January

So I’m sitting here trying to get ready to put together this issue of the Gazette. After the year just past almost anything I write will certainly be antidotal. In spite of everything that went on in the rest of the world, Train Mountain actually accomplished quite a few very noteworthy projects.

The smaller meets had dedicated hard working crews for all of the work weeks. Because of their hard work the 242 Wildfire did not destroy all of our north end trackage. Seems where there was NO pine needles or cones, there was no damage! Our long term project of replacing the wood tied track also made great progress with most of the remaining south area mainline replaced with steel on plastic. We just have the Rio Grande Subdivision left to be done.

We were in the midst of a major forest remediation project working with the Oregon Dept. of Forestry and that project got slightly delayed because of the fire but is still on schedule to be started this coming year. There is some two years of planning and meetings, and . . but it is still a go with some modifications due to some of the brush and trees have been recently removed!

Train Mountain lost some income due to the lack of tourists in 2020, but it is hoped that 2021 will allow some of them to come this year. To that end Dale has rebuilt and repowered most of the Rail Tour fleet. Having given Rail Tours for a few years I can tell you that trying to talk over the noise of the gas engines for a couple of hours every day got old quick. With the new electric fleet that problem is all by eliminated!

This was supposed to be our next Triennial Year but due to the amount of preparation work that needed to be done the Board has rescheduled it to 2022. But if you look at that large number on the bottom of the page you can see that the rescheduled date is very quickly approaching. We will need lots of infrastructure work to be done this year and of course we will need you all to step up and volunteer to assist us in putting on another great event.

We miss seeing all of you folks and we sincerely hope that as restrictions get removed and if you feel up to it, please add us to your 2021 plans. We have a little over a year to get ready for the Triennial and all that it brings to us, our hobby, our vendors, and our local community.

From all of us that call this home we wish you all a very great, happy, and healthy New Year.

Join Train Mountain Now!

Register or Join - https://trainmtn.org/tmrrmembers/Member_Portal.aspx
From the Desk of Train Mountain Railroad President - By Jeff Mills

January is shaping up to be a busy month as a lot is happening at Train Mountain though the web-cameras are not showing much activity. We have received a truck load of tie material which should keep the track shop busy through the winter. This material was purchased with the help of donation campaign that Train Mountain Institute ran in the last quarter of 2020. A container load of rail has been ordered from Switzerland and a down payment has been made. We will be expecting this to arrive sometime this spring. This purchase has been made possible by the generous donations and from the sale of salvaged timber from the 2-4-2 fire. These purchases will set up the completion of Timber Lake track replacement and go a long way in the replacement of the remaining track with wooden ties.

We have received the contract for the brush remediation project and it is being reviewed before it is signed by TMI. Once the contract is in place, we can get this project started with purchase of the necessary equipment. This project is going to be paid by a grant which will mean that Train Mountain Institute will not have to pay for this work. As we saw in September of 2020, we are quite vulnerable to fire and need to make our forest land fire resistant. This also means that we cannot let our guard down when it comes to Fire Prevention. This project will enhance the health of the trees and wild life we all enjoy so much.

The Train Mountain Railroad Board has met already this year via Zoom a technology that we all are getting more familiar with. The Board is working on the ground work for the 2022 Triennial and we have a lot tasks to complete to make this 2022 event happen.

The computer that is used for broadcast e-mails to the membership has died and until we get a replacement you will not be getting the notification of the new issues of the TM Gazette. The submission date for Articles is the 15th of the month. Russ usually has the Gazette published 2 to 3 days after the 15th and it is available on the TMRR.org website page, please look for the Gazette there. Also note that back issues of the Gazette can also be accessed from this page or the web page directory. The TMRR Board is working on purchasing a replacement and hopefully that happens this early spring.

The Kitsap Live Steamers Annual Work Week has been planned for April 10 to 17 pending any pandemic restrictions in place at this date. More on this work week in upcoming articles.

The 2-4-2 fire has placed an emphasis on the need for raking and hauling of forest debris. For the most part the tracks that were raked suffered less fire damage than the track that was not raked. So, when you are out on the track raking and hauling it is necessary and appreciated by all who enjoy Train Mountain. We will be working on raking and track repair during the spring work weeks, so be prepared to put your best effort forward.

At this point in time, we have to start planning for the upcoming events but need to be mindful that the restrictions placed on us due to the pandemic can cause us to change these plans as the year unfolds. Please be patient and mindful of your health as it can affect others.

CAUTION - CAUTION - CAUTION  North of Schubert is still CLOSED

There are a large number of lumber vehicles working the burned out area North of Schubert. PLEASE do NOT venture into that area. They are not railroaders and will NOT be looking out for you. This land clearing will be on going for some time so once again please protect yourself and stay out of the area. They will be clearing the burnt area first and then they might also be assisting us in the future forest management project that is now in it 2nd year of planning. We are awaiting the signed ODF grant forms to start on that portion as well. Thank you for your cooperation.
Greetings from Joyce at the front office:

As I write this, it is just two days before the Polar Bear meet. After a number of days of rain, snow, wind and melt-off we are having a nice sunny day with blue skies and a few clouds. It sure is nice to see the sun! And, for winter, it is even pretty warm here today.

Though 2020 had its bad points—COVID, fires and other stuff—it had some good points too. Many of you stepped forward and made generous donations to Train Mountain. A good number of you showed up for meets during the second half of the year, had fun and volunteered a lot. The two volunteers who continue to build and expand Lillyville will be bringing more buildings and more animals to add to the mix. They have been constructing, building and painting a lot during the shutdowns. We got a number of new members in 2020 and the number of Harvest Host 2020 visitors more than doubled that of 2019. A truck load of plastic tie material was purchased and it arrived. The steel rail is on order. The scouts installed Stockbridge Station adding more for you to view while travelling on the tracks. Great progress was made on the Pullman Car paint project. A red hawk was rescued. Clearing of the 2-4-2 fire burnt trees is well underway. Oregon Department of Fish and Wildlife provided Train Mountain with about 150 acres worth of seed so that we could reseed part of the property with grasses for the wildlife. Track work has continued and Train Mountain is here waiting for you and 2021 fun.

In 2020 there were 430 memberships with 791 total members including all primary and family members. For 2021, so far we are presently at 221 memberships (and growing) with 390 primary and family members. Your dues help to fund the park and keep us going, so thank you.

Your membership renewals, donations and volunteer hours are greatly appreciated. If you haven’t renewed your membership yet, you can renew online, by mail, in the office or by phone. You can also donate online, by phone, by mail or in the office. I received word from a friend that the part of the CARES ACT that has to do with deductibility of donations has been extended. Please consult with your tax advisor to confirm this and for advice. You might be able to claim 100% of your donations if you itemize or you may be able to claim up to $300 of your donations in addition to your standard deduction if you do not itemize.

I hope you are all doing well.

We are looking forward to seeing you at Train Mountain this year.

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Fund Raising Campaign Part 3

By: Jerry Crane

The Board of Directors of Train Mountain Institute would like to thank all those who made their generous donations during our recent fund raising campaign.

With existing funds, your donations and some of the salvage logging income we were able to purchase a semi load of plastic tie material and a container load of steel rail. The tie material has already been delivered and is being used to make track panels. The steel rail is now being manufactured in Switzerland and will be delivered in about three months.

The continuing income from salvage logging in the fire damaged area should provide the required funds for forest restoration. With the help of all our wonderful volunteers the plastic tie material and steel rail will be used to make new track panels this winter and spring. During this next summer we will use these panels to repair the track that was damaged during the fire.
Oregon Department of Forestry Awards
Train Mountain a Major Forest Remediation Grant

Train Mountain is about to embark on a major forestry project. This project has been in the planning and structural process for over two years. Train Mountain is a major forested land owner in Klamath County. The majority of the rest of the forested land is owned or controlled by various government agencies. With the growing number of wildfires occurring annually in Oregon, the Department of Forestry (ODF) obtained substantial funding for the much needed forest remediation to assist in making them a little less prone to wild fires.

I know that many have dreaded this project because they think that we are going to clear cut the forest and destroy the beauty of our park in the name of fire safety. That is the absolute last thing we want. We have worked out a very clever plan, assisted by Jason of ODF, that lowers the available fuel load and still leaves Train Mountain with a scenic ride through the woods.

We have had ODF hand crews here in the past but as they were leaving the park the underbrush was still growing. We have purchased the Brush Blazer and that has shown to be a valuable tool for working in close proximity to our railroad. The funding that we will be receiving from ODF will allow us to take a major step up in the forestry machinery arena with the purchase of a Fecon FTX150 forest mulcher machine. This will allow us to complete the land maintenance to complete the grant project and still have the machinery on campus to maintain the land for our long term benefit.

Tom’s video of the Fecon being tested by our own staff at Train Mountain: https://www.youtube.com/watch?v=pa8zVYz5gkU

The forestry work will be totally under Train Mountains control and funded by the ODF grant. The grant will allow for Train Mountain to purchase the Fecon machine. The grant total dollar amount is $449,080 and will be paid over the next couple of years as we complete various aspects of the work.

If you attend any of our functions this year and have questions about this major project please look me up and I’ll give all of the nitty gritty. Russ.
Coming 2021 Events from the Track Crew
an article by Dennis Ward—Track Superintendent

Here it is January—time to start planning this years track installation season. We still have approximately 1.6 miles of main line track on wooden ties. The longest route is the Rio Grande subdivision (4400’) and the next longest is the remainder of the south bound track through Timberlake (1500’). We hope to have the Timberlake project work done before the Big Build meet in September. The Rio Grande loop replacement is planned for the Big Build.

The plan for the September Big Build is to assemble four (4) track crews. One crew working from Lillyville toward the junction with Sharon’s Shortcut. A second crew to work from Sharon’s Shortcut Junction toward Lillyville. The other two crews will work between Sharon’s Shortcut and South Portal Circle. The Rio Grande project includes the replacement of nine(9) switches. It will take three(3) replacement switches on the Timberlake project.

We have a group coming in to “Screw the Yard” (Main Yard) once the track upgrading weather shows up in late spring. The plan for this group is to continue with Bert Newberry’s project of adding additional, longer screws to help extend the life of Main Yard for and additional ten years.

We could also use someone to champion the placement of the track on the Klamath and Western subdivision. This track was taken up in order to daylight the Jones Timber Tunnel. Dirt work is in progress to prepare a new grade for that track that went over the top of the tunnel.

Other main track that will eventually be replaced includes the south end of Dog Walk between Train Mountain Road and Youngstown. Sharon’s Shortcut has not been upgraded nor has Lucky North and the short annex between the two track sections.
GPS Train Tracking at Train Mountain  -  Dick Miller

The tracking of trains at Train Mountain over 37 miles of track, including nearly 25 miles of mainline track, is a challenge. Some track sections do have Centralized Train Control (CTC) such as the yard limit area around Central Station, Dog Walk, and Farmerville/Schubert track section on the north side. In the case of the Central Station area, the dispatcher may also control switches remotely similar to prototype CTC. The other areas have train detection only. Installing CTC features requires time and money, both of which are limited. As an interim solution, John Cooper has developed a train location system that can utilize train location data from any properly formatted source, and also includes a predictive train location feature that positions the train on the map based on the starting time over a specific section of track. The later method uses average times over track sections, but has no way of automatically correcting the location should a train stop for any reason. All this brings us to the next best alternative of using GPS signals for locating trains. GPS is readily available and very inexpensive by comparison to other alternatives, and is widely used for amateur radio APRS and many commercial applications.

The mapping application is currently working for the south area, with plans to provide similar mapping and graphics for the track north of South Chiloquin Road. The formatting of the data input to the mapping application is defined, since the application is currently on-line and working. Beyond that, members can be creative as to how they transmit the location data to the map application. Member Nate McConnell has a system working that uses a UHF transmitter operating on 432 MHz to transmit a data string to three receivers located at Train Mountain. Only one of the three receivers need receive the signal to forward the position data to the map server. Each position data packet is serially coded and includes a parity check to verify data integrity. The data from the three receivers is filtered through an aggregator, such that only one data packet for a given serial number and receiver ID is forwarded to the map server, after the data passes a parity check. A missing serialized packet is ignored, with the map server simply advancing the train location as verified packets are received.

The GPS data may be sent to a public IP address or URL and service port, or if received via one of the three GPS receivers, the data may be sent to the internal IP address of the map server. The formatting is defined for data sent via the local UHF receivers since this data must be recognized and verified by the aggregator that formats the data for presentation to the map server. Data sent via the Internet must be formatted correctly to be recognized by the map server as there is no other head-end formatting of this data.

John Cooper developed an application for his Android cell phone that sends GPS data to the map server via the cellular and Internet media. Although the data is presented and received correctly by the map server, the Android goes into a sleep mode that only allows location data to be sent every five minutes. John is working on this glitch since a train can go some distance in five minutes.

So, where do we go from here? Nate McConnell has developed a GPS receiver and UHF transmitter that require about $50 in Arduino parts. He has sold some of these to members at cost, and has also provided the source of the components for anyone wishing to assemble their own device (see references at the end of this document). John Cooper indicated he will share the Android application, but the problem with the 5 minute updates still needs to be resolved. And, the anomalies of GPS signal propagation through trees is not resolved, but we may have to live with that.

Any member with the technical background to develop and build their own position location is encouraged and welcome to do so. The only limitation is the forwarded position data must be formatted correctly to be recognized by the map server.  

continued next page
Benefits and Enhancements:

In addition to tracking trains for operations and dispatching, the map server can provide historical data. This could be a good safety feature to demonstrate to members how fast they are actually operating. Perhaps this would be a little like ‘Big Brother’ but nonetheless useful for maintaining safe movement of trains. GPS data would also be useful to assure safe operation of tour trains that carry the visiting public. Finally, the dispatcher may want to give priority to trains that can be located by GPS data.

Additional Information for developers:

The format of the data sent to the map server may be found in the CTC/GPS section of the Train Mountain webpage.

The format of the UHF data sent to the aggregator and the Arduino tracker may be found at: https://n7mcc.radio/projects/loratracker. A source for the parts may also be found at this website.

Train Mountain converted to FCC licensed UHF radio frequencies—Dick Miller

For several years Train Mountain and similar model railroads have been using the Family Radio Service (FRS) for communications related to safety and operation of trains. The FCC rules for the FRS, and the related General Mobile Radio Service (GMRS) are so restrictive as to prevent reliable and effective communications throughout the 2200 acres belonging to Train Mountain. Both radio services have severe output power restrictions, and only allow portable radios with permanently attached antennas, and no provisions for base stations.

Train Mountain is now licensed pursuant to Part 90 of the FCC rules for operations and safety as recommended by the radio committee appointed by President Jeff Mills. Train Mountain is licensed for one repeater pair, and four simplex channels that can, if needed, be converted to two additional repeater pairs. The repeater pair provides portable to portable, and portable to office communications throughout the entire 2200 acres. During operations and whenever the office is open, Admin channel is monitored by the office. The four simplex channels allow radio to radio communications without a repeater, in the same manner as the prototype railroads. I’m considering the addition of portable base stations for these channels. I expect changes will be made going forward as we gain more experience with the new channels and radios. I actually asked for the portable base stations in the original frequency coordination, but that somehow got dropped by the coordinator when the application was submitted to the FCC.

For the limited Operations Meet in 2020, we used the administrative repeater channel, and three of the four simplex channels. The original intent was to have a dispatcher for the track north of South Chiloquin Road, and another for the south area. As it turned out, we used the South Dispatch channel for both the north and south areas with excellent results throughout the entire park. Another channel was used for communications with the tower, and still another channel for the Freight Office. Using an outside antenna, the Freight Office had communications throughout most of the park. From what I’ve heard and read, those that used the new radios and frequencies were pleased with the performance.

Now that we operate pursuant to the Part 90 rules, any radio, portable or base station, must be certified by the FCC when used at Train Mountain. FCC Part 90 Rules apply for all commercial and

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public safety land mobile radio services. The only Baofeng model appropriately certified is the UV-82C. All other Baofeng models are explicitly NOT certified, at least not at this time. Most any other commercial radio by Motorola, Kenwood, Yaesu, Icom, or others, may be used if Part 90 certified. I sold preprogrammed Baofeng UV-82C radios for $55.00 to any member that wanted their own radio, and about a dozen radios are available in the office for loan on a first come, first serve basis.

Since my wife, Lynne, is now setting up the on-line Train Mountain Company Store, she may offer the radio to members in this manner.

For those members that are more technical, the repeater is a Kenwood Model NXR-810 digital/analog repeater, operating in the analog mode. The repeater output is rated 25 watts, continuous duty. The repeater is located on Train Mountain property at Steiger Butte and operates on a 9 dB gain antenna, offset pattern, down tilted and oriented toward Central Station. After adjusting for antenna gain, minus feedline and duplexer losses, the ERP (Effective Radiated Power) is just under 180 watts, thus providing effective coverage in buildings and signal shadow areas. The same 9 dB advantage applies to portable radios operating on the repeater channel when considering antenna gain and path loss. The repeater operates on 12 VDC, with a 120/12 volt power supply. A backup battery could be easily added in the future if ever required for emergency operation during power outages.

The technical data for the portable radios is as follows:

<table>
<thead>
<tr>
<th>Channel</th>
<th>Application</th>
<th>Frequency</th>
<th>CTCSS/DCS Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Admin/Emergency/Repeater</td>
<td>461/466.125</td>
<td>100.0</td>
</tr>
<tr>
<td>2</td>
<td>Road South</td>
<td>462.1500</td>
<td>023N</td>
</tr>
<tr>
<td>3</td>
<td>Yard Limits/Tower</td>
<td>467.1500</td>
<td>025N</td>
</tr>
<tr>
<td>4</td>
<td>Road North</td>
<td>461.9500</td>
<td>026N</td>
</tr>
<tr>
<td>5</td>
<td>Switching/Freight Office</td>
<td>466.9500</td>
<td>031N</td>
</tr>
<tr>
<td>6</td>
<td>Simplex</td>
<td>461.125</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The CTCSS and DCS code should be set for both TX and RX.

The above radio channels are licensed for use by Train Mountain. Any radios used at Train Mountain must be FCC Part 90 certified and labeled accordingly.

The frequencies will not change going forward, although the use of the frequencies may change as we gain experience in actual operation.

For any questions or comments, I may be contacted at rlmiller@telwest.com. Include “TM Radios” in the subject line of any email.

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2021 Train Mountain Train Meet Schedule

<table>
<thead>
<tr>
<th>Work Week</th>
<th>Polar Bear Train Meet</th>
<th>Spring Awakening Train Meet</th>
<th>Narrow Gauge Train Meet</th>
<th>Operations Train Meet</th>
<th>August Train Meet</th>
<th>Big Build Train Meet</th>
<th>Fall Colors Train Meet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet</td>
<td>1/15 to 1/18</td>
<td>5/7 to 5/9</td>
<td>5/22 to 5/27</td>
<td>6/19 to 6/23</td>
<td>7/24 to 7/29</td>
<td>9/4 to 9/9</td>
<td>none</td>
</tr>
</tbody>
</table>

Register or Join - [https://trainmtn.org/tmrrmembers/Member_Portal.aspx](https://trainmtn.org/tmrrmembers/Member_Portal.aspx)
USA Railroad Terms VS UK Terms
By Jeff Mills (USA) and Brian Watson (UK)

You need a little background information before we get into this list. During 2020, the year of pandemic isolation, travel restrictions and restaurant closures, we changed how we socialized with our friends. In the Seattle area, there is a group of 12 friends with a common interest in trains, who met Wednesday mornings at a restaurant by the SeaTac Airport. This is a great group, we discuss a variety of topics, bring “show and tell” about current projects or historical information. After the shutdowns, Kirk Devine took up the mantle of hosting a Zoom Chat for this group at the same time and day we used to meet at the restaurant. One of the members was Doug Wilkinson, who recently passed unfortunately. Doug invited a friend of his, Brian Watson, from Bangor, Wales in the UK to join us. Brian became a regular member and happily shares his stories with our Zoom group in the USA each week.

In 1999, Brian was driving a locomotive at the Welsh Highland Heritage Railway, a two-foot gauge railway. When Doug and Shirley, Doug’s wife, were vacationing in Wales. They asked for a Cab Ride which Brian was willing to do. They struck up a conversation about railroading and that Doug had built multiple locomotives in 7.5” Gauge. This led to a long-lasting friendship. Brian and his wife made numerous trips to the USA including the 2000 IBLS meet at Train Mountain. There, Brian got to use Doug’s Little Lima Steam engine. He and his wife made subsequent trips in 2003 and 2006. They visited Kitsap Live Steamers in Port Orchard, WA as well as the Burnaby club in BC, Canada. Brian has a 5” gauge track around his garden in Wales and is currently constructing a Romulus in 71/4” gauge which is an 0-4-0 steam engine. Brian has a background in machining and fabrication. He retired from the University of Sheffield; first as a member of the Instrument work shop staff for the Department of Chemistry Labs. Then he was the proprietor of a radiator shop. Later, he was hired again by the University's Earth Sciences Department labs.

During our Zoom chats, Brian noticed some differences in the railroad nomenclature between our two countries. At times, he needed us to translate, into the Queen’s English for him, before he understood what we were talking about. This led me to the idea to prepare a list of those words that we use differently. While this list is not complete and varies within both countries, it is interesting how we came to use these terms. Many of them are related to steam engines but they all should be recognizable to most of us. The list is in alphabetical order with the US term first.

<table>
<thead>
<tr>
<th>Term in USA</th>
<th>Term in UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad Order</td>
<td>Vehicle Defect</td>
</tr>
<tr>
<td>Box Car</td>
<td>Van</td>
</tr>
<tr>
<td>Bumper</td>
<td>Buffer</td>
</tr>
<tr>
<td>Caboose</td>
<td>Guards Van</td>
</tr>
<tr>
<td>Car</td>
<td>Carriage or Coach</td>
</tr>
<tr>
<td>Cattle Car</td>
<td>Cattle Wagon</td>
</tr>
<tr>
<td>Conductor</td>
<td>Guard</td>
</tr>
<tr>
<td>Corn Field Meet</td>
<td>Head on Collision</td>
</tr>
<tr>
<td>Coveralls</td>
<td>Boiler Suit</td>
</tr>
<tr>
<td>Combination Car</td>
<td>Brake 3rd or Brake End</td>
</tr>
<tr>
<td>Depot</td>
<td>Station Building</td>
</tr>
</tbody>
</table>

*Note: for a number of years now, since ‘Guard vans / Brake vans were withdrawn from general service, we too have used a British version of ‘FRED’.*

continued on next page
Emergency Stop Cord = Cord that runs through passenger cars that can stop the train in an emergency
UK= Communication Cord. Operates brakes in emergencies. A Fine is imposed if used incorrectly.

Engineer = person who drives a locomotive
UK= Driver

Fire Door = Door that allows access to Fire Box for adding fuel or observing the fire.
UK= Fire Hole Door

Freight = items hauled for a fee. Can be little as parcel or complete train of one commodity.
UK= Goods

Freight House= Building where freight is collected to be loaded.
UK= Goods Shed

Guard Rail = rail added on inside of primary rail used in switches and bridges to help prevent derailments.
UK= Check Rail

Gondola = Open toped car with sides usually for carrying bulk goods not needing protection from weather.
UK= Open Wagon sizes determined by weight to be carried IE. 10-ton 12 ton etc.

Grade Crossing = where a street or road crosses tracks
UK= Level Crossing

High Ball = To proceed at max track speed. Term left over from early days when colored balls were hoisted up a mast as signals.
UK= Express Passenger Trains. Though certain types of freight (in appropriate vehicles) can run at express speeds.

Hostler= person who gets a steam engine prepped and steamed up for the days run for the engineer.
UK= Steam Raiser or Fire Lighter

Johnson Bar = The lever that changes the valves on a steam engine to reverse direction of travel
UK= Reverser Lever or Reverser

Mud Ring = Internal structure of the fire box in a steam engine that collects sediment
UK= Foundation Ring

Overalls = Work garment worn by railroaders having a bib and over shoulder support straps
UK= Bib and Brace. Often with a separate short jacket

Reefer = Refrigerated car used for hauling perishables
UK= Insulated Van

Round House = Building usually a semi-circle built next to a turn table to house repair facilities for loco motives
UK= Loco Shed, usually built straight, the tracks are called roads. We do have round-houses, sheds with a turntable, tracks / roads radiating from the center. In 1947, The Great Western Railway only had a total of three.

Switch = Used to change direction of a train
UK= Points (note in USA we refer to the points as the part of the switch that moves to change direction not the whole assembly)

Throttle = used to let steam into the cylinders and to regulate speed
UK= Regulator

Tie = Piece that goes under the rail for support can be wood, plastic or concrete
UK= Sleeper, usually wood soaked in creosote (or equivalent). British Railways since 1948 (?) has converted to Flat Bottom track (rail) and now use Metal or Steel Reinforced Concrete sleepers.

Tie Plate = Metal piece that goes between the tie and the rail keeps rail aligned and provides a place for the rail fasteners
UK= Chairs when used with Bull Head Rail. However, our modern flat bottom track use ‘pandrail’ clips to secure track to metal sleepers.

Tied-Up = When parking a locomotive for a time and out of service
UK= Going on Shed

continued on next page
Truck = framework that supports the wheels and axels  
UK= Bogies

Unit Train = train hauling one commodity i.e., wheat or coal  
UK = Rakes, our expression uses the same term as you but also includes coaching stock

Valve Gear = Mechanism that changes the position and times the function of the steam valves on a steam loco  
UK= Motion, also valve gear.

The following are notes from Brian Watson which may be of additional interest.
“Prior to 1948 there were 4 major railway companies: LMS, LNER, SR and GWR (my favouruite). On that date, those companies were amalgamated and became BRITISH RAILWAYS. In due course (I cannot remember which year) B.R. started to lease some of its services, in effect privatizing certain sections. Because of this and the way it now operates, particularly without steam locomotives (The steam locomotives now running on the B.R. are privately owned and classed as ‘Heritage Trains’. ‘Heritage lines’ such as the Ffestiniog Railway or Great Central Railway run on their own trackage).”

“Consequently, some of the terminology once in regular use by the prototype railways is no longer used except by the Heritage sector or model engineers and the smaller scales. Of course, when they were individual railways there were a lot of local variations.

“I will digress here and confess to my naughtiness whilst still at school.”

“I played truant (missed school) to go train spotting (I would be 14yrs old?) in 1952. I went to Grimesthorpe shed LMS in Sheffield. This shed was a roundhouse and a straight road shed with repair facilities. The UK did not use Round Houses as much as the Americans in 1947 GWR had 3. Thinking back now I find it ironic that Grimesthorpe had a Round House. This made it interesting because one could ‘spot’ locomotives not normally seen in one’s own area. The mainline (main trackage) ran over a road bridge. I could hide behind the bridge parapet quite safely and spot (collect) all the express train locomotive numbers and names that went by. The British have a penchant for naming locomotives, even the diesel locomotives of today.”

In the Canterville Ghost (1887), Oscar Wilde wrote: ‘We have really everything in common with America nowadays except, of course, language’. Winston Churchill made it popular when he used this variant, “Americans and British are one people separated by a common language.”

Footnote: Additional reference information provided by Philip Hindley of Wales, UK
Blue Signal Protection - By John Lovely

Is it a NEW Year or are we just back to square one? Anticipating that this year will bring more happy railroading, let us continue getting ready for Operations 2021. With safety being the upmost importance on a railroad we will look at another aspect of flagging – Blue Signals.

Blue Signals, an expansion on blue flags, are to protect non-train crew workers from injury. Blue Signals are another part of real railroading that we often ignore while running our miniature trains. However, knowing and using Blue Signals we can save ourselves a lot of pain if not broken limbs.

A Blue Signal means that someone may be working on, under, or around standing railroad equipment. Do not couple to or move the blue flagged equipment. Blue signals are similar to OSHA red tags. They may take the form of a cloth flag, a colored light, or a metal sign. Where to look for them depends on where the rolling stock is parked – Main Track or Other Than Main Track (back to those same old concepts). Remember that Main Track can be designated within yards as well as out in the country. An engine is nothing more that rolling stock until it meets the definition of a train.

To protect rolling stock on Main Track, you only need to place a blue flag or light on each end of the cut. Blue signal lights usually have a magnetic base and are easily mounted on the couplers. If an engine is attached an additional blue signal needs to be placed in clear view of the engineer seat on the controlling locomotive – usually on top of the control stand or sometimes hanging on the cab window. Of course the controller (direction) handle has been removed and hand brakes set. On a steam locomotive the throttle lever will be locked closed, Johnson bar centered, and cylinder drain cocks opened.

On Other Than Main Track (yard and service track) access to the track must be denied and Blue Signals placed 50’ from each end of the cut of cars. Access to the track is denied by replacing the regular switch lock with an “effective locking device”, a padlock with only one key. Yard flags are usually metal signs, about a foot or more square, on a pole that clamps over the rail. Permanent ones will fold down between the rails.

Blue signals are also used to protect maintenance shops. Sometimes the Blue Signal will be set for the entire facility, other times for individual tracks. Individual tracks can be “blocked” by setting up multiple blue flags, so the signal can be taken down on only a portion of the track. Before anything is moved in the shop all employees stop working and are accounted for, then the blue signals can be taken down, the equipment moved, and the blue signal restored so work can resume. Tracks are often further protected by setting a de-rail along with the blue flag.

I think we need to be more diligent on blue signals for the back shop when we are working on a train. One time I was sitting on the steps working on brakes under a car on my train with the engine sticking out the door and had not set a blue door and started to move my train without looking. Fortunately, my arm was only bruised, not broken.

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continued—Blue Flag

signal. Another person came along and decided to close the A Blue signal is “owned” by one employee, just like MOW flags out along the main, and can only be removed by the person who established the protection. More than one craft can work under a blue signal as long as all persons know who is covered. Blue signals can also be passed from one owner to another making sure everyone concerned knows about it. Ask permission to work under a blue signal and be sure to inform the owner when you leave. At GCR we always asked the carmen before we released hand brakes or did anything that might cause the train to move. When the head carman handed me the wheel report then I knew the train was mine as Conductor.

Be thinking about how much fun we will have at Operations in June. Have good thoughts and get your trains ready.

Doug Wilkinson, Friend & Mentor - by Bill Hartung

Doug was the first member of KLS that I met, although that was at Boeing several years before KLS began. I knew Doug at the Renton Division, where he served as a manufacturing engineer for the 727, 737 and 757 programs. I was involved in coordination of how the factory handled the many last-minute changes to the airplanes, and Doug was one of my mentors in this often-high stress work. I noticed from the outset the photos of his live steam projects that he had sitting on his desk, something he eagerly talked about.

When I joined the informal group at the private 7.5-inch gauge railroad in Woodinville, Doug was there trying out his new Clishay. He knew I was a fan of live steam and often encouraged me to come see what KLS was all about.

Once I joined, my first experience operating a steam locomotive was Doug's three-inch scale 0-4-0. He was very generous and also very patient with me when I let it run out of steam halfway around the old KLS mainline.

When I acquired my vintage 4-4-0 in 1997 Doug stepped right up to help me prep the boiler for some needed steam leak repairs. When I eventually assembled it and presented it to the state inspector, and got it certified, Doug came right over to give me a hearty congratulations. I think he was as anxious about it passing as I was.

He was a constant presence at the park, helping with track construction and maintenance, and running trains for the public.

I know that KLS and Train Mountain meant a lot to Doug and he was really proud of his work and his memberships.

Doug was a great member of KLS, Train Mountain and a great friend.

He will be missed by all.
2018 Triennial Video
Now Available

The 2018 Train Mountain Triennial video from Aaron Benson at 7Idea Productions is now available. You can order online at the link shown or you can call the office at 541-783-3030 to get your copy. This is a most enjoyable video created by a true video artist and of course it just happens to be about our most favorite subject! The cost of the video is just $29.95, quite a bargain!

Our good friend Jim over at Discover Live Steam has placed ads for us on his terrific website, thanks Jim. discoverlivesteam.com

Did you see the great article and front cover story from the January / February 2019 issue of Live Steam and Outdoor Railroading? It is a great article covering the 2018 Triennial. and the great gang of folks that hang around the place and put on terrific live steam trainmeets. As an added bonus there is a photo album by member Michelle Moore! How about that! Pretty cool!

Crater Lake/ Train Mountain Vacation Rentals

Crater Lake Chalet
Located on Hwy 422, only 1 mile off Hwy 62 and 2 miles from Hwy 97 in the Chiloquin area. This house is at north end of Train Mountain and contiguous to Train Mountain.
This comfortable house sits on 35 beautiful acres. 2 bedrooms and 2 bathrooms. Can sleep up to 6 people.

Panoramic View Ranch House / Crater Lake
This ranch house is located on Hwy 62, and attaches to the west side of Train Mountain. The 56 acres, panoramic views of Agency Lake and the Cascades. Enjoy a peaceful and private experience. 4 bedrooms and 2 bathrooms. Can sleep up to 8 people.

For more information please call: Julie 415-756-3943 or Mike 415-420-9026
10% off for train mountain members
www.getawayvacationhome.com
Located only 1.5 miles off Hwy 97 in Downtown Chiloquin in the same building as the Post Office 212 1st Avenue, Chiloquin, OREGON 97624 -- Phone: (541) 783-0988

Good Service  
Good Food  
Friendly Folks

Crater Lake Junction Travel Center  
34005 Hwy 97 N, Chiloquin, OR 97624, 541-783-9800

The Crater Lake Junction Travel Center opened for business in 2010, and is owned by the Klamath, Modoc and Yahooskin Tribes. Open 24 hours a day and located just next door to Kla-Mo-Ya Casino as you enter, this travel center offers competitive fuel prices and many convenience items. Travelers can fuel up with gas, diesel, or propane. Stop in for a snack or soda, or grab a quick meal featuring food to go or you can eat it there, Free Wi-Fi, a comfortable lounge with large screen TVs, laundry and shower facilities, and ATMs are all available.

WE ARE ALL VOLUNTEERS  
DON’T YELL AT ME, I AM A VOLUNTEER!
Please submit your volunteer hours. If you work off site or at home on Train Mountain projects - these hours count.

REMEMBER: No job is complete without the paperwork!

I AM NOT A ROBOT!

There have been a few changes made to the member’s site, specifically where payment information is entered. The most noticeable change is that we have added a question asking if you are a robot. You check the box and depending on a bunch of things, you may be asked to choose from a set of pictures. You may be asked to click the pictures that show street signs, or click on pictures that show store fronts. It seems silly, but the questions and challenges are carefully crafted and updated by Google, and have an amazing success rate at determining if the entity pressing the keys is a real person or a computer program (“robot”) trying to gain access.

The technology is called “CAPTCHA”, or in our case “reCAPTCHA” and is quickly being the standard for online protection against robots, which pose a real problem to web sites. This is replacing the (to me) very irritating practice of trying to figure out what letters and numbers they are showing in fuzzy text. If you have questions or problems getting around the new challenge (or if you are a robot!), feel free to give Joyce a call in the office.

Dale Furseth, “the computer guy”
Gazette PUBLICATION DEADLINE:
Submissions to the Gazette must be received by the 15th of the month of publication. The fifteenth of the month is to be the last day to submit material. Material received after the 15th of the month may be held until the following month or rejected.

SUBMISSION CRITERIA
Articles and ads may be submitted via a pdf file, MS WORD, Open Office, notepad, or similar text file attached to an email. The email SUBJECT line must include your article title and a date.

Please give each article a distinct file name with your name and a date. If everyone submits an article named “article for gazette” or something similar it will often get overwritten by another article with the same name when downloading. Articles sent as text in a email text will no longer be accepted.

Please use a common open source FONT such as ARIAL that can be displayed in all Browsers, and is easy to read. Please do NOT use the Calibri font, as we must take the time to convert it to Arial.

If your document has an embedded image, you must also include the image separately as a jpg,

Visitors to Train Mountain and YOU:
Train Mountain is very popular and is continually attracting visitors from throughout the world. We announce that our hours are from 9:00 AM until 3:00 PM Monday through Friday during the summer, and 10:00 AM to 2:00 PM during the winter. The office is closed on weekends except during meets, and then only when volunteers are available to open the office.

Our insurance advisors request that all people (members and visitors) complete and sign a liability release. If YOU as a member encounter visitors on the property without a visitors pass please direct them to the office so that we can insure that a release has been completed and a visitors pass has been issued.

If YOU, as a member, open the gate and allow visitors to pass through - YOU are responsible to see that the release has been completed, and YOU are liable for them until they sign a release. Releases are available in the mailboxes near the office for those times when the office is closed. There are also releases available in the kitchen and in the Back Shop.

If you do not want to, or do not have the time to, ensure that the releases are completed - then please graciously explain that the train park is closed to visitors and that the open hours are normally (Winter - 10:00 AM until 2:00 PM) (Summer - 9:00 AM until 3:00 PM) Monday through

Please Volunteer at a Train Mountain Meet!
Train Mountain is a NO SMOKING Facility

During recent events, many Members and their Guests have been ignoring this policy. There are only three designated smoking areas at Train Mountain:

(1) Outside the front of the Backshop  
(2) Outside the east door of the Hall of Flags  
(3) Outside the Motor Pool (Maintenance Building)

Due to the high fire danger at Train Mountain during the summer, we have zero tolerance for anyone smoking outside one of the designated areas.

There is NO SMOKING anywhere out on the track!

Members, Guests, and Visitors that continue to violate the Train Mountain Smoking Policy may be asked to leave.

What is Amazon Smile?

In a nutshell, it is a way for Train Mountain to receive 501c3 donations from Amazon. According to Amazon: AmazonSmile is a simple and automatic way for you to support your favorite charitable organization every time you shop, at no cost to you. When you shop at smile.amazon.com, you’ll find the exact same low prices, vast selection and convenient shopping experience as Amazon.com, with the added bonus that Amazon will donate a portion of the purchase price to your favorite charitable organization. You can choose from nearly one million organizations to support.

When you go to Amazon Smile, choose Train Mountain Institute as your charity. In order for this to work, you must always start from Amazon Smile. Then all else is the same, your account, wish lists, etc. Also available is a direct link: http://smile.amazon.com/ch/27-4031025 for the TMI account.

The AmazonSmile Foundation will donate 0.5% of the purchase price from your eligible AmazonSmile purchases. I found that just about everything I purchased lately is eligible.

If we can get a large number of Train Mountain supporters to take advantage of the Amazon Smile program, this could result in sizable donations to Train Mountain.

New Gate Code

Due to security concerns, the Gate Code for the Train Mountain Main Gate may be changed at any time without notice. Any Member planning to arrive at Train Mountain when the Office is closed will need to contact the Office prior to arrival to ensure they have the current Gate Code.

Get New Gate Code—Call Office 541-783-3030
Train Mountain Volunteer Hours

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Total Hours

Volunteer Hours Reporting

Dale Furseth has worked his techie magic on the member’s part of our website again. You can now report your monthly volunteer hours online. From the Train Mountain Railroad home page, click on “Online Member Resources: Join Train Mountain: “Register for Meets”, then on “Enter Volunteer Hours” or go there directly with this link:

https://trainmtn.org/tmrrmembers/Member_VolunteerHours.aspx

Choose your name from the drop down menu, enter your total hours in the box that matches the month you are reporting your hours for and click on “Update Information” to submit them. So-o-o simple! We hope you enjoy using this feature.
WEB-CAM GALLERY

Photos by: The Web-Cam