intersect at grade level. (9/12)

**Diamondback Junction.** A double track wye located in [Serpentine Sub-Division](#) west of the [Motorpool](#). Diamondback Junction provides access between [Bottleneck](#) and the [Serpentine](#). (9/12)

**Diesel Horns.** Modern diesel locomotives have horns with from three to five notes. You can reproduce these notes either electrically or with air.

For four note horns, the most common, the notes are A, C, D and F and twelve volt horns with these notes used to be available from General Motors dealers, but now are available only from automobile junk yards. The Delco-Remy part numbers are: A Note #D1936, C Note #D1939, D Note #D1934 and F Note #D1935.

Signalton sells air horns with the right notes. This is particularly attractive if you already have a compressor to operate an air brake system. (5/03)

**Divisions.** So far, there are four divisions within Train Mountain Railroad. [Romulus Division](#) is everything south of South Chiloquin Road. [Douglas Division](#) is all trackage running north from the [South Chiloquin Road Tunnel](#) to the north end of the Elizabeth River valley [Caboose Ridge Division](#) will be all trackage running north from the [South Chiloquin Road Bridge](#). The [Friends Division](#) is all of the Train Mountain track north of the [Douglas Division](#). (10/06)

**Dogwalk Highline.** Re-building the roadbed and re-laying the track at Dogwalk Highline in 1999 required installing two bi-directional track segments, 554' and 375' long respectively. These were necessary to maintain right of way width standards without cutting into a steep hillside or removing a number of healthy Ponderosa Pine trees. Bob Hayes designed and installed a block signal system on Dogwalk Highline to protect these sections of bi-directional track. (8/12)

**Dogwalk North Water Siding.** Located on [Dogwalk Highline](#) westbound at mile 6.771, Dogwalk North is a 171' passing siding with water available from a hose inside the water tank structure. (10/06)

**Dogwalk South Water Siding.** Located on [Dogwalk Highline](#) eastbound at mile 8.461, Dogwalk South is a 142' passing siding with water available from a hose inside the water tank structure. (10/06)

**Dogwalk Sub-Division.** Dogwalk Sub-Division is co-extensive with [Dogwalk Highline](#). It connects the [Serpentine Sub-Division](#) at [Copperhead Junction](#) (mile 6.512 and mile 2.649) with [Douglas Loop](#) in the middle of [South Chiloquin Road Tunnel](#) (mile 6.98 and mile 8.29). Dogwalk is notable for two segments of [Bi-Directional Track](#). It is named to commemorate the Founder's many walks with a wonderful golden retriever named Lucky during the 1988 and 1989 academic school year while his daughters, Katy and Molly, were on an academic exchange year with their mother in England. (10/06)



**Douglas Division.** The Douglas Division consists of all of the right of way in the valley north of [South Chiloquin Road Tunnel](#). There are three sub-divisions within the Douglas Division, as follows: [Aspen Grove Loop](#), [Elizabeth River Loop](#), and [Douglas Loop](#). The Douglas Division

is named for Randy Douglas, the first general manager of Train Mountain from 1987 to 1994, who started Train Mountain towards what it is today. See also: [Caboose Ridge Division](#), [Friends Division](#) and [Romulus Division](#). (8/12)

**Douglas Loop.** That portion of the main line located north of the [South Chiloquin Road](#) from mile 6.98 to mile 8.29. Named for the *Douglas* Iris plants that grow in Douglas Meadow in profusion in the springtime. (11/04)



**Douglas Siding.** Located on [Douglas Loop](#) next to Douglas Meadow at mile 7.610, the passing siding is 150' long and the East Spur is 13' long. The siding is named for the wild Douglas Iris plants, which grow in the adjoining Douglas Meadow and bloom sometime between April and June, depending upon the weather. (11/04)

**Drawbars.** Used instead of couplers to connect locomotives and rolling stock, drawbars are a simple and inexpensive means as coupler substitutes. Typically, they are made by drilling a  $\frac{3}{8}$ " hole  $\frac{1}{2}$ " from each end of a piece of  $\frac{1}{2}$ " x 1" x 12" bar stock. The drawbar is then installed between two cars as two couplers would be installed.

The Train Mountain experience is that drawbars are not satisfactory as a long-term replacement for couplers. They simply do not have the flexibility needed to avoid binding up over uneven track and are responsible for numerous derailments, especially when the cars they are connecting are running either empty or with light loads. Train Mountain has replaced all of its drawbars with [couplers](#). (1/13)

## E

**East Main.** The East Main is the double track mainline that goes from [Grand Junction](#) on Track #3 via [Colton](#), [Hilltop Crossing](#), [Blue Caboose Campground](#), [Diamondback Junction](#), [Youngstown](#), [Copperhead Junction](#) and [Foothill Crossing](#). See also [West Main](#). (10/06)

**Eastside Sub-Division.** Proposed name for future track to be developed on the east side of [Caboose Ridge](#) in the [Caboose Ridge Division](#). (9/12)

**Electric Spurs.** There are fourteen spurs on the north side of the Back Shop building, tracks #121 to #135, which are served by seven fourplex electric outlets for charging electric locomotives. Following the offer of Denny Ellis in 2005, we now offer the opportunity to sponsor one of those outlets for \$50 per year. Thus far, we have the following sponsors:

#129 Denny Ellis Happy Valley Railroad January 2006 – December 2010

Sponsorship will be for five-year terms, with first right of renewal at the end of the terms. Sponsors may hang a 10" round sign at the outlet, and will have a reservation right for the spur on a 30-day notice. (1/07)

**Elizabeth River.** Named for the founder's grandmother, is located west of [Caboose Ridge](#), north of [South Chiloquin Road](#) and south of [M & M Corner](#). (9/12)

**Elizabeth River Loop.** Elizabeth River Loop begins just before [Dam #4](#) leaving [Douglas Loop](#) at mile 7.427 and ends just after [Dam #4](#) where it rejoins [Douglas Loop](#) at mile 7.56. It runs from mile 12.207 to mile 13.253. The grading was done in 1999 and 2000 and the track was laid in 2001 and 2002. Elizabeth River Loop is named after the founder's grandmother, sister, daughter, granddaughter, wife and mother-in-law. (10/06)

**Elizabeth Siding.** Located on [Elizabeth River Loop](#) northbound at mile 12.50, Elizabeth Siding is 146' long and has a 28' facing point stub at the north end. (9/12)

**Ellingson Bridge.** Located in the [Central Sub-Division](#) at mile 1.00, this 12' x 20' double track steel bridge was built by Grant Ellingson during the winter of 1991-92. The panels raising the bridge level to the level of the track were built and installed by Art Crisp in 2000, following a derailment on Ellingson Bridge at [IBLS 2000](#). (10/06)

**Ellingson Turntable.** Located south of [Central Station](#), the Ellingson Turntable is 40' long, can be operated either hydraulically or manually, and serves 32 steaming bays each 20' long with access to water, compressed air and electricity. Four of the bays provide access to the unloading area and the main line and 28 are for steaming up. The 28 bays connect to 78 storage tracks, so the total capacity of the Ellingson Turntable is 78 locomotives, and even more if more than one



locomotive is assigned to each storage track.

The turntable is named for Grant Ellingson (1920-2005) who designed, built and installed the turntable and steaming bays during the winter of 1991-92. (1/07)

**Ellingson Yard.** Ellingson yard is the name given to the 78 garden tracks surrounding [Ellingson turntable](#). (9/12)

**E-Mail Addresses.** Train Mountain has the following e-mail addresses, as follows:

General Information

[info@TrainMountain.org](mailto:info@TrainMountain.org)

**Mail Lists.** Train Mountain uses an e-mail lists as a way of keeping in touch with its members. It uses it to remind members of upcoming work parties, debate proposed rule changes and to pass on interesting news of general interest. It is much more immediate than a club newsletter and a

whole lot less expensive than printing, collating, stamping and mailing a special issue of the newsletter.

Train Mountain has a separate e-mail address for the list and has given its Internet Service Provider ("ISP") a list of e-mail addresses for participating members. Anyone wanting to send a message to all members sends one e-mail to the e-mail list address and the ISP automatically forwards the postings to everyone on the list. It is a "closed" list, which means that only those e-mail addresses on the list can make postings to the list. This substantially reduces the possibility of junk mail or spam going to the list.

This system has been operating since November of 2000. Most members who have provided e-mail addresses have chosen to be on the e-mail list. If you are a member and wish to be added to the list, please send a message to [info@TMRR.org](mailto:info@TMRR.org). (8/12)

## F

**Farmersville Circle.** Located north of [Farmersville Junction](#) at mile [##.###](#) in the [Hope sub division](#). From Farmersville Circle routes go north to and from [Witcombe Wye](#), south to and from [Farmersville Junction](#) and ,in the future, southeast to and from [Caboose Ridge](#). (9/12)

**Farmersville Junction.** Located at the north end of [Elizabeth River Loop](#) between mile 12.74 and mile12.78, Farmersville Junction is named for Bill Farmer (1945-2006). Bill will be remembered for his dream of building a house with Train Mountain main line access and how he treasured every moment he while attending the 2006 [Triennial](#) shortly before his death. (1/07)

**Firewood Loop.** Located in the [Midway Sub-Division](#) and beginning at mile 2.20, Firewood Loop is 1,786' long with two 210' sidings and two facing point spurs, one 87' long the other 23' and rejoins the main line at mile 2.26. Laid in the summer of 2001, this all steel rail loop serves two functions. First, to provide the [Firewood Train](#) access to the firewood perimeter wall separating [Train Mountain Road](#) and [Katy Lane](#) from the trackage area. Second, to provide train access for passengers going to and from their vehicles parked on the outside of the firewood wall during [Triennial](#) meets. (9/12)

**Firewood Train.** The Firewood Train will consist of 80 cars specifically designed for the transport and storage of 16" firewood for burning in stoves and fireplaces located in Train Mountain guest units. The firewood capacity of each car is 16" wide, 17" high and 78" long, or 12.27 cubic feet of wood, or 1/10 of a cord of firewood. Most of these cars are presently in storage awaiting completed guest units with fireplaces. However, a string of firewood cars are parked in [Central Station](#) each winter with firewood for the wood stoves located in [Central Station](#). (10/06)

**Flitton Yard.** Located within [Hope Circle](#), Flitton Yard contains five garden tracks of [##, ##, ##, ##,](#) and [###](#) feet in length. It is planned to be used for temporary storage of track panels which will be used in the expansion of the [Friends Division](#). Future use may be a parking area for users of a proposed [Hope Circle](#) picnic area. (8/12)

**Following Distance.** The minimum following distance behind the train ahead is 210'. Because the distance between each [Milepost](#) is 105.6', the easiest way to observe the following distance rule is to stay two milepost lengths behind the train in front. Therefore, as an engineer

passes a milepost, the end of the next train should be no closer than the second milepost ahead. Engineers who fail to maintain a 210' distance between trains will have their track privileges suspended. (11/04)

**Foothill Grade Crossing.** Located where the bottom of the [Serpentine](#) joins [Midway Sub-division](#), Foothill Grade Crossing is the lowest grade crossing on the [Serpentine](#). (10/06)

**Fouling Point.** The fouling point is that point on a track near a switch beyond which an engine or rolling stock should not be parked, lest it be hit by traffic on the other branch of the switch.

At Train Mountain, the fouling point is 34" from center of track to center of track. The sole exceptions are the storage tracks off the steaming bays at [Ellingson Turntable](#), where the fouling point is 20" from center of track to center of track.

On each switch the fouling point is indicated by a 2" galvanized steel washer in the center of the tie on both switch branches. Where a Siding Length Sign has replaced the Phillips track screw at the entrance to a siding, the fouling point is at the top edge of the sign. (10/06)

**Freihube Siding.** A 140' long siding located in [Klamath & Western Sub-Division](#) at mile 4.571. Named for Walter Freihube, a 1997 émigré from Las Vegas, Los Angeles and Bavaria, who designed [Wright Bridge](#), the eight-foot ballast spreading cars and drew the first 11" x 17" track schematic for Train Mountain Railroad. (10/06)

**Friends Division.** The Friends division encompasses all Train Mountain track which is installed north of [M & M Corner](#) and connects with the [Douglas Division](#) at the north end of the Elizabeth River valley and at the north end of [Aspen Grove Loop](#). See also [Romulus Division](#), [Douglas Division](#) and [Caboose Ridge Division](#). (9/12)

**Fuel Yard.** Located on a set of sidings accessed from [Grand Junction Track 4](#), the Fuel Yard has sidings for taking on gasoline, diesel, coal and propane. It also has storage tracks for coal cars and propane cars. The Fuel Yard has been adopted by Lee and Toni Brooks. (10/06)

## G

**Gators.** Train Mountain has been using John Deere Gators with oversized tires since 1995. The large tires (22 x 12 x 8 in front and 25 x 13 x 9 in the rear) allow driving slowly over 7½" gauge tracks and roadbeds without doing damage. The six-wheel model, equipped with a dump bed and a modified rear ballast spreading gate, is ideal for spreading ballast. The four-wheel model is best for light duty and transporting personnel.

The good news for train clubs is that non-profit organizations receive a five percent factory discount from John Deere. (10/06)

**Gauge and Scale.** There is often considerable confusion between gauge and scale. Gauge (not *gage*) is the distance between rails. Train Mountain is a 7½" gauge railroad, meaning that the nominal distance between rails is 7½". To appreciate how confusing gauge can be, see also, **Track Gauge**.



Scale describes the size of equipment relative to the full size original. Scale can be expressed either as a fraction or as so many inches per foot. Thus,  $\frac{1}{8}$  scale is the same as 1.5" to the foot and  $\frac{1}{6}$  scale is the same as 2" to the foot.

The confusion begins when 7½" gauge track is described as  $\frac{1}{8}$  scale railroading. While that may have been true in the early days of the hobby when most of the equipment operating on 7¼" and 7½" gauge track was built to 1.5" scale, that is not necessarily the case today.

Now, there is probably more equipment built to 1.6" scale than 1.5" scale and one manufacturer makes a very popular 1.7" scale switch engine. Narrow gauge engines have been built in scales ranging from 2" to 2.5" to the foot. All operate on 7¼" or 7½" gauge track. See also, **Scale: 1.5" vs. 1.6"**.

In fact, there is no precise correlation between gauge and scale in outdoor railroading. The most frequently seen outdoor gauges are 2½", 3½", 4¾", 7¼" and 7½". Yet, as the following table illustrates, none of the equipment built to these specifications operates on a track of the "correct" gauge:

Scale	Fraction Equivalent	"Correct" Gauge	Actual Gauge
½"	$\frac{1}{24}$	2.35"	2.50"
¾"	$\frac{1}{16}$	3.53"	3.50"
1"	$\frac{1}{12}$	4.70"	4.75"
1½"	$\frac{1}{8}$	7.06"	7.25"
1½"	$\frac{1}{8}$	7.06"	7.50"
1.6"	$\frac{1}{7.5}$	7.53"	7.50"

To avoid confusion, we recommend using gauge to describe track and scale to describe engines, rolling stock and structures: "Train Mountain members own 1.5", 1.6", 2.0", 2.5" and 3.75" scale equipment which runs on Train Mountain's 7½" gauge track." (9/12)

**Gauge (7.5" vs. 7.25").** The most popular back yard rail spacing in North America is 7.5" gauge for the reason that the equipment is small enough to be easily transported without special equipment, but large enough for adults to ride on with reasonable comfort. Train Mountain track is 7.5" gauge. 7.5" gauge is found everywhere in North America except for the northeast, where the gauge is 7.25".

That there are two gauges in North America is generally assumed to be the result of an error and that 7.25" gauge came first and that 7.5" was the later, deviant, gauge. But the written record that has been brought to our attention, so far, does not support that conclusion.

The May 1944 issue of *Model Craftsman* has an article by Lester Friend stating that the Brotherhood of Live Steamers considered 7.5" gauge to be the standard for 1.5" scale. This statement is made both in the body of the text and a chart that accompanies the article.

The first written evidence of a track built in 7.5" gauge prior to that date is an account in the June 1935 *Modelmaker* magazine of H.P. Shaw's 2,000 foot 7.5" gauge track in Southern Michigan.

The next report is in the June 1948 issue of *Live Steamer* magazine, of Bruce Anchor's 200 to 300 feet of 7.5" gauge track in Flossmoor, Illinois.

After that, there is an account in the March, 1953 issue of *The Miniature Locomotive* of Walter Johnson's 500 feet of 7.5" gauge track in Blue Island, Illinois.

Then, there is a report in the July, 1954 issue of *Miniature Locomotive* magazine of Southern California Live Steamers' 300 to 400 feet of 7.5" track in Lomita, California.

Finally, Seymour Johnson confirms in the Mail Stop section of the April 1984 issue of *Live Steam* that he put down 3,000 feet of 7.5" gauge track near Goleta, California in August of 1956.

The oral history on this question has an East Coast version and a West Coast version. Live steam pioneer Carl Purinton of Boxford, MA is quoted as claiming a typographical error in a letter started it all. Specifically, that Lester Friend struck the "½" key instead of the "¼" key on a manual typewriter. Most of the live steam old-timers in Massachusetts reportedly confirm this story.

The West Coast version of the story is somewhat different. By that account, when Martin Lewis, the founder of Little Engines, got into 1.5" scale, he telephoned Lester Friend and was told that the gauge was 7.5". This would have been in the mid-1940s, when he was designing his 4-8-4s.

To date, no evidence is available as to the dates of the first 7.25" gauge railroads in North America. When that evidence becomes available, then the question of which came first may be capable of being resolved.

The details may be murky, but the final conclusion is clear. The first 7.5" gauge railroad was built by H. P. Shaw in 1935. Lester Friend gave 7.5" gauge railroading official status when he claimed BLS provenance for the standard in the May 1944 *Model Craftsman* article. There is no evidence that his claim was ever contradicted.

7.25" gauge remains the worldwide standard and is found in the United Kingdom, the European Union, Africa, Australia and New Zealand. In North America, 7.25" gauge is predominant in Connecticut, Maine, the Maritime Provinces, Massachusetts, New Hampshire, New Jersey, Newfoundland, New York, the eastern half of Ontario, most of Pennsylvania, Quebec, Rhode Island and Vermont. 7.5" is predominant in the rest of the United States and Canada.

The installed base in both gauges is so great and so geographically concentrated that it is very unlikely that either group will change.

Mike Venezia, in Jackson, New Jersey has built his Iron Acres Railroad specifically to allow the simultaneous operation of both 7¼" and 7½" equipment. His track gauge is 7½" on straight and 7<sup>9</sup>/<sub>16</sub>" on curves. In the frog of his switches he machines the groove for the flange out to ½" and sets the guardrail the normal distance for 7½" gauge. He also allows for a little extra gap and movement at the switch points. (9/12)

**Grand Junction.** Grand Junction, located at mile 0.14 in [Central Sub-Division](#), provides the engineer with four choices of routes.

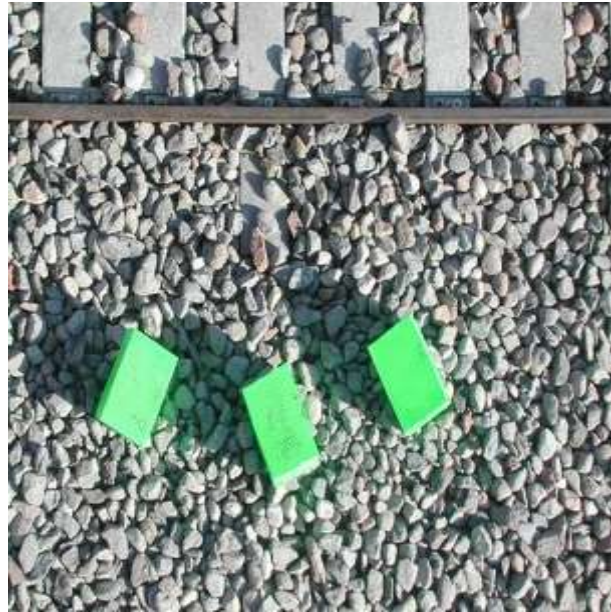
Track one is the beginning of the downhill track of the [West Main](#) and goes down Six Acre Cut (sometimes called the [Panama Canal](#)), under [Perrin Bridge](#), under [Crisp Bridge](#), past [Little Falls](#), around [Hairpin Curve](#) and across [Ellingson Bridge](#) to [South Portal](#).

Track two connects with the uphill track of the [West Main](#) and traverses the north side of [Six Acre Campground](#), crosses [Cox Bridge](#) and goes along the south side of the [Main Yard](#) to [Central Station](#).

Track three is the beginning of the downhill track of the [East Main](#) and goes under [Cox Bridge](#), under [Crisp Bridge](#), past [Colton](#), across [Hilltop Grade Crossing](#), past [Blue Caboose Campground](#) and down the [Serpentine](#) to [MidwayCircle](#).

Track four circles [Containerville](#) and provides access to both [Central Station](#) and the fuel sidings. (9/12)

**Green Blocks.** Green blocks are used at Train Mountain to mark any place where there has been a derailment. Thus, blocks on the right of way warn of a possible track problem and help repair crews identify sections of track needing repair. While a single block may indicate a location where there was an equipment problem, multiple green blocks at a single location are a sure indication of a track problem.



We recommend that each locomotive carry four blocks. They can be picked up from a crate of blocks at the [Rules of the Road](#) sign at MP .04 just after leaving [Ellingson Turntable](#).

The original blocks were introduced in 2000 measuring 2"x2"x4" and were cut from 2"x2"x 16" Port Orford Cedar railroad ties. The wood blocks did not wear well, and in 2007 Train Mountain plans to begin using 2x2x4 plastic blocks instead. Both the wood and plastic blocks are painted green for maximum visibility. (11/06)

**Green Tag.** The Green Tag is the Train Mountain Railroad Steam Engine Boiler Inspection Certificate tied to, or near, the left window of all steam locomotives running at Train Mountain so that they are visible as they pass the [Inspection Station](#). See also, [Boiler Inspection](#). (6/03)

**Ground Squirrel Drive.** Named for the frequent visitors to [South Meadow](#), Ground Squirrel Drive connects [Katy Lane](#) and [Molly Lane](#) between [Covote Alley](#) and [Quail Lane](#) in [South Meadow](#). (11/06)

## H

**Hairpin.** A landmark u-turn at the bottom of the steepest grade on Train Mountain at mile [##.###](#). (9/12)

**Hairpin Junction.** A double track wye located at [Hairpin](#) on the [West Main](#), Hairpin Junction allows access the [East Main](#) via [Bottleneck Crossing](#). (9/12)

**Hall of Flags.** For the 2006 Triennial, Train Mountain hung all of the flags that have been donated by members representing their country, state, province, or city in the main room at [Central Station](#), now called the Hall of Flags. These flags and the donors are as follows:



**State Flags**

Alabama	John & Sheila Corns
Arizona	Unknown
California	Unknown
Colorado	Dick Maddock
Florida	Steve Panzik
Idaho	Joel Slagg
Iowa	Unknown
Montana	David Van Sickle
Nevada	Northern Nevada LS
Nevada	Jim Lane
New Hampshire	Ed & Joan Dawson
New York	Unknown
Pennsylvania	Bill Dobbs
Texas	Nick Edwards
Utah	Rhyce Moore
Washington	Dennis Weaver

**Donor**

**National Flags**

Canada
Scotland
Zimbabwe

**Donor**

Al Witcombe
Chuck Stutts
Cyril & Gil Hayden

**Provincial Flags**

Queensland
Western Australia
British Columbia

**Donor**

Noel Eberhardt
Russell Dunn
Jeff Phillips

**Other Flags**

City of Westoennen
County of Soest
Boxing Kangaroo
Union Pacific

**Donor**

Hubert Wetekamp
Hubert Wetekamp
Russell Dunn
Dennis Ediger

Ultimately, Train Mountain would like to have flags from each of the countries, states or provinces from which its members come. So that all flags can be approximately the same size, the preferred flag width is three feet or one meter. (1/07)

**Helena Siding.** Located at [Elizabeth River Loop](#) southbound at mile 12.976, Helena Siding is 172' long. It was named for the founder's mother and grandniece. (10/06)

**Hidden Valley Road.** The main road running north from [South Chiloquin Road](#) leads to a *hidden valley* in the very center of Train Mountain--thus the name Hidden Valley Road. This

road is paved to just past the Vertel and Vanderspek driveways and is graveled to just past the turn off for [Sheep Station](#), the furthest point on [Aspen Grove Loop](#). (11/04)

**High Visibility Switch Throw.** In stark contrast to an ordinary switch throw, which is actually below ground level next to the switch, a High Visibility Switch Throw is 2' 6" long, is located at the edge of the right of way and sticks above ground at an angle to show the direction of the switch. It is used on the main line switches where there is a choice between two main line alternatives and is specifically designed to be visible from a distance, so that there can be no doubt which way the switch is thrown. The throw structure is painted black and the direction arrow is bright yellow. These switch throws have been phased out in favor of [Remote Switch Throws](#). The last of the high visibility switch throws was removed at Train Mountain in August 2012. Pictured above, it was located at the entrance to [Dam 4](#) siding. (8/12)



**Hilltop Grade Crossing.** As [Train Mountain Road](#) descends from [Central Station](#) to [Katy Lane](#), there are four grade crossings. The first, at the top of the hill is Hilltop Grade Crossing, where the [Central Sub-Division](#) connects with the [Serpentine Sub-Division](#).

The downhill track of Hilltop Grade Crossing was installed first, using aluminum rail. The flange way was made by using another piece of aluminum rail turned on its side, following trolley car practice. This proved to be a poor choice because the flange way easily filled with rocks and required constant sweeping.

When the uphill crossing was installed using steel rail, the flange way was made from one-inch angle that was welded to steel rail. This proved an excellent choice because the rocks fall to the bottom of the flange way and only occasional sweeping is required. (10/06)

**Hope Circle.** Located north of [Crane Water Siding](#) in the [Friends Division](#) at mile ##.###. Hope Circle provides access north to the "Big Cut", southeast to [Panzik Water Siding](#), to [New England Sub-Division](#) Burn Pit. [Flitton Yard](#) is located within Hope Circle. (8/12)

**Hope Sub-Division.** Located in [Friends Division](#), the Hope Sub-Division encompasses all track from [Farmesville Junction](#) to and including [Hope Circle](#). The track from [Witcombe Wye](#) to [Aspen Grove Loop](#) is also part of the Hope Sub-Division (9/12)

## I

**IBLS 2000.** In 1980, Los Angeles Live Steamers (LALS) hosted its first [International Brotherhood of Live Steamers](#) (IBLS) meet. They made it a quinquennial tradition by hosting further meets in 1985, 1990 and 1995, at which time LALS indicated that they would not host a meet in 2000 because of lack of space for parking, unloading, steaming and running for further international meets. At that time, Train Mountain and the [British Columbia Society of Model Engineers](#) agreed to co-host IBLS 2000.

The Train Mountain portion of the event had 825 attendees, 150 engines and a mile of trains. The group photo of this event appeared on the Jan/Feb 2000 cover of *Live Steam Magazine*. IBLs 2000 ended up being a "Ramble" that ultimately included open houses and/or meets at the following 7½" gauge tracks on the West Coast (listed from north to south):

British Columbia Society of Model Engineers  
Vancouver Island Model Engineers  
Western Washington Live Steamers  
Kitsap Live Steamers  
Tom Miller  
Pacific Northwest Live Steamers  
Southern Oregon Live Steamers  
Train Mountain Railroad  
Sacramento Valley Live Steamers  
Golden Gate Live Steamers  
Bitter Creek Western Railroad  
Los Angeles Live Steamers  
Orange County Model Engineers  
Riverside Live Steamers  
Chula Vista Live Steamers  
Maricopa Live Steamers



Train Mountain received considerable criticism for requiring realistic registration fees for an event held using the IBLs name from those who operate under the delusion that a world class train meet can be funded from the donation box. In addition, there was widespread feeling that five years is too long an interval between meets. Train Mountain changed the tradition in two ways.

First was to move away from using the IBLs name. See **International Brotherhood of Live Steamers**. Second was to change the interval from five years to three years. We have begun to hold international meets every three years. See [Train Mountain Triennial](#). (11/04)

**Inspection Station.** Located between [Ellingson Yard](#) and [the Klamath & Western Junction](#), the Inspection Station is staffed during major meets such as the [Triennial](#) or when there are lots of operators who are new to Train Mountain. The purpose of the Inspection Station is to assure that all trains going out onto the main line are properly staffed and equipped to comply with the [Rules of the Road](#). The inspectors will be looking for the following safety items:

1. Does the train have both an engineer and a conductor? The conductor is essential for flagging in case the train is stopped on the main line. Conductors must be at least seven years old. No conductor is required if the locomotive is light enough to be removed from the track by the engineer in the case of break down.
2. Does the conductor have a red flag, by day, or a flashlight, by night? The flag must be at least 12" x 12". Train Mountain flags are available at the Company Store.
3. Does the train have either a safety chain or a drawbar between each car? Mile long grades make this a crucial safety item.
4. Does the engineer have a Family Radio Service ("FRS") radio tuned to channel 10? Someday, one of these FRS radios will save a life in a medical emergency.

5. Does a wood or coal burning steam engine have both a spark arrestor and an ash pan? The summer fire danger in Klamath County is always high, and often extreme.
6. Does the train have at least four [green blocks](#) on board? [Green blocks](#) are available at the Inspection Tent or the [Rules of the Road](#) sign. Dropping one at the location of a derailment both warns the next train of a possible track problem and pinpoints the derailment location for the track crew.
7. Does every steam engine have a [Green Tag](#) as evidence of having passed a [Boiler Inspection](#)? If not, the engineer will be sent to the Boiler Inspector/Tester.
8. Does a train running at night have a white headlight mounted on the front of the engine and a red taillight mounted on the rear of the last car? (11/04)

**International Brotherhood of Live Steamers.** The International Brotherhood of Live Steamers (IBLS) was organized in 1935 by the late Carl Purinton. The initial purpose was to put live steamers in touch with each other. This made a great deal of sense when there were no live steam magazines and few clubs. IBLS performed an important function as late as the 1950's, when there were only two clubs west of the Mississippi.

IBLS has no dues, no newsletter, no elections, no directors, no officers and no conventions. Presently, IBLS has nine Regional Secretaries who were appointed by their predecessors. A list of IBLS Regional Secretaries and their mailing addresses is published in each issue of *Live Steam*.

Joining IBLS is as simple as sending your name to the closest Regional Secretary, who will add your name to the membership list for that region. Your name and address will be provided in response to an inquiry from another member who wants a local contact in the same area. Regional Secretaries also sell IBLS patches.



Today, hundreds of clubs provide a place to meet fellow hobbyists (California alone has more than 20). Every year, *Live Steam* provides hundreds of pages of articles, events and advertisements. Lately, the Internet provides access to club and vendor web sites, chat rooms and more.

In the July/August 2000 issue of *Live Steam* (page 76), Richard B. Thomas, the Western Regional Secretary of IBLS, stated that IBLS should not be involved in setting standards, because it represents no more than 5% of the live steam hobby. He suggests that the clubs should establish standards. We understand that the other Regional Secretaries have concurred in this view.

Now that clubs, publications and the Internet are the primary source of referrals and information and IBLS no longer is interested in participating in the setting of standards, the principal function of IBLS for most members is to provide a colorful patch.

Because the IBLS name can be used by anyone hosting any train meet at any time and in any place, the IBLS name has come to be used by clubs hosting train meets to bring the meet to the attention of a wider group of attendees. Almost every year, some club has an IBLS meet. For

example, Train Mountain did exactly that when it promoted [IBLS 2000](#) as a continuation of the tradition of quinquennial West Coast IBLS meets.

We have concluded that the IBLS "brand" is losing whatever exclusivity it may have had from overuse. We used it for [IBLS 2000](#) because it was closely associated with the tradition of a West Coast quinquennial meet. Our changing from a quinquennial to a triennial tradition provides a good opportunity for us to retire the IBLS name when describing a Train Mountain international meet.

With a new tradition comes the opportunity to create a name that accurately describes that tradition. Every three years we have been hosting the biggest 7½" gauge train meet in the world. [Train Mountain Triennials](#) have been held in 2003, 2006, 2009 and 2012 and we will be hosting one every three years henceforth. (10/06)

**Internet.** As of January 2007, 79% of the members of Train Mountain Railroad Museum reported e-mail addresses. Like many other organizations, whether or not railroad related, Train Mountain is finding that the fastest and most economical means of communication with members is use of the Internet. This happens in two ways.

The first is through our web site: [www.trainmountain.org](http://www.trainmountain.org). This site features schedules, registration information, current photos, links to other hobby sites, a track map and much more.

The second is through the Train Mountain e-mail List. As of January 2007, 78% of the 79% reporting e-mail addresses were on the e-mail list and it has become a very useful means of rapid communication with the membership. E-mail is instant, fast and cheap. It is possible to reply to twenty-five e-mails in the time that it takes to write, print, envelope, stamp and mail a single letter.

Our advice to anyone who does not have Internet access is to consider finding a way to get on line. Though it is not a requirement to own a computer, it certainly is more convenient to do so. Alternatives are as close as your public library, most of which have computers available for public use. Quite aside from access to hundreds of web sites relating to trains, being online is an indispensable part of life in the 21st century. (10/06)

**Isom.** (10/12)

## J

**Jones Timber Tunnel.** Located in the [Klamath & Western Sub-Division](#) at mile 4.67, the Jones Timber Tunnel is single-track tunnel that is 4' 8" wide, 6' high and 145' long. It is named for Al Jones who designed and built it for the Mercedes & Western Railroad in 1996 and 1997. Extensive repairs were made in 2010 by Charlie Bill Schubert, Jim Rickman, Russ Wood and





Dennis Ward. It is a favorite with passengers because the curve in the tunnel makes it very dark inside. (11/04)

## K

**Katy Lane.** Named for the Founder's elder daughter, Katy Lane is the main east/west road that lies between [South Meadow](#) and [Midway Circle](#), with an entrance from [South Chiloquin Road](#). See also, [Molly Lane](#). (6/03)

**Klamath & Western Junction.** The first Mainline Junction after departing Central Station, Klamath and Western Junction is located at mile 0.###. Trackside pushbuttons just south of the junction allow engineers to choose [Klamath & Western Sub-Division](#) or any of the four routes available at [Grand Junction](#). (8/12)

**Klamath & Western Railroad.** The Klamath & Western Railroad connects with [Central Sub-Division](#) at [Klamath & Western Junction](#) (mile 3.993 and mile 5.449) and with [Serpentine Sub-Division](#) at [Blue Caboose Campground](#) (mile 3.171 and mile 6.093). The Klamath & Western Railroad has 8,790' of main line track, 787' of connecting track and 5,187' of sidings and storage tracks for a total of 14,764' of aluminum track. This track is leased from Train Mountain so that Klamath & Western can provide public rides Saturdays from 10:00 to 3:00 beginning Memorial Day weekend through Labor Day weekend. Organized as a nonprofit corporation in 1982 as [Over-the-Hill Live Steam Club](#) the membership voted to change its name to Klamath & Western Railroad in 2005. They have a website at [www.knwrr.org](http://www.knwrr.org). (9/12)

**Klamath & Western Sub Division.** See [Klamath & Western Railroad](#)

## L

**Lasset Drive.** Located at the west end of [South Meadow](#) between [Katy Lane](#) and [Molly Lane](#), Lasset Drive is named for Tom Lasset (1940-2005). Tom will be remembered as a faithful ambassador for Train Mountain wherever he went and who enjoyed giving tours to first time visitors. (11/06)

**Leave Switch Lined...Signs.** A major aggravation in riding on a railroad is when the train in front has left a switch thrown the "wrong" way. At Train Mountain, every switch has a right way. The purpose of the Leave Switch Lined... signs is to let engineers know what the "right" way is.

Next to every main line switch with facing points and without a [remote switch throw](#), there is a sign indicating how the switch should be lined after a train has passed through it. The signs



come in two versions, one for left and one for right.

The signs are made using 6" x 9" rectangles of white powder coated sixteen-gauge steel with rounded corners welded to a 40" long  $\frac{5}{16}$ " diameter steel rod. The top line is  $\frac{1}{2}$ " high and reads "LEAVE SWITCH LINED". The second line is  $2 \frac{3}{8}$ " high and reads either "LEFT" or "RIGHT". The third line is also  $\frac{1}{2}$ " high and reads "FOR MAIN LINE."

The signs are placed on the right side of the right of way in line with the switch throw, with the left edge of the sign 48" from the center of the track. The bottom edge of the sign is 12" above the ground, except when the switch has a [High Visibility Switch Throw](#), in which case the sign is in front of the throw and the bottom of the sign is 6" above ground level. These signs are being removed as [Remote Switch Throws](#) are installed. (9/12)

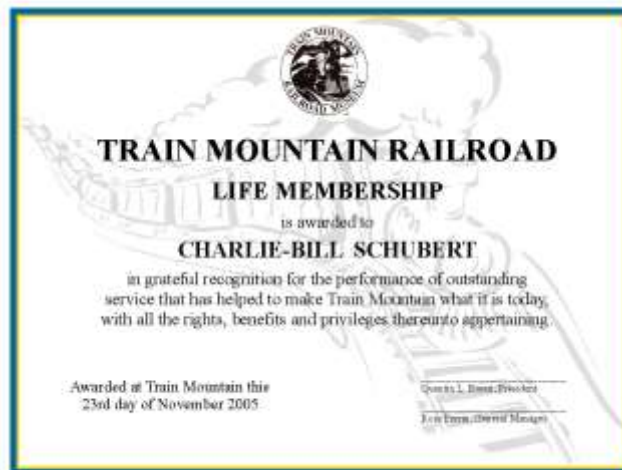
**Life Members.** Life membership status is conferred on those who deserve recognition for having devoted a major portion of their time or performed some other outstanding service to Train Mountain. Life members receive complimentary admission to all Train Mountain events and banquets. The current life members are the following:

Sharmoni Addington  
Sharon Breen  
Kydara Carter  
Art Crisp  
Jerry Balf  
Louise Balf  
Debra Cox  
Richard Cox  
Randy Douglas  
Caroline Jones  
David Kelley

Carol Lanctot  
Pat Lanctot  
Matthew Miller  
Rachel Miller  
Theresa Miller  
Austin Petersen  
Carolyn Petersen  
David Petersen  
Greg Petersen  
Helena Petersen  
Kurt Petersen

Jeff Phillips  
Mark Scarborough  
Charlie-Bill Schubert  
Peg Schubert  
Bill Shepherd  
Mary Shepherd  
Holly R. Snyder  
Carolyn Steuer  
Marty Vitz  
Linda Wood  
Russ Wood

Life members receive a distinctive name badge, white letters on a black background with the label "Life Member" and a framed certificate as follows: (9/12)



**Little Falls.** Located in the [Central Sub-Division](#) at mile 0.65, Little Falls and all of its buildings were designed and built from 1996 to 1998 by Don Isom in memory of his wife, Maggie Isom (1926 - 1996). Little Falls features a waterfall and power poles plus the following

buildings: fire station, one room school, produce stand, stone power house, church, and brick house and garage. All of the buildings in Little Falls were refurbished and painted in 2006 by Jeannie Meisser , Pat Wolf and Carolyn Steuer. (1/07)

**Location.** Now that GPS devices are widely available, and GPS satellites have been unlocked by the federal government so that they give truly accurate readings, we have a way of determining the exact location of Train Mountain. According to Cary Stewart, the location of the [Ellingson Turntable](#) at the end (inside) of the north lead track as determined by GPS is 4,350' altitude, 42° 33.398' North Latitude and 121° 53.185' West Longitude. (10/06)

**Locomotive Weight.** For locomotives, more weight means more pulling power. But weight distribution can also be important to obtain the maximum benefit from a particular weight, particularly for steam locomotives. Most owners do not have the equipment either to weigh their locomotive or to weigh individual axles on their locomotive.

During the winter of 2003-2004, Jerry Balf installed a scale in the [Back Shop](#) that will do both. Now that we have that capability, we have begun recording locomotive weights, which are listed below. This list will be updated several times a year. Unless indicated otherwise, weights are for locomotive and tender wet, e.g., with a full load of water and fuel. (8/04)

### Steam Locomotives Standard Gauge

Type	Road Name & Number	Owner	Locomotive Axle Weight From Front to Back	Loco Total	Tender Axle Weight	Tender Total
2-4-0	Kummer & Green Valley #1	Ian McInnes	72 171-389	632	153 289	452
2-6-0	Fitchburg Northern #14	George Hoke	36 54-97-83	270	58 100	158
4-6-2	South Fork & Yuba #2499	Henry Aguirre	49-52 131-138-138 110	617	85-82 66-66	299
2-8-0	L & M RR	Jerry Crane	31 59-91-91-81	353	33-30 31-21	115
2-8-0	CM 1146 (Boiler #)	Conrad Watne	21 147-181-120-120	589		
2-8-2	Great Northern #2424	Don Deffley	78 155-148-263-234 175	1053	93-97-121-106-98-97	612
4-8-2	Willamette & King Valley	Alan Shifley	99-95 171-160-163-170 155	1013	61-66-66 109-115-114	531
4-8-4	Union Pacific #828	Dean Willoughby	91-94 275-262-273-220 193-203	1586	91-90-120-128-125-123-149	826
2-8-8-2	Erie Triplex #0000	Larry Anderson	85 200-221-176-254 71-122-307-281 155-166-185-189 134	2546	Tender is over rear drivers	

### Steam Locomotives Narrow Gauge

Type	Road Name & Number	Owner	Locomotive Axle Weight From Front to Back	Loco Total	Tender Axle Weight	Tender Total
2-6-2	Timberlake RR #3	Tom Vertel	159 415-373-323 177	1477	206-205 288-288	987

### Gasoline/Hydraulic Locomotives

Type	Road Name & Number	Owner	Locomotive Axle Weight From Front to Back		Loco Total	Locomotive Builder
Dash 8s (2)	Santa Fe #824 & #816	Train Mountain	000-000	000-000		Gerry Bowdin
GP38 GP-38 Slug	CORP #5183 CORP #4165	Lee Pirtle	000-000	000-000		Rail Systems, Inc Modified by Owner
RS-3	Northern Pacific #860	Train Mountain	000-000	000-000	617	Rail Systems, Inc.
S-12	DS&JJ Express #3030	Jim Lane Dennis Ediger	121-136	147-148	551	Rail Systems, Inc.
SW1500 Engineer Car	BN #258 BN #67201	Lee Brooks Toni Brooks	302	310	612	Rail Systems, Inc.
			97	115	212	Rail Systems, Inc.
Goose #2	D&RGW	Marie Weaver	106	318	424	Dennis Weaver

### Battery/Electric Locomotives

Type	Road Name & Number	Owner	Locomotive Axle Weight From Front to Back		Loco Total	Locomotive Builder
5-3	NYC #144	Train Mountain				Marcor Locomotive Works

**Logging Camp #1.** This 1/8 scale logging camp is located just north of [Steuer Siding](#) at mile [#.###](#) in the [Douglas Division](#). It includes a kitchen, mess hall, laundry, bunk rooms and other buildings typically located in logging camps of old. There is a working, battery operated, high lead log loading setup at the camp which has a small three track yard. (10/12)

**Long Tunnel.** Located in the [Central Sub-Division](#) at mile 3.63, the Main Yard Tunnel, sometimes called the Long Tunnel, is 300' long and was built using 5' x 7' oval corrugated steel pipe. Two 12" ventilators provide air circulation. Light switches at each end and the middle control emergency lighting. Gordon Adams built the circuit boards for the block signal system protecting the tunnel. Lew Soibelman and Adkinson Signal manufactured the signal heads protecting the tunnel, Sellar Nugent installed the first signal system protecting the tunnel. John Cooper has upgraded and maintained the signal system since 2004. (1/07)

## M

**M & M Corner.** A landmark at the north end of [Elizabeth River Loop](#). So named because a large quantity of M & M candy spilled by a group of late night train riders. M & M Corner is identified by a large sign with an M & M logo. (9/12)

**MacDonald's Farm.** Located at mile 2.11, MacDonald's Farm has a 50' siding for loading cattle and features a house, barn, silo, outhouse, doghouse, and chicken coop and mailbox, all painted red and white. All of these buildings were refurbished and repainted in 2006 by Jeanne Meisser, Pat Wolf and Carolyn Steuer.



(1/07)

**Main Yard.** The Main Yard is located in the Central Sub-Division and surrounds the [Backshop](#). It was built during 1997-1999 by Art Crisp and Charlie Bill Schubert to provide for the trains expected at the [IBLS 2000](#). The Main Yard can accommodate over one mile of trains and is serviced by more than 200 switches. (9/12)

**Meisser Junction.** (11/12)

**Meisser Tower.** Located along [Train Mountain Road](#) just south of [Grand Junction](#), Meisser Tower actually contains Pumphouse #1, one of three pumphouses that supply both potable and irrigation water for Train Mountain. The exterior was built by Don Isom in 1987 and the exterior was completely restored, the stairway replaced and everything repainted by Hugo and Jeanne Meisser in 2005. Their adoption of the tower will insure that it will be well maintained in the future. (9/12)



**Megan's Law.** One of the objectives of Train Mountain is to make it a place where the entire family can enjoy the railroading experience. In particular, we want Train Mountain to be a safe place for children, who are the future of the hobby. Like any organization where children are present, we are acutely conscious of the sexual predator risk.

Since 1987, there have been two cases where there were inappropriate conversations initiated by a male adult with a teen-age boy or boys. In both cases, the adult was immediately banned from Train Mountain. The most recent incident was in 1999.

In the aftermath of the adoption of Megan's Law, there now exist web sites providing easy access to many public registries for convicted sex offenders. In 2005, Train Mountain concluded that it would begin checking every name on membership applications and meet registrations against this registry. Any person appearing on this registry will have the application or registration returned with a full refund of fees tendered and will not be allowed on Train Mountain property.

In adopting a policy of this sort, there is always a balancing of interests. On the one hand, there are convicted offenders who have served their time and who are trying to create a new life for themselves. On the other hand, our members want a safe environment for their children and grandchildren. Because we cannot serve both objectives at the same time, we have elected to protect those who need protection the most.

While there are a number of web sites that point to the various state registries, we find [www.KlaasKids.org](http://www.KlaasKids.org) to be both informative and easy to use. Not every county in every state has an on line registry, but over time the lists will become more comprehensive. Nonetheless, the available resources are a good start. (5/05)

**Members Eternal.** Train Mountain honors a number of classes of membership. The banquets at each meet honor many who have labored during the previous work week. The 100 Volunteer Day awards recognize those who have made a substantial time contribution. Life membership honors those who have made an outstanding contribution to Train Mountain.

The ultimate class of membership is Members Eternal, those who have passed on to the great railroad in the sky. Our Members Eternal are: (9/12)

Michael Ackerman	(19xx – 2011)	Steve Kennedy	(19xx – 2012)
Henry Aguirre	(1942 – 2006)	Tom Lassett	(1940 – 2005)
Paul Aragon	(19xx – 2011)	Lilly Lowell	(1917 – 2010)
Martin Becker	(19xx – 2004)	Bob McCalley	(1917 – 1994)
Quentin Breen	(1940 – 2009)	William “Bill” McCready	(19xx - xxxx)
Lyle Brown	(1920 – 2000)	Ralph "Mack" McNutt	(19xx – 2003)
Lee Carlson	(19xx – 2004)	Micheal Mews	(1952 – 2006)
Doug Chancy	(1936 – 2004)	Arthur Miller	(1914 – 2006)
Genevieve Crisp	(19xx – 2012)	Linda Newberry	(1941 – 2002)
Jerry Day	(19xx – 2012)	Reuben Pearson	(19xx – 2005)
Amandus Drewes	(1928 - 1999)	Lee Pirtle	(19xx – 2008)
Grant Ellingson	(1920 – 2005)	Joel Scanlon	(19xx – 2005)
Floyd Epperson	(19xx - xxxx)	Richard Sivers	(1941 – 2006)
Bill Farmer	(1945 – 2006)	Howard Springer	(19xx – 2012)
F. Robert Gahlsdorf	(1919 – 2002)	Frank Steuer	(19xx – 2010)
Arn Granheim	(1922 – 2004)	Bert Van Der Kooy	(19xx – xxxx)
Bob Hayes	(19xx – 2011)	Rudy Van Wingen	(1938 – 2005)
Bert Henning	(1924 – 2004)	Marty Vitz	(1919 – 2012)
Maggie Isom	(1926 – 1996)	John Wheelock	(19xx – 2011)
Al Jones	(19xx – 2008)	Ron Young	(19xx – 2010)

**Mercedes & Western Railroad.** A 7-1/2” gauge railroad located at what is now the [Klamath & Western Railroad](#) in the early 1980’s by Ed St John. This is the name of the first railroad at what is now Train Mountain. (10/12)

**Midges.** Midges are little green bugs present in great clouds at dawn and dusk on Highway 97 along Klamath Lake from June to September. When midges are in season it is best to avoid driving along Klamath Lake at these times because the midges can be so thick as to block windshields, headlights and radiators. The good news is that midges do not bite. (10/06)

**Midway Circle.** Located north of [Katy Lane](#), Midway Circle is 300' in diameter and has 6 switches connecting [Rio Grande Loop](#) (mile 2.189), [Sivers Grade](#) (9.184), [South Meadow Loop](#) (mile 2.186 and 2.263) and [Firewood Loop](#) (mile 2.209 and 2.262). (10/06)

**Midway Sub-Division.** Named for [Midway Circle](#), the Midway Sub-Division connects with the [Rio Grande Sub-Division](#) at [Midway Circle](#) (mile 2.138) and the [Serpentine Sub-Division](#) at [Foothill Grade Crossing](#) (mile 2.407 and mile 8.995). (11/05)

**Mileposts.** Mileposts are important for a number of reasons. For track maintenance, they permit identification of the specific location of a track problem. They are invaluable in directing a lost engineer or locating an engine needing a tow. Finally, they can be a lifesaver when finding someone along the right of way needing medical assistance.

Mileposts are vitally important to every engineer. The 210' required for both [Following Distance](#) and [Stopping Distance](#) are easily calculated as being two milepost lengths. Likewise, calculating train speed in observance of the Train Mountain [Speed Limit](#) is easily done using mileposts.

Milepost 00.00 is located at the points of the switch where the exit track from the [Ellingson Turntable](#) intersects the main line. That milepost reads "CENTRAL" in ½" letters for the [Central Sub-Division](#), "00.00" in 1" numbers for the distance from the first milepost, and "+1.41" in ½" numbers for the percentage grade to the next milepost. Mileposts are at intervals of .02 miles, or every 105.6' and there are 50 mileposts per mile.

Regular mileposts are fabricated from 2" x 3" and 4" x 6" rectangles of 16-gauge steel with rounded corners, each welded to a 5/16" x 40" steel rod so that 1/4" of the steel rod is visible above the steel rectangle. The bare metal sign and rod is then powder coated white.

There are four steps required to install mileposts. The first is to drive a ¾" stake every 105.6' along the right of way to establish the milepost locations and write the milepost number on each milepost with a permanent marker. This provides a temporary milepost until the permanent milepost can be built, lettered and installed.

The second step is to measure the difference in elevation between every temporary milepost using a contractor's level. For example, the difference in elevation between milepost 00.00 and 00.02 is 1.49'. The difference is then divided by 105.6' (the distance between mileposts) and multiplied by 100, which converts the difference in feet to a percentage grade difference between the two mileposts. In our example,  $1.49 / 105.6 \times 100 = 1.41\%$ .

The third step is to cut the letters and numbers (Train Mountain uses a Stika Vinyl Cutter, Model STX-) and apply the letters to the milepost signs. For a small number of mileposts, it may be more cost effective to use pre-cut vinyl letters.

The final step is to remove the wood stakes and replace them with the permanent milepost markers. Train Mountain has determined that the optimal level for its operations is to have the bottom of the milepost sign 12" above the railhead. (10/06)

**Molly Lane.** Named for the Founder's younger daughter, Molly Lane is the main east/west road that lies between [South Meadow](#) and the south boundary of Train Mountain, with an entrance from [South Chiloquin Road](#). See also [Katy Lane](#). (6/03)

**Motor Pool.** A storage and maintenance facility where full scale road building equipment, garden equipment, etc. is stored and maintained. There are electrical, plumbing and wood shops housed in the motor pool building. The motor pool is located inside the highway 97 gate, southwest of [Blue Caboose Campground](#).



(9/12)

# N

**New England Sub-Division.** The New England Sub-Division is the northern most portion of the [Friends Division](#). This sub-division encompasses all of the track to be lain from **Hope Circle** to **New England Circle** and back. The New England Sub-Division currently end 600' north of **Hope Circle**. (9/12)

**New Isom.** Located in the [Central Sub-Division](#) at MP 0.54, New Isom has a 140' passing siding and two stub sidings of 20' and 30'. The 20' siding is a facing point siding. It was called *New Isom* to distinguish it from the original town of Isom which was on the [Mercedes & Western Railroad](#) until 1996, at which time the town was re-named Mercedes, for the wife of the then owner of the Mercedes & Western, Edward W. St. John. Subsequently, the [Klamath & Western Railroad](#) (formerly the Over-the-Hill Live Steam Club) has renamed the town Isom. So now, there is an **Isom** and a New Isom on the property. (10/06)

**Newsletters.** The Train Mountain Railroad Museum Library receives, or is aware of, the following newsletters or other regular publications from train clubs that have 7¼" or 7½" gauge track:

*Bijou Creek & Western*, Colorado Live Steamers (Colorado)  
*The Call Boy*, Golden Gate Live Steamers, Inc. (California)  
*The Desert Wind*, Joshua Tree & Southern Railroad (California)  
*Diamond Rails*, Diamond Valley Railway, Inc. (Australia)  
*The Engine Booster*, Los Angeles Live Steamers (California)  
*Feedwater*, Chula Vista Live Steamers (California)  
*The Firebox*, Carillion Park Rail & Steam Society (Ohio)  
*The Gandy Dancer*, Pacific Northwest Live Steamers (Oregon)  
*The Golden Spike*, Sacramento Valley Live Steamers (California)  
*ILS Newsletter*, Independent Live Steamers (Pennsylvania)  
*Iron Acres News*, Iron Acres Railroad (New Jersey)  
*The Keirunga Park Platform*, Havelock North Live Steamers (New Zealand)  
*The Link*, Ottawa Valley Live Steamers and Model Engineers (Ontario)  
*LOCO News*, Locomotive Operators of Central Oklahoma, Inc. (Oklahoma)  
*The Manifest*, Southern Oregon Live Steamers (Oregon)  
*The Mainliner*, Great Lakes Live Steamers (Michigan)  
*The Mountain Gazette*, Train Mountain Railroad Museum (Oregon)  
*The Mud Ring*, Cinder Sniffers, Inc. of Cincinnati (Ohio)  
*The Nutty Report*, Assiniboine Valley Railway, Inc. (Manitoba)  
*The Order Board*, Kitsap Live Steamers (Washington)  
*The Safety Valve*, Vancouver Island Model Engineers (British Columbia)  
*Siderod*, Klamath & Western Railroad (Oregon)  
*The Signal*, Southwestern Live Steamers (Texas)  
*Smoke Signals*, Long Island Live Steamers (New York)  
*Southern Steam*, Mid-South Live Steamers  
*Stack Talk*, Maricopa Live Steamers (Arizona)  
*The Swarf*, Emerald Valley Model Engineers (Oregon)  
*The Trainline*, Florida Live Steamers (Florida)



*Waushakum Journal*, Waushakum Live Steamers (Massachusetts)  
*Way Freight*, Orange County Model Engineers (California)  
*The Whistle*, British Columbia Society of Model Engineers (British Columbia)  
*Whistle Blast*, New Jersey Live Steamers (New Jersey)  
*The Whistle Board*, North Coast Live Steamers (California)

The purpose of this listing is, over time, to compile a list of all 7¼" and 7½" gauge club newsletters, so that duplication of names can be minimized when a new publication is created. Therefore, contributions of the names of other club newsletters will be appreciated. (10/06)

**North Portal.** Named for its location at the north portal of the [South Chiloquin Road Tunnel](#), North Portal features a 140' passing siding at mile 8.24, and access to full sized [Timberlake Railroad](#) caboose #200. (9/12)

## O

**Operations Meets.** The first two-day Operations Meets were held over Columbus Day weekend in 2005 and 2006. Organized by Joel Slagg, these meets featured Dispatcher control, train orders and regularly scheduled passenger trains that actually ran on time. These meets were so well received that Train Mountain has now designated the June meet, except during the [Triennial](#) years, as the Operations Meet. During the [Triennial](#) years the August meet is designated the 'Ops' meet. (9/12)

**Order of the Gator.** This award is made to those who have shown extraordinary diligence in their work at Train Mountain. The award has two aspects. The first is a one-eighth scale [Gator](#) that is suitable for serving as a load on a 1/8 scale railroad flat car, which is appropriate because recipients are often seen driving their assigned [Gators](#). The second is a framed certificate.

The recipients of the Order of the Gator awards to date are as follows:

- 2001 Ross Perrin (See [Perrin Bridge](#))
- 2002 Frank Steuer (See [Steuer Siding](#))
- 2003 Jeff Phillips (See [Phillips Siding](#))
- 2004 Richard Cox (See [Cox Bridge](#))
- 2005 Quentin Breen
- 2006 Art Crisp (not pictured)

The recipients are also honored on a plaque on the wall in the [Hall of Flags](#). (10/06)



**Over-The- Hill Live Steam Club.** See [Klamath & Western Railroad](#).

## P

**Panama Canal.** So named because of the deep cut used to create the right-of-way along [South Chiloquin Road](#) from [Grand Junction](#) (track 1) to [Perrin Bridge](#). The dirt removed was used as fill for the approach to the future bridge across [South Chiloquin Road](#). (9/12)

**Panzik Water Siding.** Located in [Hope subdivision](#) at milepost [##.###](#). Panzik Water Siding lies south of [Hope Circle](#) and just north of [Crossroads Junction](#). (9/12)

**Peña Skyway.** Beginning in the [Klamath & Western Sub-Division](#) at mile 5.26, the Peña Skyway ends at mile 5.38. Originally a 4' wide wood trestle at the time of the [Mercedes & Western Railroad](#), it was replaced with an eight foot wide earth fill in 1998 when the entire railroad was re-built. Named for Joe Peña, who helped in the construction of the original wood structure. (4/03)

**Perrin Bridge.** Perrin Bridge connects the [No. 2 track](#) from [Grand Junction](#) that goes through [Six Acre Campground](#) with the approach to [South Chiloquin Road Bridge](#). The bridge crosses over the [No. 1 track](#) from [Grand Junction](#). [Perrin Bridge](#) is named for Ross *Perrin*, who was the General Manager of Train Mountain from 1995 until 2010. He has been a major contributor to the smooth running of Train Mountain. (10/12)



**Pets.** From 1987 to 1999 there was no rule prohibiting pets at Train Mountain events.

Because of an unfortunate incident in 1999, pets are no longer permitted at Train Mountain events, where the operative principle is that safety for people is more important than comfort for pets. The sole exceptions are service dogs.

Members wishing to bring pets when traveling to Train Mountain may wish to consider some alternatives. Haseman Veterinary clinic a mile or so down Highway 97 offers pet boarding services. Walt's Campground is an RV park next door to Train Mountain and staying there is practically the same as staying at Train Mountain. There are two motels very close to Train Mountain, Melita's and Rapids, which offer the same convenience. (10/06)

**Phillips Siding.** Located in the [Rio Grande Sub-Division](#) at mile 1.52, Phillips has two passing sidings. The West Siding is 172' long and the East Siding is 103' long. There is also a 25' spur track off of the East Siding.

It is named for Life Member Jeff *Phillips*, from Saanich, BC, who designed, laid and ballasted the Phillips and Saanich sidings in 1998. He spent a total of ten years maintaining, improving and modifying the [Rio Grande Sub-Division](#) and [South Portal Circle](#) during the summers from 1997 through 2006.



In 2000, he began upgrading portions of the right of way as needed, irrespective of their location on the railroad. In 2001 he completed a major realignment and addition of trackage at [Midway Circle](#) so that it is now possible to approach from [Rio Grande](#) and travel over [South Meadow Loop](#) and [Firewood Loop](#) and continue up the [Serpentine](#) without having to throw a switch.

In 2005, he graded, installed and ballasted [Sharon's Shortcut](#). (10/06)

**Polar Bear Run.** This train meet is held in January, Friday through Monday of the Martin Luther King holiday. (1/13)

**Portable Wheel Stop.** First designed by Hugo Meisser for the 2005 [Operations Meet](#), the portable wheel stop keeps a cut of cars from rolling when parked on a slope. It is made from a 2" x 3" x 12" wood tie, with two 1 3/8" grooves cut at a 60° angle, as shown. We plan to make the



next production run from plastic tied to achieve greater longevity. Though presently no required, we plan to have a box of portable wheel stops next to the boxes of green blocks for use when leaving cars on sidings. Once we have further experience, we will consider making their use when leaving a car on a siding mandatory. (1/07)

**Propane Tank Cars.** Manchester Tank, Ltd. built a total of 25 certified propane tank cars for Train Mountain, in two groups. Cars 3100-3111

were built for rail delivery of propane to remodeled caboose guest units at such time as the remodeling is completed.

Cars 3112-3122 were built for fueling propane fired engines and were designed with a dry well forward of the dome so that a hose could be fed from the dome through the tank and underneath the car to a propane burning steam engine. As of 2000, six of these cars are regularly used for this purpose and the use of a car is provided with the purchase of 25 gallons of propane.



Each car has a 32-gallon capacity, but because propane tanks can only be 80% filled, the working capacity is 25 gallons. A propane tank car is 61" long, 16" wide and weighs 168 pounds including trucks and couplers. A ready-to-run propane car with a full load of 25 gallons of propane weighs 311 pounds. (10/06)

## Q

**Quail Crossing.** Located just west of [Ellingson Bridge](#) at mile 1.015 in the [Central Sub-Division](#), Quail Crossing allows vehicular access to the MoPac Caboose at [South Portal](#) and to the [burn pit](#). (9/12)

**Quail Lane.** Named for frequent visitors to [South Meadow](#), Quail Lane connects [Katv Lane](#) and [Molly Lane](#) between [Ground Squirrel Drive](#) and [Train Mountain Road](#) in [South Meadow](#) (10/12)

**Quentin Breen's Dream.** A poem written by Robert Dean Wood in 2002 and contributed to Train Mountain. Reprinted with permission.

When I was a lad not yet in my teens  
I would have these fantastic dreams  
Not of rocket ships or wild schemes  
Or mounds of flavored ice creams

My dreams became a real obsession  
They would be real without question

Daily they would renew and freshen  
They grew stronger with every session

What was this all consuming desire  
That burned within like a roaring fire  
It was not to sing the lead in a choir  
Or to go across the ocean as a flyer

Now sometimes dreams dim with age  
Or lack of achieving brings on rage  
Or the dream fades without a gauge  
Or I was just going through a stage

What was this dream that lingered on?  
Other dreams may have come and gone  
But my dreams lingered on and on  
Was I to be a knight, a king or a pawn

No, that wasn't the dream for me  
For I wanted much more, you see  
My dream was for me and thee  
It's a dream full of fun and glee

I wanted to be something premiere  
Nothing as mundane as a cashier  
Or a guide on the western frontier  
Could my dream be my career?

Would they be those of Tom Sawyer  
Would I become a stuffy employer  
Or one who's known as a destroyer?  
Fate intervened, I became a lawyer

My fame as a lawyer was well known  
And provided me a home of my own  
But my dream still ever brightly shone  
Though it was not a kingdom or a throne

My dream was a dream to be shared  
Soon all the detail would be bared,  
For I had a dream for those who dared  
For I had a dream for those who cared

What was this great dream, you may ask  
Was it something from a barrel or cask  
Or a big swig from a bottle or flask  
Was it some heroic feat or gigantic task?

Simply put, I wanted my own train  
With track running all over the terrain  
To have a place to share my dream  
With those who dreamed the same

A railroad like no one has ever seen

With high mountains and air so clean  
With stream and forest ever green  
That's the dream of Quentin Breen

Whatever your dream, be it brakeman,  
Dispatcher, porter or the signalman,  
The ticket agent, tracklayer or trainman,  
A job filled today by many a good woman

You have Quentin Breen to thank  
For sharing his dream.

## R

**Radio Contact.** There are several reasons for Train Mountain's requirement that all trains operating on the Main Line be equipped with a radio. First, it is convenient for an engineer with a disabled engine to be able to call for help and for a Dispatcher to announce that the main line is blocked at a particular location. Second, during [Operations Meets](#), it permits realistic dispatch-controlled train movements. But the most important reason is to meet medical emergencies. Someday, someone is going to have a heart attack on a track that is miles from [Central Station](#) and a radio may well save a life.



At the time that the radio rule was adopted, citizen's band (CB) was the only relatively inexpensive non-licensed band available to the general public, and Train Mountain required all trains to have a radio tuned to channel 1. That changed with the availability of Family Radio Service ("FRS") radios. Their successful use at [IBLS 2000](#) caused Train Mountain to amend its rules in the spring of 2001 to require either a CB radio tuned to Channel 1 or an FRS radio tuned to channel 10 on all trains. In 2006, Train Mountain again amended its rules to require an FRS radio noting that its dispatchers would only monitor FRS. (10/06)

**Rail.** Rail size and profile for one-eighth scale railroads in the western United States has been established by usage. When Railroad Supply was located in Los Angeles and operated by Chet Petersen, the size and profile he sold became the *de facto* West Coast standard.

When Train Mountain had aluminum rail extruded to its specifications, it used the old Railroad Supply rail profile. Train Mountain has replaced Railroad Supply as the default supplier of West Coast aluminum rail. As a result, almost all aluminum rail sold on the West Coast for the last 25 years is interchangeable.

In 1999, Train Mountain took delivery of 120,000' of steel rail manufactured in Switzerland. This steel rail has a profile virtually identical to the Train Mountain aluminum rail profile. It is

fully interchangeable with the aluminum rail, fitting both the [Tie Plate](#) and the [Spall Rail Joiner](#).

The Train Mountain [Company Store](#) is now offering both aluminum and steel rail to the hobby as part of its [Track System](#). (10/06)

**Rail Offset.** Rail offset is the length of rail joint overlap from one side of the track panel to the other. Determining the rail offset length is always a balance between ease of transportation from the track factory to the railhead and the structural integrity of the [track system](#).

If the offset is too short, the result is jagged curves. If the offset is too long, the result is damaged rail ends during transportation and track handling. Along with most other 7 1/2" and 7 1/4" track builders, Train Mountain has concluded that a twelve-inch offset provides the best balance between structural integrity and ease of transport. (1/07)

**Red Ant Junction.** (10/12)

**Remote Switch Throws.** Developed by members of the Kitsap Live Steam club in Port Angeles, Washington, these switch throws are placed approximately forty feet prior to the switch points they control. This arrangement allows the engineer to throw the switch without leaving his/her train. They are being installed where there are optional mainline routes and at sidings where water is available. The green target indicates the preferred route. The yellow (or red) target indicates a secondary route. The switch throw lever indicates whether the traffic pattern is left or right. See also [Robinson remote switch stand](#). (10/12)

**Rio Grande Caboose.** The siding serving the Rio Grande Caboose is located in the [Rio Grande Sub-Division](#) at mile 1.96 and is 144' long with a 30' trailing point siding.

The caboose is Denver & Rio Grande Western caboose #01431 that was built in June of 1944. It is scheduled for restoration due to the low ceiling height, which makes it unsuitable for conversion to a guest unit. The first step in restoration will be to remove the plates welded over the original window openings and install new windows. (10/06)

**Rio Grande Sub-Division.** Named for the Denver & Rio Grande Western caboose on [Katy Lane](#), the Rio Grande Sub-Division connects with [Central Sub-Division](#) at [South Portal Circle](#) (mile 1.321 and mile 9.410) and [Midway Sub-Division](#) at [Midway Circle](#) (mile 2.138 and mile 9.184).

**Rio Grande Tunnel.** Located in the [Rio Grande Sub-Division](#) at mile 2.119, the Rio Grande Tunnel is 16' x 10' and is built from a recycled fuel tank, and it passes under [Rio Grande Loop](#),



avoiding a main line diamond. When the recycled fuel tank fails, it is likely that this tunnel will be replaced by a bridge. (10/06)

**Robinson Remote Throw Switch Stand.** The switch stand project was conceived and funded by Geoff Robinson, a member of the Kitsap Live steamers. This project involves placing a total of 60 switch stands on the Train Mountain main line, at the rate of ten switch stands a year. They are installed by the Kitsap Krew during Kitsap Week in April of each year. By 2006, the project was at the half-way point, and is expected to be completed by 2009. The switch stand is based on a design by Walt McGowan. The machining and stand assembly is by Geoff Robinson, Dennis Weaver and Richard Mairs, logistics by Trevor Heath, laser cutting and bending by Mike Hewlett and Automated Metal Technologies, powder coating by Dale Gerber and Kitsap Powder Coating and steel tubing by Mark White and EMJ. Installation by Geoffrey Robinson, Dennis Weaver, Jerry Crane, Richard Mairs, Larry Harper and Erik Meehan as well as many other Kitsap Krew members See also [remote switch throws](#)(10/12)



**Rochester Siding.** Located at the north end of [South Meadow Loop](#) westbound at mile 11.65, Rochester Siding is 116' long. (10/06)

**Romulus Division.** The Romulus Division consists of all track south of [South Chiloquin Road](#). There are seven sub-divisions within the Romulus Division, as follows: [Central](#), [Bottleneck](#), [Dogwalk](#), [Midway](#), [Rio Grande](#), [Klamath & Western](#) and [Serpentine](#). This division is named after the *Romulus* group of companies whose telecommunications projects created the funding that made Train Mountain possible. See also: [Caboose Ridge Division](#) , [Friends Division](#) and [Douglas Division](#). (6/03)

**Rules of the Road.** Many 7½" gauge railroad clubs have thick rulebooks, which are nominally the law of that particular land. In fact, the rules contained therein are so complex that they are more often honored in the breach than in the observance. We believe that there should be as few rules as possible.

The Old Testament had Ten Commandments. Roman Law had Twelve Tables. Train Mountain has fourteen Rules of the Road, as follows:

### **TRAIN MOUNTAIN RAILROAD - RULES OF THE ROAD**

**DEFINITION:** In these rules, "Train" or "Trains" means a single Train or a group of multiple Trains.

- 1. ALL TRAINS MUST HAVE BOTH AN ENGINEER AND A CONDUCTOR**, except for speeders and similar single-unit equipment that can be safely removed from the track by one person in the event of a breakdown. This specifically excludes radio-controlled Trains. The minimum age for a conductor is seven, the age of reason.
- 2. SEVEN MILES PER HOUR MAXIMUM SPEED EQUALS TEN SECONDS BETWEEN MILEPOSTS.** Exceptions are posted trackside.
- 3 210' MINIMUM SEPARATION BETWEEN TRAINS EQUALS TWO MILEPOST LENGTHS TO THE END OF THE NEXT TRAIN.** The absence of signal blocks means that safety requires separation between Trains. A safe stopping distance must be maintained.

- 4 **ALL CONDUCTORS TO BE EQUIPPED WITH A RED FLAG.** Minimum flag size is 12" x 12".
- 5 **CONDUCTOR TO FLAG TWO MILEPOST LENGTHS (210') BEHIND ANY STOPPED TRAIN.** This rule probably prevents more accidents than all of the other rules combined.
- 6 **SAFETY CHAINS OR DRAWBARS REQUIRED BETWEEN ALL CARS.** Some grades are more than a mile long. This rule prevents runaway cars.
- 7 **ALL TRAINS TO HAVE A FRS RADIO TUNED TO CHANNEL 10, SUB-CHANNEL 0.** It is also recommended that every Train carry a cell phone for those times and places where there is no radio coverage. Someday, one of these devices will save the life of someone who has a heart attack while miles away from Central Station. (Note: **Citizen Band Radio Channels are no longer monitored at Train Mountain.**)
- 8 **SOUND HORN OR WHISTLE (----/----/--/----) AT W SIGN.** These signs are located 60' before the track crosses roads or other tracks.
- 9 **SPARK ARRESTORS & ASHPANS REQUIRED ON ALL COAL, OIL & WOOD BURNERS.** The summer fire danger in Klamath County is always "High" and often "Extreme."
- 10 **DROP A GREEN BLOCK AT ANY DERAILMENT LOCATION.** Not only does this tell track crews where problems are, it warns the next Train that there is a track problem.
- 11 **AFTER ENTERING A SIDING LEAVE SWITCH THROWS LINED FOR MAIN LINE.** This is particularly important when the next Train may have an engineer on his or her first trip on Train Mountain track. This rule does not apply where remote switch stands are installed.

## NIGHT RUNNING

12. **WHITE HEADLIGHT MOUNTED ON FRONT OF ENGINE.** Steam engines may need battery-powered headlights.
13. **RED TAILLIGHT MOUNTED ON REAR OF LAST CAR.** The flashing lights sold in bicycle stores are a popular way of meeting this requirement.
14. **CONDUCTOR TO USE FLASHLIGHT TO FLAG TWO MILEPOSTS (210') BEHIND ANY STOPPED TRAIN.**

**Ruling Grade.** The maximum grade on a railroad. At Train Mountain the ruling grade is 3.69% at mile 10.18, on the uphill track just past [Little Falls](#). (1/07)

## S

**Saanich Siding.** Located in the [Rio Grande Sub-Division](#) at mile 1.613, this 166' passing siding has a 28' stub track. Named for the town of Saanich, BC, where the builder of the siding Jeff Phillips, resides. See also: [Phillips Siding](#). (10/06)

**St. John's Loop.** Located on the [Klamath & Western Railroad](#) between mile 4.31 and mile 5.00, this 480' connector goes around the location for a future roundhouse that will follow the design of the one at Alaska Live Steamers. The track is used when the bypassed [Klamath and Western](#) main line track is closed for repairs. It is named for Edward W. St. John for the former owner of the [Klamath & Western Railroad](#). (10/12)



**Sawby Maneuver.** There will be times when a slow train longer than the available siding needs to allow a shorter, faster train to pass. There are two ways to accomplish the maneuver.

First, the longer train stays on the main line and pulls ahead of the entrance switch to the siding. The shorter train pulls onto the siding. The longer train backs up on the main line so that the exit from the siding to the main line is clear. The shorter train pulls out of the siding onto the main line and is now ahead of the longer train.

Second, the longer train pulls into the siding and back onto the main line so that the end of the train has cleared the entrance switch to the siding. The shorter train proceeds up the main line until it has cleared the entrance switch to the siding. The longer train backs up until it has cleared the exit switch from the siding to the main line. The shorter train proceeds up the main line and is now ahead of the longer train. (5/03)

**Schubert Sidings.** Two stub sidings located in front of the [Vendor's Marketplace](#) at mile ~~##.###~~ in the [Central Sub-Division](#) one of the stubs is named for Charlie Bill Schubert the other for his wife Peg. (8/12)

**Schubert Wye.** Located in the [Hope Sub-Division](#) at mile ~~##.###~~. Access to the west leg is from [Cooper Siding](#). The north leg leads to [Crane Water Siding](#) and the south leg gives access to [Coyote Meet Siding](#). (8/12)

**Serpentine** Named for a snakelike walk in London's St. James Park, the Serpentine has six successive 75' radius curves that provide a challenge to the engineer and an ever-changing vista to the viewer. The downhill main line leaves the Serpentine at [Copperhead Junction](#) at mile 6.50 via [Dogwalk Highline](#) and returns from [Dogwalk](#), also at [Copperhead Junction](#), at mile 8.76.

The Serpentine was one of the first tracks laid at Train Mountain, with the original trackage being aluminum rail on wood ties set in three quarter minus ballast on an unevenly graded right of way. At the end of the 2001 season, all of the track, except for around Youngstown, was taken up and the old ballast used for roads. The whole right of way was re-graded to provide for a constant grade.

In the summer of 2002, the Serpentine was re-laid using steel rail, re-cycled plastic ties and three quarter clean ballast. The result was to convert what was one of the most difficult pieces of track on the railroad to one of the best pieces of track on the railroad. (1/03)

**Serpentine Sub-Division.** The Serpentine Sub-Division encompasses a section of track unique to Train Mountain: the [Serpentine](#). It connects with the [Central Sub-Division](#) at [Hilltop Grade Crossing](#) (mile 3.265 and mile 5.920) and with the [Midway Sub-Division](#) at [Foothill Grade Crossing](#) (mile 2.407 and mile 8.995).

**Sex Offenders.** See [Megan's Law](#).

**Sharon's Shortcut.** Named for the Founder's spouse, Sharon's Shortcut connects **Lucky North** and **Lucky South**, and creates a direct connection from [Saanich](#) to [Midway Circle](#), bypassing [Rio Grande](#). This track turns **Lucky South** into a crossover track. (10/06)

**Sheep Station.** See [Beauchamp Siding](#). (8/12)

**Shepherd's Grade.** Track planned for the future, north of [South Chiloquin Road](#) to be accessed by a proposed bridge which will span [South Chiloquin Road](#). (9/12)

**Siding Length Signs.** A Siding Length Sign is located at the beginning of each siding. The top edge of the sign is at the [Fouling Point](#) of the siding. The sign states the siding number and the train length that the siding can accommodate between fouling points.

The signs are made using 6" x 6" white powder coated 16 gauge steel plate. At the top of the plate in 1" high letters is the siding number. In the middle of the plate in 3 ½" high letters is the siding length. (10/06)



**Signal Bridge.** A signal bridge is a steel structure that supports a [Signal Head](#) over the right of way so that it is visible to oncoming trains. At Train Mountain the vertical supports for a standard signal bridge are twelve feet apart for a double-track right of way. Train Mountain uses such a bridge at [Grand Junction](#) that supports lights indicating the condition of the tracks leading to [Grand Junction](#).

A cantilever signal bridge has one support with the bridge extending over the track. At Train Mountain the vertical support is four feet from the centerline of the track. A total of eighteen cantilever bridges have been installed at [Grand Junction](#), on [Dogwalk Highline](#) and at [Bottleneck](#). In recognition of the fact that full size people walk along railroad rights of way, the bottom edge of all signal bridges are a minimum of seven feet above the head of the rail.

Train Mountain purchased its powder coated signal bridges, complete with ladders, railings and top deck, from Roll Models, Inc. Signal bridges spanning the two tracks at the entrance to the passenger yard at [Central Station](#) and the three tracks at the exit from [Main Yard](#) were manufactured and installed by Dale Taylor.(10/06)

**Signal Head.** A signal head displays colored signals indicating the condition of the track or switch associated with the signal. A signal head can contain a single lens that shows either a red, yellow or green signal or, more commonly in modern practice, one lens for each color.

Signal heads showing the condition of upcoming track, known as block signals, are mounted on [signal bridges](#), overpasses or tunnel portals. Signal heads showing the condition of a switch are mounted on a signal pole four feet from the centerline of the switch on the same side of the track as the switch throw, close to ground level. (6/03)



**Sivers Grade.** Located in the [Rio Grande Sub-Division](#), Between mile 9.16 and mile 9.34, Sivers Grade is named after Richard Sivers (1941—2006) who passed away near this site in August of 2006. Richard will be remembered for having the time of his life hauling track panels during his first and last visit to Train Mountain. (1/07)

**Six Acre Campground** This campground is for use by those members who are tent camping. Six Acre campground has running water and portable toilets available. Very primitive.(9/12)

**Slow Trains.** As a matter of courtesy, a train traveling slower than the speed limit should switch onto a siding to let a faster train pass. The [Conductor](#) should keep a lookout to be sure that his or her train is not impeding traffic on the main line. See also, [Sawby Maneuver](#). (6/03)

**Smoking Policy.** Due to the extreme fire danger and personal health issues associated with smoking, the following policy has been adopted and approved by the TMRR Board of Directors.

There shall be no smoking on any Train Mountain property or any track right of way associated with Train Mountain.

Exceptions to this policy, where RESPONSIBLE smoking may occur, are the paved areas outside of Central Station and the Backshop. An approved ash receptacle will be placed an appropriate distance from the building that meets the criteria of Oregon law and is also in a fire safe area. The ash receptacle will indicate the location where smoking may take place.

RESPONSIBLE smoking means that all smokers will use the ash receptacles for both ashes and any remaining butts and will maintain a clean, litter free area in these approved locations. The TMRR Board of Directors asks that any observed violations of this No Smoking Policy be reported to the TM office or any TMRR director. Reported or observed violations will be dealt with by the TMRR Board.

**Snow Plow Standards.** Train Mountain's location at 4200' assures that it will have snow on the track each winter. Typically, we see four or five storms that drop three or four inches, with a complete melt off in between. However, in the winter of 1992-93 we had over four feet on the ground for several weeks and in the winter of 2003-04 we had two feet on the ground for over two weeks.

During the winter of 2003-04 resident members developed and tested different types of snow plows and snow spreaders. Unfortunately, we discovered during spring track maintenance that the testing had resulted in damage to both track and switches. Examination of the damage has let us develop snow plow standards and procedures that will let us plow snow to keep the railroad open in winter without damaging the rail or switches.

The following standards are in effect:

1. Cutting Edge Height. The working/cutting edges of plows and blowers must be set at least  $\frac{3}{8}$ " above the railhead.
2. Skid Plate. The bottom edges must be equipped with a skid plate made of wood or plastic that will allow the plow to slide on top of the rail in the event of a derailment. The leading edge of the skid plate must be rounded so that the skid plate does not dig into rail-gaps, guard rails, frogs, points, etc. The skid plate must run the entire length of the cutting edge and be at least 2" wide.
3. No Contact. Edges (cutting and equipment) must not contact the rail, switch components or accessory items such as switch stands at any time.
4. Cleaning Switches. Removal of ice from switches, diamonds and grade crossings must be done without damaging or gouging the material used for those components. Switches are especially vulnerable to damage and must be cleaned by hand. Forcing the points over when frozen will often cause permanent damage and must be avoided.

5. Throwing Snow. Exercise care when using equipment for throwing or blowing snow and ice to avoid damage to items such as buildings, plantings, train cars etc. Snow and ice must not be thrown into areas already shoveled or plowed. (11/04)

**Solar Panels.** In isolated locations where the cost of bringing in 110-volt power would be prohibitive, solar panels offers a reliable source of 12-volt electricity. The first panel has been in service at [Hidden Valley Road Gate](#) since 1997 and has been absolutely reliable. The second was installed to power the Diner on [Elizabeth River Loop](#) in 2005.

Since 2009 solar panes are being used to power the track signal system in the [Friends Division](#) and those signals guarding the approach to the [Long Tunnel](#).

The solar panel is aimed due south and at an inclination of about 45°. The panel charges a battery. The battery operates the gate motor, signal lights or other device. See also, [Crossing Lights](#). (11/05)

**South Chiloquin Road Bridge.** Plans call for a railroad bridge to span [South Chiloquin Road](#) and the frontage roads on either side. The bridge is to connect the [Romulus Division](#) with the [Caboose Ridge Division](#). (9/12)

**South Chiloquin Road Tunnel.** Located at the boundary of the [Romulus](#) and [Douglas Divisions](#) at mile 6.97, this 12' x 80' corrugated steel double track tunnel passes under the 60' right of way of [South Chiloquin Road](#) and under a ten foot fence line road on each side of the highway right of way. The tunnel was built using the cut and cover technique in four days in 1989.

**South Chiloquin Road** connects the town of [Chiloquin](#) with Highway 62 and Modoc Point Road. When the road was a state highway, it was first called Chiloquin-Agency Lake Market Road, and later, Highway 422 South. It got its present name when ownership passed from the Oregon Department of Transportation to Klamath County in 1989. (4/03).

**South Meadow.** Located at the south end of Train Mountain, South Meadow contains [South Meadow Loop](#), the [Bone Yard](#) one of many [Burn Pits](#). The area surrounded by [South Meadow Loop](#) has a limited water supply and is used for overflow rv parking during large meets such as the Triennials. (8/12).

**South Meadow Loop.** Located at the south end of Train Mountain, South Meadow Loop leaves [Midway Circle](#) at mile [##.###](#) and rejoins [Midway Circle](#) at mile [##.###](#). South Meadow Loop is [####](#) feet long and encircles most of [South Meadow](#).

**South Portal.** Named for its location at the south portal of the [South Chiloquin Road Tunnel](#), South Portal features two passing sidings. The MOPAC Siding is accessible to trains heading towards [Ellingson Bridge](#), is located at mile 8.30 and is 140' long. The Circle Siding is accessible to trains heading towards [Rio Grande](#), is located at mile 1.35 and is 120' long.. (10/06)

**South Portal Circle.** Located at the south of the [South Portal](#). South Portal Circle is 200' in diameter and can be entered on the east and south from [Red Ant Junction](#) on the west from the [Burn pit cutoff](#) via the route from [Ellingson Bridge](#). South Portal Circle exits lead up to [Ellingson Bridge](#) or to the [Rio Grande Sub-Division](#). (8/12)

**Spall Rail Joiner.** Prototype rail is joined using bars, bolts and nuts. In 7½" gauge, this method requires an enormous amount of time on hands and knees. Ed Spall, a member first of the Los Angeles Live Steamers, and subsequently of the Sacramento Valley Live Steamers, developed an alternative method for joining track in the early 1990's.



The Spall Rail Joiner is essentially a scaled up HO track joiner that is four inches long and slips around the foot and up the web of the rail. Train Mountain has done the tool and die work to produce these joiners in quantity. They have been in use since 1992 as a part of the Train Mountain [Track System](#) and on tracks all over the country, with excellent results. They are available for purchase from the Train Mountain Company Store. (10/06)

**Speeders.** Speeders are used for individual travel on the railroad. A speeder is light enough that the operator can remove it from the track in case of a break down. This makes the speeder and other similar single unit equipment an exception to the rule that all trains must have both an engineer and a conductor. However, a speeder must comply with all of the other rules, e.g. it must have a flag, horn, headlight, tail light, and FRS radio. See [Rules of the Road](#). (10/06)

**Speed Limits.** The maximum train speed is seven miles per hour, except for the following areas, which are posted otherwise:

- 3 mph in the Main Yard and the Passenger Yard at Central Station. This starts as trains leave Wedding Cake and ends after Grand Junction.
- 5 m.p.h. in the Blue Caboose Sub-Division. This is the track between the two grade crossings that curves around the Blue Caboose Campground.
- 10 m.p.h Elizabeth River Loop in the Douglas Sub-Division. This is all steel rail on plastic ties.

<b>TIME and SPEED</b>		
<b>50 Mileposts = 1 Mile</b>		
<b>Time</b>	<b>MPH</b>	<b>KPH</b>
7.2 seconds	10	16.2
8.0 seconds	9	14.6
9.0 seconds	8	13.0
<b>10.3 seconds</b>	<b>7</b>	<b>11.3</b>
12.0 seconds	6	9.7
14.4 seconds	5	8.1
18.0 seconds	4	6.5
24.0 seconds	3	4.9

An engineer can calculate train speed with the [Mileposts](#) located every 105.6' along the right of way. By using a stopwatch, or by counting "One thousand one, one thousand two, one thousand three..." an engineer can count the number of seconds it takes to cover the distance from one milepost to another and thereby determine train speed in miles per hour by using the table set forth below.

Recognizing that an increasing number of our members reside in countries that use the metric system instead of our quaint system of inches, feet, yards and miles, we have provided the calculation for both miles and kilometers.

Engineers who exceed the applicable speed limit will have their track privileges suspended. (10/06)

**Sprague Water Siding.** Located at mile 2.282 in the [Midway Sub-Division](#), the Sprague Water Siding is 140' long. This siding is popular with engineers who want a tender full of water for their steam engine before making the climb up the [Serpentine](#) to [Central Station](#). There is also an ash pit, installed during the summer of 2003. The siding is named for the Sprague River. Well known for trout fishing, the Sprague River empties into the Williamson River near Chiloquin. It was named for Captain F.B. Sprague who was in command at Fort Klamath in 1866 and was a participant in various phases of the Snake and Piute Indian wars. His name was applied to the stream as early as 1864. (10/06)

**Steuer Rest Stop.** Located south of Douglas Meadow at mile 7.762, Steuer Rest Stop siding is 142' long with a 16' facing point spur at the east end and access to [Logging Camp #1](#) at the west end. It is a popular rest stop because it is the only Porta Potty site in the [Douglas Division](#).

The rest stop is named for Frank *Steuer*, who spent every summer from 1996 until 2009 at Train Mountain leveling and tamping track and hauling piles of pine needles to the burn pile. (11/06)

**Stopping Distance.** At all times, an engineer must be able to stop his or her train within a distance of 210' on a 3.2% grade, the steepest grade at Train Mountain. Because the distance between each milepost is 105.6', the minimum stopping distance is two milepost lengths. See also, [Mileposts](#) and [Brake Systems](#). (10/06)

## T

**Ties.** Railroad ties on a 7 ½" gauge railroad are not necessarily one-eighth-scale ties. A one-eighth scale tie would be 1" x 1" x 12". This size does not give enough support because, while many one-eighth scale trains are running on the track, full size people are on those trains. A one-eighth-scale tie simply is not big enough to handle the forces created by full size people on the ties.



Trial and error has led train Mountain to conclude that the ideal tie size is 2" x 3" x 16". The sixteen-inch length provides a broad enough base that the tie will not tip in the ballast. The three-inch depth provides enough surface area that the ballast will hold the tie in place. The two-inch width arises from the fact that the first wood ties Train Mountain used were rough cut and not dimensional, finished, lumber. The whole production process is

geared to a two-inch tie, so the new plastic ties were ordered to the same dimension as the old Port Orford cedar wood ties.

Even the best of pressure treated wood ties begin to twist and split after ten years on the ground. After that point, individual tie replacement becomes an ongoing maintenance problem. This experience has led Train Mountain to adopt a recycled plastic tie.

Though they cost twice as much as pressure treated wood ties, plastic ties have a projected life of 500 years. The only risk of degradation is from the ultra violet rays in sunlight. Because the tie plate covers the supporting surface of the tie, that risk appears to be minimal. See also, [Tie Plate](#) and [Track System](#). (10/06)

**Tie Plate.** The tie plate plays an important part in the track system. Because the track screw actually rests on the tie plate instead of digging into the foot of the rail, the rail can slide on the tie plate as it expands and contracts with changes in temperature. Because the tie plates rest in routed slots in the plastic ties, and the rail is held in the tie plate by the track screws, there is no opportunity for the track to get out of gauge. See also: [Track Gauge](#) and [Track System](#). (11/05)

**Tie Spacing.** In 7½" gauge railroading, tie spacing varies from 2" between ties (4" centers) to 6" between ties (8" centers.) Train Mountain believes that tie spacing should be conservative.

A typical four axle 1/8 scale locomotive weighs 800 pounds, or 200 pounds per axle. A typical six axle 1/8 scale locomotive weighs 1200 pounds, which is still 200 pounds per axle.

In 1/8 scale practice, the interesting weights are often found in passenger hauling. Consider the weight of those cars with lots of adults in those train meet pictures in *Live Steam* and *7+ Railroader*. Eight adults on a flat car with a bench seat can weigh 1,600 pounds, or 400 pounds per axle, is at the limit of Train Mountain's 400-pound [Axle Load](#) specification.



And then, there are 2" and 2½" scale engines and cars. A four-axle engine can easily weigh 1200 pounds, or 300 pounds per axle. Those larger cars often carry large loads of adults. 300 pounds per axle are not uncommon in these scales.

To be safe, Train Mountain uses 2" of spacing between ties. This comes to 30 ties per ten-foot track panel, which puts the 2" x 3" x 16" plastic ties on four inch centers. And, two inches of tie and two inches of spacing have a good look. (10/06)

**Timberlake Railroad.** The first adjoining railroad to connect with Train Mountain, Timberlake Railroad presently consists of [Vertel Loop](#) and an inner loop serving the Timberlake Event Center and the Vertel residence. In the past, two special passenger trains connect [Central Station](#) with the Timberlake Event Center: the Vertel Dinner Special left at 5:00 on Mondays every work week and the Vertel Movie Special left at 7:00 on Monday to Saturday during [Triennials](#). (11/05)

**Topside Sub-Division.** Proposed name for future track to be developed on the top of [Caboose Ridge](#) in the [Caboose Ridge Division](#). (9/12)

**Track Gauge.** The distance separating the rails on 7½" gauge track is not what one might think. A 1999 informal survey of club and private track builders disclosed that track gauge practice is evenly split.

Half of the builders used 7 9/16" for straight track and 7 5/8" for curves. And, the other half used 7 5/8" for both straight and curved track. The universal reason was that using the wider gauge reduces derailments. Train Mountain uses 7 5/8" gauge for both straight and curved track, except in the frog of a switch, where the gauge is exactly 7 ½ ". (10/06)



**Track Panel Train.** During a productive workweek, Train Mountain members can lay and ballast 5,000' of track, or about 1,000 feet of track per day. A substantial part of the process is moving the track panels from the track factory or track panel storage yard to the railhead.



The first step is loading the panels on the track panel cars and assembling those cars into track panel trains. Each steel rail and plastic tie track panel weighs about 100 pounds. A track panel car with five panels weighs about 700 pounds.

Each car holds 50' of track, so it would take 20 cars to transport 1,000 feet of track, enough for a day of track laying. Because a 20-car train of track panels would weigh about 14,000 pounds, this task is broken down into smaller segments.

We find that most engineers are comfortable taking no more than four track panel cars at a time. This is a typical load of about 2,800 pounds. Therefore, five trains a day will keep the track laying crew supplied with track panels. (11/06)

**Track Panel Length.** The principle consideration in determining the ideal track panel length is the ease of transporting completed track panels. A twelve-inch rail offset extends a ten-foot panel by another foot to eleven feet. Allowing six inches at each end of a track panel car means that it takes a twelve-foot car to transport a ten-foot track panel. Cars longer than twelve feet become very expensive to build because of the heavy-duty center sill that is required.

There are other reasons for the ten-foot track panel. There is a substantial risk that a fifteen-foot panel would bend in the middle when carried by two people.

Then, there is weight. A ten-foot track panel built with aluminum rail with 30 plastic ties weighs 86 pounds. A fifteen-foot panel would weigh 129 pounds, more than two people can carry



comfortably. It is even worse when using steel rail, where the weights are 100 and 150 pounds, respectively. See also: [Rail Offset](#) and [Track Panel Train](#). (10/06)

**Track Plan.** At the end of 1999, Train Mountain published a full color 24" x 36" aerial photograph of that portion of the property which presently has 7½" gauge track with existing track indicated by a solid black line and proposed track by dashes. The *Train Mountain 2000 Track Plan* was sent to the membership at the beginning of 2000.

An 11" x 17" track plan showing all of the track south of South Chiloquin Road was first drawn by Walter Freihube in 1998. This has gone through several revisions as track patterns have changed and various versions have been distributed at train meets since 1998. The 2003 Triennial Edition included place names and milepost locations and was supplied to all attendees. The current version has been developed from a physical survey conducted by Bill Shepherd. The data from that survey was entered into a mapping program by Glenn Peterson. The result is available on the Train Mountain website and will be the basis for a new wall map planned for 2007. (11/06)

**Track System.** The track system is the methods put together to have operable track available to the Train Mountain members and their guests. The things to consider are adequate right-of-way, [track gauge](#), [rail offset](#), [track plan](#), [ballast](#), [switches](#), [switch throws](#), [signals](#), [clearances](#), etc. (10/12)

**Track Warrant.** A special permit issued the railroad management, to operate a train contrary to the [Rules of the Road](#) or contrary to rules of [Train Lengths](#) and/or [Speed Limits](#). (1/13)

**Train Length.** The need to establish a maximum train length does not arise from a shortage of main line track. Rather, the limitation is the [Siding Lengths](#) along the main line. Long trains tend to be [Slow Trains](#), and sidings need to be long enough for them to pull off, so that other trains can pass without more than an occasional use of the [Sawby Maneuver](#).

The basic unit of measurement for train length is the length of [Back Shop](#) storage tracks. Each track has 140' of usable train storage space. Therefore, the basic train length at Train Mountain is 140'.

No doubt there will be occasions when it will be desirable to run trains longer than 140'. These will be examined on a case by case basis. Their operation will be subject to a special [track warrant](#). (11/04)

**Train Meet Schedule.** The only way that Train Mountain has been able to lay so much track with only a handful of local members has been the work week/train meet schedule that brings over 50 members each work week to help install and maintain the railroad.

Works weeks begin on a Saturday and continue through the following Thursday. The train meets are the following Friday through Sunday. After having labored to lay and ballast 5,000 feet of track, the crews have the satisfaction of riding on their handiwork. The gratification is truly instant.

In the beginning, Train Mountain experimented with a schedule of full moon workweeks and train meets. As glorious as it was, relatively few engineers actually took advantage of the opportunity. The disadvantage of a full moon train meet schedule was the lack of consistency in the train meet schedule from year to year, which was important in avoiding conflicts with other train clubs on the West Coast.

Since then, we have gone to a fixed train meet schedule as follows:

First Meet: This is the **Polar Bear Meet** which has no preceding work week. The meet is the four-day weekend from Friday to Monday, over the Martin Luther King holiday weekend. This meet was first held in 2005.

Second Meet: This is the **Narrow Gauge Meet**. The work week for this meet begins the first Saturday in May and runs through Thursday. A big push to get track cleaned and tuned following the winter slow down. The meet is held the following Friday through Sunday.

Third Meet: The **June Meet**, work week is the Saturday of Memorial Day weekend to Thursday. Finish right of way clean up and track tuning. Start preparing for installation of new track and/or replace of old worn out track. The train meet follows on Friday, Saturday and Sunday.

Fourth Meet: The fourth meet of the year becomes the Triennial meet every third year. The work week for the Triennial runs from Saturday through the Sunday of the following weekend. The [Triennial Train Meet](#) starts on Monday following the work week and continues to the following Sunday. Because of the summer fire danger Fourth of July fireworks are no longer held at Train Mountain, therefore the fourth meet is scheduled so that it will end on the weekend before July 4<sup>th</sup>. During non Triennial Train Meet years the [Operations Meet](#) is conducted at the fourth meet. The workweek is the Saturday through Thursday at the end of June and the train meet is the following Friday, Saturday and Sunday.

Fifth Meet/[Operations Meet](#): The workweek is the Saturday to Thursday at the beginning of August and the train meet is the following Friday, Saturday and Sunday.

Sixth Meet: The workweek is the Saturday of Labor Day weekend to Thursday and the train meet is the following Friday, Saturday and Sunday.

Seventh Meet: This is the [Fall Colors Meet](#), which has no work week. The meet is the four-day weekend from Friday to Monday, over the Columbus Day holiday weekend. This meet was first held in 2005.

The only exception is the scheduling for the [Train Mountain Triennial](#) Meets, which are scheduled for a Monday to Sunday in the last week of June and first week of July, but avoiding the fourth of July. The main event, the Group Photo and Parade of Trains, is on Saturday morning. The work week is the previous Monday through Sunday.

Specific dates for work weeks and train meets are listed on the website. (10/12)

**Train Mountain Road.** The main road through Train Mountain from the entrance at [South Chiloquin Road](#) to [Katy Lane](#) at the southend of the property. Train Mountain road provides access to the [Backshop](#), [Central Station](#), the **Woodshop** and the [Vendor Marketplace](#). Train Mountain road is open only to service vehicles from the **Vendor Marketplace** to **Foothill Crossing**. (9/12)

**Train Mountain Triennial.** These are held every third years at the end of June.

Locomotives are separated by type. Large steam locomotives with long trains are assigned to [Crisp Yard](#), with its direct access to the unloading hoists. 78 medium and small sized steam locomotives are assigned to the [Ellingson Yard](#). There is space for a few small locomotives at the [Klamath & Western](#) Yard.

Gasoline powered locomotives are assigned to the [Main Yard](#). Electric engines are assigned to the Electric Yard on the north side of the Train Shed. Engineers staying in [Blue caboose campground](#) can request assignment to [Vitz Yard](#).

Vendors will continue to be in the 25' x 210' [Vendor's Marketplace](#) building which lies west of [Central Station](#), where there are 40 separate vendor spaces. There are also three vendor tracks in [Schubert Yard](#), immediately in front of the [vendor barn](#).

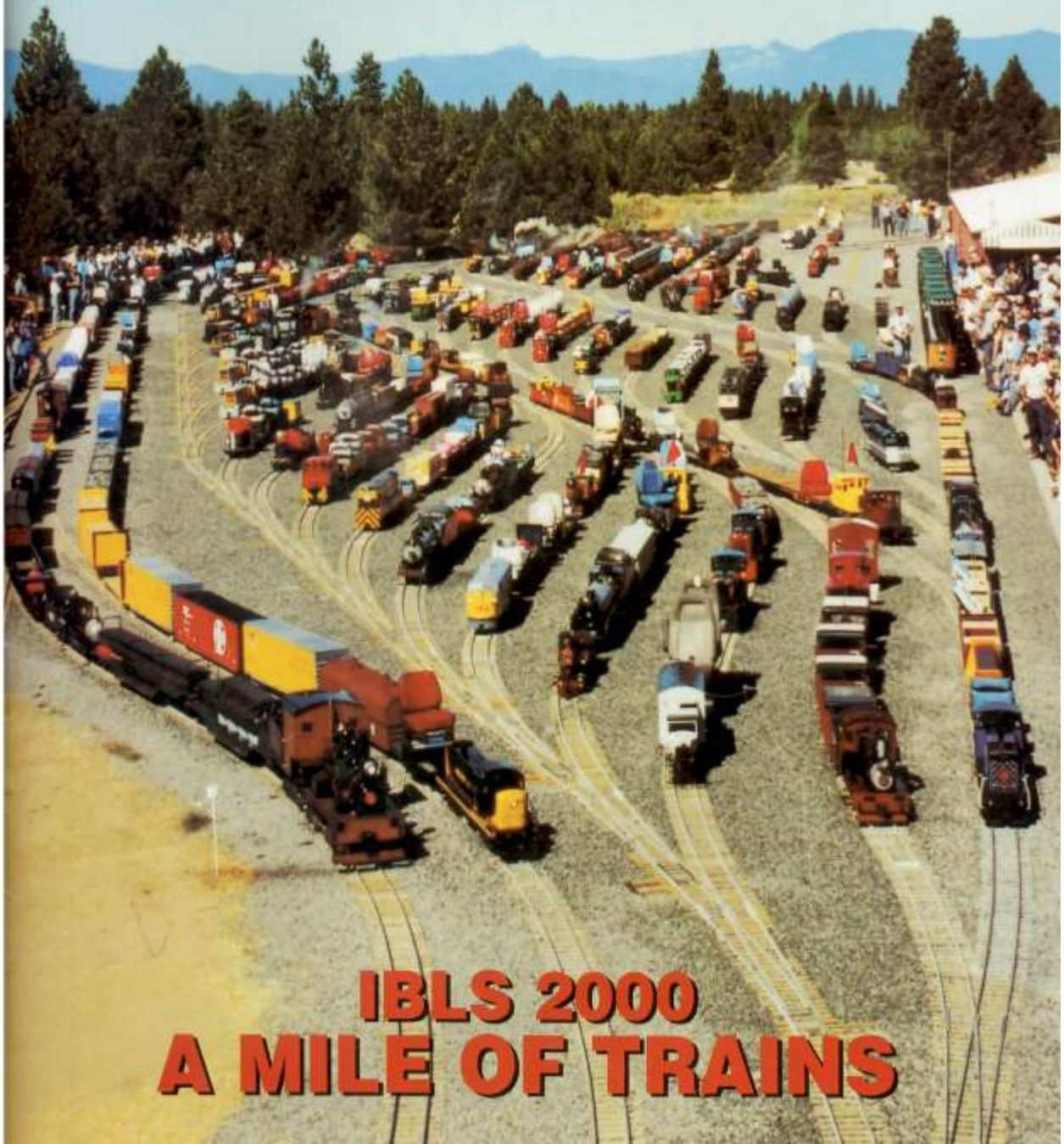
The main event is a Saturday morning group photograph of all of the trains attending the meet squeezed together in the [main yard](#) followed by a **Cavalcade of Trains** from the [Main Yard](#) to the [Inspection Tent](#). At each triennial to date, the length of the assembled trains exceeded a mile.

Each triennial also features seminars on hobby related subjects, which are held in the [Hall of Flags](#) on Monday through Friday of Triennial Week.

The 2015 Train Mountain Triennial is currently schedule for June 22 – June 28, 2015, preceded by a work week from June 13 – June 21, 2015. (10/12)

# LIVE STEAM

JANUARY/FEBRUARY 2001 \$7.00 USA, \$9.25 Canada, Int'l



**IBLS 2000  
A MILE OF TRAINS**



**2003 Triennial**



**2006 Triennial**

**Tunnels.** Rather than moving material to create tunnel opportunities, at Train Mountain we move material to avoid tunnels if at all possible because of the long-term problem of rebuilding or repairing a tunnel when it fails. Of our four tunnels, two were built because there was no other choice, i.e., the only way to get under [South Chiloquin Road](#) and under the [Main Yard](#) was to build a tunnel. In retrospect we realize that [Rio Grande Tunnel](#) should have been a bridge, and when it fails we will replace it with a bridge.

The fourth tunnel is a marvelous construction of heavy-duty timbers that runs under a portion of the main line. It is a very popular portion of the public ride on the [Klamath & Western Railroad](#) because it has a curve that makes it dark and scary. When it fails, we will have some hard choices because it may be equally difficult to rebuild as a tunnel or replace with a bridge. The present tunnels are the following:

Name	Location By MP	Type	Year Built	Length	Internal Width	Internal Height	Portal Height	Portal Width
<a href="#">Jones Timber Tunnel</a>	4.88	Heavy timbers	1997	145'	56"	77"	73"	00"
<a href="#">Long Tunnel</a>	3.64	Corrugated steel	199?	300'	60"	84"	76"	48"
<a href="#">Rio Grande Tunnel</a>	2.12	Old fuel tank	199?	16'	120"	96"	93"	89"
<a href="#">So. Chiloquin Rd</a> (double)	6.98	Corrugated steel	1989	80'	144"	101"	78"	44"
Minimum dimensions for any new single track tunnel					64"	83"	83"	48"
Minimum dimensions for any new double track tunnel					112"	83"	83"	96"

Our experience with numerous tunnel configurations has led us to some rather firm conclusions for any future tunnels. As the minimum dimensions indicate, we believe all heights should be a minimum of 83" to avoid even tall people hitting their heads--and there will be more tall people in the future than there are today. In all dimensions, there should always be two feet next to a 16" wide train, floor to ceiling, in case a stalled train requires that passengers leave the tunnel.

This floor to ceiling requirement is particularly important when using round or oval corrugated steel pipe. Be sure that the required width is present at track level and not just at the wide point of the pipe. Were we to build the [Long Tunnel](#) today, we would use a larger pipe to obtain the specified width at track level. (1/07)

## V

**Vehicles.** Scale vehicles for 7.5" gauge trains are hard to find. There are two possible scales. 1/8 scale vehicles would be suitable as loads for 1.5" or 1.6" scale flat cars and 1/6 scale vehicles would be suitable as loads for narrow gauge flatcars. 1/6 scale would also be suitable for trackside buildings where the buildings are 1/6 scale.

In 2003, Toys R Us had a series of good-looking 1/6 scale plastic tanks and jeeps that are no longer available. In time, they may become available from e-bay. Train Mountain member Boyd Butler has built a fine military train using these models, which is resident at Train Mountain and makes an appearance at most train meets.

There is a small, but lively, group of adult tank modelers who conduct elaborate field maneuvers and tank battles using 1/8 and 1/6 scale military equipment. The following is a list of companies

that offer these tanks in plastic, fiberglass or metal and either as a kit or RTR. These are well made and highly detailed tanks, but at adult prices. Sometimes they can be found used on e-bay.

1. R/C Armory (Iowa) [www.rcarmory.com](http://www.rcarmory.com)
2. Mark-1-Tank (U.K.) [www.mark-1-tank.co.uk](http://www.mark-1-tank.co.uk)
3. Armortek (U.K.) [www.armortek.co.uk](http://www.armortek.co.uk)

Another branch of this hobby uses  $\frac{1}{6}$  scale tanks equipped with paint ball guns for combat exercises as described at <http://www.rctankcombat.com/>. This site includes plans for building your own  $\frac{1}{6}$  scale tanks and lists some relatively affordable kits:

Ertl Toys used to offer  $\frac{1}{8}$  scale tractors, but they do not appear to be in the current catalog. As of June 2004 there was an assortment of  $\frac{1}{8}$  scale tractors still available in the Train Mountain Company Store. (6/04)

**Vendor's Marketplace.** Located just west of and across [Train Mountain Road](#) from [Central Station](#) the Vendor's Market is used as a garage for full sized equipment. During the Triennial Events the garaged is equipment is removed and the building is arranged into forty vendor booths. Future plans are to invite vendors to all meets. (10/12)

**Vertel Siding.** Located at Mile 7.982, Vertel Junction has a 159' passing siding, water for steam engines, a 33' stub storage track and access to and from [Vertel Loop](#). (11/06)

**Vertel Loop.** Vertel Loop leaves and rejoins the main line at [Vertel Siding](#), and has a length of 2,210'. From its beginning, the loop gradually climbs to its apex, at which point it makes a steep (3.2%) descent back to its starting point. In addition to being the access track to Vanderspek Loop, the Timberlake Event Center and the Vertel residence at Mile 8.02, Vertel Loop is a safe place to give a braking system the ultimate test. (10/06)

**Videos about Train Mountain.** All members and guests are welcome to take videos and photographs at Train Mountain and of Train Mountain events, so long as the images are simply shared with friends. Commercial use of videos and photographs taken at Train Mountain is not permitted without written permission.

There are a number of commercially produced videos about Train Mountain:

[IBLS 2000](#) - Train Mountain -- A Mile of Trains by New Life Video Productions (2000) (120 min) \$19.95

Train Mountain Museum 2000 by Green Frog Productions (2000) (60 Min) #53189 \$19.95

Building Track the Train Mountain Way by New Life Video Productions (1999) (55 Min) \$19.95

Train Mountain at Eleven by New Life Video Productions (1998) (45 min) \$ 15

Track Laying at Train Mountain by New Life Video Productions (1998) (60 min) \$19.95

[Train Mountain Triennial](#) 2003 by Robinson & Associates (2003) (86 min plus bonus footage) DVD \$29.95

Riding Railway University by Robinson & Associates (2004) (Two Volumes of 2 DVDs each 5+ hours per volume) Vol. 1 \$39.95, Vol. 2 \$39.95, Both for \$69.95

Train Mountain Revisited -- The 2006 Triennial by Robinson & Associates (2006) (115 minutes plus bonus footage) DVD \$29.95

Riding Railway University by Robinson & Associates (2006) (Two Volumes of 2 DVDs each 5+ hours per volume) Vol. 3 \$39.95, Vol. 4 \$39.95, Both for \$69.95

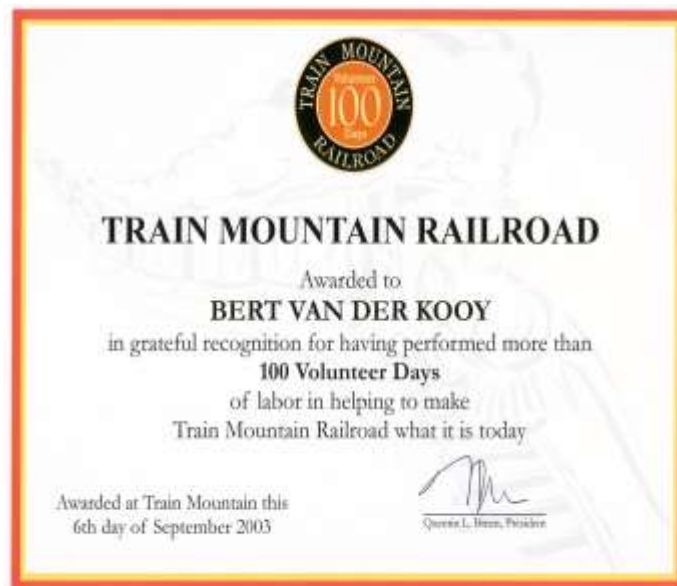
All of these videos can be purchased from the [Train Mountain Company Store](#), either in person or by mail. Shipping and Handling is \$4.50 for the first item and \$1.00 for each additional item in the same order. (11/06)

**Vitz Yard.** Located in the [Serpentine Sub-Division](#) adjacent to the [Blue Caboose Campground](#) at mile 3.12, Vitz Yard has three passing sidings (166', 116' and 81' in length) and ten spur storage tracks (69', 55', 34', 35', 29', 29', 16', 21', 27', and 33' in length). Named for Marty Vitz who single-handedly joined all of the track and switches for Vitz Yard, Vitz Spurs and Blue Mountain Spur Tracks during the summer of 1999. Marty was a faithful all summer volunteer from 1997 to 2000. (11/05)



**Volunteer Awards.** Train Mountain would not be the place that it is without its volunteers. One mark of the appreciation that we have for our dedicated volunteers is the 100 Volunteer Day Award that is given to members who have devoted at least 100 days of their lives to working on the Train Mountain Railroad.

The award has two aspects. The first is a TRAIN MOUNTAIN RAILROAD lapel pin with "Volunteer 100 Days" in the center. The second is a framed certificate as follows:



Train Mountain has been presenting these awards at the [September Train Meet](#) Awards Banquet since 2003. The recipients for each year are as follows:

2003: Art Crisp, Gordon Felber, Mark Flitton, Caroline Jones, Art Knowles, Jim Lane, Art Miller, Glenn Peterson, Jeff Phillips, Charlie Schubert, Peg Schubert, Bill Shepherd, Howard



Springer, Jeanie Springer, Frank Steuer, Chuck Stutts, Bert Van Der Kooy (posthumous), Marty Vitz, Dennis Weaver, Russ Wood and Ron Young.

2004: Jerry Balf, Rich Ledyard, Joel Slagg, Dale Taylor, Veronica Taylor and Al Witcombe.

2006: Jim & Sheri Beauchamp, Lee & Toni Brooks, Jerry Crane, Dennis Ediger, Hugo & Jeanne Meisser, Bert Newberry, and Steve & Pam Panzik.

## W

**Ward Meet Siding.** Located in the [Crossroads sub-Division](#) at mile [##.###](#), Ward Meet Siding is named for Dennis Ward, a member since 2006. It is located east of [Panzik water siding](#) on the **Crossroads Loop** which is under construction. (8/12)

**Web Site.** The Train Mountain web site is located at [www.TrainMountain.org](http://www.TrainMountain.org). (The "org" suffix is because Train Mountain is a non-profit organization.) As with many things at Train Mountain, the web site has been a volunteer project.

For the first year, the site was designed and maintained by Dan Morris, a member living in Washington. It had 18,888 hits from March 28, 2000 to April 28, 2001. We are grateful for his pioneering work.

Since April of 2001, the new site has been under continuous development by Glenn Peterson, another member living in Washington, using Microsoft's Visual Studio.NET. Thanks to his work, we have an outstanding site. It has had 340,369 hits from April 28, 2001 to November 7, 2006.

Inquiries respecting the form and structure of the site should be directed to Glenn Peterson at the Webmaster address listed in the site. Inquiries respecting the addition to or correction of content should be directed to Cheryl Hensley at: [info@TrainMountain.org](mailto:info@TrainMountain.org). (10/06)

**West Main.** The West Main is the double track main line from [Grand Junction Track #1](#) to [South Portal](#) via [Panama Canal](#), [New Isom](#), [Little Falls](#), [Hairpin Junction](#), [Deadwood](#) and [Ellingson Bridge](#). See also [East Main](#). (11/05)

**Wedding Cake.** Located west of the [Main Yard](#), Wedding Cake originally looked like a wedding cake because it had three tracks on three separate levels. Subsequent modifications of the approaches for track have changed the shape so that it is recognizable as a wedding cake only from the West Side. Even so, the name has not changed. (4/03)

**Williamson Water Siding.** Located in the [Midway Sub-Division](#) at mile 9.08, the 170' long Williamson, this siding is popular with steam locomotive engineers who want a tender full of water before making the climb up to [South Portal](#). The siding is named for the [Williamson River](#). (10/06)



**Williamson River.** World famous for trout fishing, the Williamson River passes through the town of **Chiloquin** and empties into Upper Klamath Lake. The river was named for Lieutenant Robert Stockton Williamson who explored parts of central Oregon for the Pacific Railroad Surveys of 1855. In

1867, he was the first man to determine the height of Mt. Hood with reasonable accuracy.

**Witcombe Meet Siding.** Located just north of Witcombe Wye in the [Hope Sub-Division](#) at milepost [##.###](#). Witcombe Meet Siding is [###](#) feet long. (8/12)

**Witcombe Siding.** A passing siding located at [Witcombe Wye](#) in the [Hope Sub-Division](#) Sub-Division at mile [##.###](#). Witcombe Siding is [###](#) feet long. There is a [###](#) foot stub at the north end. Future plans call for a picnic area at [Witcombe Wye](#). This siding will provide parking. (8/12)

**Witcombe Wye.** Witcombe Wye is located at mile [###](#) in the [Hope Sub-Division](#) Sub-Division. The south leg of the wye is enter from [Farmersville Circle](#). The west leg leads to [Cooper Siding](#) and in the future to **Aspen Grove Junction**. The north leg is reached from [Schubert Wye](#) via [Coyote Meet Siding](#) and [Witcombe Meet Siding](#). (8/12)

**Woodpecker Siding.** Located in the [Douglas Division](#) at mile 7.171, Woodpecker Siding is a 140' passing siding. The siding is named for a nearby Aspen tree that has numerous woodpecker holes and nests. While the track for the siding was being laid in 1997, the sound of woodpeckers pecking attracted enough attention to cause the siding to be named for the source. The tree has since acquired so many holes that it is now appears to be a veritable woodpecker condominium. (11/05)

**Wright Bridge.** Located in the [Klamath & Western Sub-Division](#) at mile 5.36, this 8' x 20'



single-track steel truss bridge allows the [Peña Skyway](#) to cross two tracks as they approach the [Klamath & Western](#) passenger station, avoiding a main line diamond. The bridge is named for Richard *Wright*, a Train Mountain employee from 1997 to 2003, who built the bridge during the winter of 1998-99. (11/04)

## Y

**Youngstown.** Located in the [Serpentine Sub-Division](#) at mile 2.619, Youngstown is served by two drive through sidings, 341' and 356' in length, at the edge of town for visiting passenger trains and three stub sidings, 75', 45' and 66' in length, through the middle of town for the storage of freight cars. The town has been under construction since 1995 by Ron Young and Caroline Jones, 1997 émigrés from Lakeview, OR and Fairbanks, AK. Their work includes the following buildings at Youngstown and other projects:

1995: Log Cabin, Wood Farm House, Mail Pouch Barn, Blacksmith Shop and Cream Separator House.

1996: Water Tank & Windmill, Saw Mill, Five-Room Foreman's House.

1997: Wash House, Cook House, Bunk House, General Store, Red Rose Saloon and Jail.

1998: Cattle Loading Pens, Small Log Cabin, Freight Depot and School.

1999: Wood Burner, Planing Mill, repaired Isom Warehouse at Youngstown, Blue Caboose Breaker Panel House at mile 6.12, Signal Box House at MP 0.05, painted Pump House #1, new roof on Milwaukee Road Engine House at Ellingson Track #20B, new roof on Isom Tractor Sales at mile 0.5 and new roof on Isom small building.



2000: Built Chinese Laundry for Youngstown and Cement Plant with associated buildings for new industrial siding at Mile 5.74.

2001: Log Train Station and boiler house for sawmill in Youngstown, painted New Isom's passenger depot and installed new roof, installed interior and painted yellow control tower in passenger yard, painted speeder sheds in passenger yard, permanently installed cattle corral in Youngstown, installed new roof and made repairs on little sawmill at [Klamath & Western](#), installed new roof, painted and restored little depot at [Klamath & Western](#).

2002: Built Perrin & Wright Fabrication Building for cement siding; restored Five Bunkhouses for new logging siding near Steuer Siding, repaired and painted Little Falls red and white farm buildings, refurbished Water Tank and stone building.

2003: Completed the [Logging Camp](#), built the Produce Warehouse, repaired and painted Isom's Depot, Control Tower and Tractor Shed.

2004: Built the Penzoil Station, Fire Tower and started building the Water Towers to mark the location of water sidings.

2005: Finished five water towers and built chalet for [Vertel Siding](#) and signal tower for Vertel Crossing.

2006: Built 5 more water towers, 10 Fire towers, built the Blackout Light Company building, worked on the buildings at [Little Falls](#), rebuilt the General Store, painted the Company House, painted the Depot, repaired and painted the Service Station, installed a door in Saw Mill, repaired and painted Express Depot, Repaired the roof on Isom Depot, repainted Smoky Bear Tower and installed new molding, repaired and painted Chinese Laundry and built the little green and yellow Donation Caboose.

