

THE POTOMAC FLYER

JUNE-JULY 2026

THE NEWSLETTER OF THE POTOMAC DIVISION, MER, NMRA



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MINI SOUND MODULE INSTALLATION



**COMING UP: SATURDAY, JUNE 27 POTOMAC DIVISION IN-PERSON MEET, 9AM
PROTOTYPE MODELS AND CARS AP CLINICS, LEISURE WORLD IN SILVER SPRING, MD.**

BILL OF LADING



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COVER: GREG CASSIDY'S MICRO 0n18 LAYOUT ([BELIDA PHOTO](#))

THE POTOMAC FLYER

SUBMISSION DEADLINES – ISSUE

NOV. 1 FOR DEC.-JAN. JAN. 1 FOR FEB.-MAR.
MARCH 1 FOR APRIL-MAY MAY 1 FOR JUNE-JULY
JULY 1 FOR AUG.-SEPT. SEPT. 1 FOR OCT.-NOV.



FROM THE BUSINESS CAR

by Ernie Little, MMR, Potomac Division Superintendent



We experienced a successful Division Annual Meeting at the Dranesville Community Center in McLean, Virginia on May 23rd. This was the second time we have used this venue. It is an excellent location, easily accessible by the membership, and free of charge to use. I want to thank **Steve Keller** for his efforts in securing this venue, which this year included the Annual Meeting as well as another date in August for another meet.

I am pleased to report that the membership unanimously approved the technical changes to our Bylaws. Henceforth the Division is known as POTOMAC DIVISION NATIONAL MODEL RAILROAD ASSOCIATION, a minor change, but it shows we are a part of something bigger.

The 2026 election process results were reported at the Annual Meeting with the election of **Jerry Stanley** as the Assistant Superintendent with 55 votes, with one vote for **Ken Wilson**, and one vote for **Mark Gionet**. Fifty-seven votes were tallied and there were five abstentions. **Ken Wilson** was elected Paymaster with 35 votes, with **Gary Mason** receiving 24 votes. Congratulations to Jerry and Ken in their re-election to the Board of Directors but in different positions. I want to thank Gary Mason for stepping up and running for the Paymaster position and hope he considers running again in the future.

The 2025-2026 Marshall Abrams Award was presented to three members this year. This annual award is named for the late Marshall Abrams, a former Board member, and honors members who have made outstanding contributions to the Division. The recipients this year were **Greg Cassidy**, Senior Assistant Superintendent; **Lee Stoermer**, Division Clerk; and **Gary Mason**. All were members of an ad hoc committee that spent a considerable amount of time and effort to successfully complete the processes to allow the Division to achieve incorporation in Virginia and 501 c(3) non-profit status. This was an important milestone for the Division and something that needed to take place. Other Divisions of the NMRA are in the process of doing the same.

WELCOME NEW MEMBERS

APRIL 2026

Roman Lopez-Woodbridge, Virginia
Jonathan Soohoo-Arlington, Virginia

Through the efforts of **Lee Stoermer**, our Clerk, we have established a PayPal account that will receive participation fees, cash donations, and the proceeds from the sale of donated railroad items.

THE POTOMAC DIVISION, MID-EASTERN REGION, NATIONAL MODEL RAILROAD ASSOCIATION, INCLUDES THE DISTRICT OF COLUMBIA; CALVERT, CHARLES, MONTGOMERY, PRINCE GEORGE'S AND ST MARY'S COUNTIES IN MARYLAND; ARLINGTON, FAIRFAX, FAUQUIER, LOUDOUN, PRINCE WILLIAM, AND RAPPAHANNOCK COUNTIES IN VIRGINIA, AS WELL AS ALL AREA INDEPENDENT CITIES.

THE DIVISION CREW:

Superintendent Ernie Little, MMR
571-383-7316 Super@potomac-nmra.org

Sr-Asst-Super Greg Cassidy 301-717-9118
Sr-Asst-Super@potomac-nmra.org

Assistant Superintendent Jerry Stanley
703-595-8081 Asst-Super@potomac-nmra.org

Paymaster Ken Wilson 540-219-9973
Paymaster@potomac-nmra.org

Clerk Lee Stoermer 928-580-3209
Clerk@potomac-nmra.org

Achievement Program Manager Martin Brechbiel, MMR 703-309-3082
Achievement-Program@potomac-nmra.org

Webmaster Ernie Little 571-383-7316
Webmaster@potomac-nmra.org

Potomac Flyer Editor & Publisher Alex Belida, MMR 240-447-5283
Potomac-Flyer@potomac-nmra.org

Flyer Proofreaders: Dan Ebert, Bob Sprague

Social Media Director: Bill Schultheiss
media@potomac-nmra.org

The Board felt that there was a need to hold clinics about the NMRA Achievement program, as our members have many questions, and a considerable amount of incorrect information has been circulating in the model railroad community about the requirements. On April 12th we started a series of virtual and in-person clinics relating to the NMRA Achievement program. The first virtual clinic, “*Introduction to the NMRA Achievement Program*” by Alex Belida MMR was well received and attended by not only our Division members but also NMRA members from other Divisions and Regions. Two additional virtual clinics on the “*Golden Spike*” requirements by Greg Cassidy and “*Achievement Program Paperwork*” by Martin Brechbiel MMR were held on May 17th. In addition, two in-person Achievement Program clinics were held at the Division meet on May 23rd. One clinic about Master Builder-Structures was presented by Greg Cassidy, Division Senior Assistant Superintendent, and Lee Stoermer, our Division Clerk, presented a clinic about Master Builder-Scenery. You can find more information about the remaining scheduled clinics on our website.

Recently, we assisted the Potomac Module Crew with their effort to become a 100% NMRA Club. I am pleased to report that they were successful in their endeavor and have become the second 100% NMRA Club in Virginia. Their effort resulted in the Division attracting several new members.

We are planning for a joint meet with the Chesapeake Division that will be held on an unspecified date in November. The date and

location will be determined as soon as a venue for the meet has been found. More information will be provided as it becomes available.

Last, we are still looking for a replacement Achievement Program Manager as our current Manager, Martin Brechbiel MMR, is stepping down. You don't have to be a Master Model Railroader to hold this position, but you do need to possess the skills

and knowledge to become one. Please contact me if you have an interest in filling this position.

Early registration is underway for the **NMRA National Convention, Scenic City Express**, to be held in Chattanooga, Tennessee, from July 27 to August 2, 2026, at the Chattanooga Convention Center. The convention website, <https://www.nmra2026.org> is online and has a link to make hotel reservations. I have received word that the host hotel has sold out.

The next **Mid-Eastern Region Convention, Tracks to Tidewater**, will be held October 15-18, 2026, in Virginia Beach, Virginia at the Holiday Inn Virginia Beach-Norfolk located at 5655 Greenwich Road, Virginia Beach, Virginia. The website for this convention is going live sometime in May. Watch the NMRA website for more information as it becomes available.

Until next time, have a great summer and be safe in your model railroad endeavors.




**Improve your modeling with
a few sheets of paper.**

That's just what happens when you join the National Model Railroad Association and take part in the Achievement Program.


No, it's not a bunch of contests. It's modelers helping modelers become better modelers, to get the most out of their hobby. It's a way to hone your skills and become the modeler you've always wanted to be.

And it's just one of many benefits of NMRA membership.

It's never too late to start improving your modeling skills. And your hobby.



We make it more fun.
www.nmra.org



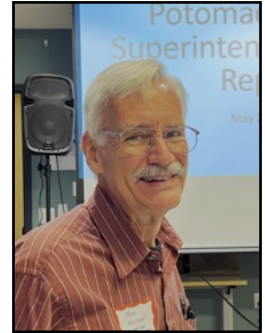
POTOMAC DIVISION ANNUAL MEETING REPORT

Article and Photos by Alex Belida MMR, Flyer Editor

The Potomac Division held its Annual Meeting on May 23rd at the Dranesville Government Center in McLean, Virginia with over 30 members and guests attending. Superintendent Ernie Little announced the results of the 2026 Division Board of Directors election with Jerry Stanley (photo left below) taking over as Assistant Superintendent and Ken Wilson (photo right below), who had previously held that post, taking Jerry's previous position as Paymaster.



Superintendent Little also announced the recipients of this year's Abrams Award, given to a member or members in recognition of their contributions to the Potomac Division and to model railroading. Greg Cassidy, Lee Stoermer, and Gary Mason shared the award for their work to get Potomac incorporated and to receive non-profit status.



From left to right below: Gary Mason, Ernie Little, Greg Cassidy, Lee Stoermer



Following Officer reports on such matters as the recent Division layout survey and the acquisition of new speakers for use at in-person meets, Achievement Program Coordinator **Martin Brechbiel** presented a record number of certificates to present, including **Bill Lyders** ([photo below](#)) receiving a plaque for becoming Master Model Railroader #819 after completing his Master Builder-Cars requirements.



Other recipients of AP certificates were **Ernie Little** for his service as a Model Railroad Official; **Ken Wilson** for Association Volunteer; **Steve Jackson** for Model Railroad Author; and **Jeff Jordan** for Master Builder-Structures ([see article on p39](#)).



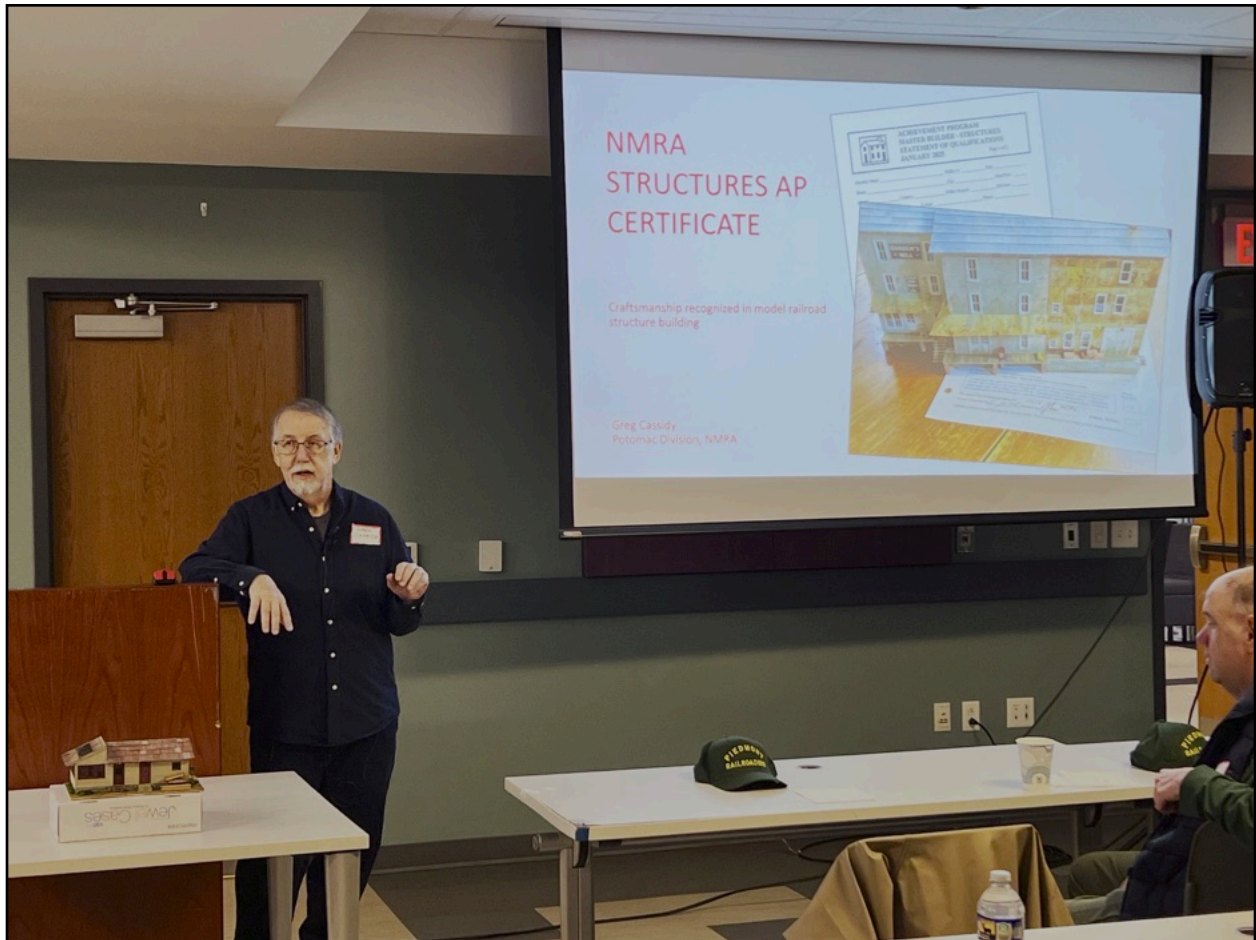
Above: Ernie Little
Below: Steve Jackson



Ken Wilson
Jeff Jordan



Following the AP presentations, there were two clinics in the Division’s series on the NMRA’s Achievement Program categories. Senior Assistant Superintendent **Greg Cassidy** discussed the requirements for the Master Builder-Structures certificate.



After a short donut break, Division Clerk **Lee Stoermer** presented his clinic on earning the Master Builder-Scenery certificate.

The participants then broke off for lunch, which consisted of various sandwich offerings, plus assorted snacks and drinks.

During the break, the audience was treated to a lifetime of railfanning and model railroading reminiscences by **Dean Mellander MMR**. His stories dated back to when he was a mere two years old and was found wandering along railroad tracks near his home. He displayed a faded newspaper clipping with a photo of himself and his rescuer.



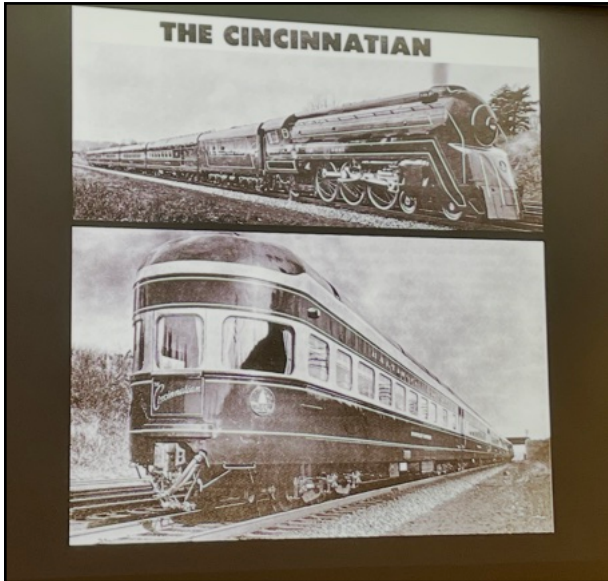
Dean Mellander MMR #68



The final clinic of the day was presented by **Nick Bulgarino (photo left)** who traced the history of the *Cincinnatian*, the B&O's service, launched in 1947, to carry passengers from Baltimore to Cincinnati. The train used specially dedicated equipment, including streamlined engines and cars. The *Cincinnatian* was unsuccessful and short-lived, however, due to the lack of passengers.

Nick, an O scale modeler, displayed his models of a *Cincinnatian* engine and passenger car. He explained in detail his use of *dead rail*, substituting battery power instead of track power to operate the engine and also to power the lighting in the cars through connectors he fabricated.

Nick, an O scale modeler, displayed his models of a *Cincinnatian* engine and passenger car. He explained in



Organizers and attendees alike agreed that this was one of the Potomac Division's most successful meets because of the superb clinics, good food, and an attractive venue with an excellent location.

Potomac will hold another meet at the Dranesville Government Center Community Room in August. This meet will feature two more of the Division's Achievement Program clinics: Motive Power and Electrical.



JUNE 27TH IN-PERSON MEET AT LEISURE WORLD WITH LAYOUT TOURS

On Saturday, June 27, 2026, the Potomac Division will have an in-person meet at Leisure World in Silver Spring, Maryland. The meet will include two more of this year's Achievement Program clinics: Cars AP with **Martin Brechbiel** MMR and Prototype Models AP with **Alex Belida** MMR. Following the meet, the Potomac Division will have four layouts open in the afternoon: Leisure World layouts open 12-3 and three others from 1PM-4PM. Location of and directions to the layouts will be provided via the Division's email distribution list and provided at the meet.

The layouts that will be open are:

1. **Leisure World Model Train Club** - This club has three layouts (HO, N, American Flyer scale) located in the lower level of the building where the meet will be held. All three layouts have full scenery and members of the club will be present running trains. This location is handicap accessible using an elevator. *Leisure World is a gated community, and you have to tell the security guard you are going to the model railroad meet located in Club House 2 to gain entry.* (Photo right)



2. **Tom Matty's Western Maryland - Thomas Sub 1980's** - This layout occupies two basement rooms, one 19' x 32' and the other 16' x 22'. It is a double deck point-to-point layout and structures are 90% complete with the scenery 15% complete. This location is NOT handicap accessible and attendees must use an interior stairway to access it.

3. **Andrew Dodge - Central Maine Railway - 1890's** - This layout is an O scale Proto 48 and is a freelanced Maine operation. It fills two adjoining basement rooms occupying approximately 1,000 square feet in size. All of the locomotives, cars, and structures are scratch built and the scenery is complete with over 1,000 trees. The layout is NOT handicapped accessible and attendees must use stairs to access it.

4. **David Vaughn - Kentucky Western Division of the Nickel Plate Road** - This layout is an O scale two rail (OS2R) rendition of the Kentucky Western Division of the Nickel Plate Road set in May of 1958, near the end of the NKP steam era. The layout is 18' x 90' and is multi-level ranging from 34" to 80" above the floor in height and is comprised of three historic OS2R layouts which includes 40% of John Armstrong's Canandaigua Southern. The three layouts have been renovated and modified to operate as a single layout with scenery 75% complete. The layout is NOT handicap accessible and stairs must be used to access it.



MEET THE MEMBER: BERNARD KEMPINSKI MMR

Editor's Note: This feature is designed to promote greater knowledge about members of the Potomac Division and their model railroading interests. If you are willing to participate, please send an email to potomac-flyer@potomac-nmra.org. The following text is by Bernard Kempinski, who also provided the photos.

I have been a model builder from very early in my life. I think the biggest inspiration for me was the New York World's Fair in 1964. My family went several times. I was about eight years old at the time, yet I vividly remember several of the exhibits. The Ford exhibit was cool, as I rode in a convertible car to see the displays. My favorite exhibit, however, was the General Motors exhibit.



My twin brother on the right and I flank my dad at the NY World's Fair

The visitors rode in seats on a conveyor belt that travelled through a series of large-scale miniature dioramas. The scene that most impressed me was the laser logging operation. I think this exhibit, and the dioramas at the New York Museum of Natural History, were largely responsible for my interest in miniature dioramas.

Like many model railroaders, I had a model train layout that my dad built for my twin brother and me when we were about six years old. I recall going to the hobby shop with him to get supplies. It was a large shop on McDonald Avenue in Brooklyn. Some of the New Yorkers may remember it, as it was open for many decades. The layout was called Twinsville. It had a double loop with an elevated siding. My brother had a Santa Fe hood engine probably an F-7 and I had a steam engine.



Our Twinsville layout

Though the layout was a lot of fun to build and play with, I was not really into trains very much as a kid. We lived in Brooklyn where trains meant the subway, which, as a child, both fascinated and terrified me in equal measure.

I really was enthralled with the space program. This was the time of the Mercury, Gemini, and Apollo programs. I read every space book at the library. My brother and my friends built a space capsule simulator from a refrigerator box and electrical

switches from my dad's shop. We would ride along the real missions as astronauts in our capsule while mom passed food to us through the back hatch.

A visit to Mystic Seaport in Connecticut inspired me to scratchbuild a model of a whaling ship. I made the hull from balsa wood and rigged it with thread from my mom's sewing box. I followed tips in ship model books I got from the library. It turned out great, at least in my mind's eye. My parents exhibited it on the mantle for quite a while.

Another inspiration came from my father and most of my uncles who served in the military and merchant marine in WW2. The stories they told captivated me. The first book I ever checked out of the library was about WW2 fighter aces in the Pacific. Therefore, I built a lot of military models. I made several balsa and tissue paper airplanes that invariably ended up soaked in lighter fluid for one last glorious flight. During high school, I built military dioramas, mostly about the WW2 Eastern Front after reading Paul Carell's *Hitler Moves East* and many other books on WW2. I found some photos of these in my dad's old slide collection.



Tiger tank in 1/72nd scale with snow made from plaster that I built in high school

My twin brother and I built a four-lane slot car track with scenery while in junior high. Later, while in high school, I helped my younger brother build a small HO train layout in our basement.

I went to MIT for college, where I got a BSME and an MS in mechanical engineering with a minor in political science and defense issues. One of my fraternity brothers was in the MIT model railroad club, and he tried several times to recruit me, but I was too busy with classes and ROTC. Their layout was mostly an antique technology marvel with hundreds of relays and old-fashioned telephone equipment that they salvaged but with very little scenery. It didn't appeal to the model builder in me.

When I got out of the US Army in 1984 after serving in the 1st Armored Division in Europe, I had a job offer from General Electric Locomotive Group to do thermodynamic modeling of their prime mover diesel engines. That would have tied directly with my master's thesis entitled *Thermodynamic Modeling of Engine Knock Based on End Gas Temperature and Pressure*. This was the time period when GE had converted its locomotive factory to robotics. I got a tour of the robotic assembly plant. It was an interesting juxtaposition of a brick steam era facility with modern robots moving about. However, I took a job in the defense industry instead, as I thought at the time, "trains are boring." Hah! Little did I know!

The defense analysis industry combined my interest in engineering and defense issues. It also said that I would be doing modeling of military operations. But then I ended up mostly involved in testing armored vehicles like the M1A2 Abrams tank and the Bradley M2A3 infantry fighting vehicle. Through the 1980s I dabbled with modeling and miniature wargaming, particularly the Civil War, with famous game designer John Hill. We became good friends.



Hidden Valley under the bed

Around 1991, my son was old enough to become fascinated by trains. We would visit Van Dorn yard near our house in Alexandria, Virginia, and he would ask a lot of questions—questions that I could not answer. I started doing some reading. I said to him, “My dad built a model train layout for me. Would you like one?” He said, “Yes.” So I built a small layout called Hidden Valley for him and his sister. It could slide under their bed. While it got a little dusty, they kept it in great shape for many years.

My son lost interest in trains as he got older, but I found building that layout so much fun, that I decided to make one for myself. Somehow I heard about NTRAK, so that is what I started building. My first module was called Chase Marine Terminal. It was a 2x4 foot module depicting a small marine terminal notionally in Baltimore. My job required numerous trips to Aberdeen, Maryland, so I passed through Baltimore many times. The module featured a scratchbuilt container ship and gantry.



My first NTRAK module

Then I connected with Matt Schafer, Brian Brendel, and Jeff Peck. Matt was like a mentor to me, as he had inexhaustible knowledge of railroads, especially the C&O. Consequently, we built the New River Subdivision with NTRAK modules. That Subdivision went to many shows.

I built a steel mill kit as a demonstration model for Walthers in 1996 and a paper mill for them a few years later. I then wrote articles about the process. Around that time, I started improving my model building and photography, and began writing articles for the model railroad press. When I went to work for Congress, my article writing was put on hold, but I did write five books for Kalmbach (now Firecrown).

Around 1999 I convinced Matt, Brian, Jeff, and a few others to build oNeTRAK modules. This was a module standard that I conceived that was compatible with

NTRAK in all ways—except that the modules only had to have one track. These focused on the C&O Mountain Subdivision, but I dabbled in several other subjects including a Canadian wheat scene called Moose Lake. A photo I took outdoors of Moose Lake won the 2002 *Model Railroader* photo contest. I used Photoshop to replace the sky. This created a firestorm of criticism and the soon thereafter, *Model Railroader* cancelled the contest.



The MR Photo Contest winning shot in 2002

Around that time, I met Paul Dolkos who introduced me to the wider world of model railroading around the country. Paul was also like a mentor to me. I used to tell my wife Alicia, “If Paul gives me advice, I better do it.” Later when my skills improved, we collaborated on several projects.

When we moved to my current house, still in Alexandria, I started a home layout that was going to be the Denver and Rio Grande Western (D&RGW) in Soldier Summit, Utah (photo right). That layout idea originated as a potential project



layout in my old townhouse for *Model Railroader* magazine. It didn't get completed due to my moving, but I continued with the D&RGW theme in the new house, now looking at Tennessee Pass, Colorado. I had completed about 30 percent of that layout when I got bored with it. So I tore it out and started a new home layout that would incorporate my C&O Mountain Subdivision on NeTRAK modules. Both of those layouts were documented in articles published by Kalmbach.

Around that time Schneider Model Trains (SMR) introduced his O scale Civil War era locomotives and rolling stock. I was interested in Civil War history by virtue of my living in Virginia. I even tried to build a small N Scale Civil War-themed railroad in the 1990s, but the engines did not run well at all, so I abandoned it. But SMR engines ran great and looked amazing.



A scene from my Aquia Line O scale layout

I purchased one as a test. It inspired me to tear out the N Scale C&O layout and start the O Scale U.S. Military Rail Road (USMRR) Aquia Line in 2009. Many of my friends thought this was just a phase, and that in a few years I would tear it out and start something new. However, I am still working on it 16 years later. I find it to be an excellent combination of my interests in model railroading and military history.

So that is where I am at now. My O scale layout is almost done. It is operational. I need to finish detailing some scenes. I don't plan to build a new basement filling layout. Instead, I will focus on other small projects that either complement this layout or are independent. For example, I am currently building a model of a pile



driver for the waterfront. I have plans for more ships, structures, details and figures. I also want to try scratchbuilding a 4-4-0 locomotive.

I have been a member of the NMRA and the Potomac Division since 1995. I enjoy the layout open houses the best. The conventions are also a lot of fun ([photo left receiving Best in Show Award at 2025 MER convention](#)). I also really like the *Potomac Flyer*, one of the best model railroad publications out there!

The aspect of model railroading that I like the most is the multi-faceted nature of it. To be a successful model railroader with a home layout, you need to learn model building,

historical research, photography, electronics, lighting, carpentry, painting, and even writing. Module building is also a lot of fun, as it includes team building and cooperation.

With all of those facets of model railroading, my favorite is backdrop painting and scenery. I also enjoy building scratchbuilding and detailing structures and rolling stock. I really don't enjoy wiring and DCC programming. I view those as chores that need to be done. Luckily through the NMRA or module clubs you can usually find someone that enjoys that side of the hobby and is willing to help.

Model railroading is truly the best of all modeling hobby genres. I engage in figure painting and diorama building which are fun hobbies. They tend to be smaller projects that one can complete quickly. But when you are done building, then what? You have to find a place to store them. With a model railroad, once it's done it can come to life through operations. And it can evolve and get better.

I don't know if I have a stated philosophy toward model railroading. I like trying new stuff and being creative. I like trying to improve. I like linking historical narrative to modeling. I also enjoy the camaraderie of model railroading, especially in operations and work sessions (though I would not describe myself as a hard-core operator.)

I tend to be a lone builder, so the opportunities to socialize with other like-minded modelers are great and motivate me to do better. This is the main reason I agreed to be the director of the Mid-Atlantic Railroad Prototype Modelers meet.

I started Alkem Scale Models, a small cottage industry, to supply model parts that friends and I needed. This small business has been going since 1996 and has experienced a modicum of success.

My advice to newcomers: Start small, find a mentor, be open to suggestions, follow your passion, and have fun.



THE RAILROAD BOOKS CHALLENGE

The Potomac Division's members are not just model railroaders. They are also readers. Many shared their favorite railroad and/or model railroading books with us for this challenge. See if there are any you might be interested in reading.

Thanks to all who sent in photos and brief descriptions for our last issue's Industries Challenge! Our *Flyer* 1st Place Favorite Star for that challenge is awarded to Bob Rodriguez MMR for his amazing coal processing plant. If you have a favorite among these railroad book offerings, send us an email telling us which one.

Looking ahead, our August-September 2026 Challenge will be for Emergency Services. We'll be looking for fire houses, fire trucks, police stations, jails, hospitals, and the like. Just send your brief descriptions and a photo or two by July 5th to: potomac-flyer@potomac-nmra.org



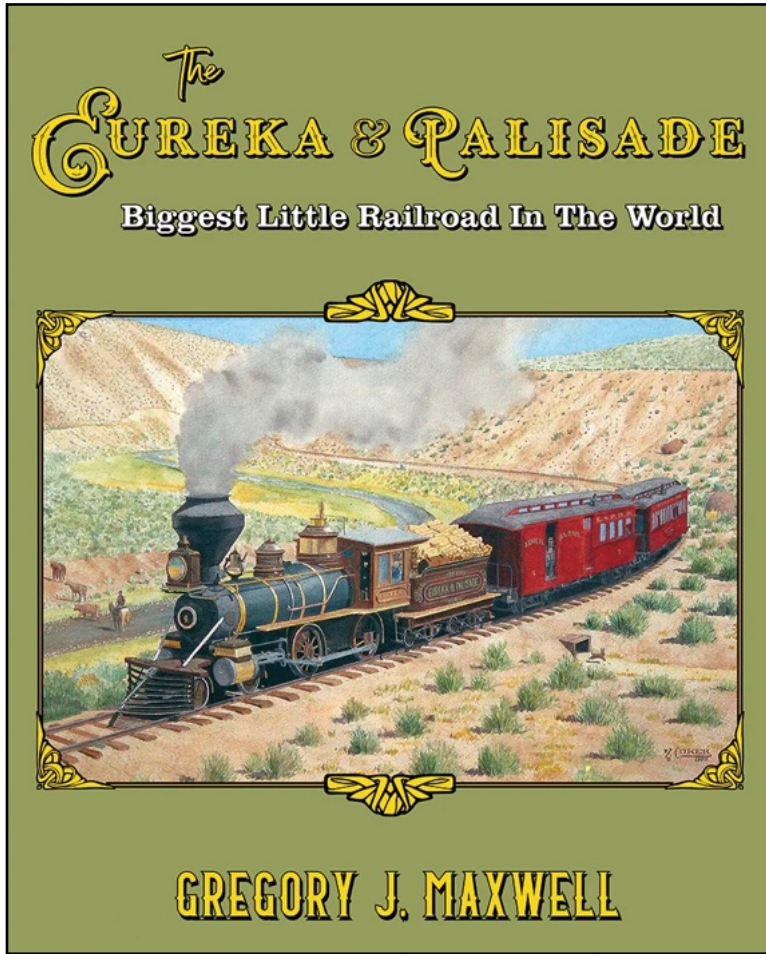
I want to thank the members of the Potomac Division for sharing their work in these challenges. Readers of the *Flyer* in the Division, in the entire Mid-Eastern Region, and NMRA members elsewhere benefit from seeing what you have accomplished (and are welcome to participate in these Challenges).

As *Flyer* Editor, I can tell you that reviewing your Challenge submissions is always among the most enjoyable aspects of the job.

Alex Belida, MMR
Editor and Publisher

(The following items appear in the order in which they were received. The texts and photos are by the modelers who submitted them unless otherwise noted. Some texts may have been edited for length and/or clarity. We welcome submissions from members of other NMRA Divisions in the MER and beyond.)

1. ALEX BELIDA'S EUREKA AND PALISADE BOOK



Most of you probably thought I would select the model railroad thriller I wrote, *Dead Rail*, as my favorite book, or its sequel, *Blind Siding*. I do recommend both, but this hefty tome (left) I received as a birthday gift has really impacted my Eureka and South Pass Railroad, a name I selected even before I knew there really was a Eureka in Nevada and a Eureka and Palisade Railroad that, like my HO layout, serviced mines. Of course, like lots of small railroads, the E&P eventually fell on hard times and died.

The railroad was a narrow gauge line just some 85 miles long from the silver mining town of Eureka to Palisade. Palisade is now a near-ghost town, but back in the late 1800s it was the interchange with the Central Pacific.

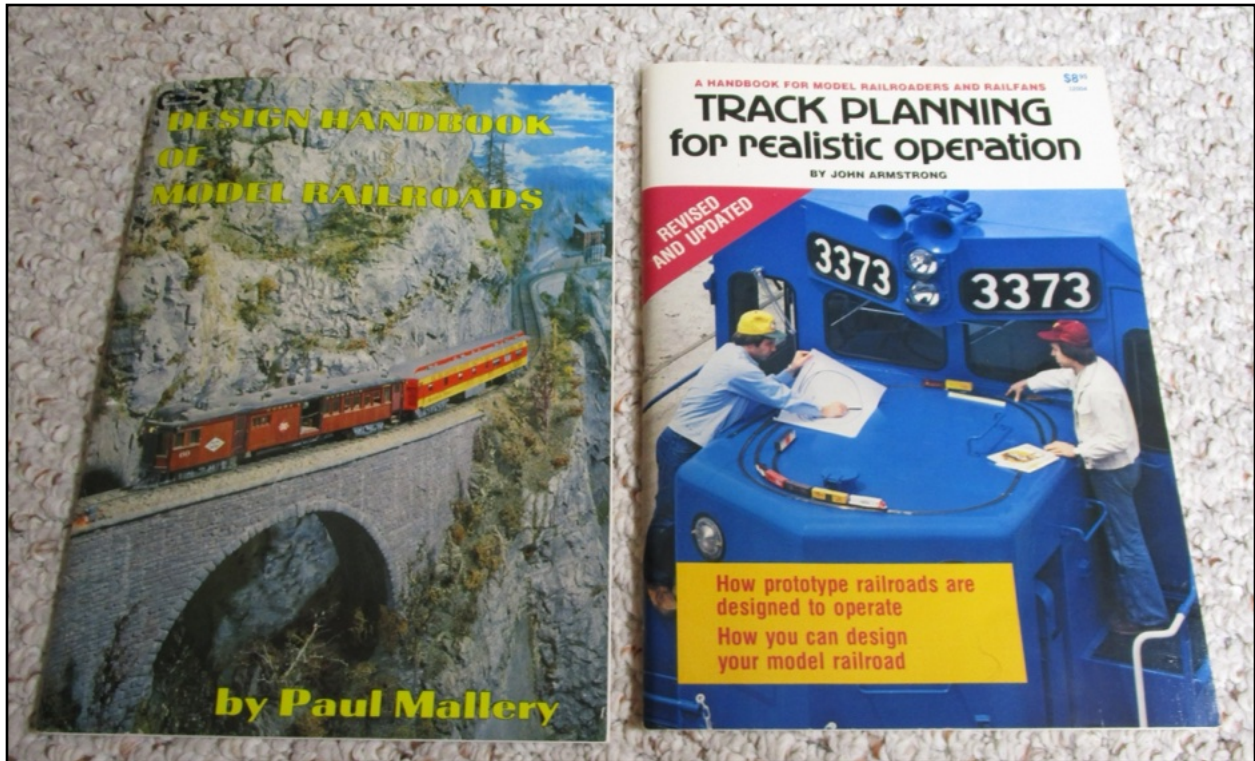
Among the railroad's many features that caught my attention was its use of small motor cars to sustain operations in the early 20th century. I'm currently working on a 3D printed HOn30 model of its motor car #22 when the line's named had changed to the Eureka Nevada Railway. It runs on an N scale Kato 11-109 drive.

Alex Belida MMR

(Photo below right courtesy of Nevadagram)



2. JAMES HELLWEGE'S DESIGN AND PLAN BOOKS

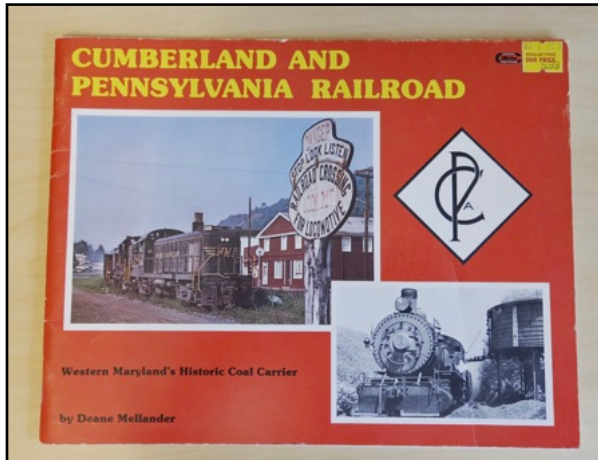


My favorite model railroading books, which were of invaluable assistance during the planning of my present (and first) N-scale layout, are *Design Handbook of Model Railroads* (1979) by Paul Mallery and *Track Planning for Realistic Operation*, 2nd ed. (1979) by John Armstrong, each of which I studied at length prior to laying my first piece of track. *James Hellwege*

A promotional graphic for NMRA membership benefits. The main text reads 'BIG benefits of a NMRA membership'. Below this, there are four icons with corresponding text: 1. A train icon with '100's of clinic videos + NMRA layout tours and educational videos'. 2. A percentage icon with 'Discounts from over 30 NMRA Partner companies' and three red tags showing '15% off', '25% off', and '45% off'. 3. A Discord icon with 'NMRA Interchange on Discord with free video hangout rooms'. 4. A group of people icon with 'A positive and supportive learning community'. At the bottom, the NMRA logo is shown with the tagline 'We make model railroading more fun!'.

3. GREG CASSIDY'S RAILROAD BOOKS

I guess I have a small, average railroad and model railroad library, certainly not like many others I know, especially as far as railroad books. But two stand out as pivotal in what led me to build my layout as I did.

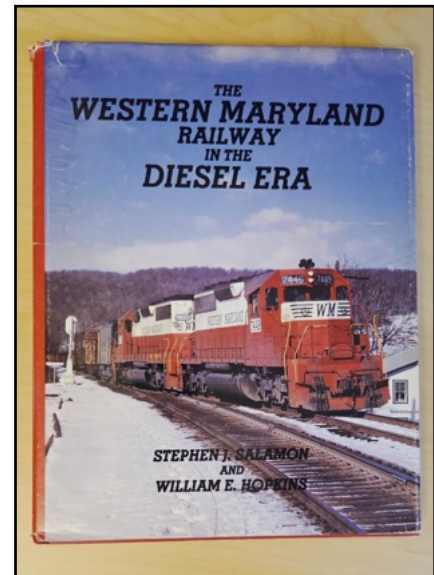


The first book, and I believe the first I got after I started thinking of model railroading, was Deane Mellander's *Cumberland and Pennsylvania Railroad*. This was before I knew Deane. I was in Postal Pro Hobbies in Gaithersburg, Maryland, probably looking for LifeLike's ubiquitous green mats to put on the layout my son and I had just built. Something about that Alco in Black & Gold and the old crossing sign caught my eye. And for under \$6 I had to get it to read more. Obviously the book primarily focuses on the Cumberland and Pennsylvania

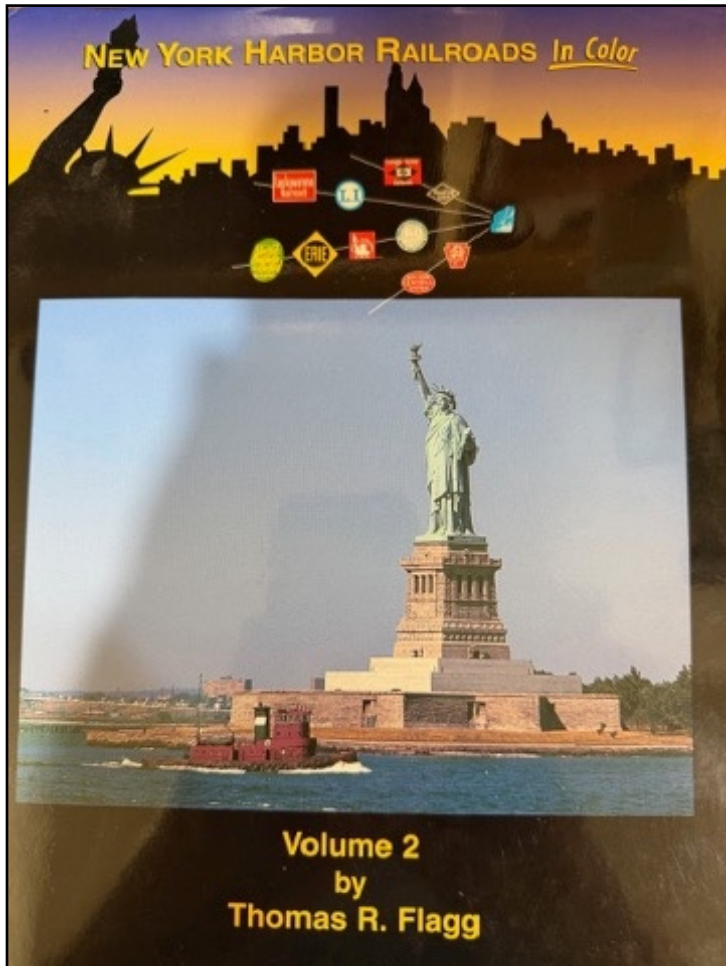
Railroad. But Deane did an excellent job of weaving in how it worked with, and then was acquired by the Western Maryland Railway. Up to that point I thought I was a B&O fan, having grown up seeing and riding on them. But once I was introduced to the Wild Mary, there was no turning back and my heart was set upon replicating it in some way.

That leads to the second book, *The Western Maryland Railway in the Diesel Era* by Stephen J. Salamon & William E. Hopkins. It was my guidebook and Bible for the entire time I was building my layout and acquiring locomotives and rolling stock, and for many years after that. I practically memorized every single colored picture that was in that book, and fell in love with most of them. Even now, when I open it I find hand drawn track plans and papers with lists of tonnage moved and schedules of named trains.

Greg Cassidy



4. PETE LAGUARDIA'S TUGBOAT BOOK



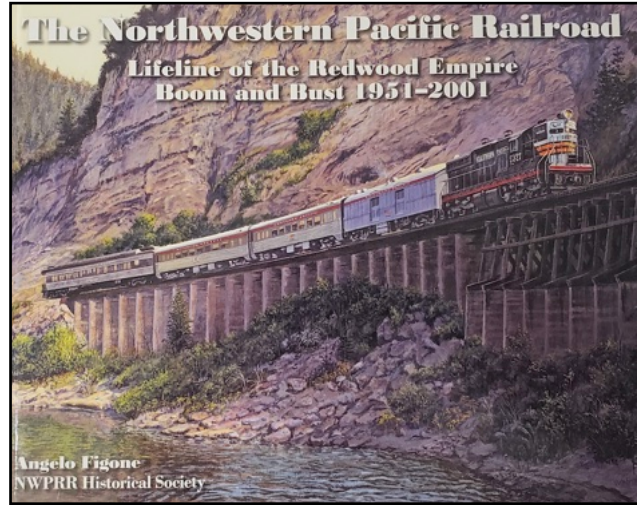
I used *New York Harbor Railroads in Color* for reference to identify the paint scheme for New York Central harbor tugs. Some of the tugs painted in the 1950s were in the Olive Livery paint scheme. Below is a photo of my model using this paint scheme. *Pete LaGuardia MMR*



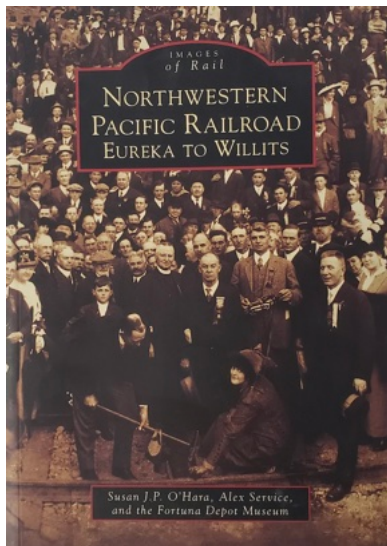
5. GARY MASON'S PACIFIC NORTHWEST BOOKS

I model a segment of the Mendocino County portion of the 277-mile-long Northwestern Pacific Railroad (NWP) in northern California, an independent subsidiary of the Southern Pacific (SP). The period modeled is the late 1950s-early 1960s. The NWP's operations during this period were centered around moving forest products from the state's "North Coast" counties south to interchange with other railroads, principally the SP. Seasonally, the NWP also handled considerable numbers of Pacific Fruit Express reefers to transport pears, apples, plums, and even some citrus to canneries in the San Francisco Bay Area or to eastern markets.

In order to model this segment of the NWP with a sequence of realistic scenes, the design work was heavily dependent on historical information on the industries served, their associated spur track plans, and how operations could be emulated in HO scale.



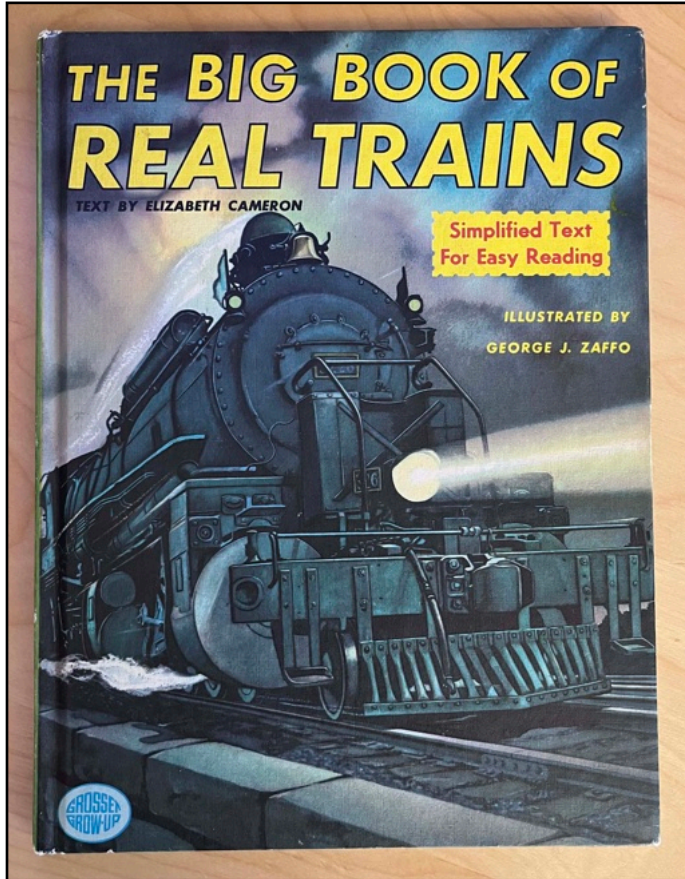
Angelo Figone's book, *The Northwestern Pacific Railroad - Lifeline of the Redwood Empire Boom and Bust 1951 to 2001*, is a thorough treatment of the last 15 years of the NWP's profitability followed by its decline and eventual closure in 1983.



Images of Rail - Northwestern Pacific Railroad - Eureka to Willits is another of the pictorial neighborhood, local or regional history publications released by Arcadia Publishing. This book, like most from the publisher, consists of a series of public domain photographs and other images with limited text and numerous captions. Photographs from these publications can sometimes reveal details about a railroad's trackage and structures, rolling stock, and even, on occasion, operations.
Gary Mason

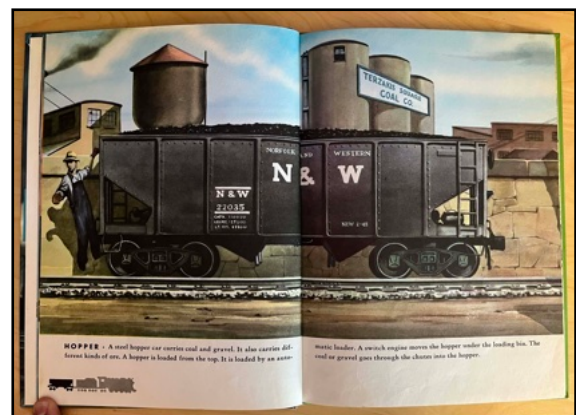
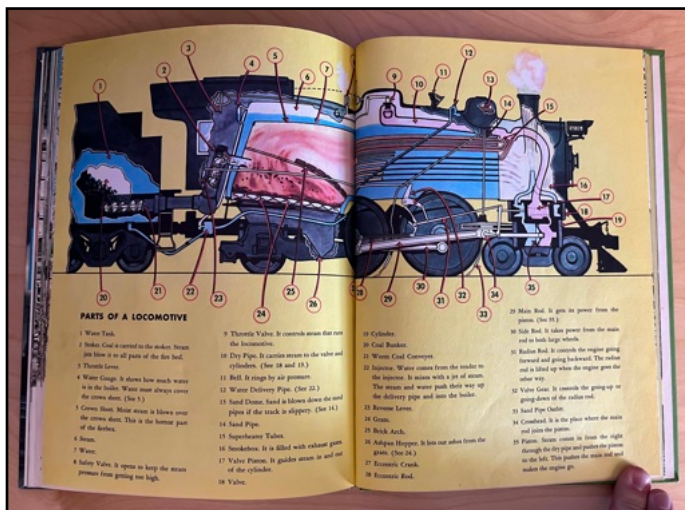


6. BEN SULLIVAN'S BIG BOOK OF REAL TRAINS



The most influential railroad book that I can recall is *The Big Book of Real Trains*, by Elizabeth Cameron with illustrations by George Zaffo. While this book was originally printed in 1949, the 1978 printing (made when I was just three years old) was the one that I had growing up. The pages roughly alternate between full-color painted renderings and lovely, intricate black and white line drawings. This book was different than most other children's railroad books that I had; this one had lots of detail and a beautiful, gritty feel to the beautiful artwork. This book took a more prototypical lean in its description of the railroad. There's even a whole section on hand/lantern signals and the makeup of passenger trains. To this day, when I see the cover I am instantly transported back to my childhood where my love of trains began.

Ben Sullivan

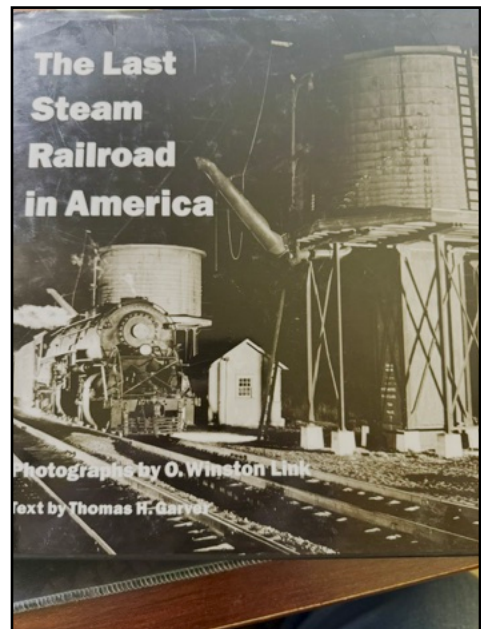


7. ERNIE LITTLE'S FAVORITE BOOKS



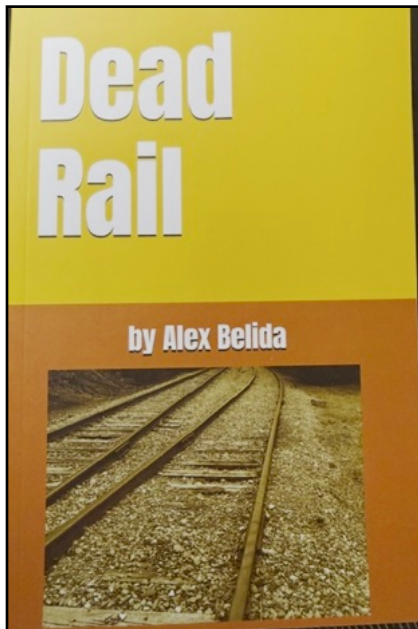
I have three favorite books on railroading. The first two are *Steam Steel & Stars* and *The Last Steam Railroad in America* that has photos by O. Winston Link. The first book was written by Tim Hensley and the second by Thomas H. Garver. Both of these books are a the travels of O. Winston Link going up and down the Norfolk and Western's divisions between 1955 and 1959 taking pictures of the trains, towns, the trains, the employees of the N&W, and people who lived

beside it. The black and white pictures, taken during the day, and those taken at night, using flash photography to highlight what Link wanted the viewer to know about the railroad. At the time the pictures were taken, the N&W was the last railroad to convert to an all diesel locomotive fleet. The N&W management supported Link in his endeavor.



My third book is *Dead Rail* written by a good friend and former Board member of the

Potomac Division Alex Belida. The book is a work of fiction that takes place at a National Model Railroad Expo being held in Washington, D. C. When I read the book, I found it to be an easy read, very addicting, and hard to put down. The main characters, Ethan Mercer and girlfriend Samantha Pierce, find themselves in a mystery surrounding disappearance of a Hudson brass locomotive being auctioned at the convention. I don't want to spoil your chance to read it, but I will say that it made me wonder if I was ever going to another train convention with what they went through. Suspense, intrigue, corruption, payoffs, spies, theft, the NMRA and murder, they are all there and keep you on the edge as you read the book. *Ernie Little MMR*

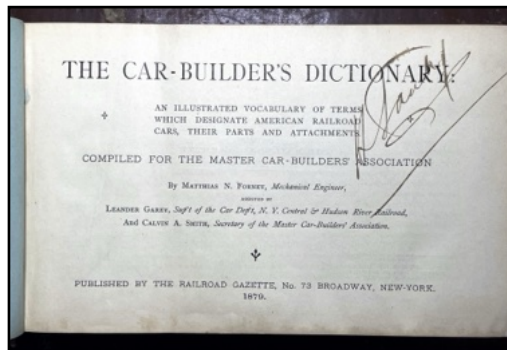
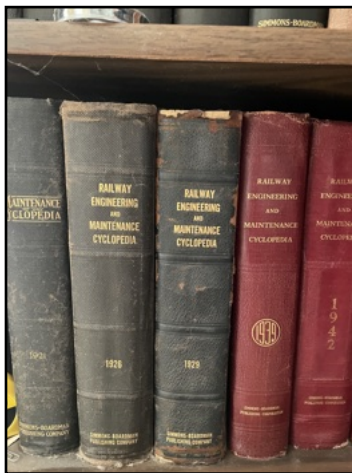


8. KEN WILSON'S RAILROAD BOOK COLLECTION



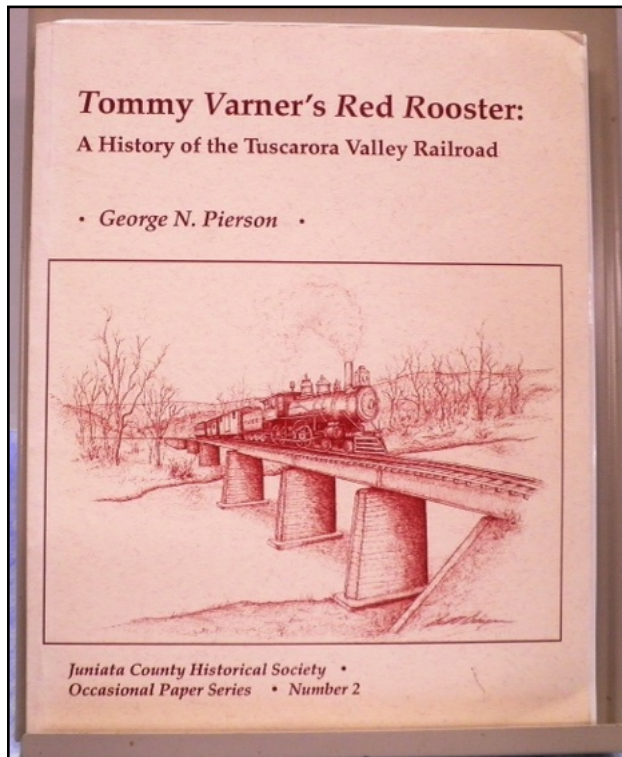
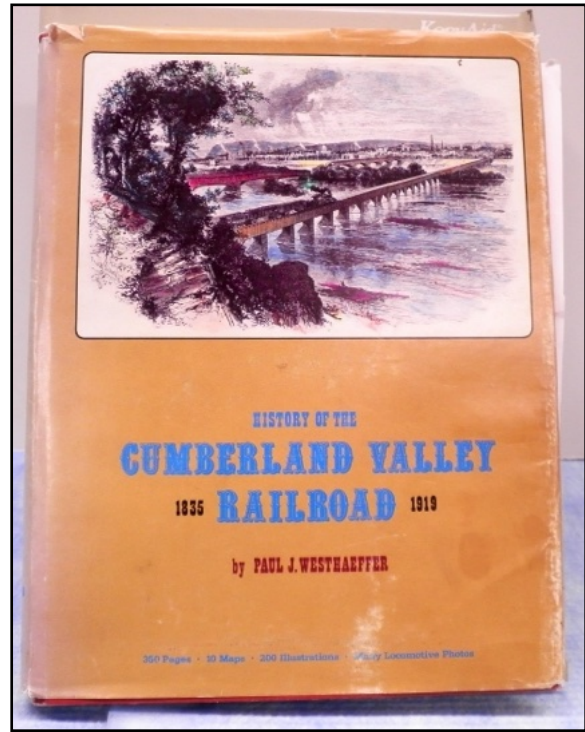
The small bookcase in the living room (photo left) is for "active use" books, the bookcases on the stair landing and the two outside my bedroom door are the main ones (photo right). I decided to focus on the original source "dictionaries" and "cyclopedias".

The Matthias Forney signed copy of the first Car Builders Dictionary of 1879 is rather uncommon. The "dictionaries" eventually were named "cyclopedias" and were published every three years or so until modern times (photos below). The wider span of publication dates is evident in the photo of the combined Car and Locomotive Cyclopedias with the last one (for now?) published in 1997. *Ken Wilson*



9. MARTIN BRECHBIEL'S CVRR AND TVRR BOOKS

The *History of the Cumberland Valley Railroad* is the solitary book on that railroad and covers it from its inception through to its absorption by the Pennsylvania Railroad (PRR). Many useful photos and historical information are within and that made it a routine consult for much of my modeling of the CVRR and the arrangement of the layout. The tracks at one time ran through many small towns in Pennsylvania, one of which I spent some of my formative years in. Several stations remain standing as well as a portion of the roundhouse in Chambersburg.

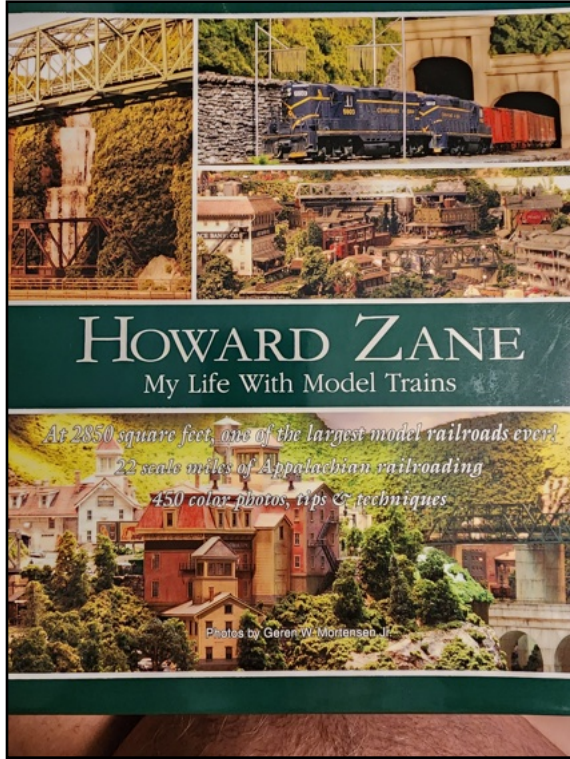


The Tuscarora Valley Railroad book, *Tommy Varner's Red Rooster*, is also, as far as I know, the only book on that railroad. It was narrow gauge and terminated in Port Royal to transfer with the PRR. At one time it was to meet with the CVRR (probably paralleling what is now Rt. 75 in Franklin County), and then also link with the East Broad Top, but neither plan came to fruition and the railroad was closed down and taken up for salvage. Very little remains standing now. There are whispers that a combine and other rolling stock were saved, but never seen. One of two conductor's lanterns and hats are in my possession.

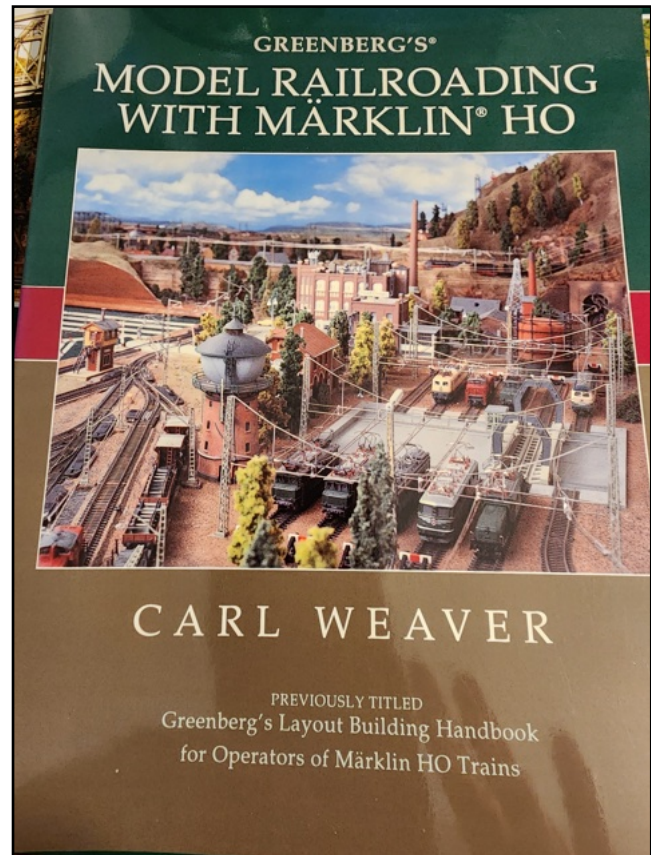
Martin Brechbiel MMR



10. CURTIS' FAVORITE BOOKS

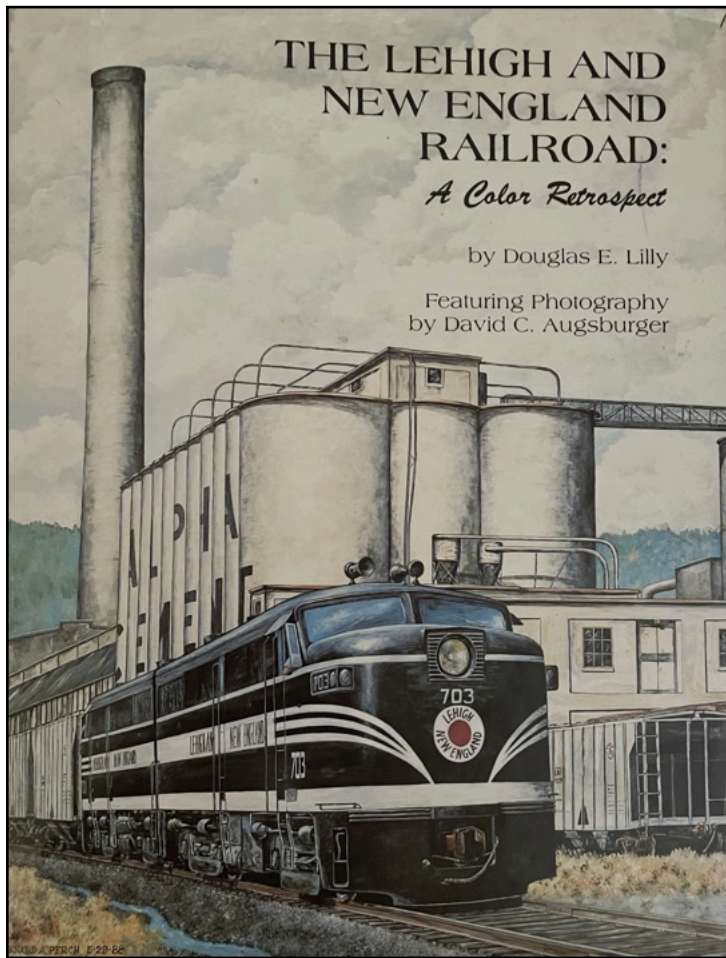


Carl Weaver and Howard Zane take you along for an enjoyable ride across the pages of their books, serving up blueprints for your train layout, whatever the size. They welcome novices and established modelers alike into their dens to not just showcase what they did, but what is possible if you are so inclined. I have spent hours reading through the pages of these books, bringing me much enjoyment and excitement. **Curtis**



11. TODD HERMANN'S LEHIGH & NEW ENGLAND RR BOOK

My favorite railroad book is *The Lehigh & New England Railroad: A Color Retrospect* by Douglas E. Lilly. Nearly 40 years after its publication, Doug Lilly's book remains the "must-have" book on the L&NE in its final decades. It features the photography of David Augsburger and Randolph Kulp, two legendary chroniclers of railroading in eastern Pennsylvania. Both men lived close to the L&NE's territory, and they had the presence of mind to document virtually all aspects of the line before its abrupt sale, shutdown, and abandonment in late 1961. The book is organized geographically - including a chapter on my modeling subject: the L&NE's Catasauqua Branch, but it takes detours to look at other topics, including fan trips over the line, winter operations, and rolling stock. It also devotes a chapter to images of L&NE employees at work. That emphasis on the human side of railroading was ahead of its time, in my view.

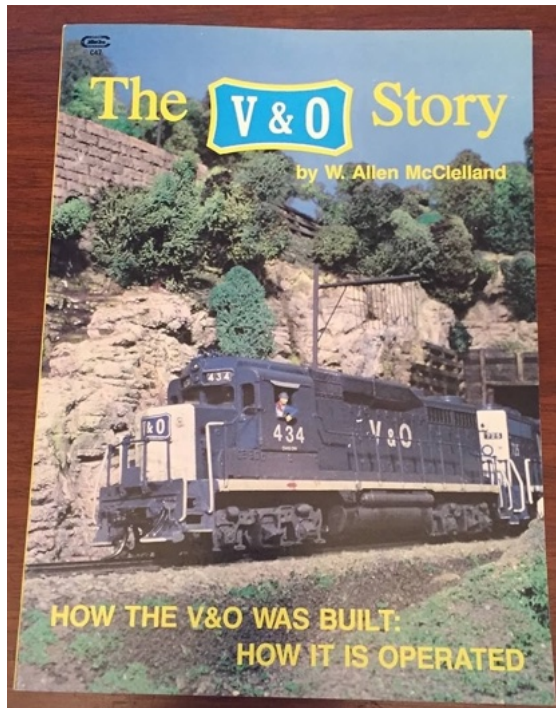


I got a job at The Crossing Hobbies in the East Towne Mall on Rt. 30 near Lancaster, Pennsylvania in early 1989. That part-time job launched me into the railroad hobby in so many ways and exposure to this book was key among them. Right around the time I hired on, the shop started selling Doug Lilly's book. We always had display copies of our books available for customers to peruse. Naturally, I read all of the available books during quiet moments at the shop, but this book captivated me from the get-go - instantly converting me into an L&NE fan and planting the seed to one day model the line. As such, it has always been my favorite.

Unfortunately, the book is no longer in print, but copies are frequently available from online auction sites, like eBay, and used railroad book dealers. *Todd Hermann*



12. DOUG GURIN'S FAVORITE BOOK



My first choice for favorite book is *The V&O Story*, (aka *The Virginian & Ohio Story*) by Allen McClelland [as well as its sequel *Allen McClelland and his Virginian & Ohio: The Man Who Changed Everything*, by Tony Koester 2022.]

The first book of this series is my favorite because it not only describes and illustrates Allen's layout, it reflects a groundbreaking analysis of Allen's underlying creative thinking behind its wide influence. When Tony Koester was planning the original V&O series of eight articles for *Railroad Model Craftsman*, he invited me to do a background search of Allen's prior articles. Beginning in 1976, he invited me to help outline each installment and generate probing questions he posed to Allen seeking explanations how the his V&O developed so many breakthroughs of design, construction,

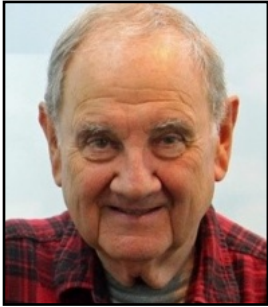
and operations. Allen helped me write one of the series' articles (also in the book) about the V&O's freight train procedure directory, which Allen said was more significant to his railroad's success than the V&O timetable! In 2021, I helped Tony again, in a retrospective book of Allen's many legendary, groundbreaking hobby contributions. In retrospect, Tony and I agreed that our efforts had provided a once-in-our-lifetime journalistic experience (kinda like a walk on the moon)!

Doug Gurin (founder of the Layout Design Special Interest Group)



CENTRAL VERMONT'S MONTVILLE, CONNECTICUT TRESTLE

Article and Photos by John Paganoni, MMR



The January 2026 *Model Railroader* had an extremely well written article by Jim Ferenc about a ballasted trestle. Anyone wishing to build a ballasted trestle should get a copy of this *MR* article. The drawings, photos, and narrative are excellent.

After reading the article, I thought that the Central Vermont (CV) Montville Trestle might offer a bit of a challenge, as it has a boat navigation channel to provide access to a river or cove below the trestle. This trestle had its south side ballasted with walkways up to the boat underpass. After the boat underpass, the trestle is of standard construction. The Montville Trestle boat navigation span allowed boatmen to come into Horton's Cove from the Thames River.



This would be an excellent construction project toward a Model Railroad Civil Engineer certificate.

My model of the CV Montville Trestle is very compressed ([photo above](#)) as the prototype is 391 feet long, but I tried to make it have a respectable “feel” of the prototype as it looked in the 1940-50 era. Like the prototype, my trestle is ballasted on the south end with the ballasting ending at the boat underpass.



The model photo (photo above) should help illustrate the Montville Trestle construction. I spent a lot of time taking notes and making drawings of the prototype a few years ago. I also have a lot of wonderful memories of looking at this trestle in my younger days, as steam engines pulled freights across and the local switcher sorted cars from the trestle to the Robert Gair paper mill.

The trestle had a walkway on each side of the ballasted section. The east side walk had a planked foot walk with a substantial red railing that ended at the boat underpass. The west side had a walk that was secured to the ties in the ballast and ended at the boat underpass.

In years past, the trestle was a fun local place to dive from in the summer. I don't have a figure of a swimmer on my model, but that might add a little more interest for a future improvement. The trestle also attracted fishermen seeking to catch snapper blues, and to this day, it is still a favorite fishing spot in Montville. In addition, the trestle was a great place to net crabs.

 John Paganoni MMR's model of the Gair Mill was displayed in the *Flyer's* Industries Challenge in the April-May issue. This mill was the largest in the Montville, Connecticut area on the Central Vermont Railway.



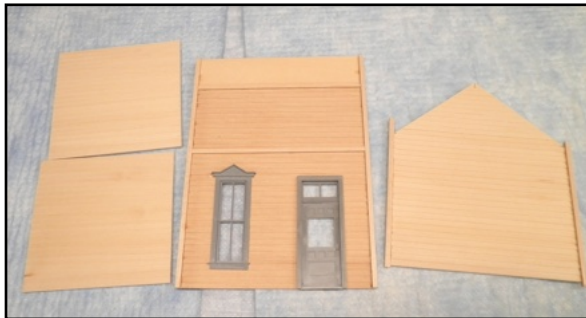
BUILDING TREHEARN'S BARBERSHOP

Article and Photos by Martin Brechbiel MMR



I was not at all sure what the final objective was going to be with this build other than a vague idea, resident in the doorways of my mind.

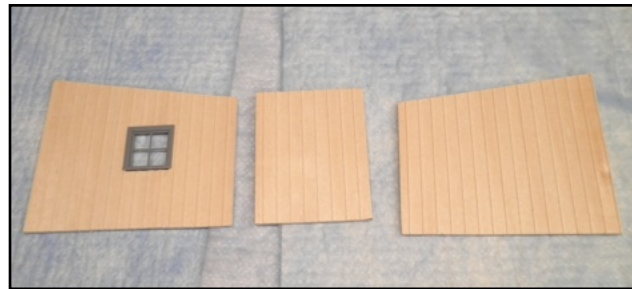
I started with another collection of doors and windows from Tichy and Grandt Line along with some shutters that might work with the longer window.



I laid out the front wall using the MidWest milled clapboard with the entrance door and the single long window. This front wall was going to have a false front assembled from several parts of clapboard and 3" stock. The ends were capped with 3/32" square stock for the corners. This front wall set the width of the back wall while the door and window placement set the height of the side walls. The back wall was also fitted with 3/32" square stock for

corners (photo above). I had some board & batten leftovers, so those got cut to make an addition off to the right side of the main building. I made an opening in one of these walls that would accept the solo Tichy work car window (photo below).

I outlined the interiors of the front and back wall with 3/16" square balsa to provide gluing surfaces for the side walls and the roof sheathing, and to provide a little reinforcement. I glued the balsa in place using Titebond and lots of small spring clamps. The long walls of the



addition section of the structure received the same 3/16" square balsa bracing treatment.



The next step was to put the main building together. I added the sides to the front wall using Goo and CA, and then added the back wall using the same adhesive mix (photo left).

As with many things, there was an afterthought involved during the course of assembly—a back door, since a quick getaway might someday be of interest to the

inhabitant. I carefully made an opening post-assembly. The care was not so much related to maintaining the integrity of the structure as it was to my avoiding any bloodletting while cutting a hole awkwardly with a sharp blade (photo right).



Similarly, I assembled the side addition using Goo and CA along with a generous amount of the 3/16" square balsa for squareness of fit and to provide gluing surfaces for the roof sheathing.



I added a foundation under the main building (photo left). The foundation was assembled from several dental stone castings that I had made using a mold derived from a very hard resin casting for a stone retaining wall that had been ripped into strips. This material can be shaped with a file and I beveled it to fit together, then glued it to that 3/16" balsa on the underside of the building. I also extended this foundation forward of the front of the building to provide a base for adding an entrance walkway. I added some scrap stripwood under the

front of the building to provide a support base for that end of the entrance walkway.

I glued the roof sheathing (1/32" sheet basswood) for the main building into place. I applied some 1/32" thick scribed siding to the back of the false front along with a cap on top of that wall. I glued the roof sheathing for the side addition into place (photo right).



I fabricated the front walkway and steps from an old reliable standard that I still had in my shop. These are the last of 10,000 coffee stirrers that I bought years ago and stained with MinWax. They are great for most board-by-board projects. I added a set of steps at the back door as well. I attached the side building

addition to the main building, and added posts under it to bring it all up to level with the main. I modified the front façade with some quarter-round and stripwood milled shapes to add more interest.

I painted all of the walls blue (Polly Scale). I wanted something that stood out a bit more than the usual drab colors so often embraced on layouts. I painted the doors, windows, and shutters Maine Central Pine Green (Polly Scale) and then glazed with overhead transparency film. I added a bit of shade to the window in the addition.



I applied standing seam metal roof material (Builders-in-Scale) to the main roof using Goo and CA (photo left). I capped the metal roof with a standing seam section cut from a scrap of roofing. I glued tar paper down onto the addition roof. A simple smoke jack made from brass tubing and some scrap sheet stock soldered together was added through the metal roof.

I glued all of the windows and doors into place. I added final details, including some signage and an Arttista figure out front, busy sweeping out the shop (photo above). I

clipped the barbershop sign off the internet, then cropped, resized, and straightened it out to fit the space. I mounted it to some 1/32" basswood and framed it with some pre-painted wood angle before glueing it to the front of the building. I added a small sign above the door—Proprietor, Alan Bourdillion, Trehearne—referring to the bloodied gentleman sweeping up.

Martin Brechbiel MMR is the current Potomac Division AP Manager.

A TRIP FOR AN AP STRUCTURES EVALUATION

Article and Photos by Ernie Little MMR, Potomac Division Superintendent

On Wednesday, April 21st, Achievement Program Manager **Martin Brechbiel** MMR and I went on a journey to the far west of our division to do an AP evaluation for 12 structures made by **Jeff Jordan**. The Potomac Division encompasses a large land area, and travelling from one side to the other can easily exceed two hours. We departed from my home in Manassas and arrived in Fort Valley, Virginia at approximately 11:00 AM and were at the evaluation site until approximately 2:30 PM.

Upon our arrival we met with Jeff, who took us to his railroad/garage building across the street from his home. He told us the building was originally a chicken coop but had been converted after he purchased the property. This was Jeff's first AP evaluation on his Lil Colorado Railroad. He was ready for our visit having the appropriate forms completed with short descriptions of his 12 structures for our use.

The AP Structures certificate requires construction of 12 structures of at least six different types. One of those six must be a trestle. In addition, six of the models must

be scratchbuilt and the remaining six must be superdetailed. Martin and I applied the evaluation matrixes for the areas of Construction (40 possible points), Detail (20 possible points), Conformity (25 possible points), Paint and Lettering (25 possible points), and Scratchbuilding (15 possible points) to arrive at an evaluation score for each building. For a merit score, a minimum of 87.5 points of a possible 125 points must be attained. Six structures must receive merit scores to earn the certificate.



Jeff's six merit score structures were Lichliter Grocery, St David's Grocery, Lehighton Interlocking Tower, the curved trestle, Middletown Station, and Ophir Quality Store.

Lichliter Grocery ([photo above](#)) is a scratchbuilt O scale model of a grocery store that once stood in Fort Valley, Virginia. As plans were not available for him to use, he found two photos of the structure, estimated dimensions from these photos, and then developed the plans for it. The structure is built using Evergreen brand styrene sheets and strips, plus some window and door castings and a chimney casting. Many of the castings were altered to more closely match the ones seen in the photographs. The doors on the storage additions were scratchbuilt, and he made the store signs using a

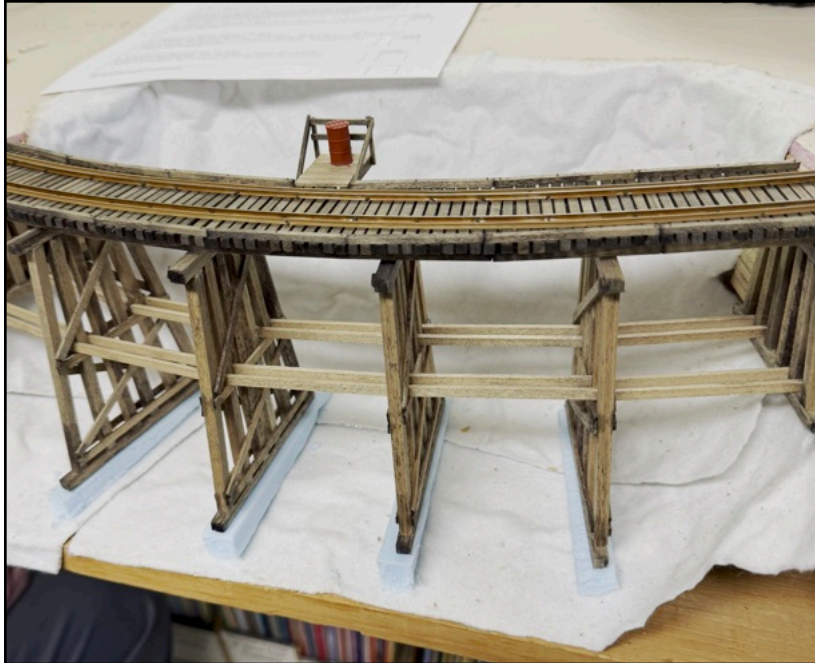
word processor application. The only commercial components were the various advertising signs (Coca Cola and 7Up) and the gas pump and the bicycle leaning by the back door. This model was loaned to a local museum for a display about the stores in Fort Valley and was featured in an article appearing in the *Northern Virginia Daily* newspaper.



St. David's Grocery (photo left) is like the Lichliter Grocery. The building is a scratchbuilt O scale model of a grocery store that once operated in Fort Valley, Virginia. The building, though long closed, still stands and the owner gave Jeff permission to measure and photograph it to create plans. The structure is built using Evergreen brand styrene sheets and strips, plus some modified window and door castings and the chimney casting. Some of the detail items on the front porch are commercial components.

Lehighton Interlocking Tower (photo right) is a scratchbuilt HO scale model of an interlocking tower that once stood in Lehighton, Pennsylvania, on the Lehigh Valley Railroad. The model is constructed using plans published in *Flags, Diamonds and Statues*, the magazine of the Anthracite Railroad Historical Society (ARHS). The walls are made of styrene sheets, with the trim and wainscoting made of several separate layers. The roof is a plain styrene sheet that Jeff scribed to simulate slate shingles. The windows and doors were scratchbuilt of Evergreen brand styrene and microscope slide glass. The stair treads and the smoke jack are commercial castings. The base is a board covered with scenic materials plus a commercial telephone pole and a Jordan Miniatures vehicle. This model won first prize for structures at an ARHS annual meeting held in Scranton, Pennsylvania.





The curved trestle (photo left) is based on a Hunterline O scale trestle kit but was significantly altered to change it from a straight trestle to a curved trestle fitting the radius and location on his layout. The kit provided wood for the ties, horizontal beams, posts, and braces; however, Jeff cut the beams into sections matching the required radius curve, and cut the posts to fit his layout's geography. He also hand-spiked the running rails to the trestle deck, and

added the outside stringers on the deck, nut-bolt-washer castings on the stringers, and made the hand-spiked guard rails from scrap rail. He also modified the style of the refuge platform to match the Rio Grande Southern prototype. Unlike many trestles, his trestle bents do not include nut-bolt-washer castings on the boards. He did this in response to the extensive photos in *The Rio Grande Southern Story* publication showing that the trestle did not have visible surface nut-bolt-washers (possibly because they were spiked rather than bolted on the timber surfaces).

Middletown Station (photo right) is based on an Altoona Models O scale structure kit. Again, Jeff significantly altered the kit to make it more closely resemble the B&O station that once stood in Middletown, Virginia. He extended the front and



back walls, narrowed the side walls, moved window and door locations, and added additional windows from the kit's plans. He also changed the roof pitch and front roof line and added snow guards. He painted the walls and trim in authentic period B&O station colors (red walls and brown trim). He also added all the platform details, including the apple baskets, waiting passengers, and an REA baggage cart. He made the base from a board, handmaking and staining the ties and hand spiking the rail. Finally, he printed made the station signs using a word processor application.



Ophir Quality Store (photo left) is based on an old Banta Models O scale structure kit. Because the kit was quite old, the wood wall material was warped and required substantial straightening and bracing. Jeff also replaced the cardboard roof material with styrene. The kit supplied laser cut windows, and since the doors were dried out and brittle, he replaced most of them with Grandt Line castings. He hand-painted the simulated sheer curtains in the dormer windows, and made the front deck using individually cut and stained wooden coffee stirrers.

The kit did not include any interior detail so Jeff scratchbuilt the store's interior

floor and walls, adding a commercial door casting. He added seven shop fixtures and filled the shelves with a variety of materials. These included hand painted styrene structural shapes simulating boxes and cans, hand painted Berkshire Models metal castings of tin cans and jars, crockery and other items simulated with craft store glass beads, and bolts of fabric simulated by wrapping photo prints of 1930's fabric around styrene cores. He added the post office sign over the front door and a visible gas pump found in his parts box. He also added a Woodland Scenics lighting kit.

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Additional information on the NMRA Achievement Program can be found at: <https://www.nmra.org/education/achievement-program>

PRODUCT REVIEW: SOUND BOARD INSTALLATION

By Nicholas Kalis with Mark Gionet and Images by Peter Kalis



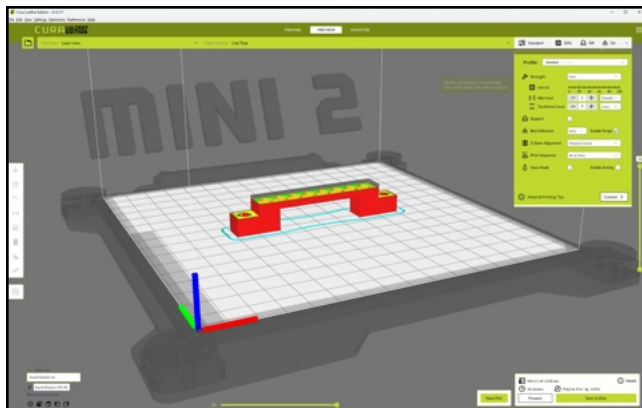
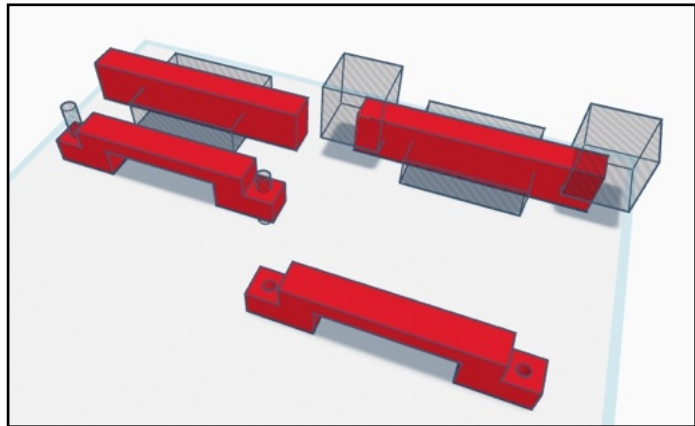
A long trestle on my Fn3 (1:20.3) 1944 Oahu layout crosses over a gully with lush Hawaiian vegetation. Given that most would consider my layout quite small, I thought that some sound would jazz matters up. So, in January 2026, Mark dropped by to help me install a sound board to add background bird sounds to the usual operating sounds of my 0-4-0 motive power.

When I ordered my ITT Products *GL Sound Module*, I sent the firm a bird-song sound file I found on the internet and downloaded for free. ITT loaded said sound file at no extra cost.

Innovative Train Technology Products
 Phone: 818-926-1143
 West Hills California
 Email: george@ittproducts.com
www.ittproducts.com

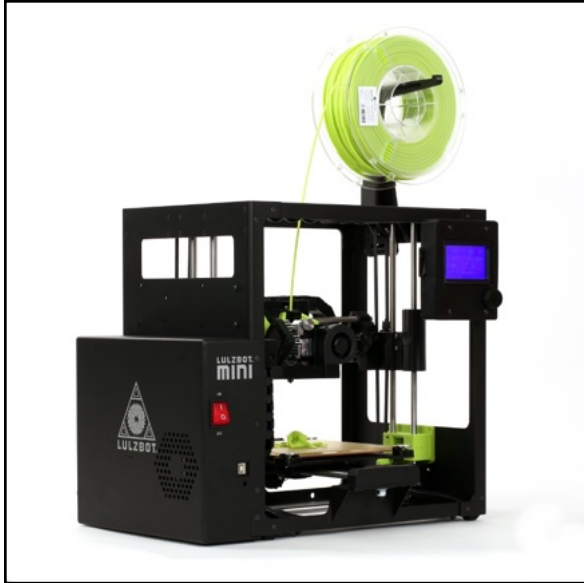
Custom Bracket

The small circuit board arrived from ITT without obvious means of attachment to the layout. My son Peter designed a custom bracket in Tinkercad, a free beginner-friendly online tool from Autodesk. He combined basic shapes and subtracted sections to create precise slots and holes for a perfect fit with the sound board ([image right](#)).



Peter then exported this design as an STL file and loaded it into Cura, the slicing software that prepares instructions for his 3D printer. Here, in CURA ([image left](#)), you can see the settings and preview of the instructions that will be sent to the printer to create the bracket.

Peter printed it on his LulzBot Mini 2 3D printer using inexpensive white plastic PLA filament (typically \$10-\$20 for a



1000g spool). LulzBot (photo left) is a premier USA-based manufacturer of desktop 3D printers. The bracket used just about 5g of material and took about 30 minutes to print.

Our first step was for Mark to bench test our parts to see that they worked. Mark drilled a hole in the fascia for the rocker switch to fit into. We then installed the rocker switch. We next installed the ITT Products *GL Sound Module* into its bracket. I installed the power strip with double-sided tape, but it did not hold, so we just left the power strip on some nearby benchwork. I plugged the power pack into the power strip and into the module.

Word to the wise: my workbench is not on the same floor as my layout so running around to assemble tools and supplies was a bit exhausting. Also, be careful rolling around under your layout on a carpeted floor. It's a great way to pick up static electricity, which is, of course, a great way to fry a circuit board. Carefully discharging the static elsewhere before mounting the board kept it fully functional.

Conclusion

We strongly encourage our fellow modelers to scour the internet for royalty-free sounds that could work on their own layouts. Do not stop at railroad sounds—trackside or otherwise. Consider adding sounds to your layout that reflect industries or residential areas you model. Does your model railroad travel through rural areas? There surely are sound recordings available that reproduce sounds of the geographic area you model.

I have no other sound modules on my layout but am now considering adding a water tower sound module in the future, hoping Mark helps me, or, should I say, I help Mark.

MaterialsList

Bracket designed and printed by Peter Kalis

[Hawaii Birds and Soft Rain Field Recording18097 \(click link for sound\)](#)

Saberdrive 11851 Interior Multipurpose screws 6 x1

ITT Products SPKR2.5 8 Ohm Speaker

Power Pack

Rocker Switch - Computer City

Power Strip



USING MINI SOUND MODULES

Clinic Notes by Jeff Jordan from his recent Hobby Barn Clinic



Sound - the final frontier

1. For me, sound adds an additional dimension to model railroading. Our layouts replicate the sights of railroading, but including sound effects creates an even more realistic and immersive experience.
2. Especially with the advent of DCC, realistic train sounds have become obtainable.
3. Background sounds are much less often modeled but really help bring the surroundings to life. On my layout, I have added (i) hammering in the blacksmith shop, (ii) sheep baaing in the stock pen and (iii) coal pouring from the coaling tower. I'm sure you can think of lots of other possibilities.

How to add background sound effects

1. In the past, less sophisticated approaches have been used, such as cassette tape players and cassette recordings.
2. Now, with the availability of inexpensive sound recording technology, more sophisticated systems are possible.
3. A number of vendors offer preassembled and prerecorded sound circuits. Some have extensive sound selections, such as city sounds, country sounds, nature sounds, industrial sounds, "western" sounds and many others. But they cost \$45-\$50 apiece!
4. I have found that inexpensive sound circuits may be easily repurposed to provide model railroad background sounds.

Getting a mini sound circuit

1. A number of vendors offer inexpensive recordable mini sound circuits. I have found a large assortment offered on Amazon.com and Walmart.com.
2. With this clinic you are receiving one we found on Walmart.com. It will permit you to download and play back MP3 files. Others offer more features, such as a "repeat" switch and volume adjustment. This example doesn't include these features.
3. When you go to buy more, make sure it downloads MP3/WAV files and that it includes a battery, a speaker, an on/off switch and a "play" switch. Look for "repeat" and volume adjustment if you also want those features. You are receiving a cable with this clinic, so you probably don't need one that includes another cable.

Getting started with the circuit

1. Firmly press the USB C plug into the socket on the circuit board. Make sure it is fully seated.
2. Press the USB A plug into the socket on your computer. The charging LED on the circuit board should illuminate (red). Let it charge for 30 minutes or more. (The circuits come with some charge in their batteries, so we will start with that.)
3. Unplug the USB A plug, turn on the power switch on the circuit board and press the play button on the circuit board. The sample sound should play.
4. Plug it back in to your computer.
5. Find the circuit board on your computer's menu. It should appear as an external USB drive.

Finding and saving sound files

1. To my surprise, there is a hobby of collecting sounds. There are a number of web pages where sound hobbyists make their sound files available for free. One that I have found is [Freesound.org](https://www.freesound.org). Go to that web page and follow the registration instructions. (My password is Coloradoxx)
2. Use the search function to explore the many sound files available. (e.g., steam locomotive, station announcement, jack hammer, tractor, airplane start up)
3. When you find one you like, click on it. Read the file type (WAV or MP3 will work) and the length (in seconds). The circuit only will take a maximum of 90 seconds.
4. Click on the button that says download sound. Your computer should download the sound file and place it in your downloads file. (Your computer might ask you where you want to save the file.)
5. (Not demonstrated here, but there are various sound editing applications which will permit you to edit a sound file, such as to clip out the portion you want.)

Moving the sound file to the circuit

1. Go to your computer menu and find the USB drive and click on it. The drive will open and show you the contents of the USB drive memory (the sample file). Click on the sample file and delete it.
2. Go to your computer's downloads file and find the sound file you just downloaded.
3. Drag and drop the sound file to the USB drive. A download "thermometer" should appear showing the download's progress. When it is done, click on the USB drive to confirm that the sound file is on the USB drive.

4. Disconnect the USB cable from your computer. Turn on the power switch on the circuit board and then click the play switch. Your sound file should play once. Your min sound circuit is now ready to use on your layout.
5. The battery should keep its charge for quite a while, depending upon how often you play it. You may recharge it by plugging it into your computer's USB port.

Installing it on your layout

1. This circuit comes stuck to some double stick tape. You can peel some or all of the components off the tape.
2. You likely will want to put the circuit board and the play switch somewhere accessible (for recharging and playing). Note that you should turn the on/off switch to "off" when you are done in order to preserve the battery's charge.
3. Depending upon the sound, you might be OK with leaving the speaker with the circuit board or placing it remotely. I have found that you can cut the speaker wires and solder in extensions.
4. If you want the speaker in a particular location, consider where you can hide it. For my blacksmith's shop, I stuck the speaker out of sight under the roof with double stick tape. For my sheep pen, I made a small shed and hid the speaker in it. You may hide the speaker in your scenery, for example covering it with ground foam clumps.
5. Use your imagination and have fun!



RAILROADS AND RIVERS

Article and Photos by Tim Tilson



Unless your railroad is set in the desert, it probably runs over or along a river or two. The purpose of this article is to provide a little background on rivers and their rapids. I have seen some inaccurate rivers and rapids created by otherwise talented modelers. While I am not a school-trained hydrologist, I have spent 25 years paddling white water on the rivers and creeks of the mid-Atlantic region. So here are some thoughts about creating accurate rapids on your rivers. In the pictures below the current always flows from the top of the page to the bottom.

A rock in a stream forms an eddy in which water immediately downstream from the rock is calm, i.e. not moving. Additionally, eddy lines form on either side of the rock (photo right).



Sometimes eddy lines are faint, and sometimes they do not depend on the rock, the gradient, and the water level that day. Paddlers use these eddies to stop and rest, to wait for other paddlers farther upstream, or to scout a rapids farther downstream.



The eddies can be the result of a single rock in the river or along the shore. Paddlers in an eddy should be facing up river. When they depart, they push through the eddy line, lean down river, turn, and then start moving down river.

Often times two rocks will be near each other. In this case their eddy lines often converge to form a V (photo left). Outfitters on the Shenandoah River instruct novice paddlers to steer

for these. Rocks can form a ledge across the river with a number of openings (photo right).



Sometimes, a second ledge is directly downstream from the first. In this example the paddler must negotiate the first ledge, make an immediate left turn, go a paddle stroke or two, and then make

an immediate right turn. These types of rapids, requiring one turn followed immediately by another, are often called either S or Z rapids. For example, about 600 yards below Great Falls, the Potomac River makes a hard right and then a hard left, forming an area called an S turn. Farther downstream, the access to the Little Falls section is through a very tight side channel called a Z channel. A great number of rocks close together form a Rock Garden. Here the eddies are all jumbled up.

Almost all rapids accumulate a name over the years. There are three on the 4.5 miles of the Rappahannock River from Remington to Kelly’s Ford. The first, Grandma Rapids, are a remarkably simple rapids directly under a railroad bridge. I suspect the name implies that even your grandmother can negotiate them successfully. Farther downstream are the major rapids called Sandy Beach Rapids. Directly at the bottom of the rapids is a sandy beach on the right-hand shore, the perfect spot for lunch. The last rapids consist of a tight turn between two rocks and a three-foot drop that—for some reason ost to time—are called Piggly Wiggly.

Try as we might, paddlers often end up upside down and fail to execute their “Eskimo roll” (photo right).



In this case, the paddler exits his kayak via a “wet exit.” This involves pulling off the “skirt” and wiggling out of the boat. Hopefully, buddies will help get the paddler and his boat to shore.

Finally, be aware of when canoes and kayaks were used on rivers. Prior to WWII most canoes were made of wood. In 1944, Grumman started making aluminum canoes using aircraft aluminum. In the mid-60s companies like L.L. Bean began making plastic/Royalex canoes in such bright colors as green or red. Although kayaks were developed in the 1930s, they really did not enter general use until the mid-1970s.

I hope this has given you a little more information about how to portray rapids on your river and, perhaps, a few other ideas for your layout.

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Tim Tilson was profiled in our *Meet the Member* feature in the June-July 2025 issue of *The Potomac Flyer*.





CALENDAR OF COMING EVENTS

Saturday, June 13, 2026, Potomac Division **Hobby Barn Clinic** - 9:00 AM - Modular Construction - Clinician: Randall Smith

Sunday, June 21, 2026, Potomac Division **Virtual Clinic** - 3:00 PM - NMRA Official and Volunteer certificate requirements - Clinician: Martin Brechbiel, MMR.

Saturday, June 27, 2026, **Potomac Division In-Person Meet** - 9:00 AM - NMRA - AP Prototype Models and Cars certificate requirements - Clinicians: Alex Belida, MMR and Martin Brechbiel, MMR. Leisure World in Silver Spring, MD.

Saturday, July 11, 2026, Potomac Division **Hobby Barn Clinic** -10:00 AM - Lighting and Animation - Clinician: Randall Smith

Saturday, August 8, 2026, **Potomac Division In-Person Meet** - 9:00 AM - NMRA AP Motive Power and Electrical certificate requirements - Clinicians: Alex Belida, MMR and Ernie Little, MMR. Dranesville Community Center, McLean, Virginia

NMRA CONVENTION:

July 27-August 2, 2026: *Scenic City Express*, Chattanooga, Tennessee



MID-EASTERN REGION CONVENTION:

October 15-18, 2026: *Tracks to Tidewater*, Holiday Inn, 5655 Greenwich Rd, Virginia Beach, Virginia



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Remember: You must have an NMRA member login to get the discount codes!



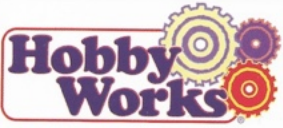
PAYMASTER'S REPORT

by Jerry Stanley, Final Report as Potomac Division Paymaster

1. Checking account (beginning balance)	\$ 6548.54
2. Cash on Hand	\$0.00
3. Total assets as of 4/30/2026 (end balance)	<u>\$ 5345.39</u>
4. Deposits by date	
a) 4/09/26 \$ 21.26 - Deposit	
b) 4/15/26 \$30.00 - Service Charge refund	
5. Total Deposits	<u>\$61.26</u>
6. Individual Deposits	
a) \$ 21.26 - Deposit	
b) \$30.00 - Service Charge refund	
7. Total Deposits	<u>\$61.26</u>
8. Total individual payouts	
a) \$100 4/14/26 in branch transfer to checking	
b) \$5.00 4/21/26 Service charge	
c) \$203.55 Truist online transfer	
d) \$203.55 Debit Card Purchase Award Crafters	
e) \$410.00 Truist online Transfer	
9. Total Payouts	<u>\$922.10</u>
10. Checking account balance as of 04/30/2026 (Lines [1+5]-9) =	<u>\$5354.39</u>
11. Total Cash on hand 04/30/2026	\$00.00
12. Total Assets (lines 10+11)	\$5354.39



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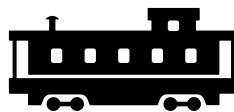
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