

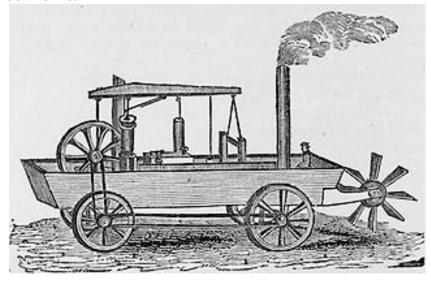
Three Lakes Model Railroad Club Volume 3, Number 4

1st 100% Club in Wisconsin April 2012

Orukter Amphilbolos: howzitpronounced

by R.G. Blocks

Oliver Evan's described his vehicle thusly, "To show that both steam carriages and steamboats were practicable, I first put wheels to the boat and propelled it by the engine a mile and a half up Market Street and around Center Square to the River Schuylkill. I then fixed a paddle-wheel at the stern and propelled it by the engine down the Schuylkill and up the Delaware sixteen miles leaving all vessels that were under full sail full halfway behind me."



Oliver Evans thus described how he 'showed off' his 'first self propelled vehicle built in the USA'. It was the number one auto if you say its character is described as having four wheels and an engine. Or, you might say it was the first truck. Or, you'd be very close to the first steam engine

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powered locomotive. There, we'd be missing the element we call rail. Or, since it was a boat frame and a sailing ship, perhaps he was displaying the first steamboat. Sounds like an Orukter Amphilbolos to me.

Evans vehicle has been described as 30 ft long and 15 tons and propelled by a five horsepower steam engine. However, the only writings describing the vehicle (that I find) are those of Evans himself. Five HP was supposed to have driven the steam dredge down that Philadelphia Street. Most might say this is a bit unlikely.

In 1777 Oliver made a machine for preparation of wire teeth for carding wool. He later invented an automated flourmill that converted grain to flour without being touched by human hands. His automated handling equipment has given Evans credit as the originator of the science of materials handling.

George Washington inherited Mt Vernon in 1754. In 1771 George built a large gristmill on Dogue Run Creek, about three miles from home. It produced flour and cornmeal for export. In 1791 Washington automated the mill using technology of our Oliver Evans.

In 1805 Evans invented a refrigeration machine and is at times referred to as inventor of the refrigerator. Evans did design the first refrigerating machine. Another American inventor, Jacob Perkins (1834) gets this credit; however, Oliver was one of the great minds of the seventeenth century. They say he was however a bit crotchety.

Oliver's inspiration for the steam engine to power his amphibian was Englishman Thomas Newcomen's steam engine (built in 1712). Oliver's Orukter Amphilbolos or Amphibious Digger was built for the city of Philadelphia (in about 1803 to 1805) as a dredge. Where steam was condensed to make a vacuum under the piston in Newcomen's design, Oliver Evans turned the idea around and produced the high-pressure steam engine we might know as the Columbian Engine.

Newcomen focused on pumping water whereas Oliver's engine could power a myriad of tasks. As a result, Oliver Evans was inducted into the Inventors Hall of Fame in 2001 in recognition of his mechanical inventions.

Steam power had already propelled a land vehicle in both Britain and France by 1804-5. The date of Oliver's story seems to be 1803 to 1805 with perhaps the more aggressive dating done in his latter years. Some would say portions of Evans' writings are a bit self-aggrandizing and somewhat inaccurate.

Little did he know we'd reinvent his vehicle as the 'Duck' as the amphibious landing craft for various military invasions in WWII. The WWII Higgins Boat is found most readily today at the Wisconsin Dells where it provides visitors a ride through town, then down a sand hill and a ride down the Wisconsin River.

Oliver Evans built his steam dredge for Philadelphia in 1803. He founded the Pittsburgh Steam Engine Company in 1811 and produced engines and large castings. Fire destroyed his factory in 1819 and ended his work.

Evans wrote a paper in 1812 describing our nation interconnected with railroads. The transport system he envisioned was powered by steam locomotives. At the time no one else (that I've encountered) had his vision, proven industrial designs or useful products to be thinking along these lines.

Credit the work of Evans as brought back to life by Charles F Kettering in five-minute radio talks regarding science and invention delivered between 1942 and 1945 for General Motors 'Symphony of the Air'. Kettering is remembered for developing the automobile self-starter and running the research labs of GM for thirty-one years.

Evans was remembered with a war ship in WWII, and a chapter of the Society for Industrial Archeology (Philadelphia). I hope we've done him justice. He was a railroad visionary and a self-starter like Kettering who later memorialized him.

Thunder Lake Railroad Views

by R.G. Blocks

The old Thunder Lake Lumber Company Railroad was perhaps the best known of the narrow gauge logging railroads in the Midwest. It began in the spring of 1893. In about 1894 the line was extended from Rhinelander to what we call the town of Sugar Camp. Back then they called the town Robbins and from what I can tell it was on the east shore of Sugar Camp Lake with a small sawmill.

The rail line at that time was owned by the Brown - Robbins Lumber Company. Thus, the name Robbins for the little town was adopted. Mixed train service was offered from Rhinelander to Robbins in that era

It is very easy to follow what was this narrow gauge railroad. Look at an aerial view and you'll spot the railroad as it approaches today's Sugar Camp from the south. Begin on the west side of today's Route 17 south of Jenny Weber Lake. Then, it crosses 17 and follows the east shore of Jenny Weber, crosses Rolling Acres Dr at the Zigzag, and proceeds to the east shore of Lost Lake where it will essentially follow the road north to then cross King Drive. You can follow it almost directly to what is called Railway Lane beginning North of County Road A just east of Sugar Camp Lake.

Note that south of County A and a quarter mile south of where Railway Lane intersects A was a turntable. It is no longer there, but is identical to the one that now sits within the Rhinelander Logging Museum. They may well be one and the same.

Sugar Lane, just west of Railway Lane also on the North of County Road A was probably the mainline for a number of years and leads between the lakes to where Robbins was and Sugar Camp is.

Going back to follow Railway Lane you can clearly see a route leading and paralleling Burnham Lake. The railroad wandered around that area and over towards Thunder Lake.



Two weeks ago, with the permission of the owners. I took two photos of the old railbed as it wandered near Thunder Lake's west shores. You can see, in many aerial photos and Google Earth, various trails made by loggers.

Here, in the first photo we see semi mature growth along the edge of a grassy knoll. The railroad proceeded to cross what was a fairly soft stretch of land to another knoll. Ground is

rolling and quite boggy; hence the railroad sought generally higher ground for its track.

The lumber folks from Robbins, due to rail as their principle means of transport, made nice graceful curves; comparatively gentle grades, and a route for later loggers and road builders to follow. Thus, sharp curves do not a railroad roadbed follow.



Timber in this area has been cut twice since the Robbins and Thunder Lake folks left which I'm assuming was around 1919. It was about that era when Robbins was bought out by the Thunder Lake Lumber Company.

The main line was abandoned from Pine Lake to Robbins and operations were diverted over towards

Three Lakes in about the 1919-20 timeframe. Here we see a rather typical view of what was a narrow gauge roadbed a quarter mile west of Thunder Lake by my estimation.

Railroad Happenings: or Semi-local events...

- April 28 29, 2012 Titletown Train Show, Shopko Hall, Green Bay, WI Info at www.ttsgbllc.com
- May 5, 2012 NMRA Winnebagoland Division Spring Meet, Plymouth, WI Info at http://www.wld-nmra.com/
- May 17-20, 2012- CNW Historical Society Convention- Norfolk, NE Info at: www.cnwhs.org
- June 16-17, 2012- Annual Strawberryfest Model Railroad Show- Waupaca, WI

Waupaca Recreation Center Saturday June 16 10 AM to 5 PM Sunday June 17 10 AM to 3 PM

June 28-July 1, 2012- Milwaukee Road Historical Assoc. Annual Convention Moscow, Idaho

Info at: www.mrha.com

- July 21, 2012- Rail fair- Copeland Park- LaCrosse, WI Info at: www.4000foundation.com
- July 29 August 4, 2012 it's the 77th National Model Railroad Convention, Grand Rapids, MI. The host club is found at www.grmrhs.org a 100% NMRA club. For info on the convention: www.gr2012.org Seventy fantastic layouts within one hour of the 12th best hotel in North America (Amway). Let's all go!
- Sept. 13-16, 2012- Soo Line Historical Society Annual Convention Thief River Falls, MN Info at: www.sooline.org
- Oct 21, 2012 Model RR Show and Swap Meet Circle B Recreation

6261 Hwy 60 – Cedarburg, WI

Info at: www.lammscape.com/cedarcreek

Our Next Generation of Operations

by R.G. Blocks

I've personally enjoyed each of the methods employed by the TR-C&NW for dispatching and running our rail operations. We've gone thru a series of phases each lasting a year or more. Each phase of our operations has involved more detail and paper. I cannot say that all participants have shared enjoyment. Learning by doing is always an adventure. We've thus begun anew. We are into a new phase. This is how we are getting started with JMRI.

Neither or kids, grandkids or railroad knowledgeable adults are crazy about lots of forms to shuffle. I was never pleased about the time it takes to organize an operating affair. This, we hope is a better way.

Sunlight comes after the dark cloud passes. My wife's open-heart surgery caused a four-month detour to our family plans and hobby activity. I'd finished the required hours of experience but not all paperwork for Chief Dispatcher AP and would not have much time to work on the TR-C&NW or AP paperwork during late winter.

We'd be near Milwaukee doctors and quite nicely close to Rolf Plachter (Midwest Lines RR) where I'd operated with Scott Brochhausen, Burnell Breaker (Belle City Division of Lionel Lines), Phil Bayuk (Oz Lines) and Don Strike's (Great Northern). It seemed that seven out of eight layouts that operate regularly in SE WI had converted to JMRI, an Open Source form of computer software. I became hooked.

I'm going to describe what it took to go from zero knowledge of JMRI to operations that should work for you as well. The cost will be in your time and effort as opposed to dollars. In a couple of years we'll know whether I'm giving you a good steer.

Your computer needs a complete Java Suite of current vintage. If not then get one. Then, download *JMRI PanelPro* software. JMRI instructions provide for a complete animation panel or signaling system. There do not seem to be instructions for a middle ground. I stayed simple with the help of Scott and Phil (see above) who are believers and have helped others in SE WI get setup. We will not cover creation of an animated panel or signaling: perhaps some other time. I would like to thank both of these gentlemen for their considerable knowledge and help.

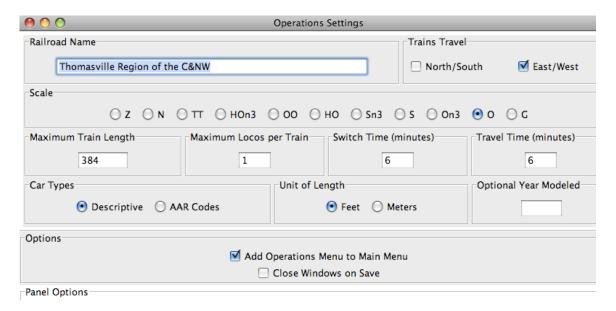
We will not use the Layout Editor in our approach. We're going to create an open loop system. JMRI software will create your trains, pickups, drops and prepare all the operations paperwork. It is not tied to your layout. There is nothing to break. There is nothing to wire. If you actually stop operating before the planned work is complete then simply move the train software to where it is on the layout and the next time you operate: start there. We're out to capture the cream of dispatch without all the bells and whistles.

Make a very simple sketch of your layout from one end to the other. A starting location and a finish location and a few locations in between are all that's needed. If you have more than a couple of handfuls of locations you've become too complex. We ended with six locations. A simple one-line schematic on scratch paper suffices.

We need sidings where cars come from and go to. These are spurs. Avoid including passing tracks as places to put cars. I had some 'do-over's' in this regard. Our layout boiled down to sixteen sidings where we have client businesses. Each client location is shown as one (44 ft) or two cars (88 ft) in length for a typical business on that siding. I made note of what kind of car was appropriate at that location. Some sidings were defined so several cars types could be placed there. In total I came up with 5544 feet of sidings by measure. They held 117 forty ft cars when absolutely full. I was told that I should populate my railroad with about 50% of the siding capacity or no more than say 58 cars.

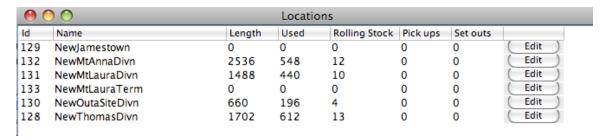
Click on the *pull down* called **Operations** and choose the menu called **Settings**. There, enter your *layout name*, a *direction*, a *gauge*, and a *maximum train length* (forty foot cars are 44 feet with couplers). I chose one loco per train (a starting point) and 6 minutes for a switch. Car types would be descriptive (for visitors benefit) and my unit of measure would be feet (scale feet not real ones). Check the box called *Add Operations to Menu to Main Menu* and *go no further* (below that line starts Panel Options which you can do if desired later).

Below is a copy of our **Settings.** Simple? Sure. Do it now and computer step one is done. No big deal.

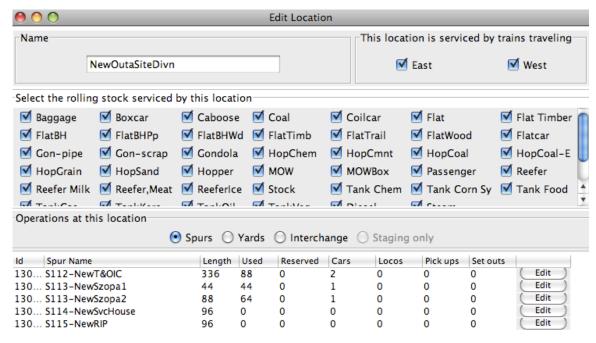


Our layout starts at NewJamestown the west end of the line, then goes to NewThomasDivn, NewOutaSiteDivn, NewMtLauraDivn, NewMtAnnaDivn and finally to NewMtLauraTerm the east end of the line. Six *locations*, not the fifty I'd started with (giving them names like ThomasDivn). Our **Locations** have the superfluous prefix 'New' to avoid duplication when I simplified. Locations need unique names.

Backup your work frequently. It is one of the options. Next time we edit our **Locations** we will change the names to eliminate the prefix 'New'. Simplify.

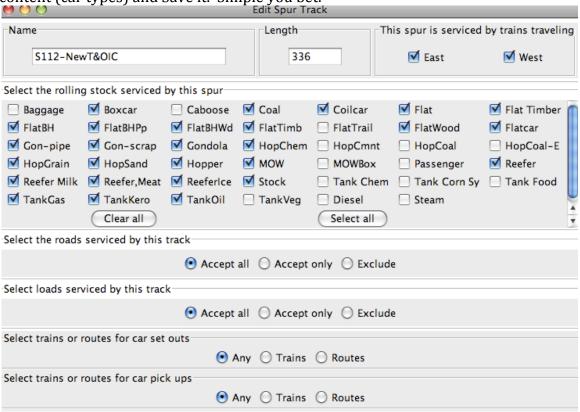


Select applicable cars types from the list. Put cabooses on a spur near where you are making up trains. We recommend you eliminate or disallow (uncheck) cabooses, passenger, baggage and engines from all but one or two locations. It simplifies.

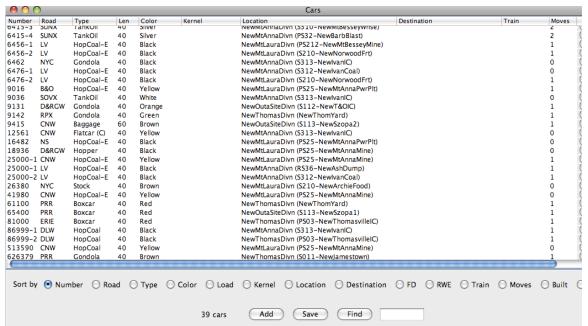


Within NewOutaSiteDivn we have a transfer operation to a sister railroad. So one siding (S112) acts as the T&O Railroad Interchange. I've shown that we allow all types of cars. We have *spurs* for each business or interchange at a location. The

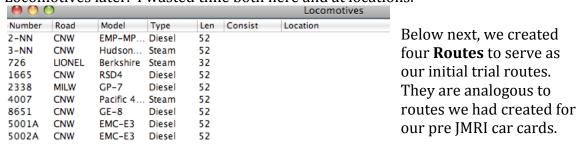
software requires that you Add the *spur* by giving it a unique name then edit the content (car types) and Save it. Simple you bet.



Next we provide some cars. I've currently defined 39 of them as you see on the **Cars** tableau below. To add a car click Add and a tableau comes up. Give that car a unique number, color, and place it where you want to start out with that particular car. It can be a yard, or spur, or stage track. Mine are currently where indicated on the cars tableau. Any number of our cars have moved while others have not. The computer software decided each move.



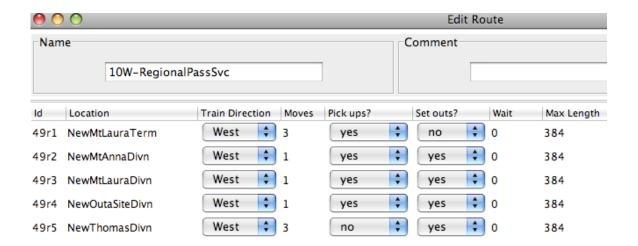
Forget specifying **Locomotives.** Simply do not require engines in your use of this software. By so doing we can spot have engines anywhere to help our road engines at various yards. I did specify mine (as shown next); however, they don't move since no *location* was specified. If you feel compelled (like I did) you can add Locomotives later. I wasted time both here and at locations.



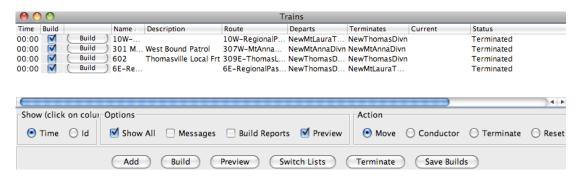
It seemed prudent to start with a few *routes* and see how they worked before adding many routes and potential complexity. I'd already both wasted time and screwed up my location names. We need not waste more time.



Below, enter the location and state the maximum number of cars to pickup or drop off at each point. The program will pick the particular industry or siding. It's all that simple. The system keeps track of the available client locations and types of cars necessary to satisfy his need.



The last screen to be worked on (by you) is called **Trains.** We build a train and can click on *Move* and advance the train to each of the *Locations*. Hence, by simply clicking on Move the train moves along the route as specified and *Built*. At each location JMRI schedules your engineer / conductor to do some work. For that purpose it creates a **Switch List**.



Above is the **Trains** tableau. Each line represents a particular train. I did not attempt to hold my trains to a schedule at this time; hence, in the future I'll add that feature.

The output of a work schedule for train 301, the second train on the above Tableau is shown below as a **Switch List**. The engineer / conductor should check the line when done with the task as specified.

```
Scheduled work for train (301 Mount Anna Turn West) West Bound Patrol
Departs NewMtAnnaDivn at 00:00 expected arrival 00:18, arrives Westbound
[] Set out LV 6476 HopCoal 40' Black E<mpty> to S115-NewRIP

Visit number 2 for train (301 Mount Anna Turn West) expected arrival 01:00, arrives Westbound
[] Pick up LIONEL 2461 Flatcar 40' Gray L<oad> from S112-NewT&OIC
[] Pick up D&RGW 9131 Gondola 40' Orange L<oad> from S112-NewT&OIC

Scheduled work for train (6E-RegionalPassSvc)
Departs NewThomasDivn at 00:00 expected arrival 00:06, arrives Eastbound
[] Set out CNW 3200 Passenger 60' Brown to S114-NewSvcHouse
No car pick ups for this train at this location
```

The same train, 301 run again produces another completely different **Switch List**. Note that the following is an entirely different **Switch list**.

```
Scheduled work for train (301 Mount Anna Turn West) West Bound Patrol
Departs NewMtAnnaDivn Westbound at 00:00
  Pick up SOVX 9036 TankOil 40' White E<mpty> from S313-NewIvanIC
  Pick up LV 6476 HopCoal 40' Black E<mpty> from S312-NewlvanCoal
[] Pick up DLW 86999 HopCoal 40' Black L<oad> from S313-NewIvanIC
[] Pick up LV 25000 HopCoal 40' Black L<oad> from S312-NewIvanCoal
 [] Pick up LV 25000 HopCoal 40' Black L<oad> from RS36-NewAshDump
[] Pick up NYC 6462 Gondola 40' Black E<mpty> from S313-NewIvanIC
Visit number 2 for train (301 Mount Anna Turn West) expected arrival 01:42, terminates NewMtAnnaDivn
[] Set out LIONEL 2461 Flatcar 40' Gray L<oad> to PS32-NewBarbBlast
[] Set out D&RGW 9131 Gondola 40' Orange L<oad> to PS32-NewHerzorMine
[] Set out CNW 513590 HopCoal 40' Yellow E<mpty> to S312-NewlvanCoal
Scheduled work for train (6E-RegionalPassSvc)
Departs NewThomasDivn at 00:00 expected arrival 00:24, arrives Eastbound
[] Set out CNW 3201 Passenger 60' Brown to S311-NewIvanTerminal
No car pick ups for this train at this location
```

The foregoing represents where we are headed. Thanks for your kind understanding. Why do I always see the same hands with questions?

From the Tower

Taking the show on the road would be the best way to describe my activity lately. We helped wire The Choo Choo Store layout and answered questions of members and customers alike during the work-days on the new layout.

Bon French and I were part of the tenth annual Center for Railroad Photography & Art, (www.railphoto-art.org/conference) Conversations about Photography held at Lake Forest College April 13 thru the 15. Bon and I have been part of this event from its start and find it to be a weekend of fellowship and information about photography and prototype railroading.

This year we had global topics with people like Henry Posner III chairman of the Railroad Development Corporation (www.rrdc.com) giving a talk on railroads he and others in the group had owned or operated in at least 6 continents.

After the conference I was off to give one of my talks on beginning all over again An Introduction to DCC at the April meeting WISE Division. I was warmly received and ask back to present the rest of the DCC Sessions in the fall. Operations continue on our railroads and I look forward to being up in the woods after Mother's Day.

I want to thank Roger for his work on the topic of Dispatcher this month and also for his putting up with operations under my direction in the completion of my NMRA AP Chief Dispatcher.

I would like to hear from the members as to what topics we should be covering this year. Also we in the Three Lakes club will be taking modules to the Minocqua clubs train show in September this year and the Fall 2013 meet in Rhinelander. If you want to get on board please let me know so we can get the information out on the size and scales we will run.

Don't forget to check the club web site for the latest updates on member activities.

Paul Wussow President Three Lakes Model railroad Club.

Congratulations Paul: From your Editor

Some guys go through the motions. Others have a goal and drive towards the goal. Paul A Wussow fits the latter category. I'd personally like to be that focused. Close but no bananna; Paul, you are to be congratulated for earning your Chief Dispatcher AP and your wall is getting there... nicely. Author, Volunteer, Electrical and working on Civil.



Paul also won first and second in WISE Divn for model layout photos and a first in prototype. All done in their April 2012 contest. Paul did this while giving a clinic.

Roger