



Spring 2019  
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Issue 2

# *INSIDE THE OC&E*

Published by the  
Colorado Model  
Railroad Museum  
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## **CMRM will Celebrate 10th Anniversary on May 25**

The month of May 2019 will be a big month for the Colorado Model Railroad Museum. The month starts out with several events honoring the re-enactment of the Golden Spike Ceremony that will occur in Ogden, Utah. We have had many inquiries from railroad enthusiasts regarding our hours, so we

have decided to open our doors Tuesday through Thursday, May 7-9, 10 AM to 4 PM. Then on Friday, May 10 at 1 PM, the Central Pacific Jupiter and Union Pacific #119 meet in a Golden Spike re-enactment ceremony. On Saturday, May 11, UP 844 and UP Big Boy #4014 will perform the honors.



### **10th Anniversary Celebration:**

Memorial Day weekend marks the museum's 10th anniversary. We will have some special events for both our guests and our loyal visitors. The Scale Junkiez, a scale model car club of Colorado will be joining us with a display, and of course we will have cake. We will also have special customized merchandise which will be revealed soon!

5/10 Re-enactment of Jupiter/119 1:00 PM  
5/11 Re-enactment 844/4014 1:00 PM  
5/11 Youth Program Open House 10 AM - 4 PM  
5/25 10th Anniversary Celebration

We will also be OPEN Tuesday 5/7, Wednesday 5/8 and Thursday 5/9, 10 AM - 4 PM.

***Our Mission Statement: To provide a model railroading experience that educates, inspires, and brings joy to all ages.***



# CMRM - the Years 10 to 20

## Where Do We Go from Here?

*Editorial by Bill Kepner*

In the Winter edition of Inside the OC&E, we presented a list of some of the accomplishments by the Colorado Model Railroad Museum in its first ten years of being open to the public. The list is awe-inspiring, especially when compared to other museums of similar size and geography. I think many of our members, volunteers, and supporters believe the museum is unique and can't be compared to any others.

The museum founder, David Trussell, presented the community with an extraordinary gift ten years ago. Dave is still active with some museum activities but has mostly passed the baton on to another group of leaders. Some of these leaders are formally recognized as such, but in reality, every one of us who has helped the museum in any manner has helped make it one of the best.

So, what do we do next? Organizations like our museum need to continue to grow and move forward for several reasons, among them, to attract new and returning visitors, and to replenish the ranks of volunteers, supporters, and members. However, too much change will burn out even the most dedicated, so the leadership must strike a happy balance and try to satisfy everyone. Here are some ideas that I've heard and discussed at various levels of the organization.

### **The Oregon, California and Eastern Layout**

The OC&E model railroad, of course, is the primary reason for the museum's existence. Without the layout, there would be little reason for visitors to come in the door. The majority of the volunteer hours accumulated in the past ten years have been spent operating, maintaining, and enhancing the layout. Additional funds are being allocated by the board to support the reliability of the OC&E and the trains that run on it.

However, how do you improve on perfection? Maybe to a visitor who returns infrequently, the outward appearances haven't changed much. However, on the inside, there is constant change; the electrical and DCC systems will continue to evolve as new equipment is available, and we see ways to incorporate new technologies. The locomotive and rolling stock fleet regularly see improvements, especially with some of the recent partnerships the museum has forged with some of the leading model manufacturers.

For the layout's scenery and track design, there hasn't been a reason to change much, and there are too many other concerns to worry about than to change something just for the sake of changing. You'll see minor details being improved, or

maybe you won't notice them because they've been done in a way that blends in with what has been there.

It's going to be very important in the future for new people to be involved with the inner workings of the layout. An unfortunate fact of life is that nobody can be involved with a volunteer organization forever. We'll need to pass the skills and knowledge the current volunteers have learned to the next generations.

Maybe some of the layout changes that occur aren't actually on the layout, but part of the supporting infrastructure. Perhaps someone will have the crazy idea to build something like a locomotive simulator that would give OC&E train crews a different perspective when running the railroad. It could be a unique attraction that would bring in new members from all over the country.

### **Museum Expansion**

One of the significant accomplishments the museum has made in the last ten years was to acquire the warehouse building to the south of the main building. While the building is not normally open to the public, it provides the ability to hold special events and includes storage for museum items that aren't currently being displayed.

Another recent acquisition has been the Great Western right of way that runs on the west side of the museum building and parking lot. The lease with OmniTrax (Great Western Railway's parent company) is signed and is in effect (99-year lease at \$1 per year). There are necessary restrictions on the museum's use of the right of way under the contract, but it does meet our fundamental expansion needs. The railroad will need to pull up the track because there is some good 90-pound rail that the railroad can use elsewhere.

We are in the process of re-platting the property that will include the alleyway between the two buildings. The city currently owns that alleyway bisecting our two properties, but the plan is for the alley to become ours. When the platting is complete, the entire property will be referred to as "Trussell Junction."

The City of Greeley is exploring many different ideas for enhancing downtown. This proposal might involve the area around the museum that would make the Colorado Model Railroad Museum even more part of the community. The idea is a long way out; but it is an exciting opportunity. If anyone

would like to buy some adjacent properties and donate them to the museum, that would be fantastic!

As we all know, parking on the museum grounds is limited, especially for our visitors. The Great Western right of way, unfortunately, won't see any operating trains, but it will provide much-needed parking. For any building expansion that would allow us to accommodate more visitors, the city of Greeley is going to demand that be part of the plan.

The next piece of the puzzle is building expansion. We do NOT plan to expand solely or primarily to get bigger. We have to grow to support and to enable the primary objective. We intend to evolve Trussell Junction into a campus-like setting that is faithful to and builds on Dave's vision. Dave will be participating directly in the planning for new displays, exhibits and is developing a design for a more extensive or complete presentation of the CMRM Department 56 Collection in the south structure. The Harris's (who donated the collection) intend to add to the Christmas Villages collection as new pieces become available in the future. New construction between and joining the current north building and a renovated south building will become the main entrance to Trussell Junction. It will house office space, meeting/class rooms, an expanded "Little Shop That Could", and visitor viewing of UP's right-of-way.

### Youth Program

Norm Wolstein and his team have been very successful growing the Youth Program and communicating their progress (see an update on page 5). Activities like this are very good at instilling a message with community donors who want to help through monetary grants. It's kind of special that our favorite hobby can be accepted as a learning opportunity. We always knew it was, but how many times do others think we're just "playing with trains." This is a chance to show them what we always knew.

### Investor Development

Ideas like this don't become reality without money and investments. Museum admissions pay for a good part of operating costs, but they can't fund expansion and change. It's unlikely that a single person could ever match what the Trussell's did to found the museum. Now we need to involve others in the community and provide an incentive for more folks to invest in our journey. You'll notice that the structure of the museum's board of directors has been very carefully designed to bring in experts in community relations and fundraising. That's important from the standpoint of the ordinary "Saturday Volunteer's" perspective in that they don't need to worry about those things.



Talk to our Board Chairman, Tim McMahon, for any length of time, and you'll find he describes this as "joining on a journey" to individuals and organizations who feel the museum is worth "investing in" for the good we provide.

Perhaps the most ambitious objective of the museum's future is to raise an endowment that will underwrite the financial strength of CMRM for the foreseeable future. The endowment fund was activated with a designated donation from within our membership. In our current Strategic Plan, we have a stated goal of raising \$1 million by 2027...an ambitious but achievable objective. This endowment and its funds are separate from the funds we seek for facilities and program expansion.

The critical challenge for the board will be to thoroughly develop the expansion concept and plan, and to synchronize these inter-dependent objectives.

The museum's mission, vision, and governance processes are all solid. As of the beginning of the fiscal year on April 1, the third formal budget will be balanced again. There will be no debt, and the leadership is determined to keep it that way; but

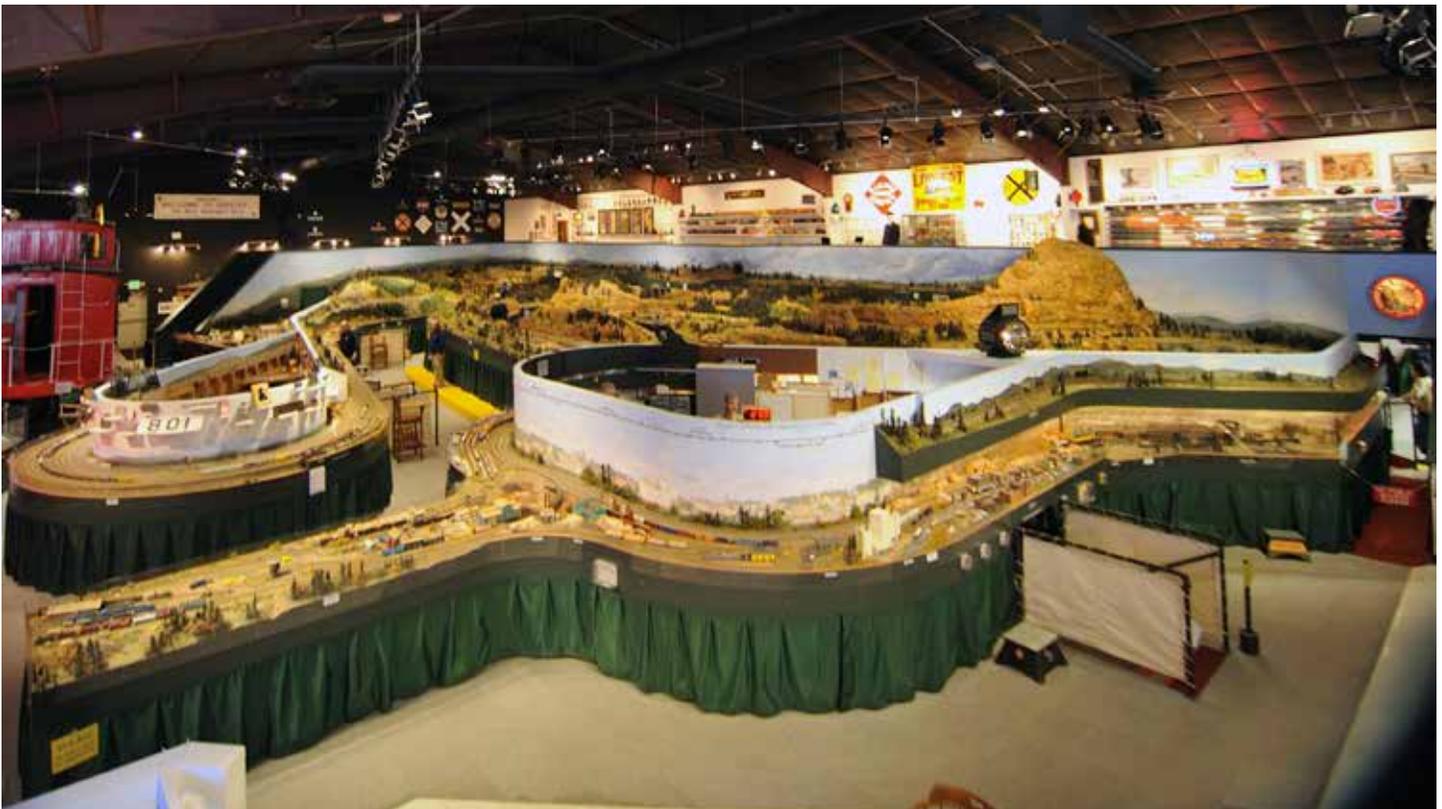
we will need much more community, member, and volunteer support to keep moving us forward.

### What do we want to be?

The original Greeley Freight Station Museum concept was to be a part of the City of Greeley's museum system. As word got out of what we were capable of doing, we gained the attention of others in the state, and soon the region.

What advantages and challenges do we bring to the organization as we grow in scope and focus? Will the dedicated member who comes to the museum a couple of days a week be upset if money is spent on building a classroom in the new building and not spending that money on expanding the OC&E?

Opportunities are a good challenge to have. That's a much better situation than to be fearful of the alternative that the museum can't pay the light bill and has to liquidate. However, 'any opportunity often leads to change, and we all, to a certain extent, don't like to experience change.



# CMRM YOUTH PROGRAM

## Colorado FIRST LEGO League Jr.

By Norm Wolstein

The Community Foundation Littler Youth Fund awarded a grant to the Colorado Model Railroad Museum (CMRM) in 2018. Their donations are awarded to qualified nonprofit organizations that make a positive impact on the youth of Weld County. The award was given to support the Museum's Youth Program to provide support for STEAM (science, technology, engineering, art, math) programs for youth.

The Museum has conducted several programs to support the Tjardes School of Innovation, the Boys and Girls Clubs of Weld County, Scout Troops, Daisies, Brownies, and Girl Scouts from Eaton to LaSalle. The Youth Program will continue to provide clinics and day camps over the summer with many different STEAM lessons from LEGO® Robotics to T-Trak N Scale train modules. The Youth Program conducts clinics at the museum, at local schools, and the Boys and Girls Clubs and will schedule activities in other locations to support the community. The museum also hosts tours by community organizations with activities to help youth. Call the museum to schedule a visit.

The CMRM Youth Program joined with the Tjardes School of Innovation in Greeley and the Boys and Girls Club in Galeton to participate in the FIRST LEGO® League Jr. hands-on program for young children to help them discover how science and technology help improve our world. The program this year featured a real-world challenge to help the children explore problems and their solutions through their imagination. The kids, ages 6-10, worked with LEGO elements and motorized to build different ideas and concepts for Mission Moon.

Two teams at the School and two at the Boys and Girls Club showed their project at the FIRST LEGO® League EXPO held on April 13th at the Discovery Museum in Fort Collins. The teams were coached and mentored to develop solutions for the inherent problems that need to be solved when building and living in a Moon Base. The kids conducted research about the theme, created a LEGO Model that contained a simple machine and a motorized part. They learned to program the device using LEGO-supported software.

They also developed and presented a poster at the Expo answering questions from volunteer reviewers about their project explaining the problem of living on the moon and their solution. All the teams received an award for their participation.



### STEM vs STEAM?

These acronyms are used by the National Science Foundation to describe a set of academic disciplines. Sometimes you'll see this term as STEM (Science, Technology, Engineering and Mathematics), or often as STEAM. We like to add "Arts", and naturally that fits with the our program!

# Colorado Model Railroad Museum Youth Program Teams

By Norm Wolstein

The CMRM Mission is “To Provide a model railroading experience that educates, inspires, and brings joy to all ages.” Our Youth Program received grants this year from the Monfort Family Foundation and Hewlett Packard Enterprise to engage our local community’s kids in STEAM (Science, Technology, Engineering, Arts, and Math) activities.

For several years, the museum’s staff has discussed the establishment of a Youth Council and Model Railroading Team. The generous grants have enabled the museum to establish the “Youth Program Teams” that will engage kids in a model railroading experience which will focus on STEAM (Science, Technology, Engineering, Art, Math) beginning with an Open House on May 11th.

The STEAM Team is for youths ages 5 through 12 and the T-Trak Team is for ages 13 through 18, although some age adjustment will be considered based on the kid’s and parents’ request. Team membership is free, and the teams will meet on a regular schedule all year.

Come to the Open House where we will establish the two Teams and listen to your questions, comments, and suggestions. The students can come to learn more about model trains, making dioramas and building modular layouts that can be assembled to create model train layouts. The focus will be on hands-on activities. The Youth Program encourages our members to participate as volunteers in our Youth Program.

The STEAM Team is a great way to learn about model trains and how the hobby engages kids in STEAM based activities. The kids will receive instruction on building train layouts utilizing “T-Trak” modules supplied by the CMRM. The students will learn to build the modules, to assemble their modules into a layout, to connect modules with the wiring, and to operate the modules with controls. The kids will also learn how to

assemble model trains and buildings as they simulate their favorite train scenes from different locations. The students will also engage in the hands-on LEGO® Education programs that teach problem-solving skills utilizing a hands-on approach to STEAM learning to Code and Build Projects based on robotics.



These programs will help kids develop essential communication, creativity, and critical thinking skills while collaborating with their team in fun projects.

The T-Trak Team members will experience a similar program that is designed for their age group. The kids will also learn STEAM-focused

model railroad skills while building and assembling their T-Trak modular layout.

These team members will be encouraged to work with the staff and the Kids Team to help mentor the younger kids based on their skills. In addition to building modular train layouts, the Teens Team will also engage in hands-on experiences to join their team in communication, creativity, and the development of critical thinking skills. The kids will also work with LEGO® kits with coding tools helping them develop their full potential in a hands-on, Maker environment. The kids will utilize LEGO® WeDo 2.0 and LEGO® Simple Machines with Motors kits.

Please sign up if you are having an interest in your kids joining the program. You can sign up in the volunteer section on our web page by entering your contact information and specifying your interest in your kids’ joining the Youth Program Teams. <https://www.cmr.org/volunteer/>. We will also be putting out updates on our Facebook page. Let us know if you have any questions or suggestions.



Photos this page: With this modular layout, the students were able to experience building something with their hands and seeing it operate. This is a much better use of their time than playing games on their phone or computers.



## Flashing Red at the Greeley Siding

By Bill Kepner

I've been running trains on layouts like the OC&E for a long time, and I have always wondered whether modern railroads really do use the "Flashing Red indication" to signal a "fleet" or "call-on" situation. I looked at the General Code of Operating Rules (1985 edition), and it shows **Rule 245C Flashing Stop and Proceed - Stop before any part of train or engine passes the signal then proceed at restricted speed**. This really doesn't tell me when this is used, but at least it tells me what I am supposed to do when I come across it. That's good enough for me when I am running a train on the OC&E.

I figured this was something we adopted to allow more multi-train meets on the OC&E. Hardly ever does a real railroad run as many trains as we do on the model!

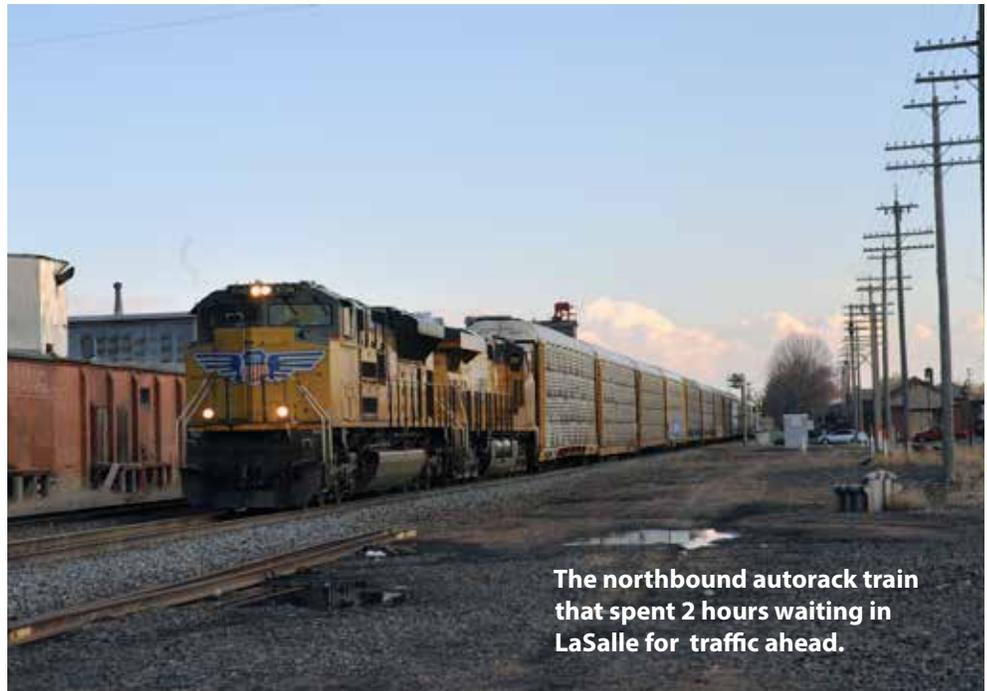
On Saturday, April 13, I had gone down to Golden with Michelle Kempema and board member John Cochran, and on the way home about 4 PM, we noticed a northbound autorack train approaching LaSalle. I didn't think much of it; we went into the museum, and I spent some time doing some experimental photography. At about 6:30 PM, I was hungry and decided it was time to head home.

As I was walking to my truck, I heard a train blowing for one of the crossings somewhere north of the museum. Since I had my camera, I decided to go take a picture of it at the 6th street crossing.

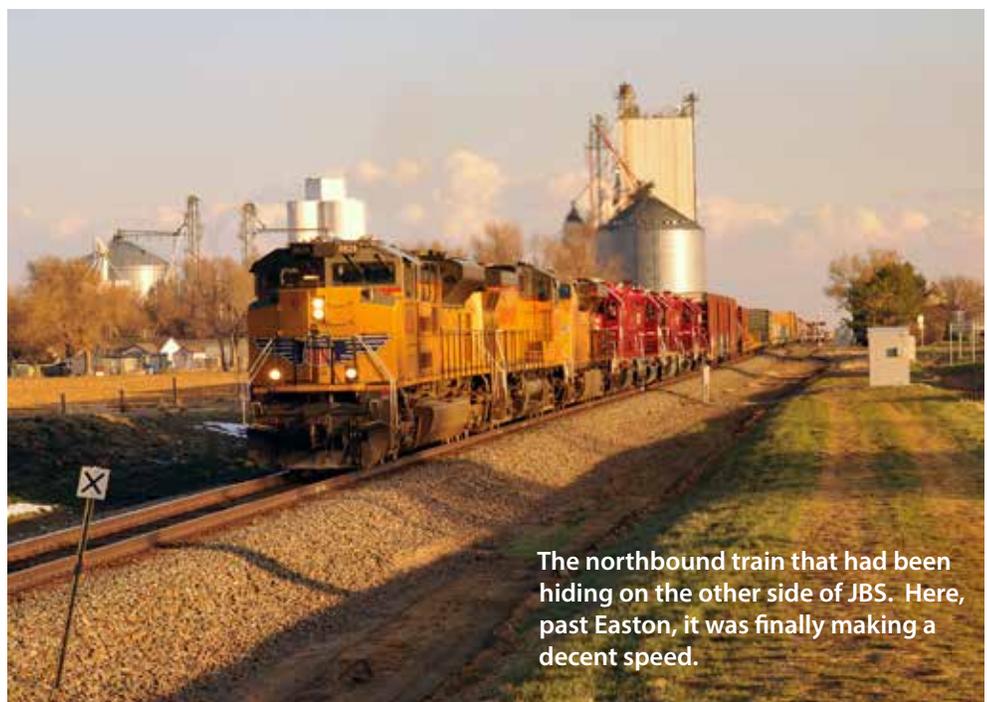
But, to my surprise, I didn't see a train coming south, and I knew during the time I was at the museum, nothing had passed by either way. I could see something parked on one of the tracks, with its headlight dimmed. But was that a DPU? UP calls these Track 1 and Track 2, but I have been assured that it's still all Centralized Traffic Control and not double track.

Then I heard a train to the south, and sure enough, it was the autorack train. I thought it was odd that it had taken 2-1/2 hours to go less than six miles, but this is Precision Scheduled Railroading, after all.

Looking to the north, I saw the signal near 5th Street was showing a "Red over Flashing Red" indication, something



The northbound autorack train that spent 2 hours waiting in LaSalle for traffic ahead.



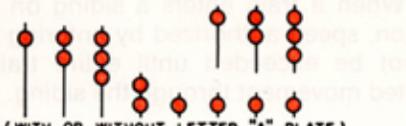
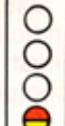
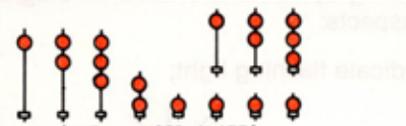
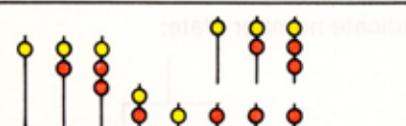
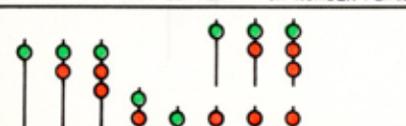
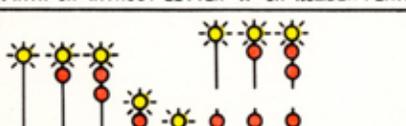
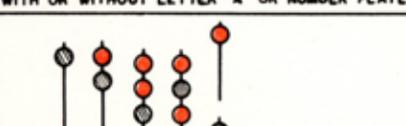
The northbound train that had been hiding on the other side of JBS. Here, past Easton, it was finally making a decent speed.

I had never seen. I didn't expect the autorack train would be headed for the Great Western interchange, so I was a bit puzzled.

Heading north on Highway 85, I was quite surprised to find there was another northbound train on the other side of JBS. It had apparently been in the siding and might have been the first horn I heard. Or it was the southbound local that had just got there, having tied the railroad up for the past two hours.

So, there you have it, a great example of how Union Pacific uses the Flashing Red signal indication to handle a three-way meet. Right under our noses. *(Jim Leonard, who knows a little bit about UP railroad operations, provided background information for this article).*

Signal Rules 245A-245H apply in all territories on Union Pacific Railroad.

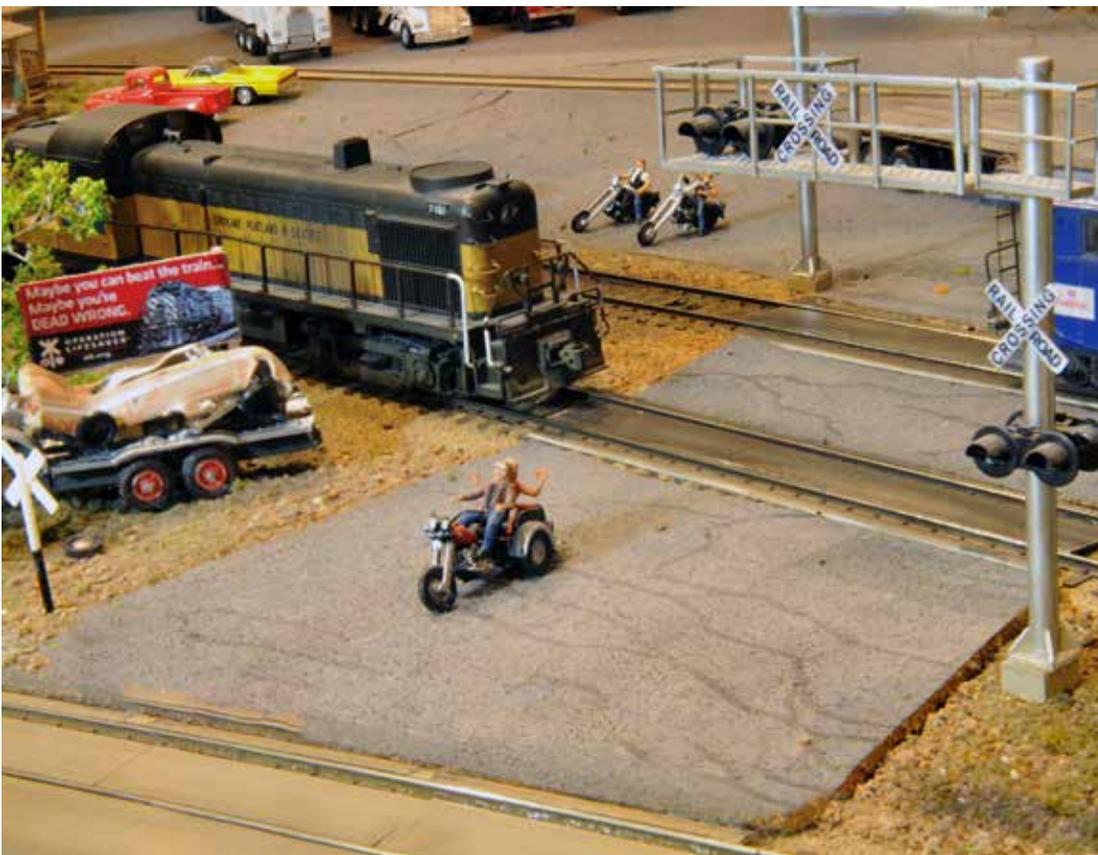
RULE	ASPECTS	ACS	NAME	INDICATION
245A	 ( WITH OR WITHOUT LETTER "A" PLATE )		Stop	Stop before any part of train or engine passes the signal.
245B	 ( WITH NUMBER PLATE )		Stop and Proceed	Stop before any part of train or engine passes the signal then proceed at restricted speed through entire block.
245C	 FLASHING RED LIGHT ON ANY SIGNAL		Flashing Stop & Proceed	Stop before any part of train or engine passes the signal. Block occupied. Proceed at restricted speed.
245D	 ( WITH OR WITHOUT LETTER "A" OR NUMBER PLATE )		Approach	Proceed prepared to stop before any part of train or engine passes the next signal. Trains exceeding 30 MPH must immediately reduce to that speed.
245E	 ( WITH OR WITHOUT LETTER "A" OR NUMBER PLATE )		Clear	Proceed.
245F	 ( WITH OR WITHOUT LETTER "A" OR NUMBER PLATE )		Approach Limited	Proceed. Speed passing next signal must not exceed 40 MPH.
245G	 ( WITH OR WITHOUT LETTER "A" PLATE )		Restricting	Proceed on route indicated at restricted speed. Speed through turnout must not exceed 15 MPH.

## Didn't Make the Cut - 2019 Edition



The 2020 CMRM calendar is almost ready to be printed. This year features five different photographers, and we had a lot of material to review. There were a couple photos that when taken, seemed like they would be winners. But they ended up being rejected.

The first photo is a nice broadside shot of UP 1943, the locomotive that celebrates the armed forces. It was in the running, until someone looked at the orange car on the left, and realized it was out of focus and there wasn't really a good way to crop it out of the picture.



The second photo, an Oregon California & Eastern locomotive entering the grade crossing at East Klamath Falls, was to show off the Operation Lifesaver exhibit.

It was rejected because the rear parking area lacked detail. We will try again next year and maybe add some more bikes or cars in the parking lot. Also, the crossing lights should be flashing and the engine's headlight should be lit.

## Donations

Anonymous (Network for Good)  
 Carol & Alvin Burkhart  
 Brian Crain (Wholesale Plywood and Lumber, Inc)  
 Suzanne & Edward David  
 W.H. Garnsey  
 Stephen Jaouen  
 Janis & Constantine Kalpaxis  
 The Lyster Family Farm  
 Norman Lyster  
 NCE  
 Raul Rios (Rivers Contracting)  
 David & Erinstacy Ritsema  
 Spradley Barr  
 Robert Wenger  
 Norm Wolstein  
 Steve Watrous

*Inside the OC&E*

*Inside the OC&E* is the official newsletter of the Colorado Model Railroad Museum. Its purpose is to communicate news and information to museum volunteers and others interested in the museum.

The Summer 2019 issue **PUBLICATION DEADLINE:** Monday, **July 15, 2019 at 5:00 PM.** Send submissions to **drgw0579@comcast.net.**

Bill Kepner, Editor.  
 Ed Hurtubis and Bob Owens, Associate Editors

## Hewlett Packard Enterprise Donates to Museum

In May, Hewlett Packard Enterprise will provide funding to the Colorado Model Railroad Museum’s Youth Program as part of their Community Engagement Program in Northern Colorado. The grant was arranged by an HPE employee, Bill Kepner.

Hewlett Packard Enterprise is a spin-off of the famous Hewlett-Packard company founded in the 1930s by Bill Hewlett and David Packard, who was a Colorado native. HPE’s primary business is developing and selling large, enterprise scale computer systems around the world.

Many large companies (and smaller ones too), often have some sort of non-profit funding programs that their employees can participate in. HPE’s community initiative liked CMRM’s Youth Programs, especially since it teaches students engineering disciplines.

Even if your organization’s program is small, when several museum supporters participate in funding programs like this, it could add up to something significant.



## Colorado Model Railroad Museum

To make a donation please complete this form & return

I would like to make a donation of:

\$ \_\_\_\_\_

Note:

I would like to make an Endowment

Challenge donation of: \$ \_\_\_\_\_

Note:

I am enclosing a check, please make payable to CMRM

Please charge my credit card: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ CVC: \_\_\_\_\_

