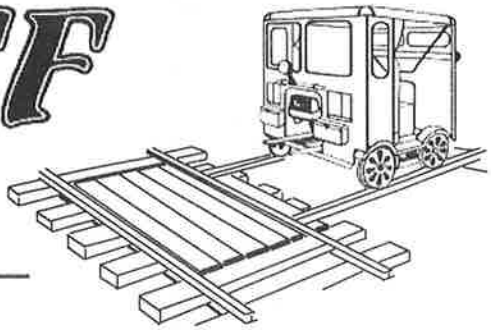
THE SETOFF



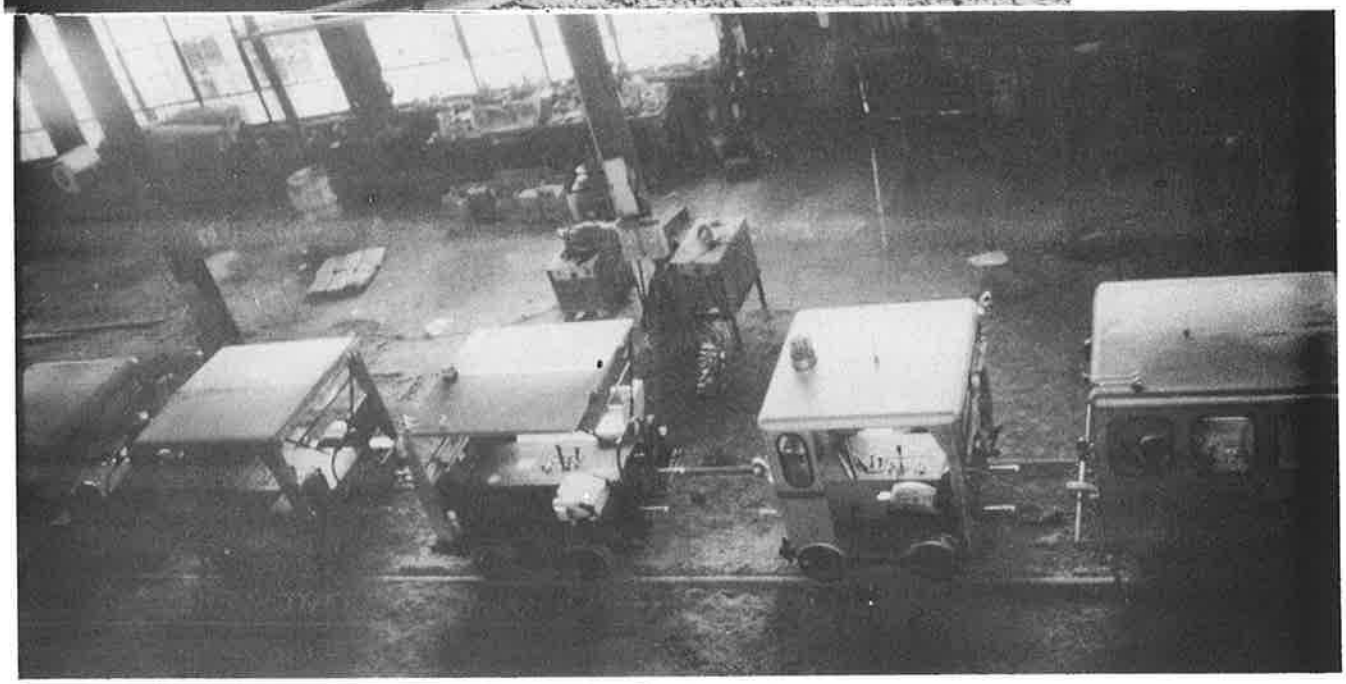
THE OFFICIAL PUBLICATION OF THE NORTH AMERICAN RAILCAR OPERATORS ASSOCIATION (NARCOA)

July/August 1999 Volume 13 - No. 3

Inside:

Gary Greenwood's Woodings car suffered a broken transmission and had to be loaded on a flatcar for transport back to Sault Ste. Marie on this year's Algoma Central excursion in July

Stan Conyer Photo



Motor Cars in the early morning sun while parked inside the engine house at Stearns, KY Big South Fork Railroad

Stan Conyer Photo

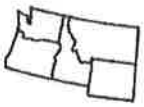
ELECTION RESULTS . . .

Carl Anderson announces the following members have been elected to office:

Area 2 Joel Williams

Area 4 Rick Tufts

Area 8 Ken Annett (Canada)



Area 6 Mike Paul

Area 10 Tom Norman

Cover Photo . . .

Ken Vogle photo of Don Breitbarth's car entering Half Moon tunnel on the climb to Grangeville, Idaho, on the Camas Prairie Railnet run, June of this year.

Railbus at Stearns, Ky August, 1997

Mary Richardson Photo

Please submit materials for the October issue of *THE SETOFF* by September 30 as follows:

Classified Ads
Excursion
Announcements ..... Ernie Jeschke

All other Materials
and photos ..... Jan Taylor

Consider submitting a photo for the 2000 calandar. Check p.7 for instructions

Thank you,
Jan

Guidelines for Submitting Materials for Publication in *THE SETOFF*

1. Our editorial policy is to publish in ***THE SETOFF*** all materials received, although they may be subject to editing for space considerations.
2. Photos and materials submitted for publication in ***THE SETOFF*** cannot be returned because they are archived.
3. Submit either black and white or sharp, color prints for publication. Please label the back of the picture as to its subject matter and photographer. Do not send slides.
4. We cannot publish copyrighted materials such as photos, posters, cartoons or articles without written permission from the author or publisher. Sender must provide written permission at the time of submission.
5. Excursion stories, technical articles, and lengthy submissions should be typed or printed. Ads, meet notices and short articles may be handwritten. Please include your phone number with your submission--**even with E-mail**--in case we need to clarify something we don't understand.
6. Send materials to ***THE SETOFF*** editor by the 15th of January, March, May, July, September or November for publication the following month's edition.

THE SETOFF

Volume 13 Number 3

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THE SETOFF is the official publication of the North American Railcar Operators Association (NARCOA) and is published bimonthly to promote safe operation of railroad motorcars and to encourage fellowship and exchange of information among motorcar enthusiasts. Membership in NARCOA, which includes a subscription to ***THE SETOFF***, is $20.00 per year and is available from Membership Secretary Joel Williams. Please address all membership inquires to Joel at the above address.

Visit NARCOA's Website at:
http://www.NARCOA.org

MOTORCAR TRAILERS

Compiled by Dick Ray

This article is unusual in that it is a compilation of opinions and experiences by a number of people, plus information from other sources. It all started with an innocent question by a new member looking for a motorcar and a suitable trailer. He asked what type he should get, and the opinions poured in.

Trailers come in a variety of configurations: open or enclosed, single axle or dual axle, with brakes or without, decked or not decked, with electric winches or manual. Open trailers are by far the most common, but some operators towing long distances prefer the enclosed ones to keep their restored motorcar clean and to provide "indoor" storage. These trailers also provide a secure storage space for gas cans and spare parts. Small, enclosed trailers such as the ones sold at some Home Depot stores, however, typically do not have the door opening height required. An MT19 requires at least 67 inches plus clearance for lights and horns. An MT14 requires 68 inches plus clearance for any roof-mounted equipment. A Woodings requires 70 inches, and an S2 need as much as 74 inches of height. Since all of these measurements are from the railhead, you'll need to add several more inches for the supports on which your car sits.

A very few horse trailers are in motorcar service. They have the rounded front for easier towing, a door in the right front, space up front for your extra stuff, lots of height, and good load capacity. Unfortunately the older ones tend to be too narrow, and newer ones are probably more expensive than the common "cargo" trailers.

Cargo trailers are available with several options, including a pointed front and an extended tongue. The extended tongue allows easier maneuvering and tighter turning in the restricted spaces in which we often find ourselves. The extended tongue also lessens the tongue weight and provides a place to mount your own wind-splitter. Rear door options include a fold-down ramp door or side-hinged rear doors. On the larger trailers the side door on the right side is standard while it is an option on smaller ones. As mentioned before, probably 90% of motorcar trailers are open. They divide into tilt-bed versus non-tilt. Tilt-bed trailers--of which Les King sells a very nice version--require that you back your trailer up exactly in line to the motorcar. You have to use a winch which places you at the front of the trailer and requires that someone else push down on the rear to tilt it. Non-tilt trailers require ramps which are extra parts that must be stowed somewhere securely, but allow some adjustment in alignment. A winch, either hand or electric, is usually required to get the car up the ramps. This system also allows you to do it alone, which in the "old days" was a high priority. It remains a priority today; since everyone is in a big rush to load up and leave, there may be no one to help you. A few trailers are being built using the torsion bar suspension units available from Northern Tool & Equipment. These allow a lower trailer with adequate static ground clearance, since there are no springs or U-bolts sticking down. With the square tubing for the structure, a pair of short ramps will fit inside the tubing, making stowage easy. Don't forget to add some kind of interior stop, so that the ramps do not disappear inside the tubing. With the ramps inside the tubing you need some exterior conduit to carry the wiring.

A deck on the trailer gives you lots of options for hauling garden tractors or sofas. A trailer with no deck allows you to work under the car while it is on the trailer. A satisfactory compromise is to have a plywood deck, held on by only a few bolts and in several pieces, so that you can have a deck or not as the situation demands.

Most winches I see are manual, but there are more and more electric ones appearing as people go upscale. Prices start at $185. Certainly an enclosed trailer needs an electric winch, because there is little space to stand inside and crank a hand winch. My personal opinion is that a hand winch is enough for a M or MT car on a trailer that is reasonably low. Electric winches present a new set of problems related to getting power to the winch. Good sized cables are needed on a vehicle not already factory equipped for towing, since winch motors can exceed 1 HP. That requires around 60 amps if the car is heavy and the ramps are steep. The low-end Ω HP winch needs only 30 amps. Since I can winch my own car up the ramps and onto the trailer in less than 15 seconds by hand, I see no need for the additional complication of the electric winch.

Along with the winch on the trailer and the power source on the tow vehicle, a good connector is needed. This brings us to the general subject of connectors. The standard RV system has a 7-pin connector with a standard connection system. Most other connectors have a standard for their number of pins. The RV one has a heavy duty pair which can be used for the winch. If everyone used the standard connections they could have someone else pull their trailer in case of trouble; unfortunately few use the standards. I carry extra pigtails for my car and trailer, as well as an extra 2-inch ball. Incidentally, the 2-inch ball should be the minimum standard, even for light trailers, so that other people can tow your trailer. I also carry an old 1-7/8 inch ball based on the No.13 Murphy's Law which says the only things you need are those you don't have.

Here is a good place to mention the location of the ball. Most pickups and SUVs have a rear bumper with an indent and a hole for a trailer ball. We see a lot of receiver-type hitches, however, which are better in my

opinion. You can get the amount of drop suitable for your low trailer and your tall 4WD truck. Better still you get a higher load rating. To me the greatest benefit is the slight extension of the ball behind the vehicle; the longer the trailer tongue, the easier it is to maneuver your trailer into that 90-degree angle which is often necessary in crowded loading areas.

Now we get to the number of axles. For heavy cars a dual axle is appropriate, but a single axle is OK for most other cars. The dual axle trailer gets you into a more elaborate set of requirements. To start with, brakes are required on dual axle trailers in BC and may be required in some states here as well. Some states require brakes, at least for registration and inspection. In addition the brakes must be activated in case the trailer breaks loose. This requires that the trailer carry a battery. Since many motorcars have bad electrical systems and bad batteries, I have no faith that the trailer battery will be good next spring.

Tires are important. Use real trailer tires which are rated for high pressure and have high load capacity. The minimum should be a 5.70-8 Load Range C tire which is good for 910 pounds at 75 psi or 725 pounds at 60 psi. These will just do for a M9 or 19 on a light trailer. B load range tires will run for a while at short distances but will not do for longer tows. Some use cheap passenger car tires, but these do not have the load capacity. A loaded MT14 on a strong trailer can total 3000 pounds, requiring tires rated in excess of 1500 pounds each. The F78x14 or 15 is similar to the 205/75x14 or 15, and all of them have a C load rating of 1710 pounds each, according to Northern Tool & Equipment Co. Two of these should get your heavy motorcar down the road for a long time. Of course you should not come too close to that rating with your load. With a double axle trailer, the load may not be evenly distributed over the four tires, so you need more margin. Finally remember that you hit potholes and bumps one axle at a time, so the shock goes into only one pair at a time.

Lighting requirements come from the Peterson Mfg. Co. web-site. Of course red stop and tail lights are required. Turn signals may either red or yellow. The license plate light is white. Two red lights or reflectors are to face the rear, and two red lights or reflectors are to face the sides at the rear. These are intended to show the trailer length and width. In addition two yellow lights or reflectors are required at the front to help define the presence and length of the trailer. Trailers longer than 30 feet and trailers wider than 80 inches which have load ratings greater than 5 tons have additional requirements not addressed here. Some low motorcar trailers have the rear lights elevated somewhat. This serves two purposes: one is to provide better visibility on rainy nights; the other is that the "light tower" allows the driver to see the empty trailer better when backing up. A small light on a wand is available from boating supply stores, because boat trailers have the same problem.

The electrical current drain of the stop, tail, and clearance lights is probably within the wiring capacity of most tow vehicles. A towing package option on a tow vehicle, however, adds additional wiring and capacity so the lights are not dim. The additional wiring package also provides heavy conductors for a winch and wiring for back-up lights. My vehicle has none of that additional wiring, so I have added two, 55-watt, halogen, back-up lights powered from an existing lighted switch on the dashboard which turns on an additional rear red light, common in Europe for fog protection. The wiring has survived for years, and I can leave the back-up lights on. Other people add a small flood light at the front of their trailers to assist loading at night.

Don't leave home without a spare tire. I see many trailers without one. One contributor suggested that there were two, different, 5 hole bolt patterns. The most common (perhaps 60%) is called the Ford-Plymouth pattern, and the other is called the Chevrolet pattern. The difference is in the diameter of the circle which connects the centers of the five bolts. When you buy a trailer, you get the pattern the manufacturer chooses. The spare is useless without a jack of some kind. I carry a slightly modified, scissors jack from a foreign car. It has an extended handle that goes around and around instead of a half turn at a time. I also carry a complete bearing and seal set as a spare. I know it fits, because I replaced one side with a new assembly, even though there was nothing wrong with the old one. The best spare part is one you know fits. Why use an old one and have a new one as a spare?

Maintenance should be obvious on a simple trailer. Grease the hubs, check the bolts holding the hitch ball socket to the tongue, and check or grease the spring shackles. There is one more item to check, and that is for possible cracking at the point where the tongue area connects to the deck area. One of our more illustrious members raved in print about the great trailer he bought and recommended it to others some years ago. Unfortunately it broke at that "hinge" area, and he had to eat one of the crows that he keeps in the freezer. Before this happens to you, it would be wise to check carefully under the trailer periodically for any cracks, whether the trailer is commercial or home-built.

Finally, in order to continue to own your trailer, don't forget to lock the trailer coupler assembly and the extension to the receiver.

Contributors to this article include:

R. Boorman	G. Brandenburg	S. Conyer
R. Craven	A. Elliott	K. Harrison
J. Ledden	C. W. Lee	D. Neale
M. Paul	A. Taylor	R. Tufts
K. Van Atta	M. Weber	J. Winkworth
R. Zammit	(And maybe some I missed)	

Motorcar Teck-Talk with Dick & Ron

When the Bolt Breaks Off . . .

This internet exchange was initiated by an operator who decided to replace a rusty bolt one day.

"Dummy (me) just was working on my M9-F out in the garage, drained the water, replaced the coil and plug, and noticed that the bolt (one of 4) that is on the bottom of the spark plug area of the engine (RO B #103579) housing was rusted, and so I thought I'd replace the 4 nuts with stainless ones—took the impact wrench to the one in the 9 o'clock position and removed it—only the bolt/stud broke (!) with the nut still attached, leaving the lock washer that was underneath it and the broken stud in place.

Should I leave well enough alone and go no further? Would it be safe to start and run it now to warm it up and then take it on a 55–mile run this week? If it does not leak, should I never touch it again, or should I stop everything and replace the bolt with (?) something (source ?) and the other three at the same time, and if so how do I remove the others? Do I have to remove the engine from the car to do it? Should I just take it to my friendly machinist?"

Dick Ray responded with little optimism:

The good news was that we know exactly what the problem is. The bad news is that it is very expensive to fix.

I have never removed a broken bolt successfully. Always optimistic though, I keep looking for the elusive reverse rotation drill bit as the magic cure. I get Easy–Out kits for Christmas and I have the unused portions of all of them left. Recall that the literal translation of Easy–Out is: "Extremely hard device which is inserted into the proper size hole and rotated until it snaps off flush with the surface in order to prevent anyone from attempting to ever put a bolt into that hole again."

I think it is time to take it to a professional. Even then if he shakes his head a little it is time to start backing out of there with the excuse that you have to pick up the kids from soccer practice. On the other hand if he says, "No problem man," it may be time to: a) sell some of the Microsoft stock to finance it if he knows what he is doing, or b) look for another engine if he does not know what he is doing.

If you must do it yourself there are some ways to improve your odds. Before starting you can help the nut release by soaking it in Kroil or PB Blaster. Liquid Wrench used to be good, but they changed the formula. Then heat and tap on the nut with a hammer to break the rust loose. Repeated treatments over several days will help. Putting a box wrench on the nut, taking up the slack and then tapping the wrench can help break the nut loose. When it comes loose work it back and forth with penetrating oil or other oil (Not WD-40).

The only good news here is that you have learned a lesson the hard way. Some never learn, thinking that enthusiasm in the form of an air wrench, is the best approach. Repeat after me, "IF IT AIN'T BROKE DON'T FIX IT." (This does not apply to maintenance procedures.)

Ron Zammit has had the same problem with a head stud and solved it with the following time–intensive and probably expensive procedure:

There are plenty of frustrated dummies, and I'm in there with you. My original car, a M-19, had–still has–a knock or tap. I now know it is piston slap from a worn engine, but, long ago I thought it was rod knock. I adjusted the big end via carb opening, then decided to pull the piston. Bad deal! One of the head studs broke off level with the block.

I had to remove the engine via the top of the car and haul it around town. I finally found a person who would look at it. He removed the stud with an electric discharge machine. The new stud fit loose, so I had to J–B weld it in. I used Never Seize on the new one to put the nut on.

Guy Lynn offered the following advice on a similar problem. Notice that he recommends pulling the engine:

I have found that a nutcracker (as in metal nut) helps avoid many of the broken stud problems associated with old engines. Also heating the nut will cause it to expand and may break the rust seal to the stud. After you get the nut off carefully inspect the base of the stud before trying to remove the stud.

I once got the broken studs out of an RO–C

hopper around the condenser and on the bottom petcock plate of the same engine. I managed to snap off all but one of the studs on the condenser. With the condenser off I noticed that there was about 1/2 inch of stud showing inside the hopper. I simply heated the broken end of the stud (and surrounding aluminum) and cooled the whole mess with WD-40. [Don't do both at the same time unless you are trying to set everything on fire and collect the insurance money if you live. RCR] I was able to reach the backside of the studs with a pair of channel locks and twisted the studs out through the inside of the tank. I chased the threads out with a tap and installed new studs.

In the case of the bottom petcock plate, I did not follow the proper practice and did it with the engine in place. Next time I would pull the engine and do it on the bench. I used a flat file on the remains of the one stud that snapped off and flattened the stud flush with the surrounding metal. I carefully center–punched the stud, then drilled out the stud starting with a 1/16–inch drill and worked my way up through the index. (Don't skip any bits to speed up the process). Keep the drill bit parallel in all aspects to the stud. You also must know what the ideal tap drill is for the threads on the stud. Do not exceed the tap drill diameter. As you drill with each larger bit, the stud will heat up and possibly loosen. In some cases the stud will screw itself into the engine without any additional work, or if you have a set of left–handed drill bits, it will screw itself out of the engine.

If the remains of the stud are still there when you reach the tap drill, then you already have the hole drilled to the proper size. You can try to collapse the remains of the stud with a sharp center punch or a small chisel. If that fails, go ahead and try to tap the hole out. If that works, simply install a new stud. If the stud is loose, you can mount it with J–B Weld. In extreme cases you may have to have a HeliCoil installed. In my case I installed the new stud with Teflon tape and have had no further problems with it.

You can get studs from:

Suburban Industries, Inc.
1090 E. Green St.
Franklin Park IL 60131
Ph. (630) 766-3773 FAX 1364

Use stainless for greater strength and less corrosion if you think the car may outlive you. You want to specify a Class 5 or 5A fit into the block which is an interference fit, so it will stay in the block. The other end—which might have to be fine threaded—wants to be a 3A fit. Use blue Locktite on the block threads unless you get a really good fit. Do not use red Locktite unless you have a poor fit and loose threads. If you have to buy a whole box of studs, simply package the excess up and bring it to meets. Many owners will buy a set and put them in stock for the future. [Or just send them to me for Y2K compliance inspection and safekeeping! RCR] A proper torque for head studs is around 30 foot–pounds to start if you have a good gasket. If leaks occur, carefully go up to 50 foot–pounds maximum.

OK now where does one get the special tools? Left handed drill bit sets are listed in the Northern Tool and Equipment catalog for $25 to $55. Some say that individual bits are available at any good tool store. Another item found at good tool stores is diamond tipped bits for a Dremel tool. These are useful for removing the broken Easy–Out or grinding the end of the broken stud flat, and cost about $10 each. Nut splitters are a common item at J. C. Whitney at about $10.

2000 October

Sunday	Monday	Tuesday
1	2	3

2000 NARCOA Calendar

It's that time of year again—we are collecting photos for the 2000 NARCOA Calendar. Please send **black and white** or **sharp, color photos** of a motor car or cars at interesting scenic locations.

Remember that motorcars operate at all times of the year in all kinds of weather. Please include a description of the scene and the name of the photographer.

Deadline for submitting photos is November 15, 1999. If you send more than three pictures please be sure you have enough postage on the envelope. Last year some arrived postage due.

Unused photos will be sent to ***THE SETOFF*** editor to be used in future issues of ***THE SETOFF.*** Send photos to:

Bob Schuknecht
516 1/2 N. Charles St.
Saginaw MI 48602-4037

Teck-Talk, cont.

The Fairmont 6 volt Generator System

Those folks who wish to keep their older motorcars original in looks and function, soon have to deal with the generator system on the Fairmont engined cars. The 6–volt generator supplied by Fairmont on the two–cycle cars is rated at about 15 amps. It is a small capacity unit, not designed for heavy electrical loads. Typical loads are:

40 watt headlight	6 amps
Tail light	2 amps
Wiper	3 amps
Ignition	less than 1 amp
Stoplight	4 amps

There are two different generators supplied by Fairmont. Although they look alike they have different part numbers because they turn in different directions, and the third brush has a different location. The single cylinder cars turn the generator in a clockwise direction (viewed from the pulley end), but the Fairmont twin–cylinder and belt S–2 cars with transmission, rotate it counterclockwise viewed from the pulley end.

The output is increased by moving the third brush in the direction of rotation. The output current rises with speed up to a peak and then falls slowly to a lower value at higher speed.

Sometimes a generator needs to be repolarized. This reestablishes the magnetic field in the case and the armature that gets the generator started. It is done by momentarily connecting the battery to the field terminal. Only a quick touch with a clip lead is necessary.

Generators need a few drops of oil in the cups to lube the bearings from time to time. Too much oil in the brush end can soak the brushes and lead to poor operation. There is no need to run the belt tight because this only loads the bearings. After all the belt is only transmitting about 1/6 HP.

Due to the low electrical load on a generator–equipped car that does not have a starter, there is no need for a huge battery, except as ballast. The sealed lead–acid (VRLA) batteries from Yuasa and others at electronic supply stores are entirely adequate at 15–20 amp–hours rating. They are smaller than wet batteries, never leak acid, withstand vibration, and cost no more than a conventional wet battery. They should last as long as your car. Avoid cheap motorcycle batteries that will leak and destroy your ignition box.

Generator Tune Up for Motorcars with Fairmont Engines

Reprinted from an article by Ron Zammit

A lot of Fairmont motorcars with the two cycle engines have an Autolite 6 volt generator and regulator TC–4301C for electrical power. If you are like me and want your car original, you keep these units. However, they usually don't work all that well, and have been a source of mystery. Each one seems different, and their operation is marginal at best. This article addresses how to get the maximum out of these components without damage.

In proper operation, the generator should trickle charge your fully charged battery at about 2–3 amps. When you load it with the lights, you should see the meter in the motorcar kick over to discharge for less than a second then come back up to a 2 or so amps charging rate. Not all of my generators have worked this way when I first purchased the motorcar. It has been difficult to get the things to work consistently in charging and keeping the system supplied with enough current to run the lights and wipers. (These generators will not handle a current load any larger than that required by the lights and wipers.) Additionally, the system should have the battery positive pole at ground; half of mine have been the other way when I first got the motorcar, so I've since reversed them, since improper polarity will burn the regulator points very quickly.

I'm assuming the generator is working with good armature, field, brushes, bearings, etc. Almost any generator shop can check these parts. Most of the problems are in the regulator. This little box has two relays—the cutout and the step (regulator.) It is their operation which is so mysterious to most folks, and to most of the repair shops I took the units to get them adjusted (they didn't know how). So here is how I finally got mine to work.

To start, you need a DC power supply, variable up to 9 volts, and with a current capability of 1 amp or so. Remove the regulator from the generator body, marking the "A" (armature) and "F" (field) wires, as these won't be mixed upon reinstallation. Open the regulator box carefully, taking care not touch any parts. The cutout is the relay with large diameter wire in its winding.

First check to make sure the contacts are not pitted or dirty. Remove pits with a point file, and dress with emery cloth. For the adventuresome, you can

carefully remove the top contact blade from the relay and inspect both sets of points. The points are held in the upper positions with springs. Make sure the springs' bodies are not touching the frames of the relays.

Now let's make the first adjustments, on the gaps. There are two on each relay. (All data is from a Prestolite service manual, dated 8/22/67.) First, the armature air gap (points open) on the cutout is to be 0.010" to 0.030," measured from the relay coil pole piece to the contact blade. Adjust by bending the blade stop. Next, the point gap (when the points are open) should be 0.015" to 0.045," and this is adjusted by bending the stationary point holder. For the step relay, the armature air gap should be 0.044" to 0.046" (points closed), adjusted by raising or lowering the upper point (and stationary point) holder. The point gap should be at least 0.005," adjusted by turning the brass cam, or bending an adjustable stop on units without the cam.

The next adjustments are with power applied. Connect your power supply positive to the body of the regulator and the negative to the "A" contact. Run the voltage up above 6.5 volts; the cutout should close between 6.5 and 7.25 volts. Adjust this action by bending the spring hooks, one or both. Note: this relay will not open again unless you lower the voltage quite a bit. On the generator, it will kick out properly, because a reverse current runs through that larger wire coil when the generator's output falls below the battery's voltage.

The step relay is the most finicky. It's operation is temperature dependent. Here are some open and closed voltages (open—coil is active): 60°—8.17, 6.41v; 70°—8.10, 6.35v; 80°—8.03, 6.28v; 90°—7.95, 6.21v. All voltages have a tolerance of plus or minus 0.15v. Adjust for the upper value by bending the spring mounts, the lower value by the brass cam (or adjustable stop.) Now is a good time to check the field resistor value. With the step relay energized, points open, you should measure between 1.85 and 2.10 ohms between the "F" terminal and ground. With the step relay points closed (not energized), you should read zero ohms. This resistor is placed in series with the field winding when the generator has high rpm's with charged battery and no load, so that the output current is limited. Without proper operation and values, you can burn out the field winding. (Most railroads put a short piece of rod in the fuse holder —like putting a penny in the fuse box at home. Use a 6 amp fuse.)

Next, if you need to polarize the generator, install the regulator with the lid off. Be careful not to touch the relay springs and their holders, or your adjustments may be ruined. With the battery connected positive terminal to ground, touch a wire connected to the negative terminal to the cutoff relay's body for a few seconds. If you have reversed the electrical polarity, don't forget to reverse the connections to the motorcar's ammeter so it will read correctly. Now install the regulator lid and do the final test.

Start the engine and warm up. Run up to normal running rpm's, and the generator should be charging. With a charged battery, 2–3 amps should be indicated. (If your battery needs charging, you'll see higher currents until it is fully charged.) Turn on the lights, and the ammeter should kick into discharge, then back up to 2–3 amps. If the "no light" current is more or less than the 2–3 amp reading, you need to adjust the generator output.

Stop the engine and remove the brush cover plate on the generator. With the help of a mirror you can see the three brushes. Usually, the stationary brushes (two of them) are in the six o'clock and 12 o'clock positions. The "third brush" is movable and in the 3 o'clock position, toward the front of the motorcar. Carefully move this brush in the direction of rotation for more current, or against the direction of rotation for less current. DO NOT TRY to move a fixed brush. The holders are old, fragile, easily broken, and no longer available. I learned the hard way! Restart the engine and see if your brush adjustment was accurate. It may take several tries to get it correct, and only adjust with the engine stopped. When finished, stop the engine and replace the brush cover.

I hope this helps you get your generators tuned up. It takes a lot of patience to adjust those relays, but once done, you'll be able to do it faster the next go round. And with all the vibration these units undergo, they'll need work again, you can count on it.

From Yesteryear . . .

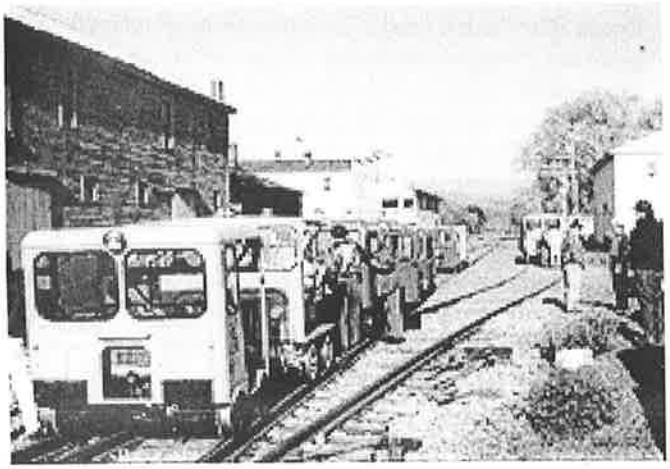
Jimmy and Nellie Deeney of the Spire Rock section house, started down the hill [Homestake Pass towards Whitehall, Montana] on a handcar Saturday night. When in the vicinity of Pipestone Springs, and while coming at a speed rate of about 20 miles an hour, a cow was met coming head on, with no lights or signals, and unfortunately Jimmy had left his cow catcher at home when they had pulled out from the Rock. Jimmy tooted his whistle and supplied the air he had lots of air for both as he and his sister were strictly in it speedily—but without avail, and the first thing he and Miss Deeney knew they were pulling themselves together at the bottom of a 20–foot, rock-filled embankment, one on each side. Fortunately, both escaped with nothing more serious than sprains and bruises. Jimmy constituted himself a wrecking crew, got the car on the track again and completed their journey without further mishaps. The cow's version of the story has yet to be heard.

Jefferson Valley Zephyr **January 18, 1895**

South Branch Valley Railroad

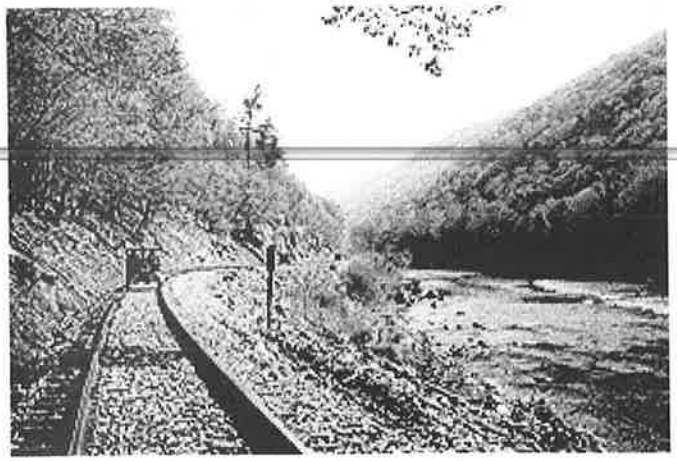
By Eileen Shrey

On Saturday, May 1, 1999, my husband Gary and I set our motor car on the South Branch Valley Railroad at Petersburg, West Virginia, for an excursion north to the CSX junction at Green Spring, a total distance of 104 miles round trip. We did not know at the time that this would be one of the most beautiful and rides we would take in our three years of motor car riding.



Our ride started out through a pasture field where there were no fences between the railroad tracks and the cattle grazing in the field. There were many young calves in the field that, I'm sure, never saw a motor car before. Their mothers probably hadn't ever seen one either. They were immediately surprised and went running for their mothers who were sometimes on the other side of the tracks. The calves ran right in front of us bringing the motor cars to a screeching halt . I hope the mothers scolded them when they were reunited.

Farther on we passed a marshy area where there were geese and their goslings swimming in a row which is typical of baby ducks and geese. I am fascinated by their order.



As we traveled north along the South Branch River, we saw the most beautiful scenery of the trip. There were reflections in the water, dogwood and red bud trees in bloom and some of the greenest grass I ever saw. I wish I could paint a picture here for all to see. It was beautiful.

On the return trip, we saw several bald eagles as we passed through the Trough, a narrow valley with only the river and the railroad in the bottom. It has steep sides, and many eagles have chosen this place to build their nests. The leaves were not quite out in full bloom, so we could still see the nests in the trees quite well. One eagle was on its nest, and we could see its white head sticking up. Another eagle was soaring above. It went higher and higher each time it passed. There were other birds riding the wind waves too, but we could tell which was the eagle because of his size and his white head. It was a spectacular show.

The weather was superb. I mean it. It was a day without a cloud in the sky, warming up to a temperature that would suit anyone—not too hot, not too cold, just right.

Have I painted the picture I wanted here? Imagine a day with perfect weather, scenery unsurpassed and just the right touch of animals to watch. What more could you ask for?

Oh, I almost forgot to mention the barns. The South Branch Valley has some really interesting old barns. They dot the fields along the railroad. The barns all have an overhang at each end of the peak of the roof. I have not noticed this type of roof extension on barns anywhere else I have been. One little barn, in particular, I have sort of taken to calling (cont. on p. 11)

Holiday Fun On the BC Railroad

By Dave Stroebe

Canada is a popular place to hold meets. After all, it has outstanding scenery with crystal clear lakes and streams, gorgeous rock cuts and wild life including bears! I've always wanted to ride the BC Railroad, and I figured sooner or later I would have the chance.

My chance came this past 4th of July when I received an E-mail from Eric Schwandt telling me of a pre–NARCOA run on this branch of the BC Railroad. I did some hasty calculating and informed Eric that I would be going. On July 2nd I headed for the BC Railroad and after a four–hour drive, arrived at the Port Huron border crossing with customs papers in hand. After clearing Canadian Customs, I headed to Owen Sound where Wayne King had made reservations at the Owen Sound Motel.

Saturday we were to meet at a gas station 5 miles away. Arriving there, I soon noticed a pickup, motorhome, and a car, all with motorcars in tow. They motioned me to follow them. The leader of the convoy proceeded to utilize one of his infamous "shortcuts." I gave my power steering a good workout as we were led on a circuitous route through the Canadian wilderness! After much twisting and turning, we finally arrived in Collingwood, our set–on point and terminus of the BC Railroad. Collingwood is a port city on Owen Sound which until around 1980 had a large shipyard where ships such as the Algoma Central's *Algonaut* were built. At one time, almost everybody in town worked at the shipyard. It was one of the only places in North America where ships were launched broadside!

Whenever a ship was ready to be launched, the whole town would descend to the ship yard for the launching! Every employee, from management to labor, would don a hard hat and descend under the massive steel hull with sledge hammers to drive out wooden wedges holding the ship in position. After a count down, several men with sharp axes would cut the massive ropes, and the railroad's future competition would slide sideways into the water, creating a massive tidal wave that washed over the dock, all of this to the wail of marine horn and whistles. Today the shipyard is gone; only the grain elevator and the slip itself remain as a mute testimony to what was once the economic engine of Collingwood!

We proceeded past the Canadian Mist whiskey distillery to the set–on site amidst the smell of roasting grain and the rather sweet, pungent, chemical smell of fresh whiskey being processed. We set on at the crossing of a narrow street which became busy just as somebody was about to set on his car! After a short safety talk where releases were turned in to meet coordinator Ted Stevens, we started our engines and headed for Barry, about 28 miles away. Halfway there we stopped as Wayne King's newly acquired M19 had quit once again. This time it refused to start. We drained out the gas and refilled with fresh gas at 20 to one ratio. When the car still wouldn't start, Fairmont two–cycle specialist Eric Schwandt proceeded to work on the carburator. Gas wouldn't flow to the carb; taking the gas cap off solved that problem, but still the car wouldn't start. Upon cranking it over, we heard a strange hissing sound which we diagnosed as a blown crankcase seal. Wayne was towed the rest of the way by Gary Greenwood's Woodings.

We arrived at Barry in the middle of the afternoon. After checking out the apparent flaws in the Canadian Pacific diamond and examining a Canadian National MT14L sitting on the ground, we backed our cars and turned them at the next crossing. We stopped for a bite to eat at the local restaurant, answered questions from some of the locals, then headed back to Collingwood. The rain which had been forecast held up until we were about to leave, but soon we were heading into a downpour, complete with wind gusts and lightning. I was getting soaked, so stopped to put up a side curtain, only to have the rain stop once I was underway! I threw open my side curtain on the fly and enjoyed the relief from the high humidity which had plagued us all day.

The five motorcars arrived safely back at Collingwood where we loaded our cars and headed for the depot/museum. There we viewed a video on ship building, after which we were invited to Ted Steven's house for a dinner of steak, salad, rolls and beverages, ending up with delicious rhubarb pie topped with vanilla ice–cream. Ted Stevens and his gracious wife Nancy were excellent hosts and made a relaxing and enjoyable ending to a good day on the BC Railroad. That is the Barry/Collingwood Railroad in Ontario, Canada.

(cont. from p.10) "my barn." The barn is usually vacant and stands alone in the middle of one of the pasture fields we rode through. This year I noticed several calves were calling my barn home. I took several pictures of barns along the route to add to my collection.

I should not end until I have commended Wray Dudley and Sue Cease for organizing one of the best rail car rides I have ever been on. Thank you both. We hope to get back there in August for another run.

Camas Prairie Railnet Journal

By Wayne Parsons

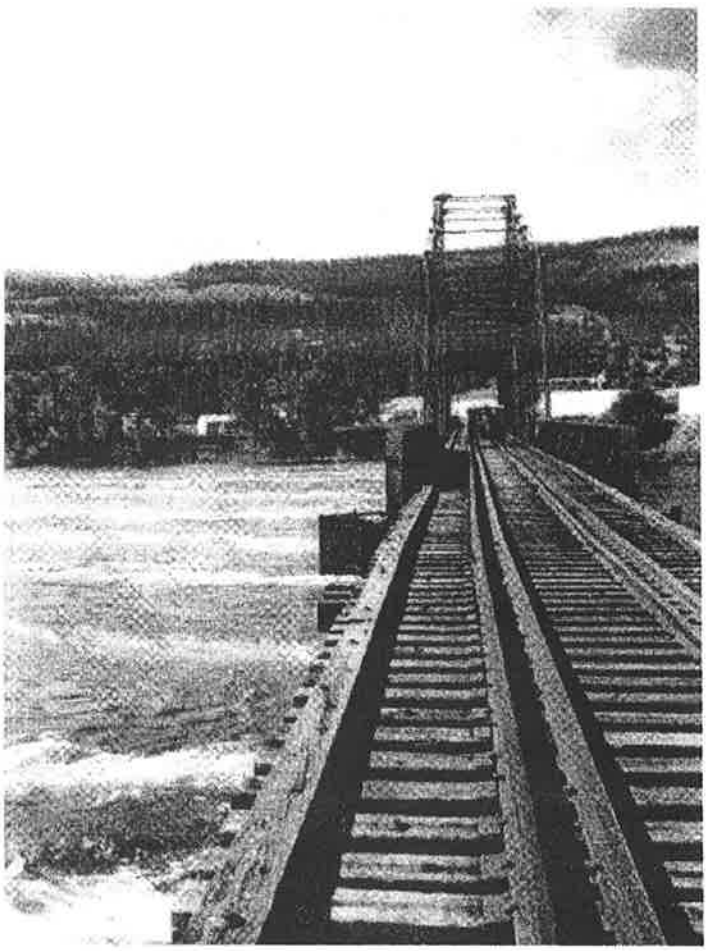
The Camas Prairie Railroad, located in north central Idaho at Lewiston, hosted its first ever motorcar event May 26–29, 1999. This was the second leg of Motorcar Operators West's Pacific Northwest Tour 1999. MOW meet coordinator Chris Baldo was able to get permission for the event following last year's change in ownership from the UP to Camas Prairie Railnet. Renowned for its many beautiful trestles and tunnels, the Camas Prairie provided movie location shots for both *Breakheart Pass* (1976) and this summer's hit *Wild Wild West.*

Because this was the first ever motorcar run on the line, local citizens were very excited to see our speeders. Several times I saw lawn chairs that had been well used as folks watched and waited along the tracks for our arrival. At Culdesac the elementary school children came out to look us over and were rewarded with American flags from Don Piercy. At Greer we were met with welcome signs, balloons and cheers. In Grangeville local Chamber of Commerce volunteers served us breakfast at the only restaurant in town. The restaurant's regulars came early to occupy the counter seats and casually look us over while drinking their morning coffee.

Our railroad host and lead escort Chief Engineer Jim Morefield was quoted on the front page of the *Lewiston Morning Tribune* as "grin[ing] at the sight of twenty-six speeder cars lined up on the trestle over Main Street in Craigmont." In his 36 years on the Camas Prairie "he had never seen anything like it." His welcome was infectious; several of his employees worked on their days off as our escorts. Beryl Grant rode with me Thursday and was thrilled by the different view the motorcar afforded. A local radio personality spent his whole three–hour show talking about his ride with us. These many warm welcomes provided the background to what must be the preeminent motorcar run this year.

Set–on in the Camas Prairie Railnet East Lewiston yard Tuesday evening was easy using a house track next to the railroad office. The large yard provided ample maneuvering room and parking for our trailers and tow vehicles.

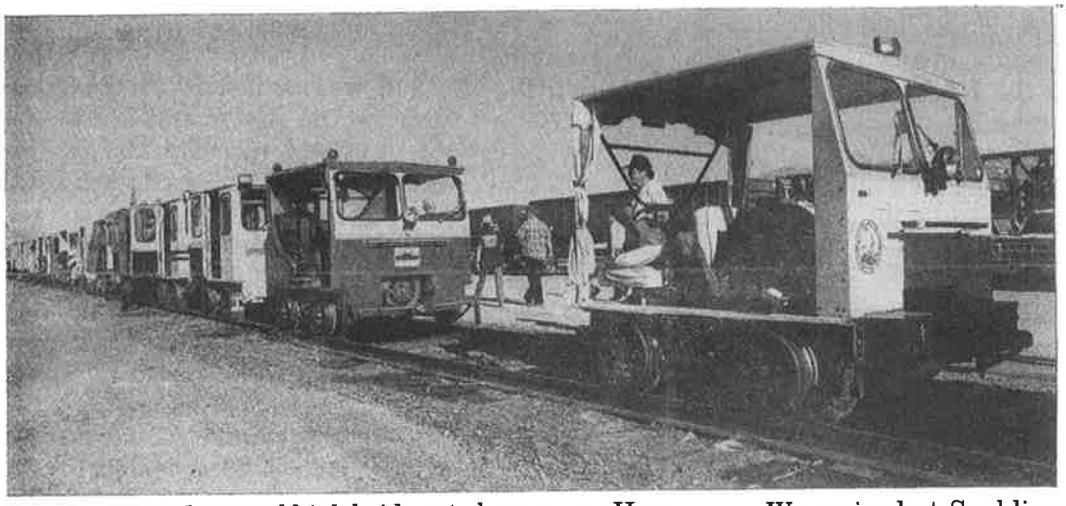
Following the Wednesday May 26th morning safety meeting, we departed eastbound at 8:15 AM. Exiting the yard, our first sight was the Potlatch log loading facilities with one of the largest moving cranes anywhere. Soon we were running along the Clearwater River that was heavy with spring runoff water. The logs in the river looked like fast swimming alligators! Canada geese floated by with their hatchlings. At MP 131 the entire rock cliff on the right was covered with the mud nests of swallows. Across the river the hills were a mixture of browns and greens.



At MP 50 a rare Phoenix iron bridge (1878) that looks like an "Erector Set" carried us 722 feet across the river.

After nine miles we reached the wye at Spalding and took the right leg turning southeast toward Grangeville. The day was warm. We made several pleasant pauses while intermittent cars got repairs. Our first official stop was Culdesac once the end of track, but today a maintenance yard. After photos of an "A" car with a wooden body, we started up the grade to the summit 12 miles away.

On these twelve miles of track is the most spectacular combination of trestles and tunnels in the western United States. From Culdesac the line crosses 11 trestles climbing up the Lapwai Canyon eight miles on a three percent grade to tunnel #1. To enter this



Thanks to photographer Barry Kough and the* Lewiston Morning Tribune *for this photo of the speeders, lined up and "preparing for a day of riding the scenic rails of the Camas Prairie RailNet" which appeared on the front page of the May 27, 1999 issue.

tunnel we used several high bridges to loop across Hwy 95 and then back to the entrance. Tunnel #2 is an 883–foot long horseshoe. Next we traversed six long bridges to enter tunnel #3 (563' long) and emerged onto Half–moon Bridge, the highest timber bridge (one million board feet) on the Camas Prairie. After crossing the 14–degree reverse curve bridge, we stopped to take photos, make several run–bys, and generally gawk. Just one replacement timber or "stick" costs $1000. If you remember "Breakheart Pass" you can see where the runaway freight car went off the curve here.

And it wasn't over! In the three remaining miles to the summit we entered four long tunnels and crossed seven more trestles. From the summit it was ten miles through farm country to our lunch stop at Craigmont. Chris announced a one–hour lunch, and the radio fell silent. We were silent. Engines shut down one by one. No one moved. We sat and absorbed the magnificence of the scenery just passed. Saint Peter don't call me, because I can't go. One more time I want to ride Culdesac to Craigmont, Idaho!

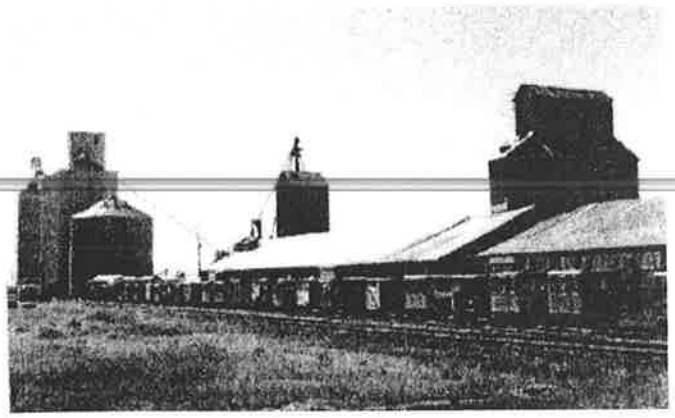
The remainder of the afternoon was a smooth two–hour run to the end of the line at Grangeville. We were riding on the Camas Prairie that gives the railroad its name. This section was built in 1908 to transport the grain harvested there. The scenery is of farms with cattle viewed from high trestles, people waving at Ferdinand, grain elevators at Cottonwood, and wild flowers so dense that their colors fill the spaces between the rails. At Grangeville a fuel truck met us, along with a bus that took us to our motels and to the Elks club for dinner. Wednesday's mileage was 75.3.

On Thursday morning May 27th we departed Grangeville at 8:15 AM for Orofino. At Reubens we went into the hole and waited for a train. After it passed with some hopper cars for the nearby grain elevator, we departed downhill. From the ridge my passenger pointed out that the hillsides around here had been logged three months earlier using helicopters. Below along the road a backhoe was cleaning up one of five landing zones where the logs had been loaded onto trucks. This area won't be logged again in our lifetimes.

We arrived at Spalding, backed through the wye and tied up for lunch at the Nez Perce National Historical Park.. The visitor center is just a short walk over the hill. The nearby grassy park is the site of the 1836 Presbyterian Indian mission where Henry Spalding built a sawmill and gristmill. Later the site was used by the Indian Agency to administer the reservation forced on Chief Joseph and the Nez Perce.

Leaving Spalding eastbound the track follows the middle fork of the Clearwater River, then just two feet below flood stage. The rail snakes along the river on a rock shelf cut on the north bank; Hwy 12 is on the south bank. The track and roadbed here are in good condition. The afternoon was warm and sunny. The group spread out nicely and settled into a steady 25–28 mph. The view of the river, rocks and mountains was a mobile progression of splendor. Stopping for a break at Lenore we spotted rail dated 1881 on the Lewiston Grain Growers siding. An hour later we arrived in Orofino at 5 PM, tied up for the night and walked to our hotels two blocks away. Thursday's mileage was 98.7.

From Orofino the Camas Prairie sends out two branches: one east to Revling and one southeast to Kooskia. These branches, built around 1925, were primarily for lumber. Our visit coincided with the start of a new service on the CP. Logs too small for a Pot-



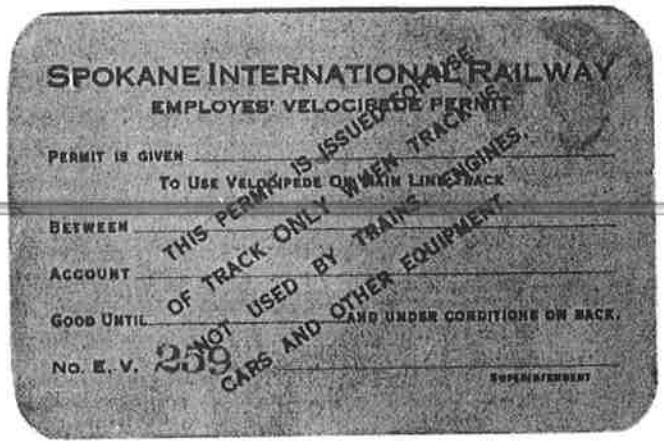
A rest stop on the return from Grangeville.

latch mill on the Revling branch are now sent to a mill on the Kooskia branch, opening up again after almost being abandoned. During the Friday morning safety meeting Chris had to compete for our attention with a four–man crew replacing some ties. It was an interesting process. Watching it done manually reminded us how much physical work a railroad involves. We departed at 8:15 out the Revling branch.

People were out waving to us. The day was cool and overcast. At MP 9 we passed a modern–day lumberjack, walking beside the track. He was carrying a chain saw and a radio. After cutting down a tree, he radios a helicopter to pick it up. At Rudo, MP 14.7, former site of section crew quarters, we paused beside the river. The scenery is second and third growth timber next to the river in a canyon. Between MP 17 and 18 the railroad crosses the river half a dozen times. This branch has many trestles and rock cuts, making scenic panoramas that blend together in the mind. The group stayed bunched up, running between 20–25 MPH. We turned at Reveling, just past the Potlatch Lumber operation and returned to Orofino by 1:00 PM.

Departing at 1:45 PM we passed through Greer and Kamiah on the way to our turn around at Kooskia. The group spread out, running, around 25 MPH on the rock shelf and fill along the Clearwater River. At MP 50 a rare Phoenix iron bridge (1878) that looks like an "Erector Set" carried us 722 feet across the river. Along the track were pink wild roses with a five–petal flower, an unidentified purple flower in abundance, wild sunflowers and Queen Anne's Lace. At 3:35 PM we turned at Kooskia and returned to the city park in Kamiah for a rest break. The run back to Orofino was uneventful and we were tied up for dinner by 6 PM. Friday's mileage was 123.8.

Chris Baldo led an evening trip by bus to the nearby town of Pierce to tour the Howard Bradbury Logging History Museum. Displays are centered on the men, equipment, and working conditions of the Potlatch Timber Co. in the 1950s. The group was back in Orofino around 11 PM.



From the collection of Bill Taylor.

Saturday May 29th was our last day on the Camas Prairie Railnet. Leaving the yard at 8:20 AM we met an inbound freight. We were retracing the fine rail along the Clearwater to Spalding with good track speed, clear cool air and a bright sun. After making one rest stop in Lenore, we kept up our speed and reached Lewiston at 10:40 AM. After taking a group photo on a Camas Prairie switcher, ten cars set off for an early start home, and the rest of us headed west, leaving at 11:10 AM for the wye at Riparia, Washington, 72 miles away.

Around 1975 the U.S. Government built this section of track to replace CP track flooded when the reservoirs behind the Snake River dams began to fill. After crossing the 1906 lift bridge we could see the Clearwater River mixing with the brown waters of the Snake. The combination creates a wide river with grassy hills on its banks. Pleasure boats towing inner–tube riders mixed with barges being pushed by tugs. The line here is heavy, 112–pound, sectional rail bolted up tight and laid straight as a laser; the ride is as good as ribbon rail. Soon we were spread out with three-eighths of a mile between cars and running stopwatch speeds of 33 mph!

Along the river we passed a ballast–loading site (mp 50), the Crum siding (MP 44) with 50 cars stored, Lower Granite Dam (MP 39) and stopped for lunch next to a grain barge loading operation at Almota (MP35). Departing at 1:20 PM we fought a headwind as we passed the long sidings at Penawawa (MP 24) and Central Ferry (MP15). At Central Ferry three houses built by the government stand next to a gas and oil transfer point. There were fishermen in the water above Little Goose Dam (MP 3).

We arrived at the Riparia wye at 2:30 PM, switched through in two groups and backed down to Ayer Junction, interchange point with the UP. Jim Morefield gave us a brief talk about how the area looked and past operations. We headed back to Lewiston at 3:25 PM, making good speed all the way. As we approached Lewiston, a pensive mood settled in at the end of this wonderful run. This was certainly one of the best motorcar events ever with its variety of grades, curves and bridges in mountain, prairie, forest, farm, canyon and river scenery. Our railroad host treated us like one of the family. Set–off began at 6:25 PM. Mileage Saturday was 184. Total mileage on the CP is 481.8.

All of us renewed old acquaintances and made new friends on this trip. Thank you Chris Baldo and all your tour committee members for their work putting together such a fine event. Thank you Camas Prairie Railnet for hosting Motorcar Operators West inaugural motorcar run on your road.

Want Ads

Editor's Note: *THE SETOFF* is happy to print all ads received from members. Send ads directly to : Ernie Jeschke, 4106 N. Adrian Hwy., Adrian, MI 49221. FAX (517) 265-6749 or e-mail: ejeske@tc3net.com There is no charge for placing an ad; please send us yours. If you want an ad to run for more than one issue, please indicate how many issues. No full-page ads are accepted. Use the present issue's ads as a guide. Thank You.

FOR SALE - Fairmont A-5 motorcar in excellent shape and was completely rebuilt in 1997. New wood, rebuilt engine, steel top and back, etc. Looks excellent and rides well. Has an extended range gas tank, 17 gallon, and an air compressor system. A set of Nathan P3's are optional with the sale for a few dollars more. Also available is a custom built 16' trailer. Will sell these two together or separate. I am asking $9,000 OBO for the A-5 and trailer. They are located in eastern Washington State. Matt Regan (509) 745-9010 mregan@nwi.net JA99

FOR SALE - MT19A Flatop (SP car), car featured on PBS "California's Gold" series '97 McCloud segment. Ready for your summer/fall fun. MT19A-L (UP car), w/turntable. Excellent runner, used last on P&W 9/98. (4) 16" rubber-tired wheels in good condition. Both cars used numerous times in MOW/NARCOA excursions . . Ready to use NOW!! Bill Evans, Palmdale CA (661) 285-8330. JA99

FOR SALE - Railroad motorcar trailer $600, in northern New Jersey. Converted tandem axle SnoBird snowmobile trailer modified for hauling motorcars. Includes two heavy steel "U" channel ramps and hand winch. Trailer handles up to two cars, one MT-14 and one M/MT-19. Serviced in late summer of 1998, had new wheel bearings and two new tires installed. Will deliver within 150 miles of Northeastern New Jersey. Cash, money order or certified funds only. For other information, Carl R. Ceragno. E-mail callcri@ix.netcom.com or call evenings at (201) 689-1074. JA99

FOR SALE - Milwaukee Road/Fairmont M-9 WWII baby. Restored at Toma, Wisconsin shops just before the Soo-Line take over. Car was assigned to Davis Jct. Illinois. This is an open cab M-9 and comes with the following items: New rebuilt C5 carb, crank, Fairmont tow hook, Toma Shop built tool box with small tools found in it when purchased. New Fairmont/Pontiac coil, birth papers from Fairmont and Milwaukee Road, Farimont manual, Toma Shop CMST.P&P brass serial number tag and other spare parts. Car is painted yellow with reflective red stripe through it and a reflective red *"Hiawatha"* logo on Toma made coil box. Car has good tires, good brakes, 6-volt system generator with head light and tail lights, ready to run. $2,500 OBO. This car is a collector's item! "Serious" inquires only! I'm the only owner it's had since the Soo-Line take over! Michael Mitzel (815) 264-7979 or mitzelsigns@juno.com JA99

WANTED - Need parts, railgear, pictures, manuals for a 1955 Fairmont Hyrail truck. This is built on a Willys Jeep frame. Any help would be appreciated. Charlie Hulsizer Upper Hudson River RR, North Creek NY (518) 251-5334. JA99

FOR SALE - Fairmont Padlocks, solid brass padlocks marked Fairmont. Keyed in pairs, 5/16" shank, made in the USA. Perfect for locking the toolboxes on the front of your Fairmont motor car. Others available. $20 per pair plus $2 shipping. Contact Stan Conyer, 9333 West St. Rd. 46, Columbus IN (812) 342-0565 sconyer@juno.com JA99

FOR SALE - Kalamazoo model 23B, circa 1945 completely restored 1995. All new wood, canvas top, engine overhauled, new friction wheel lining, new brake shoes, new anywhere needed. Car restored to its original condition as was on the READING RAILROAD, #42 assigned to Bridgeport, PA MOW. $3,600. Also will sell enclosed trailer new in 1995, electric brakes, electric wench, loading track, set up for this car, $3,200. Car can be purchased separately. John Kook 35 Mark Drive, Pottstown PA 19465. (610) 323-7132. jkook35@aolcom JA99

FOR SALE - MT14 motorcar. Canadian National car with fiberglass body. Runs very well. Has double chain, two new wheels. It also has automobile seats and interior fans for comfort. It has the required horns and lights, etc. This comes with a custom trailer, and is ready to go. The car is in eastern NC. Price $3,200 Contact Richard Cumberland, (252) 247-7137 evan@coaswtalnet.com JA99

FOR SALE - Carb. poppet valves, #EZ-455. $15.60 each plus $3 shipping and handling. C-5 and C-8 carb repairs done, very competitive prices with quality work. Contact: Carey Boney, 1605 Powers Road, Wallace NC 28466. JA99

FOR SALE - EX UP MT14-L (1975) Full headlights front and rear. Air horn, boat seats (4-2 easily removeable), side and rear curtains. Ready to ride, $2,750 service/parts book included. EX WC(MILW?) MT19 - Headlights, tail and stop lights. Air horn, boat seats, good curtains. Ready to ride. $2,750 service/parts book included. Take both cars for $5,000. Pictures available. Possible delivery on either car within 500 mile radius of Rockford, IL for $100 or less. Mike Kelley, P O Box 19, Roscoe, IL 61073-0019 Phone (815) 623-7609 before 9:00 p.m. (CST) Fax (815) 623-9895 JA99

FOR SALE - Used wheels for M-9. Have four (4). Passes NARCOA Safety Inspections. $50 each. Used M-9 Belt. Good condition. $50. Complete roof assembly, Fairmont M-19. All aluminum flat style, no holes, good condition. $200. Left door for MT-19. 31 5/8" wide X 44 3/8" high. Very good condition. Hinge, window gasket and outside handle included. Fiberglass style. $150. MT-19 Ex CN Motorcar. Good original condition. Onan Twin engine, 2 speed transmission, has new wheels and new exterior engine cover. Car has run excursions on the Great Smokeys, Wheeling & Lake Erie, AC&Y, Ivyland & New Hope, The Ontario "Loop" and others. $3,200. Contact Walter Powell (717) 428-1827. *JA99

FOR SALE - Turn Table Kit for MT19, Electric - Fits under engine cover, incudes all parts, bolts and wiring assembly. Install in approximately 1 hour. Requires drilling four 3/8" dia holes. Cost $450. MT14 Kits available in 4 to 6 weeks. NEW PRODUCTS -

F5537 Oilite steel bushings M9, M19, MT19	$12.50
M20023 Guide axle bearing, M9, M19, MT19	$10.00
H6334 Insulation set 1 -3/16, M9, M19, MT19	$25.00
M18931 Spring (hanger pin)	$1.50
M32739 Brake pivot stud (flange brakes)	$12.50
M16379 Off set brake and liner	$25.00
New S2 brake and liner	$25.00
New cab fronts with insp-window	$650.00
Folding seat frames	each $40.00

Les King, P O Box 164, North Lawrence OH 44666 Phone (330) 833-2868, Fax (330) 830-5213, Cell: (330) 284-0185 JA99

FOR SALE - Former L&N M19, completely restored with electric starter, $2,000. Contact Walton Bryan, (502) 554-9419. JA99

FOR SALE - Videos of Trackcar Meets:
New Orleans & Kosciusko RR '99; Apalachicola '99;
Meridian & Bigbee with Arkansas Midland '99;
Maine Coast 5/99;
San Pedro Southwestern with Copper Basin 3/98;
Santa Fe Southern with Texas & New Mexico 3/98;
Lycoming Valley with Union City Industrial & Koppers Tie Plant 5/98;
Quebec City Tour with St. Anne DeBeaupre '98;
Beaupre to Clermont, St. Lawrence River '98
Matapedia to Gaspe, Quebec '98
Northern Vermont & Twin States, NH '98
Peace River to Coppermine, NWT '96
Central Montana with Alberta Prairie '96
CN RR Cabrides, Peace R. to Roma Jct., Alberta '96
North Bay to Swastika with Ottawa Valley '97
Copper Canyon, Mexico 3/96
NYS&W Steam fan trip with engine #142, Rutland to Whitehall and Ludlow, VT 8/98, with Milw steam #261 "Steamtown Plow Extra" 2/96
All videos are 2 hours Std. Play on VHS w/music and narration. $16 each plus $3 shipping on 1st tape, additional $1 for 2nd tape. Buy 3 tapes and get free shipping. Credit card or check. Bill Kozel, 23 Lee Ave., Rexford NY 12148-1209 (518) 399-5836 *JA99

FOR SALE - Left door for MT-19. 31 5/8" wide X 44 3/8" high. Very good condition. Hinge, window gasket and outside handle included. Fiberglass style. $150. Contact Walter Powell (717) 428-1827. *JA99

FOR SALE - MT-19 Ex CN Motorcar. Good original condition. Onan Twin engine, 2 speed transmission, has new wheels and new exterior engine cover. Car has run excursions on the Great Smokeys, Wheeling & Lake Erie, AC&Y, Ivyland & New Hope, The Ontario "Loop" and others. $3,200. Contact Walter Powell (717) 428-1827. *JA99

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FOR SALE - Three (3) M-19 ex N&W Group 1, Series F motorcars. All have fronts and roofs, hand crank, motors turn freely. Cars are located in Jonesborough, Tenn. The Watauga Valley Chapter of NRHA (423) 753-5797. JA99

NOTICE - Custom graphics or lettering for your motorcar, signs, banners, vehicles, etc. T-Shirts, hats, pens also. Call Steve Kepner (570) 584-4117 *JA99

WANTED - Woodings Motor Car in ready to run condition, but would consider a complete car that requires a limited amount of rebuilding. Contact Paul Simington, RR#2, Box 313A, Sunbury PA 17801. Phone (570) 286-6060 after 6 p.m. JA99

WANTED - We are in need of an A3 or A5 section car type tranfer case. Steve Torrico c/o Mount Dora Scenic Railway Co. (352) 383-4368 bix26@aol.com JA99

WANTED - (1) 6 volt vibrator coil for our C&S speeder. Gus Mocilac, Pueblo Locomotive and Rail Historical Society, Colorado. JA99

WANTED - I am looking for a hand car for display purposes. It doesn't need to work or need to be too old. This hand car would be displayed in Cascade, Idaho at the Depot Institute. This group is a non-profit organization and they are willing to purchase at a reasonable price. Please contact me with any information you may have. Carl Sorensen, P O Box 471, Cascade, Idaho 83611 (208) 382-3559 ka7anm@pophost.micron.net JA99

WANTED - I am looking for a "firecracker" style antenna that came on the older locomotives. Bracket and antenna. Contact me: Rick Tufts, 95 Idlewild Road, Pinehurst NC 28374 (910) 295-0987 rltufts@ac.net JA99

Excursions

Members who have organized excursions are encouraged to advertise those events here. We will publish all notices received. Include details of the trip such as time schedule, total mileage, costs, restrictions and conditions for attending. State whether or not NARCOA rules will be in effect and whether insurance is required. Send excursion notices to Ernie Jeschke, c/o SETOFF, - 4106 North Adrian Highway, Adrian, MI 49221 FAX (517) 265-6749 ejeske@tc3net.com (E-mail - Text only)

PLEASE NOTE - Advertisement of an excursion in THE SETOFF does not constitute responsibility by NARCOA and/or its officers, or THE SETOFF and/or its editorial staff for excursion conditions. Excursion attendees must exercise caution in the observance of safety conditions and rules, and must accept full responsibility for themselves, their guests and their equipment when attending any excursion.

THE FOLLOWING RAILROAD ARE HAVING MOTORCAR OPERATIONS THAT MIGHT BE OF INTEREST TO MOTORCAR OPERATORS

1ST & 3RD WEEKEND EACH MONTH - Red Springs Northern RR. The (RO-C) are sponsoring rides on these work/ride events. Ride privileges are granted in return for maintaining the grass. Tracks run 12.5 miles between Red Springs and Parkton NC. $50 annually per calendar year (no prorating) or $20 per day. Red Springs is located south of Fayetteville NC, 15 miles west of I-95 on NC-211 and NC-71. Motels at I-95 at Lumberton and Laurinburg. For more information contact:

Rick Tufts (910) 295-0987 rltufts@ac.net or
Tom Stallings (252) 827-4693
bestalli@eastnet.educ.ecu.edu

New - - Kosciusko & Southwestern Railway - Kosciusko, Mississippi offers owners of motorcars and hi-rail vehicles the opportunity to operate on their railroad. To arrange permission, contact Dave Delatte at (601) 372-2275. Runs are scheduled when as not to interfere with freight operations and, may be in conjunction with scheduled motorcar excursion programs. All privately owned equipment must operate on the line under the proper authorization. Persons operating on the line illegally (bootlegging) will not be tolerated and will be reported to all nationally recognized motorcar groups. For those who do not have a motorcar, the railway is offering motorcar rides consisting of a 36 mile round trip from Kosciusko to the Big Black River area taking about 3 1/2 hours for the trip. Fares: $15 Adults and $7.50 Children.

NEW ENGLAND RAIL CAR ASSOCIATION (NERCA)

The following are New England Rail Car Association events for the remainder of the year. For more information, contact Warren Riccitelli, 39 Brookside Ave, North Providence, RI 02911 or (401) 231-5640 evenings.

September 11 - NARCOA EVENT - Maine Coast Railroad - Rockland Branch Wiscassett to Thomaston - Follow the scenic shoreline of ME for a 70 mile round trip. A Repeat of the great spring run. $45 per car

September 12 - NARCOA EVENT - St Lawrence & Atlantic Railroad - A 70 mile round trip from Portland, ME to Mechanic Falls, ME; this trip will take us from the Atlantic Ocean and follow the route of the old Grand Trunk Western. 25 car limit $40 per car.

October 3 Milford-Bennington RR – Come with us for a crisp fall ride and a Sunday morning breakfast. This event has taken place for the past few years and this year is open to NERCA members. Approximately 37 miles round-trip. $10 per car.

October 16 - Delaware & Ulster Railroad - (Arkville, NY) - After the foliage falls, again, we set out on the D&U. Approximately 36 miles round trip and the 3.5% grades. $10 per car.

October 17 - NARCOA EVENT - Tioga Scenic Railroad - Owego to Harford, NY. Again we travel to central NY and into the Finger Lakes Region. Approximately 46 miles round trip. $40 per car

October 31 NARCOA EVENT - New England Central Railroad - A never before motor car ride on the old Central Vermont from the Railroad Museum at Willimantic to New London and return. A 60 mile round trip you will never forget. $75 per car.

NORTHERN CENTRAL RAILCARS ASSOCIATION (NCRA)

November 6, 1999 Second annual ride on the historic Gettysburg Railway from Gettysburg PA to Hunter's Run (just south of Mount Holly Springs PA) and return. This branch of the former Reading Railroad passes through part of the Gettysburg National Military Park where one of the most pivotal battles of the Civil War fought. The orchards and other beautiful scenery of Adams County will also be part of your viewing pleasure. It will be approximately 50 miles round trip. Cost is $25 per car. There is a 35 car limit. NARCOA Insurance required - NARCOA Rules apply. Send insurance Card Number, Driver Exam Number, name, address, phone number, E-mail address and check payable to: "Northern Central Railcar

Association" to: Gary Shrey, 54 Adams Road, New Freedom PA 17349. Phone number (717) 227-9628 or E-mail GShrey@aol.com

(Make it a 2-Event weekend - travel time from Gettysburg to Cumberland is approximately 2 hours)

November 7, 1999 Ride the Western Maryland Scenic Railroad from Cumberland MD to Frostburg MD and return. This former Western Maryland RR has steep mountain grades, Helmstetters Curve, a tunnel and excellent mountain scenery (the leaves should be off of the trees proving spectacular views). Then, have your car turned on the turntable at Frostburg. It will be approximately 36 miles round trip. Cost is $30 per car. NARCOA Insurance required - NARCOA Rules apply. Send insurance Card Number, Driver Exam Number, name, address, phone number, E-mail address and check payable to: "John Kemmet" to: John Kemmet, 708 Westwood Street, Hagerstown MD 21740. Phone number (301) 739-5948, or E-mail AMSIAP@aol.com

OTHER MOTORCAR EXCURSIONS

October 9 Wellsboro & Corning Railroad Autumn Leaf Ride. Wellsboro PA to Gang Mills NY. 70 miles former New York Central, NARCOA Insurance required. $35 to: Larry Maynard, RR1, Box 351, New Columbia PA 17856. (570) 538-9050 before 10:00 PM EST or E-mail lmayn@jdweb.com

OHIO VALLEY RAILCARS OVR

October 2 Wheeling & Lake Erie. $70 per car. Contact Jeff Levengood (330) 343-2691 nkpl599@juno.com

October 16 Greater Miami & Scioto Railroad. $50. Dave Verzi (440) 236-3374 WM340@aol.com

GREAT LAKES RAILCARS

Sunday September 19th. Illinois Railnet (replaces KB&S) Flagg Center to Rockford (NEW LINE, NEW MILEAGE), 34 miles RT, including crossing the ex-Milwaukee mainline. Sponsored by Great Lakes Railcars. NARCOA Insurance Required. To register, send $60 to Mike Mitzel, 230 North Cedar Street, Waterman, IL 60556, check payable to Great Lakes Railcars.

Saturday, September 25 Hoosier Southern Railroad - Lincoln City to Tell City, IN. NEW MILEAGE! Sponsored by Great Lakes Railcars. Set on at 8:00 leave at 9:00 EST. 44 miles round trip. $30 per car, NARCOA Insurance required. Contact Stan Conyer at (812) 342-0565 or email to sconyer@juno.com for details.

Saturday October 2nd, Southern Michigan Railroad Society. Clinton, MI to Raisin Center, MI - 24 miles round trip. Sponsored by Dave Stroebe. No NARCOA Insurance needed, but must be SMRS member by September 1st, 1999 in order to run. Membership $15 per year Call Dave at (231) 773-7980 or E-mail STROBX@aol.com for more details.

Sunday October 3rd, TSBY Cadillac to Yuma in the morning and then Cadillac to Walton Junction in the afternoon. 80 miles in total. Sponsored by Great Lakes Railcars. NARCOA Insurance required and 20 car limit. To register, send $60 to Jeremy Winkworth, 1701 West B Ave., Plainwell, MI. Make check payable to Great Lakes Railcars.

Saturday, October 16 Indiana Railroad. Set on, Cost, and mileage yet to be determined. Sponsored by Hoosier Railcars, Contact Dave Beck (317) 784-9417 for details.

Sunday, October 17 Crane Naval Surface Warfare Center Railroad, Crane, IN. Sponsored by Hoosier Railcars. Contact Stan Conyer at (812) 342-0565 or email sconyer@juno.com for details.

Sat./Sun. October 30/31 Commonwealth Edison (Tentative) Byron Branch, 12 RT, several times. Sponsored by Great Lakes Railcars. NARCOA Insurance Required. Contact Mike Mitzel for further details at (815) 264-7979 or 230 North Cedar Street, Waterman, IL 60556.

Sat./Sun. November 6/7 Big South Fork, Stearns, Kentucky. Sponsored by Stan Conyer, 14 miles RT, run twice. Sponsored by Hoosier Railcars. For more information call Stan Conyer at (812) 342-0565 or email to sconyer@juno.com

Saturday, December 4 Indiana Transportation Museum Annual Christmas Run. More details later.

FIRST IOWA DIVISION

Carl Schneider, Trip Coordinator, 1302 6th Ave. SE, Altoona, IA, 50009-2002. Ph. (515) 967-5181, motorcarl@raccoon.com Or Contact: Mark Kirkpatrick (515) 292-5027; Wayne Rimathe (515) 685-3019; Ed Rasmussen (402) 391-0524.

September 19 Appanoose Co. Railroad - This popular ride will again be held from Centerville, Iowa to Albia in conjunction with the Moravia, Iowa town celebration. Our noon meal will be a barbeque at the restored Wabash depot with the First Iowa Division paying $3 of cost of the barbeque per person. We will set on in Centerville near the watertower in the southeast part of town at 6:30 AM with an 8:30 AM departure. Cost of this ride will be $30 per car. Motels in Centerville: Super 8 Motel (800) 800-8000, Motel 60 (800) 437-7271.

October 16 Fort Leonard Wood Army Base - This popular ride through the Missouri scenery will again be held to take advantage of the changing Fall colors. Set on time will be 11:30 AM with a 1:00 PM departure for the first run. Two run are planned which are 40 miles round trip per run. Super 8 Motel in Waynesville exit on I-44 (800) 800-8000; other motels at the St. Robert exit near the army base.

November 6 Boone & Scenic Valley Railroad - Our season closer, complete with a cookout (inside where it's warm) and Halloween decorations. We will be setting on a 8:00 AM with a 10:00 AM departure, running the line several times during the day NARCOA insurance is not necessary for this ride, but membership in the Boone Railroad Historical Society is require at $25 per year. The ride will also cost $10 per car. Super 8 Motel in Boone, Iowa (800) 800-8000.

The First Iowa Division and its officers assume no responsibility for any property damage or personal injury which may occur on a First Iowa sponsored excursion.

MOTORCAR OPERATORS WEST (MOW)

September 11 - 12 California Prune Festival. MOW and Operation Lifesaver display. Free. For more information: MOW, 8672 Fairmont Way, Fair Oaks CA 95628 (916) 965-3949 gilnjanet@foothill.net

November 13 - 14 Internation Railfair. MOW and Operation Lifesaver display. Free for presenters. For more information: MOW, 8672 Fairmont Way, Fair Oaks CA 95628 (916) 965-3949 gilnjanet@foothill.net

October 23 - 24 San Diego & Arizona Railway (San Diego Railroad Museum) This track with high trestles was featured on a recent Huel Howser show. Set-on Saturday at Plaster City (near El Centro, CA - 110 miles east of San Diego) and operate west to Tunnel 16. Saturday evening optional catered dinner and night run! Set-on Sunday at Campo, CA and operate east to Tunnel 8. Ankle high boots and long pants are required. Steep 2.5% grades. Windy conditions are possible. Coast per car $120. Send check for car fee made out to Motorcar Operators West along with a LSASE, information on type of car you will operate, MOW license #, NARCOA rulebook #, and NARCOA insurance # and your phone number to :Wayne Parsons, 13380 Golden Valley Lane, Granada HIlls, CA 91344. Deadline for signup is October 8th. Limit 25 cars. Final details on the Saturday evening optional dinner will be announced later. For more information on the museum see http://www.sdrm.org

PACIFIC RAILCAR OPERATORS (PRO)

September 25 - 26 - Nevada Northern Railroad (BHP Nevada Railway) Ely-Shafter-Ely 247 miles. Unexpectedly, we have been cordially invited once again to operate this historic and hugely popular motorcar excursion. This largely untouched 1906 railroad runs through some of the grandest and most remote scenery in the United States. Primitive camping only at the end of line at Shafter at jct. with UP mainline between Silver Zone and the Pequops. Very limited accommodations (five rustic cabins), improved camping, and meals at Currie. $65/car to include membership in White Pine Historical Railroad Society (Nevada Northern Museum). Visit great historic railroad facilities and equipment in Ely. 25 car maximum. PRO membership, NARCOA Operating Certificate, and Insurance. LSASE ($0.55 postage) to PRO Nevada Northern, 920 29th Street, Sacramento, CA 95816 danspach@macnexus.org

North American Railcar Operators Association

(NARCOA)

Officers:
President – Stan Conyer
Vice President – Mike Paul
Secretary – Joel Williams
Treasurer – Tom Norman

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Box 82
Greendell, NJ 07839

Area 3
(IN, OH, MI)
Stan Conyer
9333 West State Road, 46
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(WV, VA, KY, NC, SC, TN)
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Lincolnton, NC 28092

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Wichita, KS 67215

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Tom Norman
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Alberton, MT 59820

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(CA, NV, UT, AZ, NM, HI)
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8672 Fairmont Way
Fair Oaks, CA 95628

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Director at Large (non-voting)
Ron Zammit
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Arroyo Grande, CA 93420

Director at Large (non-voting)
Dave Verzi
10059 Aldridge Dr.
Columbia Station, OH 44028

Committee Chairs:
Insurance: Tom Norman
Judiciary: Jack Whitt
Safety and Rules: Mike Mitzel
FRA and Railroad Liaison: Ron Zammit

THE SETOFF
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Adrian, MI 49221

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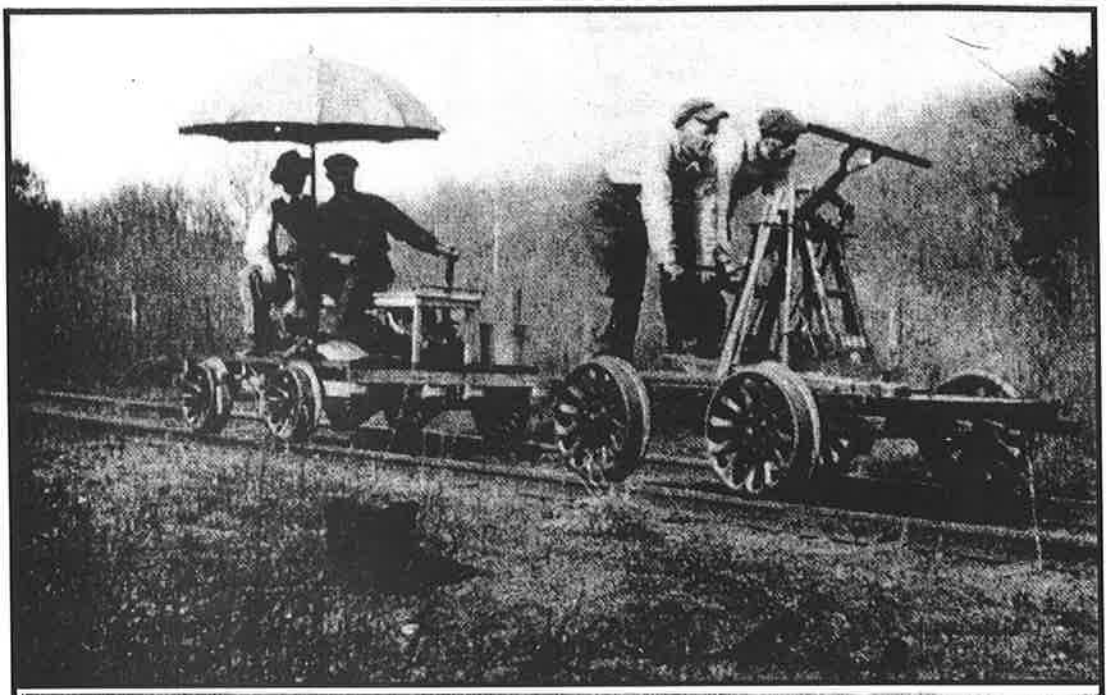
1330 Rosedale Ln.
Hoffman Estates, IL 60195

OPERATIONS
Hank Brown
622 Oak St.
Cottage Grove, WI 53527

LEGAL FORMS
Mark Springer
143 N. Arcadia
Wichita, KS 67212

OPERATOR CERTIFICATION TEST
Mike Mitzel
P.O. Box 79
Waterman. IL 60556

NARCOA Licensed Radio Call Sign WPHT745 – 151.625 mHz



Which Way Are You Going to Work?

The picture above certainly needs no explanation. The foreman and helper on the lever car, stooping over the bar, hard at work and exposed to the blistering hot sun. Behind, a neighboring foreman with a "Casey Jones" motor car has just caught up with them; he and his helper are riding without any effort on their part and in the cool shade of the big umbrella. Needless to say the foreman on the lever car readily realized the advantages of a motor car and has since changed his lever car into a motor car by installing a "Casey Jones." The question for you and your crew to decide now, is, are you going to pump a lever car or ride on a motor car, during the coming hot summer days of June, July, August and September.

Make a Motor Car From Your Hand-Car

4 H.P. on High Gear

8 H.P. on Low Gear

Changing a hand car into a motor car is a job that can be done in a couple of hours by anyone. The work consists simply of disconnecting the handle bars, remove the gears, take out a couple of boards from the car platform, fasten the split pulley to the driving axle, bolt the engine to the car platform with four bolts and connect the belt. The engine comes with outfit complete ready to install. Nothing to buy, nothing to wait for. Connect the battery, wires, fill the tank with gasoline, and you have the most up-to-date and modern motor car that money can buy.

Price of engine and outfit complete only $85.00. Terms, $10.00, down and $5.00 per month on the balance. Send for it and try it out on your own section for thirty days at our expense. If not satisfactory, return, and no questions will be asked. Order direct from this ad, or send for our complete new 1917 catalog.

This is the 2 speed transmission gear, which doubles the pulling power of engine when needed.

NORTHWESTERN MOTOR COMPANY

525 Spring Street
Eau Claire, Wisconsin

***Northwestern Motor Company advertisement which appeared in the July 1917 issue of* The Milwaukee Railway System Employees Magazine.**